Administration Guide | PUBLIC
2023-05-30

SAP Electronic Invoicing for Brazil (SAP Nota Fiscal Eletrônica)

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1 SAP Electronic Invoicing for Brazil (SAP Nota Fiscal Eletrônica)

Product Information

Product	SAP Electronic Invoicing for Brazil (SAP Nota Fiscal Eletrônica)
Release	10.0 SP35
Based on	SAP NetWeaver 7.02 SP16
Documentation published	May 2023

Use

SAP Electronic Invoicing for Brazil (SAP Nota Fiscal Eletrônica; SAP NFE) helps companies comply with the Brazilian legal requirements for electronic invoicing.

- Companies selling products in Brazil must send each invoice electronically to the government for validation before shipping their goods.
- Companies purchasing goods in Brazil must check the electronic invoice at the government before receiving the goods.

The brazilian government wants to be sure that all due tax revenue is collected. Companies need to handle these activities with an automated solution that can scale to high volumes of invoices and meet their business process requirements: SAP Electronic Invoicing for Brazil (SAP Nota Fiscal Eletrônica; SAP NFE) is that solution.

2 What's New in NFE 10.0

Features

- What's New in NFE 10.0 SP35 (RTC May 30, 2023) [page 7]
  All new features for NFE 10.0 SP35
- What's New - History [page 9]
  Information regarding new features for previous support packages

What's New in NFE 10.0 SP35 (RTC May 30, 2023) [page 7]

What's New - History [page 9]

2.1 What's New in NFE 10.0 SP35 (RTC May 30, 2023)

> **Note**
>
> SAP NFE 10.0 will be out of maintenance by the end of the year 2025. For the planning of legal changes in 2025, refer to the following SAP notes:
>
> - NF-e: 3634131 and 3662006
> - MDF-e: 3629110 and 3652296
> - CT-e: 3634045 and 3652297
> - Enhancement of SEFAZ status code (cStat): 3663048
>
> SAP has explicitly communicated via the Regulatory Change Manager app that the Brazil Tax Reform will not be supported in GRC NFE. Despite the lack of support for the tax reform, GRC NFE plans to deliver only a minimal technical update. Refer to above SAP notes for more information.

Legal Changes

- CT-e
  - New CT-e layout 4.00 (valid as of NFE 10.0 SP35)
    The main changes in the CT-e layout are:
    - New PI namespace `http://sap.com/xi/CTE/400` for layout 4.00.
    - New PI configuration necessary for CT-e layout 4.00, CT-e OS 4.00, CT-e events 4.00, and CT-e Distribution Service
    - The following processes are obsolete with CT-e layout 4.00:
      - CT-e Batch
      - CT-e Skip
      - CT-e Gap Skip
    - The following programs are obsolete with CT-e layout 4.00:
      - Create CT-e Batches

- Send CT-e Batches
- Send CT-e Batch Requests
- Create and Send CT-e Batches and Batch Requests
- Create and Send CT-e Batches and Batch Requests and CT-e Number Skippings
- Send CT-e Number Skippings

For more information, see CT-e Process: Issue of CT-e [page 176], Batch Job Planning for CT-e Outbound [page 99], and CTOAUTHO: Authorize CT-e [page 186].

SAP Notes

- **NF-e**
  - NF-e NT2023.001 v1.20, for more information, see SAP note 3324085.
    The main changes in the NF-e Layout are:
    - the group <ICMS53> has been modified before production go live
      - field <qBCMonoDif> has been changed to <qBCMono>
      - field <adRemICMSDif> has been changed to <adRemICMS>
      - new fields <vICMSMonoOp>, <pDif> and <vICMSMono> have been introduced.
  - NF-e NT2023.001, for more information, see SAP note 3305270.
    The main changes in the NF-e Layout are:
    - in group <comb>-<CIDE>-<encerrante>, the field <pBio> has been introduced.
    - in group <encerrante>, the new group <origComb> has been introduced
    - the new group <ICMS02> has been introduced.
    - the new group <ICMS15> has been introduced.
    - the new group <ICMS53> has been introduced.
    - the new group <ICMS61> has been introduced.
    - in group <total>-<ICMSTot>, the fields <qBCMono>, <vICMSMono>, <qBCMonoReten>, <vICMSMonoReten>, <qBCMonoRet> and <vICMSMonoRet> have been introduced.
  - NF-e NT2022.003, for more information, see SAP note 3290276.
    The main changes in the NF-e Layout are:
    - in group <NFref>, the field <refNFeSig> has been introduced within the existing choice.
  - NF-e NT 2014.002 v1.15, for more information, see SAP note 3265844.
    The government has published NF-e technical note 2014.002 v1.15, wich makes the attribute NSU optional in the layout (for a specific scenario).
  - NF-e NT2021.004 v1.30, for more information, see SAP note 3205461.
    The main changes in the NF-e Layout are:
    - The validation pattern for field <cProdAnvisa> have been changed (allowed field length now 11 or 13 digits)
  - NF-e NT2021.004, for more information, see SAP note 3198255.
    The main changes in the NF-e Layout are:
    - The fixed field values for field <tpVeic> have been changed (removal of leading zeros for one digit values)
  - NF-e NT2021.004 v1.10, for more information, see SAP note 3148222.
    The main changes in the NF-e Layout are:
    - In group <imposto>-<ICMS>-<ICMSPart>, an optional sequence with new fields <vBCFCPST>, <pFCPST>, <vFCPST> have been introduced.
    - In group <det>, the new group <obsItem> has been introduced.

- In group `<infAdic>-<procRef>`, the new field `<tpAto>` has been introduced.

> **Note**
>
> For the planning of legal changes in 2025, refer to SAP note 3634131 and 3662006.

- **CT-e**
  - CT-e NT2022.001, for more information, see SAP note 3166704.
    The main changes in the CT-e Layout are:
    - In group `<rodo>-<infANTT>-<infContratante>`, a new group `<infContrato>` has been introduced
    - In group `<rodo>-<infANTT>-<infPag>`, new fields `<indAntecipaAdiant>` & `<tpAntecip>` have been introduced
  - CT-e NT2025.001, for more information, see SAP note3634045

    > **Note**
    >
    > For the planning of legal changes in 2025, refer to SAP note 3634045 and 3652297.

- **MDF-e**
  - MDF-e NT2022.001, for more information see SAP note 3155793.
  - MDF-e NT2024.001 - switch to synchronous processing, for more information see SAP note 3453629.
    - The following processes are obsolete:
      - MDF-e Batch
    - The following programs are obsolete:
      - Create MDF-e Batches
      - Send MDF-e Batches
      - Send MDF-e Batch Requests
      - Create and Send MDF-e Batches and Batch Requests

    For more information, see MDF-e Process: Issue of MDF-e [page 213], Batch Job Planning for MDF-e Outbound [page 105], and MFOAUTHO: Authorize MDF-e [page 216].
  - MDF-e NT2025.001, for more information, see SAP note3629110

    > **Note**
    >
    > For the planning of legal changes in 2025, refer to SAP notes 3629110 and 652296.

Required SAP NetWeaver Version

Due to technical dependencies, as of SAP NFE 10.0 SP35, the required minimum version of SAP NetWeaver is 7.02 SP16.

2.2 What's New - History

What's New: History - NFE 10.0 SP34 (RTC August 17, 2021) [page 10]

What's New: History - NFE 10.0 SP33 (RTC October 29, 2019) [page 12]

What's New: History - NFE 10.0 SP32 (RTC March 26, 2019) [page 13]
What's New: History - NFE 10.0 SP31 (RTC August 21, 2018) [page 13]
What's New: History - NFE 10.0 SP30 (RTC May 22, 2018) [page 13]
What's New: History - NFE 10.0 SP29 (RTC February 20, 2018) [page 14]
What's New: History - NFE 10.0 SP28 (RTC November 14, 2017) [page 14]
What's New: History - NFE 10.0 SP27 (RTC August 8, 2017) [page 15]
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What's New: History - NFE 10.0 SP17 (RTC May 27, 2014) [page 25]
What's New: History - NFE 10.0 SP16 (RTC February 11, 2014) [page 26]
What's New: History - NFE 10.0 SP15 (RTC October 22, 2013) [page 27]
What's New: History - NFE 10.0 SP14 (RTC June 4, 2013) [page 28]
What's New: History - NFE 10.0 SP13 (RTC February 19, 2013) [page 29]
What's New: History - NFE 10.0 SP12 (RTC October 16, 2012) [page 30]
What's New: History - NFE 10.0 SP11 (RTC June 12, 2012) [page 31]
What's New: History - NFE 10.0 SP10 (RTC March 13, 2012) [page 32]
What's New: History - NFE 10.0 SP09 (RTC November 22, 2011) [page 33]

2.2.1 What's New: History - NFE 10.0 SP34 (RTC August 17, 2021)

Features

- BAdI to change the logical system for Skip Gap scenarios
  For more information, see BAdIs for NF-e Outbound [page 94] and BAdIs for CT-e Outbound [page 100].
- Flexible Event Process
  For more information regarding NF-e events, see NF-e Events: Receipt of Other Event Types from SEFAZ inNF-e Events: Receipt of Other Event Types from SEFAZ [page 456]
  For more information regarding CT-e events, see CT-e Events: Receipt of Other Event Types from SEFAZ in CT-e Events: Receipt of Other Event Types from SEFAZ [page 488]

Legal Changes

- NF-e
  - NF-e NT2020.006 v1.00a, for more information see note 2988392
    The main changes in the NF-e layout are:
    - new field `indIntermed` in tag `ide`
    - new group `infIntermed` inside of tag `infNFe`
  - NF-e NT 2020.006 1.20, for more information see note 3042393
    The main changes in the NF-e layout are:
    - new field `xPag` in tag <`pag`>-<`detPag`>
    - changed validation pattern for field `tPag` in tag <`pag`>-<`detPag`>
    - changed validation pattern for field `tBand` in tag <`pag`>-<`detPag`>
  - NF-e NT2020.005, for more information see note 3054162
    The main changes in the NF-e Layout are listed in the note, for details, please refer to the note.
- CT-e
  - CT-e NT2020.001 NNF, for more information see note 2930525
    The main changes in the CT-e/ CT-e Event layout are:
    - new field value 3 for field `tpEmis`
    - new choice in tag `emit` that contains CNPJ or CPF
    - new choice in tag `infEvento` that contains CNPJ or CPF
    - new group `infSolicNFF`
    - new attributes `nPortaCon` & `dhConexao` in tags `cteProc`, `cteOSProc` & `ProcEvento`
  - CT-e NT2020.002 GTV, for more information see note2930526
    The main changes in the CT-eOS layout are:
    - new choice in tag `infDocRef` with one new field `chBPe`
    - new group `infGTVe` inside of tag `infCTeNorm`
  - CT-e NT2021.001, for more information see note3036348
    The main changes in the CT-eOS layout are: within tag <`veic`> of structure <`rodoOS`> the field <`UF`> has become optional
- MDF-e
  - MDF-e NT2021.001, for more information see note 3036349
    The main changes in the MDF-e rodo layout are:
    - within group <`infANTT`>-<`valePed`>-<`disp`> the field `nCompra` is now optional
    - within group <`infANTT`>-<`valePed`>-<`disp`>, the field <`tpValePed`> has been introduced
    - within group <`infANTT`>-<`valePed`>, the field <`categCombVeic`> has been introduced
    - within group <`infANTT`>-<`infPag`>, the field `indAltoDesemp` has been introduced
    - within group <`infANTT`>-<`infPag`>-<`infBanc`>, the field <`PIX`> has been introduced
    - within group <`veicTracao`>, the field <`UF`> is now optional
    - within group <`veicReboque`>, the field <`UF`> is now optional
  - MDF-e NT2021.002, for more information see note 3053124
    The main changes in the MDF-e Layout are:
    - Inside group `rodo`, the group `infPag` is enhanced by field `vAdiant`
    - Inside group `rodo`, group `infPag`-'`infPrazo` the former optional fields `nParcela` and `dVenc` have been made mandatory

    This note does not cover the new MDF-e Operation Payment Event (110116)
  - MDF-e NT2020.001, for more information see note 2877819

The main changes in the MDF-e Layout are:

- The group `prodPred` is introduced
- Inside group `rodo`, the group `infContrantante` is enhanced by fields `xNome`, `idEstrangeiro`
- Inside group `rodo`, group `infContrantante` a new group `infPag` is introduced.

Changed Features

NF-e Inbound Logistics Workplace enhanced with changed feature blind counting, for more information, see NF-e Logistics Workplace [page 360].

When using the option `BLDCOUNT` - Blind Counting, the column *Converted NF-e Quantity* und the related column for the *Unit of Measure* are now not visible any more.

2.2.2 What's New: History - NFE 10.0 SP33 (RTC October 29, 2019)

Features

- **Legal Changes**
  - NF-e NT 2019.001: Changes to ICMS mappings
  - CT-e version 3.00a
    - The field `pICMSInterPart` was removed
    - A new tag `infCTeSupl` with field `qrCodCTe` was added.

      > **Note**
      >
      > The information of field `qrCodCTe` is created by SAP NFE and not the feeder system. Therefore, the Customizing activity *CT-e: Define Query for Service Status for Authority (SEFAZ)* was extended with a new column *URL for QR Code* and renamed to *CT-e: Maintain Region-Dependent Settings*

    - The field `retCanCTe` was removed from the CT-e status check return.
    - The tag `infFisco` was added to the protocol.
  - MDF-e version 3.00a
    - The field `indCarregaPosterior` was added
      A new tag `infMDFeSupl` with field `qrCodMDFe` was added.

      > **Note**
      >
      > The information of field `qrCodMDFe` is created by SAP NFE and not the feeder system. Therefore, the Customizing activity *MDF-e: Define Query for Service Status for Authority (SEFAZ)* was extended with a new column *URL for QR Code* and renamed to *MDF-e: Maintain Region-Dependent Settings*

    - The tag `infFisco` was added to the protocol.
- **Events**
  - Suframa Events:
    Two new events are issued by the government. Both events are received via the DistributionWebService.For more information, see

- SUFRAMA - Vistoria [page 454]
- SUFRAMA - Internalização [page 455]

2.2.3 What's New: History - NFE 10.0 SP32 (RTC March 26, 2019)

Features

- **Legal Changes**
  - CT-e NT 2018.002: New group `infRespTec` (technical Responsible) and a new tag `infFretamento` for CT-e OS rodo
  - NF-e NT 2018.005 : New group `infRespTec` and changes to `retirada`, `entrega`, `med`, `ICMSST` and the protocol.
  - MDF-e NT 2018.002 v1.01: New group`infRespTec`.

2.2.4 What's New: History - NFE 10.0 SP31 (RTC August 21, 2018)

Features

- **Legal Changes**
  - NF-e NT 2018.001: NF-e issued with CPF instead of CNPJ
    SAP NFE supports to receive NF-es that were issued with a CPF. SAP NFE does not support to issue NF-es with CPF, NF-es are always issued with CNPJ.
  - NF-e NT 2016.002 1.60: Changes to Layout 4.00
    New group for `ICMSEfet` in `ICMS60` and `ICMSSN500` and other minor changes.
  - MDF-e NT 2018.002: The following changes to the layout were implemented:
    - New optional group `infEntregaParcial`
    - New optional group `infEntregaSoft`
- **General Improvements: Receive PI Acknowledgment/response a second time**
  If a negative **non-final** acknowledgment arrives, it is possible to configure the system behavior and define that the processing status of the corresponding document changes to *Error* immediately. Alternatively, you can define a time limit after which the status switches from *Wait* to *Error*.
  For more information, see Collect and process Acknowledgments from PI [page 75].

2.2.5 What's New: History - NFE 10.0 SP30 (RTC May 22, 2018)

Features

- **Legal Changes**
  - CT-e: NT 2018.001: CTe OS was enhanced with `ICMS20` and the regular expression for the licence plate (placa) was changed.
  - MDF-e: NT 2018.001: The regular expression for the licence plate (placa) was changed.
  - NF-e: NT2016.002 v1.50:
    - XML tag `pag-detPag` was enhanced by field `indPag` (new, optional)
    - In XML tag `imposto-ICMS`, the field `modDesICMS` also accepts the value `90`
    - Changed validation rules for both fields above
- **NF-e Inbound**
  - Rejection e-mail for NF-e: Option to add free text to the e-mail.
    With SP30, when sending a rejection e-mail to the vendor, you can add an additional free text to the text derived from the rejection reason. For additional information, see NF-e Fiscal Workplace [page 346] (See section *Additional Functions* → *Reject NF-e*).
- **NF-e Outbound**
  - Customer Defined Validation Rules
    With SP30, you can define own validation rules. For additional information, see Process Settings and Customizing for NF-e Outbound [page 91] (See section *Settings for NF-e* → *NF-e: Maintain Validation Rules*).

2.2.6 What's New: History - NFE 10.0 SP29 (RTC February 20, 2018)

Features

- **Legal Changes**
  - NF-e: NT 2016.002 v1.40: Some layout changes for XML tags `Ipi-clEnq` (removed) and `pag-detPag-vPag` (mandatory).
- **CT-e Inbound**
  - CT-e OS.
    With SP29, it is possible to process incoming CT-es for OS (CT-e model 67). For additional information, see CT-e OS Basic Process [page 375].

2.2.7 What's New: History - NFE 10.0 SP28 (RTC November 14, 2017)

Features

- **Legal Changes**
  - CT-e: NT 2017.002: The tag `aquav` was enhanced with field `tpNav`.
  - NF-e: NT 2016.002 v1.30: Some layout changes, for example, related to XML tags `comb`, `ICMS90`.

    > **Note**
    >
    > This legal change requires the implementation of ERP note 2537989

- MDF-e: NT 2017.003: The tag `ide` was extended with field `indCanalVerde`.

- **CT-e Inbound**
  - CT-e Distribution WebService (NT 2015.002). For additional information, see Query Documents (CT-e) from Authority [page 83].
  - New Process for CT-e: CT-e Cancellation if Event before CT-e (For more information, see CT-e Cancellation Process [page 376]).
- **Changed Features**
  - The issuing of NF-e events and the usage of the Distribution Webservice now use the new interfaces from namespace `009` so the configuration of the corresponding PI scenarios is mandatory.
  - The DF-e Distribution Request (Distribuição de DF-e) (For more information, see DF-e Distribution Request Monitor [page 532]) moved from the *Fiscal Workplace* to the *Administration* role.

2.2.8 What's New: History - NFE 10.0 SP27 (RTC August 8, 2017)

Features

- **Legal Changes**
  - NF-e: Introduction of new layout 4.00 according to technical note 2016.002.
- **NF-e Inbound**
  - Support Avulsa NF-e (CPF as Issuer)
    Avulsa NF-es are displayed in the Fiscal Workplace and have a different business determination than normal NF-es. For more information, see Business Process Determination for NF-es [page 237] and Business Process Determination by CFOP Codes and Position Types [page 238].
- **General Improvements**
  - Log read access to sensitive personal data for main documents added
    An application log is written whenever someone looks at the details of an NF-e, CT-e or MDF-e, or downloads the XML of an NF-e, CT-e or MDF-e. This log is switched off by default and can be switched on in Customizing.
- **Changed Features**
  - To issue or receive NF-e with layout 4.00, you have to configure new integration scenarios in SAP NetWeaver Process Integration. These scenarios - and all other related artifacts - can be found in the new namespace `http://sap.com/xi/NFE/009`. For more details please refer to Configuration of SAP PI [page 40].
    After the PI configuration has been created for the new scenarios, the handling for NF-e events and the distribution webservice must be switched to the new namespace. Please see SAP notes 2498688 and 2498689 for more details.

2.2.9 What's New: History - NFE 10.0 SP26 (RTC February 21, 2017)

Brief Overview

- What's New: Legal Changes
  - CT-e: New Event for Service Delivery Disagreement
  - CT-e: NT 2016.001: New Status Check supports ‘old’ CT-e; needs PI configuration, ‘old’ WS is deprecated
  - MDF-e: NT 2016.001: new Status Check supports ‘old’ MDF-e; needs PI configuration, ‘old’ WS is deprecated
  - NF-e: New XSDs for Distribution WebService
- What's New: NF-e Outbound
  - Enhance BAdI for add. communication parameter (`/XNFE/IF_EX_EMAIL_B2B`)
- What's New: NF-e Inbound
  - BAdI for e-Mail Address Determination
  - Enable Mass Selection of NF-e in Receiver Acknowlegment Workplace for Events
- What's New: Gatekeeper
  - Skip Scanning of NF-e

Detailed Description

Legal Change: CT-e: New Event for Service Delivery Disagreement

This feature enables you to implement the following legal change:

- CT-e: New Event for Service Delivery Disagreement. For mor information, see CT-e Events: Service Delivery Disagreement Event [page 484].

Legal Change: CT-e: NT 2016.001

This feature enables you to implement the following legal change:

- The Status Check now provides information about CT-es with layout 2.00 and 3.00. The previous WebService is deprecated, therefore, the PI configuration must be changed.

Legal Change: MDF-e: NT 2016.001

This feature enables you to implement the following legal change:

- The Status Check now provides information about MDF-es with layout 2.00 and 3.00. The previous WebService is deprecated, therefore, the PI configuration must be changed.

Legal Change: NF-e: NT 2014.002 v1.02

This feature enables you to implement the following legal change:

- The Distribution Web Service now supports the download of single documents, the Web Services NfeConsultaDest and NFeDownloadNF are deprecated. The Distribution Web Service is now used for dowloading NF-es from the Gatekeeper and the Fiscal Workplace, therefore the PI configuration of the deprecated Web Services is no longer needed.

NF-e Outbound: BAdI: Extend B2B Message with Communication Parameters

This feature enables you to implement the following change:

The BAdI for additional communication parameter `(/XNFE/IF_EX_EMAIL_B2B)` was enhanced with the following features:

- A new optional input parameter for event header which will be filled in case of events
- 2 new exceptions in case the email cannot be filled

For more information, see BAdIs for NF-e Outbound [page 94].

NF-e Inbound: BAdI Enhancement of E-Mail to Issuer

This feature enables you to implement the following change:

The BAdI for additional communication parameter `(/XNFE/IF_EX_EMAIL_B2B)` was enhanced with the following features:

- A new optional input parameter for event header which will be filled in case of events
- 2 new exceptions in case the email cannot be filled

BAdI: Enhancement of E-mail to the Issuer

A new BAdI is available that enables you to enhance the e-mail for the notification of the issuer of the NF-e or CT-e. You can use method `GET_RECEIVER` to determine the mail recipient for the notification to the NF-e/CT-e issuer dynamically.

For more information, see BAdIs for NF-e Inbound [page 116] and BAdIs for CT-e Inbound [page 118].

NF-e Inbound: Enable Mass Selection of NF-e in Receiver Acknowledgment Workplace

In the Receiver Acknowledgment Events Workplace, this new feature offers multi-selection for the two actions 'Send Operation Confirmation' and Send Operation Termination'.

Gatekeeper

This new feature enables you to avoid the scanning of the referenced NF-es inside a CT-e. Instead, it is sufficient to scan the CT-e only. This new feature can be switched on via configuration in Customizing. For more information, see DF-e Gate Monitor [page 418].

2.2.10 What's New: History - NFE 10.0 SP25 (RTC November 15, 2016)

Legal Changes: New manual -> CT-e 3.00 Model 57

This feature enables you to implement the following legal change:

- CT-e: NT 2016.002 -> New Layout for CT-e 3.00 Outbound Model 57

Legal Changes: MDF-e: NT 2016.002 -> MDF-e 3.00 Outbound

This feature enables you to implement the following legal change:

- MDF-e: NT 2016.002 -> New Layout for MDF-e 3.00 Outbound Model 57

NF-e Inbound: Enhanced BAdIs for flexible NF-e Process

An assign table was added to the BAdI interface. This enables the customer to access and change assignments. For more information, see BAdIs for NF-e Inbound [page 116]

NF-e Inbound: Enhanced Information for ERP Problems During Inbound Processing

This new BAdI to enable customers to exchange step result texts with own message-dependent information. The BAdI is called in all processing process steps that call ERP. You can display two new columns `Application Log` and `Info Text Last Process Step` on header level in the NF-e Inbound Monitor as additional field. For more information, see NF-e Fiscal Workplace [page 346] and BAdIs for NF-e Inbound [page 116].

CT-e Outbound: Archiving for CT-e Service Status Check Replaced

This feature offers the following:

- CT-e Outbound -> Archiving for CT-e Service Status Check Replaced
  Archiving for the CT-e Service Status Check is replaced by a deletion report to remove entries.

CT-e Inbound: Enhance BAdIs for flexible CT-e Process

An assign table was added to the BAdI interface. This enables the customer to access all assignments. For more information, see BAdIs for CT-e Inbound [page 118] and CT-e Flexible Process [page 377].

2.2.11 What's New: History - NFE 10.0 SP24 (RTC May 29, 2016)

Legal Changes: NF-e NT 2015.001

This feature enables you to implement the following legal change:

- NF-e: NT 2015.001 -> ICMS suspension events
  When sending components to the subcontractor (for subcontracting processes), the Delivery NF-e is issued. If this is an interstate operation (subcontractor is located in another state inside Brazil, or outside Brazil), the government allows the ICMS suspension for 180 days.
  With technical note 2015.001 you can apply for this ICMS suspension using events:
  - Homologation Date: 26/10/2015
  - ◦ Production Date: 30/11/2015

For additional information, see Events for ICMS Suspension [page 443].

CT-e Outbound: Finish Skipping

When the sending of a CT-e skip request fails, the NFE system offers the action Finish skipping that requests the user to provide protocol information from the SEFAZ website (for example, dhEmi).

For more information, see

- CT-e Monitor (Outbound) [page 200]
- User Actions for CT-e Processing [page 182]

Event Outbound: Confirm Authorization

Since NT 2015.002, the NF-e status check does not return receiver acknowledgement events and the distribution web service does not return them to the issuer.

Therefore, the Request Status Check is not active for some events, these need to be resent. If you receive a duplicate, use the a new action Confirm Authorization, but only for events that are not returned by the status check. This new action provides a pop-up to enter protocol information from the SEFAZ Website. The NFE system uses these values to enhance the XML with a protocol-tag and the further processing works as usual.

For more information, see

- Event Monitor Outbound [page 514]
- User Actions for NF-e Event Processing [page 458]

2.2.12 What's New: History - NFE 10.0 SP23 (RTC December 8, 2015)

Legal Changes: CT-e NT 2015.003

This feature enables you to implement the following legal change:

- CT-e: NT 2015.003 -> ICMS on interstate transactions with final consumer
  This technical note changes the layout of CT-e related to ICMS due to UF where the transport rendering is concluded, considering a scenario of interstate transaction with final consumer, according to EC 87/2015 (new law). The changes will be available in *Homologation* on October 1, 2015 and in *Production* on November 3, 2015. However the legal due date is January 1, 2016. There is a new optional group `ICMSUFFim` with 6 mandatory fields inside the `imp` tag.

Legal Changes: CT-e NT 2015.004

This feature enables you to implement the following legal change:

- CT-e: NT 2015.004 -> ICMS tax related to poverty combat fund
  This technical note changes the layout of CT-e related to ICMS due to UF where the transport rendering is concluded, considering a scenario of interstate transaction with final consumer, according to EC 87/2015 (new law). The changes will be available in *Homologation* on December 1, 2015 and in *Production* on December 15, 2015.

Legal Changes: NF-e NT 2015.003

This feature enables you to implement the following legal change:

- NF-e: NT 2015.003 -> ICMS on interstate transactions with final consumer
  This technical note changes the layout of NF-e related to ICMS due to UF where the transport rendering is concluded, considering a scenario of interstate transaction with final consumer, according to EC 87/2015 (new law). The changes will be available in *Homologation* on October 1, 2015 and in *Production* on November 3, 2015. However the legal due date is January 1, 2016. There is a new optional group `ICMSUFFim` with 6 mandatory fields inside the `imposto` tag and a new field CEST inside the `prod` tag is added.

NF-e Outbound: Display Receiver Acknowledgements in Outbound Monitor

The NFE Outbound Monitor was extend: You see the status of the receiver acknowledgment event as issued by your business partner. To receive these events, refer to section *NF-e from National Environment: Batch Job Planning* in Batch Job Planning for NF-e Outbound [page 93]. This new information is also offered as search criteria. It is also possible to design your own query based on this search criteria.

NF-e Outbound: Report to Upload Changed Validation Rules

This new feature enables you to use report `/XNFE/CHANGE_XML_VALIDATION` to upload changed validation rules.

NF-e Inbound: Removal of Action Reject Cancellation NF-e

The function to reject the cancellation of an NF-e was removed from the Fiscal Workplace.

2.2.13 What's New: History - NFE 10.0 SP22 (RTC October 13, 2015)

Features

- **Legal Changes**
  - NF-e: NT 2015.002
- **NF-e Outbound**
  - BAdI for Customer-specific Validations
  - Save *Receiver Acknowledgement Events* received via *Distribution WebService*
- **NF-e Inbound**

- New NF-e Inbound Process for NF-e issued via EPEC
- Automatic Processing for Temporary Errors in ERP

- **General Changes**
  - Report for Configuration Checks (`/XNFE/CONF_CHECK`) was extended with checks for deprecated acknowledgements and NF-e.
  - New Handling for PI Acknowledgements

2.2.14 What's New: History - NFE 10.0 SP21 (RTC June 23, 2015)

Features

- **Legal Changes**
  - NF-e: NT 2014.001 (EPEC)
  - NT 2014.003
- **NF-e Inbound**
  - Display of Tax Conditions During NF-e Simulation
- **CT-e Inbound**
  - Enhanced Process for Incoming Cancellations
- **NF-e Outbound**
  - Display Issuer base-CNPJ in Batch Monitor
  - Configuration Check Report Supports Direct Navigation
- **Events**
  - More Information About Events in the NF-e/CT-e Monitor
- **General Changes**
  - Customizing of NFE 10.0 SP21 restructured
    - All Customizing entries referring to NF-e layout 2.00 removed
    - New document-specific overview chapters introduced (NF-e, CT-e, MDF-e)
    - Customizing activity *NF-e: Define Reason for Rejection and Assign Events* moved to *Inbound NF-e*
    - Customizing activity *NF-e: Define Service Status Request for Authority (SEFAZ)* moved to *Outbound NF-e*
    - Customizing activity *CT-e: Define Reason for Rejection* moved to *Inbound CT-e*
    - Customizing activity *BAdI: Determination of Logical System* removed from the specific NF-e/CT-e subchapters and moved to section for general BAdIs
    - Customizing activity *BAdI: DF-e Status Determination for Gate Monitor* moved to section for general BAdIs
    - Removal of subnode*Business Add-Ins for DF-e Gate Monitor*

    All affected roles were adjusted accordingly.

2.2.15 What's New: History - NFE 10.0 SP20 (RTC April 14, 2015)

Features

- **Legal Changes**
  - MDF-e: Version 1.00a
  - NT 2014.003
  - NT 2015.001
- **Gate Monitor**
  - Trigger XML Download from Gate Monitor
  - Support for Import NF-e
- **NF-e Inbound**
  - Improved DANFE display for EPEC & Security Paper-Based NF-e
- **NF-e Outbound**
  - Configuration-Check-Report
  - New Option to Keep Negative B2B Acknowledgments
  - Automatic Processing of Temporary Batch Problems
  - New Function to Support Migration of Already Authorized NF-e
- **CT-e Outbound**
  - Assign CT-e to New Batch
  - Resend CT-e XML to Business Partner
  - Repeat Successful Process Step (Update Feeder System)
- **Events**
  - Resend CT-e Event XML to Business Partner
  - Repeat Successful Feeder System Update for Event Status
  - Manually End an NF-e Event Batch Process in Status *Wait*
- **Receiver Acknowledgment Workplace**
  - Delete Processed Lines from the Distribution WebService

2.2.16 What's New: History - NFE 10.0 SP19 (RTC December 23, 2014)

Legal Changes

- NF-e: NT 2014.002: (NFeDistribuicaoDFe)
- NF-e: NT 2013.005 v1.10 & v1.20

MDF-e Outbound Enhancements

- Validate MDF-e data from feeder system
- Archiving of MDF-e
- Function (to be called from Feeder System) for ending the issuing process for a rejected MDF-e

NF-e Inbound Enhancements

- Extended XML content for ERP
- New BAdI to check fiscal checkpoint events during the inbound processing
- New BAdI to control the issuing of the operation confirmation event during the inbound processing

NF-e Outbound Enhancements

- Manually end batch process also when status is *wait*
- New BAdI to automatically update the feeder system for some rejection codes
- Send NF-e to both business partners in parallel

CT-e Inbound Enhancements

- Allow overwriting of incorrect CT-e

Event Enhancements

- Allow overwriting of incorrect events
- Send NF-e Events to both business partners in parallel

2.2.17 What's New: History - NFE 10.0 SP18 (RTC September 2, 2014)

Legal Changes

- NF-e: Technical Note 2014.004

- CT-e: Technical Note 2014.001
- MDF-e: Technical Note 2014.003

MDF-e Outbound

- New MDF-e issuing process
- Events: close, cancel, addition of driver

NF-e Inbound Enhancements

- Filter available purchase orders according to purchasing group/organization
- Display purchasing group/organization in Fiscal Workplace
- Trigger XML download when DANFE is scanned and NF-e has not arrived yet

NF-e Outbound Enhancements

- Accept the rejection of a cancelation

CT-e Inbound Processes

- CT-e inbound automation with TM for outbound NF-e
- CT-e inbound automation with TM for inbound NF-e

2.2.18 What's New: History - NFE 10.0 SP17 (RTC May 27, 2014)

Legal Changes

- NF-e: Technical Note 2013.005

NF-e Outbound Enhancements

- New NF-e issuing process: sending NF-e without batch
- Sending NF-e batches as zip file
- Improved NF-e error handling
  - Resend NF-e to government
  - Update feeder system
  - Repeat feeder system update
  - Manually end failed skip requests
- New report for evaluating the NF-e throughput

NF-e Inbound Enhancements

- Enable customer enhancements to Logistic Workplace

NF-e Outbound Enhancements

- B2B sending of events as independent process

Receiver Acknowledgement Enhancements

- Automatic transfer for downloaded NF-e to Fiscal Workplace

2.2.19 What's New: History - NFE 10.0 SP16 (RTC February 11, 2014)

Legal Changes

- NF-e: Technical Note 2013/005 (new Layout 3.10)

NF-e Outbound Enhancements

- XML mass download extended with NF-e number and series

- Service Status Check can be scheduled for different regions independently
- New Customizing *Maintain Control Parameters for Process Flow*: The step *Trigger B2B Process* in process *NF-e Outbound: with Batch Processing* can be deactivated

NF-e Inbound Enhancements

- DANFE entry date and time are available as selection new column in Fiscal Workplace, new selection criteria *DANFE received*
- The status history of document processing keeps the application log
- Failed goods receipt posting can be shown in logistics workplace (new control parameter for the goods receipt step)
- Subcontracting – Symbolic Returns: manual assignment without info record/BADI in ERP

Receiver Acknowledgement Enhancements

- Visualize event deadlines

2.2.20 What's New: History - NFE 10.0 SP15 (RTC October 22, 2013)

Legal Changes

- CT-e: Technical Notes 06/2013, 10/2013 and 12/2013 (new layout 2.00)
- NF-e Technical Note 2013/006 (new field nFCI)

Receiver Acknowledgment Workplace Enhancements

- Deletion for receiver acknowledgment tables

NF-e Inbound Enhancements

- Receive duplicate NF-e
- Receive NF-e with unknown receiver CNPJ
- Allow overwriting of incorrect NF-e

- Send material origin from XML to ERP
- BADI for calculating the total amount for non statistical items (RTP and symbolic returns)
- New columns and selection criteria: finNF-e and logical system

CT-e Inbound Enhancements

- Receive duplicate CT-e

NF-e Outbound Enhancements

- Manually finish NF-e batch processing

NF-e Event Enhancements

- Restart event batch process

2.2.21 What's New: History - NFE 10.0 SP14 (RTC June 4, 2013)

Legal Changes

- CT-e: Technical Note 2013.001, Technical Note 2013.004
- NF-e: Technical Note 2013.003

Receiver Acknowledgement Workplace Enhancements

- Resending rejected/denied receiver acknowledgment events
- New report to decouple list download from DB cross-check

Gate Monitor Enhancements

- BADI for Gate Monitor status and text

NF-e Inbound Enhancements

- More detailed error information during simulation (long text, item specific)

Event Enhancements

- (Re)send NF-e event XML to business partners
- Customizing steps for event process flow

New CT-e Inbound Processes

- CT-e inbound automation for the buyer (NF-e receiver) with LES
- CT-e inbound automation for the vendor (NF-e issuer) with LES

2.2.22 What's New: History - NFE 10.0 SP13 (RTC February 19, 2013)

New Workplace for Inbound NF-e Synchronization with SEFAZ

- Get list of inbound NF-e from SEFAZ
- Check for missing documents (NF-e, Cancelation)
- Download missing documents

New Workplace for Receiver Acknowledgment Synchronization with SEFAZ

- Manage missing receiver acknowledgment events

New Workplace for the Gatekeeper

- Scan documents (NF-e and CT-e) from truck
- Check entrance conditions (authorization, processing state)
- Trigger processing (if entrance allowed)

NF-e Inbound Enhancements

- Enhanced PO assignments (multiple items to same PO item)
- Invoice simulation and creation - BADI for calculating the amount for RTP

CT-e Inbound Enhancements

- Rejection and notification for CT-e

New NF-e Events

- Operation Acknowledgment
- Operation Termination
- Operation Denial

Java-Only PI

- Enable NF-e to run with AEX (Java-Only-PI) – new content delivered

2.2.23 What's New: History - NFE 10.0 SP12 (RTC October 16, 2012)

Legal Changes

- Technical Note 2012/003

General Improvements

- Enhance customizing for B2B activation (CT-e and NF-e)
- Special treatment for temporary SEFAZ errors (108, 109)
- Display protocol information (nProt) in overview tables
- Signature validation for 'old' certificates

CT-e Outbound Enhancements

- SVC: new contingency system and process
- Validation
- Archiving and download
- Automatic retry after ERP update error
- Support for different versions
- Asynchronous CT-e status check

NF-e Outbound Enhancements

- (Re)send XML to business partners
- Allow user actions also from the NF-e *Overview*

Events

- New NF-e Event: Cancellation
- New Monitor for incoming events

NF-e Incoming Reports

- List of NF-e with missing/wrong PO item assignments

2.2.24 What's New: History - NFE 10.0 SP11 (RTC June 12, 2012)

CT-e Outbound Enhancements

- B2B Messaging
- Status Check
- Number Gap Skipping

Events

- New NF-e event: Operation Confirmation

NF-e Incoming Reports

- Evaluation of rejected NF-es

2.2.25 What's New: History - NFE 10.0 SP10 (RTC March 13, 2012)

Legal Changes

- CT-e 1.04b XML layout

New NF-e Inbound Business Process

- Consignment (2 new Scenarios)

New CT-e Outbound Process

- CTe issuing

NFe Inbound Enhancements

- Removal of proposed quantity from logistics clerk screen (blind count)
- BADI for custom validations for specific groups of customers
- BADI for enhancing the automatic PO assignment
- BADI for additional customer checks on NF-e simulation
- Decoupling RECDANFE from PDF view
- Automatic execution of simulation (PO and NF-e)

NF-e Outbound Enhancements

- NF-e: Support different versions of messages for different regions

Other Non-Functional Enhancements

- License auditing support

2.2.26 What's New: History - NFE 10.0 SP09 (RTC November 22, 2011)

Legal Changes

- XML layout change as required by technical note 04/2011

New NF-e Inbound Business Processes

- Subcontracting (3 new scenarios)
- Future Delivery (2 new scenarios)
- Returnable Packages (all existing GR scenarios enhanced)

New CT-e Inbound Business Process

- CT-e inbound automation via BADIs

NFe Inbound Enhancements

- PO assignment improvements
- BADI for flexible business process determination

Events

- New NF-e event: correction letter (CC-e)

3 Overview of SAP NFE

Use

SAP Electronic Invoicing for Brazil (SAP Nota Fiscal Eletrônica, SAP NFE) helps companies comply with the Brazilian requirements for electronic invoicing. Companies selling products in Brazil must send each invoice electronically to the government for validation before shipping their goods. Companies purchasing goods in Brazil must check the electronic invoice at the government before receiving the goods.

The Brazilian government wants to be sure that all due tax revenue is collected. The authorities are actively involved in the invoicing process, which includes issuing real-time authorization orders for companies' canceled or out-of-sequence invoices. Companies need to handle these activities with an automated solution that can scale to high volumes of invoices and meet their business process requirements: SAP Electronic Invoicing for Brazil is that solution.

The Brazilian government requires that companies submit the following documents for every planned goods movement:

- An electronic invoice (nota fiscal eletrônica, NF-e)
- A freight document (conhecimento do transporte eletrônico, CT-e)
- A transport document (Manifesto Eletrônico de Documentos Fiscais, MDF-e)

In addition, SEFAZ has introduced the option to add a document to an NF-e/CT-e/MDF-e to provide information. This additional document is an **event** and carries additional information for the main document (NF-e/CT-e/MDF-e).

SAP NFE is a centralized data store and workplace for all messages communicated between your company and the government system, as well as for messages between your company and other companies' systems in B2B scenarios. It also is the central platform for storing the exchanged files as required by law and provides interfaces for easy access to these documents.

The following features are available for SAP Electronic Invoicing for Brazil 10.0:

Scope Overview - Outbound (Supplier)	Description
Outbound NF-e:	• Issue NF-e (all layouts supported by SEFAZ, asynchronous via batch or synchronous) • Events: Issue Cancellation, Correction Letter & ICMS Suspension, receive Receiver Acknowledgements • Contingency processes SVC & EPEC • Monitors for NF-e, Events, Batches, and Service Availability

Scope Overview - Outbound (Supplier)	Description
Outbound CT-e:	• Issue CT-e (all layouts supported by SEFAZ) • Events: issue Cancellation and Correction Letter, receive Service Delivery Disagreement • Contingency process SVC • Monitors for CT-e, Events, Batches and Service Availability
Outbound MDF-e:	• Issue MDF-e (all layouts supported by SEFAZ) • Events: issue Cancellation, Close, and Addition of Driver • Monitors for MDF-e, Events, Batches and Service Availability

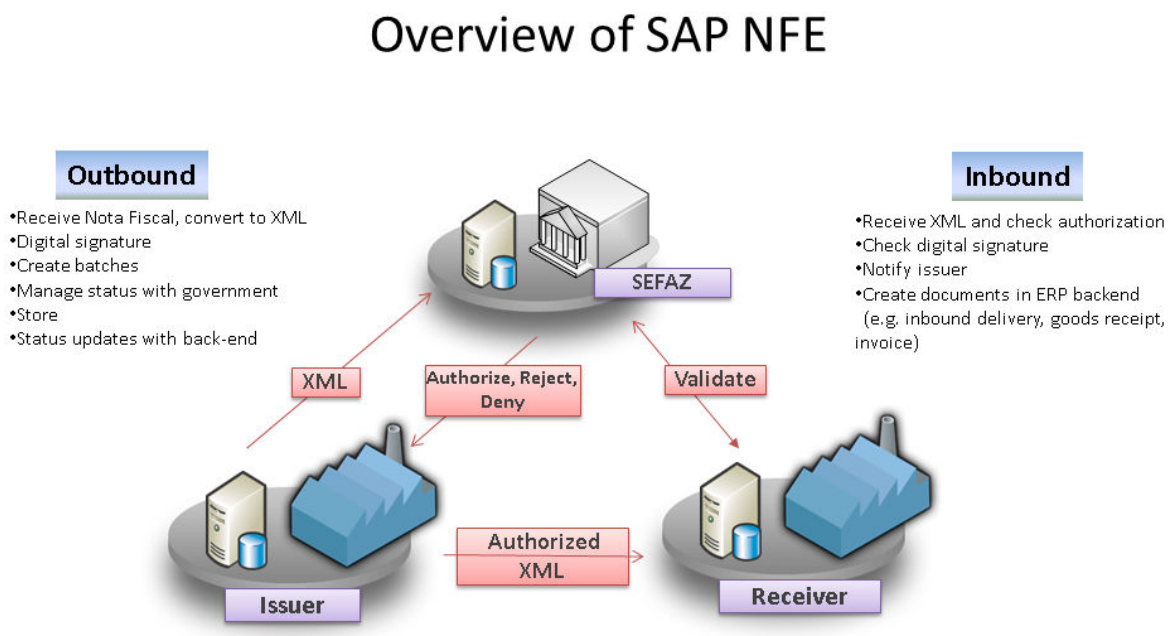
Scope Overview - Inbound (Buyer)	Description
Inbound NF-e:	• Receive NF-e (all layouts supported by SEFAZ) • Events: Issue Receiver Acknowledgements, receive Cancellation, Correction Letter, ICMS Suspension, and EPEC. • Distribution WebService (receive XML from government), • Fiscal Workplace, Logistic Workplace, Receiver Acknowledgement Workplace, and Gate Monitor
Inbound CT-e:	• Receive CT-e (all layouts supported by SEFAZ) • Events: Issue Service Delivery Disagreement, receive Cancellation and Correction Letter • Fiscal Workplace

Inbound Automation	Description
NF-e Inbound Automation Processes:	• Basic (Signature & Authorization Check), (with RTP) • Flexible (Basic + BAdI) (with RTP) • Normal Purchasing (with RTP) • Stock Transfer • Subcontracting (with RTP) • Future Delivery (with RTP) • Consignment (with RTP)
CT-e Inbound Automation Processes:	• Basic (Signature & Authorization Check) • Flexible (Basic + BAdI) • CT-e Inbound Automation for the Buyer (NF-e Receiver) with TM • CT-e Inbound Automation for the Supplier (NF-e Issuer) with TM • CT-e Inbound Automation for the Buyer (NF-e Receiver) with LES • CT-e Inbound Automation for the Supplier (NF-e Issuer) with LES

Integration

To raise revenue principally in the form of taxes on goods movements, the Brazilian government has implemented an XML-based electronic billing system known as *Nota Fiscal Eletrônica*, which comprises both business-to-government (B2G) communication as well as business-to-business (B2B) communication. The government provides the forms and stipulates the rules for electronic communication that the majority of companies must use and follow in order to do business in Brazil.

SAP's solution is composed of two deployment units: NFE and the ERP core component. Each of the parts is an independent solution. Both parts complement each other for automation of the integrated end-to-end scenarios. An overview of the NF-e processing is shown in the following diagram:



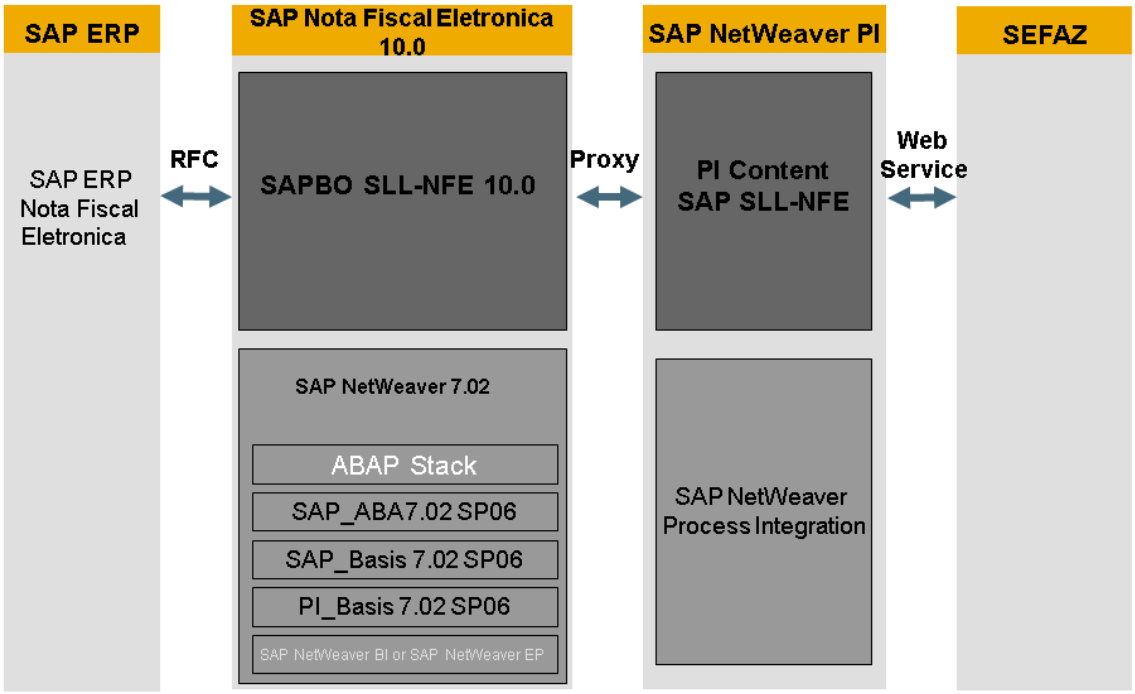
More Information

For more information about NFE business processes and functions in SAP ERP, see *Electronic Nota Fiscal (NF-e)* in the SAP Library under *SAP Solutions* > *SAP ERP* > *SAP ERP Central Component* > *<Release>* > *SAP ERP Central Component* > *Logistics* > *Country Versions* > *Americas* > *Brazil* > *Cross-Application Components* > *Nota Fiscal*

4 Architecture of SAP NFE

Concept

SAP Electronic Invoicing for Brazil (SAP Nota Fiscal Eletrônica, SAP NFE) utilizes different components to meet government requirements, all while enabling a high degree of flexibility to ensure your business benefits. The following graphic shows all the components included in the NFE application-shipment that you need in addition to the business processes in SAP ERP.



Architecture of SAP Nota Fiscal Eletrônica

- SAP Nota Fiscal Eletrônica
  The NFE application contains the administration and monitor workplaces for the outbound scenario, and the fiscal and logistic workplace for the inbound scenario.
- SAP NetWeaver Process Integration (SAP NetWeaver PI)
  If you already use SAP NetWeaver PI to communicate between different systems, you can easily implement the additional content required to communicate with the authorities without changing your existing setup. SAP NetWeaver PI offers you all the technological and messaging capabilities you need to send NF-es and all other NF-e related messages in a compliant manner (including HTTPS and SOAP).

Integration

Inbound and Outbound Integration

Based on your existing system landscape, you can connect one or several logistics systems as back-end systems to send and receive NF-es for SAP NFE, and to use SAP NFE as the central communication platform for your NF-e processes. The back-end systems can be either SAP ERP or any legacy system that provides the billing data and tax-related information that the authorities require. The interface implementation necessary to connect SAP ERP to NFE is part of the standard delivery.

More Information

For information about the message flow between the different instances of NFE and the authorities, see

- Communication Flow for Sending NF-es [page 126]
- Communication Flow for Sending CT-es [page 171]
- Communication Flow for Sending MDF-es [page 209]

5 Configure SAP NFE

To configure SAP Electronic Invoicing for Brazil (SAP Nota Fiscal Eletrônica, SAP NFE), you must perform activities in all relevant software components (described in Architecture of SAP Electronic Invoicing for Brazil (SAP Nota Fiscal Eletrônica) [page 38]).

This section distinguishes between the general connection settings that are required to connect all systems to one another, and the specific settings that are required to set up communication and related processes in each of the systems. It is therefore divided into the following subsections:

Configuration of SAP PI [page 40]

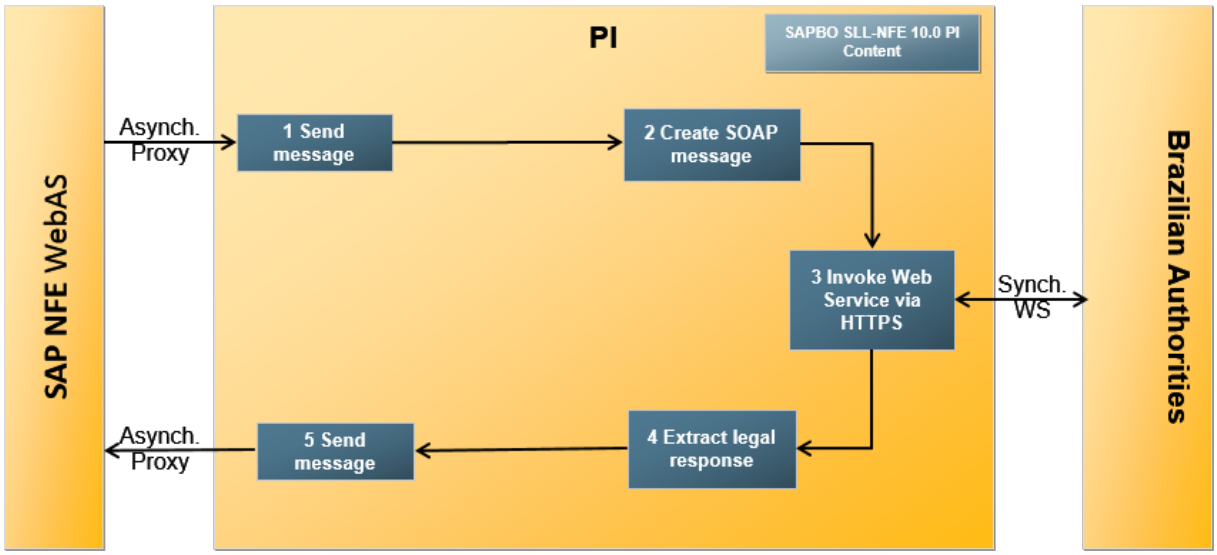
Configuration of SAP NFE [page 67]

Related Configuration in SAP ERP [page 123]

5.1 Configuration of SAP PI

SAP NetWeaver Process Integration (SAP NetWeaver PI) serves as middleware that routes messages between SAP NFE components, government authorities, and business partners. SAP NetWeaver PI provides the following integration features for NFE:

- Tailoring XML messages to SEFAZ requirements.
- Secure SOAP communication using client and server certificates.
- Switching from synchronous message transfer - used between SAP NetWeaver PI and SEFAZ - to an asynchronous message transfer due to performance reasons (async-sync bridge).



Step-by-Step Procedure in Detail

1. Send the message asynchronously from SAP NFE to PI

2. Embed legal document into a SOAP envelope
3. Invoke SEFAZ Web Service synchronously via HTTPS with certificate-based authentication from PI
4. Extract legal response from SEFAZ Web Service
5. Send the message asynchronously to SAP NFE (WebAS)

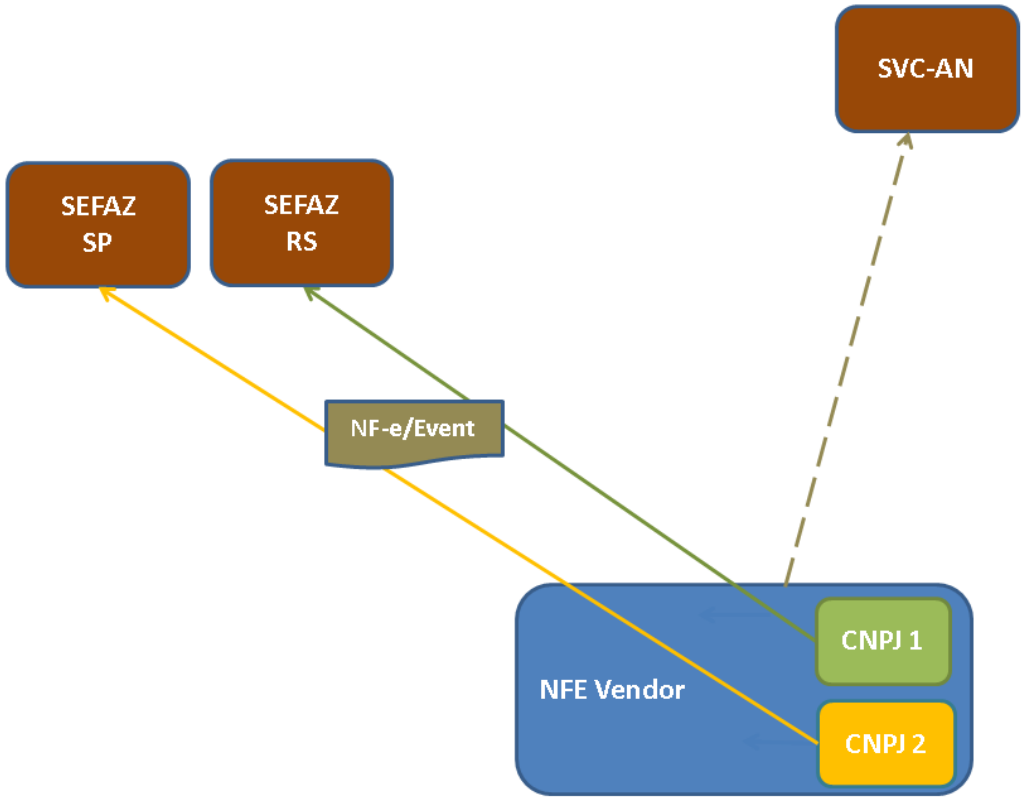
In the dual stack PI, the async-sync bridge is implemented via a `ccBPM` process in ABAP. Since `SAPBO SLL-NFE 10.0 SP13 SWCV`, there are also integration scenarios and channel templates for the Java-only version of PI 7.31 and above AEX (Advanced Adapter Engine Extended). In `AEX`, the `ccBPM` functionality for the async-sync bridge is replaced by adapter modules.

You can define the conditions for determining the recipient within a specific configuration scenario. SAP NetWeaver Process Integration (SAP NetWeaver PI) determines the correct recipient by analyzing the payload in the XMLs sent by the NFE core application.

How to address the correct authority system

This section explains how the messages have to be routed and also explains the background of the government authorities.

The authorizing systems responsible for your state can be a SEFAZ (Secretaria da Fazenda) or a SEFAZ VIRTUAL (SVXX) system. If this state system fails due to a technical reason (for example, application error, server or network overload), companies cannot receive the authorization immediately. As an alternative, the government provides the SEFAZ VIRTUAL Contingency (SVC-XX) systems. You have to customize the SVC system responsible for you in your NFE system (▶ *Nota Fiscal Eletronica* ▶ *Outgoing* ▶ *NF-e: Define Service Status Request for Authority (SEFAZ)* ▶).



Routing to the Government Systems

In this example, we have 2 plants (CNPJ 1 & 2) that send NF-es/Events to their respective SEFAZ system. If the SEFAZ system is not available, the NF-es/Events are sent to the corresponding contingency system (For example, SVC-AN).

Events have to be sent to the government for authorization. An event is an additional document for an NF-e and can carry information concerning the NF-e. The SVC event service for the cancellation event is available for an NF-e authorized in SVC. An NF-e authorized by a non-SVC SEFAZ system cannot be cancelled in SVC. Other events, such as CC-e, are not available in SVC.

There are different types of government systems: SEFAZ, SEFAZ VIRTUAL, SVC (contingency systems) and *Ambiente Nacional*. The Sefaz systems used by only one region for NF-e are:

- Sefaz Amazonas - (AM)
- Sefaz Bahia - (BA)
- Sefaz Goias - (GO)
- Sef Minas Gerais - (MG)
- Sefaz Mato Grosso do Sul - (MS)
- Sefaz Mato Grosso - (MT)
- Sefaz Pernambuco - (PE)
- Sefaz Paraná - (PR)
- Sefaz Rio Grande do Sul - (RS)

- Sefaz São Paulo - (SP)

Virtual Sefaz systems for NF-e that are used by regions without an own SEFAZ system:

- Sefaz Virtual Ambiente Nacional - (SVAN), used by MA, PA, PI.
- Sefaz Virtual Rio Grande do Sul - (SVRS), used by AC, AL, AP, DF, ES, PB, RJ, RN, RO, RR, SC, SE, TO

Authorizing SVC systems for NF-e:

- Sefaz Virtual de Contingência Ambiente Nacional - (SVC-AN), used by AC, AL, AP, DF, MG, PB, RJ, RO, RR, RS, SC, SE, SP, TO.
- Sefaz Virtual de Contingência Rio Grande do Sul - (SVC-RS) used by AM, BA, EC, ES, GO, MA, MS, MT, PA, PE, PI, PR, RN.

Ambiente Nacional - (AN) provides services for EPEC events and Nfe download.

The governments' web sites with a list of the web services are:

- Production
  NF-e: *http://www.nfe.fazenda.gov.br/portal/webservices.aspx*
  CT-e: *http://www.cte.fazenda.gov.br/portal/webservices.aspx*
  MDF-e: *https://mdfe-portal.sefaz.rs.gov.br/site/servicos*
- Homologation
  NF-e: *http://hom.nfe.fazenda.gov.br/portal/webservices.aspx*
  CT-e: *http://hom.cte.fazenda.gov.br/portal/webservices.aspx*
  MDF-e: *https://mdfe-portal.sefaz.rs.gov.br/site/servicos*

Prerequistes

- You must maintain the system and component information in the system landscape directory (SLD).
- You must install Java Web Start before you can use the Integration Builder for configuration activities in SAP NetWeaver PI.

> **Note**
>
> The settings below are described to assist a trained SAP NetWeaver PI consultant with the necessary configuration activities.

To configure SAP NetWeaver Process Integration (SAP PI), read the following descriptions:

PI Configuration on Dual Stack [page 43]

PI Configuration for AEX (Java-only Single Stack) [page 57]

5.1.1 PI Configuration on Dual Stack

Use

The traditional configuration is the integration directory configuration with *receiver determination*, *interface determination*, *sender and receiver agreements*, and *communication channels*. These configurations will be processed by both engines, ABAP and Java.

More Information

First NFE PI Scenario-Independent Steps [page 44]

Alert Configuration in SAP NFE [page 45]

PI Configuration for NF-e Outbound [page 45]

PI Configuration for CT-e Outbound [page 47]

PI Configuration for MDF-e Outbound [page 48]

PI Configuration for NF-e Inbound [page 49]

PI Configuration for CT-e Inbound [page 50]

Additional Configuration [page 51]

NFE PI: General Configuration Steps [page 52]

5.1.1.1 First NFE PI Scenario-Independent Steps

Use

The following manual preprocessing steps are scenario independent:

Process

1. Import certificates into the J2EE keystore
   To import certificates for client authentication into the J2EE keystore, refer to SAP NetWeaver J2EE documentation.

   > ⓘ Note
   >
   > Import the certificate - including the CA chain - as one single PFX file as described in SAP Note 1524196.

2. Create Parties
   Open the Integration Directory and create the following parties:
   - Your company
     For your own company, you must define a party and a communication component.
   - Government systems
     You must create a party for every individual regional authority and every individual supplier authority. Then create two different *communication components*, one for the productive system environment and the other for the homologation environment.
   - Business partners for business-to-business (B2B) scenarios
     You must create a party for each business partner with which you agree to exchange NF-es. You must create separate *Business Services* if you want to send NF-es to a business partner. You must create separate *Communication Channels* for sending NF-es and for sending events. The adapter type for

your communication channels depends on the agreement with your business partners, for example, FTP, or HTTP.

3. Create the Business System
   You must assign the system on which your NFE application runs to a business system without a party. The system information has to be maintained in the System Landscape Directory before the start of your configuration project as an administrative task.
   1. You must create a receiver *Communication Channel* for the adapter type XI that calls the ABAP proxies. This channel holds the parameters for the connection to your NFE system.
   2. The communication channel of the XI type for the sender is implicitly defined and requires no configuration action.

5.1.1.2 Alert Configuration in SAP NFE

Use

For a correct error handling, it is essential to send negative acknowledgments from PI to NFE if a communication problem occurs (Due to the fact that the outbound scenario relies on asynchronous messages from NFE to PI). For PI double-stack installations, the alert category `NFE_ALRT_CAT` has to be created using transaction `ALRTCATDEF` (see SAP Note 1741486). This is not required for AEX (Java-only) PI installations.

You can also use the alerts function in SAP NetWeaver Process Integration (SAP NetWeaver PI) to send e-mail notifications to the responsible persons in your company about possible communication problems. The e-mail relays the error status message. You can specify the e-mail notification recipients for each integration scenario.

For more information about configuring alerts in SAP NetWeaver PI, see *Alert Configuration* in the SAP Library under *Functional View* > *SAP NetWeaver by Key Capability* > *Process Integration by Key Capability* > *SAP NetWeaver Exchange Infrastructure* > *Runtime* > *Central Monitoring*.

Activities

- To configure alerts, use transaction code **ALRTCATDEF** and create the alert category **NFE_ALRT_CAT**.
- Define your alert rules according to the alert configuration descriptions in SAP Library for SAP NetWeaver PI.

5.1.1.3 PI Configuration for NF-e Outbound

You can identify the objects that belong to an integration scenario by checking the first characters in the technical name. Adhere to the naming conventions when creating objects to keep consistent object names analogue to the description in section *Naming Conventions* in Configure Integration Scenarios in PI [page 52].

> **Note**
>
> The technical names in SAP NetWeaver PI for SAP Nota Fiscal Eletrônica refer to the core application as *WebAS*.

Integration Scenarios for NF-e Outbound for NF-e Layout 4.00

The following integration scenarios from namespace: `http://sap.com/xi/NFE/009` are part of SAP NetWeaver PI content delivery for SAP NFE layout 4.00 (NF-e layout 3.10 uses namespace `http://sap.com/xi/NFE/008`):

- `NFEBATCH_WebAS_Outbound_NFeBatch`
  This integration scenario contains all objects relevant for configuring the batch sending of signed NF-es to the authorities.
- `NFEBATZP_WebAS_Outbound_NFeBatchZip`
  This integration scenario contains all objects relevant for configuring the batch zip sending of signed NF-es to the authorities.
- `NFEBATSR_WebAS_Outbound_NFeBatchStatusRequest`
  This integration scenario contains all objects relevant for configuring the collection of NF-e statuses from the authorities This occurs after the expiration of the time period that you received from the authorities in the above integration scenario. The logistics process can only continue after receiving this message with an authorizing status code from the authorities.
- `NFESC_WebAS_Outbound_NFeStatusCheck`
  This integration scenario contains the objects relevant for configuring the retrieval of status information about a NF-e from the authorities. This scenario is necessary for checking the status of all NF-es sent to the authorities in batches for which you cannot retrieve the status information with the batch status check. The government is required to keep NF-e statuses only for a specific period. If you cannot collect the status due to system downtime, you must request the NF-e status for each NF-e individually by using this integration scenario. You also need this scenario to check the status of NF-es that you receive from your business partners.
- `NFETB2B_WebAS_Outbound_NFeToB2B`
  This integration scenario contains the objects relevant for configuring the sending of NF-es to defined business partners.
- `NFESKIPR_WebAS_Outbound_NFeSkipRequest`
  Brazilian authorities require that NF-es be numbered in consecutive order. After an NF-e is rejected, the number of this NF-e is used up and cannot be used again. Whenever an NF-e is rejected, you must inform the authorities about the gap in the sequence by sending a request to skip the used number. This integration scenario contains all objects relevant to configuring the sending a skipping request to the authorities and the receipt of the authorities' response.
- `NFESRVSC_WebAS_Outbound_NFeServiceStatusCheck`
  This integration scenario contains all objects relevant for configuring the checking of the availability of the authorities' system at a specific interval. Every company is required to regularly check government system availability.
- `NFEEVTB2B_WebAS_Outbound_NFeEventToB2B`
  This integration scenario contains all objects relevant for configuring the sending of authorized events to B2B partners.
- `NFEEVFB2B_WebAS_Inbound_NFeEventFromB2B`
  This integration scenario contains all objects relevant for configuring the receiving of events from B2B partners.

- `NFEEV_WebAS_Outbound_NFeEvent`
  This integration scenario contains all objects relevant for configuring the sending of events to the authorities and the receipt of the authorities' response for these requests. Examples for NF-e events are the cancellation request or the correction letter.

For these scenarios the messages have to be routed to the local authorities. For hints regarding the content-based routing, see the descriptions in Receiver Determination [page 54]. To carry out the configuration, see NFE PI: General Configuration Steps [page 52]. The description can be used as example for all integration scenarios.

5.1.1.4 PI Configuration for CT-e Outbound

You can identify objects that belong to an integration scenario by checking the first characters in the technical name. Adhere to the naming conventions when creating objects to keep consistent object names analogue to section *Naming Conventions* in Configure Integration Scenarios in PI [page 52].

> **Note**
>
> The technical names in SAP NetWeaver PI for SAP Nota Fiscal Eletrônica refer to the core application as *WebAS*.

Integration Scenarios for CT-e Outbound for CT-e Layout 4.00

The following integration scenarios from namespace: `http://sap.com/xi/CTE/400` are part of SAP NetWeaver PI content delivery for CT-e layout 4.00.

- `CTEBATCH_Model57_Outbound_CTeBatch_Sync`
  This integration scenario contains all objects relevant to configuring the sending of signed CT-es to the authorities.
- `CTEEV_Outbound_CTeEvent_SYNC`
  This integration scenario contains all objects relevant for configuring the sending of events to the authorities and the receipt of the authorities' response for these requests. Examples for CT-e events are the cancellation request or the correction letter.
- `CTEEVTB2B_Outbound_CTeEventToB2B`
  This integration scenario contains all objects relevant for configuring the sending of authorized events to B2B partners.
- `CTESC_Outbound_CTeStatusCheck`
  The CT-e status check is executed asynchronously.
- `CTESC_Outbound_CTeStatusCheck_Sync`
  The CT-e status check is executed synchronously.
- `CTETB2B_Model57_Outbound_CTeToB2B`
  This integration scenario contains the objects relevant for configuring the sending of CT-es to defined business partners.

For all CT-e scenarios, the messages have to be routed to the local authorities or the responsible SVC system. For hints regarding the content-based routing see the descriptions in Receiver Determination [page 54].

To carry out the configuration, see NFE PI: General Configuration Steps [page 52]. The description can be used as example for all integration scenarios.

5.1.1.5 PI Configuration for MDF-e Outbound

You can identify the objects belonging to an integration scenario by checking the first characters in the technical name. Adhere to the naming conventions when creating objects to keep consistent object names analogue to the description in section *Naming Conventions* in Configure Integration Scenarios in PI [page 52].

> **Note**
>
> The technical names in SAP NetWeaver PI for SAP Nota Fiscal Eletrônica refer to the core application as WebAS.

Integration Scenarios for MDF-e Outbound for MDF-e Layout 3.00

The following integration scenarios from namespace `http://sap.com/xi/MDFE/300` are part of SAP NetWeaver PI content delivery for SAP NFE (MDF-e layout 1.00 uses namespace `http://sap.com/xi/MDFE/100`):

- `MDFE_Outbound_Sync`
  This integration scenario contains all objects relevant to configuring the sending of signed MDF-es to authorities.
- `MDFEBATCH_WebAS_Outbound_MDFeBatch_Sync`

  > **Note**
  >
  > With SAP note3453629, this integration scenario is deprecated. Use `MDFE_Outbound_Sync` instead.

  This integration scenario contains all objects relevant to configuring the batch sending of signed MDF-es to the authorities.
- `MDFEBATSR_WebAS_Outbound_MDFeBatchStatusRequest_Sync`

  > **Note**
  >
  > With SAP note3453629, this integration scenario is deprecated. Use `MDFE_Outbound_Sync` instead.

  This integration scenario contains all objects relevant to configuring the collection of MDF-e statuses from the authorities. This occurs after the expiration of the time period that you received from the authorities in the above integration scenario. The logistics process can only continue after receiving this message with an authorizing status code from the authorities.
- `MDFESC_WebAS_Outbound_MDFeStatusCheck`
  The MDF-e status check is executed asynchronously.
- `MDFESC_WebAS_Outbound_MDFeStatusCheck_Sync`
  The MDF-e status check is executed synchronously.
- `MDFEEV_WebAS_Outbound_MDFeEvent_Sync`
  This integration scenario contains all objects relevant for configuring the sending of events to the authorities and the receipt of the authorities' response for these requests. Examples for MDF-e events are `Cancellation`, `Closing`, and `Addition of driver` (Cancelamento, Encerramento, Inclusão de Condutor).
- `MDFESRVSC_WebAS_Outbound_MDFeServiceStatusCheck_Sync`

This integration scenario contains all objects relevant for configuring the checking of the availability of the authorities' system at a specific interval. Every company must regularly check the availability of the government systems.

To ensure that messages are routed to the correct target, you must configure content-based routing for all Receiver Determinations in government processes, see section Receiver Determination [page 54]. The authorizer environment (SEFAZ National Authorizer) provides the web services for all states.

To carry out the configuration, see NFE PI: General Configuration Steps [page 52]. The description can be used as example for all integration scenarios.

> ### Note
>
> As there is no contingency system available for MDF-e, both `tpemis = 1` and `tpemis = 2` have to be routed to the normal SEFAZ system

5.1.1.6 PI Configuration for NF-e Inbound

The following integration scenarios are part of SAP NetWeaver PI content delivery for SAP NFE.

> ### Note
>
> The technical names in SAP NetWeaver PI for SAP NFE refer to the core application as *WebAS*.

> ### Caution
>
> Be aware that you have to configure every integration scenario individually for every NF-e layout version that you need. For example, if you use the integration to receive NF-es in layout 4.00 and you also need to receive NF-es in layout 3.10, you **also** have to configure the integration scenario for both NF-e layouts, 4.00 and 3.10.

Scenarios for NF-e Inbound

From namespace: `http://sap.com/xi/NFE/009`.

- `NFEFB2B_WebAS_Inbound_NFeFromB2B`
  This integration scenario contains the objects relevant to configuring the reception of NF-es from defined business partners.
- `NFESC_WebAS_Outbound_NFeStatusCheck`
  This integration scenario contains the objects relevant to configuring the retrieval of status information about a NF-e from the authorities. This scenario is necessary for checking the status of all NF-es sent to the authorities in batches for which you cannot retrieve the status information with the batch status check. The government is required to keep the NF-e statuses only for a specific period. If you cannot collect the status due to system downtime, you must request the NF-e status for each NF-e individually by using this integration scenario. You also need this scenario to check the status of NF-es that you receive from your business partners.

- `NFEEVFB2B_WebAS_Inbound_NFeEventFromB2B`
  This integration scenario contains all objects relevant to configuring the receiving of events from B2B partners.
- `NFEEVTB2B_WebAS_Outbound_NFeEventToB2B`
  This integration scenario contains all objects relevant for configuring the sending of authorized events to B2B partners.
- `NFEEV_WebAS_Outbound_NFeEvent`
  This integration scenario contains all objects relevant for configuring the sending of event requests from the operation progress group (in the inbound case), such as the *Operation Confirmation* event to the authorities and the receipt of the authorities' response to these requests. Event requests from the operation progress group will be issued to national authority system. The contingency event service for the inbound scenario is not available in the SVC system.

To carry out the configuration, see NFE PI: General Configuration Steps [page 52]. The description can be used as example for all integration scenarios.

5.1.1.7 PI Configuration for CT-e Inbound

The following integration scenarios are part of SAP NetWeaver PI content delivery for SAP NFE.

> **Note**
>
> The technical names in SAP NetWeaver PI for SAP NFE refer to the core application as *WebAS*.

> **Caution**
>
> Be aware that you have to configure every integration scenario individually for every CT-e layout version that you need. For example, if you use the integration to receive CT-es in layout 4.00 and you also need to receive CT-es in layout 3.00, you **also** have to configure the integration scenario for both CT-e layouts, 4.00 and 3.00.

CT-e Integration Scenarios

- `CTEEVFB2B_Inbound_CTeEventFromB2B`
  This integration scenario contains the objects relevant for configuring the reception of CT-es from defined business partners.
- `CTEFB2B_Model57_Inbound_CTeFromB2B`
  This integration scenario contains the objects relevant to configuring the reception of CT-es model 57 from defined business partners.
- `CTEFB2B_Model67_Inbound_CTeFromB2B`
  This integration scenario contains the objects relevant to configuring the reception of CT-es model 67 from defined business partners.
- `CTESC_Outbound_CTeStatusCheck`
  This integration scenario contains the objects relevant to configuring the reception of status information from the authorities about a CT-e that you received from a business partner.

To ensure that messages are routed to the correct target, you must configure content-based routing for all Receiver Determinations in government processes, see Receiver Determination [page 54].

To carry out the configuration, see NFE PI: General Configuration Steps [page 52]. The description can be used as example for all integration scenarios.

> **Note**
>
> To use *SEFAZ VIRTUAL DE CONTINGÊNCIA (SVC)* set `tpEmis = 7` for *SVRS* or `tpEmis = 8` for *SVSP* and for normal operation: `tpEmis ≠ 7` or `≠ 8`, depending on the used SVC system. All CT-es with `tpEmis = 1` and `tpEmis = 5` have to be transferred to the standard (non-contingency) SEFAZ system. Check technical note 2012/003 to find the respective SVC region.

> **Note**
>
> **New integration scenarios for CT-e Outbound for CT-e Layout 4.00**
>
> The integration scenarios from namespace: `http://sap.com/xi/CTE/400` are part of SAP NetWeaver PI content delivery for SAP NFE layout 4.00.

5.1.1.8 Additional Configuration

If you want to use additional workplaces, you have to configure additional PI scenarios. For the configuration of these integration scenarios, the same configuration procedure for PI must be applied (described in the previous sections).

DF-e Gate Monitor

The following additional integration scenarios need to be configured in Process Integration for the Gatekeeper Workplace:

- `CTESC_WebAS_Outbound_CTeStatusCheck_Sync` (Namespace: `http://sap.com/xi/CTE/300` for CT-e layout 3.00).
  This integration scenario contains the objects relevant to configuring the reception of status information from the authorities about a CT-e that you received from a business partner. This synchronous integration scenario is additionally required next to the asynchronous `CTESC_WebAS_Outbound_CTeStatusCheck` that is used by the CT-e Fiscal Workplace.
- `CTESC_WebAS_Outbound_CTeStatusCheck_Sync` (Namespace: `http://sap.com/xi/CTE/400` for CT-e layout 4.00).
  This integration scenario contains the objects relevant to configuring the reception of status information from the authorities about a CT-e that you received from a business partner. This synchronous integration scenario is additionally required next to the asynchronous `CTESC_WebAS_Outbound_CTeStatusCheck` that is used by the CT-e Fiscal Workplace.
- `NFESC_WebAS_Outbound_NFeStatusCheck_Sync` (Namespace: `http://sap.com/xi/NFE/009` for NF-e layout 4.00. Use `http://sap.com/xi/NFE/008` for NF-e layout 3.10).
  This integration scenario contains the objects relevant to configuring the retrieval of status information about an NF-e from the authorities. In this case this scenario checks the status of NF-es that you receive from your business partners. This synchronous integration scenario is additionally required next to the asynchronous `NFESC_WebAS_Outbound_NFeStatusCheck` that is used by the NF-e Fiscal Workplace.

DF-e Distribution Web Services

The following additional integration scenarios need to be configured in Process Integration for the *DF-e Distribution Web Services*:

- `CTEDIST_WebAS_Outbound_CTeDistRequest_Sync`
  This integration scenario contains all objects relevant for configuring the service for the distribution of electronic tax documents (CT-e and corresponding events). The corresponding web service CTeDistribuicaoDFe is offered by the Ambiente Nacional - (AN).
- `NFEDIST_WebAS_Outbound_NFeDistRequest_Sync`
  This integration scenario contains all objects relevant for configuring the service for the distribution of summary information and electronic tax documents (NF-e and corresponding events). The corresponding web service NfeDistribuicaoDFe is offered by the Ambiente Nacional - (AN).

> **Note**
>
> *DF-e Distribution* requests have to be configured using the national authorities system (`Ambiente Nacional - AN / cUF = 91`) only. In the content-based routing, you only need to differentiate between the two environments (`tpAmb`). For more detailed information, refer to Receiver Determination [page 54].

5.1.1.9 NFE PI: General Configuration Steps

Use

Completing the configuration scenarios based on predefined design objects contains of several steps:

Process

Configure Integration Scenarios in PI [page 52]

Receiver Determination [page 54]

Configure the Communication with B2B Partners [page 56]

5.1.1.9.1 Configure Integration Scenarios in PI

Use

To support you in implementing SAP NFE, SAP NetWeaver PI contains integration scenarios that group all dependent objects of a communication process. You can use these integration scenarios to complete configure electronic communication during the implementation process.

All integration scenarios are defined in the development namespace for a specific version of a government system. They use objects from this system version namespace as well as from the common namespace. The

common namespace groups all objects, such as structures or mappings, that do not depend on a government system.

Procedure

To perform the following configuration steps open the Integration Directory.

1. **Create Communication Channel**
   Within the Business Service of the party, create a Communication Channel as a SOAP receiver channel for each available Web service per region:
   - For `NFE 009`, apply the communication channel template `WebAS_GOV_SOAP_RCV_TMPL`.
   - Enter the web service URL of the authority system that can be found on the SEFAZ web site.
   - Enable certificate-based authentication and select your relevant certificate (keystore view / keystore entry).
   - Enable *Do Not Use SOAP Envelope* under *Conversion Parameters* due to the fact that the SOAP envelope is created during the mapping process.
2. **Import Integration Process**
   An integration process is required for each scenario. You can transfer integration processes from the ESR to the *Integration Directory* using the wizard. In *Service Without Party*, choose *Integration Process* > *New* .
3. **Create Configuration Scenario**
   Create a configuration scenario based on the relevant integration scenario from ESR choosing *Object* > *New* in the scenario tab.
   Then open the integration scenario configurator:
   1. Select the *Web AS Template* and choose your SAP NFE backend. For synchronous scenarios, choose the business service for B2B and the business service you have created for your own company.
   2. For asynchronous scenarios, select *Process Template* and choose the relevant integration process you have imported in the last step. For *Business Service for B2B*, choose the business service you have created for your own company.
   3. Select *Government System Template* and add all required SEFAZ systems.
   4. Select the connection from Web AS to government system and maintain the *Communication Channel* you created before.
   5. Select the connection from process to Web AS and maintain the *Communication Channel* you have created in the third step of the manual preprocessing.
   6. Save the model and perform the generation. The configuration objects *Receiver Determination*, *Interface Determination*, and *Receiver Agreement* have been generated.

5.1.1.9.2 Receiver Determination

Context

To ensure that messages are routed to the correct target, you must configure content-based routing for the receiver determinations of the synchronous web service call in government processes, for example, in the configuration scenario `NFESC_WebAS_Outbound_NFeStatusCheck`. You configure this routing by defining conditions based on the values in the XML fields, for every receiving government system, for example, the receiver-specific fields `cUF`, `tpAmb`, and `tpEmis`. Other scenarios exist for which the routing must be based on sender-specific data like `tpEvento` or sender `CNPJ`.

Receiver-specific Routing

- `tpAmb = 2` indicates a homologation system
- `tpAmb = 1` indicates a productive system

The `cUF` field in the XML payload contains the state number. The `tpEmis` field determines the issuing type to indicate if a contingency environment is used. For an SVC NF-e, check technical note 2013/007 and for an SVC CT-e, check technical note 2012/003 to find the relevant SVC server for your state:

tpEmis	Authorization
1	SEFAZ (normal operation)
2	SEFAZ (Contingency, FS)
3 (No longer used)	SCAN (SEFAZ Contingência Ambiente Nacional)
4	SEFAZ (EPEC)
5	SEFAZ (Contingency, FS-DA)
6	SVC_AN (SEFAZ Virtual de Contingência Ambiente Nacional) (SVC NF-e)
7	SVC_RS (SEFAZ Virtual de Contingência Rio Grande do Sul) (SVC NF-e)
7	SVRS (SEFAZ Virtual Rio Grande do Sul) (SVC CT-e)
8	SVSP (SEFAZ Virtual São Paulo) (SVC CT-e)

Using the combination of the `cUF` entry and `tpAmb` and `tpEmis`, the system can identify the correct receiving government system and your routing rules have to ensure that, for example, the following targets are reached:

tpEmis	cUF	tpAmb	Target

1	43	1	RS Production
1	35	2	SP Homologation
3 (No longer used)	any	2	SCAN Homologation
4	91 (for EPEC events) 43 (for NF-e)	1	SEFAZ_AN Production (for EPEC events) SEFAZ_RS Production (for NF-e)
6	any	1	SVC_AN Production
7	any	2	SVC_RS Homologation

Remember that the contingency event service for the cancellation event is always available for the NF-e authorized in the contingency system. Other events - such as CC-e - are not available.

If the NF-e/CT-e is sent to the contingency system, the routing of the following CC-e event must be redirected within the *Receiver Determination*. The event inherits the `tpEmis` from its NF-e or CT-e, for example, 6 or 7 for NF-e and 7 or 8 for CT-e.

The skipping request of an unused NF-e or CT-e has to be transferred to a SEFAZ system, as the `NfeInutilizacao WebService` is not offered by the SVC systems.

Sender-specific Routing

There are scenarios for which the conditions for the content-based routing must be based on sender specific criteria. For events, attention must be paid to the following special features:

- Events of type CCE and issuing type SVC (`tpEmis` = 6 or 7) must be routed to SEFAZ.
- Events of type EPEC (`tpEmis` = 4) must be routed to SEFAZ_AN.
- Events for the cancellation of an EPEC NF-e (`tpEmis` = 4) must be routed to SEFAZ.

Example for routing conditions for event scenario `EVENT_WebAS_Outbound_EventRequest`:

	tpEvento	tpEmis	cUF	tpAmb	Target
	-	-	91	1	SEFAZ_AN Production
EITHER	110110	6	43	1	
OR	-	other than 6	43	1	SEFAZ_RS Production
	other than 110110	6	-	2	SEFAZ_AN Homologation

In integration scenarios that require that the client certificate (used to authenticate on the server) matches the CNPJ code of the request, you have to create own communication channels for every individual sender CNPJ with individual certificates and with the according *Business Component/Party* and *Receiver Agreement*.

Example for a routing condition for the scenario `NFEDI_WebAS_Outbound_NFeDist`: In this case, the *Business Component* is *Production* and the *Party* is `SEFAZ_AN_12345`:

CNPJ	tpEmis	cUF	tpAmb	Target
12345	-	-	1	SEFAZ_AN_12345 Production

5.1.1.9.3 Configure the Communication with B2B Partners

> **Note**
>
> The technical names in SAP NetWeaver Process Integration (SAP NetWeaver PI) refer to the core application of SAP Nota Fiscal Eletrônica (SAP NFE) as *WebAS*.

SAP NetWeaver PI offers an array of options for communicating with B2B partners (also see the B2B articles on the NFE Wiki http://wiki.scn.sap.com/wiki/display/BPX/SAP+NFE). This is the configuration approach for the `NFETB2B_WebAS_Outbound_NFeToB2B` integration scenario.

The SAP NFE system populates the receiver service in the XI message header with the CNPJ code (pattern *CNPJ <cnpjcode>*) of your business partner (buyer or carrier). This additional information gives you several options to configure the receiver determination in your PI system:

- You can use the predefined *Service as Identifier*: This straightforward approach uses the *Integration Scenario Configurator*. Create one generic party or several parties for your B2B partners and use their respective CNPJs to determine the receiver service. In the receiver determination, set *Service* to *Receiver Service*.

  > **Caution**
  >
  > In the generated receiver determinations, the *Party* and *Service* fields under *Receiver* must be set as * (asterisk).

  The receiver determination now contains your own defined *Party* object, but also accepts the *Receiver Service* already populated from the SAP NFE WebAS. Create the interface determinations and corresponding *Receiver Agreements* for each receiver to determine the communication direction within the relevant communication channel.
- You can use *extended receiver determination* to translate the receiver-service-CNPJ into specific partners: If you already created your B2B partners in XI and want to re-use them, message mapping reads the *Receiver* parameter from the message headers. You can then use a value mapping of your choice to match the CNPJ numbers with your target B2B partners. Receiver determinations are no longer necessary, and you can re-use existing Interface Determinations and Receiver Agreements. The approach described in SAP Note 1525562 (with minor enhancements) can be applied to this scenario.
- You can use *generic receivers*: You can use the receiver-service-CNPJs to determine the mail address by using the *SAP PI Lookup API* and the *Dynamic Adapter Configuration*. ,
  You can also implement the Business Add-In `/XNFE/EMAIL_B2B` to add the e-mail address in SAP NFE as an attachment to the XI message. You can extract this e-mail address in your PI system via adapter module (PI 7.0) or Message/Java mapping (PI 7.1 and higher).

5.1.2 PI Configuration for AEX (Java-only Single Stack)

Use

With the release of SAP NetWeaver Process Integration (PI) 7.31, it is possible to run the system as an AEX (Advanced Adapter Engine Extended /Java-only / single stack) installation. Here an integrated configuration is used to configure an end-to-end scenario that processes messages locally on the Java engine. This object replaces the traditional configuration objects (*Receiver Determination*, *Interface Determination*, and *Sender/Receiver Agreements*).

To configure the PI content of SAP NFE on such an installation, you have to use the integration scenarios containing the infix AEX.

Process

The configuration of AEX PI contains the following steps:

NWA Destination Configuration [page 57]

Configure Integration Scenarios for PI AEX [page 58]

Manual Postprocessing in PI AEX [page 62]

Complete Configuration for PI AEX [page 66]

5.1.2.1 NWA Destination Configuration

Use

Configure the NWA (NetWeaver Administrator) destination for delivering acknowledgement to the SAP NFE backend.

Process

1. Open NWA (*http://[host]:[port]/nwa Configuration Infrastructure Destinations*)
2. Maintain the HTTP destination, for example, `GRC_NFE_WAS` with the following URL: *http://[host]:[port]//sap/xi/engine?type=entry&sap-client=[client]&sap-language=EN*
3. Replace host, port and client values with the values of your SAP NFE backend. If you have multiple SAP NFE backends, you need to define separate destinations (destination name is arbitrary) for every individual backend.

5.1.2.2 Configure Integration Scenarios for PI AEX

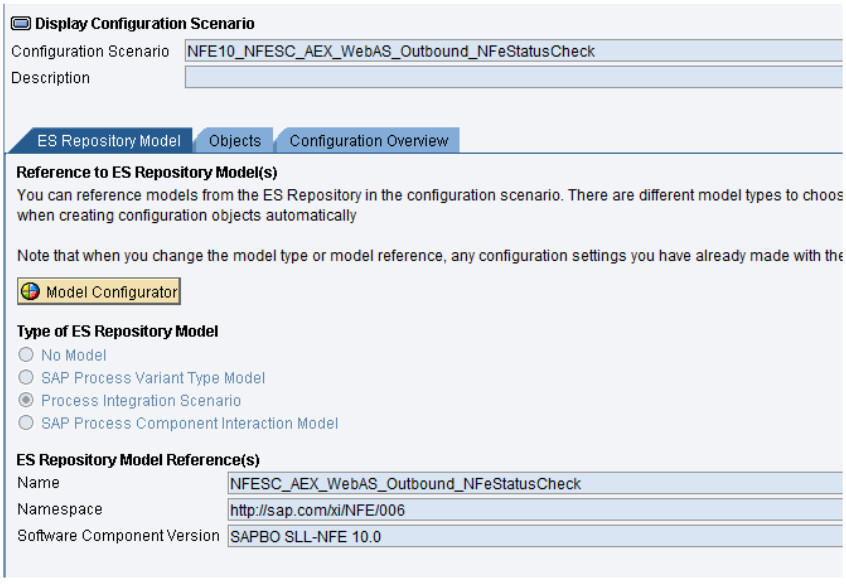
Use

When the integration scenarios are generated as an *Integrated Configuration*, it is necessary to use the delivered *Communication Channel* templates. These templates contain the adapter modules in the correct order. The adapter modules replace the `ccBPM` logic on dual stack scenarios.

In the SOAP *Sender Channel* that receives messages from your SAP NFE system, populate the *HTTP Destination* field of the *Acknowledgement Handling* tab with your destination created in NWA Destination Configuration [page 57] (for example: GRC_NFE_WAS).

Process

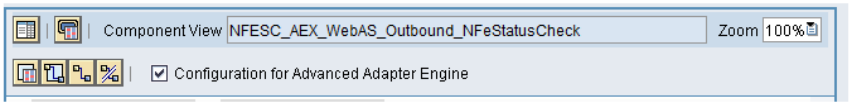
Open the *Integration Directory* and create a configuration scenario based on the integration scenario from ESR. In the following sections, the asynchronous *NF-e Status Check* is used as an example.



Screen 1

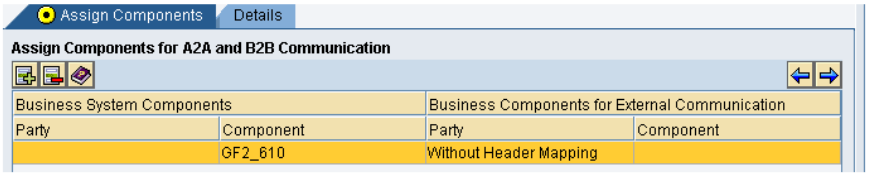
For AEX PI, use configuration integration scenarios with the infix AEX, for example, NFESC_AEX_Outbound_NFeStatusCheck in namespace `http://sap.com/xi/NFE/009`.

Create the *Configuration Scenario* first and select the relevant *Process Integration Scenario*. Then open the *Model Configurator* and ensure that the *Configuration for Advanced Adapter Engine* flag is checked.



Screen 2

Select the *Web AS Template* and choose your SAP NFE backend. Use the *Without Header Mapping* option for the second group of columns.

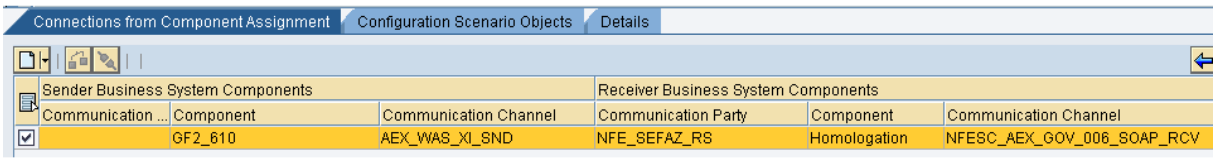


Screen 3

Select *Government System* and add all required systems to the row.

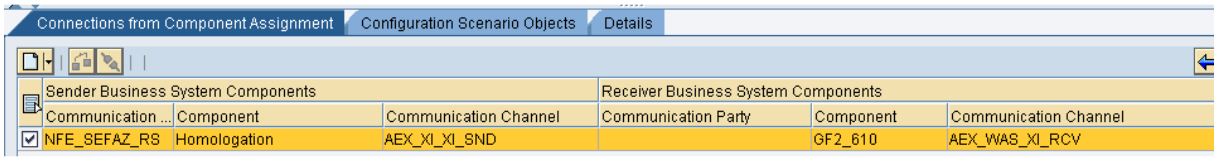
Select the first connection from Web AS to the government system and maintain the sender and receiver *Communication Channels*. Create the communication channels with the provided templates using the *Create Communication Channel with Template* dropdown list box next to the *New* button.

The sender channels for an NFE backend can be reused across all scenarios, whereas the receiver channels for a government system are scenario-specific.



Screen 4

Direction: Web AS to government system.



Direction: Government system to Web AS.

Save the model and perform the generation using the *Integrated Configuration* scope.

Close the generator wizard and switch to the *Objects* tab in the configuration scenario. For every SEFAZ system there will be a separate integrated configuration. In addition, there will be one integrated configuration with the SAP NFE backend system as the sender.

5.1.2.3 Manual Postprocessing in PI AEX

Context

The manual postprocessing consists of the following actions:

- Copy Response Integrated Configurations [page 63]
- Copy Integrated Configurations for B2B [page 64]
- Adjust Communication Channels for Sender and Receiver [page 65]

5.1.2.3.1 Copy Response Integrated Configurations

Generated integrated configuration objects in request-response scenarios need to be post-processed.

List of affected scenarios (for namespace `http://sap.com/xi/NFE/009`):

- `NFEBATCH_AEX_WebAS_Outbound_NFeBatch`
- `NFEBATCH_AEX_WebAS_Outbound_NFeBatchZip`
- `NFEBATSR_AEX_WebAS_Outbound_NFeBatchStatusRequest`
- `NFEEV_AEX_WebAS_Outbound_NFeEvent`
- `NFESC_AEX_WebAS_Outbound_NFeStatusCheck`
- `NFESKIPR_AEX_WebAS_Outbound_NFeSkipRequest`

For namespace `http://sap.com/xi/CTE/300`:

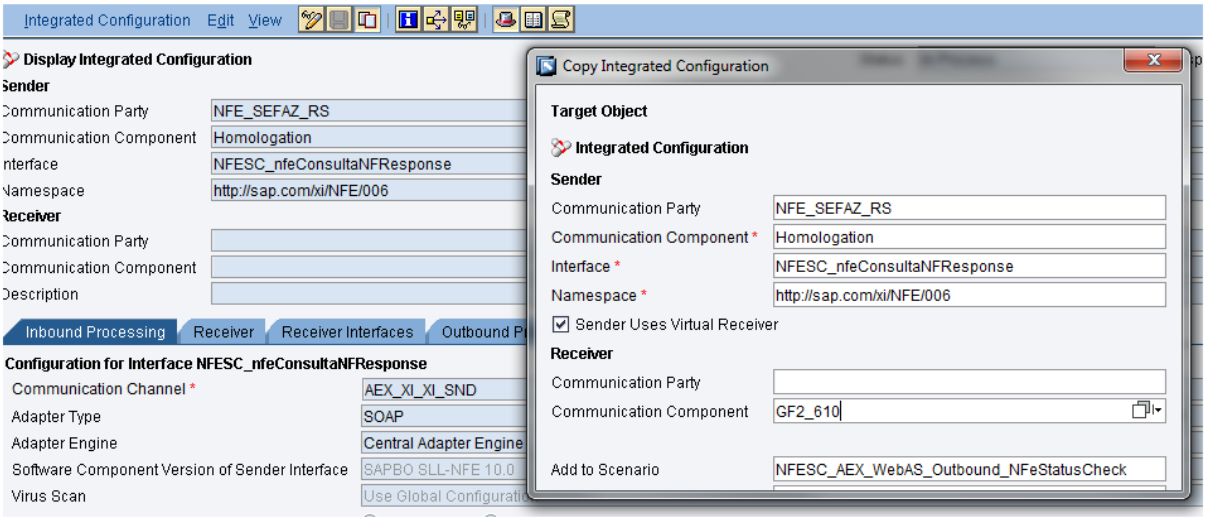
- `CTESC_AEX_WebAS_Outbound_CTeStatusCheck`

New namespace `http://sap.com/xi/CTE/400`.

For namespace `http://sap.com/xi/MDFE/300`:

- `MDFESC_AEX_WebAS_Outbound_MDFeStatusCheck`

Copy the generated *Integrated Configuration* from the authorities (SEFAZ is sender) and specify the NFE system as the communication component of the *Virtual Receiver*. Then delete the previous *Integrated Configuration*.



Screen 1

5.1.2.3.2 Copy Integrated Configurations for B2B

Use

Generated integrated configuration objects for B2B scenarios must to be manually post-processed. The B2B scenarios from the SAP NFE system to your B2B partner must have a virtual receiver with the asterisk (*), because the receiver is already populated with the CNPJ number in the SAP NFE system.

List of affected scenarios in namespace `http://sap.com/xi/NFE/009`:

- `NFEEVTB2B_AEX_WebAS_Outbound_NFeEventToB2B`
- `NFETB2B_AEX_WebAS_Outbound_NFeToB2B`

List of affected scenarios in namespace `http://sap.com/xi/CTE/300`:

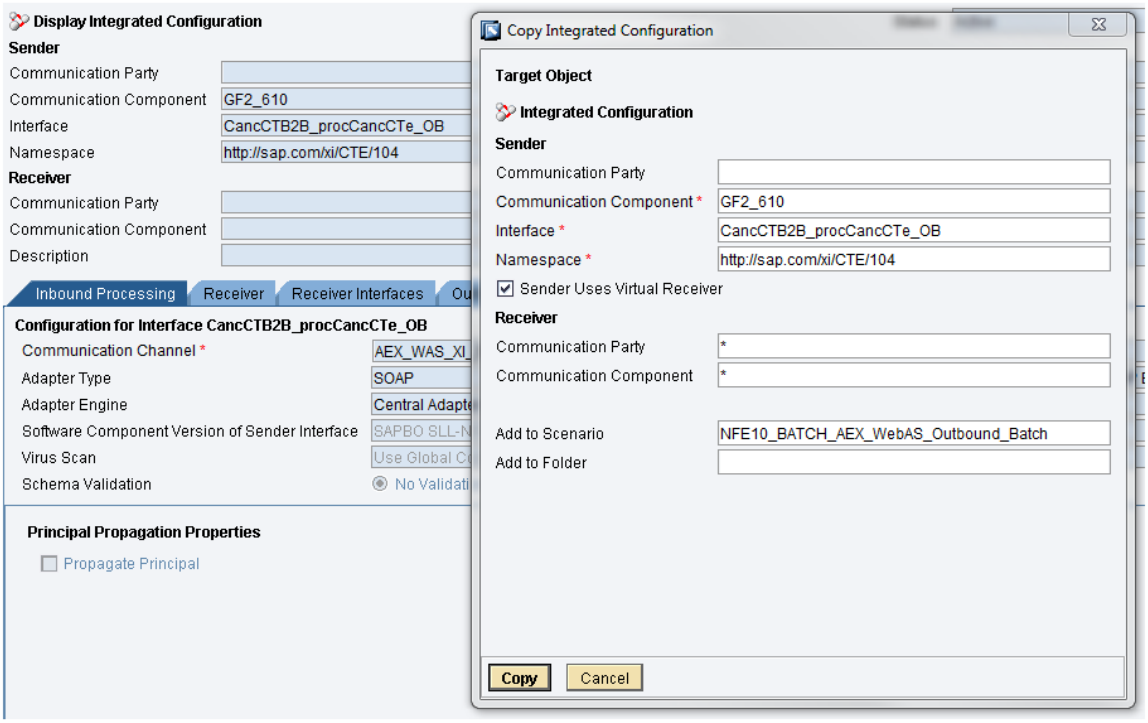
- `CTB2B_AEX_WebAS_Outbound_B2B_CTe`

List of affected scenarios in namespace `http://sap.com/xi/CTE/400`:

- `CTB2B_AEX_WebAS_Outbound_B2B_CTe`

Process

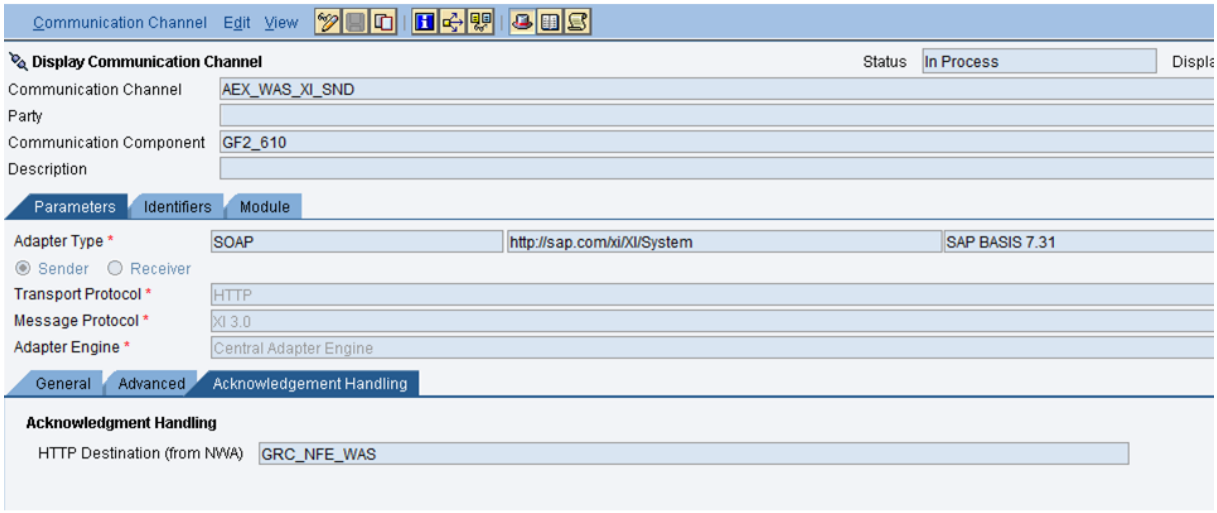
1. Open the integrated configuration.
2. Click on the *Copy Object* button.
3. Select the *Sender uses Virtual Receiver* checkbox.
4. Enter * (asterisk) as value of the virtual party and service.
5. Assign the resulting integrated configuration to the configuration scenario.
6. Delete the original integrated configuration.



Screen 1

5.1.2.3.3 Adjust Communication Channels for Sender and Receiver

Check the tab *Acknowledgment Handling* for every sender channel. It must contain the name of the HTTP destination configured for the NFE backend in the NWA and serves to deliver XI acknowledgements.



Screen 5

Maintain the correct target URL (see SEFAZ web site) and the correct client certificate for every receiver channel.

5.1.2.4 Complete Configuration for PI AEX

Use

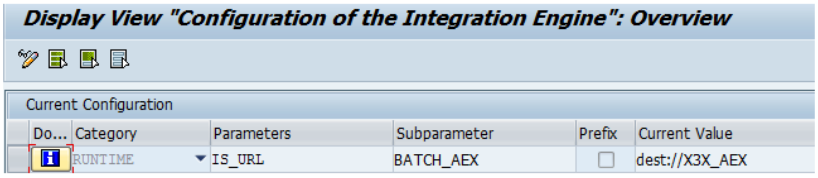
Settings for NFE WebAS ABAP

Process

The ABAP proxy communication needs to call the AEX (Java-only) directly. This is described in SAP Help under *Process Integration* > *Advanced Adapter Engine Extended (AEX)*. Path Prefix: `/XISOAPAdapter/MessageServlet?ximessage=true`

In case of a PI 7.31 double-stack system, you can use the AEX connection (for example, due to performance reasons) by creating specific sender IDs in transaction `sxmb_adm` (configure sender/receiver ID). Assign the

new RFC destination to the sender IDs of the NFE interfaces in the *Integration Engine Configuration* as shown below (sender ID = subparameter).



Screen 1

The proxy connection for the other interfaces then remains the standard ABAP to ABAP connection.

5.2 Configuration of SAP NFE

This section describes the settings that you need for system connections between the different instances in the communication process for electronic documents (NF-e, CT-e, MDF-e, Events). To configure SAP Electronic Invoicing for Brazil (SAP Nota Fiscal Eletrônica, SAP NFE), you must perform activities in all relevant software components:

- General Settings for SAP NFE [page 68]
- Digital Signature Configuration [page 68]
- Setup of System Communication for SAP NFE [page 69]
- Background Reports [page 71]
- Configuration of Outbound [page 88]
- Configuration of Inbound [page 106]

Configuration of Events [page 119]

Configuring and Personalizing Workplaces [page 123]

5.2.1 General Settings for SAP NFE

The setting *Maintain Own Tax Numbers* is found in Customizing under *Nota Fiscal Eletrônica* > *General Settings*. You enter your company's tax numbers, as well as an appropriate description.

5.2.2 Digital Signature Configuration

Internal Signature

If you want to use an internal signature in SAP NetWeaver, you must define the following settings:

- *Maintain System Security Information (SSF:Trust Manager)*
  For every Secure Store and Forward (SSF) application, you must import the certificates that you have purchased from the authorities. This is done in the Trust Manager.
- *Maintain Application-Dependent SSF Information*
  You receive an overview of existing SSF applications and you must create entries for each of your own tax numbers.
- *Maintain System Response for Own Tax Numbers*
  Maintain the name of the SSF application for each CNPJ where you saved the purchased certificates that you must use to sign the documents. For more information, refer to the corresponding document-specific section of *Process Settings and Customizing*:
  - Process Settings and Customizing for NF-e Outbound [page 91]
  - Process Settings and Customizing for CT-e Outbound [page 98]
  - Process Settings and Customizing for MDF-e Outbound [page 103]

For more information, see Administration [page 524].

External Signature

If you want to use an external signature, you must maintain the following settings:

- To create an external signature, you must implement the Business Add-In *BAdI: Signature for Outbound Documents*, in Customizing under *Nota Fiscal Eletrônica* > *Outbound* > *Business Add-Ins for Outbound NF-es/CT-es/Events*.
- *Maintain System Response for Own Tax Numbers*
  Maintain the key store view and key store element for each CNPJ in the same location where you saved the certificate that you purchased from the authorities and that you use to sign the documents.

This information is a parameter of the BAdI interface. For more information, refer to the corresponding document-specific section of *Process Settings and Customizing*:

- Process Settings and Customizing for NF-e Outbound [page 91]
- Process Settings and Customizing for CT-e Outbound [page 98]
- Process Settings and Customizing for MDF-e Outbound [page 103]

For more information, see Administration [page 524].

5.2.3 Setup of System Communication for SAP NFE

Use

The communication process with SAP Nota Fiscal Eletronica (SAP NFE) is triggered by the feeder system SAP ERP. It is then processed in SAP NFE, and uses SAP NetWeaver Process Integration (SAP NetWeaver PI) as the communication engine to communicate with the authorities and business partners through specific Process Integration (PI) content for SAP NFE. To set up the communication process, you must define the system connection between the different instances.

> **Note**
>
> The setup of the system connection from SAP NetWeaver PI to the necessary systems is part of the configuration process in SAP NetWeaver PI. For more information, see the specific descriptions in the document-specific section of the SAP NetWeaver PI configuration:
>
> - PI Configuration on Dual Stack [page 43]
> - PI Configuration for AEX (Java-only Single Stack) [page 57]

Prerequisites

- You have defined and assigned the logical systems in SAP ERP and the core application of SAP NFE. For more information, see *Setting Up Logical Systems* in the SAP NetWeaver Library under *Functional View* > *SAP NetWeaver by Key Capability* > *Security* > *Identity Management*.
- The communication between the feeder system and the SAP NFE application is based on Remote Function Call (RFC) technology. You have defined an RFC user in SAP NFE, each relevant feeder system that you must assign in the system connection setup, and SAP NetWeaver PI.

Features

The following system connections are necessary for the communication process:

- From SAP ERP to the core application of SAP NFE
  The business process for invoicing in SAP ERP triggers the electronic communication to the authorities by sending the data for electronic notas fiscais (NF-es) to the core application of SAP NFE. There the system

processes the messages according to the legal requirements. For the transfer of the document data, you must set up the system connection from SAP ERP to the core application of SAP NFE. Based on your existing system landscape, you can connect one or several logistics systems as feeder systems to the core application of SAP NFE.

> **Note**
>
> The feeder systems provide the billing data and tax-related information that the authorities require, and can either be SAP ERP or any other legacy system.

- From the core application of SAP NFE to SAP ERP
  You need to connect SAP NFE to SAP ERP to synchronize the status information you receive from the government. This status information influences the invoicing and follow-on processes, for example, continuing the logistics process based on authorized NF-es, or initiating the contingency process for notas fiscais in SAP ERP. You must set up a connection to each of the feeder systems in your system landscape that requires status updates after electronic communication with the authorities.
- From the core application of SAP NFE to SAP NetWeaver PI
  You define this system connection to transfer messages between the SAP NFE core application and SAP NetWeaver PI for further processing. This is a prerequisite for routing the messages to their respective destinations, such as to the authorities' systems, to the Web service for a digital signature, or to a business partner in business-to-business scenarios.

Activities

- From SAP ERP to SAP NFE
  You must define the RFC destination to SAP NFE by using transaction code **SM59** in the feeder system. This requires the *ABAP Connection* connection type.
- From SAP NFE to SAP ERP
  You can access the *Communication to ERP Backend System* Customizing activity and respective description by entering **SPRO** and executing the appropriate activity after choosing *Nota Fiscal Eletrônica* > *Communication to ERP Backend System*.
  - Name the Logical System
    You must define the logical systems to which you want to connect your own SAP NFE system. A logical system needs to be defined for each back-end (ERP) system to enable your SAP NFE system to establish a connection with the ERP system.
  - Create RFC Connections
    You must define the RFC destination to SAP ERP by using transaction code **SM59** in the feeder system. This requires the *ABAP Connection* connection type.
  - Determine RFC Destinations for Method Calls
    You must also maintain the relationship between the RFC destination and the logical system. You can do this by using this Customizing activity or transaction code **BD97**. Under *Standard BAPI destination* assign the RFC destination to the logical system.
- From SAP NFE to SAP NetWeaver PI
  - PI on Single Stack (AEX)
    You must define the RFC destination to PI by using transaction code **SM59** in the feeder system. This needs the connection type *HTTP Connections to External Server*.

- PI on Dual Stack
  You must define the RFC destination to PI by using transaction code **SM59** in the feeder system. This needs the connection type *HTTP Connections to ABAP System*.

5.2.4 Background Reports

You must define batch jobs for communication processes in SAP Nota Fiscal Eletrônica (SAP NFE) that require regular processing.

- Batch Job Planning for NF-e Outbound [page 93]
  - NF-e Service Status Request [page 72]
  - Create and Send NF-e Batches [page 73]
  - Create and Send NF-e Event Batches [page 73]
  - Create and Send NF-e Batches and Batch Requests [page 73]
    This report combines the reports *Create and Send NF-e Batches* and *Send NF-e Batch Requests*.
  - Send NF-e Batch Requests [page 74]
  - Send NF-e Number Skippings [page 74]
  - Continue Process for Documents with Temporary Errors [page 75]
  - Collect and process Acknowledgments from PI [page 75]
  - Send Document to B2B Partner [page 78]
  - Query Documents (NF-e) from Authority [page 78]
- Batch Job Planning for CT-e Outbound [page 99]
  - CT-e Service Status Request [page 79]
  - Create CT-e Batches [page 83]
  - Send CT-e Batches [page 84]
  - Send CT-e Batch Requests [page 84]
  - Create and Send CT-e Batches and Batch Requests and CT-e Number Skippings [page 85]
    This report combines the reports *Create CT-e Batches*, *Send CT-e Batches* and *Send CT-e Batch Requests*
  - Send CT-e Number Skippings [page 85]
  - Send CT-e Events to Authority for Authorization [page 83]
- Batch Job Planning for MDF-e Outbound [page 105]
  - MDF-e Service Status Request [page 86]
  - Create MDF-e Batches [page 86]
  - Send MDF-e Batches [page 87]
  - Send MDF-e Batch Requests [page 87]
  - Create and Send MDF-e Batches and Batch Requests [page 88]
    This report combines the reports *Create MDF-e Batches*, *Send MDF-e Batches* and *Send MDF-e Batch Requests*
  - Send MDF-e Events to Authority for Authorization [page 88]
- Batch Job Planning for NF-e/CT-e Inbound [page 116]
  - Continue Process for Documents with Temporary Errors [page 75]

- Query Documents (NF-e) from Authority [page 78]
- Collect and process Acknowledgments from PI [page 75]

Overview of Batch Jobs for NF-e Outbound [page 72]

Overview of Batch Jobs for CT-e Outbound [page 79]

Overview of Batch Jobs for MDF-e Outbound [page 85]

5.2.4.1 Overview of Batch Jobs for NF-e Outbound

- Batch Job Planning for NF-e Outbound [page 93]

  NF-e Service Status Request [page 72]

  Create and Send NF-e Batches [page 73]

  Create and Send NF-e Event Batches [page 73]

  Create and Send NF-e Batches and Batch Requests [page 73]

  Send NF-e Batch Requests [page 74]

  Send NF-e Number Skippings [page 74]

  Continue Process for Documents with Temporary Errors [page 75]

  Collect and process Acknowledgments from PI [page 75]

  Send Document to B2B Partner [page 78]

  Query Documents (NF-e) from Authority [page 78]

5.2.4.1.1 NF-e Service Status Request

This report (technical name: `/XNFE/NFE_CHECK_SRV_STATUS`) periodically checks the availability of the government systems that host the Web services for filing your NF-es or related messages. It is possible to schedule the Service Status Check job for all regions at once, or for various regions (one or several regions). In order to check different regions, you create variants for the existing regions and schedule them separately in different time intervals. No overlapping of intervals of regions is allowed. Overlapping intervals could lead to a cancellation of the current job run. During this job, the system sends the service status requests to the relevant regional systems based on the interval you set in Customizing and during job scheduling.

For more information, see the documentation for customizing activity *NF-e: Define Service Status Request for Authority (SEFAZ)* in Customizing and Process Settings and Customizing for NF-e Outbound [page 91].

> → Recommendation
>
> In Customizing, define the period values for your batch job according to the region with the shortest time interval requirement for status requests.

5.2.4.1.2 Create and Send NF-e Batches

This report (technical name: `/XNFE/NFE_BATCH_CREATE`) collects all NF-es that have to be sent to the authorities - depending on your issuing process - and either creates batches (process NF-e Process: Issue of NF-e with Batch [page 130]) or sends the NF-es individually (process NF-e Process: Issue of NF-e without Batch [page 131]).

NF-e Batch Settings

You can define criteria for batch creation and subsequent batch status requests to optimize the communication process. These settings can be carried out in Customizing (see, Process Settings and Customizing for NF-e Outbound [page 91] -> NF-e: Maintain Batch Parameters), or in the Administration [page 524] Workplace (-> `NF-e: Maintain Batch Parameters`).

> **Note**
>
> This report provides the selection parameter to run the report in an endless loop. When using this parameter, you can set the waiting time between each loop via parameter `Wait Time Until Next Call`. If you decide not to run the reports continuously, you can schedule these reports to run periodically. In case of a system shutdown, restart, or system dump, the reports restart automatically. If you schedule the reports to run continuously, you can stop the batch jobs by using transaction code `SM50`.

5.2.4.1.3 Create and Send NF-e Event Batches

This report (technical name: `/XNFE/EVENT_BATCH_SEND`) sends the event batch to the authorities.

5.2.4.1.4 Create and Send NF-e Batches and Batch Requests

This report (technical name: `/XNFE/NFE_BATCH_PROCESS`) performs the batch creation, the sending of the batches and the sending of the batch status request together. The advantage of scheduling this report instead of the reports Create and Send NF-e Batches [page 73]`/XNFE/NFE_BATCH_CREATE`, `/XNFE/NFE_BATCH_SEND` and Send NF-e Batch Requests [page 74] (`/XNFE/NFE_BATCH_REQUEST`) is that it only uses one background process. If you do not use the report *Create and Send NF-e Batches and Batch Requests* (`/XNFE/NFE_BATCH_PROCESS`), the other reports use one background job each. This can speed up the batch processing in scenarios where many NF-es are created within a very short time period.

NF-e Batch Settings

You can define criteria for batch creation and subsequent batch status requests to optimize the communication process. These settings can be carried out in Customizing (see, Process Settings and Customizing for NF-e Outbound [page 91] -> NF-e: Maintain Batch Parameters), or in the Administration [page 524] Workplace (-> `NF-e: Maintain Batch Parameters`).

> **Note**
>
> This report provides the selection parameter to run the report in an endless loop. When using this parameter, you can set the waiting time between each loop via parameter `Wait Time Until Next Call`. If you decide not to run the reports continuously, you can schedule these reports to run periodically. In case of a system shutdown, restart, or system dump, the reports restart automatically. If you schedule the reports to run continuously, you can stop the batch jobs by using transaction code `SM50`.

5.2.4.1.5 Send NF-e Batch Requests

This report (technical name `/XNFE/NFE_BATCH_REQUEST`) requests the batch status at the authorities and is only relevant for the issuing process *Issue of NF-e without Batch* NF-e Process: Issue of NF-e without Batch [page 131].

NF-e Batch Settings

You can define criteria for batch creation and subsequent batch status requests to optimize the communication process. For more information, see customizing activity *NF-e: Maintain Batch Parameters* in Customizing and Process Settings and Customizing for NF-e Outbound [page 91], or in the Administration [page 524] Workplace (-> `NF-e: Maintain Batch Parameters`).

> **Note**
>
> This report provides the selection parameter to run the report in an endless loop. When using this parameter, you can set the waiting time between each loop via parameter `Wait Time Until Next Call`. If you decide not to run the reports continuously, you can schedule these reports to run periodically. In case of a system shutdown, restart, or system dump, the reports restart automatically. If you schedule the reports to run continuously, you can stop the batch jobs by using transaction code `SM50`.

5.2.4.1.6 Send NF-e Number Skippings

This report (technical name: `/XNFE/NFE_SKIP_SEND` collects all skipping requests that are ready for sending and sends them to the authorities. It can be scheduled for different selection parameters: Code of Brazilian State (CUF), CNPJ of Issuer, System Environment and Issuing Type. If you use the provided selection parameters, make sure that you schedule a job for all combinations that can occur in your company.

5.2.4.1.7 Continue Process for Documents with Temporary Errors

This report (technical name: `/XNFE/NFE_CONTINUE_PROCESS`) collects all failed NF-es and NF-e batches with a temporary error and reprocesses them automatically. This situation can occur:

- If the transfer of the status information to the backend fails, for example, because the corresponding NF-e was locked.
- If the steps *Send NF-e to Transporter* and *Send NF-e to Buyer* were set to *temporary error* by BadI *Add Additional Documents to Communication Message*.
- If the service status check for the NF-e batches with EPEC failed during sending to the government system with one of the following status codes:
  - 108 -> *Service Interrupted Momentarily*
  - 109 -> *Service Interrupted Indefinitely*
  - 999 -> *Rejection: Unexpected Error*
- If the step *Send NF-e Batch* failed, because the batch was rejected by SEFAZ with one of the following status codes:
  - 108 -> *Service Interrupted Momentarily*
  - 109 -> *Service Interrupted Indefinitely*
  - 999 -> *Rejection: Unexpected Error*
- If during inbound processing, a temporary error occurs according to Cusomizing activity Maintenance of Messages for Temporary Error (see

  see Process Settings and Customizing for NF-e/CT-e Inbound [page 110]

5.2.4.1.8 Collect and process Acknowledgments from PI

Overview

This report (technical name: `/XNFE/GET_ACKNOWLEDGMENT`) collects acknowledgments from SAP NetWeaver Process Integration: The NFE application collects the technical processing information from SAP NetWeaver Process Integration and displays the communication status of SAP PI in the NF-e, CT-e, MDF-e, Event, and Batch Monitors.

> ⚠ Caution
>
> For a correct error handling, it is essential to send negative acknowledgments from PI to NFE if a communication problem occurs. For more detailed information, see SAP Note 1741486.

Detailed Description

This report is relevant for the all processes that are responsible for the asynchronous sending of documents to the authorities.

You need the following batch job to collect the technical processing information from SAP NetWeaver Process Integration (PI) and to display the communication status of SAP PI in the NF-e, CT-e, Events, and Batch Monitors.

Create the batch job for the collection of acknowledgments by using the program `/XNFE/GET_ACKNOWLEDGMENT`.

The report collects all acknowledgments depending on the process type and the process step of the document for the following acknowledgment scenarios:

- NF-e Batch:
  - Send NF-e batch (technical name of the process type: `NFEBATSD`; technical name of the step: `NFBATSND`)
  - Request NF-e batch (technical name of the process type: `NFEBATSD`; technical name of the step: `NFBATREQ`)
  - Send NF-e event batch (technical name of the process type: `EVEBATSD`; technical name of the step: `EVBATSND`)
- NF-e Outbound:
  - Issue of NF-e with batch (technical name of the process type: `NFEISSU1`; technical name of the step: `NFOTOBAT`)
  - Issue of NF-e without batch (technical name of the process type: `NFEISSU2`; technical name of the step: `NFOAUTH1`)
  - Issue of NF-e skipping (technical name of the process type: `NFESKPNG`; technical name of the step: `NFOSKAUT`)
  - Issue of NF-e number gap skipping (technical name of the process type: `NFESKGAP`; technical name of the step: `NFOSKAUT`)
  - Send NF-e to transporter (technical name of the process type: `NFEB2BSD`; technical name of the step: `NFOB2BCA`)
  - Send NF-e to buyer (technical name of the process type: `NFEB2BSD`; technical name of the step: `NFOB2BBU`)
  - Generic NF-e processing step: Request status check (technical name of the step: `NFOTOBAT`)
- NF-e Inbound:
  - NF-e authorization check (in all inbound processes that contain the following process steps: `AUTHORIZ, AUTHGRPT, AUTHBXML, AUTHCANC`)
- CT-e Outbound:
  - Send CT-e to tomador (technical name of the process type: `CTEB2BSD`; technical name of the step: `CTOB2BTO`)
  - Generic CT-e processing step: Request status check (technical name of the step: `CTOTOBAT`)
- CT-e Inbound:
  - CT-e authorization check (in all inbound processes that contain the following process steps: `CTEAUTHO, CTEAUTHC, CTEAUTHG`)
- MDF-e Outbound:
  - Generic MDF-e processing step: Request status check (technical name of the step: `MFOTOBAT`)
- Events:
  - Send NF-e event to buyer (in all outbound NF-e event B2B processes and all events for receiver acknowledgment that contain the following process step: `B2BOUTBD`)
  - Send NF-e event to buyer (in all outbound NF-e event B2B processes and all events for receiver acknowledgment that contain the following process step: `B2BOUTCA`)
  - Forward event to B2B tomador (in all outbound CT-e Event B2B processes that contain the following process step: `B2BOUTTO`)

- Generic NF-e/CT-e/MDF-e processing step for outbound/inbound: Request status check (technical names of the steps: `ADDTOBAT, AUTHEVNT, EVCTAUTH, AUTHCTEV, EVMFAUTH`)

Acknowledgments for documents with different process types and steps are ignored and deleted from the database table.

The acknowledgment status received from PI can be: *OK* (positive), *not arrived* (pending) or *Error* (negative). The documents are processed depending on their acknowledgment status. There are 3 different ways of standard acknowledgment processing:

1. All positive acknowledgments are automatically deleted from the database table without any further processing.
2. The report tries to retrieve the status for all pending acknowledgments at every execution. The pending acknowledgments remain in the database table until either the positive or negative acknowledgment arrived.
3. All documents that received a negative acknowledgment are displayed with the status *Error* for the relevant process step immediately. Such documents can be restarted with the user action *Continue Process*.

The processing of following documents is different from the standard behavior:.

- Processing of NF-e documents
- Processing of documents sent to the business partner

> **Note**
>
> - All NF-e documents with a pending acknowledgment remain on the acknowledgment database table until the positive or negative acknowledgment arrives (default behavior). Alternatively, the acknowledgments can be deleted after a customizable time period. (For more information, see customizing activity *Control Parameters for Process-Independent Actions* in Process Settings and Customizing for NF-e Outbound [page 91]).
> - All NF-e documents with a negative acknowledgment are set to the status *Error* immediately (default behavior), or alternatively, after a certain time period depending on the customizing settings. (For more information, see customizing activity *Control Parameters for Process-Independent Actions* in Process Settings and Customizing for NF-e Outbound [page 91]).
> - For NF-e documents sent to a business partner (process *Send NF-e to Business Partner*, technical name: `NFEB2BSD`), an additional Customizing is available. For more information, see customizing activity *Define Control Parameters for Process Steps* in Process Settings and Customizing for NF-e Outbound [page 91].

> **Note**
>
> In case of sending the document to a B2B partner, the execution process is always waiting for a negative or positive acknowledgment before continuing the process.
>
> - The process status of the NF-e/CT-e/event documents sent to the business partner changes to *OK* for the last relevant process step after the positive acknowledgment arrived. This is relevant for the following process types: Send NF-e to Business Partner (`NFEB2BSD`), Send CT-e to Business Partner (`CTEB2BSD`), Send NF-e/CT-e Event to Business Partner (`EVB2BNFC, EVB2BNFE, EVB2BCTC, EVB2BCTE`)

> **Note**
>
> If you send a cancellation event for NF-e or CT-e to the business partner (technical name of the processes: EVB2BNFC, EVB2BCTC), it is important to receive a positive acknowledgment. Otherwise the next process step cannot be executed and the process is not completed.

> **Note**
>
> If your PI system has technical problems, or is not configured correctly, you may receive many acknowledgments with status *not arrived*. Depending on the number of pending acknowledgments, the involved database table can grow rapidly, which can result in a significantly lower performance of the database. Therefore, it is highly recommended to verify that all documents are processed and completed.

5.2.4.1.9 Send Document to B2B Partner

This report (technical name: `/XNFE/NFE_B2B_SEND`) collects all NF-es/CT-es, which are ready for sending and sends them to the B2B Partner. It can be scheduled for different selection parameters (CNPJ of Recipient, CNPJ of Transporter). If you use the provided selection parameters, make sure that you schedule a job for all combinations that can occur in your company.

> **Note**
>
> This report is also used to send events for NF-es and CT-es to the corresponding business partner. In addition, you have the option to send documents for all scenarios to all your B2B partners at once, or separately for every scenario.
>
> For partners/natural persons/ foreign partners: The document can only be sent if there is no restriction maintained regarding the B2B partner CNPJ.

5.2.4.1.10 Query Documents (NF-e) from Authority

This report (technical name: `/XNFE/COLLECT_DOCUMENTS`) requests information from the national environment for all documents that were issued for an own tax number (CNPJ). The received NF-es are processed as described in Preprocessing Inbound NF-es [page 244]. The received events are processed depending on their type as described in NF-e Event Processing [page 424].

> **Note**
>
> This request (depending on the expected NF-es) should not be issued more often than once per hour to avoid rejections from SEFAZ.

You can limit your selection according to CNPJ. If you do not specify a limitation, all own tax numbers specified in Customizing are used as tax numbers.

Depending on the number of entries you receive, the involved database tables can grow rapidly which can result in a significantly lower performance of the database. You can create a batch job to delete already

processed entries using the program /XNFE/NFEDIST_DB_DELETE. You can limit your selection according to the CNPJ and the existence of the entries in the system (minimum number of days).

5.2.4.2 Overview of Batch Jobs for CT-e Outbound

- Batch Job Planning for CT-e Outbound [page 99]

  Send CT-e to Authority for Authorization [page 79]

  CT-e Service Status Request [page 79]

  Collect and process Acknowledgments from PI [page 80]

  Send Document to B2B Partner [page 82]

  Send CT-e Events to Authority for Authorization [page 83]

  Query Documents (CT-e) from Authority [page 83]

  Create CT-e Batches [page 83]

  Send CT-e Batches [page 84]

  Send CT-e Batch Requests [page 84]

  Create and Send CT-e Batches and Batch Requests and CT-e Number Skippings [page 85]

  Send CT-e Number Skippings [page 85]

5.2.4.2.1 Send CT-e to Authority for Authorization

This report (technical name: /XNFE/CTE_SEND) collects all CT-es that are ready for sending and sends them to the authorities.

CT-es are not authorized in packages. Every CT-e is sent individually and synchronously.

> **Note**
>
> This feature is only supported as of CT-e layout 4.00.

5.2.4.2.2 CT-e Service Status Request

This report (technical name: /XNFE/CTE_CHECK_SRV_STATUS) periodically checks the availability of the government systems that host the Web services for filing your CT-es or related messages. It is possible to schedule the Service Status Check job for all regions at once, or for various regions (one or several regions). In order to check different regions, you create variants for the existing regions and schedule them separately in different time intervals. No overlapping of intervals of regions is allowed. Overlapping intervals could lead to a cancellation of the current job run. During this job, the system sends the service status requests to the relevant regional systems based on the interval you set in Customizing and during job scheduling.

For more information, see the documentation for customizing activity *CT-e: Define Service Status Request for Authority (SEFAZ)* in Customizing and Process Settings and Customizing for CT-e Outbound [page 98].

> → Recommendation
>
> In Customizing, define the period values for your batch job according to the region with the shortest time interval requirement for status requests.

5.2.4.2.3 Collect and process Acknowledgments from PI

Overview

This report (technical name: `/XNFE/GET_ACKNOWLEDGMENT`) collects acknowledgments from SAP NetWeaver Process Integration: The NFE application collects the technical processing information from SAP NetWeaver Process Integration and displays the communication status of SAP PI in the NF-e, CT-e, MDF-e, Event, and Batch Monitors.

> ⚠ Caution
>
> For a correct error handling, it is essential to send negative acknowledgments from PI to NFE if a communication problem occurs. For more detailed information, see SAP Note 1741486.

Detailed Description

This report is relevant for the all processes that are responsible for the asynchronous sending of documents to the authorities.

You need the following batch job to collect the technical processing information from SAP NetWeaver Process Integration (PI) and to display the communication status of SAP PI in the NF-e, CT-e, Events, and Batch Monitors.

Create the batch job for the collection of acknowledgments by using the program `/XNFE/GET_ACKNOWLEDGMENT`.

The report collects all acknowledgments depending on the process type and the process step of the document for the following acknowledgment scenarios:

- NF-e Batch:
  - Send NF-e batch (technical name of the process type: `NFEBATSD`; technical name of the step: `NFBATSND`)
  - Request NF-e batch (technical name of the process type: `NFEBATSD`; technical name of the step: `NFBATREQ`)
  - Send NF-e event batch (technical name of the process type: `EVEBATSD`; technical name of the step: `EVBATSND`)
- NF-e Outbound:
  - Issue of NF-e with batch (technical name of the process type: `NFEISSU1`; technical name of the step: `NFOTOBAT`)
  - Issue of NF-e without batch (technical name of the process type: `NFEISSU2`; technical name of the step: `NFOAUTH1`)

    - Issue of NF-e skipping (technical name of the process type: `NFESKPNG`; technical name of the step: `NFOSKAUT`)
    - Issue of NF-e number gap skipping (technical name of the process type: `NFESKGAP`; technical name of the step: `NFOSKAUT`)
    - Send NF-e to transporter (technical name of the process type: `NFEB2BSD`; technical name of the step: `NFOB2BCA`)
    - Send NF-e to buyer (technical name of the process type: `NFEB2BSD`; technical name of the step: `NFOB2BBU`)
    - Generic NF-e processing step: Request status check (technical name of the step: `NFOTOBAT`)
- NF-e Inbound:
    - NF-e authorization check (in all inbound processes that contain the following process steps: `AUTHORIZ, AUTHGRPT, AUTHBXML, AUTHCANC`)
- CT-e Outbound:
    - Send CT-e to tomador (technical name of the process type: `CTEB2BSD`; technical name of the step: `CTOB2BTO`)
    - Generic CT-e processing step: Request status check (technical name of the step: `CTOTOBAT`)
- CT-e Inbound:
    - CT-e authorization check (in all inbound processes that contain the following process steps: `CTEAUTHO, CTEAUTHC, CTEAUTHG`)
- MDF-e Outbound:
    - Generic MDF-e processing step: Request status check (technical name of the step: `MFOTOBAT`)
- Events:
    - Send NF-e event to buyer (in all outbound NF-e event B2B processes and all events for receiver acknowledgment that contain the following process step: `B2BOUTBD`)
    - Send NF-e event to buyer (in all outbound NF-e event B2B processes and all events for receiver acknowledgment that contain the following process step: `B2BOUTCA`)
    - Forward event to B2B tomador (in all outbound CT-e Event B2B processes that contain the following process step: `B2BOUTTO`)
    - Generic NF-e/CT-e/MDF-e processing step for outbound/inbound: Request status check (technical names of the steps: `ADDTOBAT, AUTHEVNT, EVCTAUTH, AUTHCTEV, EVMFAUTH`)

Acknowledgments for documents with different process types and steps are ignored and deleted from the database table.

The acknowledgment status received from PI can be: *OK* (positive), *not arrived* (pending) or *Error* (negative). The documents are processed depending on their acknowledgment status. There are 3 different ways of standard acknowledgment processing:

1. All positive acknowledgments are automatically deleted from the database table without any further processing.
2. The report tries to retrieve the status for all pending acknowledgments at every execution. The pending acknowledgments remain in the database table until either the positive or negative acknowledgment arrived.
3. All documents that received a negative acknowledgment are displayed with the status *Error* for the relevant process step immediately. Such documents can be restarted with the user action *Continue Process*.

The processing of following documents is different from the standard behavior:.

- Processing of NF-e documents

- Processing of documents sent to the business partner

> **Note**
>
> - All NF-e documents with a pending acknowledgment remain on the acknowledgment database table until the positive or negative acknowledgment arrives (default behavior). Alternatively, the acknowledgments can be deleted after a customizable time period. (For more information, see customizing activity *Control Parameters for Process-Independent Actions* in Process Settings and Customizing for NF-e Outbound [page 91]).
> - All NF-e documents with a negative acknowledgment are set to the status *Error* immediately (default behavior), or alternatively, after a certain time period depending on the customizing settings. (For more information, see customizing activity *Control Parameters for Process-Independent Actions* in Process Settings and Customizing for NF-e Outbound [page 91]).
> - For NF-e documents sent to a business partner (process *Send NF-e to Business Partner*, technical name: `NFEB2BSD`), an additional Customizing is available. For more information, see customizing activity *Define Control Parameters for Process Steps* in Process Settings and Customizing for NF-e Outbound [page 91].

> **Note**
>
> In case of sending the document to a B2B partner, the execution process is always waiting for a negative or positive acknowledgment before continuing the process.
>
> - The process status of the NF-e/CT-e/event documents sent to the business partner changes to *OK* for the last relevant process step after the positive acknowledgment arrived. This is relevant for the following process types: Send NF-e to Business Partner (`NFEB2BSD`), Send CT-e to Business Partner (`CTEB2BSD`), Send NF-e/CT-e Event to Business Partner (`EVB2BNFC, EVB2BNFE, EVB2BCTC, EVB2BCTE`)

> **Note**
>
> If you send a cancellation event for NF-e or CT-e to the business partner (technical name of the processes: EVB2BNFC, EVB2BCTC), it is important to receive a positive acknowledgment. Otherwise the next process step cannot be executed and the process is not completed.

> **Note**
>
> If your PI system has technical problems, or is not configured correctly, you may receive many acknowledgments with status *not arrived*. Depending on the number of pending acknowledgments, the involved database table can grow rapidly, which can result in a significantly lower performance of the database. Therefore, it is highly recommended to verify that all documents are processed and completed.

5.2.4.2.4 Send Document to B2B Partner

This report (technical name: `/XNFE/NFE_B2B_SEND`) collects all NF-es/CT-es, which are ready for sending and sends them to the B2B Partner. It can be scheduled for different selection parameters (CNPJ of Recipient, CNPJ of Transporter). If you use the provided selection parameters, make sure that you schedule a job for all combinations that can occur in your company.

> **Note**
>
> This report is also used to send events for NF-es and CT-es to the corresponding business partner. In addition, you have the option to send documents for all scenarios to all your B2B partners at once, or separately for every scenario.
>
> For partners/natural persons/ foreign partners: The document can only be sent if there is no restriction maintained regarding the B2B partner CNPJ.

5.2.4.2.5 Send CT-e Events to Authority for Authorization

This report (technical name: `/XNFE/CTE_EVENT_SEND`) collects all CT-e events that are ready for sending and sends them to the authorities.

CT-e events are not authorized in packages. Every event is send individually and synchronously.

5.2.4.2.6 Query Documents (CT-e) from Authority

This report (technical name: `/XNFE/COLLECT_DOCUMENTS_CTE`) requests information from the national environment for all CT-e documents that were issued for an own tax number (CNPJ). This request (depending on the expected CT-es) should not be issued more often than once per hour to avoid rejections from SEFAZ.

You can limit your selection according to CNPJ. If you do not specify a limitation, all own tax numbers specified in Customizing are used as tax numbers.

Depending on the number of entries you receive, the involved database tables can grow rapidly which can result in a significantly lower performance of the database. You can create a batch job to delete already processed entries using the program `/XNFE/NFEDIST_DB_DELETE`. You can limit your selection according to the CNPJ and the existence of the entries in the system (minimum number of days).

5.2.4.2.7 Create CT-e Batches

This report (technical name `/XNFE/CTE_BATCH_CREATE`) collects all CT-es that have to be sent to the authorities and creates batches (process *Issue of CT-e with Batch*, see CT-e Processing (Outbound) [page 175]). You can define the maximum collection time per batch via parameter.

For more information, see CT-e Batch Processing [page 195].

> **Note**
>
> This report provides the selection parameter to run the report in an endless loop. If you decide not to run the reports continuously, you can schedule these reports to run periodically. In case of a system shutdown, restart, or system dump, the reports restart automatically. If you schedule the reports to run continuously, you can stop the batch jobs by using transaction code `SM50`.

> **Note**
>
> This feature is only supported up to CT-e layout 3.0.

5.2.4.2.8 Send CT-e Batches

This report (technical name: `/XNFE/CTE_BATCH_SEND`) collects all CT-e batches that are ready for sending and sends them to the authorities. It can be scheduled for different selection parameters (CNPJ of Transporter, CNPJ of Recipient). If you use the provided selection parameters, make sure that you schedule a job for all combinations that can occur in your company.

> **Note**
>
> This report provides the selection parameter to run the report in an endless loop. If you decide not to run the reports continuously, you can schedule these reports to run periodically. In case of a system shutdown, restart, or system dump, the reports restart automatically. If you schedule the reports to run continuously, you can stop the batch jobs by using transaction code `SM50`.

> **Note**
>
> You can run the `Batch Send` and the `Batch Request` report in parallel. That means you can schedule several jobs for report `/XNFE/CTE_BATCH_SEND` and `/XNFE/CTE_BATCH_REQUEST` with the same selection parameters (region and CNPJ code). This can speed up batch processing for scenarios where many CT-es for the same region and with same CNPJ code are created in a very short time period.

> **Note**
>
> This feature is only supported up to CT-e layout 3.0.

5.2.4.2.9 Send CT-e Batch Requests

Use

This report (technical name `/XNFE/CTE_BATCH_REQUEST`) requests the status of CT-e batches at the authorities.

> **Note**
>
> This report provides the selection parameter to run the report in an endless loop. If you decide not to run the reports continuously, you can schedule these reports to run periodically. In case of a system shutdown, restart, or system dump, the reports restart automatically. If you schedule the reports to run continuously, you can stop the batch jobs by using transaction code `SM50`.

> **Note**
>
> You can run the `Batch Send` and the `Batch Request` report in parallel. That means you can schedule several jobs for report `/XNFE/CTE_BATCH_SEND` and `/XNFE/CTE_BATCH_REQUEST` with the same selection parameters (region and CNPJ code). This can speed up batch processing for scenarios where many CT-es for the same region and with same CNPJ code are created in a very short time period.

> **Note**
>
> This feature is only supported up to CT-e layout 3.0.

5.2.4.2.10 Create and Send CT-e Batches and Batch Requests and CT-e Number Skippings

This report (technical name: `/XNFE/CTE_PROCESS`) performs the batch creation, the sending of the batches and the sending of the batch status request together. The advantage of scheduling this report instead of the reports `/XNFE/CTE_BATCH_CREATE`, `/XNFE/CTE_BATCH_SEND`, `/XNFE/CTE_BATCH_REQUEST`, and `/XNFE/CTE_SKIP_SEND` is that it only uses one background process. If you do not use the report `/XNFE/CTE_PROCESS`, the other three reports use one background job each. This can speed up the batch processing in scenarios where many CT-es are created within a very short time period.

> **Note**
>
> This feature is only supported until CT-e layout 3.0.

5.2.4.2.11 Send CT-e Number Skippings

This report (technical name: `/XNFE/CTE_SKIP_SEND`) collects all skipping requests, which are ready for sending and sends them to the authorities. It can be scheduled for different selection parameters: Code of Brazilian State (CUF), CNPJ of Issuer, System Environment and Issuing Type. If you use the provided selection parameters, make sure that you schedule a job for all combinations that can occur in your company.

> **Note**
>
> This feature is only supported until CT-e layout 3.0.

5.2.4.3 Overview of Batch Jobs for MDF-e Outbound

- Batch Job Planning for MDF-e Outbound [page 105]

  Send MDF-e to Authority for Authorization [page 86]

MDF-e Service Status Request [page 86]

Create MDF-e Batches [page 86]

Send MDF-e Batches [page 87]

Send MDF-e Batch Requests [page 87]

Create and Send MDF-e Batches and Batch Requests [page 88]

Send MDF-e Events to Authority for Authorization [page 88]

5.2.4.3.1 Send MDF-e to Authority for Authorization

This report (technical name: `/XNFE/MDFE_SEND`) collects all MDF-es that are ready for sending and sends them to the authorities.

MDF-es are not authorized in packages. Every MDF-e is sent individually and synchronously.

> ⓘ Note
>
> This feature is only supported as of MDF-e SAP note 3453629.

5.2.4.3.2 MDF-e Service Status Request

This report (technical name: `/XNFE/MDFE_CHECK_SRV_STATUS`) periodically checks the availability of the government systems that host the Web services for filing your MDF-es or related messages. It is possible to schedule the Service Status Check job for all regions at once, or for various regions (one or several regions). In order to check different regions, you create variants for the existing regions and schedule them separately in different time intervals. No overlapping of intervals of regions is allowed. Overlapping intervals could lead to a cancellation of the current job run. During this job, the system sends the service status requests to the relevant regional systems based on the interval you set in Customizing and during job scheduling.

For more information, see the documentation for customizing activity *MDF-e: Define Service Status Request for Authority (SEFAZ)* in Customizing and Process Settings and Customizing for MDF-e Outbound [page 103].

> → Recommendation
>
> In Customizing, define the period values for your batch job according to the region with the shortest time interval requirement for status requests.

5.2.4.3.3 Create MDF-e Batches

> ⓘ Note
>
> This feature is obsolete after implementation of MDF-e SAP note 3453629.

This report (technical name `/XNFE/MDFE_BATCH_CREATE`) collects all MDF-es that have to be sent to the authorities and creates batches (process *Issue of MDF-e with Batch*).

For more information, see Administration [page 524] and MDF-e Batch Processing [page 222].

> **Note**
>
> This report provides the selection parameter to run the report in an endless loop. If you decide not to run the report continuously, you can schedule the report to run periodically. In case of a system shutdown, restart, or system dump, the report restarts automatically. If you schedule the report to run continuously, you can stop the batch jobs by using transaction code `SM50`

5.2.4.3.4 Send MDF-e Batches

> **Note**
>
> This feature is obsolete after implementation of MDF-e SAP note 3453629.

This report (technical name: `/XNFE/MDFE_BATCH_SEND`) collects all MDF-e batches that are ready for sending and sends them to the authorities. It can be scheduled for different selection parameters (CNPJ of Recipient, CNPJ of Transporter). If you use the provided selection parameters, make sure that you schedule a job for all combinations that can occur in your company.

> **Note**
>
> This report provides the selection parameter to run the report in an endless loop. If you decide not to run the report continuously, you can schedule the report to run periodically. In case of a system shutdown, restart, or system dump, the report restarts automatically. If you schedule the report to run continuously, you can stop the batch jobs by using transaction code `SM50`

5.2.4.3.5 Send MDF-e Batch Requests

Use

> **Note**
>
> This feature is obsolete after implementation of MDF-e SAP note 3453629.

This report (technical name `/XNFE/MDFE_BATCH_REQUEST`) requests the batch status at the authorities.

> **Note**
>
> This report provides the selection parameter to run the report in an endless loop. If you decide not to run the report continuously, you can schedule the report to run periodically. In case of a system shutdown,

restart, or system dump, the report restarts automatically. If you schedule the report to run continuously, you can stop the batch jobs by using transaction code SM50

5.2.4.3.6 Create and Send MDF-e Batches and Batch Requests

> **Note**
>
> This feature is obsolete after implementation of MDF-e SAP note 3453629.

This report (technical name: /XNFE/MDFE_BATCH_PROCESS) performs the batch creation, the sending of the batches and the sending of the batch status request together. The advantage of scheduling this report instead of the reports /XNFE/MDFE_BATCH_CREATE, /XNFE/MDFE_BATCH_SEND and /XNFE/MDFE_BATCH_REQUEST is that it only uses one background process. If you do not use the report /XNFE/MDFE_BATCH_PROCESS, the other tree reports use one background job each. This can speed up the batch processing in scenarios where many MDF-es are created within a very short time period.

> **Note**
>
> This report provides the selection parameter to run the report in an endless loop. If you decide not to run the reports continuously, you can schedule these reports to run periodically. In case of a system shutdown, restart, or system dump, the reports restart automatically. If you schedule the reports to run continuously, you can stop the batch jobs by using transaction code SM50.

5.2.4.3.7 Send MDF-e Events to Authority for Authorization

This report (technical name: /XNFE/MDFE_EVENT_SEND) collects all MDF-e events that are ready for sending and sends them to the authorities.

MDF-e events are not authorized in packages. Every event is send individually and synchronously.

5.2.5 Configuration of Outbound

This section describes the process control settings for outbound scenarios.

- Configuration of NF-e (Outbound) [page 89]
  - Technical Settings for NF-e Outbound [page 90]
  - Process Settings and Customizing (Outbound) [page 91]
  - NF-e Batch Job Planning (Outbound) [page 93]
  - BAdIs for NF-e Outbound [page 94]

    - User Roles and Authorizations for NF-e Outbound [page 95]
- Configuration of CT-e Outbound [page 96]
    - Technical Settings for CT-e Outbound [page 97]
    - Process Settings and Customizing for CT-e Outbound [page 98]
    - CT-e Batch Job Planning (Outbound) [page 99]
    - BAdIs for CT-e Outbound [page 100]
    - User Roles and Authorizations for CT-e (Outbound) [page 101]
- Configuration of MDF-e Outbound [page 101]
    - Technical Settings for MDF-e Outbound [page 102]
    - Process Settings and Customizing for MDF-e Outbound [page 103]
    - MDF-e Batch Job Planning (Outbound) [page 105]
    - BAdIs for MDF-e Outbound [page 105]
    - User Roles and Authorizations for MDF-e (Outbound) [page 106]

Configuration of NF-e Outbound [page 89]

Configuration of CT-e Outbound [page 96]

Configuration of MDF-e Outbound [page 101]

5.2.5.1 Configuration of NF-e Outbound

Use

SAP Nota Fiscal Eletrônica (SAP NFE) contains the process logic used to communicate with government authorities. For this process, the NFE application links a feeder system such as SAP ERP to SAP NetWeaver Process Integration (SAP NetWeaver PI). You must configure the NFE core application in order to control system behavior and to specify process setup. The necessary settings are divided into basic technical settings and process-related settings:

- Basic technical settings
  Basic technical settings enable you to make decisions about electronic communication with your business partners. For example, you can include activities such as specify in Customizing how the system responds to different process statuses.
- Process-related settings
  Process-related settings control batch creation and monitoring options.

Process

1. You define basic technical settings such as the following (see Technical Settings for NF-e Outbound [page 90]):
    - System environments and storage locations for digital-signature certificates
    - Service status settings, for example, request a frequency or status check for the system environment of a certain region in Brazil

- Status codes of the authorities, based on which the system controls follow-up activities
- Business partners taking part in the electronic exchange of notas fiscais (NF-es)
- Number ranges for batches that group notas fiscais eletrônicas (NF-es)
- Services for user interface displays

2. You plan batch jobs (see Batch Job Planning for NF-e Outbound [page 93]) for the following regular tasks:
   - Batch settings, for example, maximum size and time between batch creation
   - Monitoring settings for optimized process observation
3. You define user roles and authorizations (see User Roles and Authorizations for NF-e Outbound [page 95]) by tax number.

More Information

Technical Settings for NF-e Outbound [page 90]

Process Settings and Customizing for NF-e Outbound [page 91]

Batch Job Planning for NF-e Outbound [page 93]

BAdIs for NF-e Outbound [page 94]

User Roles and Authorizations for NF-e Outbound [page 95]

5.2.5.1.1 Technical Settings for NF-e Outbound

Use

You specify technical settings in order to control system behavior and responses.

Activities

Activating Services for UI Display

You must activate the relevant UI services for master data maintenance and for monitoring of NF-e outbound.

Enter transaction code **SICF** and select the following entries in the navigation tree for the *Virtual Hosts/Services* under *default_host* > *sap* > *bc* > *webdynpro* > *xnfe*. Activate the service for displaying the user interfaces for each of the following entries by using the context menu and selecting *Activate Service*:

NF-e

- `nfe_outb_monitor` for *NF-e Monitor*
- `nfe_batch_monitor` for *NF-e Batch Monitor*
- `nfe_servsta_monitor` for *Service Status Monitor*
- `nfe_outb_monitor_arch` for *NF-e Monitor for Archived NF-es*

- `nfe_analytics_out` for *Evaluations of Outbound NF-es*
- `ssf maintenance` for SSF maintenance

In addition, you must activate the following basic services in the navigation tree for the *Virtual Hosts/Services* under ▶ *default_host* > *sap* > *public* > *bc* ◀:

- `ur` for *Unified Rendering*
- `icons` for *SAP Icons*
- `icons_rtl` for *Icons RTL*
- `pictograms` for *Pictograms*
- `webdynpro` for *Web Dynpro MIME Handling*

Number Range for Batches

Batches that package NF-es require a number range both to identify and to monitor the batches in process. In the batch monitor of SAP NFE, you can use this number range to access all NF-es that the system has combined into one batch.

Enter transaction **SNUM** to create the number range for the object `/XNFE/BAID`, and create interval **01** with a length of 15 digits.

Archiving Infostructure

Before you can access the archiving function, you have to activate the corresponding archiving infostructure for your respective scenario.

Enter transaction **SARI** and choose *Customizing*. In the following screen *Archive Retrieval Configurator*, select the *archive infostructure* `/XNFE/OUTNFE` for outbound NF-e and activate it.

You can also activate `/XNFE/BATCH` for batch archiving.

Logging and Tracing

Logging and tracing is done in the application log. To select application logs, enter transaction **SLG1**. The relevant object is `/XNFE/NFE` for NF-e.

5.2.5.1.2 Process Settings and Customizing for NF-e Outbound

You can access the Customizing activities and the **detailed** documentation by entering **SPRO** and executing the appropriate activity after choosing ▶ *Nota Fiscal Eletrônica* > *Outbound* ◀. The documentation below only offers a brief description of the Customizing activities, you find the full documentation in the Customizing section of your NFE system.

General Outbound Settings

- **Maintain System Response for Own Tax Numbers**
  You use the tax number of your company to define the storage location of the certificate that you must use for digital signatures, and whether or not you use the productive or test system environment for

communication. In this Customizing activity, you configure the system behavior and the storage location for your digital signature for each tax number at your company.

- **Maintain Control Parameters for Process Flow**
  In this activity, you can make the settings for the process steps for further processing of a document (NF-e, CT-e, events). The process steps are derived from the business process that is assigned to the document. The process flow for this business process is contained in table `/XNFE/PROCFLOW`. In this activity, you can influence the handling of the process flow, This is possible, depending on the sender's and/or recipient's CNPJ number in the document. The *Control Settings* field lets you influence automatic processing of a process step.
- **Define Control Parameters for Process Steps**
  In this Customizing activity, you can define various control parameters for specific process steps. Your own tax number (CNPJ) is used to distinguish an entry at a higher level.
  You can use these activities to influence the outcome of the selected process flow. The *Value* field can contain various values and meanings, depending on which parameter is selected.
- **Control Parameters for Process-Independent Actions**
  In this Customizing activity, you can define various control parameters for specific process steps. Your own tax number (CNPJ) is used to distinguish an entry at a higher level. You can perform the available action with a related parameter. Various values are available for the parameter.
- **Activate B2B Scenarios for Business Partners**
  In this Customizing activity, you determine the business partners with whom you want to exchange electronic documents.
- **Activate B2B Scenarios for Natural Persons**
  In this Customizing activity, you determine the natural persons with whom you want to exchange electronic documents.
- **Activate B2B Scenarios for Foreign Partners**
  In this Customizing activity, you determine the foreign partners with whom you want to exchange electronic documents.

Settings for NF-e

The following settings must be executed if you want to send NF-es:

- **NF-e: Maintain Connected Authority Systems**
  In this Customizing activity, you configure the settings that the system needs for deciding to which government system your messages are to be sent.
- **NF-e: Maintain Version of Message Types**
  In this Customizing activity, you determine which XML version is used for individual message types when communicating with authorities. In Customizing activity *NF-e: Define Connected Government Systems*, you have defined the government system you want to communicate with.
- **NF-e: Define Service Status Request for Authority (SEFAZ)**
  In this Customizing activity, you configure the settings that the system needs for the automatic query of system availability for NF-e of the SEFAZ system and the responsible contingency system. You are required to query this status and can control the status query dependent on your batch planning or document volume.
- **NF-e: Maintain Batch Parameters**
  In this Customizing activity, you define the parameters for collecting NF-es in batches and perform the batch request for each region used in your company.

> **Note**
>
> These parameters have a high influence on the CPU usage, disk usage, and overall performance of SAP NFE. Therefore, change the parameters according to your business needs and try to create the batches with the highest NF-e number in an acceptable time. Be aware that using small values for Max. Collecting Time, Max. Batch Size or Max. Number of NF-es increases the number of batches. This can provoke processing performance problems. The creation of NF-e batches is also influenced by the way you scheduled the job for the batch report. For more information about batch jobs, see Batch Job Planning for NF-e Outbound [page 93].

- **NF-e: Maintain Process Determination for Outbound NF-es**
  In this Customizing activity, you assign a specific process type to an outbound NF-e for further processing. The CNPJ number of the sender determines the process type.

  > **Note**
  >
  > The process determination is carried out when the NF-e is received from the feeder system (ERP). There is no option to switch between the two processes during processing. If you want to send a rejected NF-e using a different process, then you have to forward the rejection to your feeder system (Change the Customizing!) and resend the NF-e.

- **NF-e: Define Authority's Status Code**
  In this Customizing activity, you define the codes and their descriptions that the authorities can use as answers to an electronic message in communication for handling notas fiscais. You receive this list from your responsible tax authorities. Based on this definition, you can see in the application how official code affects the status of the NF-e. The assignment of a code to a clear description makes it easier for you to initiate follow-on activities.
- **NF-e: Maintain Validation Rules**
  In this Customizing activity, you maintain the validation rules used by the NFE system during the creation of a document to validate the data sent by the back end. The validation rules are shipped by SAP in standard table `/XNFE/XMLVALID`. With this Customizing activity, you can adjust and extend the validation rules according to your requirements.

5.2.5.1.3 Batch Job Planning for NF-e Outbound

You have to schedule the following batch jobs for the various communication processes in SAP Nota Fiscal Eletrônica (SAP NFE):

Background Reports for NF-e Outbound

Name	Technical Name	Description
NF-e Service Status Request [page 72]	`/XNFE/NFE_CHECK_SRV_STATUS`	You are required to periodically check the availability of the government systems that host the Web services for filing your NF-es or related messages.
Create and Send NF-e Batches [page 73]	`/XNFE/NFE_BATCH_CREATE`	Collect NF-es into batches.

Name	Technical Name	Description
Create and Send NF-e Batches and Batch Requests [page 73]	/XNFE/NFE_BATCH_PROCESS	Performs the sending of the NF-es and the sending of the batch status request together.
Send NF-e Batch Requests [page 74]	/XNFE/NFE_BATCH_REQUEST	Send batch status requests to the authorities.
Send NF-e Number Skippings [page 74]	/XNFE/NFE_SKIP_SEND	Send Skipping requests to the authorities.
Continue Process for Documents with Temporary Errors [page 75]	/XNFE/NFE_CONTINUE_PROCESS	This report collects all failed NF-es and NF-e batches with a temporary error and reprocesses them automatically.
Collect and process Acknowledgments from PI [page 75]	/XNFE/GET_ACKNOWLEDGMENT	The NFE application collects the technical processing information from SAP NetWeaver Process Integration and displays the communication status of SAP PI.
Send Document to B2B Partner [page 78]	/XNFE/NFE_B2B_SEND	This report collects all NF-es ready for sending and sends them to the B2B Partner.
Query Documents (NF-e) from Authority [page 78]	/XNFE/COLLECT_DOCUMENTS	This report requests information from the national environment for all documents that were issued for an own tax number (CNPJ).

For creating a batch job, use transaction code SM36 and define the parameters for the period.

> **Note**
>
> Do not forget to plan the necessary batch jobs for events. For more information, see Batch Job Planning for Events [page 122].

5.2.5.1.4 BAdIs for NF-e Outbound

For more detailed information, see the documentation for the BAdIs in Customizing under *Nota Fiscal Eletrônica* > *Outbound* > *Business Add-Ins for Outbound Documents*.

The following BAdIs (Outbound) are available for SAP Nota Fiscal Eletronica (NFE):

General Outbound BAdIs

- BAdI: Signature for Outbound Documents

The BAdI enables a synchronous proxy call of an external signature service (through external signature hardware, for example, or an external Web service), to avoid the standard signature implementation in ABAP.

- BAdI: Extend B2B Message with communication parameters
  You can use this BAdI to add additional communication parameters to the XML message as an attachment when sending an NF-e, CT-e, or an NF-e/CT-e event to your business partner (consignee, carrier, or tomador).
- BAdI: Change of Logical System
  With this BAdI you can change the original logical system that you received from the feeder system.
- BAdI: Add Additional Documents to Communication Message
  You use this BAdI to add a document to the XML from your feeder system and send it as e-mail attachment to your business partner.

Outbound BAdIs for NF-e

- NF-e BAdI: Validation of an Outbound XML Document
  In this Customizing activity, you can implement a BAdI that executes a customer-specific validation of an outbound XML document.
- NF-e BAdI: Call Non-SAP System via RFC Communication
  In this Customizing activity, you can implement a Business Add-In (BAdI) to control the RFC call. The BAdI lets you control the RFC call for communication with the ERP system, to use the electronic communication of notas fiscais with the authorities for non-SAP systems. In the standard settings, the system uses the standard SAP modules to call SAP ERP for RFC communication with the ERP system.
- NF-e BAdI: Store Extension Parameters from ERP Back-End System
  You can use this BAdI to store the extension parameters from the module `/XNFE/OUTNFE_CREATE`. This enables you to transfer all kinds of values from the back-end system to the NFE system, where they can be stored.
- NF-e BAdI: Defining a Text as Attachment to a PI Message
  In this Customizing activity, you can implement a BAdI that is used to add a text to a PI message as an attachment. For the web service communication with SEFAZ, you may find it necessary to use different HTTPS client certificates (depending on the sender CNPJ) for authentication, for example, if you want to use an NF-e client for different customers (NF-e as cloud service).
- NF-e BAdI: BAdI for Automatic Handling of Rejected Nf-es
  In this Customizing activity, you can implement a BAdI that enables the customer to decide if rejected NF-es should be processed automatically.

5.2.5.1.5 User Roles and Authorizations for NF-e Outbound

The core application in SAP Nota Fiscal Eletrônica (SAP NFE) contains the following roles with their relevant authorization objects. You can copy the roles as templates and assign them to users according to your company's needs.

User Roles

- `/XNFE/WP_NFE_OUT_MONITOR`
  This role does not contain authorizations and is therefore only meant to create and set up the user menu for the NFE Outbound Monitors. You can copy this role to adjust the user menu according to your requirements. This role can be combined with other roles in a composite role.

- `/XNFE/WP_NFE_ADMIN`
  This role is intended for the NFE Administrator. It does not contain authorizations and is therefore only meant to create and set up the user menu. You can copy this role to adjust the user menu according to your requirements. This role can be combined with other roles in a composite role.

Authorizations

For information concerning authorizations, refer to the security guide of SAP Nota Fiscal Eletrônica (http://help.sap.com/nfe).

5.2.5.2 Configuration of CT-e Outbound

Use

The core application of SAP Nota Fiscal Eletrônica (SAP NFE) contains the process logic used to communicate with government authorities. For this process, the NFE application links a feeder system such as SAP ERP to SAP NetWeaver Process Integration (SAP NetWeaver PI). You must configure the NFE application to control system behavior and to specify process setup. The necessary settings are divided into basic technical settings and process-related settings:

- Basic technical settings
  Basic technical settings enable you to make decisions about electronic communication with your business partners. For example, you can include activities such as specify in Customizing how the system responds to different process statuses.
- Process-related settings
  Process-related settings control batch creation and monitoring options.

Process

1. You define basic technical settings such as the following (see Process Settings and Customizing for CT-e Outbound [page 98]:
   - System environments and storage locations for digital-signature certificates
   - Status codes of the authorities, based on which the system controls follow-up activities
   - Number ranges for batches that group CT-es
   - Services for user interface displays
2. You plan batch jobs (see Batch Job Planning for CT-e Outbound [page 99]) for the following regular tasks:
   - Monitoring settings for optimized process observation
3. You define user roles and authorizations (see User Roles and Authorizations for CT-e Outbound [page 101] by tax number.

More Information

Technical Settings for CT-e Outbound [page 97]

Process Settings and Customizing for CT-e Outbound [page 98]

Batch Job Planning for CT-e Outbound [page 99]

BAdIs for CT-e Outbound [page 100]

User Roles and Authorizations for CT-e Outbound [page 101]

5.2.5.2.1 Technical Settings for CT-e Outbound

Use

You specify technical settings in order to control system behavior and responses.

Activities

Activating Services for UI Display

You must activate the relevant UI services for master data maintenance and for monitoring of CT-e outbound.

Enter transaction code **SICF** and select the following entries in the navigation tree for the *Virtual Hosts/Services* under *default_host* > *sap* > *bc* > *webdynpro* > *xnfe*. Activate the service for displaying the user interfaces for each of the following entries by using the context menu and selecting *Activate Service*:

CT-e

- `cte_monitor` for *CT-e Monitor*
- `cte_monitor_arch` for *CT-e Monitor for Archived CT-es*
- `cte_batch_monitor` for *CT-e Batch Monitor*
- `cte_servsta_monitor` for *CT-e Service Status Monitor*
- `ssf maintenance` for SSF maintenance

In addition, you must activate the following basic services in the navigation tree for the *Virtual Hosts/Services* under *default_host* > *sap* > *public* > *bc*:

- `ur` for *Unified Rendering*
- `icons` for *SAP Icons*
- `icons_rtl` for *Icons RTL*
- `pictograms` for *Pictograms*
- `webdynpro` for *Web Dynpro MIME Handling*

Number Range for Batches

Batches that package CT-es require a number range both to identify and to monitor the batches in process. In the batch monitor of SAP NFE, you can use this number range to access all CT-es that the system has combined into one batch.

Enter transaction **SNUM** to create the number range for the object `/XNFE/CTBT`, and create interval **01** with a length of 15 digits.

Archiving Infostructure

Before you can access the archiving function, you have to activate the corresponding archiving infostructure for your respective scenario.

Enter transaction **SARI** and choose *Customizing*. In the following screen *Archive Retrieval Configurator*, select the *archive infostructure* `/XNFE/CTE` and activate it.

You can also activate `/XNFE/BATC` for batch archiving.

Logging and Tracing

Logging and tracing is done in the application log. To select application logs, enter transaction **SLG1**. The relevant object is `/XNFE/CTE_OUT` for CT-es.

5.2.5.2.2 Process Settings and Customizing for CT-e Outbound

Use

You specify technical settings to control system behavior and responses.

You can access the Customizing activities and the **detailed** documentation by entering **SPRO** and executing the appropriate activity after choosing *Nota Fiscal Eletrônica* > *Outbound*. The documentation below only offers a brief description of the Customizing activities, you find the full documentation in the Customizing section of your NFE system.

Features

General Outbound Settings

- **Maintain System Response for Own Tax Numbers**
  You use the tax number of your company to define the storage location of the certificate that you must use for digital signatures, and whether or not you use the productive or test system environment for communication. In this Customizing activity, you configure the system behavior and the storage location for your digital signature for each tax number at your company.
- **Maintain Control Parameters for Process Flow**
  In this activity, you can make the settings for the process steps for further processing of a document (NF-e, CT-e, events). The process steps are derived from the business process that is assigned to the document. The process flow for this business process is contained in table `/XNFE/PROCFLOW`. In this activity, you can influence the handling of the process flow, This is possible, depending on the sender's and/or recipient's CNPJ number in the document. The *Control Settings* field lets you influence automatic processing of a process step.
- **Define Control Parameters for Process Steps**
  In this Customizing activity, you can define various control parameters for specific process steps. Your own tax number (CNPJ) is used to distinguish an entry at a higher level.

You can use these activities to influence the outcome of the selected process flow. The *Value* field can contain various values and meanings, depending on which parameter is selected.

- **Control Parameters for Process-Independent Actions**
  In this Customizing activity, you can define various control parameters for specific process steps. Your own tax number (CNPJ) is used to distinguish an entry at a higher level. You can perform the available action with a related parameter. Various values are available for the parameter.
- **Activate B2B Scenarios for Business Partners**
  In this Customizing activity, you determine the business partners with whom you want to exchange electronic documents.
- **Activate B2B Scenarios for Natural Persons**
  In this Customizing activity, you determine the natural persons with whom you want to exchange electronic documents.

CT-e Settings

- **CT-e: Maintain Connected Authority Systems**
  In this Customizing activity, you configure the settings that the system needs for deciding to which government system your messages are to be sent.
- **CT-e: Maintain Version of Message Types**
  In this Customizing activity, you determine which XML version is used for individual message types when communicating with authorities.
- **CT-e: Maintain Region-Dependent Settings**
  In this Customizing activity, you maintain various region-dependent settings. These settings control the service status query, for example.

5.2.5.2.3 Batch Job Planning for CT-e Outbound

You have to schedule the following batch jobs for the various communication processes in SAP Nota Fiscal Eletrônica (SAP NFE):

Background Reports

Name	Technical Name	Description	CT-e Version
Send CT-e to Authority for Authorization [page 79]	/XNFE/CTE_SEND	Send CT-e to Authority for Authorization	4.00
CT-e Service Status Request [page 79]	/XNFE/CTE_CHECK_SRV_STATUS	You are required to periodically check the availability of the government systems that host the Web services for filing your CT-es or related messages.	All versions

Name	Technical Name	Description	CT-e Version
Collect and process Acknowledgments from PI [page 75]	/XNFE/GET_ACKNOWLEDGMENT	The NFE application collects the technical processing information from SAP NetWeaver Process Integration and displays the communication status of SAP PI.	All versions
Send Document to B2B Partner [page 78]	/XNFE/NFE_B2B_SEND	This report collects all CT-es ready for sending and sends them to the B2B Partner.	All versions
Query Documents (CT-e) from Authority [page 83]	/XNFE/COLLECT_DOCUMENTS_CTE	This report requests information from the national environment for all documents that were issued for an own tax number (CNPJ).	All versions
Create CT-e Batches [page 83]	/XNFE/CTE_BATCH_CREATE	Collect CT-es into batches.	3.00
Send CT-e Batches [page 84]	/XNFE/CTE_BATCH_SEND	Send batches to the authorities.	3.00
Send CT-e Batch Requests [page 84]	/XNFE/CTE_BATCH_REQUEST	Send batch status requests to the authorities.	3.00
Create and Send CT-e Batches and Batch Requests and CT-e Number Skippings [page 85]	/XNFE/CTE_PROCESS	Performs the sending of the CT-es and the sending of the batch status request together.	3.00
Send CT-e Number Skippings [page 85]	/XNFE/CTE_SKIP_SEND	Send Skipping requests to the authorities.	3.00

For creating a batch job, use transaction code SM36 and define the parameters for the period.

5.2.5.2.4 BAdIs for CT-e Outbound

For more detailed information, see the documentation for the BAdIs in Customizing under *Nota Fiscal Eletrônica* > *Outbound* > *Business Add-Ins for Outbound Documents*.

The following BAdIs are available for outbound CT-es:

General Outbound BAdIs

- BAdI: Signature for Outbound Documents

The BAdI enables a synchronous proxy call of an external signature service (through external signature hardware, for example, or an external Web service), to avoid the standard signature implementation in ABAP.

- BAdI: Extend B2B Message with communication parameters
  You can use this BAdI to add additional communication parameters to the XML message as an attachment when sending an NF-e, CT-e, or an NF-e/CT-e event to your business partner (consignee, carrier, or tomador).
- BAdI: Change of Logical System
  With this BAdI you can change the original logical system that you received from the feeder system.
- BAdI: Add Additional Documents to Communication Message
  You use this BAdI to add a document to the XML from your feeder system and send it as e-mail attachment to your business partner.

BAdIs for Outbound CT-e

- CT-e BAdI: Call Non-SAP System via RFC Communication
  In this Customizing activity, you use a Business Add-In (BAdI) to control the RFC call.

5.2.5.2.5 User Roles and Authorizations for CT-e Outbound

The core application in SAP Nota Fiscal Eletrônica (SAP NFE) contains the following roles with their relevant authorization objects. You can copy the roles as templates and assign them to users according to your company's needs.

User Roles

- `/XNFE/WP_NFE_OUT_MONITOR`
  This role is does not contain authorizations and is therefore only meant to create and set up the user menu for the NFE Outbound Monitors. You can copy this role to adjust the user menu according to your requirements. This role can be combined with other roles in a composite role.
- `/XNFE/WP_NFE_ADMIN`
  This role is intended for the NFE Administrator. It does not contain authorizations and is therefore only meant to create and set up the user menu. You can copy this role to adjust the user menu according to your requirements. This role can be combined with other roles in a composite role.

Authorizations

For information concerning authorizations, refer to the security guide of SAP Nota Fiscal Eletrônica (http://help.sap.com/nfe).

5.2.5.3 Configuration of MDF-e Outbound

Use

The core application of SAP Nota Fiscal Eletrônica (SAP NFE) contains the process logic used to communicate with government authorities. For this process, the NFE application links a feeder system such as SAP ERP to SAP NetWeaver Process Integration (SAP NetWeaver PI). You must configure SAP NFE in order to control

system behavior and to specify process setup. The necessary settings are divided into basic technical settings and process-related settings:

- Basic technical settings
  Basic technical settings enable you to make decisions about electronic communication. For example, you can include activities such as specify in Customizing how the system responds to different process statuses.
- Process-related settings
  Process-related settings control batch creation and monitoring options.

Process

1. You define basic technical settings such as the following (see Technical Settings for MDF-e Outbound [page 102]):
   - System environments and storage locations for digital-signature certificates
   - Service status settings, for example, request a frequency or status check for the system environment of a certain region in Brazil
   - Status codes of the authorities, based on which the system controls follow-up activities
   - Number ranges for batches that group MDF-es
   - Services for user interface displays
2. You plan batch jobs (see Batch Job Planning for MDF-e Outbound [page 105]) for the following regular tasks:
   - Monitoring settings for optimized process observation
3. You define user roles and authorizations (see User Roles and Authorizations for MDF-e Outbound [page 106]) by tax number.

More Information

Technical Settings for MDF-e Outbound [page 102]

Process Settings and Customizing for MDF-e Outbound [page 103]

Batch Job Planning for MDF-e Outbound [page 105]

BAdIs for MDF-e Outbound [page 105]

User Roles and Authorizations for MDF-e Outbound [page 106]

5.2.5.3.1 Technical Settings for MDF-e Outbound

Use

You specify technical settings in order to control system behavior and responses.

Activities

Activating Services for UI Display

You must activate the relevant UI services for master data maintenance and for monitoring of MDF-e outbound.

Enter transaction code `SICF` and select the following entries in the navigation tree for the *Virtual Hosts/Services* under *default_host* > *sap* > *bc* > *webdynpro* > *xnfe*. Activate the service for displaying the user interfaces for each of the following entries by using the context menu and selecting *Activate Service*.

MDF-e

- `mdfe_monitor` for *MDF-e Monitor*
- `mdfe_batch_monitor` for *MDF-e Batch Monitor*
- `mdfe_servsta_monito` for *MDF-e Service Status Monitor*
- `ssf maintenance` for SSF maintenance

In addition, you must activate the following basic services in the navigation tree for the *Virtual Hosts/Services* under *default_host* > *sap* > *public* > *bc*:

- `ur` for *Unified Rendering*
- `icons` for *SAP Icons*
- `icons_rtl` for *Icons RTL*
- `pictograms` for *Pictograms*
- `webdynpro` for *Web Dynpro MIME Handling*

Number Ranges for Batches

Batches that package MDF-es require a number range both to identify and to monitor the batches in process. In the batch monitor of SAP NFE, you can use this number range to access all MDF-es that the system has combined into one batch.

Enter transaction **SNUM** to create the number range for the object `/XNFE/MFBT`, and create interval **01** with a length of 15 digits.

Archiving Infostructure

Before you can access the archiving function, you have to activate the corresponding archiving infostructure for your respective scenario.

Enter transaction **SARI** and choose *Customizing*. In the following screen *Archive Retrieval Configurator*, select the *archive infostructure* `/XNFE/MDFE` and activate it.

Logging and Tracing

Logging and tracing is done in the application log. To select application logs, enter transaction **SLG1**. The relevant object is `/XNFE/OUTMDFE` for MDF-es.

5.2.5.3.2 Process Settings and Customizing for MDF-e Outbound

The following settings are found in Customizing under *Nota Fiscal Eletrônica* > *Outbound*.

You can access the Customizing activities and the **detailed** documentation by entering **SPRO** and executing the appropriate activity after choosing *Nota Fiscal Eletrônica* > *Outbound*. The documentation below only offers a brief description of the Customizing activities, you find the full documentation in the Customizing section of your NFE system.

General Outbound Settings

- **Maintain System Response for Own Tax Numbers**
  You use the tax number of your company to define the storage location of the certificate that you must use for digital signatures, and whether or not you use the productive or test system environment for communication. In this Customizing activity, you configure the system behavior and the storage location for your digital signature for each tax number at your company.
- **Maintain Control Parameters for Process Flow**
  In this activity, you can make the settings for the process steps for further processing of a document (NF-e, CT-e, events). The process steps are derived from the business process that is assigned to the document. The process flow for this business process is contained in table `/XNFE/PROCFLOW`. In this activity, you can influence the handling of the process flow, This is possible, depending on the sender's and/or recipient's CNPJ number in the document. The *Control Settings* field lets you influence automatic processing of a process step.
- **Define Control Parameters for Process Steps**
  In this Customizing activity, you can define various control parameters for specific process steps. Your own tax number (CNPJ) is used to distinguish an entry at a higher level.
  You can use these activities to influence the outcome of the selected process flow. The *Value* field can contain various values and meanings, depending on which parameter is selected.
- **Control Parameters for Process-Independent Actions**
  In this Customizing activity, you can define various control parameters for specific process steps. Your own tax number (CNPJ) is used to distinguish an entry at a higher level. You can perform the available action with a related parameter. Various values are available for the parameter.
- **Activate B2B Scenarios for Business Partners**
  In this Customizing activity, you determine the business partners with whom you want to exchange electronic documents.
- **Activate B2B Scenarios for Natural Persons**
  In this Customizing activity, you determine the natural persons with whom you want to exchange electronic documents.

MDF-e Settings

- **MDF-e: Maintain Connected Authority Systems**
  In this Customizing activity, you configure the settings that the system needs for deciding to which government system your messages are to be sent.
- **MDF-e: Maintain Version of Message Types**
  In this Customizing activity, you determine which XML version is used for individual message types when communicating with authorities. In Customizing activity *MDF-e: Maintain Connected Authority Systems*, you have defined the government system you want to communicate with.

- **MDF-e: Maintain Region-Dependent Settings**
  In this Customizing activity, you maintain various region-dependent settings. These settings control the service status query, for example.

5.2.5.3.3 Batch Job Planning for MDF-e Outbound

You have to schedule the following batch jobs for the various communication processes in SAP Nota Fiscal Eletrônica (SAP NFE):

Background Reports

Name	Technical Name	Description
Create MDF-e Batches [page 86]	/XNFE/MDFE_BATCH_CREATE	This report collects all MDF-es that have to be sent to the authorities and creates batches.
Send MDF-e Batches [page 87]	/XNFE/MDFE_BATCH_SEND	Send batches to the authorities
Send MDF-e Batch Requests [page 87]	/XNFE/MDFE_BATCH_REQUEST	This report requests the batch status at the authorities.
Create and Send MDF-e Batches and Batch Requests [page 88]	/XNFE/MDFE_BATCH_PROCESS	This report performs the sending of the MDF-es and the sending of the batch status request together.
MDF-e Service Status Request [page 86]	/XNFE/MDFE_CHECK_SRV_STATUS	Service Status Check: You are required to periodically check the availability of the government systems that host the Web services for filing your MDF-es or related messages.
Collect and process Acknowledgments from PI [page 75]	/XNFE/GET_ACKNOWLEDGMENT	The NFE application collects the technical processing information from SAP NetWeaver Process Integration and displays the communication status of SAP PI.

For creating a batch job, use transaction code SM36 and define the parameters for the period.

5.2.5.3.4 BAdIs for MDF-e Outbound

For more detailed information, see the documentation for the BAdIs in Customizing under *Nota Fiscal Eletrônica* > *Outbound* > *Business Add-Ins for Outbound Documents*.

The following BAdIs (Outbound) are available for SAP Nota Fiscal Eletronica (NFE):

General Outbound BAdIs

- BAdI: Signature for Outbound Documents
  The BAdI enables a synchronous proxy call of an external signature service (through external signature hardware, for example, or an external Web service), to avoid the standard signature implementation in ABAP.
- BAdI: Change of Logical System
  With this BAdI you can change the original logical system that you received from the feeder system.

Outbound BAdIs for MDF-e

- MDF-e BAdI: Call Non-SAP System via RFC Communication
  With this BAdI you can update a non-SAP feeder system with the authorization status of the MDF-e.

5.2.5.3.5 User Roles and Authorizations for MDF-e Outbound

The core application in SAP Nota Fiscal Eletrônica (SAP NFE) contains the following roles with their relevant authorization objects. You can copy the roles as templates and assign them to users according to your company's needs.

User Roles

- `/XNFE/WP_NFE_OUT_MONITOR`
  This role does not contain authorizations and is therefore only meant to create and set up the user menu for the NFE Outbound Monitors. You can copy this role to adjust the user menu according to your requirements. This role can be combined with other roles in a composite role.
- `/XNFE/WP_NFE_ADMIN`
  This role is intended for the NFE Administrator. It does not contain authorizations and is therefore only meant to create and set up the user menu. You can copy this role to adjust the user menu according to your requirements. This role can be combined with other roles in a composite role.

Authorizations

For information concerning authorizations, refer to the security guide of SAP Nota Fiscal Eletrônica (http://help.sap.com/nfe).

5.2.6 Configuration of Inbound

Use

SAP Nota Fiscal Eletrônica (SAP NFE) contains the logic used to communicate with the authorities and to process incoming NF-es. For these communication processes, SAP NFE links a feeder system such as SAP ERP to SAP NetWeaver Process Integration (SAP NetWeaver PI). You must configure SAP NFE to control system behavior and to specify the process setup.

The necessary settings are divided into basic technical settings and process-related settings:

- Basic technical settings

Basic technical settings enable you to make decisions about electronic communication with your business partners. For example, you can specify in Customizing how the system responds to different process statuses.

- Process-related settings
  Process-related settings include, for example, control of the fiscal and logistics workplaces.

Process

1. Define basic technical settings, including:
   - Incoming NF-es and Configuration for Digital Signature Validation [page 110]
   - Authorization checks for NF-es and communication with SEFAZ (see Process Settings and Customizing for NF-e/CT-e Inbound [page 110]).
   - Communication with ERP
   - Process steps for assigned business processes
   - Defining services for user interfaces and workplaces

   For more information, see Technical Settings for NF-e/CT-e Inbound [page 108].
2. Define process-related customizing settings for:
   - Process steps
   - Monitoring processes
3. Define user roles and authorizations (see User Roles and Authorizations for Inbound [page 118]).

More Information

To configure the NF-e/CT-e Inbound of SAP NFE, read the following descriptions:

Technical Settings for NF-e/CT-e Inbound [page 108]

Configuration for Digital Signature Validation [page 110]

Process Settings and Customizing for NF-e/CT-e Inbound [page 110]

Vendor Notification [page 112]

Batch Job Planning for NF-e/CT-e Inbound [page 116]

BAdIs for NF-e Inbound [page 116]

BAdIs for CT-e Inbound [page 118]

User Roles and Authorizations for Inbound [page 118]

5.2.6.1 Technical Settings for NF-e/CT-e Inbound

You must carry out technical settings for the following areas of the SAP NFE core application:

Activating Services for UI Display

You must activate the relevant UI services for master data maintenance and for monitoring of NF-e inbound.

Enter transaction code **SICF** and select the following entries in the navigation tree for the *Virtual Hosts/Services* under *default_host* > *sap* > *bc* > *webdynpro* > *xnfe*. Activate the service for displaying the user interfaces for each of the following entries by using the context menu and selecting *Activate Service*:

General/cross-document applications

- `ssf maintenance` for *SSF* maintenance
- `download_mass_xml` for *Download XML of NF-es / CT-es*
- `gatekeeper_workplace` for *DF-e Gate Monitor*

NF-e specific services

- `nfe_fiscal_workplace` for *Fiscal Workplace for NF-e*
- `nfe_fisc_workplace_arch` for *NF-e Fiscal Workplace for Archived NF-es*
- `nfe_log_workplace` for *Logistics Workplace for NF-e*
- `nfe_receiver_ack_wp` for *NF-e Receiver Acknowledgment Workplace*
- `nfe_diststa_monitor` for *NF-e Distribution Request Monitor*
- `nfe_analytics` for *Reports for NF-e Senders*
- `innfe_dab` for *Graphical Overview for Incoming NF-es*

CT-e specific services

- `cte_fisc_workplace` for *CT-e Inbound Fiscal Workplace*
- `cte_fisc_workplace_arch` for *CT-e Inbound Fiscal Workplace for Archived CT-es*

In addition, you must activate the following basic services in the navigation tree for the *Virtual Hosts/Services* under *default_host* > *sap* > *public* > *bc*:

- `ur` for *Unified Rendering*
- `icons` for *SAP Icons*
- `icons_rtl` for *Icons RTL*
- `pictograms` for *Pictograms*
- `webdynpro` for *Web Dynpro MIME Handling*

Archiving Infostructure

Before you can access the archiving function, you have to activate the corresponding archiving infostructure for your respective scenario.

Enter transaction **SARI** and choose *Customizing*. In the following screen *Archive Retrieval Configurator*, select the *archive infostructure* `/XNFE/INNFE` for NF-e inbound and `/XNFE/INCTE` for CT-e inbound and activate it.

Logging and Tracing

Logging and tracing is done in the application log. To select application logs, enter transaction **SLG1**. The relevant objects are `/XNFE/INNFE` for NF-e, and `/XNFE/INCTE` for CT-e.

Signature

- *Maintain System Security Information*
  You define and monitor the personal security environments (PSEs) in the SAP system that are used for digital signatures and encryption in SAP systems. For more information, see the documentation in Customizing under *Nota Fiscal Eletrônica* > *Signature* > *Maintain System Security Information*.
- *Maintain Application-Dependent SSF Information*
  You specify the application-independent parameters for using SSF (secure store and forward) functions. The applications that use the SSF functions do not all have to use the same security environment or products. For more information, see the documentation in Customizing under *Nota Fiscal Eletrônica* > *Signature* > *Maintain Application-Dependent SSF Information* and Configuration for Digital Signature Validation [page 110].

Communication to ERP Back End System

- *Name the Logical System*
  You define your back-end (ERP) system to enable it to establish a connection with SAP Nota Fiscal Eletronica (NFE). For more information, see the documentation in Customizing under *Nota Fiscal Eletrônica* > *Communication to ERP Back End System* > *Name the Logical System*.
- *Create RFC Destinations*
  You define the technical parameters for the RFC (Remote Function Call) destinations, which must be maintained to define an RFC port. The name of the RFC destination should match the name of the corresponding logical system. For more information, see the documentation in Customizing under *Nota Fiscal Eletrônica* > *Communication to ERP Back End System* > *Create RFC Destinations*.
- *Determine RFC Destinations for Method Calls*
  You define the RFC destinations that are used for synchronous BAPI calls and for calling dialog methods in other logical systems.
  1. Assign the RFC destinations to the logical systems using a tree graphic. All the logical systems in the SAP system group are displayed in the tree, with the assigned RFC destination appearing beneath each logical system.
  2. Select a logical system and assign to it a standard destination for BAPIs, or dialogs or a destination for specific methods. For more information, see the documention in Customizing under *Nota*

Fiscal Eletrônica > *Communication to ERP Back End System* > *Determine RFC Destinations for Method Calls*

> **Note**
>
> You cannot assign RFC destinations to your own logical system because it is called without an RFC destination.

5.2.6.2 Configuration for Digital Signature Validation

To validate a digital signature in SAP NetWeaver, you need to define the following settings:

- *SSF: Trust Manager*
  Execute transaction `STRUST`. For the SSF application `NFE_IN`, you must import the public CA certificates from your business partners. When the signing certificate of your business partner is issued by `Certisign`, you have to import the public CA certificate from `Certisign`. If another business partners has SERASA as issuer; then you have to import the public CA certificate from SERASA, too. Do this for all other certificate providers of your business partners. For more information, see SAP Note 1524196, attachment `NFE_Digital_Signature_Guide.pdf`, and Administration [page 524].
- *Define Control Parameter for Signature Validation*
  To overcome the problem that the certificate of an authorized document has expired during the sending to the business partner, you can set a customizable switch to *reference validation*. This validation (together with the authorization check) also prevents fraud and is independent of the sender's certificate expiration date. During the reference validation, the message digest is calculated and checked against the persisted digest after the authorization step. Set the *Value* field of the IMG activity *Define Control Parameters for Process Steps* to blank (= Signature Validation), or 1 (= Reference Validation) for the relevant CNPJ, process type and step.

5.2.6.3 Process Settings and Customizing for NF-e/CT-e Inbound

Use

You can access the Customizing activities and the **detailed** documentation by entering **SPRO** and executing the appropriate activity after choosing *Nota Fiscal Eletrônica* > *Inbound*. The documentation below only offers a brief description of the Customizing activities, you find the full documentation in the Customizing section of your NFE system.

Procedure

General Inbound Settings

Define the process type and process step that you want to influence. You also can limit your selection by the tax number (CNPJ). You can also make a blank entry for the tax number. When determining the valid entry, the system first searches for an entry with a suitable tax number. If no such entry is found, the system searches with a blank tax number.

- **Maintain Logical System for Own Tax Numbers**
  When inbound NF-es are processed, process steps can be carried out that require communication with an ERP system. The corresponding ERP system is determined using the recipient's CNPJ number from the incoming NF-e. In this Customizing activity, you define the assignment of the recipient's CNPJ number to the corresponding ERP system. To determine the logical system, the system checks whether it can find an entry for the CNPJ number of the recipient of an incoming NF-e.
- **Maintain Control Parameter for Process Flow**
  In this Customizing activity, you perform certain steps to further process an incoming document (NF-e, CT-e, or Event). These process steps are determined from the business process to which the NF-e was assigned based on the CFOP codes of its items (This is only true for NF-es; for CT-es and events, the CFOP code is not used for business process determination). The process flow for this business process is contained in table `/XNFE/PROCFLOW`. You can determine how the process flow is handled, dependent upon the sender's and/or recipient's CNPJ number in the incoming document. The `Control Settings` field lets you control the processing of a process step.
- **Define Control Parameters for Process Steps**
  In this Customizing activity, you can define various control parameters for specific process steps. Your own tax number (CNPJ) is used to distinguish an entry at a higher level.
  You can use these activities to influence the outcome of the selected process flow. The *Value* field can contain various values and meanings, depending on which parameter is selected.
- **Control Parameters for Process-Independent Actions**
  In this Customizing activity, you can define various control parameters for specific process steps. Your own tax number (CNPJ) is used to distinguish an entry at a higher level. You can perform the available action with a related parameter. Various values are available for the parameter.
- **Maintenance of Messages for Temporary Error**
  In this Customizing activity, you can maintain message classes and numbers for a combination of process type and process step, which in the process step means that a step for which the corresponding message is issued, is set to being a temporary error.
- **Maintain Mail Sender Parameters for Own Tax Numbers**
  In this Customizing activity, you assign an e-mail address to incoming NF-es for your own tax number (CNPJ). This e-mail address is used as the sender address for e-mail communication. If you do not define this entry, the system tries to use the e-mail address of the currently active user. You can enter the e-mail text with the rejection in the *Rejection Text Name* field. You can enter the e-mail text with the acceptance in the *Acceptance Text Name* field. You can maintain these texts using transaction code `SO10`; the text ID must be *NFE*.
- **Maintain Communication Parameters for Partner Tax Numbers**
  In this Customizing activity, you define the communication parameters for a business partner. The business partner tax number must be entered. Optional: You can also enter your own tax number and link it with the business partner tax number. The recipient e-mail address determines where notifications are sent during e-mail communication. If no recipient e-mail address is entered for a business partner tax number, then e-mail notification is not possible for that business partner.

Communication to Business Partner

- **Maintain Mail Sender Parameters for Own Tax Numbers**

In this Customizing activity, you assign an e-mail address to incoming NF-es for your own tax number (CNPJ). This e-mail address is used as the sender address for e-mail communication. If you do not define this entry, the system tries to use the e-mail address of the currently active user.

- **Maintain Communication Parameters for Partner Tax Numbers**
  In this Customizing activity, you define the communication parameters for a business partner. The business partner tax number must be entered. Optional: You can also enter your own tax number and link it with the business partner tax number.

Settings for NF-e

- **NF-e: Maintain Process Determination for Inbound NF-es**
  In this Customizing activity, you assign specific business processes to incoming NF-es for further processing. The business processes are determined based on the CFOP codes that are assigned to the NF-e items. If the CFOP code does not enable identification of a unique business process, the NF-e is not assigned.
- **NF-e: Maintain Assignment of Item Category to CFOP Code**
  In this Customizing activity, you can maintain the assignment of item categories to CFOP codes. This assignment is relevant for determining the correct business process. The item categories represent the meanings of the CFOP codes. They have different priorities in the determination of the business processes. If an NF-e contains both main items and other item categories, then only the main items are used to determine the business process.
- **NF-e: Define Reasons for Rejection; Assign to Events**
  In this Customizing activity, you specify the reasons for rejecting processing for incoming NF-es. Only the texts defined in this activity can be selected as reasons for rejection. If vendor notification is active (in the rejection case), the selected rejection text can be sent to the business partner as part of an e-mail.
- **NF-e: Maintain Receiver Acknowledgment Deadlines**
  You use this Customizing activity to specify the deadlines for final receiver acknowledgment events by which the transaction concerned needs to be reported to SEFAZ by means of a suitable end event.

Settings for CT-e

- **CT-e: Maintain Process Determination for Inbound CT-es**
  In this Customizing activity, you assign specific business processes to incoming CT-es for further processing. Determination of the business process is carried out using the CNPJ of the service taker (Field `CNPJ_DERIVED_TOM` in table `/XNFE/INCTEHD`) and the indicator for the service taker (Field TOMA in table`/XNFE/INCTEHD`).
- **CT-e: Define Reasons for Rejection; Assign to Events**
  In this Customizing activity, you specify the reasons for rejecting the processing of inbound CT-es. Only the texts defined in this activity can be selected as reasons for rejection. The selected rejection text can be sent to the business partner as part of an e-mail.

5.2.6.4 Vendor Notification

You can notify your business partners by e-mail when NF-es/CT-es are accepted or rejected by performing the activities in Customizing under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner*.

The following activities are available:

- Enter the e-mail parameters for your own tax number in Customizing under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner* > *Maintain Mail Sender Parameters for Own Tax Numbers*.

- Define a new e-mail address for your own tax number.

If you are using the vendor notification feature, then this e-mail address is used as the sender address. If you do not define an e-mail address, then the address of the logged-on user, if available, becomes the vendor address. You can use the vendor notification only if you enter a valid e-mail address, either via this Customizing activity, or in the user master data.

- Define SAP Standard Texts
  Using transaction code **SO10**, enter appropriate texts to use for your acceptance rejection e-mail notifications. If you do not enter a text, a default text is used. For more information, see the documentation for this Customizing activity.
- Assign e-mail addresses to business partners' tax numbers
  Vendor notification by e-mail is possible only if you assign an e-mail address to the corresponding business partner's tax number. Optionally, you can enter your own tax number.
  Refer to the documentation of this activity for more information. You find this activity under the following path: *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner* > *Maintain Communication Parameters for Partner Tax Numbers*.

For more information, see:

NF-e Rejection Notification [page 113]

CT-e Rejection Notification [page 114]

NF-e Acceptance Notification [page 115]

CT-e Acceptance Notification [page 115]

5.2.6.4.1 NF-e Rejection Notification

You have the option of notifying the relevant business partner by e-mail when an NF-e is rejected. (See Vendor Notification [page 112]) To configure the communication, make the following entries in Customizing under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner* > *NF-e: Define Reasons for Rejection; Assign to Events*

- Reason for rejection
- Text for rejection

> **Note**
>
> You must enter values for this table if you want to be able to reject NF-es in the *NF-e Fiscal Workplace*.

- *Enter E-Mail Parameters of Sender for Own Tax Number*
  You can define a SAP standard text (via transaction code **SO10**) for the e-mail body of the rejection. If you do not enter a text, a default text is used.
  Refer to the documentation of this activity for more information. You find this activity under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner* > *Maintain Mail Sender Parameters for own Tax Numbers*.
- *Maintain Communication Parameters for Partner Tax Numbers*
  You can assign an e-mail address of a business partner to the tax number of the same business partner. Optionally, you can enter your own tax number.

Refer to the documentation of this activity for more information. You find this activity under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner* > *Maintain Communication Parameters for Partner Tax Numbers*.

> **Note**
>
> The vendor notification via e-mail is only possible if you assign the vendor's e-mail to the vendor's tax number.

5.2.6.4.2 CT-e Rejection Notification

You have the option of notifying the relevant business partner by e-mail when a CT-e is rejected. (See Vendor Notification [page 112]) To configure the communication, make the following entries in Customizing under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner* > *CT-e: Define Reasons for Rejection*

- Reason for rejection
- Text for rejection

> **Note**
>
> You must enter values for this table if you want to be able to reject CT-es in the *CT-e Fiscal Workplace*.

- *Enter E-Mail Parameters of Sender for Own Tax Number*
  You can define a SAP standard text (via transaction code **SO10**) for the e-mail body of the rejection. If you do not enter a text, a default text is used.
  Refer to the documentation of this activity for more information. You find this activity under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner* > *Maintain Mail Sender Parameters for own Tax Numbers*.
- *Maintain Communication Parameters for Partner Tax Numbers*
  You can assign an e-mail address of a business partner to the tax number of the same business partner. Optionally, you can enter your own tax number.
  Refer to the documentation of this activity for more information. You find this activity under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner* > *Maintain Communication Parameters for Partner Tax Numbers*.

  > **Note**
  >
  > The vendor notification via e-mail is only possible if you assign the vendor's e-mail to the vendor's tax number.

5.2.6.4.3 NF-e Acceptance Notification

You have the option of notifying your business partner by e-mail when an NF-e is accepted. (See Vendor Notification [page 112]) To configure the communication, make the following entries in Customizing under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner*

- *Maintain Mail Sender Parameters for Own Tax Number*
  You can define a SAP standard text (via transaction code **SO10**) for the e-mail body of the acceptance. If you do not enter a text, a default text is used.
  Refer to the documentation of this activity for more information. You find this activity under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner* > *Maintain Mail Sender Parameters for Own Tax Number*.
- *Maintain Communication Parameters for Partner Tax Numbers*
  You can assign an e-mail address of a business partner to the tax number of the same business partner. Optionally, you can enter your own tax number.
  Refer to the documentation of this activity for more information. You find this activity under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner* > *Maintain Communication Parameters for Partner Tax Numbers*.

> **Note**
>
> Vendor notification via e-mail is only possible if the vendor's e-mail address is assigned to the vendor's tax number.

5.2.6.4.4 CT-e Acceptance Notification

You have the option of notifying your business partner by e-mail when a CT-e is accepted. (See Vendor Notification [page 112]) To configure the communication, make the following entries in Customizing under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner*

- *Maintain Mail Sender Parameters for Own Tax Number*
  You can define a SAP standard text (via transaction code **SO10**) for the e-mail body of the acceptance. If you do not enter a text, a default text is used.
  Refer to the documentation of this activity for more information. You find this activity under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner* > *Maintain Mail Sender Parameters for Own Tax Number*.
- *Maintain Communication Parameters for Partner Tax Numbers*
  You can assign an e-mail address of a business partner to the tax number of the same business partner. Optionally, you can enter your own tax number.
  Refer to the documentation of this activity for more information. You find this activity under *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner* > *Maintain Communication Parameters for Partner Tax Numbers*.

> **Note**
>
> Vendor notification via e-mail is only possible if the vendor's e-mail address is assigned to the vendor's tax number.

5.2.6.5 Batch Job Planning for NF-e/CT-e Inbound

You have to schedule the following batch jobs for the various communication processes in SAP Nota Fiscal Eletrônica (SAP NFE):

Background Reports

Name	Technical Name	Description
Continue Process for Documents with Temporary Errors [page 75]	`/XNFE/NFE_CONTINUE_PROCESS`	This report collects all NF-es with a temporary error and reprocesses them automatically.
Query Documents (NF-e) from Authority [page 78]	`/XNFE/COLLECT_DOCUMENTS`	This report requests information from the national environment for all NF-e documents that were issued for an own tax number (CNPJ).
Query Documents (CT-e) from Authority [page 83]	`/XNFE/COLLECT_DOCUMENTS_CTE`	This report requests information from the national environment for all CT-e documents that were issued for an own tax number (CNPJ).
Collect and process Acknowledgments from PI [page 75]	`/XNFE/GET_ACKNOWLEDGMENT`	The NFE application collects the technical processing information from SAP NetWeaver Process Integration and displays the communication status of SAP PI.

For creating a batch job, use transaction code `SM36` and define the parameters for the period.

5.2.6.6 BAdIs for NF-e Inbound

For more detailed information, see the documentation for the BAdIs in Customizing under *Nota Fiscal Eletrônica* > *Inbound* > *Business Add-Ins for Inbound Documents* > *Business Add-Ins for Inbound NF-es*.

The following BAdIs (Incoming) are available for SAP Nota Fiscal Eletrônica (NFE):

General Inbound BAdIs

- BAdI: Determination of Logical System
  In this Customizing activity, you can implement a BAdI that determines a customer-specific logical system.

- BAdI: DF-e Status Determination for Gate Monitor
  In this activity, you can implement a BAdI, which lets you determine the DF-e status for the Gate Monitor and define a suitable text. You can also determine your own text for each status of the traffic light, which controls entry through the gate.
- BAdI: Enhancement of Step Result
  In this activity, you can implement a BAdI that determines a customer-specific change to the status message of a process step.
- BAdI: Enhancement of E-mail to the Issuer
  In this activity, you can implement a BAdI that is used to enhance the e-mail for the notification of the issuer of the NF-e or CT-e.

Business Add-Ins for Inbound NF-es

- NF-e BAdI: Step Implementation before/after DANFE
  You can implement a BAdI that is used within the business process Customer-Specific Business Process with DANFE [page 263] to trigger transactions in the integrated ERP system.
- NF-e BAdI: Determine Business Process
  You can implement a BAdI that carries out a customer-specific business process determination.
- NF-e BAdI: Validation of Incoming XML Document
  You can implement a BAdI that executes a customer-specific validation of an incoming XML document.
- NF-e BAdI: Assignment of Purchase Order Number and Purchase Order Item
  You can implement a BAdI that executes a customer-specific assignment of the order number and order positions to an NF-e position.
- NF-e BAdI: Determination of Variant for Delivery Quantity Entry
  You can implement a BAdI that determines a customer-specific variant for the delivery quantity entry.
- NF-e BAdI: Simulate/Post Filling of Extension Parameter for Invoice
  You can implement a BAdI that fills extension parameters, which are handed over to the ERP system in a simulation/booking of invoice.
- NF-e BAdI: Calculation of Total Value
  You can implement a BAdI that performs a customer-specific calculation of the total value. The BAdI returns the calculated total value to the ERP system for the XML simulation and for posting the invoice. In the standard SAP NFE system, the total value of the XML document is returned to the ERP system.
- NF-e BAdI: Determination of Custom UI for Logistics Workplace
  You can implement a BAdI that replaces the UI of the process step *Prepare Goods Receipt Posting* with a UI provided by the user.
- NF-e BAdI: Check for Fiscal Checkpoint Event
  In this Customizing activity, you can implement a BAdI that enables the customer to check if one (or several) event of the type *Fiscal Checkpoint Passage Record* exists for an incoming NF-e.
- NF-e BAdI: Download NF-e XML File from Authority
  In this Customizing activity, you can implement a BAdI that controls downloads of XML files from the authority (SEFAZ).
- NF-e BAdI: Issue of Receiver Acknowledgment Events
  In this Customizing activity, you can implement a BAdI that lets you determine whether to issue an Operation Confirmation event for the processed NF-e.
- NF-e Event BAdI: Step Implementation after Receipt
  In this activity, you can implement a BAdI that is used within the business process NF-e Events: Receipt of Other Event Types from SEFAZ [page 456] to trigger processes in connected systems.

5.2.6.7 BAdIs for CT-e Inbound

For more detailed information, see the documentation for the BAdIs in Customizing under *Nota Fiscal Eletrônica* > *Inbound* > *Business Add-Ins for Inbound Documents* > *Business Add-Ins for Inbound CT-es*.

The following BAdIs (Incoming) are available for SAP Nota Fiscal Eletrônica (NFE):

General Inbound BAdIs

- BAdI: Determination of Logical System
  In this Customizing activity, you can implement a BAdI that determines a customer-specific logical system.
- BAdI: DF-e Status Determination for Gate Monitor
  In this activity, you can implement a BAdI, which lets you determine the DF-e status for the Gate Monitor and define a suitable text. You can also determine your own text for each status of the traffic light, which controls entry through the gate.
- BAdI: Enhancement of E-mail to the Issuer
  In this activity, you can implement a BAdI that is used to enhance the e-mail for the notification of the issuer of the NF-e or CT-e.

Business Add-Ins for Inbound CT-es

- CT-e BAdI: Step Implementation before/after DACTE
  You can implement a BAdI that is used within the business process CT-e Flexible Process [page 377] to trigger transactions in the integrated ERP system.

  > **Note**
  >
  > The BadI can also be used within the business process CT-e OS Flexible Process [page 378] to trigger transactions in the integrated ERP system.

- CT-e BAdI: Determine Business Process
  You can implement a BAdI that carries out a customer-specific business process determination.
- CT-e BAdI: Provide LES Documents in ERP
  You can implement a BAdI that is used in the business process CT-e for NF-e Inbound with LES (Logistic Execution System) [page 379].
- CT-e BAdI: Step Implementation BAdI Call for Cancellation Process
  You can implement a BAdI that is used within the CT-e Cancellation Process [page 376] to trigger transactions in the integrated ERP system.
- CT-e Event BAdI: Step Implementation after Receipt
  In this activity, you can implement a BAdI that is used within the business process BADARECT: Customer-specific CT-e Event Step [page 493] to trigger processes in connected systems.

5.2.6.8 User Roles and Authorizations for Inbound

User Roles

- `/XNFE/WP_NFE_ADMIN`
  This role is intended for the NFE administrator. It does not contain authorizations and is therefore only meant to create and set up the user menu. You can copy this role to adjust the user menu according to your requirements. This role can be combined with other roles in a composite role.

- `/XNFE/WP_NFE_IN_FISCAL`
  This role is intended for the user of inbound monitors and workplaces for NF-e and CT-e, for example, *Fiscal Workplace for NF-e* and *Fiscal Workplace for CT-e*. It does not contain authorizations and is therefore only meant to create and set up the user menu. You can copy this role to adjust the user menu according to your requirements. This role can be combined with other roles in a composite role.
- `/XNFE/WP_NFE_IN_LOGISTIC`
  This role is intended for the user of the *NF-e Logistics Workplace*. It does not contain authorizations and is therefore only meant to create and set up the user menu. You can copy this role to adjust the user menu according to your requirements. This role can be combined with other roles in a composite role.
- `/XNFE/WP_NFE_IN_REPORTS`
  This role is intended for the user who wants to run an analysis of various NF-e processing situations. It does not contain authorizations and is therefore only meant to create and set up the user menu. You can copy this role to adjust the user menu according to your requirements. This role can be combined with other roles in a composite role.
- `/XNFE/WP_NFE_IN_GATEKEEPER`
  This role is intended for the user of the *DF-e Gate Monitor* (DF-e = NF-e and CT-e) at the company gate to scan the barcodes of a shipment (Example: truck arrives with several DACTE and DANFE). It does not contain authorizations and is therefore only meant to create and set up the user menu. You can copy this role to adjust the user menu according to your requirements. This role can be combined with other roles in a composite role.

Authorizations

For information concerning authorizations, refer to the security guide of SAP Nota Fiscal Eletrônica (http://help.sap.com/nfe).

5.2.7 Configuration of Events

Use

SAP Nota Fiscal Eletrônica (SAP NFE) contains the process logic used to communicate with government authorities. For this process, the NFE application links a feeder system such as SAP ERP to SAP NetWeaver Process Integration (SAP NetWeaver PI). You must configure the NFE core application in order to control system behavior and to specify process setup. The necessary settings are divided into basic technical settings and process-related settings:

- Basic technical settings
  Basic technical settings enable you to make decisions about electronic communication with your business partners. For example, you can include activities such as specify in Customizing how the system responds to different process statuses.
- Process-related settings
  Process-related settings control batch creation and monitoring options.

Process

1. You define basic technical settings such as the following (see Technical Settings for Events [page 120]):
   - System environments and storage locations for digital-signature certificates
   - Service status settings, for example, request a frequency or status check for the system environment of a certain region in Brazil
   - Status codes of the authorities, based on which the system controls follow-up activities
   - Business partners taking part in the electronic exchange of notas fiscais (NF-es)
   - Number ranges for batches that group notas fiscais eletrônicas (NF-es)
   - Services for user interface displays
2. You have to validate a digital signature (see Configuration for Digital Signature Validation [page 110])
3. You plan batch jobs (see Batch Job Planning for Events [page 122])
4. You define user roles and authorizations (see User Roles and Authorizations for Events [page 122]) by tax number.

More Information

Technical Settings for Events [page 120]

Configuration for Digital Signature Validation [page 121]

Batch Job Planning for Events [page 122]

User Roles and Authorizations for Events [page 122]

5.2.7.1 Technical Settings for Events

Use

You specify technical settings in order to control system behavior and responses.

Activities

Activating Services for UI Display

You must activate the relevant UI services for master data maintenance and for monitoring of events.

Enter transaction code **SICF** and select the following entries in the navigation tree for the *Virtual Hosts/Services* under *default_host* > *sap* > *bc* > *webdynpro* > *xnfe*. Activate the service for displaying the user interfaces for each of the following entries by using the context menu and selecting *Activate Service*:

Events

- `event_monitor` for *Event Monitor Outbound*
- `event_monitor_IB` for *Event Monitor Inbound*
- `event_batch_monitor` for *Event Batch Monitor*
- `ssf maintenance` for SSF maintenance

In addition, you must activate the following basic services in the navigation tree for the *Virtual Hosts/Services* under *default_host* > *sap* > *public* > *bc*:

- `ur` for *Unified Rendering*
- `icons` for *SAP Icons*
- `icons_rtl` for *Icons RTL*
- `pictograms` for *Pictograms*
- `webdynpro` for *Web Dynpro MIME Handling*

Number Range for Batches

Batches that package events require a number range both to identify and to monitor the batches in process. In the batch monitor of SAP NFE, you can use this number range to access all events that the system has combined into one batch.

Enter transaction code **SNUM** to create the number range for the object `/XNFE/EVBT`, and create interval **01** with a length of 15 digits.

Archiving Infostructure

Events are archived together with their corresponding main document (NF-e, CT-e, MDF-e).

5.2.7.2 Configuration for Digital Signature Validation

To validate a digital signature in SAP NetWeaver, you need to define the following settings:

- *SSF: Trust Manager*
  Execute transaction `STRUST`. For the SSF application `NFE_IN`, you must import the public CA certificates from your business partners. When the signing certificate of your business partner is issued by `Certisign`, you have to import the public CA certificate from `Certisign`. If another business partners has SERASA as issuer; then you have to import the public CA certificate from SERASA, too. Do this for all other certificate providers of your business partners. For more information, see SAP Note 1524196, attachment `NFE_Digital_Signature_Guide.pdf`, and Administration [page 524].
- *Define Control Parameter for Signature Validation*
  To overcome the problem that the certificate of an authorized document has expired during the sending to the business partner, you can set a customizable switch to *reference validation*. This validation (together with the authorization check) also prevents fraud and is independent of the sender's certificate expiration date. During the reference validation, the message digest is calculated and checked against the persisted digest after the authorization step. Set the *Value* field of the IMG activity *Define Control Parameters for Process Steps* to blank (= Signature Validation), or 1 (= Reference Validation) for the relevant CNPJ, process type and step.

5.2.7.3 Batch Job Planning for Events

You need batch jobs for the following periodic tasks:

Background Reports

Name	Technical Name	Description
Create and Send NF-e Event Batches [page 73]	/XNFE/EVENT_BATCH_SEND	Events are collected in batches and sent to the authorities.
Send CT-e Events to Authority for Authorization [page 83]	/XNFE/CTE_EVENT_SEND	This report sends every CT-e to the authorities individually for authorization.
Send MDF-e Events to Authority for Authorization [page 88]	/XNFE/MDFE_EVENT_SEND	This report sends every MDF-e to the authorities individually for authorization.
Collect and process Acknowledgments from PI [page 75]	/XNFE/GET_ACKNOWLEDGMENT	The NFE application collects the technical processing information from SAP NetWeaver Process Integration and displays the communication status of SAP PI in the MDF-e Monitor.
Query Documents (NF-e) from Authority [page 78]	/XNFE/COLLECT_DOCUMENTS	This report requests information from the national environment for all documents that were issued for an own tax number (CNPJ).

For creating a batch job, use transaction code SM36 and define the parameters for the period.

5.2.7.4 User Roles and Authorizations for Events

The core application in SAP Nota Fiscal Eletrônica (SAP NFE) contains the following roles with their relevant authorization objects. You can copy the roles as templates and assign them to users according to your company's needs.

User Roles

- /XNFE/WP_NFE_OUT_MONITOR
  This role is does not contain authorizations and is therefore only meant to create and set up the user menu for the NFE Outbound Monitors. You can copy this role to adjust the user menu according to your requirements. This role can be combined with other roles in a composite role.
- /XNFE/WP_NFE_ADMIN
  This role is intended for the NFE Administrator. It does not contain authorizations and is therefore only meant to create and set up the user menu. You can copy this role to adjust the user menu according to your requirements. This role can be combined with other roles in a composite role.

Authorizations

For information concerning authorizations, refer to the security guide of SAP Nota Fiscal Eletrônica (http://help.sap.com/nfe).

5.2.8 Configuring and Personalizing Workplaces

You can use your Personal Object Work List (POWL) and the *Floorplan Manager* to configure and personalize workplaces, as follows:

- **POWL Framework**
  The Personal Object Work List/ Power List provides central, personalized access to your worklist items. You can define (and optionally store) queries via portal-based interfaces similar to selection screen variants in SAP systems.
- **Floorplan Manager**
  Floorplan Manager is a framework that you can use to create and configure Web Dynpro applications in Web Dynpro ABAP. You can use the *Floorplan Manager* configuration editor to combine application-specific views of one or more business applications with a new Floorplan Manager application. For more information, see the documentation for *Floorplan Manager for Web Dynpro ABAP* in SAP Library under: http://help.sap.com/nw702 ▸ *SAP NetWeaver 7.0 EHP2* ▸. Now enter *Floorplan Manager* in the Global Search field in the upper right of your screen and you find a link to the documentation for *Floorplan Manager for Web Dynpro ABAP* (http://help.sap.com/saphelp_nw70ehp2/helpdata/en/9f/95467bbefc4a808fffeba4c5177258/frameset.htm).

Alternatively, navigate manually: http://help.sap.com/nw702 ▸ *SAP NetWeaver 7.0 EHP2* ▸ *System Administration and Maintenance Information* ▸ *Technical Operations for SAP NetWeaver* ▸ *SAP NetWeaver by Key Capability* ▸ *Application Platform by Key Capability* ▸ *ABAP Technology* ▸ *UI Technology* ▸ *Web UI Technology* ▸ *Floorplan Manager for Web Dynpro ABAP* ▸

5.3 Related Configuration in SAP ERP

Use

To be able to process electronic fiscal documents (such as NF-e or CT-e) and post the follow-on documents in the SAP ERP system, you must ensure that you have made the necessary Customizing settings in the SAP Customizing Implementation Guide (IMG) in your SAP ERP system.

Activities

General Settings

In the IMG of your SAP ERP system, make the necessary settings in Customizing for *Cross-Application Components* under ▸ *General Application Functions* ▸ *Nota Fiscal* ▸. For details about the settings to be made, see the documentation for each Customizing activity in the system.

You can find an overview of the necessary Customizing settings in the Application Help for the SAP ERP solution for Brazil on the SAP Help Portal under http://help.sap.com/ ▶ *SAP Business Suite* ▶ *SAP ERP* ▶ *SAP ERP Central Component* ▶ *SAP ERP Central Component* ▶ *SAP Library* ▶ *SAP ERP Central Component* ▶ *Logistics* ▶ *Country Versions* ▶ *Americas* ▶ *Brazil* ▶ *Cross-Application Components* ▶ *Nota Fiscal* ▶ *Electronic Fiscal Documents* ▶.

Settings Specific to Incoming Automation

If you use the automated functions for processing incoming NF-e, you must make the corresponding Customizing settings in the IMG of your SAP ERP system under ▶ *Cross-Application Components* ▶ *General Application Functions* ▶ *Nota Fiscal* ▶ *Electronic Fiscal Documents* ▶ *Incoming NF-e Automation* ▶. For details about the settings to be made, see the documentation for each Customizing activity in the system.

If you use the automated functions for processing incoming CT-e, you must make the corresponding Customizing settings in the IMG of your SAP ERP system under ▶ *Cross-Application Components* ▶ *General Application Functions* ▶ *Nota Fiscal* ▶ *Electronic Fiscal Documents* ▶ *Incoming CT-e Automation* ▶. For details about the settings to be made, see the documentation for each Customizing activity in the system.

6 Outbound

The Outbound of SAP Nota Fiscal Eletrônica has the scope to automate and monitor the authorization of NF-es, CT-es, MDF-es and their events at the government system. NF-es, CT-es and corresponding Events can also be automatically sent to the to business partners.

The Outbound of SAP Nota Fiscal Eletrônica consists of the following:

NF-e Outbound [page 125]

CT-e Outbound [page 170]

MDF-e Outbound [page 208]

6.1 NF-e Outbound

The NF-e outbound of SAP Nota Fiscal Eletrônica manages the authorization with federal tax systems and issuance to customers of electronic invoices. The NF-e outbound of SAP Nota Fiscal Eletrônica has the following scope:

- NF-e issuing through Batch and Batch Status Request
- NF-e issuing without Batch Processing
- Events for Cancellation and Correction Letter
- Skipping
- Service Status Check
- ABAP Digital Signature
- Contingency
- Communication to Business Partners (B2B)
- BADI for enhancements
- Monitors for NF-e processes: NF-e, Batch, Events

The NF-e outbound of SAP Nota Fiscal Eletrônica consists of the following topics:

- Communication Flow for Sending NF-es [page 126]
- NF-e Processing (Outbound) [page 129]
  - User Actions for NF-e Processing [page 139]
- NF-e Batch Processing [page 156]
  - User Actions for NF-e Batch Processing [page 157]
- Monitor NF-e Outbound [page 161]
  - NF-e Monitor (Outbound) [page 162]
  - NF-e Batch Monitor (Outbound) [page 165]
  - NF-e Service Status Monitor (Outbound) [page 168]
  - Monitor for Outbound Analysis [page 169]

> **Note**
>
> Additional information: BAdIs for NF-e Outbound [page 94]

Communication Flow for Sending NF-es [page 126]

NF-e Processing (Outbound) [page 129]

NF-e Batch Processing [page 156]

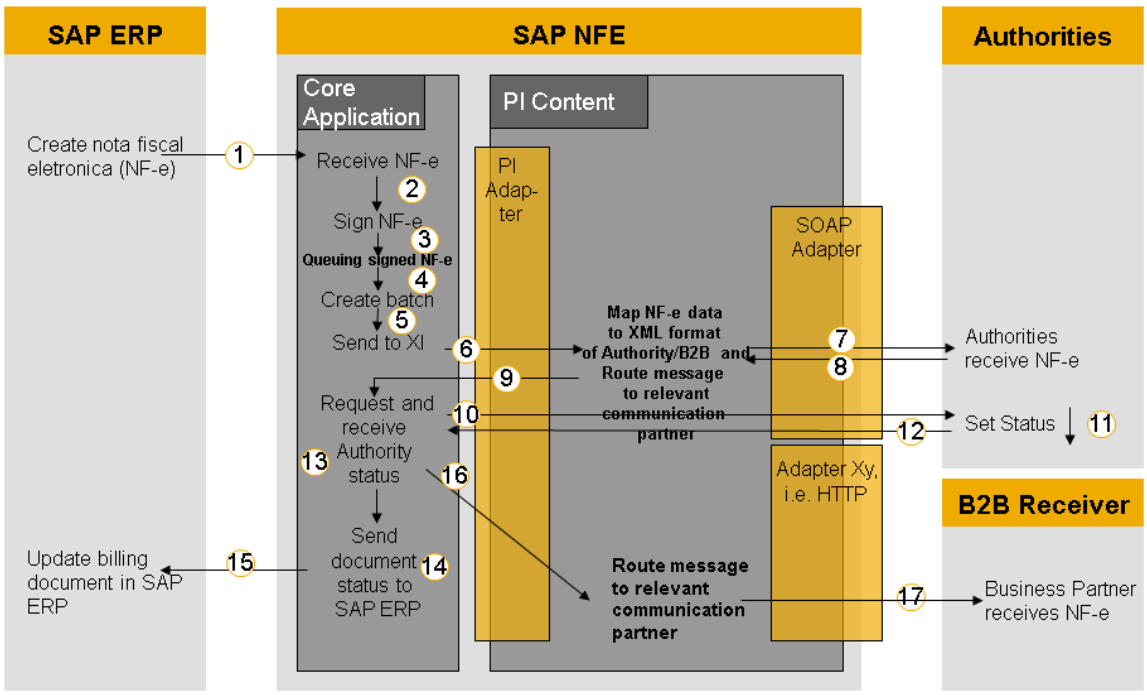
Monitor NF-e Outbound [page 161]

6.1.1 Communication Flow for Sending NF-es

Use

This section provides an overview of the interaction between the different components of the SAP Nota Fiscal Eletrônica (SAP NFE) shipment based on the example process of sending an NF-e . You can apply the explanations for each NF-e process step to such secondary processes as canceling or skipping NF-es.

Process



Communication Flow

1. *Create an electronic fiscal document in SAP ERP*
   To create an electronic fiscal document in a logistics process, you need country-specific information contained in an NF-e.
   For more information about the role and the handling of electronic fiscal documents (NF-es), see SAP Library for SAP ERP under *SAP Solutions* > *SAP ERP* > *SAP ERP Central Component* > *<Release>* > *SAP ERP Central Component* > *Logistics* > *Country Versions* > *Americas* > *Brazil* > *Sales and Distribution (SD)*.
2. *Receive NF-e data in the SAP NFE core application*
   The system transfers all required data in a NF-e from the SAP ERP feeder system to the SAP NFE core application, which stores the data with a common identifier and a reference to the feeder system document.
3. *Sign NF-e*
   The authorities require that each NF-e be signed by using a certificate that they have issued. Each NF-e is signed individually within the ABAP stack using the certificate that is stored in the STRUST table.
4. *Queue signed NF-es*
   The core application saves the signed NF-es for later reference and also queues them for the next process step.

5. *Create batch in core application*
   The authorities only accept NF-es in batches that cannot exceed a certain size. The system applies all requirements from the authorities when batching signed NF-es.
6. *Send NF-e batch to SAP NetWeaver PI*
   The SAP NFE system sends the batch synchronously to SAP NetWeaver PI using the standard PI adapter.
7. *Send NF-e batch from SAP NetWeaver PI to authorities*
   SAP NetWeaver PI routes the batches to the correct addressee. For communicating with the authorities, an HTTPs connection using the company-specific certificate from the government via SOAP is required.
8. *Receive average timeframe from authorities for status availability*
   When the authorities receive the batched NF-es, they automatically send a response via SAP NetWeaver PI with the average time (in seconds) that it took to set the NF-e batch status.
9. *Prepare request for NF-e status information*
   After SAP NetWeaver PI transmits the authorities' response to the SAP NFE core application, the core application schedules a system status request message to send to the authorities.
10. *Set NF-e government status (authorities)*
    The authorities set the status for all NF-es in the batch for which they have provided a time estimate. The status is stored in the authorities' system until your company retrieves it

    > **Note**
    >
    > Authorities can reject NF-es due to technical problems or other reasons. You can solve this issue if you initiate the skipping process by canceling the rejected NF-e in the SAP ERP feeder system. If the authorities return the NF-e with status *Denied*, that means that a severe credibility problem has occurred.

11. *Request status information from authorities*
    After the time set by the authorities for collecting status data has elapsed, the SAP NFE core application uses the standard PI adapter to send the status request to SAP NetWeaver PI. SAP NetWeaver PI then routes the request via the SOAP adapter to the authorities.
12. *Receive authority status in SAP NFE core application*
    The SAP NFE system receives the government status for the NF-es via SAP NetWeaver PI and updates the status information accordingly.
13. *Triggering of B2B process (if configured) in SAP NFE core application*
    If configured in Customizing, the SAP NFE system triggers the B2B process and sends the XML file to the business partner.
14. *Forward NF-e status to SAP ERP*
    The SAP NFE core application sends the government-issued status to SAP ERP.
15. *Update status of electronic fiscal document in SAP ERP*
    The process is terminated and changes to goods movement processing.
16. *Send NF-es to SAP NetWeaver PI*
    The SAP NFE system uses the standard PI adapter to send the NF-es to SAP NetWeaver PI.
17. *Send NF-es from SAP NetWeaver PI to B2B receiver*
    SAP NetWeaver PI routes the NF-es to the correct B2B addressee. An HTTPs connection is required to communicate with the B2B receiver.

> **Note**
>
> The authorities require the receiving and issuing companies to keep the records of exchanged NF-es and of cancellation requests that the authorities authorized or rejected.

More Information

- Setting up and configuring the individual components required to enable the communication process is described in Configuration of NF-e Outbound [page 88].
- Monitoring the communication process is described in Monitor NF-e Outbound [page 161].

6.1.2 NF-e Processing (Outbound)

Use

You can display and control the status of your NF-es for all listed processes in the NF-e Monitor (Outbound) [page 162].

Process

SAP NFE offers several processes for issuing an NF-e (as designed by the brazilian authorities). If you have to deal with many NF-es, NF-es can be sent in batches to reduce your data traffic and to speed up the overall processing time. If you have to deal with only few NF-es, these NF-es can be sent individually without batch. The determination of the issuing process takes place when the NF-e is received from the feeder system according to customizing activity *NF-e: Maintain Process Determination for Outbound NF-es* in Process Settings and Customizing (Outbound) [page 91]:

The following processes are available:

NF-e Process: Issue of NF-e with Batch [page 130]

NF-e Process: Issue of NF-e without Batch [page 131]

NF-e Process: Issue of NF-e with EPEC and Batch [page 132]

NF-e Process: Issue of NF-e Cancellation [page 135]

NF-e Process: Issue of NF-e Skipping [page 135]

NF-e Process: Issue of NF-e Number Gap Skipping [page 136]

NF-e Process: Send NF-e to Business Partner [page 138]

NF-e Process: Send NF-e Cancellation to Business Partner [page 138]

User Actions for NF-e Processing [page 139]

NF-e Outbound Processing Steps [page 142]

6.1.2.1 NF-e Process: Issue of NF-e with Batch

Use

You can display and control the status of your NF-es for all listed processes in the NF-e Monitor (Outbound) [page 162].

Process

The process *NF-e Process: Issue of NF-e with Batch* (technical name: `NFEISSU1`) consists of the following steps:

Step	Technical Name	Description
1. *Create NF-e*	`NFOCREAT`	The NF-e data is validated and transformed into XML. For more information, see NFOCREAT: Create NF-e [page 142] **Note** If the validation or transformation fails, the NF-e data can be corrected and send again from the feeder system (ERP). The error reason can be displayed by clicking the *Application Log* field in the *Status Overview* of the *NF-e Monitor*.
2. *Sign NF-e*	`NFOSIGNA`	The NF-e is signed with the certificate of the NF-e issuer CNPJ. For more information, see NFOSIGNA: Sign NF-e [page 143].
3. *Authorize NF-e*	`NFOTOBAT`	The NF-es are collected in batches and then sent to the government system for authorization. Sending the batches is a separate process described in NF-e Batch Processing [page 156]. The status code can be authorized (for example: 100), or not authorized. For details about the error codes, see the current SEFAZ NF-e manual on the SEFAZ website. For more information, see NFOTOBAT: Authorize NF-e [page 144].
4. *Trigger B2B Process (optional)*	`NFOTRB2B`	The B2B process is created as a separate process. For more information see NF-e Process: Send NF-e to Business Partner [page 138] and NFOTRB2B: Trigger B2B Process [page 145] . **Note** This step is only relevant if the NF-e was authorized.
5. *Notify Feeder System*	`NFOUPDFS`	The status code is transferred to the feeder system (ERP). For more information, see NFOUPDFS: Notify Feeder System [page 146].

After the successful execution of these steps, the process of issuing an NF-e is complete. However, the process can continue if a *cancellation* or *skipping* is triggered in the feeder system (ERP).

6.1.2.2 NF-e Process: Issue of NF-e without Batch

Use

You can display and control the status of your NF-es for all listed processes in the NF-e Monitor (Outbound) [page 162].Configuration of SAP NFE [page 67]

Process

The process*Issue of NF-e without Batch* (technical name: `NFEISSU2`) consists of the following steps:

The process *NF-e Process: Issue of NF-e without Batch* (technical name: `NFEISSU2`) consists of the following steps:

Step	Technical Name	Description
1. *Create NF-e*	`NFOCREAT`	The NF-e data is validated and transformed into XML. For more information, see NFOCREAT: Create NF-e [page 142] **Note** If the validation or transformation fails, the NF-e data can be corrected and send again from the feeder system (ERP). The error reason can be displayed by clicking the *Application Log* field in the *Status Overview* of the *NF-e Monitor*.
2. *Sign NF-e*	`NFOSIGNA`	The NF-e is signed with the certificate of the NF-e issuer CNPJ. For more information, see NFOSIGNA: Sign NF-e [page 143].
3. *Authorize NF-e*	`NFOAUTH1`	Every single NF-e is sent to the government system for authorization individually and you immediately receive the NF-e status information. The status code can be authorized (for example: 100), or not authorized. For details about the status codes, see the current SEFAZ NF-e manual on the SEFAZ website. Before sending of single NF-e, the system checks the current service status. For more information, see the detailed description of the reports (`/XNFE/NFE_BATCH_PROCESS`, `/XNFE/NFE_BATCH_CREATE`) in NF-e Batch Job Planning (Outbound) [page 93]. For more information regarding the step, see NFOAUTH1: Authorize NF-e [page 147].

4. *Trigger B2B Process (optional)*	NFOTRB2B	The B2B process is created as a separate process. For more information see NF-e Process: Send NF-e to Business Partner [page 138] and NFOTRB2B: Trigger B2B Process [page 145] . **Note** This step is only relevant if the NF-e was authorized.
5. *Notify Feeder System*	NFOUPDFS	The status code is transferred to the feeder system (ERP). For more information, see NFOUPDFS: Notify Feeder System [page 146].

After the successful execution of these steps, the process of issuing an NF-e is complete. However, the process can continue if a *cancellation* or *skipping* is triggered in the feeder system (ERP).

6.1.2.3 NF-e Process: Issue of NF-e with EPEC and Batch

Use

You can display and control the status of your NF-es for all listed processes in the NF-e Monitor (Outbound) [page 162].

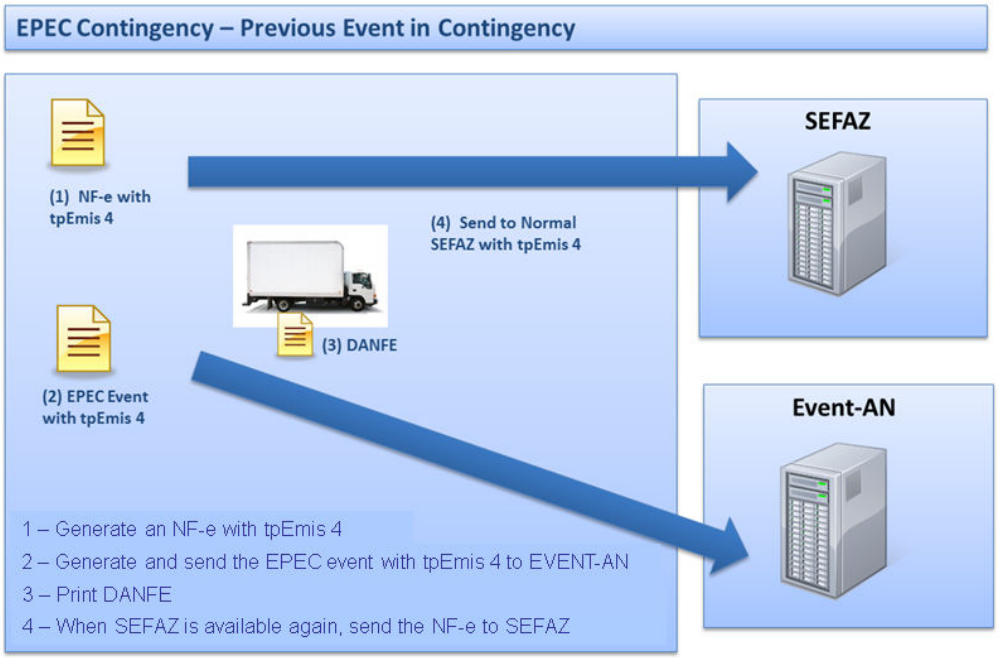
Process

Issue of NF-e with EPEC and Batch is the contingency process for the emergency situation that neither the regional SEFAZ, nor SVC are available (EPEC is the abbreviation for *Evento Prévio de Emissão em Contingência*, translated *Previous Event to Posting under Contingency*). To use *Issue of NF-e with EPEC and Batch*, the feeder system generates an NF-e with issuing type 4 (tpemis 4). This NF-e is not send directly to SEFAZ, but the corresponding EPEC event must be created in the feeder system and send to SEFAZ AN for authorization. Once the EPEC event is authorized, the NF-e process continues and the NF-e is send to the regional SEFAZ system to receive the authorization. For more detailed information about the EPEC event, refer to NF-e Events: EPEC Event [page 431]

Caution

You must send every NF-e with an EPEC event to the regional SEFAZ within 7 days (168 hours), otherwise the next EPEC event will be rejected with status code 142.

EPEC contingency should only be used in case of technical problems. SEFAZ can restrict the use of EPEC if it notices abuse of EPEC contingency.



The process *Issue of NF-e with EPEC and Batch* (technical name: `NFEISSU4`) consists of the following steps:

Step	Technical Name	Description
1. *Create NF-e*	`NFOCREAT`	The NF-e data is validated and transformed into XML. For more information, see NFOCREAT: Create NF-e [page 142] **Note** In case of issuing of an NF-e with EPEC the process type (`NFEISSU4`) is set automatically depending of the issuing type (field `tpEmis`) provided by a feeder system. **Note** If the validation or transformation fails, the NF-e data can be corrected and send again from the feeder system (ERP). The error reason can be displayed by clicking the *Application Log* field in the *Status Overview* of the *NF-e Monitor*.
2. *Sign NF-e*	`NFOSIGNA`	The NF-e is signed with the certificate of the NF-e issuer CNPJ. For more information, see NFOSIGNA: Sign NF-e [page 143].

3. *Authorize NF-e*	`NFOAUTEP`	This step waits until the EPEC event process is finished and the event has received a status from the national government system. If the event is authorized, the NF-e changes status code to 124 (EPEC authorized) and the process continues. The NF-e is updated in the event process step `Update NF-e Data After EPEC` (For more information, see NF-e Events: EPEC Event [page 431]). If the EPEC event was rejected, the NF-e status code remains empty and the NF-e process is treated by the NFE system as *Completed with Rejection*. However, the process can continue by sending a new EPEC event or triggering a skipping process from the feeder system (ERP). For more information regarding the step, see NFOAUTEP: Authorize with EPEC [page 148].
4. *Authorize NF-e*	`NFOTOBAT`	The NF-es are collected in batches and then send to the government system for authorization. Sending the batches is a separate process described in NF-e Batch Processing [page 156]. The status code can be authorized (for example: 100), or not authorized. For details about the error codes, see the current SEFAZ NF-e manual on the SEFAZ website. For more information, see NFOTOBAT: Authorize NF-e [page 144]. **Note** If the service status check failed during sending of the NF-e batch to the government system or the step `Send NF-e Batch failed`, because the batch was rejected by SEFAZ with one of the following status codes: • 108 -> Service Interrupted Momentarily • 109 -> Service Interrupted Indefinitely • 999 -> Rejection: Unexpected Error The NF-e Batch can be restarted with report `/XNFE/NFE_CONTINUE_PROCESS`. For details please refer to NF-e Batch Job Planning (Outbound) [page 93].
5. *Trigger B2B Process (optional)*	`NFOTRB2B`	The B2B process is created as a separate process. For more information see NF-e Process: Send NF-e to Business Partner [page 138] and NFOTRB2B: Trigger B2B Process [page 145] . **Note** This step is only relevant if the NF-e was authorized.
6. *Notify Feeder System*	`NFOUPDFS`	The status code is transferred to the feeder system (ERP). For more information, see NFOUPDFS: Notify Feeder System [page 146].

After the successful execution of these steps, the process *Issue of NF-e with EPEC and Batch* is complete. However, the process can continue if a *cancellation* or *skipping* is triggered in the feeder system (ERP).

6.1.2.4 NF-e Process: Issue of NF-e Cancellation

Use

You can display and control the status of your NF-es for all listed processes in the NF-e Monitor (Outbound) [page 162].

Process

The process *Issue of NF-e Cancellation* (technical name: `NFECANCL`) is possible if the NF-e was authorized and consists of the following step:

Step	Technical Name	Description
1. *Cancel NF-e*	`NFOCANCL`	When a cancellation event arrives in NFE, the NF-e changes the process type to *cancellation*. If the cancellation event was authorized, the NF-e is updated in the event process step *Update NF-e Data After Cancellation* (For more information, see NF-e Events: Cancellation Event [page 428]). If the cancellation event was rejected, the NF-e status code remains authorized. For more information regarding the step, see NFOCANCL: Cancel NF-e [page 151]

After the successful execution of this step, the process of issuing an NF-e cancellation is complete. If the *cancellation* was authorized, the process is completed with no option to continue. If the cancellation event was rejected, the process can continue by sending a new event from the feeder system, or can be completed (with no option to continue) by accepting the rejection of the cancellation from the feeder system.

6.1.2.5 NF-e Process: Issue of NF-e Skipping

Use

You can display and control the status of your NF-es for all listed processes in the NF-e Monitor (Outbound) [page 162].

Process

The process *Issue of NF-e Skipping* (technical name: `NFESKPNG`) is possible if the NF-e was rejected and consists of the following steps:

Step	Technical Name	Description
1. *Create Skipping*	`NFOSKCRE`	The skip NF-e data is validated and transformed into XML. **Note** If the validation or transformation fails, the skip NF-e data can be corrected and sent again from the feeder system (ERP). The error reason can be displayed by clicking the *Application Log* field in the *Status Overview* of the *NF-e Monitor*. For more information, see NFOSKCRE: Create Skipping [page 149] .
2. *Sign NF-e*	`NFOSIGNA`	The skip NF-e is signed with the certificate of the NF-e issuer CNPJ. For more information, see NFOSIGNA: Sign NF-e [page 143].
3. *Authorize Skipping*	`NFOSKAUT`	The skip NF-es are collected and then sent to the government system for authorization. The status code can be authorized (102), or not authorized. For details about the error codes, see the current SEFAZ NF-e manual on the SEFAZ website. **Note** The report `/XNFE/NFE_SKIP_SEND` (must be scheduled as a background job) collects all skipping requests ready for sending to the government system and processes them. For more information, see description of report in NF-e Batch Job Planning (Outbound) [page 93]. For more information, see NFOSKAUT: Authorize Skipping [page 150].
4. *Notify Feeder System*	`NFOUPDFS`	The status code is transferred to the feeder system (ERP). For more information, see NFOUPDFS: Notify Feeder System [page 146].

After the successful execution of this step, the process of issuing a skip NF-e is complete. If the *skipping* was authorized, the process is completed with no option to continue. If the skipping was rejected, the process can continue by sending a new skipping request from the feeder system.

6.1.2.6 NF-e Process: Issue of NF-e Number Gap Skipping

Use

You can display and control the status of your NF-es for all listed processes in the NF-e Monitor (Outbound) [page 162].

Process

The numbering scheme of SEFAZ demands that all NF-es use subsequent numbers. However, there are situations when a number must be omitted.

The process *Issue of NF-e Number Gap Skipping* (technical name: `NFESKGAP`) to skip a number is carried out in the following steps

Step	Technical Name	Description
1. Create Number Gap Skipping	`NFOSGCRE`	The skip NF-e data is validated and transformed into XML. **Note** If the validation or transformation fails, the skip NF-e data can be corrected and send again from the feeder system (ERP). The error reason can be displayed by clicking the *Application Log* field in the *Status Overview* of the *NF-e Monitor*. For more information, see NFOSGCRE: Create Number Gap Skipping [page 148]
2. *Sign NF-e*	`NFOSIGNA`	The skip NF-e is signed with the certificate of the NF-e issuer CNPJ. For more information, see NFOSIGNA: Sign NF-e [page 143].
3. *Authorize Skipping*	`NFOSKAUT`	The skip NF-es are collected and then send to the government system for authorization. The status code can be authorized (102), or not authorized. For details about the error codes, see the current SEFAZ NF-e manual on the SEFAZ website. **Note** The report `/XNFE/NFE_SKIP_SEND` (must be scheduled as a background job) collects all skipping requests ready for sending to the government system and sends them. For more information, see description of report in NF-e Batch Job Planning (Outbound) [page 93]. For more information, see NFOSKAUT: Authorize Skipping [page 150].
4. *Notify Feeder System*	`NFOUPDFS`	The status code is transferred to the feeder system (ERP). For more information, see NFOUPDFS: Notify Feeder System [page 146].

After the successful execution of these steps, the process of skipping an NF-e number is complete. If the *skipping* was authorized, the process is completed with no option to continue. If the skipping was rejected, the process can continue by sending a new skipping request from the feeder system.

6.1.2.7 NF-e Process: Send NF-e to Business Partner

Use

You can display and control the status of your NF-es for all listed processes in the NF-e Monitor (Outbound) [page 162].

Process

The process *Send NF-e to Business Partner* (technical name: `NFEB2BSD`) consists of the following steps:

Step	Technical Name	Description
1. *Create B2B Process*	`NFOB2BCR`	**Note** The report `/XNFE/NFE_B2B_SEND` (must be scheduled as a background job) collects all NF-es ready for sending to the B2B partner and processes them. For more information, see the description of the report in NF-e Batch Job Planning (Outbound) [page 93]. For more information, see NFOB2BCR: Create B2B Process [page 152]
2. *Send NF-e to Transporter*	`NFOB2BCA`	Send the NF-e XML to the transporter. This process step is only relevant if the B2B for the transporter CNPJ is activated. For more information, see NFOB2BCA: Send NF-e to Transporter [page 154]
3. *Send NF-e to Buyer*	`NFOB2BBU`	Send the NF-e XML to the receiver. This This process step is only relevant if the B2B for the receiver CNPJ is activated. For more information, see NFOB2BBU: Send NF-e to Buyer [page 153]

After the successful execution of these steps, the process of sending an NF-e to the business partner is complete.

6.1.2.8 NF-e Process: Send NF-e Cancellation to Business Partner

Use

You can display and control the status of your NF-es for all listed processes in the NF-e Monitor (Outbound) [page 162].

Process

The process *Send NF-e Cancellation to Business Partner* (technical name: `NFEB2BCL`) consists of the following step:

Step	Technical Name	Description
1. *Send NF-e Cancellation to Partner*	`NFOB2BCL`	This process step is only relevant for authorized events. If the cancellation event was sent to the business partner, the NF-e is updated in the event process step *Update NF-e B2B Data After Cancellation* (technical name `CANUPNFO`). For more information regarding the event cancellation process, see NF-e Outbound Cancellation Event [page 429]. For more information regarding the step, see NFOB2BCL: Send NF-e Cancellation to Partner [page 153]

After the successful execution of this step, the process of sending an NF-e cancellation to the business partner is complete.

6.1.2.9 User Actions for NF-e Processing

Finish Skipping

This action allows the user to finish the skip/skip gap process in case of an invalid SEFAZ response and transmit the status to the feeder system. Therefore, the user has to enter the protocol number and authorization date and time (retrieved from the government website) manually. This action is enabled if the status of the process step *Authorize skipping* displays an *Error*. This can be caused by a rejection with one of the following status codes:

- 206 -> NF-e is already skipped in the SEFAZ database
- 256 -> An NF-e number in the range is already skipped in the SEFAZ database
- 563 -> There is an existing skipping request for the same range

With these status codes, this NF-e is unknown to SEFAZ and therefore the action *Continue* to trigger the NF-e status check has no effect on the process. The user has to clarify that the skip request was authorized by SEFAZ and has to enter the relevant protocol data to continue the process.

Request Status Check

This action allows the user to trigger an asynchronous NF-e status check. The response returns the current NF-e status from SEFAZ. This action is enabled if the status of the process step *Authorize NF-e* displays an *Error*. This can be caused by the following situations:

- The NF-e batch process was ended manually (for more information, see User Actions for NF-e Batch Processing [page 157]).

- The batch process was completed, but the NF-e was rejected with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 204 -> Rejection: Duplicated NF-e
  - 205 -> Rejection: NF-e is already denied on the SEFAZ database
  - 999 -> Rejection: Unexpected Error
- The NF-e status check failed with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 217 -> Rejection: NF-e does not exist on the SEFAZ database
  - 656 -> Improper Consumption (wait at least 3 minutes before try again)
  - 999 -> Rejection: Unexpected Error

> → Recommendation
>
> Execute the *NF-e Status Check* (action *Request Status Check*) for all statuses except 217. For status 217, execute action *Continue Process* to authorize the NF-e at SEFAZ.

Update Feeder System

This action allows the user to finish the NF-e issuing process in case of an invalid response from SEFAZ and transmit the last status code from SEFAZ (either from batch process or NF-e status check) to the connected feeder system. This action is enabled if the status of the process step *Authorize NF-e* displays an *Error*.

Use this action if you perform the *NF-e Status Check* and receive a rejection, for example, *217* (unknown NF-e). If, for example, SEFAZ is down, the only way to get an authorization for this NF-e is to forward the status to the feeder system and create another NF-e with the same content and send this NF-e to the active contingency system.

> → Recommendation
>
> Execute the *NF-e Status Check* first (action *Continue Process*) before using the action *Update Feeder System*.

Repeat Process Step

This action allows the user to repeat the process step *Notify Feeder System* although this step was already successfully executed during the regular processing. This action is enabled if the status of the process step *Notify Feeder System* displays *OK*.

Use this action if the transfer of the NF-e status to the connected feeder system failed, but did not return an error. Therefore, the status of the process step *Notify Feeder System* stays *OK*.

Continue Process

The action allows the user to execute the current/next process step of the issuing process depending on:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

If an error occurred, check the error description in *Status Overview* and solve the problem before using the action *Continue Process*.

You can use this action in step *Authorize NF-e* for the following situations:

- The NF-e batch process was ended manually (for more information, see User Actions for NF-e Batch Processing [page 157]).
- The batch process was completed, but the NF-e was rejected with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 204 -> Rejection: Duplicated NF-e
  - 205 -> Rejection: NF-e is already denied on the SEFAZ database
  - 999 -> Rejection: Unexpected Error
- The NF-e status check failed with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 217 -> Rejection: NF-e does not exist on the SEFAZ database
  - 656 -> Improper Consumption (wait at least 3 minutes before trying again)
  - 999 -> Rejection: Unexpected Error

> ⓘ Note
>
> If a communication problem (for example, negative acknowledgment) occurred, you can find the corresponding PI message *GUID* in the *History*.

> → Recommendation
>
> If process step *Authorize NF-e* finished with an error, use the action *Request Status Check* first, before you use the action *Continue Process*.

Continue B2B Process

The action allows the user to execute the current/next process step of the B2B process depending on:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

Use this action in case of an error during sending an XML file to one of your business partners. If an error occurred, check the error description in *Status Overview* and solve the problem before using the action *Continue B2B Process*.

> **Note**
>
> If a communication problem (for example, negative acknowledgment) occurred, you can find the corresponding PI message *GUID* in the *B2B History*.

6.1.2.10 NF-e Outbound Processing Steps

The following steps are available:

- NFOCREAT: Create NF-e [page 142]
- NFOSIGNA: Sign NF-e [page 143]
- NFOTOBAT: Authorize NF-e [page 144]
- NFOTRB2B: Trigger B2B Process [page 145]
- NFOUPDFS: Notify Feeder System [page 146]
- NFOAUTH1: Authorize NF-e [page 147]
- NFOAUTEP: Authorize with EPEC [page 148]
- NFOSGCRE: Create Number Gap Skipping [page 148]
- NFOSKCRE: Create Skipping [page 149]
- NFOSKAUT: Authorize Skipping [page 150]
- NFOCANCL: Cancel NF-e [page 151]
- NFOB2BCR: Create B2B Process [page 152]
- NFOB2BCL: Send NF-e Cancellation to Partner [page 153]
- NFOB2BBU: Send NF-e to Buyer [page 153]
- NFOB2BCA: Send NF-e to Transporter [page 154]

6.1.2.10.1 NFOCREAT: Create NF-e

The step *Create NF-e* (technical name: `NFOCREAT`) receives the complete XML from the feeder system in ABAP structures. The data is validated, transformed to XML and stored on the NFE database tables.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

- Maintain Own Tax Numbers
- NF-e: Maintain Connected Authority Systems
- NF-e: Maintain Version of Message Types
- NF-e: Maintain Process Determination for Outbound NF-es

For additional information, see Process Settings and Customizing for NF-e Outbound [page 91].

BAdIs

- *Saving of Extension Parameters* (technical name: `/XNFE/BADI_EXTENSION_B2B`))
  You can use this BAdI to store the extension parameters from the module `/XNFE/OUTNFE_CREATE`. This enables you to transfer all kinds of values from the back-end system to the NFE system, where they can be stored.
- *Change of Logical System* (technical name: `/XNFE/BADI_LOGSYS_REPLACE`))
  You can implement the BAdI to change the original logical system that you received from the feeder system.

For more information, see BAdIs for NF-e Outbound [page 94]

Usage

NF-e Outbound Processing

Additional Information

If the document status in the NFE system does not allow to resend and there is a feeder system call, the NFE system writes a history entry.

6.1.2.10.2 NFOSIGNA: Sign NF-e

The step *Sign NF-e* (technical name: `NFOSIGNA`) signs an NF-e (data part) by using the assigned certificate and adds this signature to the already existing XML file.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Maintain System Response for Own Tax Numbers

For additional information, see Process Settings and Customizing for NF-e Outbound [page 91].

BAdIs

BAdI: Signature for Outbound Documents (technical name: `/XNFE/SIGN_CREATE`)

This BAdI enables a synchronous proxy call of an external signature service (through external signature hardware, for example, or an external Web service), to circumvent the standard signature implementation in ABAP.

For more information, see BAdIs for NF-e Outbound [page 94]

Usage

NF-e Outbound Processing

6.1.2.10.3 NFOTOBAT: Authorize NF-e

The step *Authorize NF-e* (technical name: `NFOTOBAT`) requests the authorization of the NF-e. Therefore, a batch (different process) is created that sends one or more NF-es to the government web service for authorization. Every single NF-e will be updated with the returned status code inside the batch process. For additional information, see Background Reports [page 71].

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

BAdI for Automatic Processing of Rejected NF-es (technical name: `/XNFE/BADI_HANDLING_REJECT_NFE`)

The BAdI is used to control the automatic processing of rejected NF-es.

For more information, see BAdIs for NF-e Outbound [page 94]

Usage

NF-e Outbound Processing

Additional Information

A history entry is written if a response message enters the system and the step is no longer the current one.

6.1.2.10.4 NFOTRB2B: Trigger B2B Process

The step *Trigger B2B Process* (technical name: `NFOTRB2B`) creates and stores the B2B process for all NF-e that have been authorized by SEFAZ.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdIs available.

Usage

NF-e Outbound Processing

Additional Information

The B2B process will only be created, if NF-e is authorized

6.1.2.10.5 NFOUPDFS: Notify Feeder System

The step *Notify Feeder System* (technical name: `NFOUPDFS`) transfers the received SEFAZ status code to the connected feeder system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

RFC Call of External Systems (technical name: `/XNFE/BADI_RFC_EXTERN`)

The BAdI lets you control the RFC call for communication with the feeder system, to use the electronic communication of notas fiscais as well as their events with the authorities for non-SAP systems. In the standard settings, the system uses the standard SAP modules to call SAP ERP for RFC communication with the ERP system.

For more information, see BAdIs for NF-e Outbound [page 94]

Usage

NF-e Outbound Processing

6.1.2.10.6 NFOAUTH1: Authorize NF-e

The step *Authorize NF-e* (technical name: `NFOAUTH1`) requests the authorization of the NF-e. Therefore, a batch (different process) is created that sends one or more NF-e(s) to the government web service for authorization.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant

BAdIs

BAdI for Automatic Processing of Rejected NF-es (technical name: `/XNFE/BADI_HANDLING_REJECT_NFE`)

This BAdI is used to control the automatic processing of rejected NF-es.

For more information, see BAdIs for NF-e Outbound [page 94]

Usage

NF-e Outbound Processing

Additional Information

A history entry will be written if the step was completed before calling of the response function.

6.1.2.10.7 NFOAUTEP: Authorize with EPEC

The step *Authorize with EPEC* (technical name: `NFOAUTEP`) reflects the status of the corresponding EPEC event to this NF-e.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

NF-e Outbound Processing

Additional Information

A history entry is written if the process status is not the current one.

6.1.2.10.8 NFOSGCRE: Create Number Gap Skipping

The step *Create Number Gap Skipping* (technical name: `NFOSGCRE`) creates a NF-e number gap skipping.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

NF-e: Maintain Version of Message Types.

For additional information, see Process Settings and Customizing for NF-e Outbound [page 91].

BAdIs

No BAdI available.

Usage

NF-e Outbound Processing

Additional Information

A history is written if the requested skip gap ,or the NF-e itself already exists.

6.1.2.10.9 NFOSKCRE: Create Skipping

The step *Create Skipping* (technical name: `NFOSKCRE`) creates a NF-e number gap skipping.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

NF-e: Maintain Version of Message Types.

For additional information, see Process Settings and Customizing for NF-e Outbound [page 91].

BAdIs

No BAdI available.

Usage

NF-e Outbound Processing

Additional Information

A history is written if the requested skip or the NF-e itself already exists.

6.1.2.10.10 NFOSKAUT: Authorize Skipping

The step *Authorize Skipping* (technical name: NFOSKAUT) requests the authorization of the skipping for a NF-e number.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant

BAdIs

BAdI for Automatic Processing of Rejected NF-es (technical name: `/XNFE/BADI_HANDLING_REJECT_NFE`)

This BAdI is used to control the automatic processing of rejected NF-es.

For more information, see BAdIs for NF-e Outbound [page 94]

Usage

NF-e Outbound Processing

Additional Information

A history entry is written if the expected step is not the current one.

6.1.2.10.11 NFOCANCL: Cancel NF-e

The step *Cancel NF-e* (technical name: `NFOCANCL`) reflects the status of the cancellation event process in the NF-e Monitor.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

NF-e Outbound Processing

Additional Information

A history entry is written in case of the response faces a different process step status than *wait*.

6.1.2.10.12 NFOB2BCR: Create B2B Process

The step *Create B2B Process* (technical name: `NFOB2BCR`) creates the B2B process for an NF-e.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

NF-e Outbound Processing

6.1.2.10.13 NFOB2BCL: Send NF-e Cancellation to Partner

The step *Send NF-e Cancellation to Partner* (technical name: `NFOB2BCL`) reflects the B2B status of the cancellation event process in the NF-e Monitor.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

NF-e Outbound Processing

Additional Information

A history entry is written in case of the response faces a different process step status than *wait*.

6.1.2.10.14 NFOB2BBU: Send NF-e to Buyer

The step *Send NF-e to Buyer* (technical name: `NFOB2BBU`) sends an NF-e XML to the business partner which is informed in the XML as receiver (XML tag`<dest>`).

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

- Activate B2B Scenarios for Business Partners
- Activate B2B Scenarios for Foreign Partners
- Activate B2B Scenarios for Natural Persons

For additional information, see Process Settings and Customizing for NF-e Outbound [page 91].

BAdIs

- BAdI: Extend B2B Message with Communication Parameters (`/XNFE/EMAIL_B2B`)
  You can use this BAdI to add additional communication parameters to the XML message as an attachment when sending an NF-e, CT-e, or an NF-e/CT-e event to your business partner (consignee, carrier, or tomador). In the standard settings, the system does not create an attachment when calling the PI for sending the B2B message.
- BAdI: Add Additional Documents to the Communication Message (`/XNFE/BADI_GET_AUXILIARY_DOC`)
  You can implement this BAdI to append additional documents to the communication message and then send this to your business partner.

For more information, see BAdIs for NF-e Outbound [page 94]

Usage

NF-e Outbound Processing

Additional Information

The status of the step test is set by the program Collect and process Acknowledgments from PI [page 75].

6.1.2.10.15 NFOB2BCA: Send NF-e to Transporter

The step *Send NF-e to Transporter* (technical name: `NFOB2BCA`) sends an NF-e XML to the business partner which is informed in the XML as transporter (XML tag `<transporta>`).

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

- Activate B2B Scenarios for Business Partners
- Activate B2B Scenarios for Natural Persons

For additional information, see Process Settings and Customizing for NF-e Outbound [page 91].

BAdIs

- BAdI for Customer Enhancement to Determine E-Mail for B2B Messages (`/XNFE/EMAIL_B2B`)
  You can use this BAdI to add additional communication parameters to the XML message as an attachment when sending an NF-e, CT-e, or an NF-e/CT-e event to your business partner (consignee, carrier, or tomador). In the standard settings, the system does not create an attachment when calling the PI for sending the B2B message.
- Append Additional Documents to the Communication Message (`/XNFE/BADI_GET_AUXILIARY_DOC`)
  You can implement this BAdI to append additional documents to the communication message and then send this to your business partner.

For more information, see BAdIs for NF-e Outbound [page 94]

Usage

NF-e Outbound Processing

Additional Information

The transporters CNPJ cannot be one of the company's own CNPJs for B2B sending . The status of the step test is set by the program Collect and process Acknowledgments from PI [page 75].

6.1.3 NF-e Batch Processing

Use

You can display and control the status of your NF-e Batches for all listed processes in the NF-e Batch Monitor (Outbound) [page 165].

Process

The process *Send NF-e Batch* (technical name: NFEBATSD) consists of the following steps:

> **Note**
>
> Reports are available for the processing of NF-e Batches that must be scheduled as background jobs. For details please refer to NF-e Batch Job Planning (Outbound) [page 93].

Step	Technical Name	Description
1. *Create NF-e Batch*	NFBATCRE	During batch creation the NF-es are separated according to: • System Environment (Test or Production) • Issuing Type • Code of Brazilian State (CUF) • CNPJ of Issuer • XML Version • Model of Nota Fiscal Batches are created according to different criteria (batch size, No. of NF-es inside the batch). In addition, you have the option to send the batch to the authorities as a compressed file (zip). For more information, see NFBATCRE: Create NF-e Batch [page 158].
2. *Send NF-e Batch*	NFBATSND	The batch is send to authorities asking for authorization of the included NF-es. Before the batch is sent, the system checks the current service status. For more information, see NFBATSND: Send NF-e Batch [page 159].

3. *Request NF-e Batch*	NFBATREQ	The batch request is sent to authorities and returns the status of the included NF-es. If the status is missing the first time, the system automatically resends the batch status request. The received status for each NF-e included in the batch is transferred to the NF-e Process. **Note** If the batch request is not successful due to a technical error, the batch process can be terminated in the NF-e Batch Monitor (using action *Finish Batch Process*) and an NF-e status check on NF-e level can be carried out manually in the NF-e Monitor. For more information, see User Actions for NF-e Batch Processing [page 157]. For more information, see NFBATREQ: Request NF-e Batch [page 160].

After the successful execution of these steps, the process of sending an NF-e batch is complete.

User Actions for NF-e Batch Processing [page 157]

NF-e Batch Processing Steps [page 158]

6.1.3.1 User Actions for NF-e Batch Processing

Finish Batch Process

The action allows the user to end the NF-e batch process and continue the processing in the *NF-e Monitor* (For more information, see NF-e Monitor (Outbound) [page 162]). This action is enabled if the status of the last batch process step displays *Error* or *Waiting*.

The following status codes are possible in case of an *Error* status:

- The step *Send NF-e Batch* failed, because the batch was rejected by SEFAZ with one of the following status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 426 -> Rejection: Failure decompressing the data area
  - 656 -> Improper Consumption (wait at least 3 minutes before trying again)
  - 999 -> Rejection: Unexpected Error
- The step *Request NF-e Batch* failed, because the NF-e batch request was rejected by SEFAZ with one of the following status codes:
  - 215 -> Rejection: XML schema validation error
  - 426 -> Rejection: Failure decompressing the data area
  - 516, 517, 545 -> Rejection: XML schema validation error
  - 656 -> Improper Consumption (wait at least 3 minutes before trying again)
  - 999 -> Rejection: Unexpected Error

If a PI-related problem occurs, the last batch process step (*Send NF-e Batch* or *Request NF-e Batch*) remains in status *Waiting*.

→ Recommendation

To solve these errors, contact your PI administrator first before you use the action *Exit Batch Process*.

→ Recommendation

If the step *Request NF-e Batch* failed and you executed the action *Exit Batch Process*, then we recommend to continue with an *NF-e Status Check* in the *NF-e Monitor*.

Restart

The action allows the user to execute the current/next process step depending on the following situations:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

If an error occurred, check the error description in *Status Overview* and*History*, and solve the problem before using the action *Restart*.

ⓘ Note

If a communication problem occurred, you can find the corresponding PI message `GUID` in the *History*.

6.1.3.2 NF-e Batch Processing Steps

The following steps are available:

NFBATCRE: Create NF-e Batch [page 158]

NFBATSND: Send NF-e Batch [page 159]

NFBATREQ: Request NF-e Batch [page 160]

6.1.3.2.1 NFBATCRE: Create NF-e Batch

The step *Create NF-e Batch* (technical name: `NFBATCRE`) creates the batch and assigns NF-es depending on some criteria (e.g. region, CNPJ, etc.) to it.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

- Number Range for Batches
- Maintain Batch Parameters

For additional information, see Process Settings and Customizing for NF-e Outbound [page 91] and Technical Settings for NF-e Outbound [page 90].

BAdIs

No BAdI available.

Usage

NF-e Batch Processing

Additional Information

The NF-e will be updated in this step in case of a rejection of the batch. In this case the status code and the reason of the batch are propagated to NF-e level. A history entry is written when the expected step is not the current one.

6.1.3.2.2 NFBATSND: Send NF-e Batch

The step *Send NF-e Batch* (technical name: `NFBATSND`) sends the batch to the authority for authorization.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Maintain Batch Parameters

For additional information, see Process Settings and Customizing for NF-e Outbound [page 91].

BAdIs

No BAdI available.

Usage

NF-e Batch Processing

Additional Information

The NF-e will be updated in this step in case of a rejection of the batch. In this case the status code and the reason of the batch are propagated to NF-e level.

A history entry is written when the expected step is not the current one.

6.1.3.2.3 NFBATREQ: Request NF-e Batch

The step *Request NF-e Batch* (technical name: `NFBATREQ`) requests the status of the batch including the status of all NF-e (protocol) that have been sent to SEFAZ with that batch.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

NF-e Batch Processing

Additional Information

A history entry is written when the expected step is not the current one.

6.1.4 Monitor NF-e Outbound

SAP Nota Fiscal Eletrônica (SAP NFE) runs in different components when communicating with regional tax authorities. SAP NFE gives you access to monitors with differing levels of detail to control the communication process and to solve problems.

The monitoring options in SAP Nota Fiscal Eletrônica (SAP NFE) provide you with a single point-of-entry for tracking the communication statuses of NF-es (both individual and batched), and the communication process between the NFE application and the authorities' system. In case of communication failures, the NFE monitors allow you to trigger resending and rechecking of NF-es, batches, and related messages.

- The NF-e Monitor (Outbound) [page 162] displays an overview list of all NF-es sent individually to government systems and to business partners, along with all NF-e-related messages. You can also resend certain messages from the filtered lists in this monitor.
- The NF-e Batch Monitor (Outbound) [page 165] displays the messages you send to and receive from government systems about the status of NF-e batches.
- The NF-e Service Status Monitor (Outbound) [page 168] displays the messages you send to and receive from government systems about government Web service availability.
- The Monitor for Outbound Analysis [page 169] lets you analyze your processing time for outbound NF-es.

> **Note**
>
> The DF-e Distribution Request Monitor [page 532] displays the messages you sent to the national system to receive documents (for example, Receiver Acknowledgment Events) for your own CNPJs.

NF-e Monitor (Outbound) [page 162]

NF-e Batch Monitor (Outbound) [page 165]

NF-e Service Status Monitor (Outbound) [page 168]

Monitor for Outbound Analysis [page 169]

6.1.4.1 NF-e Monitor (Outbound)

The *NF-e Monitor (Outbound)* is a single point-of-entry for monitoring the document and process status of an NF-e, as well as for monitoring communication with government systems and with business partners in business-to-business (B2B) scenarios. It allows you to download the XML files for NF-es, along with all authorization, cancellation, and skipping messages that you are legally required to keep as records. You can also resend messages from this monitor that your system was unable to send due to technical reasons. For more information regarding the NF-e processes, see NF-e Processing (Outbound) [page 129].

Queries

- **Overview**
  The *Overview* query lists all NF-es (except NF-es in process number gap skipping) with their main header data and the status information.
- **Overview Errors**
  The *Overview Errors* query lists NF-es with errors (except NF-es in process number gap skipping) with their main header data and the status information.
- **Overview of B2B Errors**
  The *Overview of B2B Errors* query lists NF-es with B2B errors with their main header data and the status information.
- **Overview Number Gap Skipping**
  The *Overview Number Gap Skipping* query lists NF-es with process *Number Gap Skipping* with their main header data and the status information.
- **Overview Number Gap Skipping Errors**
  The *Overview Number Gap Skipping Errors* query lists NF-es in process *Number Gap Skipping* with errors with their main header data and the status information.

List

Based on your selection criteria, the *NF-e Monitor* displays a list of NF-es and their processing status.

The following status icons are used:

- Process Completed; Document successfully processed. This icon represents the following statuses:
  - 99 -> Process Completed; Document Successfully Processed
    Depending on the NF-e type, this means:
    - NF-e authorized (SEFAZ Status Code 100)
    - NF-e Cancellation authorized (SEFAZ Status Code 101)
    - NF-e Number Skipping authorized (SEFAZ Status Code 102)
  - 98 -> Process Completed; Document Manually Processed
    Status 98 means that the rejection of an MDF-e was manually accepted.
- Process completed; NF-e denied. This icon represents status 89.
  The NF-e processing finished with no option to continue processing.

- Process completed; NF-e rejected. This icon represents status 88.
  Depending on the NF-e type, this means:
  - NF-e rejected. The processing is finished and you can either send the NF-e again with corrected data, or skip the NF-e number.
  - NF-e Number Skipping rejected. The processing is finished and can request to skip the NF-e number again.
- Validation error; action required in calling system. This icon represents status 05.
  The process stopped, because the NF-e cannot be created due to a validation error. You have to correct this error in your ERP system and resend your NF-e.
- Process is waiting. This icon represents the following statuses:
  - 11 -> Process waiting for response
  - 12 -> Status check: step waiting for asynchronous response
  - 13 -> Step waiting for external process

  Example: The batch containing the NF-e has not been sent to the authorities.
- Error in last process step. This icon represents the following statuses:
  - 02 -> Error in last process step
  - 03 -> Technical error in last process step
  - 04 -> Temporary error in last process step

  To correct the error, go to the status overview and check the problem description in the last activity. After correcting the problem, you can continue the process using the action *Continue Process*.
- Process OK. This icon represents status 01.
  The process stopped for the user to carry out necessary actions.

> **Note**
>
> In process *Number Gap Skipping*, the skip *Access Key* has 39 digits.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Additional Information

Once you select a line in the displayed table, you receive additional information about this NF-e at the bottom of the screen:

- **Status Overview**
  This is a description of the process with the corresponding *Status*, *Activity*, *Status Description*, *Info Text* and *Application Log* fields.
- **History**
  This is a description of the history of this NF-e containing the *Status*, *Activity*, *Status Description*, *Info Text*, *Executed on*, and the *User* fields.
- **B2B Status Overview**

This is a description of the B2B process with the corresponding *Status*, *Activity*, *Status Description*, *Info Text* and *Application Log* fields.

- **B2B History**
  This is a description of the history of the B2B activities of this NF-e containing the *Status*, *Activity*, *Status Description*, *Info Text*, *Executed on*, and the *User* fields.
- **Events**
  This is an overview of all events related to this NF-e. For more detailed information, see Events Embedded in Monitors [page 522].

> ⚠ Caution
>
> The tabs *B2B Status Overview* and *B2B History* are only visible if the B2B process was triggered. The *Events* tab is only visible if there is at least 1 event for an NF-e.

Actions

- **Select Details:**
  - **Display Details**
    This action displays the XML content in multiple sub-screens. You can also access the NF-e details by clicking on the access key in the list.
  - **Display XML**
    This action allows you to download/display the NF-e XML file (if existing).
  - **Cancellation XML**
    This action allows you to download/display the cancellation event XML file (if existing).
  - **Skipping XML**
    This action allows you to download/display the skipped XML file (if existing).
  - **Display DANFE**
    This action displays parts of the XML content in a DANFE preview (if existing).
- **Continue Process**
  You can select an NF-e with an error in the NF-e process and then check the problem description in the last activity. After correcting the problem, you can continue the process using the *Continue Process* action.
- **Continue B2B Process**
  You can select an NF-e with an error in the B2B process and then check the problem description in the last activity. After correcting the problem, you can continue the process using the *Continue B2B Process* button.
- **Additional Functions:**
  - **Request Status Check**
    This action allows the user to trigger an asynchronous NF-e status check. The response returns the current NF-e status from SEFAZ.
  - **Update Feeder System**
    This action allows the user to transfer the last status code from SEFAZ (either from batch process or NF-e status check) to the connected feeder system.
  - **Repeat Process Step**
    This action allows the user to repeat the *Update Feeder System* process step although this step was already successfully executed during the regular processing.

- **Finish Skipping**
  The action allows the user to enter the protocol number and authorization date and time manually. This only applies to skip and gap skip.
- **Send XML File**
  This action allows the user to send an authorized NF-e XML to your business partner depending on the B2B Customizing for the partner CNPJ.

  > **Note**
  >
  > This action is only enabled if you activated the B2B Customizing for at least 1 partner CNPJ.
- **Request Events**
  This action allows the user to trigger an asynchronous NF-e status check to receive events from your business partner through the authorities.

> **Note**
>
> For more information regarding the available *Actions*, also refer to User Actions for NF-e Processing [page 139].

NF-e Details

You can display the content of the XML by choosing an NF-e's *Access Key*, or by selecting the corresponding line and choosing *Display Details*. The details view displays:

- The processing status of the NF-e in both your system and the authorities' system
- The content of the XML in several tabs and grouped according to the tags in the XML

Navigation

You can access the NF-e monitor in SAP NFE via one of the following options:

- You can call up the specific menu *NF-e Monitor* from the menu derived from the user role `/XNFE/WP_NFE_OUT_MONITOR` *(Menu for Message Monitors),* (or any other role that contains the Web Dynpro application).
- You can navigate to the menu option in the navigation structure of *Message Monitor* in SAP NFE. You can access this option from the user role by choosing *Monitor Outbound NF-es/Events* > *NF-e Monitor*.

6.1.4.2 NF-e Batch Monitor (Outbound)

The batch monitor displays the statuses of the NF-e batches that are sent to the authorities, along with the results of the batch status requests that you have sent to the authorities.

Queries

- **Overview**
  The *Overview* query displays the main header data and status information for all batches you have sent.
- **Overview Errors**
  The *Overview Errors* query displays the main header data and status information for all batches with errors.

List

Based on your selection criteria, the *NF-e Batch Monitor* displays a list of NF-e batches and their processing status .

The following status icons are used:

- Process completed; Document successfully processed. This icon represents status 99.
  The NF-e batch processing finished with no option to continue processing.
- Process completed; This icon represents the following statuses:
  - Status 98: Process manually finished
    The NF-e batch is finished manually by the user by using the respective action in the monitor.
  - Status 88: Document rejected
    The batch sending or batch request was rejected by the authorities.
- Process is waiting. This icon represents then following statuses:
  - 11 -> Process waiting for response
  - 13 -> Step waiting for external process
- Error in last process step. This icon represents status the following statuses:
  - 02 -> Error in last process step
  - 03 -> Technical error in last process step
  - 04 -> Temporary error in last process step

  To correct this error, go to the status overview and check the problem description in the last activity. After correcting the problem, you can continue the process using the *Continue Process* action.
- Process OK. This icon represents status 01.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Additional Information

Once you select a line in the displayed table, you receive additional information about this NF-e batch at the bottom of the screen:

- **Status Overview**
  The Status Overview tab displays additional information about the processing steps: *Status*, *Activity*, *Status Description*,and *Info Text*.
- **History**
  The history tab displays the following additional information: *Status*, *Activity*, *Status Description*, *Info Text*, *Executed On*, and *User*.

Actions

- **Batch Details**
  The batch details are displayed. You can also access the batch details by clicking the *Batch Number* in the list.
- **Restart**
  You can select an NF-e Batch with an error and check the problem description in the last activity. After correcting the problem, you can restart the process using the action *Restart*.
- **Finish Batch Process**
  You can select an NF-e batch in status *error* or *wait* and check the problem description in the last activity. If you cannot correct the problem, for example due to technical problems with the SEFAZ system, you can end the batch process using the action *Finish Batch Process*. This finishes the batch process and sets the status of the `Check Authorization` step of every NF-e in the batch to *Error*. The new status for every individual NF-e of the batch allows you to continue the NF-e process in the *NF-e Monitor*. To receive a valid status from SEFAZ, the NF-e status check requests a status for every individual NF-e.

> ⚠ Caution
>
> By ending the batch processing, an NF-e status request is only possible via NF-e status check. The NF-e process step `Check Authorization` is set to *Error* and has to be restarted **manually** in the *NF-e Monitor*. If the NF-e is unknown to the government system, the user has to decide to send the NF-e to SEFAZ for authorization, or update the feeder system (ERP) with the current SEFAZ status.

> ⓘ Note
>
> For more information regarding the available *Actions*, also refer to User Actions for NF-e Batch Processing [page 157].

Batch Details

You can display the details of a specific batch by choosing the *Batch Number* or by selecting its line and choosing *Details*. The details view displays:

- The processing status of the batch in both your system and the authorities' system
- Batch header data
- A list of the individual NF-es in the batch with their most important header data

Navigation

You can access the *NF-e Batch Monitor* in SAP Nota Fiscal Eletrônica (SAP NFE) by using one of the following options:

- Call up the specific menu *NF-e Batch Monitor* from the user role `/XNFE/WP_NFE_OUT_MONITOR` *(Outgoing User Menu)*.
- You can navigate to the menu option in the navigation structure of *Message Monitor* in SAP NFE. You can access this option from the user role by choosing *Monitor Outbound NF-es/Events* > *NF-e Batch Monitor*.

6.1.4.3 NF-e Service Status Monitor (Outbound)

Every company is required to regularly check the authorities' system availability at a defined interval. You use this status information to determine if you must start the contingency process in the feeder system SAP ERP manually in order to process your goods movement invoices in a timely fashion.

This monitor displays the result of the communication between the NFE system and the web service to check the availability of the connected government system. The web service is called via a batch job, for more information see NF-e Batch Job Planning (Outbound) [page 93]. The service status indicates the authorities' system availability.

Configuration

You configure the service status check request using the following two options:

- In Customizing activity *NF-e: Define Query for Service Status for Authority (SEFAZ)* . For additional information, see Process Settings and Customizing (Outbound) [page 91].
- In the current settings transaction *NF-e: Define Service Status Request for Authority (SEFAZ)* of the administrator role. For additional information, see Administration [page 524].

List

Based on your selection criteria, the *NF-e Service Status Monitor* displays a list of service status requests and their processing status.

The following status icons are used:

- Processing Completed Error-Free with the following SEFAZ status codes:
  - 107 -> Service is available
  - 113 -> Service is available until a given point in time
- Processing Completed with Error
  This error is either due to communication error or a negative status code from SEFAZ.

> ⓘ Note
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Navigation

You can access the *NF-e Service Status Monitor* in SAP NFE by calling up the *NF-e Service Status Monitor* in the *Message Monitor* menu under *Monitor Outbound NF-es/Events*.

6.1.4.4 Monitor for Outbound Analysis

This monitor for outbound analysis lets you analyze your processing time for outbound NF-es. The selection criteria are CNPJ and date. The monitor returns the processing time of an NF-e and should be used to assess the system performance. The processing time is measured between the receiving of the NF-e from the feeder system and the last processing step *Update Feeder System*.

The results are displayed in a list for a time interval of one hour.

> ⓘ Note
>
> The processing time is only measured for NF-es whose automated processing was not interrupted. The processing time serves as a performance indicator and therefore only NF-es are taken into consideration that finished their processing steps without interruption.

Navigation

You can access the *Evaluations of Outbound NF-es* in SAP NFE via one of the following options:

- You can call up the specific menu *Evaluations of Outbound NF-es* from the user role `/XNFE/WP_NFE_OUT_MONITOR` (Menu for Message Monitors), (or any other role that contains the Web Dynpro application)
- You can access this option from the user role by choosing *Monitor Outbound NF-es/Events* > *Evaluations of Outbound NF-es*.

6.2 CT-e Outbound

The CT-e outbound of SAP Nota Fiscal Eletrônica manages the authorization with federal tax systems and issuance to customers of electronic transport documents and has the following scope:

- To automate and monitor the authorization with government systems and to issue CT-es to business partners.

The CT-e outbound of SAP Nota Fiscal Eletrônica consists of the following topics:

- Communication Flow for Sending CT-es [page 171]
- CT-e Processing (Outbound) [page 175]
  - User Actions for CT-e Processing [page 182]
- CT-e Batch Processing [page 195]
  - User Actions for CT-e Batch Processing [page 196]
- Monitor CT-e Outbound [page 200]
  - CT-e Monitor (Outbound) [page 200]
  - CT-e Batch Monitor (Outbound) [page 204]
  - CT-e Service Status Monitor (Outbound) [page 207]

> **Note**
>
> Additional information: BAdIs for Outbound CT-e [page 100]

Communication Flow for Sending CT-es (CT-e Layout 3.00) [page 171]

Communication Flow for Sending CT-es (CT-e Layout 4.00) [page 173]

CT-e Processing (Outbound) [page 175]

CT-e Batch Processing [page 195]

Monitor CT-e Outbound [page 200]

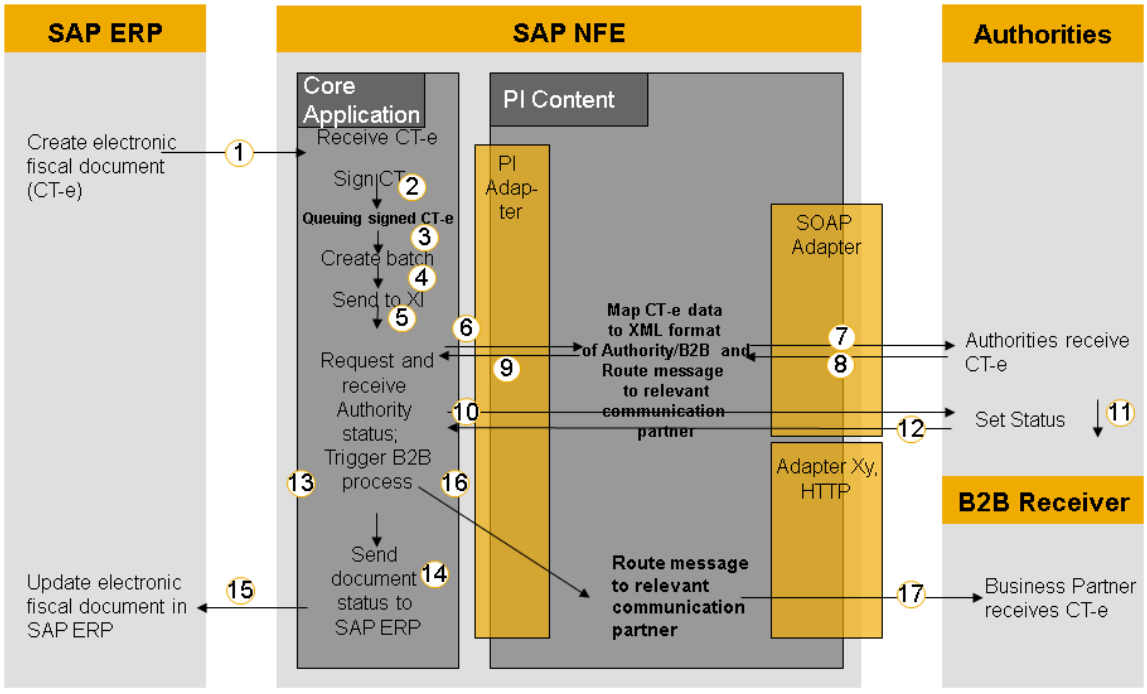
6.2.1 Communication Flow for Sending CT-es (CT-e Layout 3.00)

Use

This section provides an overview of the interaction between the different components of the SAP Nota Fiscal Eletrônica (SAP NFE) shipment based on the example process of sending a *Conhecimento de Transporte Eletrônico* (CT-e). You can apply the explanations for each CT-e process step to such secondary processes as canceling or skipping CT-es.

> **Note**
>
> Batch creation and processing are specific only to sending CT-es to the authorities.

Process



Communication Flow

1. *Create an electronic fiscal document in SAP ERP*

To create an electronic fiscal document in a logistics process, you need country-specific information contained in a CT-e.
For more information about the role and the handling of electronic fiscal documents (CT-es), see SAP Library for SAP ERP under *SAP Solutions* > *SAP ERP* > *SAP ERP Central Component* > *<Release>* > *SAP ERP Central Component* > *Logistics* > *Country Versions* > *Americas* > *Brazil* > *Sales and Distribution (SD)*.

2. *Receive CT-e data in the SAP NFE core application*
   The system transfers all required data in a CT-e from the SAP ERP feeder system to the SAP NFE core application, which stores the data with a common identifier and a reference to the feeder system document.
3. *Sign CT-e*
   The authorities require that each CT-e be signed by using a certificate that they have issued. Each CT-e is signed individually within the ABAP stack using the certificate that is stored in the STRUST table.
4. *Queue signed CT-es*
   The core application saves the signed CT-es for later reference and also queues them for the next process step.
5. *Create batch in core application*
   The authorities only accept CT-es in batches that cannot exceed a certain size. The system applies all requirements from the authorities when batching signed CT-es.
6. *Send CT-e batch to SAP NetWeaver PI*
   The SAP NFE system sends the batch synchronously to SAP NetWeaver PI using the standard PI adapter.
7. *Send CT-e batch from SAP NetWeaver PI to authorities*
   SAP NetWeaver PI routes the batches to the correct addressee. For communicating with the authorities, an HTTPs connection using the company-specific certificate from the government via SOAP is required.
8. *Receive average timeframe from authorities for status availability*
   When the authorities receive the batched CT-es, they automatically send a response via SAP NetWeaver PI with the average time (in seconds) that it took to set the CT-e batch status.
9. *Prepare request for CT-e status information*
   After SAP NetWeaver PI transmits the authorities' response to the SAP NFE core application, the core application schedules a system status request message to send to the authorities.
10. *Set CT-e government status (authorities)*
    The authorities set the status for all CT-es in the batch for which they have provided a time estimate. The status is stored in the authorities' system until your company retrieves it

> **Note**
>
> Authorities can reject CT-es due to technical problems or other reasons. You can solve this issue if you initiate the skipping process by canceling the rejected CT-e in the SAP ERP feeder system. If the authorities return the CT-e with status *Denied*, that means that a severe credibility problem has occurred.

11. *Request status information from authorities*
    After the time set by the authorities for collecting status data has elapsed, the SAP NFE core application uses the standard PI adapter to send the status request to SAP NetWeaver PI. SAP NetWeaver PI then routes the request via the SOAP adapter to the authorities.
12. *Receive authority status in SAP NFE core application*
    The SAP NFE system receives the government status for the CT-es via SAP NetWeaver PI and updates the status information accordingly.
13. *Triggering of B2B process (if configured) in SAP NFE core application*

If configured in Customizing, the SAP NFE system triggers the B2B process and sends the XML file to the business partner.

14. *Forward CT-e status to SAP ERP*
    The SAP NFE core application sends the government-issued status to SAP ERP.
15. *Update status of electronic fiscal document in SAP ERP*
    The process is terminated and changes to goods movement processing.
16. *Send CT-es to SAP NetWeaver PI*
    The SAP NFE system uses the standard PI adapter to send the CT-es to SAP NetWeaver PI.
17. *Send CT-es from SAP NetWeaver PI to B2B receiver*
    SAP NetWeaver PI routes the CT-es to the correct B2B addressee. An HTTPs connection is required to communicate with the B2B receiver.

> **Note**
>
> The authorities require both the consignor and the consignee companies to keep the records of exchanged CT-es and of cancellation requests that the authorities authorized or rejected.

More Information

- Setting up and configuring the individual components required to enable the communication process is described in Configuration of CT-e (Outbound) [page 96].
- Monitoring the communication process is described in Monitor CT-e Outbound [page 200].

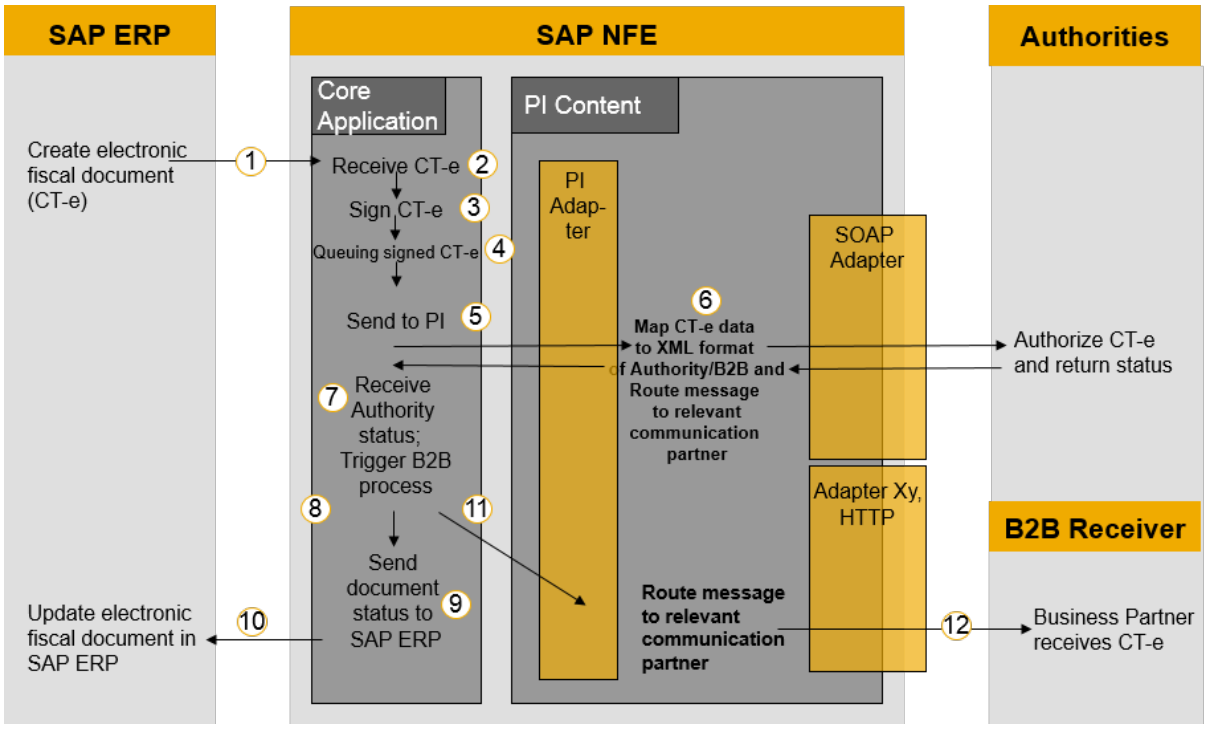
6.2.2 Communication Flow for Sending CT-es (CT-e Layout 4.00)

Use

This section provides an overview of the interaction between the different components of the SAP Nota Fiscal Eletrônica (SAP NFE) shipment based on the example process of sending a *Conhecimento de Transporte Eletrônico* (CT-e). You can apply the explanations for each CT-e process step to such secondary processes as canceling or skipping CT-es.

> **Note**
>
> Batch creation and processing are specific only to sending CT-es to the authorities.

Process



Communication Flow

1. *Create an electronic fiscal document in SAP ERP*
   To create an electronic fiscal document in a logistics process, you need country-specific information contained in a CT-e.
   For more information about the role and the handling of electronic fiscal documents (CT-es), see SAP Library for SAP ERP under *SAP Solutions* > *SAP ERP* > *SAP ERP Central Component* > *<Release>* > *SAP ERP Central Component* > *Logistics* > *Country Versions* > *Americas* > *Brazil* > *Sales and Distribution (SD)*.
2. *Receive CT-e data in the SAP NFE core application*
   The system transfers all required data in a CT-e from the SAP ERP feeder system to the SAP NFE core application, which stores the data with a common identifier and a reference to the feeder system document.
3. *Sign CT-e*
   The authorities require that each CT-e be signed by using a certificate that they have issued. Each CT-e is signed individually within the ABAP stack using the certificate that is stored in the STRUST table.
4. *Queue signed CT-es*
   The core application saves the signed CT-es for later reference and also queues them for the next process step.
5. *Send CT-e to SAP NetWeaver PI*
6. *Send CT-e from SAP NetWeaver PI to authorities*
   The SAP NFE system sends the CT-e synchronously to SAP NetWeaver PI using the standard PI adapter.
7. *Receive authority status in SAP NFE core application*
   SAP NetWeaver PI routes the CT-es to the correct addressee. For communicating with the authorities, an HTTPs connection using the company-specific certificate from the government via SOAP is required.

8. *Triggering of B2B process (if configured) in SAP NFE core application*
   If configured in Customizing, the SAP NFE system triggers the B2B process and sends the XML file to the business partner.
9. *Forward CT-e status to SAP ERP*
   The SAP NFE core application sends the government-issued status to SAP ERP.
10. *Update status of electronic fiscal document in SAP ERP*
    The process is terminated and changes to goods movement processing.
11. *Send CT-es to SAP NetWeaver PI*
    The SAP NFE system uses the standard PI adapter to send the CT-es to SAP NetWeaver PI.
12. *Send CT-es from SAP NetWeaver PI to B2B receiver*
    SAP NetWeaver PI routes the CT-es to the correct B2B addressee. An HTTPs connection is required to communicate with the B2B receiver.

> **Note**
>
> The authorities require both the consignor and the consignee companies to keep the records of exchanged CT-es and of cancellation requests that the authorities authorized or rejected.

More Information

- Setting up and configuring the individual components required to enable the communication process is described in Configuration of CT-e (Outbound) [page 96].
- Monitoring the communication process is described in Monitor CT-e Outbound [page 200].

6.2.3 CT-e Processing (Outbound)

Use

You can display and control the status of your CT-es for all listed processes in the CT-e Monitor (Outbound) [page 200].

Process

SAP NFE offers the following process for issuing a CT-e (as designed by the brazilian authorities):

The following processes are available:

CT-e Process: Issue of CT-e [page 176]

CT-e Process: Issue of CT-e Cancellation [page 177]

CT-e Process: Send CT-e to Business Partner [page 177]

CT-e Process: Send CT-e Cancellation to Business Partner [page 178]

CT-e Process: Issue of CT-e with Batch [page 179]

CT-e Process: Issue of CT-e Skipping [page 180]

CT-e Process: Issue of CT-e Number Gap Skipping [page 181]

User Actions for CT-e Processing [page 182]

CT-e Outbound Processing Steps [page 184]

6.2.3.1 CT-e Process: Issue of CT-e

> **Note**
>
> This feature is only supported as of CT-e layout 4.00.

You can display and control the status of your CT-es for all listed processes in the CT-e Monitor (Outbound) [page 200].

The process *CT-e Process: Issue of CT-e* (technical name: `CTEISSU2`) consists of the following steps:

Step	Technical Name	Description
1. *Create CT-e*	`CTOCREAT`	The CT-e data is validated and transformed into XML. For more information, see CTOCREAT: Create CT-e [page 184] **Note** If the validation or transformation fails, the CT-e data can be corrected and sent again from the feeder system (ERP). The error reason can be displayed by clicking the *Application Log* field in the *Status Overview* of the *CT-e Monitor*. For more information, see CTOCREAT: Create CT-e [page 184].
2. *Sign CT-e*	`CTOSIGNA`	The CT-e is signed with the certificate of the CT-e issuer CNPJ. For more information, see CTOSIGNA: Sign CT-e [page 185].
3. *Authorize CT-e*	`CTOAUTHO`	This step requests the authorization of a CT-e. For more information, see CTOAUTHO: Authorize CT-e [page 186].
4. *Trigger B2B Process (optional)*	`CTOTRB2B`	The B2B process is created as a separate process, for more information see CT-e Process: Send CT-e to Business Partner [page 177] and CTOTRB2B: Trigger CT-e B2B Process [page 188]. **Note** This step is only relevant if the CT-e was authorized.

5. *Notify Feeder System*	`CTOUPDFS`	The status code is transferred to the feeder system (ERP). For more information, see CTOUPDFS: Notify CT-e Feeder System [page 189].

After the successful execution of these steps, the process of issuing a CT-e is complete. However, the process can continue if a *cancellation* is triggered in the feeder system (ERP).

6.2.3.2 CT-e Process: Issue of CT-e Cancellation

You can display and control the status of your CT-es for all listed processes in the CT-e Monitor (Outbound) [page 200].

The process *Issue of CT-e Cancellation* (technical name: `CTECANCL`) is possible if the CT-e was authorized and consists of the following step:

Step	Technical Name	Description
1. *Cancel CT-e*	`CTOCANCL`	When a cancellation event arrives in NFE, the CT-e changes the process type to *cancellation*. If the cancellation event was authorized, the CT-e is updated in the event process step *Update CT-e Data After Cancellation* (For more information, see CT-e Events: Cancellation Event [page 482]). If the cancellation event was rejected, the CT-e status code remains authorized. For more information regarding the step, see CTOCANCL: Cancel CT-e [page 193]

After the successful execution of this step, the process of issuing a CT-e cancellation is complete. If the *cancellation* was authorized, the process is completed with no option to continue. If the cancellation event was rejected, the process can continue by sending a new event from the feeder system, or can be completed (with no option to continue) by accepting the rejection of the cancellation from the feeder system.

6.2.3.3 CT-e Process: Send CT-e to Business Partner

> **Note**
>
> This feature is only supported up to CT-e layout 3.0.

You can display and control the status of your CT-es for all listed processes in the CT-e Monitor (Outbound) [page 200].

The process *Send CT-e to Business Partner* (technical name: `CTEB2BSD`) consists of the following steps:

Step	Technical Name	Description
1. *Create B2B Process*	`CTOB2BCR`	**Note** The report `/XNFE/NFE_B2B_SEND` (must be scheduled as a background job) collects all CT-es ready for sending to the B2B partner and processes them. For more information, see the description of the report in CT-e Batch Job Planning (Outbound) [page 99]. For more information, see CTOB2BCR: Create B2B Process [page 189].
2. *Send CT-e to Tomador*	`CTOB2BTO`	The step *Send CT-e to Tomador* sends a CT-e XML to the business partner which is informed in the XML as tomador (`XML tag <toma>`). This process step is only relevant if the B2B for the Tomador CNPJ is activated. For more information, see CTOB2BTO: Send CT-e to Tomador [page 190].

After the successful execution of these steps, the process of sending a CT-e to the business partner is complete.

6.2.3.4 CT-e Process: Send CT-e Cancellation to Business Partner

You can display and control the status of your CT-es for all listed processes in the CT-e Monitor (Outbound) [page 200].

The process *Send CT-e Cancellation to Business Partner* (technical name: `CTEB2BCL`) consists of the following step:

Step	Technical Name	Description
1. *Send CT-e Cancellation to Partner*	`CTOB2BCL`	This process step is only relevant for authorized events. If the cancellation event was sent to the business partner, the CT-e is updated in the event process step *Send CT-e Cancellation to Partner* , for more information see CT-e Outbound Cancellation Event [page 482]. For more information regarding the step, see CTOB2BCL: Send CT-e Cancellation to Partner [page 194].

After the successful execution of this step, the process of sending a CT-e cancellation to the business partner is complete.

6.2.3.5 CT-e Process: Issue of CT-e with Batch

> **Note**
>
> This feature is only supported up to CT-e layout 3.00.

You can display and control the status of your CT-es for all listed processes in the CT-e Monitor (Outbound) [page 200].

The process *CT-e Process: Issue of CT-e with Batch* (technical name: `CTEISSU1`) consists of the following steps:

Step	Technical Name	Description
1. *Create CT-e*	`CTOCREAT`	The CT-e data is validated and transformed into XML. For more information, see CTOCREAT: Create CT-e [page 184] **Note** If the validation or transformation fails, the CT-e data can be corrected and sent again from the feeder system (ERP). The error reason can be displayed by clicking the *Application Log* field in the *Status Overview* of the *CT-e Monitor*. For more information, see CTOCREAT: Create CT-e [page 184].
2. *Sign CT-e*	`CTOSIGNA`	The CT-e is signed with the certificate of the CT-e issuer CNPJ. For more information, see CTOSIGNA: Sign CT-e [page 185].
3. *Authorize CT-e*	`CTOTOBAT`	The CT-es are collected in batches and then sent to the government system for authorization. Sending the batches is a separate process described in CT-e Batch Processing [page 195]. The status code can be authorized (for example: 100), or not authorized. For details about the error codes, see the current SEFAZ CT-e manual on the SEFAZ website. For more information, see CTOTOBAT: Authorize CT-e [page 187].
4. *Trigger B2B Process (optional)*	`CTOTRB2B`	The B2B process is created as a separate process, for more information see CT-e Process: Send CT-e to Business Partner [page 177] and CTOTRB2B: Trigger CT-e B2B Process [page 188]. **Note** This step is only relevant if the CT-e was authorized.
5. *Notify Feeder System*	`CTOUPDFS`	The status code is transferred to the feeder system (ERP). For more information, see CTOUPDFS: Notify CT-e Feeder System [page 189].

After the successful execution of these steps, the process of issuing a CT-e is complete. However, the process can continue if a *cancellation* or *skipping* is triggered in the feeder system (ERP).

6.2.3.6 CT-e Process: Issue of CT-e Skipping

> **Note**
>
> This feature is only supported up to CT-e layout 3.0.

You can display and control the status of your CT-es for all listed processes in the CT-e Monitor (Outbound) [page 200].

The process *Issue of CT-e Skipping* (technical name: `CTESKPNG`) is possible if the CT-e was rejected and consists of the following steps:

Step	Technical Name	Description
1. *Create CT-e Skip*	`CTOSKCRE`	The skip CT-e data is validated and transformed into XML. **Note** If the validation or transformation fails, the skip CT-e data can be corrected and sent again from the feeder system (ERP). The error reason can be displayed by clicking the *Application Log* field in the *Status Overview* of the *CT-e Monitor*. For more information, see CTOSKCRE: Create CT-e Skip [page 191].
2. *Sign CT-e*	`CTOSIGNA`	The CT-e is signed with the certificate of the CT-e issuer CNPJ. For more information, see CTOSIGNA: Sign CT-e [page 185].
3. *Authorize Skipping*	`CTOSKAUT`	The skip CT-es are collected and then send to the government system for authorization. The status code can be authorized (102), or not authorized. For details about the error codes, see the current SEFAZ CT-e manual on the SEFAZ website. **Note** The report `/XNFE/CTE_SKIP_SEND` (must be scheduled as a background job) collects all skipping requests ready for sending to the government system and processes them. For more information, see description of report in CT-e Batch Job Planning (Outbound) [page 99]. For more information, see CTOSKAUT: Authorize CT-e Skip [page 192].
4. *Notify Feeder System*	`CTOUPDFS`	The status code is transferred to the feeder system (ERP). For more information, see CTOUPDFS: Notify CT-e Feeder System [page 189].

After the successful execution of this step, the process of issuing a skip CT-e is complete. If the *skipping* was authorized, the process is completed with no option to continue. If the skipping was rejected, the process can continue by sending a new skipping request from the feeder system.

6.2.3.7 CT-e Process: Issue of CT-e Number Gap Skipping

> **Note**
>
> This feature is only supported up to CT-e layout 3.0.

You can display and control the status of your CT-es for all listed processes in the CT-e Monitor (Outbound) [page 200].

The numbering scheme of SEFAZ demands that all CT-es use subsequent numbers. However, there are situations when a number must be omitted.

The process *Issue of CT-e Number Gap Skipping* (technical name: `CTESKGAP`) consists of the following steps:

Step	Technical Name	Description
1. Create CT-e Number Gap Skipping	`CTOSGCRE`	The step *Create CT-e Number Gap Skipping* creates a CT-e number gap skipping. The skip CT-e data is validated and transformed into XML. **Note** If the validation or transformation fails, the skip CT-e data can be corrected and sent again from the feeder system (ERP). The error reason can be displayed by clicking the *Application Log* field in the *Status Overview* of the *CT-e Monitor*. For more information, see CTOSGCRE: Create CT-e Number Gap Skipping [page 193]
2. *Sign CT-e*	`CTOSIGNA`	The skip CT-e is signed with the certificate of the CT-e issuer CNPJ. For more information, see CTOSIGNA: Sign CT-e [page 185]
3. *Authorize Skipping*	`CTOSKAUT`	The skip CT-es are collected and then sent to the government system for authorization. The status code can be *authorized* (102), or *not authorized*. For details about the error codes, see the current SEFAZ NF-e manual on the SEFAZ website. **Note** The report *Send CT-e Number Skippings* (must be scheduled as a background job) collects all skipping requests ready for sending to the government system and sends them. For more information, see Send CT-e Number Skippings [page 85]. For more information, see CTOSKAUT: Authorize CT-e Skip [page 192].
4. *Notify Feeder System*	`CTOUPDFS`	The status code is transferred to the feeder system (ERP). For more information, see CTOUPDFS: Notify CT-e Feeder System [page 189].

After the successful execution of these steps, the process of skipping a CT-e number is complete. If the *skipping* was authorized, the process is completed with no option to continue. If the skipping was rejected, the process can continue by sending a new skipping request from the feeder system.

6.2.3.8 User Actions for CT-e Processing

Finish Skipping

This action allows the user to finish the skip/skip gap process in case of an invalid SEFAZ response and transmits the status to the feeder system. Therefore, the user has to enter the protocol number and authorization date and time (retrieved from the government website) manually. This action is enabled if the status of the process step *Authorize skipping* displays an error. This can be caused by a rejection with the following status code:

- 682 -> There is an existing skipping request for the same range

With this status code, the CT-e is unknown to SEFAZ and therefore the action *Continue* to trigger the CT-e status check has no effect on the process. The user has to clarify that the skip request was authorized by SEFAZ and has to enter the relevant protocol data to continue the process.

Request Status Check

This action allows the user to trigger an asynchronous CT-e status check. The response returns the current CT-e status from SEFAZ. This action is enabled if the status of the process step *Authorize CT-e* displays an *Error*. This can be caused by the following situations:

- The CT-e batch process was ended manually (for more information, see User Actions for CT-e Batch Processing [page 196]).
- The batch process was completed, but the CT-e was rejected with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 204 -> Rejection: Duplicated CT-e
  - 205 -> Rejection: CT-e is already denied on the SEFAZ database
  - 999 -> Rejection: Unexpected Error
- The CT-e status check failed with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 217 -> Rejection: CT-e does not exist on the SEFAZ database
  - 678 -> Improper Consumption (wait at least 3 minutes before try again)
  - 999 -> Rejection: Unexpected Error

> → Recommendation
>
> Execute the *CT-e Status Check* (action *Request Status Check*) for all statuses except 217. For status 217, execute action *Continue Process* to authorize the CT-e at SEFAZ.

Repeat Process Step

This action allows the user to repeat the process step *Notify Feeder System* although this step was already successfully executed during the regular processing. This action is enabled if the status of the process step *Notify Feeder System* displays *OK*.

Use this action if the transfer of the CT-e status to the connected feeder system failed, but did not return an error. Therefore, the status of the process step *Notify Feeder System* stays *OK*.

Continue Process

The action allows the user to execute the current/next process step of the issuing process depending on:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

If an error occurred, check the error description in *Status Overview* and solve the problem before using the action *Continue Process*.

You can use this action in step *Authorize CT-e* for the following situations:

- The CT-e batch process was ended manually (for more information, see User Actions for CT-e Batch Processing [page 196]).
- The batch process was completed, but the CT-e was rejected with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 204 -> Rejection: Duplicated CT-e
  - 205 -> Rejection: CT-e is already denied on the SEFAZ database
  - 999 -> Rejection: Unexpected Error
- The CT-e status check failed with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 217 -> Rejection: CT-e does not exist on the SEFAZ database
  - 678 -> Improper Consumption (wait at least 3 minutes before trying again)
  - 999 -> Rejection: Unexpected Error

> ⓘ Note
>
> If a communication problem (for example, negative acknowledgment) occurred, you can find the corresponding PI message *GUID* in the *History*.

> → Recommendation
>
> If process step *Authorize CT-e* finished with an error, use the action *Request Status Check* first, before you use the action *Continue Process*.

Continue B2B Process

The action allows the user to execute the current/next process step of the B2B process depending on:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

Use this action in case of an error during sending an XML file to one of your business partners. If an error occurred, check the error description in *Status Overview* and solve the problem before using the action *Continue B2B Process*.

> **Note**
>
> If a communication problem (for example, negative acknowledgment) occurred, you can find the corresponding PI message *GUID* in the *B2B History*.

6.2.3.9 CT-e Outbound Processing Steps

The following steps are available:

CTOCREAT: Create CT-e [page 184]

CTOSIGNA: Sign CT-e [page 185]

CTOAUTHO: Authorize CT-e [page 186]

CTOTOBAT: Authorize CT-e [page 187]

CTOTRB2B: Trigger CT-e B2B Process [page 188]

CTOUPDFS: Notify CT-e Feeder System [page 189]

CTOB2BCR: Create B2B Process [page 189]

CTOB2BTO: Send CT-e to Tomador [page 190]

CTOSKCRE: Create CT-e Skip [page 191]

CTOSKAUT: Authorize CT-e Skip [page 192]

CTOSGCRE: Create CT-e Number Gap Skipping [page 193]

CTOCANCL: Cancel CT-e [page 193]

CTOB2BCL: Send CT-e Cancellation to Partner [page 194]

6.2.3.9.1 CTOCREAT: Create CT-e

The step *Create CT-e* (technical name: `CTOCREAT`) receives the complete XML from the feeder system in ABAP structures. The data is validated, transformed to XML and stored on the NFE database tables.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

- Maintain Own Tax Numbers
- CT-e: Maintain Connected Authority Systems
- CT-e: Maintain Version of Message Types

For additional information, see Process Settings and Customizing for CT-e Outbound [page 98].

BAdIs

- *Change of Logical System* (technical name: `/XNFE/BADI_LOGSYS_REPLACE`)
  You can implement the BAdI in to change the original logical system that you received from the feeder system.

For more information, see BAdIs for CT-e Outbound [page 100]

Usage

CT-e Outbound Processing

Additional Information

If the document status in the NFE system does not allow to resend and there is a feeder system call, the NFE system writes a history entry.

6.2.3.9.2 CTOSIGNA: Sign CT-e

The step *Sign CT-e* (technical name: `CTOSIGNA`) signs a CT-e (data part) by using the assigned certificate and adds this signature to the already existing XML file.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Maintain System Response for Own Tax Numbers

For additional information, see Process Settings and Customizing for CT-e Outbound [page 98].

BAdIs

BAdI: Signature for Outbound Documents (technical name: `/XNFE/SIGN_CREATE`)

This BAdI enables a synchronous proxy call of an external signature service (through external signature hardware, for example, or an external Web service), to circumvent the standard signature implementation in ABAP.

For more information, see BAdIs for CT-e Outbound [page 100]

Usage

CT-e Outbound Processing

6.2.3.9.3 CTOAUTHO: Authorize CT-e

The step *Authorize CT-e* (technical name: `CTOAUTHO`) requests the authorization of a CT-e.

> **Note**
>
> For the processing of the CT-e authorization, the report `/XNFE/CTE_SEND` must be scheduled as a background job. For details please refer to Overview of Batch Jobs for CT-e Outbound [page 79] .

Activation/Deactivation

By default, this step is active and processed automatically. The communication is synchronous.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

CT-e Processing

6.2.3.9.4 CTOTOBAT: Authorize CT-e

The step *Authorize CT-e* (technical name: `CTOTOBAT`) requests the authorization of the CT-e. Therefore, a batch (different process) is created that sends one or more CT-es to the government web service for authorization. Every individual CT-e will be updated with the returned status code inside the batch process. For additional information, see Background Reports [page 71].

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant

BAdIs

No BAdIs available.

Usage

CT-e Outbound Processing

Additional Information

A history entry is written if a response message enters the system and the step is no longer the current one.

6.2.3.9.5 CTOTRB2B: Trigger CT-e B2B Process

The step *Trigger B2B Process* (technical name: `CTOTRB2B`) creates and stores the B2B process for all CT-e that have been authorized by SEFAZ.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdIs available.

Usage

CT-e Outbound Processing

Additional Information

The B2B process will only be created, if CT-e is authorized.

6.2.3.9.6 CTOUPDFS: Notify CT-e Feeder System

The step *Notify Feeder System* (technical name: `CTOUPDFS`) transfers the received SEFAZ status code to the connected feeder system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

CT-e BAdI: Call Non-SAP System via RFC Communication (technical name: `/XNFE/BADI_CTE_RFC_EXTERN`)

The BAdI lets you control the RFC call for communication with the SAP ERP system, to use the electronic communication of CT-es along with their events with the authorities for non-SAP systems. In the standard settings, the system uses the standard SAP modules to call SAP ERP for RFC communication with the ERP system.

For more information, see BAdIs for CT-e Outbound [page 100]

Usage

CT-e Outbound Processing

Additional Information

The B2B process will only be created, if CT-e is authorized.

6.2.3.9.7 CTOB2BCR: Create B2B Process

The step *Create B2B Process* (technical name: `CTOB2BCR`) creates the B2B process for a CT-e.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

CT-e Outbound Processing

6.2.3.9.8 CTOB2BTO: Send CT-e to Tomador

The step *Send CT-e to Tomador* (technical name: `CTOB2BTO`) sends a CT-e XML to the business partner which is informed in the XML as tomador (`XML tag <toma>`).

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Activate B2B Scenarios for Business Partners

Activate B2B Scenarios for Natural Persons

For additional information, see Process Settings and Customizing for CT-e Outbound [page 98].

BAdIs

- *BAdI for Customer Enhancement to Determine E-Mail for B2B Messages* (technical name: `/XNFE/EMAIL_B2B`)
  This BAdI enables a synchronous proxy call of an external signature service (through external signature hardware, for example, or an external Web service), to circumvent the standard signature implementation in ABAP.
- *Append Additional Documents to the Communication Message* (technical name: `/XNFE/BADI_GET_AUXILIARY_DOC`)
  This BAdI can be used to append additional documents to the communication message and sending this enhanced message to the business partner.

For more information, see BAdIs for CT-e Outbound [page 100].

Usage

CT-e Outbound Processing

Additional Information

The status of the step test is set by the program Collect and process Acknowledgments from PI [page 75]).

6.2.3.9.9 CTOSKCRE: Create CT-e Skip

The step *Create CT-e Skip* (technical name: `CTOSKCRE`) creates a CT-e number skipping.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

CT-e: Maintain Version of Message Types

For additional information, see Process Settings and Customizing for CT-e Outbound [page 98].

BAdIs

No BAdI available.

Usage

CT-e Outbound Processing

Additional Information

A history is written if the requested skip gap or the CT-e itself already exists.

6.2.3.9.10 CTOSKAUT: Authorize CT-e Skip

The step *Authorize CT-e Skip* (technical name: `CTOSKAUT`) requests the authorization of the skipping for a CT-e number.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

CT-e Outbound Processing

6.2.3.9.11 CTOSGCRE: Create CT-e Number Gap Skipping

The step *Create CT-e Number Gap Skipping* (technical name: `CTOSGCRE`) creates a CT-e number gap skipping.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

CT-e: Maintain Version of Message Types

CT-e: Maintain Connected Authority Systems

For additional information, see Process Settings and Customizing for CT-e Outbound [page 98].

BAdIs

No BAdI available.

Usage

CT-e Outbound Processing

Additional Information

A history is written if the requested skip gap ,or the CT-e itself already exists.

6.2.3.9.12 CTOCANCL: Cancel CT-e

The step *Cancel CT-e* (technical name: `CTOCANCL`) reflects the status of the cancellation event process in the CT-e Monitor.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

CT-e Outbound Processing

Additional Information

A history entry is written in case of the response faces a process step status other than *wait*.

6.2.3.9.13 CTOB2BCL: Send CT-e Cancellation to Partner

The step *Send CT-e Cancellation to Partner* (technical name: `CTOB2BCL`) reflects the B2B status of the cancellation event process in the CT-e Monitor.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

CT-e Outbound Processing

Additional Information

A history entry is written in case of the response faces a process step status other than *wait*.

6.2.4 CT-e Batch Processing

Use

> **Note**
>
> This feature is only supported up to CT-e layout 3.00.

You can display and control the status of your CT-e Batches for all listed processes in the CT-e Batch Monitor (Outbound) [page 204].

Process

The process *Send CT-e Batch* (technical name: `CTEBATSD`) consists of the following steps:

> **Note**
>
> Reports are available for the processing of CT-e Batches that must be scheduled as background jobs. For details please refer to CT-e Batch Job Planning (Outbound) [page 99].

Step	Technical Name	Description

1. *Create CT-e Batch*	CTBATCRE	During batch creation the CT-es are separated according to: • System Environment (Test or Production) • Issuing Type • Code of Brazilian State (CUF) • CNPJ of Issuer • XML Version • Transport type of the CT-e Batches are created according to different criteria (batch size, No. of CT-es inside the batch). For more information, see CTBATCRE: Create CT-e Batch [page 198].
2. *Send CT-e Batch*	CTBATSND	The batch is sent to authorities asking for authorization of the included CT-es. Before the batch is sent, the system checks the current service status. The authorities answer with an average time that it took to set the CT-e status. For more information, see CTBATSND: Send CT-e Batch [page 198].
3. *Request CT-e Batch*	CTBATREQ	The batch request is sent to the authorities and returns the status of the included CT-e. If the status is missing the first time, the system automatically resends the batch status request. The received status for the CT-e included in the batch is transferred to the CT-e process. **Note** If the batch request is not successful due to a technical error, the batch process can be terminated in the CT-e Batch Monitor and a CT-e status check on CT-e level can be carried out manually in the CT-e Monitor (For more information, see User Actions for CT-e Batch Processing [page 196]) For more information, see CTBATREQ: Request CT-e Batch [page 199].

After the successful execution of these steps, the process of sending a CT-e batch is complete.

User Actions for CT-e Batch Processing [page 196]

CT-e Batch Processing Steps [page 198]

6.2.4.1 User Actions for CT-e Batch Processing

Finish Batch Process

The action allows the user to end the CT-e batch process and continue the processing in the *CT-e Monitor* (For more information, see CT-e Monitor (Outbound) [page 200]). This action is enabled if the status of the last batch process step displays *Error* or *Waiting*.

Status of step: *Error*

The following status codes are possible in case of an *Error* status:

- The step *Send CT-e Batch* failed, because the batch was rejected by SEFAZ with one of the following status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 678 -> Improper Consumption (wait at least 3 minutes before trying again)
  - 999 -> Rejection: Unexpected Error
- The step *Request CT-e Batch* failed, because the NF-e batch request was rejected by SEFAZ with one of the following status codes:
  - 215 -> Rejection: XML schema validation error
  - 516, 517, 545 -> Rejection: XML schema validation error
  - 678 -> Improper Consumption (wait at least 3 minutes before trying again)
  - 999 -> Rejection: Unexpected Error

Status of step: *Waiting*

If a PI-related problem occurs, the last batch process step (*Send CT-e Batch* or *Request CT-e Batch*) remains in status *Waiting*.

> → Recommendation
>
> To solve these errors, contact your PI administrator first before you use the action *Exit Batch Process*.

> → Recommendation
>
> If the step *Request CT-e Batch* failed and you executed the action *Exit Batch Process*, then we recommend to continue with an *CT-e Status Check* in the *CT-e Monitor*.

Restart

The action allows the user to execute the current/next process step depending on the following situations:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

If an error occurred, check the error description in *Status Overview* and*History*, and solve the problem before using the action *Restart*.

> ⓘ Note
>
> If a communication problem occurred, you can find the corresponding PI message `GUID` in the *History*.

6.2.4.2 CT-e Batch Processing Steps

The following steps are available:

CTBATCRE: Create CT-e Batch [page 198]

CTBATSND: Send CT-e Batch [page 198]

CTBATREQ: Request CT-e Batch [page 199]

6.2.4.2.1 CTBATCRE: Create CT-e Batch

The step *Create CT-e Batch* (technical name: `CTBATCRE`) This step creates a CT-e batch and assigns CT-es to this batch.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Number Range for Batches

For additional information, see Technical Settings for CT-e Outbound [page 97].

BAdIs

No BAdI available.

Usage

CT-e Batch Processing

6.2.4.2.2 CTBATSND: Send CT-e Batch

The step *Send CT-e Batch* (technical name: `CTBATSND`) sends the CT-e batch to the authority for authorization.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

CT-e Batch Processing

Additional Information

The CT-e is updated in this step if the batch was rejected. In this case, the status code and the reason of the batch are propagated to CT-e level.

6.2.4.2.3 CTBATREQ: Request CT-e Batch

The step *Request CT-e Batch* (technical name: `CTBATREQ`) requests the status of the CT-e batch including the status of all CT-es (protocol) that have been sent to SEFAZ with this batch.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

CT-e Batch Processing

6.2.5 Monitor CT-e Outbound

SAP Nota Fiscal Eletrônica (SAP NFE) runs in different components when communicating with regional tax authorities. SAP NFE gives you access to monitors with differing levels of detail to control the communication process and to solve problems.

CT-e Communication Process Monitoring (Outbound)

The monitoring options in SAP NFE provide you with a single point-of-entry for tracking the communication statuses of CT-es (both individual and batched), and the communication process between the NFE application and the authorities' system. In case of communication failures, the NFE application monitors allow you to trigger resending and rechecking of CT-es, batches, and related messages.

- The CT-e Monitor [page 200] displays an overview list of all CT-es sent individually to government systems and to business partners, along with all CT-e-related messages. You can also resend certain messages from the filtered lists in this monitor.
- The CT-e Batch Monitor [page 204] displays the messages you sent to and receive from the government systems regarding the status of CT-e batches.
- The CT-e Service Status Monitor (Outbound) [page 207] displays the results of service status inquiries that the system automatically performs. The service status indicates the authorities' system availability.

  CT-e Monitor (Outbound) [page 200]

  CT-e Batch Monitor (Outbound) [page 204]

  CT-e Service Status Monitor (Outbound) [page 207]

6.2.5.1 CT-e Monitor (Outbound)

The *CT-e Monitor* is a single point of entry for monitoring the document and process status of *Conhecimento de Transporte Eletrônico* (CT-e), as well as for monitoring communication with government systems and with

business partners in business-to-business (B2B) scenarios. It allows you to download the XML files for CT-es, along with all authorization, cancellation, and skipping messages that you are legally required to keep as records. You can also resend messages from this monitor that your system was unable to send due to technical reasons. For more information regarding the CT-e processes, see CT-e Processing (Outbound) [page 175].

Queries

- **Overview**
  The *Overview* query lists all CT-es (except CT-es in process *Number Gap Skipping*) with their main header data and the status information.
- **Overview Errors**
  The *Overview Errors* query lists CT-es with errors (except CT-es in process *Number Gap Skipping*) with their main header data and the status information.
- **Overview of B2B Errors**
  The *Overview of B2B Errors* query lists CT-es with B2B errors with their main header data and the status information.
- **Overview Number Gap Skipping**
  The *Overview Number Gap Skipping* query only lists CT-es with process *Number Gap Skipping* with their main header data and the status information.
- **Overview Number Gap Skipping Errors**
  The *Overview Number Gap Skipping Errors* query lists CT-es in process *Number Gap Skipping* with errors with their main header data and the status information.

List

Based on your selection criteria, the *CT-e Monitor* displays a list of CT-es and their processing status.

The following status icons are used:

- Process Completed; Document successfully processed. This icon represents status 99.
  Depending on the CT-e type, this means:
  - CT-e authorized (SEFAZ Status Code 100)
  - CT-e Cancellation authorized (SEFAZ Status Code 101)
  - CT-e Number Skipping authorized (SEFAZ Status Code 102)
- Process completed; Document denied. This icon represents status 89.
  The CT-e processing is finished with no option to continue processing.
- Process completed; CT-e rejected. This icon represents status 88.
  Depending on the CT-e type, this means:
  - CT-e rejected. The processing is finished and you can either send the CT-e again with corrected data, or skip the CT-e number.
  - CT-e Number Skipping rejected. The processing is finished and can request to skip the CT-e number again.
- Validation Error; Action Required in the Feeder System. This icon represents status 05.

The process stopped, because the CT-e cannot be created due to a validation error. You have to correct this error in your ERP system and resend your CT-e.

- Process is waiting. This icon represents the following statuses:
  - 11 -> Process waiting for response
  - 12 -> Status check: step waiting for asynchronous response
  - 13 -> Step waiting for external process
- Error in last process step. This icon represents the following statuses:
  - 02 -> Error in last process step
  - 03 -> Technical error in last process step
  - 04 -> Temporary error in last process step

  To correct the error, go to the status overview and check the problem description in the last activity. After correcting the problem, you can continue the process using the *Continue Process* action.
- Process OK. This icon represents status 01.
  The process stopped for the user to carry out necessary actions.

> **Note**
>
> This skip *access key* has only 39 digits.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Additional Information

Once you select a line in the displayed table, you receive additional information about this CT-e at the bottom of the screen:

- Status Overview
  This is a description of the process with the corresponding *Status*, *Activity*, *Status Description*, *Info Text* and *Application Log* fields.
- History
  This is a description of the history of this CT-e containing the *Status*, *Activity*, *Status Description*, *Info Text*, *Executed on*, and the *User* fields.
- B2B Status Overview
  This is a description of the B2B process with the corresponding *Status*, *Activity*, *Status Description*, and *Info Text* fields.
- B2B History
  This is a description of the history of the B2B activities of this CT-e containing the *Status*, *Activity*, *Status Description*, *Info Text*, *Executed on*, and the *User* fields.
- Events
  This is an overview of all events related to this CT-e. For more detailed information, see Events Embedded in Monitors [page 522].

> ⚠ Caution
>
> The Events tab is only visible if there is at least 1 event for a CT-e.

Actions

- **Select Details:**
  - **Display Details**
    This action displays the XML content in multiple sub-screens. You can also access the CT-e details by clicking on the access key in the list.
  - **Display XML**
    This action allows you to download/display the CT-e XML file (if existing).
  - **Cancellation XML**
    This action allows you to download/display the cancellation event XML file (if existing).
  - **Skipping XML**
    This action allows you to download/display the skipped XML file (if existing).
- **Continue Process**
  You can select a CT-e with an error in the CT-e process and then check the problem description in the last activity. After correcting the problem, you can continue the process using the *Continue Process* button.

  > ⓘ Note
  >
  > If the step *Check CT-e Authorization* finished with an error, you can repeat the CT-e status check by clicking the *Continue Process* button. After that, the overall status will change to *Process waiting for asynchronous answer*. After a while, the overall status of the CT-e will change again according to the asynchronous answer from SEFAZ. Therefore, it is important that you refresh the current query repeatedly (using the refresh link at the bottom right of the screen).
- **Continue B2B Process**
  You can select a CT-e with an error in the B2B process and then check the problem description in the last activity. After correcting the problem, you can continue the process using the *Continue B2B Process* button.
- **Additional Functions:**
  - **Request Status Check**
    This action allows the user to trigger an asynchronous CT-e status check. The response returns the current CT-e status from SEFAZ.
  - **Repeat Process Step**
    This action allows the user to repeat the *Update Feeder System* process step although this step was already successfully executed during the regular processing.
  - **Finish Skipping**
    The action allows the user to enter the protocol number and authorization date and time manually. This only applies to skip and gap skip..
  - **Send XML File**
    This action allows the user to send an authorized CT-e XML to your business partner depending on the B2B Customizing for the partner CNPJ.

> **Note**
>
> This action is only enabled if you activated the B2B Customizing for your business partner CNPJ .

- **Query Events**
  Use this action to trigger an asynchronous CT-e status check to receive events from your business partner through the authorities.

> **Note**
>
> For more information regarding the available *Actions*, also refer to User Actions for CT-e Processing [page 182].

CT-e Details

You can display the details by choosing a CT-e's *Access Key*, or by selecting the corresponding line and choosing *Display Details*. The details view displays:

- The processing status of the CT-e in both your system and the authorities' system
- The entire content of the XML in several tabs and grouped according to the tags in the XML

Navigation

You can access the *CT-e Monitor* in SAP NFE via one of the following options:

- You can call up the specific menu *CT-e Monitor* from the user role `/XNFE/WP_NFE_OUT_MONITOR` *(Outgoing User Menu)*.
- You can navigate to the menu option in the navigation structure of the *Monitor Outgoing Messages* in SAP NFE. You can access this option from the user role by choosing *Monitor Outbound CT-es/Events* > *CT-e Monitor*.

6.2.5.2 CT-e Batch Monitor (Outbound)

The batch monitor displays the statuses of the CT-es that you have sent in batches to the authorities, along with the results of the batch status requests that you have sent to the authorities.

Queries

- **Overview**
  The *Overview* query displays the main header data and status information for all batches you have sent.

- **Overview Errors**
  The *Overview Errors* query displays the main header data and status information for all batches with errors.

List

Based on your selection criteria, the *CT-e Batch Monitor* displays a list of CT-e batches and their processing status .

The following status icons are used:

- Process Completed; Document successfully processed. This icon represents status 99.
  The CT-e batch processing finished with no option to continue processing.
- Process completed; This icon represents the following statuses:
  - Status 98: Process manually finished
    The CT-e batch is finished manually by the user by using the respective action in the monitor.
  - Status 88: Document rejected
    The batch sending or batch request was rejected by the authorities.
- Process is waiting. This icon represents the following statuses:
  - 11 -> Process waiting for response
  - 12 -> Status check: step waiting for asynchronous response
  - 13 -> Step waiting for external process
- Error in last process step. This icon represents the following statuses:
  - 02 -> Error in last process step
  - 03 -> Technical error in last process step

  To correct the error, go to the status overview and check the problem description in the last activity. After correcting the problem, you can continue the process using the action *Continue Process*.
- Batch Processing Completed. This icon represents status 01.
  The process stopped for the user to carry out necessary actions.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Additional Information

Once you select a line in the displayed table, you receive additional information about this CT-e batch at the bottom of the screen:

- Status Overview
  The Status Overview tab displays additional information about the processing steps: *Status*, *Activity*, *Status Description*, and *Info Text*.
- History

The history tab displays the following additional information: *Status*, *Activity*, *Status Description*, *Info Text*,*Executed On*, and *User*.

Actions

- **Batch Details**
  The batch details are displayed. You can also access the batch details by clicking the *Batch Number* in the list.
- **Restart**
  You can select a CT-e Batch with an error and then check the problem description in the last activity. After correcting the problem, you can restart the process using the action *Restart*.
- **End Batch Process**
  You can select a CT-e batch with an error and then check the problem description in the last activity. If you cannot correct the problem, for example due to technical problems with the SEFAZ system, you can end the batch process using the action *End Batch Process*. This finishes the batch process and sets the status of the `Check Authorization` step of every CT-e in the batch to *Error*. The new status for every individual CT-e of the batch allows you to continue the CT-e process in the *CT-e Monitor*. To receive a valid status from SEFAZ, the CT-e status check requests a status for every individual CT-e.

  > ⚠ Caution
  >
  > By ending the batch processing, a CT-e status request is only possible via *CT-e Status Check*. The CT-e process step `Check Authorization` is set to *Error* and has to be restarted **manually** in the CT-e Monitor. If the CT-e is unknown to the government system, the user has to decide to send the CT-e to SEFAZ for authorization, or update the feeder system (ERP) with the current SEFAZ status.

> ⓘ Note
>
> For more information regarding the available *Actions*, also refer to User Actions for CT-e Batch Processing [page 196].

Details

You can display the details of a specific batch by choosing the *Batch Number* or by selecting its line and choosing *Details*. The details view displays:

- The processing status of the batch in both your system and the authorities' system
- Batch header data
- A list of the individual CT-es in the batch with their most important header data

Navigation

- You can access the *CT-e Batch Monitor* in SAP Nota Fiscal Eletrônica (SAP NFE) by using one of the following options:
  - Call up the specific menu *CT-e Batch Monitor* from the user role `/XNFE/WP_NFE_OUT_MONITOR` *(Outgoing User Menu)*.
  - Navigate to the menu option in the navigation structure of the *Monitor Outgoing Messages* in SAP NFE. You can access it from the user role by choosing *Monitor Outbound CT-es/Events* > *CT-e Batch Monitor*.

6.2.5.3 CT-e Service Status Monitor (Outbound)

Every company is required to regularly check the authorities' system availability at a defined interval. You use this status information to determine if you must start the contingency process in the feeder system SAP ERP manually in order to process your goods movement invoices in a timely fashion.

This monitor displays the result of the communication between the NFE system and the web service to check the availability of the connected government system. The web service is called via a batch job, for more information see CT-e Batch Job Planning (Outbound) [page 99]. The service status indicates the authorities' system availability.

Configuration

You configure the service status check request using the following two options:

- In Customizing activity *CT-e: Define Service Status Request for Authority (SEFAZ)*. For additional information, see Process Settings and Customizing for CT-e Outbound [page 98].
- In the current settings transaction *CT-e: Define Service Status Request for Authority (SEFAZ)* of the administrator role. For additional information, see Administration [page 524].

List

Based on your selection criteria, the *CT-e Service Status Monitor* displays a list of service status requests and their processing status.

The following status icons are used:

- Processing Completed Error-Free with the following SEFAZ status codes:
  - 107 -> Service is available
  - 113 -> Service is available until a given point in time
- Processing Completed with Error
  This error is either due to communication error or a negative status code from SEFAZ.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Navigation

You can access the *CT-e Service Status Monitor* in SAP NFE by calling up the *CT-e Service Status Monitor* in the *Message Monitor* menu under *Monitor Outgoing Messages*.

6.3 MDF-e Outbound

The MDF-e outbound of SAP Nota Fiscal Eletrônica manages the authorization with federal tax systems. The MDF-e outbound of SAP Nota Fiscal Eletrônica has the following scope:

- MDF-e issuing through Batch and Batch Status Request
- Events for Close, Cancellation, and Addition of Driver
- Service Status Check
- ABAP Digital Signature
- BADI for enhancements
- Monitors for MDF-e processes: MDF-e, Batch, Events, Service Status

The MDF-e outbound of SAP Nota Fiscal Eletrônica consists of the following topics:

- Communication Flow for Sending MDF-es [page 209]
- MDF-e Processing (Outbound) [page 211]
  - User Actions for MDF-e Processing [page 214]
- MDF-e Batch Processing [page 222]
  - User Actions for MDF-e Batch Processing [page 223]
- Monitor MDF-e Outbound [page 226]
  - MDF-e Monitor (Outbound) [page 227]
  - MDF-e Batch Monitor (Outbound) [page 229]
  - MDF-e Service Status Monitor (Outbound) [page 232]

> **Note**
>
> Additional information: BAdIs for Outbound MDF-e [page 105]

Communication Flow for Sending MDF-es [page 209]

MDF-e Processing (Outbound) [page 211]

MDF-e Batch Processing [page 222]

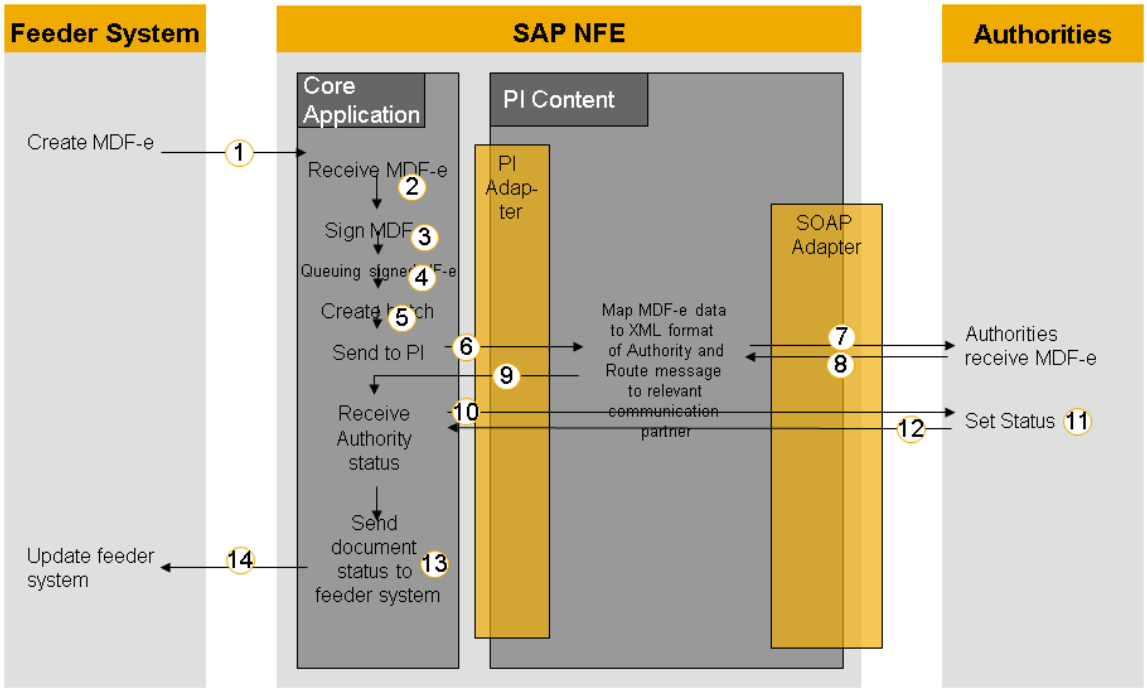
Monitor MDF-e Outbound [page 226]

6.3.1 Communication Flow for Sending MDF-es

Use

This section provides an overview of the interaction between the different components of the SAP Nota Fiscal Eletrônica (SAP NFE) shipment based on the example process of sending an MDF-e . You can apply the explanations for each MDF-e process step to such secondary processes as canceling or skipping MDF-es.

Process



Communication Flow

1. *Create an MDF-e in the Feeder System*
   The MDF-e is created with the required data in the feeder system.
2. *Receive MDF-e data in SAP NFE*
   The feeder system transfers all required data in an MDF-e to SAP NFE that stores the data with a common identifier and a reference to the feeder system document.
3. *Sign MDF-e*
   The authorities require that each MDF-e be signed by using a certificate that they have issued. Each MDF-e is signed individually within the ABAP stack using the certificate that is stored in the STRUST table.

4. *Queue signed MDF-es*
   The core application saves the signed MDF-es for later reference and also queues them for the next process step.
5. *Create batch in core application*
   The authorities only accept MDF-es in batches that cannot exceed a certain size. The system applies all requirements from the authorities when batching signed MDF-es.
6. *Send MDF-e batch to SAP NetWeaver PI*
   The SAP NFE system sends the batch synchronously to SAP NetWeaver PI using the standard PI adapter.
7. *Send MDF-e batch from SAP NetWeaver PI to authorities*
   SAP NetWeaver PI routes the batches to the correct addressee. For communicating with the authorities, an HTTPs connection using the company-specific certificate from the government via SOAP is required.
8. *Receive average timeframe from authorities for status availability*
   When the authorities receive the batched MDF-es, they automatically send a response via SAP NetWeaver PI with the average time (in seconds) that it took to set the MDF-e batch status.
9. *Prepare request for MDF-e status information*
   After SAP NetWeaver PI transmits the authorities' response to the SAP NFE core application, the core application schedules a system status request message to send to the authorities.
10. *Set MDF-e government status (authorities)*
    The authorities set the status for all MDF-es in the batch for which they have provided a time estimate. The status is stored in the authorities' system until your company retrieves it
11. *Request status information from authorities*
    After the time set by the authorities for collecting status data has elapsed, the SAP NFE core application uses the standard PI adapter to send the status request to SAP NetWeaver PI. SAP NetWeaver PI then routes the request via the SOAP adapter to the authorities.
12. *Receive authority status in SAP NFE*
    The SAP NFE system receives the government status for the MDF-es via SAP NetWeaver PI and updates the status information accordingly.
13. *Forward MDF-e status to feeder system*
    SAP NFE sends the government-issued status to feeder system.
14. *Update status of electronic fiscal document in the feeder system*
    The process is completed.

> **Note**
>
> The authorities require the receiving and issuing companies to keep the records of exchanged MDF-es and of cancellation requests that the authorities authorized or rejected.

More Information

- Setting up and configuring the individual components required to enable the communication process is described in Configuration of MDF-e Outbound [page 101].
- Monitoring the communication process is described in Monitor MDF-e Outbound [page 226].

6.3.2 MDF-e Processing (Outbound)

Use

You can display and control the status of your MDF-es for all listed processes in the MDF-e Monitor (Outbound) [page 227].

Process

SAP NFE offers several processes for issuing an MDF-e (as designed by the brazilian authorities). If you have to deal with many MDF-es, MDF-es can be sent in batches to reduce your data traffic and to speed up the overall processing time. If you have to deal with only few MDF-es, these MDF-es can be sent individually without batch. The determination of the issuing process takes place when the MDF-e is received from the feeder system according to customizing activity *NF-e: Maintain Process Determination for Outbound MDF-es* in Process Settings and Customizing (Outbound) [page 91]:

The following processes are available:

- MDF-e Process: Issue of MDF-e with Batch [page 211]
- MDF-e Process: Issue of MDF-e Cancellation [page 212]
- MDF-e Process: Issue of MDF-e [page 213]
- User Actions for MDF-e Processing [page 214]
- MDF-e Outbound Processing Steps [page 216]

6.3.2.1 MDF-e Process: Issue of MDF-e with Batch

> **Note**
>
> This process is used until the implementation of MDF-e SAP note 3453629 or NFE SP36.

SAP NFE offers a process for issuing MDF-es in batches (as designed by the brazilian authorities).

You can display and control the status of your MDF-es for all listed processes in the MDF-e Monitor (Outbound) [page 227].

The process *MDF-e Process: Issue of MDF-e with Batch* (technical name: `MFEISSU1`) consists of the following steps:

Step	Technical Name	Description

1. *Create MDF-e*	`MFOCREAT`	The MDF-e data is validated and transformed into XML. **Note** If the validation or transformation fails, the MDF-e data can be corrected and send again from the feeder system (ERP). The error reason can be displayed by clicking the *Application Log* field in the *Status Overview* of the *MDF-e Monitor*. For more information, see MFOCREAT: Create MDF-e [page 217].
2. *Sign MDF-e*	`MFOSIGNA`	The MDF-e is signed with the certificate of the MDF-e issuer CNPJ. For more information, see MFOSIGNA: Sign MDF-e [page 218].
3. *Authorize MDF-e*	`MFOTOBAT`	The MDF-es are collected in batches and then sent to the government system for authorization. Sending the batches is a separate process described in MDF-e Batch Processing [page 222]. The status code can be authorized (for example: 100), or not authorized. For details about the error codes, see the current SEFAZ MDF-e manual on the SEFAZ website. For more information, see MFOTOBAT: Authorize MDF-e [page 219].
4. *Notify Feeder System*	`MFOUPDFS`	The status code is transferred to the feeder system (ERP). For more information, see MFOUPDFS: Notify Feeder System [page 219].
5. *Close MDF-e*	`MFOCLOS`	The processing is not finished and the MDF-e is waiting for the authorization of the close event. This is carried out in a separate process, see MDF-e Events: Closing Event [page 500]. For more information, see MFOCLOSE: Close MDF-e [page 220].

After the successful execution of these steps, the process of issuing an MDF-e is complete.

6.3.2.2 MDF-e Process: Issue of MDF-e Cancellation

You can display and control the status of your MDF-es for all listed processes in the MDF-e Monitor (Outbound) [page 227].

The process *Issue of MDF-e Cancellation* (technical name: `MFECANCL`) is possible if the MDF-e was authorized and consists of the following step:

Step	Technical Name	Description

1. *Cancel MDF-e*	`MFOCANCL`	When a cancellation event arrives in NFE, the MDF-e changes the process type to *cancellation*. If the cancellation event was authorized, the MDF-e is updated in the event process step *Update MDF-e Data After Cancellation* (technical name `CANUPMFO`. For miore information, see MDF-e Event Processing [page 499]). If the cancellation event was rejected, the SEFAZ status code of the MDF-e remains authorized. For more information regarding the step, see MFOCANCL: Cancel MDF-e [page 221].

After the successful execution of these steps, the process of issuing an MDF-e cancellation is complete.

6.3.2.3 MDF-e Process: Issue of MDF-e

> **Note**
>
> This process is used as of the implementation of MDF-e SAP note 3453629 or NFE SP36.

You can display and control the status of your MDF-es for all listed processes in the MDF-e Monitor (Outbound) [page 227].

The process *MDF-e Process: Issue of MDF-e* (technical name: `MFEISSU2`) consists of the following steps:

Step	Technical Name	Description
1. *Create MDF-e*	`MFOCREAT`	The MDF-e data is validated and transformed into XML. **Note** If the validation or transformation fails, the MDF-e data can be corrected and send again from the feeder system (ERP). The error reason can be displayed by clicking the *Application Log* field in the *Status Overview* of the *MDF-e Monitor*. For more information, see MFOCREAT: Create MDF-e [page 217].
2. *Sign MDF-e*	`MFOSIGNA`	The MDF-e is signed with the certificate of the MDF-e issuer CNPJ. For more information, see MFOSIGNA: Sign MDF-e [page 218].
3. *Authorize MDF-e*	`MFOAUTHO`	This step requests the authorization of an MDF-e. For more information, see MFOAUTHO: Authorize MDF-e [page 216].
4. *Notify Feeder System*	`MFOUPDFS`	The status code is transferred to the feeder system (ERP). For more information, see MFOUPDFS: Notify Feeder System [page 219].

5. *Close MDF-e*	`MFOCLOS`	The processing is not finished and the MDF-e is waiting for the authorization of the close event. This is carried out in a separate process, see MDF-e Events: Closing Event [page 500]. For more information, see MFOCLOSE: Close MDF-e [page 220].

After the successful execution of these steps, the process of issuing an MDF-e is complete.

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6.3.2.4 User Actions for MDF-e Processing

Request Status Check

This action allows the user to trigger an asynchronous MDF-e status check. The response returns the current MDF-e status from SEFAZ. This action is enabled if the status of the process step *Authorize MDF-e* displays an *Error*. This can be caused by the following situations:

- The MDF-e batch process was ended manually (for more information, see User Actions for MDF-e Batch Processing [page 223]).
- The batch process was completed, but the MDF-e was rejected with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 204 -> Rejection: Duplicated MDF-e
  - 999 -> Rejection: Unexpected Error
- The MDF-e status check failed with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 217 -> Rejection: MDF-e does not exist on the SEFAZ database
  - 999 -> Rejection: Unexpected Error

> → Recommendation
>
> Execute the *MDF-e Status Check* (action *Request Status Check*) for all statuses except 217.

Update Feeder System

This action allows the user to finish the MDF-e issuing process in case of an invalid response from SEFAZ and transmit the last status code from SEFAZ (either from batch process or MDF-e status check) to the connected feeder system. This action is enabled if the status of the process step *Authorize MDF-e* displays an *Error*.

Use this action if you perform the *MDF-e Status Check* and receive a rejection, for example, *217* (unknown MDF-e).

→ Recommendation

Execute the *MDF-e Status Check* first (action *Continue Process*) before using the action *Update Feeder System*.

Continue Process

The action allows the user to execute the current/next process step of the issuing process depending on:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

If an error occurred, check the error description in *Status Overview* and solve the problem before using the action *Continue Process*.

You can use this action in step *Authorize MDF-e* for the following situations:

- The MDF-e batch process was ended manually (for more information, see User Actions for MDF-e Batch Processing [page 223]).
- The batch process was completed, but the MDF-e was rejected with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 204 -> Rejection: Duplicated MDF-e
  - 205 -> Rejection: MDF-e is already denied on the SEFAZ database
  - 999 -> Rejection: Unexpected Error
- The MDF-e status check failed with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 217 -> Rejection: MDF-e does not exist on the SEFAZ database
  - 656 -> Improper Consumption (wait at least 3 minutes before trying again)
  - 999 -> Rejection: Unexpected Error

ⓘ Note

If a communication problem (for example, negative acknowledgment) occurred, you can find the corresponding PI message *GUID* in the *History*.

→ Recommendation

If process step *Authorize MDF-e* finished with an error, use the action *Request Status Check* first, before you use the action *Continue Process*.

6.3.2.5 MDF-e Outbound Processing Steps

The following steps are available:

- MFOAUTHO: Authorize MDF-e [page 216]
- MFOCREAT: Create MDF-e [page 217]
- MFOSIGNA: Sign MDF-e [page 218]
- MFOTOBAT: Authorize MDF-e [page 219]
- MFOUPDFS: Notify Feeder System [page 219]
- MFOCLOSE: Close MDF-e [page 220]
- MFOCANCL: Cancel MDF-e [page 221]

6.3.2.5.1 MFOAUTHO: Authorize MDF-e

The step *Authorize MDF-e* (technical name: `MFOAUTHO`) requests the authorization of an MDF-e.

> **Note**
>
> For the processing of the MDF-e authorization, the report `/XNFE/MDFE_SEND` must be scheduled as a background job. For details please refer to Overview of Batch Jobs for MDF-e Outbound [page 85] .

Activation/Deactivation

By default, this step is active and processed automatically. The communication is synchronous.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

CT-e Processing

6.3.2.5.2 MFOCREAT: Create MDF-e

The step *Create MDF-e* (technical name: `MFOCREAT`) receives the complete XML from the feeder system in ABAP structures. The data is validated, transformed to XML and stored on the NFE database tables.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

- Maintain System Response for Own Tax Numbers
- MDF-e: Maintain Connected Authority Systems
- MDF-e: Maintain Version of Message Types

For more information, see Process Settings and Customizing for MDF-e Outbound [page 103].

BAdIs

Change of Logical System (technical name: `/XNFE/BADI_LOGSYS_REPLACE`)

This BAdI enables you to change the original logical system that you received from the feeder system.

For more information, see BAdIs for MDF-e Outbound [page 105].

Usage

MDF-e Outbound Processing

Additional Information

If the document status in the NFE system does not allow to resend and there is a feeder system call, the NFE system writes a history entry.

6.3.2.5.3 MFOSIGNA: Sign MDF-e

The step *Sign MDF-e* (technical name: `MFOSIGNA`) signs an MDF-e (data part) by using the assigned certificate and adds this signature to the already existing XML file.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Maintain System Response for Own Tax Numbers

For more information, see Process Settings and Customizing for MDF-e Outbound [page 103].

BAdIs

BAdI: Signature for Outbound Documents (technical name: `/XNFE/SIGN_CREATE`)

This BAdI enables a synchronous proxy call of an external signature service (through external signature hardware, for example, or an external Web service), to circumvent the standard signature implementation in ABAP.

For more information, see BAdIs for MDF-e Outbound [page 105]

Usage

MDF-e Outbound Processing

6.3.2.5.4 MFOTOBAT: Authorize MDF-e

The step *Authorize MDF-e* (technical name: `MFOTOBAT`) requests the authorization of the MDF-e. Therefore, a batch (different process) is created that sends one or more MDF-es to the government web service for authorization. Every individual MDF-e will be updated with the returned status code inside the batch process. For more information, see MDF-e Batch Processing [page 222].

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant

BAdIs

No BAdIs available.

Usage

MDF-e Outbound Processing

Additional Information

Each MDF-e has a one-to-one assignment to a batch.

A history entry is written when a response message enters the system and the step is no longer the current one.

6.3.2.5.5 MFOUPDFS: Notify Feeder System

The step *Notify Feeder System* (technical name: `MFOUPDFS`) transfers the received SEFAZ status code to the connected feeder system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

- *MDF-e BAdI: Call to Non-SAP Systems via RFC Communication* (technical name: `/XNFE/BADI_MDFE_RFC_EXTERN`)
  The BAdI lets you control the RFC call for communication with the SAP ERP system, to use the electronic communication of MDF-es along with their events with the authorities for non-SAP systems. In the standard settings, the system uses the standard SAP modules to call SAP ERP for RFC communication with the ERP system.

For more information, see BAdIs for MDF-e Outbound [page 105].

Usage

MDF-e Outbound Processing

6.3.2.5.6 MFOCLOSE: Close MDF-e

The step *Close MDF-e* (technical name: `MFOCLOSE`) reflects the status of the close event process in the MDF-e Monitor.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant

BAdIs

No BAdIs available.

Usage

MDF-e Outbound Processing

Additional Information

A history entry is written in case of the response faces a different process step status than *wait*.

6.3.2.5.7 MFOCANCL: Cancel MDF-e

The step *Cancel MDF-e* (technical name: `MFOCANCL`) reflects the status of the cancellation event process in the MDF-e Monitor.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

MDF-e Outbound Processing

Additional Information

A history entry is written in case of the response faces a process step status other than *wait*.

6.3.3 MDF-e Batch Processing

Use

You can display and control the status of your MDF-e Batches for all listed processes in the MDF-e Batch Monitor (Outbound) [page 229].

Process

The process *Send MDF-e Batch* (technical name: `MFEBATSD`) consists of the following steps:

> **Note**
>
> Reports are available for the processing of MDF-e batches that must be scheduled as background jobs. For details please refer to MDF-e Batch Job Planning (Outbound) [page 105].

Step	Technical Name	Description
1. *Create MDF-e Batch*	`MFBATCRE`	During batch creation, exactly one MDF-e is assigned to one batch. For more information, see MFBATCRE: Create MDF-e Batch [page 224].
2. *Send MDF-e Batch*	`MFBATSND`	The batch is sent to authorities asking for authorization of the included MDF-es. Before the batch is sent, the system checks the current service status. The authorities answer with an average time that it took to set the MDF-e status. For more information, see MFBATSND: Send MDF-e Batch [page 225] .

3. *Request MDF-e Batch*	MFBATREQ	The batch request is sent to the authorities and returns the status of the included MDF-e. If the status is missing the first time, the system automatically resends the batch status request. The received status for the MDF-e included in the batch is transferred to the MDF-e process. **Note** If the batch request is not successful due to a technical error, the batch process can be terminated in the MDF-e Batch Monitor and an MDF-e status check on MDF-e level can be carried out manually in the MDF-e Monitor. For more information, see User Actions for MDF-e Batch Processing [page 223]. For more information, see MFBATREQ: Request MDF-e Batch [page 225].

After the successful execution of these steps, the process of sending an MDF-e batch is complete.

User Actions for MDF-e Batch Processing [page 223]

MDF-e Batch Processing Steps [page 224]

6.3.3.1 User Actions for MDF-e Batch Processing

Exit Batch Process

The action allows the user to end the MDF-e batch process and continue the processing in the *MDF-e Monitor* (For more information, see MDF-e Monitor (Outbound) [page 227]. This action is enabled if the status of the last batch process step displays an *Error* depending on the following situations:

- The step *Send MDF-e Batch* failed, because the batch was rejected by SEFAZ with one of the following status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 999 -> Rejection: Unexpected Error
- The step *Request MDF-e Batch* failed, because the MDF-e batch request was rejected by SEFAZ with one of the following status codes:
  - 215 -> Rejection: XML schema validation error
  - 999 -> Rejection: Unexpected Error

Restart

The action allows the user to execute the current/next process step depending on the following situations:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

If an error occurred, check the error description in *Status Overview* and *History*, and solve the problem before using the action *Restart*.

6.3.3.2 MDF-e Batch Processing Steps

The following steps are available:

MFBATCRE: Create MDF-e Batch [page 224]

MFBATSND: Send MDF-e Batch [page 225]

MFBATREQ: Request MDF-e Batch [page 225]

6.3.3.2.1 MFBATCRE: Create MDF-e Batch

The step *Create MDF-e Batch* (technical name: `MFBATCRE`) This step creates a MDF-e batch and assigns MDF-es to this batch.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Number Range for Batches

For more information, see Technical Settings for MDF-e Outbound [page 102].

BAdIs

No BAdI available.

Usage

MDF-e Batch Processing

6.3.3.2.2 MFBATSND: Send MDF-e Batch

The step *Send MDF-e Batch* (technical name: `MFBATSND`) sends the MDF-e batch to the authority for authorization.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

MDF-e Batch Processing

Additional Information

The MDF-e will be updated in this step in case of a rejection of the batch. In this case, the status code and the reason of the batch are propagated to MDF-e level.

6.3.3.2.3 MFBATREQ: Request MDF-e Batch

The step *Request MDF-e Batch* (technical name: `MFBATREQ`) requests the status of the MDF-e batch from SEFAZ.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant.

BAdIs

No BAdI available.

Usage

MDF-e Batch Processing

6.3.4 Monitor MDF-e Outbound

SAP Nota Fiscal Eletrônica (SAP NFE) runs in different components when communicating with regional tax authorities. SAP NFE gives you access to monitors with differing levels of detail to control the communication process and to solve problems.

- The MDF-e Monitor (Outbound) [page 227] displays an overview list of all MDF-es sent individually to government systems, along with all MDF-e-related messages. You can also resend certain messages from the filtered lists in this monitor.
- The MDF-e Batch Monitor (Outbound) [page 229] displays the messages you send to and receive from government systems about the status of MDF-e batches.
- The MDF-e Service Status Monitor (Outbound) [page 232] displays the messages you send to and receive from government systems about government Web service availability.

The monitoring options in SAP Nota Fiscal Eletrônica (SAP NFE) provide you with a single point-of-entry for tracking the communication statuses of MDF-es and the communication process between the NFE application and the authorities' system. In case of communication failures, the NFE monitors allow you to trigger resending and rechecking of MDF-es, batches, and related messages.

MDF-e Monitor (Outbound) [page 227]

Batch Monitor for MDF-e Outbound [page 229]

MDF-e Service Status Monitor (Outbound) [page 232]

6.3.4.1 MDF-e Monitor (Outbound)

The *MDF-e Monitor (Outbound)* is a single point-of-entry for monitoring the document and process status of an MDF-e, as well as for monitoring communication with government systems. It allows you to download the XML files for MDF-es, along with all authorization, cancellation, and closing messages that you are legally required to keep as records. You can also resend messages from this monitor that your system was unable to send due to technical reasons. For more information regarding the MDF-e processes, see MDF-e Processing (Outbound) [page 211].

Queries

- **Overview**
  The *Overview* query lists all MDF-es with their main header data and the status information.
- **Overview Errors**
  The *Overview Errors* query lists MDF-es with errors with their main header data and the status information.

List

Based on your selection criteria, the *MDF-e Monitor* displays a list of MDF-es and their processing status.

The following status icons are used:

- Process Completed; Document successfully processed. This icon represents the following statuses:
  - Status code 99:
    Depending on the MDF-e type, this means:
    - MDF-e authorized (SEFAZ Status Code 132) and authorized close event
    - MDF-e Cancellation authorized (SEFAZ Status Code 101)
  - Status code 98:
    - Process Completed; Document Manually Processed
      The MDF-e is rejected by the government and the feeder system finished the process by accepting the rejection.
- Process completed; MDF-e rejected. This icon represents status 88.
  MDF-e rejected. The processing is finished and you have to send the MDF-e again with corrected data.
- Validation error; action required in calling system. This icon represents status 05.
  The process stopped, because the MDF-e cannot be created due to a validation error. You have to correct this error in your feeder system and resend your MDF-e.
- Process is waiting. This icon represents the following statuses:
  - 11 -> Process waiting for response
  - 12 -> Status check: step waiting for asynchronous response
  - 13 -> Step waiting for external process

  Example: The batch containing the MDF-e has not been sent to the authorities.

- Error in last process step. This icon represents the following statuses:
  - 02 -> Error in last process step
  - 03 -> Technical error in last process step
  - 04 -> Temporary error in last process step

  To correct the error, go to the status overview and check the problem description in the last activity. After correcting the problem, you can continue the process using the action *Continue Process*.
- Process OK. This icon represents status 01.
  The process stopped for the user to carry out necessary actions.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Additional Information

Once you select a line in the displayed table, you receive additional information about this MDF-e at the bottom of the screen:

- **Status Overview**
  This is a description of the process with the corresponding *Status*, *Activity*, *Status Description*, *Info Text* and *Application Log* fields.
- **History**
  This is a description of the history of this MDF-e containing the *Status*, *Activity*, *Status Description*, *Info Text*, *Executed on*, and the *User* fields.
- **Events**
  This is an overview of all events related to this MDF-e. For more detailed information, see Events Embedded in Monitors [page 522].

> **Caution**
>
> The *Events* tab is only visible if there is at least 1 event for an MDF-e.

Actions

- **Select Details:**
  - **Display Details**
    This action displays the XML content in multiple sub-screens. You can also access the MDF-e details by clicking on the access key in the list.
  - **Display XML**
    This action allows you to download/display the MDF-e XML file (if existing).
  - **Cancellation XML**
    This action allows you to download/display the cancellation event XML file (if existing).

- **Continue Process**
  You can select an MDF-e with an error in the MDF-e process and then check the problem description in the last activity. After correcting the problem, you can continue the process using the *Continue Process* action.
- **More Functions:**
  - **Request Status Check**
    This action allows the user to trigger an asynchronous MDF-e status check. The response returns the current MDF-e status from SEFAZ.
  - **Update Feeder System**
    This action allows the user to transfer the last status code from SEFAZ (either from batch process or MDF-e status check) to the connected feeder system.

> **Note**
>
> For more information regarding the available *Actions*, also refer to User Actions for MDF-e Processing [page 214]

MDF-e Details

You can display the content of the XML by choosing an MDF-e's *Access Key*, or by selecting the corresponding line and choosing *Display Details*. The details view displays:

- The processing status of the MDF-e in both your system and the authorities' system
- The content of the XML in several tabs and grouped according to the tags in the XML

Navigation

You can access the MDF-e monitor in SAP NFE via one of the following options:

- You can call up the specific menu *MDF-e Monitor* from the menu derived from the user role `/XNFE/WP_NFE_OUT_MONITOR` *(Menu for Message Monitors),* (or any other role that contains the Web Dynpro application).
- You can navigate to the menu option in the navigation structure of *Message Monitor* in SAP NFE. You can access this option from the user role by choosing *Monitor Outbound MDF-es/Events* > *MDF-e Monitor*.

6.3.4.2 Batch Monitor for MDF-e Outbound

The batch monitor displays the statuses of the MDF-e batches that are sent to the authorities, along with the results of the batch status requests that you have sent to the authorities.

Queries

- **Overview**
  The *Overview* query displays the main header data and status information for all batches you have sent.
- **Overview Errors**
  The *Overview Errors* query displays the main header data and status information for all batches with errors.

List

Based on your selection criteria, the *MDF-e Batch Monitor* displays a list of MDF-e batches and their processing status .

The following status icons are used:

- Process completed; Document successfully processed. This icon represents status 99.
  The MDF-e batch processing finished with no option to continue processing.
- Process completed; This icon represents the following statuses:
  - Status 98: Process manually finished
    The MDF-e batch is finished manually by the user by using the respective action in the monitor.
  - Status 88: Document rejected
    The batch sending or batch request was rejected by the authorities.
- Process is waiting. This icon represents then following statuses:
  - 11 -> Process waiting for response
  - 13 -> Step waiting for external process
- Error in last process step. This icon represents status the following statuses:
  - 02 -> Error in last process step
  - 03 -> Technical error in last process step
  - 04 -> Temporary error in last process step

  To correct this error, go to the status overview and check the problem description in the last activity. After correcting the problem, you can continue the process using the *Continue Process* action.
- Process OK. This icon represents status 01.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Additional Information

Once you select a line in the displayed table, you receive additional information about this MDF-e batch at the bottom of the screen:

- **Status Overview**
  The Status Overview tab displays additional information about the processing steps: *Status*, *Activity*, *Status Description*, *Info Text*, and *Application Log*.
- **History**
  The history tab displays the following additional information: *Status*, *Activity*, *Status Description*, *Info Text*, *Executed On*, and *User*.

Actions

- **Details**
  The batch details are displayed. You can also access the batch details by clicking the *Batch Number* in the list.
- **Restart**
  You can select an MDF-e Batch with an error and check the problem description in the last activity. After correcting the problem, you can restart the process using the action *Restart*.
- **Finish Batch Process**
  You can select an MDF-e Batch with an error and check the problem description in the last activity. If you cannot correct the problem, for example due to technical problems with the SEFAZ system, you can end the batch process using the action *Finish Batch Process*. This finishes the batch process and sets the status of the `Check Authorization` step of every MDF-e in the batch to *Error*. The new status for every individual MDF-e of the batch allows you to continue the MDF-e process in the *MDF-e Monitor*. To receive a valid status from SEFAZ, the MDF-e status check requests a status for every individual MDF-e.

> ⚠ Caution
>
> By ending the batch processing, an MDF-e status request is only possible via MDF-e status check. The MDF-e process step `Check Authorization` is set to *Error* and has to be restarted **manually** in the *MDF-e Monitor*. If the MDF-e is unknown to the government system, the user has to decide to send the MDF-e to SEFAZ for authorization, or update the feeder system (ERP) with the current SEFAZ status.

> ⓘ Note
>
> For more information regarding the available *Actions*, also refer to User Actions for MDF-e Batch Processing [page 223]

Batch Details

You can display the details of a specific batch by choosing the *Batch Number* or by selecting its line and choosing *Details*. The details view displays:

- The processing status of the batch in both your system and the authorities' system
- Batch header data
- A list of the individual MDF-es in the batch with their most important header data

Navigation

You can access the *MDF-e Batch Monitor* in SAP Nota Fiscal Eletrônica (SAP NFE) by using one of the following options:

- Call up the specific menu *MDF-e Batch Monitor* from the user role `/XNFE/WP_NFE_OUT_MONITOR` *(Outgoing User Menu)*.
- You can navigate to the menu option in the navigation structure of *Message Monitor* in SAP NFE. You can access this option from the user role by choosing *Monitor Outbound MDF-es/Events* > *MDF-e Batch Monitor*.

6.3.4.3 MDF-e Service Status Monitor (Outbound)

Each company is required to regularly check the authorities' system availability at a defined interval. You use this status information to determine if you must start the contingency process in the feeder system SAP ERP manually in order to process your goods movement invoices in a timely fashion.

This monitor displays the result of the communication between the NFE system and the web service to check the availability of the connected government system. The web service is called via a batch job, for more information see MDF-e Batch Job Planning (Outbound) [page 105]. The service status indicates the authorities' system availability.

Configuration

You configure the service status check request using the following two options:

- In Customizing activity *MDF-e: Define Request for Service Status of Authority (SEFAZ)* . For additional information, see Process Settings and Customizing for MDF-e Outbound [page 103].
- In the current settings transaction *MDF-e: Define Request for Service Status of Authority (SEFAZ)* of the administrator role.For additional information, see Administration [page 524].

List

Based on your selection criteria, the *MDF-e Service Status Monitor* displays a list of service status requests and their processing status.

The following status icons are used:

- Processing Completed Error-Free with the following SEFAZ status codes:
  - 107 -> Service is available
  - 113 -> Service is available until a given point in time
- Processing Completed with Error
  This error is either due to communication error or a negative status code from SEFAZ.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Navigation

You can access the *MDF-e Service Status Monitor* in SAP NFE by calling up the *Message Monitor* menu and then *MDF-e Service Status Monitor*.

7 Inbound

The Inbound of SAP Nota Fiscal Eletrônica has the following scope:

To automate and monitor the receipt of NF-e, CT-e and Events, to check the authorization against government systems, and trigger posting of documents in ERP.

The Inbound of SAP Nota Fiscal Eletrônica consists of the following:

Business Roles [page 234]

NF-e Inbound [page 235]

CT-e Inbound [page 371]

DF-e Gate Monitor [page 418]

7.1 Business Roles

- **NF-e Fiscal Clerk**
  The work of the NF-e fiscal clerk combines the activities of a tax accountant with those of a clerk who verifies and processes logistics invoices. Incoming notas fiscais are verified for correctness by comparing the document line items with what was expected, based on, for example, purchase orders. The fiscal clerk also checks the correctness of the applied taxes and verifies the quantities that are physically delivered. Finally, upon acceptance, the fiscal clerk posts the NF-e accounting. With respect to handling NF-es, the fiscal clerk must verify:
  - The correctness of received NF-es (the XML documents), including their SEFAZ authorization status
  - The correctness of received DANFEs (Documento Auxiliar da NF-e) by comparing them with corresponding NF-es
  - The correctness of all values, especially tax amounts, by comparing them with, for example, the values on corresponding purchase orders
  - The correctness of delivered quantities as reported by inbound delivery processing

  The NF-e fiscal clerk works in the *NF-e Fiscal Workplace* when processing incoming NF-es.
- **CT-e Fiscal Clerk**
  The CT-e fiscal clerk must verify the correctness of the received CT-es (the XML documents), including their SEFAZ authorization status.:
  The CT-e fiscal clerk works in the *CT-e Fiscal Workplace* when processing incoming CT-es.
- **NF-e Logistics Clerk**
  The NF-e logistics clerk is responsible for handling physical goods receipts. This includes:
  - Counting or measuring received quantities
  - Assigning the goods to appropriate storage locations

  The NF-e logistics clerk works in the *NF-e Logistics Workplace* when tracking the differences (if any exist) between the physical quantities received and the quantities listed on the DANFE.

> **Note**
>
> The fiscal clerk and the logistics clerk user roles should have separate authorizations. However, certain fiscal authorizations may encompass existing logistics authorizations (and the other way around), as when, for example, the fiscal clerk also works as a logistics invoice verifier, or when the logistics clerk also works as a logistics execution or inventory manager.

- **NF-e Administrator**
  The NF-e administrator is a user with administration rights. This role has access to all features of the NFE solution and is able to manage authorizations, profiles, and users. The NF-e administrator works in the *Administration* workplace, and normally also has at least display authorization for the *NF-e Fiscal Workplace*, the *CT-e Fiscal Workplace*, and the *NF-e Logistics Workplace*.

  > **Note**
  >
  > The NF-e Administrator should at least have display authority for the intended workplace.

- **DF-e Gate Control**
  DF-e gate control is carried out by a user who is responsible for the entrance check of a shipment (multiple NF-es and CT-es) at the company gate. Depending on the multiple statuses of the NF-es/CT-es, the user decides if a shipment can enter the company grounds.
  The DF-e Gate Control user works in the *DF-e Gate Monitor* to check incoming shipments.

7.2 NF-e Inbound

The NF-e Inbound of SAP Nota Fiscal Eletrônica has the scope to manage and automate the receipt of electronic invoices received from business partners.

> **Note**
>
> If you are using a S4/HANA feeder system, material numbers longer than 18 digits are not supported.

NF-e inbound consists of the following topics:

- Business Process Determination for NF-es [page 237]
  - Business Process Determination by CFOP Codes and Position Types [page 238]
  - Business Process Determination for Special Scenarios [page 240]
- Returnable Packaging [page 241]
  - Processing in SAP ERP: Returnable Packaging with Purchased Goods [page 242]
- NF-e Process Settings [page 243]
- Preprocessing Inbound NF-es [page 244]
- Processing Inbound NF-es [page 246]
  - NF-e Process Normal Purchasing [page 246]
    - Processing in SAP ERP: Normal Purchasing [page 248]
  - NF-e Contingency Process [page 253]
    - Processing in SAP ERP: Contingency [page 254]
  - NF-e Cancellation Process [page 254]

        - Processing in SAP ERP: Cancellation [page 257]
    - NF-e Without Business Process Assignment [page 257]
    - NF-e for Other Processes without DANFE [page 258]
        - Communication with SAP ERP for Other Processes [page 259]
    - NF-e for Other Processes with DANFE [page 259]
        - Communication with SAP ERP for Other Processes [page 259]
    - NF-e Stock Transfer Process [page 260]
        - Processing in SAP ERP: Stock Transfer [page 262]
    - Customer-Specific Business Process with DANFE [page 263]
    - NF-e Sucontracting Overview [page 264]
        - NF-e Subcontracting Process [page 265]
            - Processing in SAP ERP: NF-e for Subcontracting (SUBCON1A) [page 267]
        - NF-e for Symbolic Returns [page 269]
            - Processing in SAP ERP: NF-e for Symbolic Returns (SUBCON2C) [page 270]
        - NF-e for Returns of Components [page 271]
            - Processing in SAP ERP: NF-e for Return of Components (SUBCON2D) [page 272]
    - NF-e Future Delivery Overview [page 273]
        - NF-e Invoice Receipt Future Delivery Process [page 274]
            - Processing in SAP ERP: Future Delivery Invoice [page 275]
        - NF-e Goods Receipt Future Delivery Process [page 276]
            - Processing in SAP ERP: Future Delivery Goods Receipt [page 278]
    - NF-e Consignment Overview [page 279]
        - NF-e Goods Receipt Consignment Process [page 281]
            - Processing in SAP ERP: Consignment Goods Receipt [page 282]
        - NF-e Invoice Consignment Process [page 284]
            - Processing in SAP ERP: Consignment Invoice [page 285]
    - Preprocess for NF-e with EPEC Event [page 287]
    - NF-e Inbound Processing Steps [page 288]
- BAdIs for Inbound NF-es [page 116]
- NF-e Fiscal Workplace [page 346]
    - NF-e Fiscal Workplace: Assignment [page 350]
        - Assignment for Normal Purchasing and Future Delivery Invoice [page 351]
        - Assignment for NF-e for Subcontracting (SUBCON1A) [page 353]
        - Assignment for NF-e for Symbolic Returns (SUBCON2C) [page 354]
        - Assignment for Future Delivery Goods Receipt (FUTDELGR) [page 356]
    - NF-e Fiscal Workplace: Simulating NF-es [page 357]
    - NF-e Fiscal Workplace: Recording DANFEs [page 359]
    - NF-e Fiscal Workplace: Checking Goods Receipt Quantities [page 360]
- NF-e Logistics Workplace [page 360]
    - NF-e Logistics Workplace: Entering Goods Receipt Quantities [page 362]
    - NF-e Logistics Workplace: Preparing Goods Receipt Postings [page 364]
- Receiver Acknowledgment (Manifestação do Destinatário) [page 364]

- Receiver Acknowledgment Events [page 365]

  For additional information, also refer to DF-e Distribution Request Monitor [page 532]
- Dashboards for Inbound NF-es [page 368]
- NF-e Reporting [page 369]
  - Reporting for Rejected NF-es [page 369]
  - NF-es with correct/incorrect Assignment in the XML [page 370]

> **Note**
>
> Also see: Administration [page 524]

Business Process Determination for NF-es [page 237]

Returnable Packaging [page 241]

NF-e Process Settings [page 243]

Preprocessing Inbound NF-es [page 244]

Processing Inbound NF-es [page 245]

NF-e Fiscal Workplace [page 346]

NF-e Logistics Workplace [page 360]

Receiver Acknowledgment (Manifestação do Destinatário) [page 364]

Dashboards for Inbound NF-es [page 368]

NF-e Reporting [page 369]

7.2.1 Business Process Determination for NF-es

The content of the NF-e determines which business process has to be used to carry out the necessary processing steps. The document is automatically analyzed to evaluate the relevant control parameters to assign the business process accordingly.

For NF-e model *55*, the business processes are determined based on the CFOP codes assigned to the NF-e items if the destination is a CNPJ belonging to your company (For more information, see Business Process Determination by CFOP Codes and Position Types [page 238]).

In some cases, postings in ERP are not supported and instead of the CFOP-based business process determination one of the following processes is assigned:

NF-e Without Business Process Assignment (technical name: `BUPRODET`) is set if at least one of the following conditions is met:

- The NF-e model is not `55`
- The destination CNPJ is not one of your own tax numbers
- The *Issuing Function* (from XML tag `finNFe`) is **complementary** or **adjustment**
- The CFOP code is missing in one of the XML items

For more information, see NF-e Without Business Process Assignment [page 257].

NF-e for Other Processes with DANFE (technical name: `SIGNAUT2`) is set if:

- Instead of the `emit` tag, the `avulsa` tag (Emissão de avulsa) is provided and the access key of the NF-e contains the SEFAZ CNPJ.

NF-e for Other Processes without DANFE (technical name: `SIGNAUTH`) is set if:

- No customizing entries found for CFOP based business process determination
  For more information, see NF-e for Other Processes without DANFE [page 258].

> **Note**
>
> Other processes are available if the NF-e is created in the Fiscal Workplace without having the full XML. For more information, see Preprocessing Inbound NF-es [page 244].

> **Note**
>
> You can overwrite the standard process determination by using the BAdI *NF-e BAdI: Determine Business Process*. For more information, see BAdIs for NF-e Inbound [page 116].

> **Note**
>
> If no normal business process could be assigned and the system assigned *NF-e for Other Processes without DANFE* or *NF-e Without Business Process Assignment* you can use report `/XNFE/DET_NEW_PROC_AND_EXECUTE` to trigger a new business process determination after checking Customizing.

Business Process Determination by CFOP Codes and Position Types [page 238]

Business Process Determination for Special Scenarios [page 240]

7.2.1.1 Business Process Determination by CFOP Codes and Position Types

Business Process Determination by CFOP Codes

The content of the incoming legal document determines which business process has to be used to carry out the necessary processing steps. The document is automatically analyzed to evaluate the relevant control parameters to assign the business process accordingly. This business process assignment is carried out regarding the used Customizing settings. For special cases, a the NFE system assigns a certain process type.

The business processes are determined based on the CFOP codes that are assigned to the NF-e items. If the CFOP code does not enable identification of a unique business process, the NF-e is assigned to NF-e Without Business Process Assignment [page 257] .

If you you receive an NF-e of type **AVULSA-NF-e**, the process NF-e for Other Processes with DANFE [page 259] is assigned as default process.

The content based business process determination deals with the handling of several CFOPs. It is necessary to determine the business process type to be assigned to the incoming legal document. In the case of the Nota Fiscal eletrônica, the business process determination depends mainly on the CFOP code which is defined by the Brazilian authorities and describes the type of business transaction.

Maintain your settings as described in Customizing under *Nota Fiscal Eletrônica* > *Inbound* > *NF-e: Maintain Business Process Determination for Inbound NF-es*.

Example

CFOP	Process Type
5102	NF-e for standard purchase order
5101	NF-e for standard purchase order
1101	NF-e for Subcontracting

When an NF-e - in which all items have CFOP 5101 or 5102 - is processed, the *NF-e for Standard* process is executed. When an NF-e whose CFOPs do not lead to a unique process type (such as 5101 or 1101) is processed, an error occurs. You have to correct this inconsistency in Customizing, after which you can determine the business process again with menu path *Administration* > *Incoming NF-es* > *Redetermine Business Process*. When an NF-e - that contains only CFOPs that are not defined in its items - is processed, then a predefined process is executed. If you do not want this to happen, the administrator can also start a redetermination through the report, in this case after adjusting the Customizing settings.

Position Types

The introduction of more and more processes made position types necessary. The position types are stored in domain `/XNFE/ITEMTYPE` as fixed values.

The system table `/XNFE/ITEMCAT` categorizes the position types according to their relevance in the business process determination. If several position types exist in an NF-e, then only the position types with the lowest number are considered during the business process determination.

Position Type	Description	Priority
<Blank>	Main Position	1
RTP	Returnable Packaging	9
SRE	Symbolic Return Subcontracting Component	2
PRE	Return Subcontracting Component	2

Determination of the position type of an incoming NF-e is controlled in Customizing under *Nota Fiscal Eletronica* > *Inbound* > *Maintain Assignment of Position Type to CFOP Code*. Table `/XNFE/CFOPCAT` contains the assignment of CFOP codes to position types. If no entry exists in the table, then the NF-e position receives the position type *blank* and is therefore seen as a main position.

System table `/XNFE/PROCITEM`: Assignment of process type to allowed position type: This table stores the position types allowed for a process type. If the NF-e contains a combination that is not allowed, then the NF-e reports an error.

Process Determination Considering the Position Types

The business process determination considering position types is carried out in four steps:

1. Defining of the position types, which represents the meaning of the CFOP code, such as main position, or symbolic return of subcontracting components
2. Prioritizing the position types for the business process determination.
3. Defining the allowed combinations for process type and position type.
4. Creating a customizing table to assign the CFOP codes to the position types.

If the position type in one of the items is not allowed for the process, `SIGNAUTH` or `SIGNAUT2` is assigned.

Example

In subcontracting cases, the NF-e can contain a final product (= main item) and the subcontracting components (= symbolic return). To determine the correct business process, the entries must be maintained for the final product and the subcontracting components, to enable assignment of the corresponding item categories:

CFOP	Position Type
5124	Main Item
5902	Symbolic Return of subcontracting component

If an NF-e contains 5124 and 5902, then 5124 receives the higher priority. Therefore, the process *NF-e for Subcontracting* is determined. For an NF-e that only contains 5902, the process *Symbolic Return* is determined.

7.2.1.2 Business Process Determination for Special Scenarios

Some processes are not assigned via process determination due to the fact that the full XML document has not arrived yet. The following scenarios are available and have fixed processes assigned to them:

- *DANFE Arrive before XML* (technical name: `DANWOXL`)
  For more information, see NF-e Contingency Process [page 253].
- *Preprocess for NF-e with EPEC Event* (technical name: `PREPEPEC`)
  For more information, see Preprocess for NF-e with EPEC Event [page 287].
- *Summary of denied NF-e* (technical name: `PPSUMDEN`)
  For more information, see Preprocessing Inbound NF-es [page 244].
- *Preprocess for NF-e Summary* (technical name: `PREPSUM`)
  For more information, see Preprocessing Inbound NF-es [page 244].
- *NF-e Cancellation If Event Before NF-e* (technical name: `CANCL02`)
  For more information, see NF-e Cancellation Process [page 254].

7.2.2 Returnable Packaging

Use

A vendor places the purchased good into/on a package that must be returned (for example, pallets and barrels). A customer receiving these returnable packages (RTP) must include them in their inventory at no value until it is returned to the vendor. RTP is not invoice relevant, but has special stock and unique movement types.

> **Note**
>
> RTP items can be identified by their CFOP code which is different to other position types. For more information about position types, see Business Process Determination by CFOP Codes and Position Types [page 238].

Process

There are two different processes for RTP: Same and Single

- **Same**
  Same is when the vendor includes an item for the purchased goods in the same NF-e, and another item for the RTP. Example: My company issues a purchase order with one item (for example, oil). The vendor issues an NF-e with two items: oil and barrel (RTP)
- **Single**
  Single is when the vendor issues separate NF-es for the purchased goods and for the RTP. In our example for the oil business, a vendor would issue an NF-e for the oil and another one for the barrel.

NFE only offers *RTP same*. This means that the NF-es used in the processes are extended by RTP positions.

Processes with RTP Positions

Process	Technical Name
Normal Purchasing [page 246]	NORMPRCH
Subcontracting [page 265]	SUBCON1A
Future Delivery [page 276]	FUTDELGR
Consignment [page 281]	CONSIGGR
Customer-Specific Business Process with DANFE [page 263]	FLEXPRO1
Other Processes without DANFE [page 258]	SIGNAUTH
Other Processes with DANFE [page 259]	SIGNAUT2

Processing in SAP ERP: Returnable Packaging with Purchased Goods [page 242]

7.2.2.1 Processing in SAP ERP: Returnable Packaging with Purchased Goods

Use

To automatically process the information in the incoming NF-e for purchased goods and returnable transport packaging (RTP) that are shipped together and create the follow-on documents, SAP Nota Fiscal Eletrônica communicates with your SAP ERP system and vice versa. The processing of RTP is supported for the following purchasing processes:

- Normal purchasing
- Subcontracting (receipt of end product with or without subsequent adjustment)
- Future delivery goods receipt

In these processes, when your SAP ERP validates the purchase order for the purchased goods, the system maps the material number in the XML for the RTP items to the ERP material. By default the mapping is done using vendor info records. Alternatively, you can implement your own logic to do this mapping in the *Convert Material from XML into ERP Material* (`MATERIAL_CONVERSION`) method of the *Conversions for Incoming NF-e Automation* (`J_1BNFE_IN`) Business Add-In (BAdI). In addition, the system converts the UoM and quantity in the XML to the UoM and quantity in ERP.

This documentation focuses on the RTP-specific communication and processing that occurs during the following steps of the purchasing process:

- Create Inbound Delivery
- Post Goods Receipt and NF-e

For information about the standard communication and processing in all steps of the incoming process, see Processing in SAP ERP: Normal Purchasing [page 248].

Features

Create Inbound Delivery

SAP Nota Fiscal Eletrônica sends the following additional data about the RTP items to your SAP ERP system:

- ERP material number
- Quantity
- Unit of measurement (UoM)

When your SAP ERP system creates the inbound delivery, it does the following for the RTP items:

- Creates delivery items for the RTP materials with the delivery type that is mapped to the movement type for the Purchased Goods with RTP process (for example, 841) in your SAP ERP Customizing
- Sets the special stock indication to `M` for the RTP delivery items
- Uses the same plant for the RTP delivery items as the plant from the purchased goods if there is only one plant for the whole delivery. If there is more than one plant for the purchased goods, the system uses the first plant listed for the purchased goods a the plant for the RTP delivery items.

- Uses the same storage location for the RTP delivery items from the purchased goods if there is only one storage location for the whole delivery. If there is more than one, the system leaves the storage location for the RTP delivery items blank.
  Note that it is also possible to implement your own logic for assigning the storage location in the inbound delivery in the *Change Storage Location and Valuation Type in Inbd Delivery* (`CHANGE_SLOC_AND_VALTYPE`) method of the *Conversions for Incoming NF-e Automation* (`J_1BNFE_IN`) Business Add-In (BAdI).

Post Goods Receipt

When your SAP ERP system posts the goods receipt, it does the following for the RTP items:

- Checks that the inbound delivery still contains all RTP items in the XML and that their quantities have not been changed. If the RTP items have changed, your SAP ERP system sends an error message to SAP Nota Fiscal Eletrônica.
- Stores the final price for the RTP items from the XML (= price + freight + insurance + other expense – discount) in the *Alternate Base Amount* field on the *Tax* tab page of the goods receipt. This information is later included in the NF item details for the RTP items when the NF-e is posted:
  - For normal purchasing and subcontracting, the system creates the NF-e with the invoice.
  - For future delivery – goods receipt, it is created during goods receipt posting.

Your SAP ERP system sends the material document number and the year to SAP Nota Fiscal Eletrônica. If the goods receipt cannot be posted, an error message is returned.

7.2.3 NF-e Process Settings

Step Automation

Step table `/xnfe/procstep` gives an overview of the process steps and their default settings. The following settings are possible:

- FLAG_MANUAL
  This step can be carried out manually.
- FLAG_AUTO
  This step can be carried out automatically.
- FLAG_ERP
  This step issues a call to the ERP system. This means that this step cannot be deactivated.
- FLAG_MANDATORY
  This step is required by the NFE system and cannot be deactivated.

Example

Process Step	PROCSTEPIMPL	Flag MANUAL	Flag AUTO	Flag ERP	Flag MANDATORY
ACCNOTIF	Notification XML accepted		x		

AUTHORIZ	Check Authorization After NF-e Receipt		x		
POASSIGN	Assign Purchase Order Items	x	x	x	x
RECDANFE	Goods Arrived, Enter DANFE	x			
SIGNATUR	Check Business Partner's Signature		x		

Maintain Control Parameters for Process Flow

You can influence the behavior of process steps via settings in Customizing. For a more detailed description, see the documentation in Customizing under: *Nota Fiscal Eletronica* > *Incoming* > *Define Control Parameters for Process Steps*.

7.2.4 Preprocessing Inbound NF-es

Use

There are 2 inbound processes for documents coming from the distribution service of the authorities (Distribucao). Depending on the data delivered by the distribution service, the following processes are used:

Process

1. *Preprocess for NF-e Summary* (technical name `PREPRSUM`)
   You received an entry of the type `NFE_SUM` with an approved authorization (`cSitNFe`=1). After the successful preprocessing, you receive the complete XML document from the authorities which will then be processed as usual.
   This process consists of three steps:
   1. *Create NF-e* (technical name: `CREATNFE`)
      This step creates an NF-e using the received data from the authorities.
   2. *Validate NF-e from Distribution Service* (technical name: `VALIDATE`)
      This step decides whether the process continues - in which case the *Operation Acknowledgment* event is issued - or whether the process is ended at this point. This step runs either automatically (using the BAdI `BADI_XML_DOWNLOAD`), or manually depending on your settings in Customizing (see Customizing activity *Maintain Control Parameters for Process Flow*).
   3. *Send Acknowledgment Event* (technical name: `SENDACKN`)
      This step issues an *Operation Acknowledgment Event* to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Acknowledgment Event*.

> **Note**
>
> The final result of this preprocessing is to receive the XML from the authorities and to continue the processing in one of the standard inbound processes.

> **Note**
>
> For ending the preprocess, you can use the action *Manually End NF-e* under *Additional Functions*. In this case, you do not receive the XML from the authorities. However, you can still receive it from your business partner.

2. *Summary of Denied NF-e* (technical name `PPSUMDEN`)
   You received an entry of the type `NFE_SUM` with a denied authorization (`cSitNFe`=2). This document is stored on the database and can be displayed in the Fiscal Workplace. No further processing takes place. This process consists of one step:
   1. *Create NF-e* (technical name: `CREATNFE`
      This step creates an NF-e using the available data.

The processing is complete after this step.

7.2.5 Processing Inbound NF-es

Use

Every NF-e is processed using a business process. These business processes consist of several steps that are executed in sequence. If a step was carried out successfully, the process continues with the next step. If the steps returns an error, a user action is required. If a step results in a temporary error, an automatic retry can be executed (for more information, see Batch Job Planning for NF-e/CT-e Inbound [page 116]). If that retry does not solve the problem, the step eventually goes to status *Error* and requires a user action. If a step results in status *Wait*, then it is waiting for an asynchronous external response from the authorities, business partner, or ERP system.

You can end the process manually by using the actions:

- *Rejection*
  Process Completed; NF-e Rejected.
- *Completion*
  Process Completed; NF-e manually ended and processed successfully.

This can be done, for example, via manual actions in your ERP system, or an action in the *Fiscal Workplace* (For more information, see NF-e Fiscal Workplace [page 346]).

Overview

Status Icon	Status	Description	Next Action
	OK	Step carried out successfully	Continue with next step: User input required
	Error/Technical Error	Step stops	User input for correction of error required

	Temporary Error	Step stops	Automatic retry first: If that does not solve the problem, a user input is required
	Wait	Step stops	Waiting for asynchronous response

Procedure

The correct business process for every individual NF-e must be determined by the system before processing. For more information, see: Business Process Determination for NF-es [page 237]

For detailed descriptions of the business processes, see:

- NF-e Process Normal Purchasing [page 246]
- NF-e Contingency Process [page 253]
- NF-e Cancellation Process [page 254]
- NF-e Without Business Process Assignment [page 257]
- NF-e for Other Processes without DANFE [page 258]
- NF-e for Other Processes with DANFE [page 259]
- NF-e Stock Transfer Process [page 260]
- Customer-Specific Business Process with DANFE [page 263]
- NF-e Subcontracting Overview [page 264]
- NF-e Future Delivery Overview [page 273]
- NF-e Consignment Overview [page 279]
- Preprocess for NF-e with EPEC Event [page 287]
- NF-e Inbound Processing Steps [page 288]

7.2.5.1 NF-e Process Normal Purchasing

Use

The process *NF-e for Normal Purchasing* creates the inbound delivery and triggers the goods receipt posting in the connected ERP system. Finally, the invoice receipt is posted to the ERP system and the NFE system receives the result of the invoice receipt from the ERP system.

Process

The process *NF-e for Normal Purchasing* (technical name: `NORMPRCH`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`SIGNATUR`	This step checks the signature of the received NF-e and if the calculated digest value matches the value in the XML. For more information, see SIGNATUR [page 343]
2. *Check Authorization After NF-e Receipt*	`AUTHORIZ`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHORIZ [page 295].
3. *Validation for Normal Purchasing*	`NPURVALD`	This step validates items of type RTP in the assignment table. For more information, see NPURVALD [page 329].
4. *Assign Purchase Order Items*	`POASSIGN`	An NF-e item is automatically assigned to the PO from the received XML and the ERP and NFE systems check if the assignment is complete. For more information, see POASSIGN [page 335].
5. *Simulate Invoice and NF-e*	`NFESIMUL`	This step simulates the invoice posting with the current assignments using XML data, tax code, and CFOP. For more information, see NFESIMUL [page 327]
6. *Generate Inbound Delivery*	`DELCREAT`	This step creates the inbound delivery in the connected ERP system. For more information, see DELCREAT [page 305]
7. *Notification XML Accepted*	`ACCNOTIF`	This step sends an email notification to the business partner that the processing of the NF-e XML was successful and the goods can be send. For more information, see ACCNOTIF [page 290].
8. *Enter DANFE*	`RECDANFE`	The vendor sends the goods, together with the DANFE, to the company, and the goods arrive at the company. For more information, see RECDANFE [page 336].
9. *Check Authorization After DANFE Receipt*	`AUTHGRPT`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHGRPT [page 294].
10. *Enter Goods Receipt Quantities*	`GRCONFQU`	The logistics clerk counts the quantities. By default, the quantities in the NF-e are used as the reference point. If counted quantities deviate from the default values, the logistics clerk can overwrite and enter other quantities. For more information, see GRCONFQU [page 315].
11. *Check Goods Receipt Quantities*	`GRFICHCK`	The fiscal clerk compares the quantities from the NF-e with the received quantities and confirms the results. For more information, see GRFICHCK [page 316].

12. *Prepare Goods Receipt Posting*	GRMMCHCK	The logistics clerk confirms that all preparations are complete and that the goods receipt can be posted. For more information, see GRMMCHCK [page 317].
13. *Posting Goods Receipt*	GRPOSTNG	This step triggers the goods receipt posting in the connected ERP system. For more information, see GRPOSTNG [page 318].
14. *Post Invoice and NF-e*	IVPOSTNG	The invoice receipt is posted to the ERP system. The NFE system receives the result of the invoice receipt from the ERP system. For more information, see IVPOSTNG [page 322].
15. *Create Operation Confirmation Event*	SENDOPCO	This step issues an *Operation Confirmation Event* to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Confirmation Event*. For more information, see SENDOPCO [page 341].

Processing in SAP ERP: Normal Purchasing [page 248]

7.2.5.1.1 Processing in SAP ERP: Normal Purchasing

Use

To automatically process the information in an incoming NF-e and create the follow-on documents, SAP Nota Fiscal Eletrônica communicates with your SAP ERP system and vice versa. This communication occurs during the following steps in the incoming process:

- Assign Purchase Order Items
- Simulate Invoice and NF-e
- Generate Inbound Delivery
- Post Goods Receipt
- Post Invoice and NF-e

The two systems also exchange information in the following special situations:

- The issuer shipped the goods when the company was operating in contingency mode. In this case, the goods and the DANFE arrive at your site before the XML for the incoming NF-e.
- An incoming NF-e is canceled by the issuer and you have not yet started the goods receipt process.

The data that is exchanged between the two systems is explained in more detail in the following documentation.

ERP Documents

- **Vendor**
  - Sales Order with Reference to Purchase Order
  - Outbound Delivery
  - Goods Issue

- Billing Document
- Outbound NF-e created out of the Billing Document

- **Buyer**
  - Purchase Order
  - Inbound Delivery
  - Material Document Goods Receipt
  - Invoice
  - Inbound NF-e created out of the Invoice

Prerequisites

- You have set up the RFC connection between SAP Nota Fiscal Eletrônica and your SAP ERP system. For more information, see Technical Settings in Core Application (Inbound) [page 108].
- You have completed the necessary Customizing settings in your SAP ERP system. For more information, see Related Configuration in SAP ERP [page 123].

Features

Assign Purchase Order Items

At several points during this process step, the two systems exchange information as follows:

Find Purchase Order Items

If the XML for the incoming NF-e does not contain any purchase order details, you can trigger a search to find the corresponding purchase order items in your SAP ERP system.

- Item-Based Search
  - Find purchase order: You can enter a purchase order number (required) and the purchase order item number (optional) to trigger a specific search.
  - Extended search: Your SAP ERP system uses the CNPJ numbers and material numbers from the incoming XML to find possible purchase orders with the equivalent material number in your SAP ERP system. You can limit this search by entering a range for the date on which the purchase order was created or the date of the corresponding inbound delivery. The system then uses the value for the NCM code to filter the list of possible matches (if any).

    > **Note**
    >
    > A fuzzy search is only available for the ERP Mat. No. and the Vendor Prod/Serv Code fields. If you make (or change) an entry in any of the other search fields, you must enter the entire value. Do not enter * or a partial value.

- Global Search
  - Find purchase order item by purchase number: You can enter a purchase order number directly to receive all related purchase order items.

- Find purchase order: You can use the input help to receive a list of purchase order numbers. Select one entry to receive all related purchase order items. Your SAP ERP system uses the CNPJ numbers from the incoming XML to find possible purchase orders in your SAP ERP system. You can limit this search by entering a range for the date on which the purchase order was created or the date of the corresponding inbound delivery.

If your SAP ERP system finds a possible match, it sends the relevant data to SAP Nota Fiscal Eletrônica for purchase order items that have not been delivered or deleted. You can then select the correct items.

Validate Purchase Orders

After the items in the XML are assigned to purchase order items, SAP Nota Fiscal Eletrônica needs to validate this information by comparing it with the purchase order data in your SAP ERP system. Your SAP ERP system searches for the purchase order number in its database and when it finds a match, checks the quantities as follows:

1. Confirms that the unit of measurement (UoM) in the incoming NF-e exists in the SAP ERP system
2. Converts the UoM of the quantity in the incoming XML according to the settings you made in your SAP ERP system
3. Provides SAP Nota Fiscal Eletrônica with the ISO code mapped to the UoM

In addition, the system checks whether the recipient's CNPJ in XML is the same as the CNPJ of the business place that is linked to the purchase order.

> **Note**
>
> The system supports the assignment of multiple NF-e items to the same purchase order item. This feature is not supported if the purchase order item has multiple accounts assignment.

Simulate PO Items

Once the assignment to the purchase order items is made and validated, you can trigger a simulation using the price from the purchase order and the quantity from the incoming XML data. Your SAP ERP system simulates the NF-e posting and returns the simulation results for you to check.

If needed, you can overwrite the tax codes or CFOP codes proposed by the system and run the simulation with different selections. Your SAP ERP system selects the tax codes and CFOP codes as follows:

- Select tax codes: To create the simulation, your SAP ERP system uses the tax codes for each purchase order item in the purchase order as the default values for tax codes in the NF-e. However, you can overwrite these default values using a list of possible tax codes that are proposed by your SAP ERP system. The SAP ERP system proposes the allowed tax codes based on a check of the material usage and tax type (input/output tax) for each purchase item.
- Select CFOP codes: To create the simulation, your SAP ERP system uses the CFOP codes defined in Customizing as the default values in the NF-e. However, you can overwrite these default values using a list of all possible CFOP codes for the region and date that are proposed by your SAP ERP system and filtered by SAP Nota Fiscal Eletrônica.

Simulate Invoice and NF-e

To check if the invoice and NF-e can be posted once the goods arrive, you can run a simulation of the invoice and NF-e posting in your SAP ERP system. Your SAP ERP system uses the prices and NF-e data from the incoming XML and the assigned purchase order items to simulate the prices and taxes.

During the simulation, the system makes several checks:

- Standard checks that are also made when such a posting is made using the MIRO transaction. These include, for example, tolerance checks and a balance check.
- NF-e Issuer's CNPJ checks between the data in the XML and the master data of vendor or of the invoicing party in the purchase order.
- Tax comparison checks between the data in the XML and the tax codes and Customizing settings in your SAP ERP system. The following is checked:
  - ICMS rate
  - IPI rate
  - ICST rate

Note that there is no tax comparison for PIS and COFINS, because incoming PIS and COFINS are posted according to the settings in SAP ERP, which can differ from the values in XML.

> **Note**
>
> You can add your own checks by implementing the *Check XML for Invoice* (`CHECK_INVOICE`) method in the *Conversions for Incoming NF-e Automation* (`J_1BNFE_IN`) Business Add-In (BAdI) in your SAP ERP system. The system runs your checks after the standard validation checks. For more information, see the BAdI method documentation in the system.

The simulation results show errors and warnings that may occur. If the tax comparison checks result in an error, the cause may be one or more of the following:

- XML content is not correct
- Tax code is not correct
- Customizing in your SAP ERP system (for example, related to tax rates) is not up-to-date

If needed, you can overwrite the tax codes or CFOP codes proposed by the system and run the simulation with different selections.

Generate Inbound Delivery

When the status of the invoice and NF-e posting simulation is set to okay, SAP Nota Fiscal Eletrônica informs your SAP ERP system. Your SAP ERP system uses the delivery quantities and UoM from the incoming XML to create the actual inbound delivery automatically.

The system checks that there will be only one inbound delivery created for one nota fiscal. If the settings in PO cause a delivery split (e.g. different incoterms), the system will not create the inbound delivery.

> **Note**
>
> You can implement your own logic in the *Search for Inbound Delivery* (`INBOUND_DELIV_SEARCH`) method in the *Conversions for Incoming NF-e Automation* (`J_1BNFE_IN`) Business Add-In (BAdI) method to add a search for existing inbound deliveries in your SAP ERP system during this process step.

Your SAP ERP system saves the NF-e number and the series in the header of the delivery document and sends the delivery document number to SAP Nota Fiscal Eletrônica. If your SAP ERP system cannot create the inbound delivery, the system sends a corresponding message to SAP Nota Fiscal Eletrônica.

Batch Split

It is possible to manually split the inbound delivery into batches in your SAP ERP system using the `VL32n` transaction. If you create batches, your SAP ERP system posts the corresponding goods receipt with the same number of line items as in the split inbound delivery. However, since an NF-e can have only one line item for the `<det nItem>` tag in the XML, your SAP ERP system posts the NF-e with one line item, using the quantity from the XML. The invoice is posted with the line items as in the split inbound delivery and goods receipt.

Post Goods Receipt

After the goods arrive and you complete all logistics-relevant activities, you can trigger the goods receipt posting from SAP Nota Fiscal Eletrônica. Your SAP ERP system then automatically posts the goods receipt for the corresponding inbound delivery and sends the resulting material document number to SAP Nota Fiscal Eletrônica.

Post Invoice and NF-e

Using the data from SAP Nota Fiscal Eletrônica, your SAP ERP system compares the quantities in the goods receipt with the quantities in the incoming XML to ensure that they are still the same. If they are not the same, the processing cannot continue. If the values are correct, your SAP ERP system automatically posts the invoice and corresponding NF-e using the prices from the XML. Your SAP ERP system sends the resulting invoice number and the fiscal year to SAP Nota Fiscal Eletrônica. Note that the invoice is always posted using the local currency, even when the value of the items in purchase order is in a foreign currency.

If an invoice cannot be posted, your SAP ERP system sends an error message to SAP Nota Fiscal Eletrônica. If the error can be fixed, the user can then repeat the posting step in SAP Nota Fiscal Eletrônica. If not, the user can set the NF-e to complete in SAP Nota Fiscal Eletrônica and then post the invoice and NF-e in SAP ERP manually.

More Information

This document describes the communication and document flow for the normal purchasing process. For information about the specifics related to other purchasing processes, see the corresponding documentation:

- Processing in SAP ERP: Contingency [page 254]
- Processing in SAP ERP: Cancellation [page 257]
- Processing in SAP ERP: Stock Transfer [page 262]
- Processing in SAP ERP: NF-e for Subcontracting (SUBCON1A) [page 267]
- Processing in SAP ERP: NF-e for Symbolic Returns (SUBCON2C) [page 270]
- Processing in SAP ERP: NF-e for Return of Components (SUBCON2D) [page 272]
- Processing in SAP ERP: Future Delivery Invoice [page 275]
- Processing in SAP ERP: Future Delivery Goods Receipt [page 278]
- Processing in SAP ERP: Consignment Goods Receipt [page 282]
- Processing in SAP ERP: Consignment Invoice [page 285]
- Processing in SAP ERP: Returnable Packaging with Purchased Goods [page 242]

7.2.5.2 NF-e Contingency Process

Use

The process *DANFE Arrives Before XML* is used if a DANFE (*Documento Auxiliar da NF-e*, or supplementary NF-e document) arrives before the XML. All information stored in the NFE system before the XML arrived, was retrieved from the access key. In this case, the CNPJ of the access key is taken as issuer CNPJ.

Process

The process *DANFE Arrives Before XML* (technical name `DANWOXML`) consists of the following steps:

Step	Technical Name	Description
1. *Check Authorization (DANFE Without XML)*	`AUTHBXML`	This step executes an NF-e Status Check to validate the current status of this NF-e at SEFAZ. For more information, see AUTHBXML [page 292]
2. *Process waiting for complete NF-e*	`XMLARRIV`	This step waits for the arrival of the XML, either from business partner, or from the distribution web service. For more information, see XMLARRIV [page 346].
3. *Check Authorization After NF-e Receipt*	`AUTHORIZ`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHORIZ [page 295].
3. *Validate - DANFE Before XML*	`DWOXVALD`	This step offers a BAdI that can be used to validate the whole content of the XML. For more information, see DWOXVALD [page 306].
4. *Check Existence of NF-e in ERP*	`NFEINERP`	This step checks the existence of an incoming NF-e in the connected ERP system. For more information, see NFEINERP [page 324].
5. *Create Operation Confirmation Event*	`SENDOPCO`	This step issues an Operation Confirmation Event to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the Operation Confirmation event. . For more information, see SENDOPCO [page 341].

> **Note**
>
> The stored data in the NFE system is updated with the data of the NF-e once it arrives. The arrival of the XML does not change the process type: no new process determination occurs.

Processing in SAP ERP: Contingency [page 254]

7.2.5.2.1 Processing in SAP ERP: Contingency

Use

To automatically process the information in an incoming NF-e and to create the follow-on documents, SAP Nota Fiscal Eletrônica communicates with your SAP ERP system. This documentation focuses on the communication and processing specific to processing whenthe vendor ships goods while operating in contingency mode. For information about the standard communication and processing of incoming NF-e, see Processing in SAP ERP: Normal Purchasing [page 248].

Features

Contingency Mode

If the issuer is running under contingency, the goods and DANFE may arrive at your site before the XML for the incoming NF-e. If the DANFE arrives before the XML, you can create the inbound delivery manually and create a corresponding incoming NF-e in your SAP ERP system.

When the XML for the incoming NF-e arrives, SAP Nota Fiscal Eletrônica sends the NF-e access key to your SAP ERP system, which then checks if the incoming NF-e has already been created manually. If an incoming NF-e was created, SAP Nota Fiscal Eletrônica sends the following data about the NF-e from the incoming XML to your SAP ERP system:

- Protocol number
- Authorization date and time
- XML version

Your SAP ERP system updates this information in the posted NF-e and sends the amounts that have been posted for the NF-e to SAP Nota Fiscal Eletrônica for further processing. If the incoming NF-e does not exist in your SAP ERP system, the system sends a corresponding message to SAP Nota Fiscal Eletrônica.

7.2.5.3 NF-e Cancellation Process

Use

When the NFE system receives a cancellation event, the process changes. Depending on the process, one of three different cancel processes is assigned. Every process type has a fixed cancel process assigned to it. The table below lists the processes that can be canceled, along with their assigned cancellation process type:

Process	Assigned Cancel Process
NF-e for Normal Purchasing (technical name: `NORMPRCH`)	*Cancellation of NF-e* (technical name: `CANCEL00`).

NF-e for other processes without DANFE (technical name: SIGNAUTH)	*Cancellation of NF-e, general process* (technical name: CANCEL01)
NF-e for other processes with DANFE (technical name: SIGNAUT2)	*Cancellation of NF-e, general process* (technical name: CANCEL01)
NF-e without business process assignment (technical name: BUPRODET)	*Cancellation of NF-e, general process* (technical name: CANCEL01)
NF-e for Stock Transfer (technical name: STOCKTRF)	*Cancellation of NF-e, general process* (technical name: CANCEL01)
NF-e for subcontracting (technical name: SUBCON1A)	*Cancellation of NF-e* (technical name: CANCEL00)
Symbolic return of subcontracting components (technical name: SUBCON2C)	*Cancellation of NF-e, general process* (technical name: CANCEL01)
Return of subcontracting components (technical name: SUBCON2D)	*Cancellation of NF-e, general process* (technical name: CANCEL01)
Future Delivery - Invoice Receipt (technical name: FUTDELIV)	*Cancellation of NF-e, general process* (technical name: CANCEL01)
Future Delivery - Goods Receipt (technical name: FUTDELGR)	*Cancellation of NF-e* (technical name: CANCEL00)
Custumer specific Business Process with DANFE (technical name: FLEXPRO01)	*Cancellation of NF-e, general process* (technical name: CANCEL01)
DANFE arrives before XML (technical name: DANWOXML)	*Cancellation of NF-e* (technical name: CANCEL00)
Consignment - Invoice Receipt (technical name: CONSIGIV)	*Cancellation of NF-e, general process* (technical name: CANCEL01)
Consignment - Goods Receipt (technical name: CONSIGGR)	*Cancellation of NF-e* (technical name: CANCEL00)

Process

You use one of three available cancellation processes to cancel an NF-e:

1. *Cancellation of NF-e* (technical name: CANCEL00)
   If a cancellation event arrives in the system, the system carries out the event process (See NF-e Events: Cancellation Event [page 428]). As a result, the NF-e is transferred to the corresponding cancellation process. If the automatic process fails, then the user can manually carry out individual follow-on actions in the workplace.

Step	Technical Name	Description

1. *Check Authorization after XML Cancellation*	`AUTHCANC`	This step executes an NF-e Status Check to validate the current status of this NF-e at SEFAZ. For more information, see AUTHCANC [page 293].
2. *Process waiting for complete NF-e*	`XMLARRIV`	This step waits for the arrival of the XML either from business partner or from the distribution web service. For more information, see XMLARRIV [page 346].
3. *Delete Delivery in ERP*	`DELDELET`	This steps deletes the inbound delivery in the connected ERP system (if the delivery was created by the NFE system). For more information, see DELDELET [page 306].
4. *Check Manual Activities in ERP*	`ERPTASKS`	This step offers the user the option to confirm that all remaining tasks in the connected ERP system have been executed. For more information, see ERPTASKS [page 307].

When an incoming NF-e is canceled, SAP Nota Fiscal Eletrônica automatically sends the corresponding internal delivery document number to your SAP ERP system for checking. Your SAP ERP system checks if the goods receipt process for this inbound delivery has been started.
If the good receipt process has not been started, your SAP ERP system deletes the inbound delivery and informs SAP Nota Fiscal Eletrônica of the successful deletion. If the goods receipt process has been started, the inbound delivery can not be deleted, and your SAP ERP system informs SAP Nota Fiscal Eletrônica accordingly.

> **Note**
>
> The automated deletion of inbound deliveries is only possible for inbound deliveries that are created using the incoming NF-e automation functions in SAP Nota Fiscal Eletrônica.

2. *Cancellation of NF-e, General Process* (technical name: `CANCEL01`)
   If a cancellation event arrives in the system, the system carries out the event process (see NF-e Events: Cancellation Event [page 428]). As a result, the NF-e is transferred to the corresponding cancellation process. If the automatic process fails, then the user can manually carry out individual follow-on actions in the workplace.

Step	Technical Name	Description
1. *Check Authorization after XML Cancellation*	`AUTHCANC`	This step executes an NF-e Status Check to validate the current status of this NF-e at SEFAZ. For more information, see AUTHCANC [page 293].
2. *Check Manual Activities in ERP*	`ERPTASKS`	This step offers the user the option to confirm that all remaining tasks in the connected ERP system have been executed. For more information, see ERPTASKS [page 307].

3. *NF-e Cancellation if Event before NF-e* (technical name: `CANCEL02`)
   For the special case if a cancellation event (see NF-e Events: Cancellation Event [page 428]) arrives before the appropriate NF-e has arrived in the system. All information stored in the NFE system before the XML arrived, was retrieved from the access key. In this case, the CNPJ of the access key is taken as issuer CNPJ.

Step	Technical Name	Description
1. *Process waiting for complete NF-e*	`XMLARRIV`	This step waits for the arrival of the XML either from business partner or from the distribution web service. For more information, see XMLARRIV [page 346].
2. *Check Manual Activities in ERP*	`ERPTASKS`	This step offers the user the option to confirm that all remaining tasks in the connected ERP system have been executed. For more information, see ERPTASKS [page 307].

Processing in SAP ERP: Cancellation [page 257]

7.2.5.3.1 Processing in SAP ERP: Cancellation

Use

When an incoming NF-e is canceled, SAP Nota Fiscal Eletrônica automatically sends the corresponding internal delivery document number to your SAP ERP system for checking. Your SAP ERP system checks if the goods receipt process for this inbound delivery has been started.

If the good receipt process has not been started, your SAP ERP system deletes the inbound delivery and informs SAP Nota Fiscal Eletrônica of the successful deletion.

> ⓘ Note
>
> The automated deletion of inbound deliveries is only possible for inbound deliveries that are created using the Incoming NF-e Automation functions in SAP Nota Fiscal Eletrônica.

If the goods receipt process has been started, the inbound delivery can not be deleted, and your SAP ERP system informs SAP Nota Fiscal Eletrônica accordingly. If you do not want your SAP ERP system to automatically delete inbound deliveries, you can implement your own logic in the *Check if Deletion of Inbound Delivery Possible* (`INBOUND_DELIV_ DELETE_CHECK`) method in the *Conversions for Incoming NF-e Automation* (`J_1BNFE_IN`) Business Add-In (BAdI).

More Information

For information about the standard communication and processing of incoming NF-e, see Processing in SAP ERP: Normal Purchasing [page 248].

7.2.5.4 NF-e Without Business Process Assignment

The process *NF-e Without Business Process Assignment* (technical name: `BUPRODET`) is assigned if no unique process assignment was possible (for example, if differing processes are assigned to the CFOPs in an NF-e). For

more information about business process determination, see Business Process Determination for NF-es [page 237].

> **Note**
>
> It is possible to start a re-determination for the NF-e if the process *NF-e Without Business Process Assignment* was assigned by the NFE system.

7.2.5.5 NF-e for Other Processes without DANFE

Use

The process *NF-e for Other Processes without DANFE* is used when no business processes are assigned to the CFOP codes in an NF-e.

Process

The process *NF-e for Other Processes without DANFE* (technical name: `SIGNAUTH`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`SIGNATUR`	This step checks the signature of the received NF-e and if the calculated digest value matches the value in the XML. For more information, see SIGNATUR [page 343]
2. *Check Authorization After NF-e Receipt*	`AUTHORIZ`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHORIZ [page 295].
3. *Validate - Other Process Without DANFE*	`SIGNVALD`	This step offers a BAdI that can be used to validate the whole content of the XML. For more information, see SIGNVALD [page 343].
4. *Check Manual Activities in ERP*	`ERPTASKS`	This step offers the option to confirm that all remaining tasks in the connected ERP system have been executed. For more information, see ERPTASKS [page 307].
5. *Create Operation Confirmation Event*	`SENDOPCO`	This step issues an *Operation Confirmation Event* to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Confirmation Event*. For more information, see SENDOPCO [page 341].

> **Note**
>
> It is possible to start a re-determination for the NF-e if the process *Determine Business Process* was assigned by the NFE system. For more information, see Business Process Determination for NF-es [page 237].

Processing in SAP ERP: Other Processes for NF-e [page 259]

7.2.5.5.1 Processing in SAP ERP: Other Processes for NF-e

There is no automatic communication in the NFE application for *Other Processes*. The step ERPTASKS notifies you to check if you must carry out manual actions, but you must decide which actions to carry out. After you have successfully carried out all necessary actions, you can set this step to *OK* so that the NF-e can be processed and eventually completed.

7.2.5.6 NF-e for Other Processes with DANFE

Use

The process *NF-e for Other Processes with DANFE* can be selected manually via the customizing of the business process determination.

Process

The process *NF-e for Other Processes with DANFE* (technical name: `SIGNAUT2`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`SIGNATUR`	This step checks the signature of the received NF-e and if the calculated digest value matches the value in the XML. For more information, see SIGNATUR [page 343]
2. *Check Authorization After NF-e Receipt*	`AUTHORIZ`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHORIZ [page 295].
3. *Validate - Other Process with DANFE*	`SIG2VALD`	This step is a manual confirmation for the Fiscal Clerk to check the content of the XML (manually) and confirm that this NF-e should be processed. For more information, see SIG2VALD [page 342].

4. *NF-e Accepted*	ACCPTNFE	This step is a manual confirmation for the Fiscal Clerk to check the content of the XML (manually) and confirm that this NF-e should be processed. For more information, see ACCPTNFE [page 291]
5. *Notification XML Accepted*	ACCNOTIF	This step sends an email notification to the business partner that the processing of the NF-e XML was successful and the goods can be send. For more information, see ACCNOTIF [page 290].
6. *Enter DANFE*	RECDANFE	The vendor sends the goods, together with the DANFE, to the company, and the goods arrive at the company. For more information, see RECDANFE [page 336].
7. Check Authorization After DANFE Receipt	AUTHGRPT	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHGRPT [page 294]
8. *Check Manual Activities in ERP*	ERPTASKS	This step offers the option to confirm that all remaining tasks in the connected ERP system have been executed. For more information, see ERPTASKS [page 307].
9. *Create Operation Confirmation Event*	SENDOPCO	This step issues an *Operation Confirmation Event* to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Confirmation Event*. For more information, see SENDOPCO [page 341].

Processing in SAP ERP: Other Processes for NF-e [page 260]

7.2.5.6.1 Processing in SAP ERP: Other Processes for NF-e

There is no automatic communication in the NFE application for *Other Processes*. The step ERPTASKS notifies you to check if you must carry out manual actions, but you must decide which actions to carry out. After you have successfully carried out all necessary actions, you can set this step to *OK* so that the NF-e can be processed and eventually completed.

7.2.5.7 NF-e Stock Transfer Process

Use

The process *Stock Transfer Order* triggers the goods movement posting in the connected ERP system.

Process

The *Stock Transfer Order* (technical name: `STOCKTRF`) process consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`SIGNATUR`	Check that the signed NF-e matches the certificate of the corresponding CNPJ. For more information, see SIGNATUR [page 343]
2. *Check Authorization After NF-e Receipt*	`AUTHORIZ`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHORIZ [page 295].
3. *Validate - Stock Transfer*	`STOCVALD`	This step offers a BAdI that can be used to validate the whole content of the XML. For more information, see STOCVALD [page 344].
4. *Notification XML Accepted*	`ACCNOTIF`	This step sends an email notification to the business partner that the processing of the NF-e XML was successful and the goods can be send. For more information, see ACCNOTIF [page 290].
5. *Enter DANFE*	`RECDANFE`	The vendor sends the goods, together with the DANFE, to the company, and the goods arrive at the company. For more information, see RECDANFE [page 336].
6. *Check Authorization After DANFE Receipt*	`AUTHGRPT`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHGRPT [page 294].
7. *Enter Goods Receipt Quantities*	`GRCONFQU`	The logistics clerk counts the quantities. By default, the quantities in the NF-e are used as the reference point. If counted quantities deviate from the default values, the logistics clerk can overwrite and enter other quantities. For more information, see GRCONFQU [page 315].
8. *Check Goods Receipt Quantities*	`GRFICHCK`	The fiscal clerk compares the quantities from the NF-e with the received quantities and confirms the results. For more information, see GRFICHCK [page 316].
9. *Prepare Goods Receipt Posting*	`GRMMCHCK`	The logistics clerk confirms that all preparations are complete and that the goods receipt can be posted. For more information, see GRMMCHCK [page 317].
10. *Post Goods Receipt Stock Transfer*	`GRSTOPST`	This step triggers the goods receipt posting in the connected ERP system. For more information, see GRSTOPST [page 321].
11. *Create Operation Confirmation Event*	`SENDOPCO`	This step issues an *Operation Confirmation Event* to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Confirmation Event*. For more information, see SENDOPCO [page 341].

System Configuration for Stock Transfer Orders

To process *Stock Transfer Order* in SAP Nota Fiscal Eletrônica (SAP NFE), you must set the B2B communication to *DB* for every individual tax number or CNPJ, as follows:

1. In Customizing, navigate to *Nota Fiscal Eletrônica* > *Outbound* > *Activate B2B Scenarios for Business Partners* >.
2. Change the *B2B Active* field to *D - Communication via DB (local)*

- To automatically process STOs, your company branches must use the same system client and belong to the same company code.
- An outbound STO does not pass through the XI interface; instead, it is transferred directly to the database of your inbound system.

NFE Settings for Stock Transfer Order Outbound Handling

In the B2B customizing table, set the indicator for your company's CNPJ to *D*. Use the CFOP to determine the `STOCKTRF` process type.

1. Create the outgoing NF-e to a stock transfer.
2. The NF-e is send to the SAP NFE system
3. After processing the NF-e, the system checks if the NF-e should be sent to a business partner. (Up to this step, there is no difference between this NF-e and other NF-es.)
4. Determine the NF-e target: See the instructions in *Prerequisites*; see also the table entry for the STO process in NF-e Cancellation Process [page 254]. The following options are available:
   - " ": No communication
   - *X*: Communication via XI
   - *D*: Communication via DB (local)

   For *Stock Transfer Order*, set the indicator to *D*, which creates the incoming NF-e directly in your database. The logic used is the same as when an incoming NF-e is send from an external system to your SAP NFE system. Your system determines the business process and triggers further processing.

   Processing in SAP ERP: Stock Transfer [page 262]

7.2.5.7.1 Processing in SAP ERP: Stock Transfer

Use

In the *Post Goods Receipt for Stock Transfer* inbound process, your SAP Nota Fiscal Eletrônica system communicates with your SAP ERP system and exchanges data. This documentation focuses on the communication and processing during the *Post Goods Receipt for Stock Transfer* step. For information about the standard communication and processing in all steps of the incoming process, see Processing in SAP ERP: Normal Purchasing [page 248].

Features

Post Goods Receipt for Stock Transfer

After a stock transfer is authorized, you can view the corresponding NF-e in the *NF-e Fiscal Workplace*.

After the goods receipt is confirmed in the *NF-e Logistics Workplace*, SAP Nota Fiscal Eletrônica sends the access key from the NF-e to your SAP ERP system for checking and to be used in the posting of necessary follow-on documents. Your SAP ERP system does the following:

1. Based on the information in the access key, the SAP ERP system tries to locate a reference document by searching for documents in the following order:
    1. The system tries to find the inbound delivery.
    2. If the system cannot find the inbound delivery, the system looks for the outbound delivery.
    3. If the system cannot find the outbound delivery, the system looks for a corresponding goods reference.
2. The system automatically posts the good receipt, using an inbound delivery number, or an outbound delivery number, or a material document number as the reference.
3. The system creates the corresponding inbound NF-e using the tax code and other relevant data, such as the access key or XML version, from the outgoing NF-e.
4. The system sends the material document number from the goods receipt to SAP Nota Fiscal Eletrônica. If NF-e processing cannot be completed, the system sends an error message.

7.2.5.8 Customer-Specific Business Process with DANFE

Use

The process *Customer-Specific Business Process with DANFE* offers the option to configure a flexible process that can trigger customer-specific actions, events, or processes in the ERP system.

Process

The process *Customer-Specific Business Process with DANFE* (technical name `FLEXPR01`) consists of the following technical steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`SIGNATUR`	Check that the signed NF-e matches the certificate of the corresponding CNPJ. For more information, see SIGNATUR [page 343]
2. *Check Authorization After NF-e Receipt*	`AUTHORIZ`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHORIZ [page 295].
3. *Validate Customer-Specific Process*	`FLEXVALD`	This step offers a BAdI that can be used to validate the whole content of the XML. For more information, see FLEXVALD [page 314].
4. *Customer-Specific Step Before DANFE*	`BADIBEFD`	This step includes a BAdI that offers the customer the option to execute all necessary steps in the connected ERP before the DANFE has arrived. For more information, see BADIBEFD [page 296]

5. *Notification XML Accepted*	`ACCNOTIF`	The fiscal clerk notifies the vendor that the XML has been accepted. For more information, see ACCNOTIF [page 290].
6. *Enter DANFE*	`RECDANFE`	The vendor sends the goods, together with the DANFE, to the company, and the goods arrive at the company. For more information, see RECDANFE [page 336].
7. *Check Authorization After DANFE Receipt*	`AUTHGRPT`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHGRPT [page 294].
8. *Customer-Specific Step After DANFE*	`BADIAFTD`	This step includes a BAdI that offers the customer the possibility to execute all necessary steps in the connected ERP after the DANFE has arrived. For more information, see BADIAFTD [page 295].
9.*Create Operation Confirmation Event*	`SENDOPCO`	This step issues an *Operation Confirmation Event* to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Confirmation Event*. For more information, see SENDOPCO [page 341].

7.2.5.9 NF-e Subcontracting Overview

Use

If you obtain materials using subcontracting orders, you receive either one or two incoming NF-e depending on the process involved. In order to automatically process the information in the incoming NF-e and create the follow-on documents, SAP Nota Fiscal Eletrônica communicates with your SAP ERP system (and vice versa) at different points within the subcontracting process. This communication differs depending on the type of subcontracting process:

- NF-e for Subcontracting, that is, the end product and a symbolic return of the used components are delivered with one NF-e (SUBCON1A), see NF-e Subcontracting Process [page 265].
- NF-e for Symbolic Returns (SUBCON2C), that is, the end product is delivered with one NF-e and a subsequent adjustment for the used components is delivered in another NF-e, see NF-e for Symbolic Returns [page 269].
- NF-e for Returns of Components (SUBCON2D), that is, unused components are returned with an NF-e, see NF-e for Returns of Components [page 271].

Process

Prerequisites

- You have activated the `Outsourced Manufacturing in ERP Operations` (LOG_MM_OM_1) Business Function in your SAP ERP system, which is available as of SAP Enhancement Package 4 for SAP ERP 6.0.

With this business function, you can enter subcontracting components in the inbound delivery, or you can fill the subcontracting components using a shipping notification from the supplier.

- You have set up the RFC connection between SAP Nota Fiscal Eletrônica and your SAP ERP system. For more information, see Technical Settings for NF-e/CT-e Inbound [page 108].
- You have completed the necessary Customizing settings in your SAP ERP system. For more information, see Related Configuration in SAP ERP [page 123].

Features

The following documents explain the communication between your SAP ERP system and SAP Nota Fiscal Eletrônica in the steps for processing the NF-e related to the components. These steps are as follows for the respective process:

Process Name	Technical Name	Steps
NF-e for Subcontracting	SUBCON1A	• Assign Purchase Order Items • Simulate Invoice and NF-e • Generate Inbound Delivery • Post Goods Receipt • Post Invoice and NF-e
NF-e for Symbolic Returns	SUBCON2C	• Simulate Material Document and NF-e • Post Subsequent Adjustment and NF-e
NF-e for Returns of Components	SUBCON2D	• Assign Purchase Order Items • Simulate Material Document and NF-e • Post Component Return and NF-e

NF-e Subcontracting Process [page 265]

NF-e for Symbolic Returns [page 269]

NF-e for Returns of Components [page 271]

7.2.5.9.1 NF-e Subcontracting Process

Use

NF-e for Subcontracting is the end product and a symbolic return of the used components that are delivered with one NF-e. The process *NF-e for Subcontracting* creates the inbound delivery and triggers the goods receipt posting in the connected ERP system. Finally, the invoice receipt is posted to the ERP system and the NFE system receives the result of the invoice receipt from the ERP system.

Process

This process *NF-e for Subcontracting* (technical name: `SUBCON1A`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`SIGNATUR`	This step checks the signature of the received NF-e and if the calculated digest value matches the value in the XML. For more information, see SIGNATUR [page 343]
2. *Check Authorization After NF-e Receipt*	`AUTHORIZ`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHORIZ [page 295].
3. *Validation for Subcontracting*	`SCONVALD`	If there are RTP positions (abbreviation for *returnable packaging*), then the system checks the unit of measurement (UoM) and conversion (if necessary) in the ERP system. For more information, see SCONVALD [page 339].
4. *Assign Items with Components*	`SCASSIGN`	This step assigns to all item of the XML a purchase order and purchase order number. These two values can be assigned automatically if both are informed in the corresponding fields in the XML. For more information, see SCASSIGN [page 337].
5. *Simulate Invoice and NF-e*	`NFESIMSC`	This step simulates the invoice posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values. For more information, see NFESIMSC [page 326]
6. *Create Delivery – Subcontracting*	`SCDELCRE`	This step creates the inbound delivery in the connected ERP system. For more information, see SCDELCRE [page 338]
7. *Notification XML Accepted*	`ACCNOTIF`	The fiscal clerk notifies the vendor that the XML has been accepted. For more information, see ACCNOTIF [page 290].
8. *Enter DANFE*	`RECDANFE`	The vendor sends the goods, together with the DANFE, to the company, and the goods arrive at the company. For more information, see RECDANFE [page 336].
9. *Check Authorization After DANFE Receipt*	`AUTHGRPT`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHGRPT [page 294].
10. *Enter Goods Receipt Quantities*	`GRCONFQU`	The logistics clerk counts the quantities. By default, the quantities in the NF-e are used as the reference point. If counted quantities deviate from the default values, the logistics clerk can overwrite and enter other quantities. For more information, see GRCONFQU [page 315].
11. *Check Goods Receipt Quantities*	`GRFICHCK`	The fiscal clerk compares the quantities from the NF-e with the received quantities (see step 8) and confirms the results. For more information, see GRFICHCK [page 316].

12. *Prepare Goods Receipt Posting*	GRMMCHCK	The logistics clerk confirms that all preparations are complete and that the goods receipt can be posted. For more information, see GRMMCHCK [page 317].
13. *Goods Receipt – Subcontracting*	GRSCON1A	This step triggers the goods receipt posting in the connected ERP system. For more information, see GRSCON1A [page 319].
14. *Post Invoice and NF-e Subcontracting mixed*	IVSCON1A	This step posts the invoice in the connected ERP system. For more information, see IVSCON1A [page 323].
15. *Create Operation Confirmation Event*	SENDOPCO	This step issues an *Operation Confirmation Event* to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Confirmation Event*. For more information, see SENDOPCO [page 341].

Processing in SAP ERP: NF-e for Subcontracting (SUBCON1A) [page 267]

7.2.5.9.1.1 Processing in SAP ERP: NF-e for Subcontracting (SUBCON1A)

Use

This documentation explains how your SAP ERP system and SAP Nota Fiscal Eletrônica communicate during the NF-e for Subcontracting (SUBCON1A) process, that is, the end product and the symbolic return of the used components are delivered with one incoming NF-e. When your SAP ERP system validates the purchase order assignment for the end product, the system checks that this purchase order is a subcontracting purchase order, that is, the purchase order items only have L as the item category.

The documentation focuses mainly on the communication that is needed to process the components in the NF-e. Communication related to the components takes place during the following steps in the incoming process:

- Assign Purchase Order Items
- Simulate Invoice and NF-e
- Generate Inbound Delivery
- Post Goods Receipt
- Post Invoice and NF-e

For information about the standard communication and processing in all steps of the incoming process, see Processing in SAP ERP: Normal Purchasing [page 248].

Features

Assign Purchase Order Items

SAP Nota Fiscal Eletrônica sends the XML data to your SAP ERP system and indicates that the purchase order was created for a subcontracting order.

If the XML contains the purchase order information for the components, your SAP ERP system maps the XML materials to the ERP materials. By default, the mapping is done using vendor info records. Alternatively, you can implement your own logic to do this mapping in the `Convert Material from XML into ERP Material`(MATERIAL_CONVERSION) method of the `Conversions for Incoming NF-e Automation (J_1BNFE_IN) Business Add-In (BAdI)`. Your SAP ERP system checks that the ERP material in the XML is included in the component list for the purchase order. The system then converts the UoM (unit of measurement) in the XML to the UoM in SAP ERP.

If the XML does not contain the purchase order item information, your SAP ERP system uses the purchase order for the end product to search for the possible purchase order items for the used components. The purchase order data for the components, if any, is returned to SAP Nota Fiscal Eletrônica. After the purchase order items are assigned to the components, your SAP ERP system then coverts the UoM in the XML to the UoM in SAP ERP.

> **Note**
>
> When you save the purchase order assignment in SAP Nota Fiscal Eletrônica, it is essential for the rest of the automation to run correctly that the assignment of the NF-e item to the purchase order item or purchase order item component is unique.

Simulate Invoice and NF-e

To check if the invoice and NF-e can be posted, you can run a simulation of the invoice and NF-e posting in your SAP ERP system. Your SAP ERP system uses the prices and NF-e data from the incoming XML and the assigned purchase order items to simulate the prices and taxes. The system also checks if the stock quantities at the vendor are sufficient for a consumption posting for the components. If this is not the case, your SAP ERP system returns an error message to SAP Nota Fiscal Eletrônica.

Generate Inbound Delivery

When creating the inbound delivery, your SAP ERP system uses the delivery quantities and UoM from the incoming XML. Your system proceeds as follows regarding the components:

- Adjusts the default quantity of the components taken from the purchase order item to match the quantities passed from SAP Nota Fiscal Eletrônica
- Sets the component quantities to zero if no component information is passed from SAP Nota Fiscal Eletrônica. This is the case when the NF-e only contains the end product.

Post Goods Receipt

After the goods arrive and you complete all logistics-relevant activities, you can trigger the goods receipt posting from SAP Nota Fiscal Eletrônica. SAP Nota Fiscal Eletrônica sends the inbound delivery number to your SAP ERP system. Your SAP ERP system then automatically posts the goods receipt for the end product and the component consumption. It sends the resulting material document number to SAP Nota Fiscal Eletrônica.

Post Invoice and NF-e

Your SAP ERP system posts the invoice and corresponding NF-e. The system uses the prices from the XML for these postings. This NF-e has additional lines for the used components with the NF item type that is mapped to the relevant movement type in your SAP ERP Customizing. These lines are also marked as statistical items.

7.2.5.9.2 NF-e for Symbolic Returns

Use

NF-e for Symbolic Returns means the end product is delivered with one NF-e and a subsequent adjustment for the used components is delivered in another NF-e.

The process also triggers the goods movement posting in the connected ERP system.

Process

The process *NF-e for Symbolic Returns* (technical name: `SUBCON2C`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`SIGNATUR`	This step checks the signature of the received NF-e and if the calculated digest value matches the value in the XML. For more information, see SIGNATUR [page 343]
2. *Check Authorization After NF-e Receipt*	`AUTHORIZ`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHORIZ [page 295].
3. *Validation for Subcontracting*	`SCONVALD`	If there are RTP positions (abbreviation for *returnable packaging*), then the system checks the unit of measurement (UoM) and conversion (if necessary) in the ERP system. For more information, see SCONVALD [page 339].
4. *Assign Items with Components*	`SCASSIGN`	This step assigns to all item of the XML a purchase order and purchase order number. These two values can be assigned automatically if both are informed in the corresponding fields in the XML. For more information, see SCASSIGN [page 337].
5. *Simulate Goods Movement and NF-e*	`NFESIMSA`	This step simulates the goods movement posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values. For more information, see NFESIMSA [page 325]
6. *Goods Issue: Symbolic Return Subc. Comp.*	`GISCON2C`	This step triggers the goods movement posting in the connected ERP system. For more information, see GISCON2C [page 315].
7. *Create Operation Confirmation Event*	`SENDOPCO`	This step issues an *Operation Confirmation Event* to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Confirmation Event*. For more information, see SENDOPCO [page 341].

Processing in SAP ERP: NF-e for Symbolic Returns (SUBCON2C) [page 270]

7.2.5.9.2.1 Processing in SAP ERP: NF-e for Symbolic Returns (SUBCON2C)

Use

In the NF-e for Symbolic Returns (SUBCON2C) process, the end product is delivered with one NF-e and a subsequent adjustment for used components in another NF-e. In this process, the NF-e for the end product must be posted first.

The communication for processing the end product is similar to the normal purchasing process. When the inbound delivery is posted, your SAP ERP system adjusts the quantity for the subcomponents to zero. The component consumption is posted later in the subsequent adjustment. The following documentation explains how your SAP ERP system and SAP Nota Fiscal Eletrônica communicate during this subsequent adjustment. The steps in the adjustment process are as follows:

- Assign Purchase Order Items
- Simulate Material Document and NF-e
- Post Subsequent Adjustment and NF-e

For information about the standard communication and processing in all steps of the incoming process, see Processing in SAP ERP: Normal Purchasing [page 248].

Features

Assign Purchase Order Items

SAP Nota Fiscal Eletrônica sends the XML data to your SAP ERP system. Your SAP ERP system searches for subcontracting purchase orders that have the XML materials in the component list for the purchase order items.

Your SAP ERP system then maps the XML materials to the ERP materials. By default, the mapping is done using vendor info records. Alternatively, you can implement your own logic to do this mapping in the `Convert Material from XML into ERP Material`(MATERIAL_CONVERSION) method of the `Conversions for Incoming NF-e Automation (J_1BNFE_IN) Business Add-In (BAdI)`. The system then converts the UoM (unit of measurement) in the XML to the UoM in SAP ERP.

The purchase order data for the components is returned to SAP Nota Fiscal Eletrônica.

Simulate Material Document and NF-e

Using the information from SAP Nota Fiscal Eletrônica, your SAP ERP system checks if the stock quantities at the vendor are sufficient for a consumption posting for the components. If the posting is possible, the system checks if the goods receipt of the end product related to this purchase order item has taken place. If this is not the case, your SAP ERP system returns an error message to SAP Nota Fiscal Eletrônica. If the posting is possible, the system simulates the tax postings using the prices and other values from the XML sent by SAP Nota Fiscal Eletrônica. The ICMS value should be `0`. The tax base is calculated using the values from the XML.

Post Subsequent Adjustment and NF-e

Using the data from the XML sent by SAP Nota Fiscal Eletrônica, your SAP ERP posts the subsequent adjustments for the components (movement type 543) and the corresponding NF-e. This NF-e has additional

lines for the used components with the NF item type that is mapped to the relevant movement type in your SAP ERP Customizing. In the Observation field of the NF-e, the system enters the NF number series of the referred NF. If no reference is available, the system enters a hyphen (-). Your SAP ERP system then sends the material number and material item numbers to SAP Nota Fiscal Eletrônica.

7.2.5.9.3 NF-e for Returns of Components

Use

The *NF-e for Returns of Components* process means unused components are returned with an NF-e.

The process also triggers the goods receipt posting in the connected ERP system.

Process

The process *NF-e for Returns of Components* (technical name: `SUBCON2D`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`SIGNATUR`	This step checks the signature of the received NF-e and if the calculated digest value matches the value in the XML. For more information, see SIGNATUR [page 343]
2. *Check Authorization After NF-e Receipt*	`AUTHORIZ`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHORIZ [page 295].
3. *Validation for Subcontracting*	`SCONVALD`	If there are RTP positions (abbreviation for *returnable packaging*), then the system checks the unit of measurement (UoM) and conversion (if necessary) in the ERP system. For more information, see SCONVALD [page 339].
4. *Check and Assign Units of Measure*	`ASSUNITS`	This step checks and converts the unit of measure of all items. Also each item is assigned to the corresponding item of the reference document. For more information, see ASSUNITS [page 291].
5. *Simulate Goods Receipt and NF-e*	`NFESIMGR`	This step simulates the goods receipt posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values. For more information, see NFESIMGR [page 324]
6. *Notification XML Accepted*	`ACCNOTIF`	The fiscal clerk notifies the vendor that the XML has been accepted. For more information, see ACCNOTIF [page 290].

7. *Enter DANFE*	RECDANFE	The vendor sends the goods, together with the DANFE, to the company, and the goods arrive at the company. For more information, see RECDANFE [page 336].
8. *Check Authorization After DANFE Receipt*	AUTHGRPT	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHGRPT [page 294].
9. *Enter Goods Receipt Quantities*	GRCONFQU	The logistics clerk counts the quantities. By default, the quantities in the NF-e are used as the reference point. If counted quantities deviate from the default values, the logistics clerk can overwrite and enter other quantities. For more information, see GRCONFQU [page 315].
10. *Check Goods Receipt Quantities*	GRFICHCK	The fiscal clerk compares the quantities from the NF-e with the received quantities (see step 8) and confirms the results. For more information, see GRFICHCK [page 316].
11. *Prepare Goods Receipt Posting*	GRMMCHCK	The logistics clerk confirms that all preparations are complete and that the goods receipt can be posted. For more information, see GRMMCHCK [page 317].
12. *Goods Receipt Return - Subcontr. Comp.*	GRSCON2D	This step triggers the goods receipt posting in the connected ERP system. For more information, see GRSCON2D [page 320].
13. *Create Operation Confirmation Event*	SENDOPCO	This step issues an *Operation Confirmation Event* to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Confirmation Event*. For more information, see SENDOPCO [page 341].

Processing in SAP ERP: NF-e for Return of Components (SUBCON2D) [page 272]

7.2.5.9.3.1 Processing in SAP ERP: NF-e for Return of Components (SUBCON2D)

Use

In the NF-e for Return of Components (SUBCON2D) process, unused components are returned with an NF-e. In the NF-e for the returned components, there is a reference to the nota fiscal that was used to ship the components to the subcontractor.

The following documentation explains how your SAP ERP system and SAP Nota Fiscal Eletrônica communicates and processes the return of unused components. The steps in this process are as follows:

- Simulate Material Document and NF-e
- Post Component Return and NF-e

For information about the standard communication and processing in all steps of the incoming process, see Processing in SAP ERP: Normal Purchasing [page 248].

Features

Simulate Material Document and NF-e

In addition to the usual data needed for a simulation, SAP Nota Fiscal Eletrônica sends the number of the reference nota fiscal, that is the NF that was used to send the components to the subcontractor, to your SAP ERP system.

Your SAP ERP system checks that the referred nota fiscal exists as an outgoing nota fiscal. If several notas fiscais are found, the system checks that they all have the same sender and recipient. Using the recipient of the referred nota fiscal, the system tries to find the vendor, plant, and storage location. If this is successful, the system then checks if the stock quantities at the vendor are sufficient for a return of components posting. If this is not the case, your SAP ERP system returns an error message to SAP Nota Fiscal Eletrônica. The system converts the UoM (unit of measurement) in the XML to the UoM in SAP ERP.

If a posting is possible, the system simulates the tax postings using the prices and other values passed from SAP Nota Fiscal Eletrônica. The ICMS value should be `0`. The tax base is calculated using the values in the XML.

Post Component Return and NF-e

SAP Nota Fiscal Eletrônica sends data that is necessary for posting the component return to your SAP ERP system. Your SAP ERP system uses the recipient in the referred nota fiscal to locate the vendor, plant, and storage location. The system then posts the goods consumption with this data:

- Material and quantity from the XML data
- NF number (number and series) in the Material Slip field
- Referred NF number (number and series) in the document header text

Your SAP ERP system also posts the NF-e for the return. The system calculates the taxes using the prices from the incoming XML as the prices in the NF-e. After a successful posting, your SAP ERP system returns the material number to SAP Nota Fiscal Eletrônica.

7.2.5.10 NF-e Future Delivery Overview

Use

The *Future Delivery* scenario is used to carry out *Future Delivery* processes in the NFE system. Every *Future Delivery* process consists of two NF-es that belong together. The first NF-e is the invoice and the second NF-e is the delivery and goods receipt.

The following *Future Delivery* processes are offered:

- NF-e Invoice Receipt Future Delivery Process [page 274]
- NF-e Goods Receipt Future Delivery Process [page 276]

Process

Process Name	Technical Name	Steps
NF-e Invoice Receipt Future Delivery Process	FUTDELIV	• Validate Business Partner's Signature • Check Authorization after NF-e Receipt • Validate Invoice - Future Delivery • Assign Purchase Order Items- Future Delivery • Simulate Invoice and NF-e • Notification XML accepted • Enter DANFE • Post Invoice and NF-e - Future Delivery • Create Operation Confirmation Event
NF-e Goods Receipt Future Delivery Process	FUTDELGR	• Validate Business Partner's Signature • Check Authorization after NF-e Receipt • Validate Invoice - Future Delivery • Assign Reference Purchase Order Items • Simulate Goods Receipt and NF-e • Generate Inbound Delivery • Notification XML accepted • Enter DANFE • Check Authorization After DANFE Receipt • Enter Goods Receipt Quantities • Check Goods Receipt Quantities • Prepare Goods Receipt Posting • Post GoodsReceipt Future Delivery • Create Operation Confirmation Event

NF-e Invoice Receipt Future Delivery Process [page 274]

NF-e Goods Receipt Future Delivery Process [page 276]

7.2.5.10.1 NF-e Invoice Receipt Future Delivery Process

Use

The *NF-e Invoice Receipt Future Delivery Process* scenario is used to carry out *Future Delivery* processes in the NFE system. Every *Future Delivery* process consists of two NF-es that belong together. The first NF-e is the invoice and the second NF-e is the delivery and goods receipt.

The process *NF-e Invoice Receipt Future Delivery Process* posts the invoice receipt to the ERP system and the NFE system receives the result of the invoice receipt from the ERP system.

Process

The process *Invoice Receipt Future Delivery* (technical name: `FUTDELIV`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`SIGNATUR`	This step checks the signature of the received NF-e and if the calculated digest value matches the value in the XML. For more information, see SIGNATUR [page 343]
2. *Check Authorization After NF-e Receipt*	`AUTHORIZ`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHORIZ [page 295].
3. *Validate Invoice - Future Delivery*	`FDIVVALD`	This step offers a BAdI that can be used to validate the whole content of the XML. For more information, see FDIVVALD [page 313].
4. *Assign Purchase Order Items-Future Delivery*	`FDASSIGN`	This step assigns to all item of the XML a purchase order and purchase order number. These two values can be assigned automatically if both are informed in the corresponding fields in the XML. For more information, see FDASSIGN [page 308].
5. *Simulate Invoice and NF-e*	`NSIMFDIV`	This step simulates the invoice posting with the current assignments. For more information, see NSIMFDIV [page 333]
6. *Notification XML Accepted*	`ACCNOTIF`	The fiscal clerk notifies the vendor that the XML has been accepted. For more information, see ACCNOTIF [page 290].
7. *Enter DANFE*	`RECDANFE`	The vendor sends the goods, together with the DANFE, to the company, and the goods arrive at the company. For more information, see RECDANFE [page 336].
8. *Post Invoice and NF-e - Future Delivery*	`FDIVPOST`	This step posts the invoice in the connected ERP system. For more information, see FDIVPOST [page 312].
9. *Create Operation Confirmation Event*	`SENDOPCO`	This step issues an *Operation Confirmation Event* to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Confirmation Event*. For more information, see SENDOPCO [page 341].

Processing in SAP ERP: Future Delivery Invoice [page 275]

7.2.5.10.1.1 Processing in SAP ERP: Future Delivery Invoice

Use

To automatically process the information in the invoice and incoming NF-e for future deliveries and create the follow-on documents, SAPNota Fiscal Eletrônica communicates with your SAP ERP system and vice versa.

This documentation focuses on the communication and processing specific to future deliveries in the following steps in the incoming process:

- Assign Purchase Order Items
- Simulate Invoice and NF-e
- Post Invoice and NF-e

For information about the standard communication and processing in all steps of the incoming process, see Processing in SAP ERP: Normal Purchasing [page 248].

Features

Assign Purchase Order Items

In this process, the communication between SAP Nota Fiscal Eletrônica and your SAP ERP system is similar to the communication for normal purchasing. However, when your SAP ERP validates the purchase order assignment, the system also checks that none of the purchase order items in the assigned purchase order is set for goods-receipt-based invoice verification. If an item is marked as such in the purchase order, your SAP ERP system returns an error message to SAP Nota Fiscal Eletrônica.

> **Note**
>
> The assignment of multiple NF-e items to the same purchase order item is not supported for future delivery invoices.

Simulate Invoice and NF-e

After the purchase order data is assigned, you can simulate the NF-e using the prices and other data from the XML. Your SAP ERP system determines the NF type for the future delivery process using the corresponding Customizing settings in your SAP ERP system. The system then simulates the prices and taxes. The system also checks that the taxes are consistent for this process type, that is, ICMS is statistical. If this is not the case, your SAP ERP system returns an error message to SAP Nota Fiscal Eletrônica.

Post Invoice and NF-e

After the status of the invoice and NF-e posting simulation is set to okay, SAP Nota Fiscal Eletrônica informs your SAP ERP system. Your SAP ERP system then uses the data sent by SAP Nota Fiscal Eletrônica and the required NF type from your SAP ERP Customizing to post the invoice and corresponding NF-e. Your SAP ERPS system sends the resulting invoice number and the fiscal year to SAP Nota Fiscal Eletrônica.

7.2.5.10.2 NF-e Goods Receipt Future Delivery Process

Use

The *Goods Receipt Future Delivery* scenario is used to carry out *Future Delivery* processes in the NFE system. Every *Future Delivery* process consists of two NF-es that belong together. The first NF-e is the invoice and the second NF-e is the delivery and goods receipt.

The process *Goods Receipt Future Delivery* creates the inbound delivery and triggers the goods receipt posting in the connected ERP system. Finally, the invoice receipt is posted to the ERP system and the NFE system receives the result of the invoice receipt from the ERP system.

Process

The process *NF-e Goods Receipt Future Delivery Process* (technical name: `FUTDELGR`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`SIGNATUR`	This step checks the signature of the received NF-e and if the calculated digest value matches the value in the XML. For more information, see SIGNATUR [page 343]
2. *Check Authorization After NF-e Receipt*	`AUTHORIZ`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHORIZ [page 295].
3. *Validation for Future Delivery*	`FDELVALD`	If there are RTP positions (abbreviation for *returnable packaging*), then the system checks the unit of measurement (UoM) and conversion (if necessary) in the ERP system. For more information, see FDELVALD [page 310].
4. *Assign Reference Purchase Order Items*	`POASSREF`	This step assigns to all item of the XML a purchase order and purchase order number. These two values can be assigned automatically if both are informed in the corresponding fields in the XML. For more information, see POASSREF: Assign Reference Purchase Order Items [page 334].
5. *Simulate Goods Receipt and NF-e*	`NSIMFDGR`	This step simulates the invoice posting with the current assignments. For more information, see NSIMFDGR [page 332]
6. *Generate Inbound Delivery*	`FDDELCRE`	This step creates the inbound delivery in the connected ERP system. For more information, see FDDELCRE [page 309]
7. *Notification XML Accepted*	`ACCNOTIF`	The fiscal clerk notifies the vendor that the XML has been accepted. For more information, see ACCNOTIF [page 290].
8. *Enter DANFE*	`RECDANFE`	The vendor sends the goods, together with the DANFE, to the company, and the goods arrive at the company. For more information, see RECDANFE [page 336].
9. *Check Authorization After DANFE Receipt*	`AUTHGRPT`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHGRPT [page 294].

10. *Enter Goods Receipt Quantities*	`GRCONFQU`	The logistics clerk counts the quantities. By default, the quantities in the NF-e are used as the reference point. If counted quantities deviate from the default values, the logistics clerk can overwrite and enter other quantities. For more information, see GRCONFQU [page 315].
11. *Check Goods Receipt Quantities*	`GRFICHCK`	The fiscal clerk compares the quantities from the NF-e with the received quantities (see step 8) and confirms the results. For more information, see GRFICHCK [page 316].
12. *Prepare Goods Receipt Posting*	`GRMMCHCK`	The logistics clerk confirms that all preparations are complete and that the goods receipt can be posted. For more information, see GRMMCHCK [page 317].
13. *Post Goods Receipt Future Delivery*	`FDGRPOST`	This step posts the goods receipt in the connected ERP system. For more information, see FDGRPOST [page 311].
14. *Create Operation Confirmation Event*	`SENDOPCO`	This step issues an *Operation Confirmation Event* to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Confirmation Event*. For more information, see SENDOPCO [page 341].

Processing in SAP ERP: Future Delivery Goods Receipt [page 278]

7.2.5.10.2.1 Processing in SAP ERP: Future Delivery Goods Receipt

Use

In order to automatically process the information in the incoming NF-e delivered with the goods receipt for a future delivery and create the follow-on documents, SAP Nota Fiscal Eletrônica communicates with your SAP ERP system and vice versa. This documentation focuses on the communication specific to future deliveries that occurs during the following steps in the incoming process:

- Simulate NF-e based on Goods Receipt
- Create Inbound Delivery
- Post Goods Receipt and NF-e based on Inbound Delivery

For information about the standard communication and processing in all steps of the incoming process, see Processing in SAP ERP: Normal Purchasing [page 248].

Features

Simulate NF-e based on Goods Receipt

Using the data from SAP Nota Fiscal Eletrônica, your SAP ERP system checks if the referenced NF-e access key exists in the database. If it does, the system simulates the goods receipt and its corresponding NF-e. The system derives the movement type from the delivery type that was entered in your SAP ERP Customizing for the future delivery process. Your SAP ERP system derives the tax codes from the mapping in your SAP ERP Customizing of the tax codes for the purchase order to the tax codes of the goods receipt. The system checks the following tax information:

- ICMS rate to be used in SAP ERP is the same as the rate in the XML
- Incoming XML does not contain IPI
- IPI, if any, is to be posted statistically

> **Note**
>
> The assignment of multiple NF-e items to the same purchase order item is supported as of SAP Enhancement Package 5 for SAP ERP 6.0 the. For lower releases, it is essential for the rest of the automation to run correctly that the assignment between NF-e item and purchase order item is unique.

Create Inbound Delivery

After a successful simulation, your SAP ERP system can create an inbound delivery. SAP Nota Fiscal Eletrônica sends the tax data from the XML and informs your SAP ERP system that this is an inbound delivery for the Future Delivery Goods Receipt process. The system creates the inbound delivery using the delivery type from your Customizing settings for the future delivery process.

Post Goods Receipt and NF-e based on Inbound Delivery

Using the data from SAP Nota Fiscal Eletrônica, your SAP ERP system compares the quantities in the inbound delivery with the quantities in the incoming XML to ensure that they are still the same. The system posts the goods receipt and NF-e and sends the resulting goods receipt number to SAP Nota Fiscal Eletrônica.

7.2.5.11 NF-e Consignment Overview

Use

The NF-e Consignment process can be described in the following way: A supplier provides products or raw material for a customer that is also stored in the customer's own warehouse. The supplier remains the rightful owner of these products or raw materials until the customer (reseller or manufacturer) withdraw them from the consignment warehouse. By removing products or raw materials from the consignment warehouse, a liability towards the supplier is created. The invoice is due according to agreed time periods, for example, monthly. The parties of this contract can arrange that the customer will automatically take over remaining products or raw materials in the consignment warehouse after a defined time period. The process consists of 2 parts and is similar to the NF-e Future Delivery process. In contrast to the NF-e Future Delivery process, which issues the invoice before the delivery of the product, the NF-e Consignment process has a delivery of a product or raw material first and then an invoice. The delivery comes first and a Goods Receipt is booked for the Consignment warehouse. After that, an invoice is created that refers to the withdrawal of products or raw materials from the Consignment warehouse. The two parts of the Consignment process are described in detail in the following two links:

- NF-e Goods Receipt Consignment, that is, the filling of the consignment warehouse. The technical name of the process is CONSIGGR, for more information see NF-e Goods Receipt Consignment Process [page 281].

- NF-e Invoice Consignment (technical name CONSIGIV), that is, the invoice after the withdrawal of the product or raw material from the consignment warehouse. For more information, see NF-e Invoice Consignment Process [page 284].

Process

Process Overview

Process Name	Technical Name	Steps
NF-e Goods Receipt Consignment	CONSIGGR	• Check Business Partner's Signature • Check Authorization after NF-e Receipt • Validate Goods Receipts Consignment • Assign Reference Purchase Order Items • Simulate Invoice and NF-e • Generate Inbound Delivery • Notification XML accepted • Enter DANFE • Check Authorization after DANFE Receipt • Enter Goods Receipt Quantities • Check Goods Receipt Quantities • Prepare Goods Receipt Posting • Post Goods Receipt Consignment
NF-e Invoice Consignment	CONSIGIV	• Check Business Partner's Signature • Check Authorization after NF-e Receipt • Validate Invoice for Consignment • Assign Purchase Order Items • Simulate Invoice for Consignment • Notification XML accepted • Enter DANFE • Post Invoice for Consignment

NF-e Goods Receipt Consignment Process [page 281]

NF-e Invoice Consignment Process [page 284]

7.2.5.11.1 NF-e Goods Receipt Consignment Process

Use

The *NF-e Goods Receipt Consignment Process* means the filling of the consignment warehouse.

The process *NF-e Goods Receipt Consignment Process* creates the inbound delivery and triggers the goods receipt posting in the connected ERP system. Finally, the goods receipt is posted to the ERP system and the NFE system receives the result of the goods receipt from the ERP system.

Process

The process *NF-e Goods Receipt Consignment Process* (technical name: `CONSIGGR`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`SIGNATUR`	This step checks the signature of the received NF-e and if the calculated digest value matches the value in the XML. For more information, see SIGNATUR [page 343]
2. *Check Authorization After NF-e Receipt*	`AUTHORIZ`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHORIZ [page 295].
3. *Validate Consignment - Goods Receipt*	`CSGRVALD`	This step validates the RTP of this NF-e and checks that there no taxes (vICMS, vIPI) in the XML for an RTP item For more information, see CSGRVALD [page 301].
4. *Assign Purchase Order Items-Consignment*	`CSASSIGN`	This step assigns to all item of the XML a purchase order and purchase order number. For more information, see CSASSIGN [page 298].
5. *Simulate Goods Receipt and NF-e*	`NSIMCSGR`	This step simulates the invoice posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values. For more information, see NSIMCSGR [page 330].
6. *Create Inbound Delivery - Consignment*	`CSDELCRE`	This step creates the inbound delivery in the connected ERP system. For more information, see CSDELCRE [page 299].
7. *Notification XML Accepted*	`ACCNOTIF`	The fiscal clerk notifies the vendor that the XML has been accepted. For more information, see ACCNOTIF [page 290].
8. *Enter DANFE*	`RECDANFE`	The vendor sends the goods, together with the DANFE, to the company, and the goods arrive at the company. For more information, see RECDANFE [page 336].

9. *Check Authorization After DANFE Receipt*	`AUTHGRPT`	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHGRPT [page 294].
10. *Enter Goods Receipt Quantities*	`GRCONFQU`	The logistics clerk counts the quantities. By default, the quantities in the NF-e are used as the reference point. If counted quantities deviate from the default values, the logistics clerk can overwrite and enter other quantities. For more information, see GRCONFQU [page 315].
11. *Check Goods Receipt Quantities*	`GRFICHCK`	The fiscal clerk compares the quantities from the NF-e with the received quantities (see step 8) and confirms the results. For more information, see GRFICHCK [page 316].
12. *Prepare Goods Receipt Posting*	`GRMMCHCK`	The logistics clerk confirms that all preparations are complete and that the goods receipt can be posted. For more information, see GRMMCHCK [page 317].
13. *Post Goods Receipt - Consignment*	`CSGRPOST`	This step triggers the goods receipt posting in the connected ERP system. For more information, see CSGRPOST [page 300].
14. *Create Operation Confirmation Event*	`SENDOPCO`	This step issues an *Operation Confirmation Event* to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Confirmation Event*. For more information, see SENDOPCO [page 341].

Processing in SAP ERP: Consignment Goods Receipt [page 282]

7.2.5.11.1.1 Processing in SAP ERP: Consignment Goods Receipt

Use

During the automatic processing of NF-e in the delivery of consignment goods to the recipient's premises in the Consignment Goods Receipt scenario, SAP Nota Fiscal Eletrônica communicates with your SAP ERP system during the following steps in this part of the consignment process:

1. Assign Purchase Order Items
2. Simulate NF-e based on Goods Receipt
3. Create Inbound Delivery
4. Post Goods Receipt and NF-e based on Inbound Delivery

This documentation focuses on the processing specific to consignments. For information about the standard communication and processing in all steps of the incoming process, see Processing in SAP ERP: Normal Purchasing [page 248].

Prerequisites

You have completed the necessary Customizing settings in your SAP ERP system. For more information, see Related Configuration in SAP ERP [page 123]. Note that in the *Assign Delivery Type to Incoming NF-e Processes* Customizing activity, you must enter a delivery type for the Consignment Goods Receipt process.

Features

Assign Purchase Order Items

As in the Normal Purchasing process, if the XML for the incoming NF-e does not contain any purchase order details, you can trigger a search to try to find the corresponding purchase order items in your SAP ERP system. After the items in the XML are assigned to purchase order items, your SAP ERP system validates the quantities in the XML.

Once the assignment to the purchase order items is made and validated, you can trigger a simulation using the price from the purchase order and the quantity from the incoming XML data. Your SAP ERP system simulates the NF-e posting and returns the simulation results for you to check.

> **Note**
>
> The assignment of multiple NF-e items to the same purchase order item is supported as of SAP Enhancement Package 5 for SAP ERP 6.0. In lower releases, it is essential for the rest of the automation to run correctly that the assignment between NF-e item and purchase order item is unique.

Simulate NF-e based on Goods Receipt

Using the data from SAP Nota Fiscal Eletrônica, your SAP ERP system simulates the goods receipt and its corresponding NF-e. The system derives the movement type (for example, 821) from the delivery type entered in your SAP ERP Customizing for Incoming NF-e Automation for the Consignment Goods Receipt process. Your SAP ERP system uses the prices and taxes from the XML and the tax codes that are passed from SAP Nota Fiscal Eletrônica. If SAP Nota Fiscal Eletrônica does not send any tax codes, your SAP ERP system derives the tax codes from the mapping in your SAP ERP Customizing of the tax codes for the purchase order to the tax codes of the goods receipt.

The system checks the following tax information:

- ICMS, ICST and IPI rates in the XML are the same as the rates in SAP ERP Customizing. Note that the SAP ERP system does not check IPI pauta rates.
- Since consignment is only applicable for industrialization cases, the tax code must have the production/sales as the usage. If not, the ERP system returns an error message.

Create Inbound Delivery

After a successful simulation, your SAP ERP system can create an inbound delivery. SAP Nota Fiscal Eletrônica sends the tax data from the XML and informs your SAP ERP system that this is an inbound delivery for the Consignment Goods Receipt process. The system creates the inbound delivery using the delivery type from your SAP ERP Customizing settings for the Consignment Goods Receipt process.

Note that you can implement your own logic to determine a valuation type for the materials in the inbound delivery. You do this by implementing the *Change Storage Location and Valuation Type in Inbd Delivery*

(CHANGE_SLOC_AND_VALTYPE) method in the *Conversions for Incoming NF-e Automation* (J_1BNFE_IN) Business Add-In (BAdI).

Post Goods Receipt and NF-e based on Inbound Delivery

Using the data from SAP Nota Fiscal Eletrônica, your SAP ERP system compares the quantities in the inbound delivery with the quantities in the incoming XML to ensure that they are still the same. The system posts the goods receipt and NF-e, taking the tax rates, values and bases for ICMS, ICST and IPI from the XML. The system sends the resulting goods receipt number to SAP Nota Fiscal Eletrônica.

7.2.5.11.2 NF-e Invoice Consignment Process

Use

NF-e Invoice Consignment represents the invoice after the withdrawal of the product or raw material from the consignment warehouse.

Process

The process *Invoice Consignment* (technical name: CONSIGIV) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	SIGNATUR	This step checks the signature of the received NF-e and if the calculated digest value matches the value in the XML. For more information, see SIGNATUR [page 343]
2. *Check Authorization After NF-e Receipt*	AUTHORIZ	Check the authorization status of the NF-e using the NF-e status check. For more information, see AUTHORIZ [page 295].
3. *Validate Invoice - Consignment*	CSIVVALD	This step checks that the NF-e reference is available in the system and completely processed. For more information, see CSIVVALD [page 303].
4. *Assign Reference PO Items-Consignment*	CSASSREF	This step assigns the purchase order items to those of the reference NF-e.. For more information, see CSASSREF [page 298].
5. *Simulate Invoice and NF-e*	NSIMCSIV	This step simulates the invoice posting with the current assignments. For more information, see NSIMCSIV [page 331].
6. *Notification XML Accepted*	ACCNOTIF	The fiscal clerk notifies the vendor that the XML has been accepted. For more information, see ACCNOTIF [page 290].

7. *Enter DANFE*	`RECDANFE`	The vendor sends the goods, together with the DANFE, to the company, and the goods arrive at the company. For more information, see RECDANFE [page 336].
8. *Post Invoice and NF-e - Consignment*	`CSIVPOST`	This step posts the invoice in the connected ERP system. For more information, see CSIVPOST [page 303].
9. *Create Operation Confirmation Event*	`SENDOPCO`	This step issues an *Operation Confirmation Event* to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Confirmation Event*. For more information, see SENDOPCO [page 341].

Processing in SAP ERP: Consignment Invoice [page 285]

7.2.5.11.2.1 Processing in SAP ERP: Consignment Invoice

Use

During the automatic processing of NF-e for consumed consignment goods in the Consignment Invoice process step, SAP Nota Fiscal Eletrônica communicates with your SAP ERP system during the following steps in this part of the consignment process:

1. Simulate Invoice and NF-e
2. Post Invoice and NF-e

This documentation focuses on the processing specific to consignments. For information about the standard communication and processing in all steps of the incoming process, see Processing in SAP ERP: Normal Purchasing [page 248].

Prerequisites

You have completed the necessary Customizing settings in your SAP ERP system. For more information, see Related Configuration in SAP ERP [page 123]. Note that in the *Assign NF Type to Incoming NF-e Processes* Customizing activity, you must enter an NF type for the Consignment Invoice Receipt process that has a default item type for which ICMS and IPI are statistical.

Features

Simulate Invoice and NF-e

To check the invoice and NF-e, you can run a simulation of their posting in your SAP ERP system that is similar to the simulation for the Normal Purchasing process. However, the following aspects differ from normal purchasing:

- The goods receipt has already taken place. Your SAP ERP system must have a reference to the goods receipt, that is, the NF-e number and the series (similar to the value placed in the field text (SGTXT) in a goods receipt created with the MIRO transaction).
- The quantity in the invoice and NF-e may differ from the quantity delivered with the goods receipt, for example, in the case of a partial invoice.
- NF-e does not contain values for ICMS, ICST or IPI. Your SAP ERP system has to calculate statistical values for these tax types if the configuration of the tax codes requires this.
- Your SAP ERP system uses the NF type assigned to the Consignment Invoice Receipt process in your SAP ERP Customizing for incoming NF-e automation.

To enable the simulation, SAP NFE passes the following information to your SAP ERP system:

- Prices and quantities from the XML
- Tax codes. Since consignment is only applicable for industrialization cases, the tax code must have the production/sales as the usage. If the tax code is not filled by SAP Nota Fiscal Eletrônica, your SAP ERP system uses the tax codes from the purchase order.

During the simulation, your SAP ERP system does the following:

- Calculates the amount of ICMS using values from your SAP ERP Customizing. This amount is then used to derive the net purchase price from the XML prices.
- Checks that ICMS, ICST and IPI in the XML contain zero as the tax rate and tax values
- Calculate statistical postings for IPI and ICST based on you SAP ERP Customizing settings

> **Note**
>
> The assignment of multiple NF-e items to the same purchase order item is supported as of SAP Enhancement Package 5 for SAP ERP 6.0. The prerequisite is that multiple assignment of NF-e items to purchase order item has been already used for the consignment goods receipt process. For lower releases, it is essential for the rest of the automation to run correctly that the assignment between NF-e item and purchase order item is unique.

Post Invoice and NF-e

After the status of the invoice and NF-e posting simulation is set to okay, SAP Nota Fiscal Eletrônica informs your SAP ERP system. Your SAP ERP system then uses the quantity and prices from the XML and the required NF type for the Consignment Invoice Receipt process from your SAP ERP Customizing for incoming NF-e automation to post the invoice and corresponding NF-e. The statistical posting for ICMS, ICST and IPI are based on your SAP ERP Customizing settings.

Your SAP ERP system sends the resulting invoice number and the fiscal year to SAP Nota Fiscal Eletrônica.

7.2.5.12 Preprocess for NF-e with EPEC Event

Use

The process *Preprocess for NF-e with EPEC Event* takes care of an arriving EPEC event for which an NF-e will follow. However, postings can not be automated due to the lack of available information for this NF-e (It can take several days until the XML is available).

Process

Preprocess for NF-e with EPEC Event NF-e Inbound process for EPEC

The process *Preprocess for NF-e with EPEC Event* (technical name: `PREPEPEC`) consists of the following step:

1. Create NF-e (technical name `CREATNFE`)
   The NF-e data is validated and transformed into XML.

Result

Depending on the order the respective documents (NF-e, DANFE, EPEC event, cancellation event) arrive, the following scenarios are possible:

1. The NF-e arrives before the EPEC event.
   The NF-e is assigned to a process as usual. Once the EPEC event arrives, it is posted. The event is just added without changing the NF-e. The event is displayed in the event inbound monitor and linked to the NF-e in the Fiscal Workplace.
2. First, an NF-e sum entry is posted with report `/XNFE/COLLECT_DOCUMENTS` and then the EPEC event arrives.
   The NF-e is assigned to the preprocess for sum entries (technical name: PREPRSUM). Once the EPEC event arrives, it is posted. The event is just added without changing the NF-e. The event is displayed in the *Event Inbound Monitor* and linked to the NF-e in the *Fiscal Workplace*. When the NF-e arrives, the process is switched to normal process.
3. The DANFE arrives first, and then the EPEC event.
   In this case, the NF-e is assigned to process type `DANWOXML`. The event is just added without changing the NF-e. The event is displayed in the event inbound monitor and linked to the NF-e in the Fiscal Workplace. When the NF-e XML arrives, the NF-e process continues.
4. The EPEC event arrives first and then the NF-e.
   In this case, the EPEC event is added and creates an NF-e with process type `PREPEPEC`. The NF-e is displayed in the *Fiscal Workplace*. The event is displayed in the *Event Inbound Monitor* and linked to the NF-e in the *Fiscal Workplace*. When the NF-e arrives, the NF-e process type is switched from `PREPEPEC` to a normal process type.
5. The EPEC event arrives first and then an NF-e sum.
   In this case, the event is added and creates an NF-e with process type `PREPEPEC`. When the NF-e sum arrives, the process is switched from `PREPEPEC` to `PREPRSUM`, so that an operation acknowledgement event can be issued for the NF-e to download the NF-e XML from SEFAZ.

6. The EPEC event arrives first and then the DANFE.
   The event is added and creates an NF-e with process type `PREPEPEC`. When the DANFE arrives, the user can decide to wait (nothing happens), or to switch to process type `DANWOXML` and post the documents in ERP manually.
7. The EPEC event arrives first and then the cancellation event.
   The event is added and creates an NF-e with process type `PREPEPEC`. When the cancel event arrives, the NF-e process type is switched to cancel process type `CANCEL02`.
8. The EPEC event arrives first and the NF-e is entered via the Gate Monitor later.
   The event is added and creates an NF-e with process type `PREPEPEC`. When the NF-e is entered in the Gate Monitor, an information message is issued that entering a DANFE is not possible for this process type.

> ⚠ Caution
>
> Receiver acknowledgment events cannot be issued before the NF-e arrived.

> ⓘ Note
>
> For more detailed information about the EPEC event, refer to NF-e Events: EPEC Event [page 431]

7.2.5.13 NF-e Inbound Processing Steps

This is an overview of all available processing steps for NF-e inbound:

ACCNOTIF: Notification XML Accepted [page 290]

ACCPTNFE: NF-e Accepted [page 291]

ASSUNITS: Check and Assign Units of Measure [page 291]

AUTHBXML: Check Authorization (DANFE Without XML) [page 292]

AUTHCANC: Check Authorization After XML Cancellation [page 293]

AUTHGRPT: Check Authorization After DANFE Receipt [page 294]

AUTHORIZ: Check Authorization After NF-e Receipt [page 295]

BADIAFTD: Customer-Specific Step After DANFE [page 295]

BADIBEFD: Customer-Specific Step Before DANFE [page 296]

CREATNFE: Create NF-e from Distribution Service [page 297]

CSASSIGN: Assign Purchase Order Items- Consignment [page 298]

CSASSREF: Assign Reference PO Items - Consignment [page 298]

CSDELCRE: Create Inbound Delivery - Consignment [page 299]

CSGRPOST: Post Goods Receipt - Consignment [page 300]

CSGRVALD: Validate Consignment - Goods Receipt [page 301]

CSIVPOST: Post Invoice and NF-e - Consignment [page 303]

CSIVVALD: Validate Invoice - Consignment [page 303]

DELCREAT: Generate Inbound Delivery [page 305]

DELDELET: Delete Delivery in ERP [page 306]
DWOXVALD: Validate - DANFE Before XML [page 306]
ERPTASKS: Check Manual Activities in ERP [page 307]
FDASSIGN: Assign Purchase Order Items- Future Delivery [page 308]
FDDELCRE: Create Inbound Delivery- Future Delivery [page 309]
FDELVALD: Validate - Future Delivery [page 310]
FDGRPOST: Post Goods Receipt - Future Delivery [page 311]
FDIVPOST: Post Invoice and NF-e - Future Delivery [page 312]
FDIVVALD: Validate Invoice - Future Delivery [page 313]
FLEXVALD: Validate Customer-Specific Process [page 314]
GISCON2C: Goods Issue: Symbolic Return Subc. Comp. [page 315]
GRCONFQU: Enter Goods Receipt Quantities [page 315]
GRFICHCK: Check Goods Receipt Quantities [page 316]
GRMMCHCK: Prepare Goods Receipt Posting [page 317]
GRPOSTNG: Posting Goods Receipt [page 318]
GRSCON1A: Goods Receipt - Subcontracting [page 319]
GRSCON2D: Goods Receipt Return - Subcontr. Comp. [page 320]
GRSTOPST: Post Goods Receipt - Stock Transfer [page 321]
IVPOSTNG: Post Invoice and NF-e [page 322]
IVSCON1A: Post Invoice and NF-e - Subcontracting [page 323]
NFEINERP: Check Existence of NF-e in ERP [page 324]
NFESIMGR: Simulate Goods Receipt and NF-e [page 324]
NFESIMSA: Simulate Goods Movement and NF-e [page 325]
NFESIMSC: Simulate Invoice and NF-e [page 326]
NFESIMUL: Simulate Invoice and NF-e [page 327]
NPURVALD: Validation for Normal Purchasing [page 329]
NSIMCSGR: Simulate Goods Receipt and NF-e [page 330]
NSIMCSIV: Simulate Invoice and NF-e [page 331]
NSIMFDGR: Simulate Goods Receipt and NF-e [page 332]
NSIMFDIV: Simulate Invoice and NF-e [page 333]
POASSREF: Assign Reference Purchase Order Items [page 334]
POASSIGN: Assign Purchase Order Items [page 335]
RECDANFE: Enter DANFE [page 336]
SCASSIGN: Assign Items with Components [page 337]
SCDELCRE: Create Delivery – Subcontracting [page 338]

SCONVALD: Validate - Subcontracting [page 339]
SENDACKN: Send Acknowledgment Event [page 340]
SENDOPCO: Create Operation Confirmation Event [page 341]
SIG2VALD: Validate - Other Process with DANFE [page 342]
SIGNATUR: Validate Signature of Business Partner [page 343]
SIGNVALD: Validate - Other Process Without DANFE [page 343]
STOCVALD: Validate - Stock Transfer [page 344]
VALIDATE: Validate NF-e from Distribution Service [page 345]
XMLARRIV: Process waiting for complete NF-e [page 346]

7.2.5.13.1 ACCNOTIF: Notification XML Accepted

The step *Notification XML Accepted* (technical name: `ACCNOTIF`) sends an email notification to the business partner that the processing of the NF-e XML was successful and the goods can be send.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

You can influence the behavior of this step in Customizing. The following settings have to be carried out:

- Email sender address has to be maintained
- Email receiver address has to be maintained

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

No BAdI availabe

Usage

NF-e Inbound Processing

7.2.5.13.2 ACCPTNFE: NF-e Accepted

In step *NF-e Accepted* (technical name: `ACCPTNFE`), the Fiscal Clerk checks the content of the XML and confirms that the NF-e processing continues.

Activation/Deactivation

By default, this step is not active. If it is activated, the step requires manual user interaction.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

NF-e Inbound Processing

7.2.5.13.3 ASSUNITS: Check and Assign Units of Measure

The step *Check and Assign Units of Measure* (technical name: `ASSUNITS`) calls the ERP system to check and convert the unit of measure of all NF-e items. Every item is assigned to the corresponding item of the reference document.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Both units of measure must be defined in the NFE and ERP system.

The corresponding ISO code is required to determine the internal language-independent unit of measurement.

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

7.2.5.13.4 AUTHBXML: Check Authorization (DANFE Without XML)

The step *Check Authorization (DANFE Without XML)* (technical name: `AUTHBXML`) executes an *NF-e Status Check* to validate the current status of this NF-e at SEFAZ.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is asynchronous. During this communication, the step is waiting for the response from SEFAZ.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

NF-e Inbound Processing

Additional Information

The SEFAZ status is only overwritten if a status is found that is worse than the status already stored in the system. If the NF-e process is no longer waiting for a response, a history entry is written.

7.2.5.13.5 AUTHCANC: Check Authorization After XML Cancellation

The step *Check Authorization After XML Cancellation* (technical name: `AUTHCANC`) executes an *NF-e Status Check* to validate the current status of this NF-e at SEFAZ.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is asynchronous. During this communication, the step is waiting for the response from SEFAZ.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

NF-e Inbound Processing

Additional Information

The SEFAZ status is only overwritten if a status is found that is worse than the status already stored in the system. If the NF-e process is no longer waiting for a response, a history entry is written.

7.2.5.13.6 AUTHGRPT: Check Authorization After DANFE Receipt

The step *Check Authorization After DANFE Receipt* (technical name: `AUTHGRPT`) checks the authorization status of the NF-e after the DANFE arrived at the company.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is asynchronous. During this communication, the step is waiting for the response from SEFAZ.

Customizing

Not relevant

BAdIs

You can use the following BAdI in this step: *Check for Requirement of Fiscal Checkpoint Event* (`/xnfe/badi_check_fcp_event`). For more information, see BAdIs for NF-e Inbound [page 116].

Usage

NF-e Inbound Processing

Additional Information

The SEFAZ status is only overwritten if a status is found that is worse than the status already stored in the system. If the NF-e process is no longer waiting for a response, a history entry is written.

7.2.5.13.7 AUTHORIZ: Check Authorization After NF-e Receipt

The step *Check Authorization After NF-e Receipt* (technical name: `AUTHORIZ`) executes an *NF-e Status Check* to validate the current status of this NF-e at SEFAZ.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is asynchronous. During this communication, the step is waiting for the response from SEFAZ.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

NF-e Inbound Processing

Additional Information

The SEFAZ status is only overwritten if a status is found that is worse than the status already stored in the system. If the NF-e process is no longer waiting for a response, a history entry is written.

7.2.5.13.8 BADIAFTD: Customer-Specific Step After DANFE

The step *Customer-Specific Step After DANFE* (technical name: `BADIAFTD`) includes a BAdI that offers the customer the option to execute all necessary steps in the connected ERP system after the DANFE has arrived.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

Customer-Specific Implementation of a step (`/XNFE/BADI_FLEXIBLE_STEP`). For more information, see BAdIs for NF-e Inbound [page 116].

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

7.2.5.13.9 BADIBEFD: Customer-Specific Step Before DANFE

The step *Customer-Specific Step Before DANFE* (technical name: `BADIBEFD`) includes a BAdI that offers the customer the possibility to execute all necessary steps in the connected ERP before the DANFE has arrived.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

Customer-Specific Implementation of a step (`/XNFE/BADI_FLEXIBLE_STEP`). For more information about the available BAdIs, see BAdIs for NF-e Inbound [page 116].

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

7.2.5.13.10 CREATNFE: Create NF-e from Distribution Service

The step *Create NF-e from Distribution Service* (technical name: `CREATNFE`) creates an NF-e header entry from the information received by a line of the distribution web service.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

No BAdI available

Usage

NF-e Inbound Processing

7.2.5.13.11 CSASSIGN: Assign Purchase Order Items- Consignment

The step *Assign Purchase Order Items- Consignment* (technical name: `CSASSIGN`) assigns to all item of the XML a purchase order and purchase order number. A purchase order number and item must be assigned to all NF-e items. This happens either automatically, or by manual assignment.

Activation/Deactivation

By default, this step is active. The step can be processed automatically or manually.

Customizing

Both units of measure must be defined in the NFE and ERP system.

The corresponding ISO code is required to determine the internal language-independent unit of measurement.

BAdIs

Assignment of Purchase Order Number and PO Item Number (`/XNFE/BADI_PO_ASSIGN`)

You can use a BAdI to implement a customer-specific mapping of the purchase order number and item to the NF-e item. For more information, see BAdIs for Inbound NF-e [page 116].

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

7.2.5.13.12 CSASSREF: Assign Reference PO Items - Consignment

The step *Assign Reference PO Items - Consignment* (technical name: `CSASSREF`) assigns the purchase order items of the NF-e to those of the reference NF-e.

A reference PO number and item must be assigned to all NF-e items. This happens either automatically, or by manual assignment.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Both units of measure must be defined in the NFE and ERP system.

The corresponding ISO code is required to determine the internal language-independent unit of measurement.

BAdIs

Assignment of Purchase Order Number and PO Item Number (`/XNFE/BADI_PO_ASSIGN`)

You can use a BAdI to implement a customer-specific mapping of the purchase order number and item to the NF-e item. For more information, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

Additional Information

The invoice relates to the relevant goods receipt that must already exist in the system. The goods receipt must be completely assigned to orders. The invoice is assigned using the reference NF-e, that means the goods receipt NF-e. The system checks if the assignments from the goods receipt NF-e can be taken over to the invoice NF-e. If this is possible, the assignment is used and the invoice NF-e is assigned.

7.2.5.13.13 CSDELCRE: Create Inbound Delivery - Consignment

The step *Create Inbound Delivery - Consignment* (technical name: `CSDELCRE`) creates the inbound delivery in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

The ERP system uses the PO, the PO item, and the XML quantity data to create an inbound delivery number.

The ERP system sends the created inbound delivery number back to the NFE system.

If you have RTP positions in your NF-e, RTP data is send to the ERP system. The ERP system creates additional lines for RTPThe ERP system and creates additional lines for RTP.

7.2.5.13.14 CSGRPOST: Post Goods Receipt - Consignment

The step *Post Goods Receipt - Consignment* (technical name: `CSGRPOST`) triggers the goods receipt posting in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Step Relevant for Logistics Workplace (`LSTLOGWP`)

Control of XML Data Transfer (`TRANSTDF`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

The inbound delivery number is sent to the ERP system and the goods receipt for the inbound delivery is posted.

The NFE system receives the goods receipt report from the ERP system:

- If you have RTP positions in your NF-e, then the following takes place:
  - The RTP data is send to the ERP system together with the references of the inbound delivery number and position
  - The ERP posts the goods receipt with the RTP data.
  - The ERP system checks that the RTP positions in the inbound delivery are still consistent

7.2.5.13.15 CSGRVALD: Validate Consignment - Goods Receipt

The step *Validate Consignment - Goods Receipt* (technical name: `CSGRVALD`) validates the RTP of the NF-e (if existing) and checks that there no taxes (vICMS, vIPI) in the XML for an RTP item. The RTP lines are validated (incl UM conversion) on the ERP side. In addition, a BAdI can be used to validate the whole content of the XML.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

- *Assignment of Purchase Order Number and PO Item Number* (`/XNFE/BADI_PO_ASSIGN`)
  You can use a BAdI to implement a customer-specific mapping of the purchase order number and item to the NF-e item.
- *BAdI for Validation of Incoming XML Document* (`/XNFE/BADI_XML_VALIDATE`)
  You can use a BAdI in this step to implement customer-specific validation checks.
- You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

For more information about the available BAdIs, see BAdIs for Incoming NF-e [page 116].

Usage

NF-e Inbound Processing

Additional Information

Only the unit of measurement (UoM) for RTP materials need to be converted in this step.

BAdI for PO Assign not considered for RTP

> ### Note
>
> The RTP positions must be validated in processing step `CSGRVALD`. The validation in the ERP system comprises checks of units of measurements (UoM), conversions, and purchase orders (if existing).

7.2.5.13.16 CSIVPOST: Post Invoice and NF-e - Consignment

The step *Post Invoice and NF-e - Consignment* (technical name: `CSIVPOST`) posts the invoice in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Control of XML Data Transfer (`TRANSTDF`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

Extension Parameter(s) for Simulating or Posting Invoice (`/XNFE/BADI_INVOICE_ENHANCE`)

You can implement a BAdI that fills extension parameters that are handed over to the ERP system in a simulation/booking of the invoice. For more information, see BAdIs for Inbound NF-e [page 116].

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

7.2.5.13.17 CSIVVALD: Validate Invoice - Consignment

The step *Validate Invoice - Consignment* (technical name: `CSIVVALD`) checks that the NF-e reference is available in the system and completely processed. Also, a check is carried out, wether an automatic assignment can be done. In addition, a BAdI can be used to validate the whole content of the XML.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

- Assignment of Purchase Order Number and PO Item Number (`/XNFE/BADI_PO_ASSIGN`)
  You can use a BAdI to implement a customer-specific mapping of the purchase order number and item to the NF-e item.
- BAdI for Validation of Incoming XML Document (`/XNFE/BADI_XML_VALIDATE`)
  You can use a BAdI in this step to implement customer-specific validation checks.

For more information about the available BAdIs, see BAdIs for Inbound NF-e [page 116].

The validation steps require the assignment information to be able to carry out the validation and for when returnable packaging is involved to compare the units of measure of the returnable packaging items with the ERP system. The assignments are not stored in the validation steps. Instead, the assignments are stored in the subsequent steps for the purchase order assignments.

Usage

NF-e Inbound Processing

Additional Information

This validation step contains a BAdI that can be used to carry out a customer specific validation of the incoming XML document.

- Check if there are paper references: If yes, then this is an error because only electronic references are accepted
- Check existence of reference NF-e
- Check for NF-e type if reference is of type *NF-e*
- Check for process type of the reference NF-e if the process type is `CONSIGIV`
- Check for NF-e status if the reference NF-e has header status 98 (manual completed) or 99 (automatically completed)

- Check if the material number matches the material number of the reference NF-e. It is NOT possible to set this step manually to *OK*. If more than one entry is found in reference the step is *OK*, but no automatic assignment is possible. If exactly one entry is found an automatic assignment can be done.
- BAdI for PO Assign not considered for RTP

7.2.5.13.18 DELCREAT: Generate Inbound Delivery

The step *Generate Inbound Delivery* (technical name: `DELCREAT`) creates the inbound delivery in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

If the simulation is *OK*, then the system triggers the inbound delivery creation:

- The NFE system calls the ERP system to check the purchase order (PO), the PO item, and the XML quantity.
- The ERP system uses the PO, the PO item, and the XML quantity data to create an inbound delivery number.

- The ERP system sends the created inbound delivery number back to the NFE system.
- The NFE system assigns the inbound delivery. The *normal purchase* NF-e can proceed to the next processing step.

If you have RTP positions in your NF-e, RTP data is sent to the ERP system. The ERP system creates additional lines for RTP and returns the inbound delivery number and position to the NFE system.

7.2.5.13.19 DELDELET: Delete Delivery in ERP

The steps *Delete Delivery in ERP* (technical name: `DELDELET`) deletes the inbound delivery in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

7.2.5.13.20 DWOXVALD: Validate - DANFE Before XML

The step *Validate - DANFE Before XML* (technical name: `DWOXVALD`) offers a BAdI that can be used to validate the whole content of the XML.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

BAdI for Validation of Incoming XML Document (`/XNFE/BADI_XML_VALIDATE`)

You can use the BAdI *NF-e BAdI: Validation of Incoming XML Document* in this step to implement customer-specific validation checks. For more information, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

7.2.5.13.21 ERPTASKS: Check Manual Activities in ERP

The step *Check Manual Activities in ERP* (technical name: ERPTASKS) offers the option to confirm that all remaining tasks in the connected ERP system have been executed.

Activation/Deactivation

By default, this step is active and processed manually.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

NF-e Inbound Processing

7.2.5.13.22 FDASSIGN: Assign Purchase Order Items- Future Delivery

The step *Assign Purchase Order Items- Future Delivery* (technical name: `FDASSIGN`) assigns a purchase order and purchase order number to all items of the XML . These two values can be assigned automatically if both are informed in the corresponding fields in the XML (xPed, nItemPed).

Activation/Deactivation

By default, this step is active. The step can be processed automatically or manually.

Customizing

Both units of measure must be defined in the NFE and ERP system.

The corresponding ISO code is required to determine the internal language-independent unit of measurement.

BAdIs

Assignment of Purchase Order Number and PO Item Number (`/XNFE/BADI_PO_ASSIGN`)

You can use a BAdI to implement a customer-specific mapping of the purchase order number and item to the NF-e item. For more information, see BAdIs for Inbound NF-e [page 116].

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

You must assign a PO number and item to all NF-e Future Delivery items. In addition, the following requirements must be fulfilled to complete this step:

- The PO number and item must exist in the ERP system.
- The ERP system has validated the unit of measure of the NF-e item:
- If the unit of measure for the assigned PO is different than the unit of measure for the corresponding NF-e item, a conversion must be defined in the ERP system.

7.2.5.13.23 FDDELCRE: Create Inbound Delivery- Future Delivery

The step *Create Inbound Delivery- Future Delivery* (technical name: `FDDELCRE`) creates the inbound delivery in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

7.2.5.13.24 FDELVALD: Validate - Future Delivery

The step *Validate - Future Delivery* (technical name: `FDELVALD`) validates the RTP of this NF-e and checks that there are no taxes (vICMS, vIPI) for an RTP item in the XML. The second check is that the RTP lines are validated (incl UM conversion) on the ERP side. A line is only *OK* if it is completely assigned. The step checks that the NF-e reference is available in the system and completely processed. In addition, a check for the feasability of automatic assignment is carried out. A BAdI can be used to validate the whole content of the XML.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

- *Assignment of Purchase Order Number and PO Item Number* (`/XNFE/BADI_PO_ASSIGN`). You can use a BAdI to implement a customer-specific mapping of the purchase order number and item to the NF-e item.
- *BAdI for Validation of Incoming XML Document* (`/XNFE/BADI_XML_VALIDATE`). You can use a BAdI in this step to implement customer-specific validation checks.
- You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

For more information about the available BAdIs, see BAdIs for Inbound NF-e [page 116]

The validation steps require the assignment information to be able to carry out the validation and for when returnable packaging is involved to compare the units of measure of the returnable packaging items with the ERP system. The assignments are not stored in the validation steps. Instead, the assignments are stored in the subsequent steps for the purchase order assignments.

Usage

NF-e Inbound Processing

Additional Information

- Check if there are paper references: If yes, then this is an error because only electronic references are accepted
- Check existence of reference NF-e
- Check for NF-e type if reference is of type 'NF-e'
- Check for process type of the reference NF-e if the process type is NF-e Invoice Receipt Future Delivery Process [page 274] (technical name:`FUTDELIV`).
- Check for NF-e status if the reference NF-e has header status 98 (manual completed) or 99 (automatically completed)
- Check if the material number matches with the material number of the reference NF-e. It is NOT possible to set this step manually to *OK*. If more than one entry is found in reference the step is *OK*, but no automatic assignment is possible. If exactly one entry is found, an automatic assignment can be done.
- If there are RTP positions, then a check of the unit of measurement (UoM) and conversion (if necessary) is carried out in the ERP system. Only RTP materials need to be converted as the unit of measurement (UoM) of other materials can be derived from the reference NF-e.
- BAdI for PO Assign not considered for RTP

7.2.5.13.25 FDGRPOST: Post Goods Receipt - Future Delivery

The step *Post Goods Receipt - Future Delivery* (technical name: `FDGRPOST`) triggers the goods receipt posting in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Step Relevant for Logistics Workplace (`LSTLOGWP`)

Control of XML Data Transfer (`TRANSTDF`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

- The inbound delivery number is send to the ERP system and the goods receipt for the inbound delivery is posted.
- The NFE system receives the goods receipt report from the ERP system
- The RTP data is send to the ERP system together with the references of the inbound delivery number and position
- The ERP posts the goods receipt with the RTP data.
- The ERP system checks that the RTP positions in the inbound delivery are still consistent
- This step can be visible/ executable in the fiscal workplace (by default) or in the logistics workplace.

7.2.5.13.26 FDIVPOST: Post Invoice and NF-e - Future Delivery

The step *Post Invoice and NF-e - Future Delivery* (technical name: `FDIVPOST`) posts the invoice in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically and synchronously.

Customizing

Control of XML Data Transfer (`TRANSTDF`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

- *Extension Parameter(s) for Simulating or Posting Invoice* (`/XNFE/BADI_INVOICE_ENHANCE`). You can implement a BAdI that fills extension parameters that are handed over to the ERP system in a simulation/booking of the invoice. For more information, see BAdIs for Inbound NF-e [page 116].
- You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Aditional Information

The invoice receipt is posted to the ERP system and the NFE system receives the NF-e invoice receipt from the ERP system.

The NF-e is created and posted in the ERP system together with the invoice receipt.

7.2.5.13.27 FDIVVALD: Validate Invoice - Future Delivery

The step *Validate Invoice - Future Delivery* (technical name: `FDIVVALD`) offers a BAdI that can be used to validate the whole content of the XML.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

BAdI for Validation of Incoming XML Document (`/XNFE/BADI_XML_VALIDATE`)

You can use a BAdI in this step to implement customer-specific validation checks. For more information about the available BAdIs, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

7.2.5.13.28 FLEXVALD: Validate Customer-Specific Process

The step *Validate Customer-Specific Process* (technical name: `FLEXVALD`) offers a BAdI that can be used to validate the whole content of the XML.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

BAdI for Validation of Incoming XML Document (`/XNFE/BADI_XML_VALIDATE`)

You can use a BAdI in this step to implement customer-specific validation checks. For more information about the available BAdIs, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

7.2.5.13.29 GISCON2C: Goods Issue: Symbolic Return Subc. Comp.

The step *Goods Issue: Symbolic Return Subc. Comp.* (technical name: `GISCON2C`) triggers the goods movement posting in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Step Relevant for Logistics Workplace (`LSTLOGWP`)

Control of XML Data Transfer (`TRANSTDF`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

This step can be visible/ executable in the fiscal workplace (by default) or in the logistics workplace.

7.2.5.13.30 GRCONFQU: Enter Goods Receipt Quantities

The step *Enter Goods Receipt Quantities* (technical name: `GRCONFQU`) enables the logistics user to enter the quantities that were received in the delivery of the goods. By default, the quantities in the NF-e are used as the

reference point. If counted quantities deviate from the default values, the logistics clerk can overwrite and enter other quantities.

Activation/Deactivation

By default, this step is active and processed manually.

Customizing

Entry of Goods Quantity (technical name: `BLDCOUNT`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

Determination of variant for entering goods receipt quantities (`/XNFE/BADI_GET_COUNTING`)

You can implement a BAdI that determines a customer-specific variant for the delivery quantity entry. For more information, see BAdIs for NF-e Inbound [page 116].

Usage

NF-e Inbound Processing

7.2.5.13.31 GRFICHCK: Check Goods Receipt Quantities

The step *Check Goods Receipt Quantities* (technical name: `GRFICHCK`) enables the fiscal user to check if there are differences between the ordered quantities and the counted quantities. If there are any differences, the fiscal user has to confirm these differences.

Activation/Deactivation

By default, this step is active and processed manually.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

NF-e Inbound Processing

7.2.5.13.32 GRMMCHCK: Prepare Goods Receipt Posting

The step *Prepare Goods Receipt Posting* (technical name: `GRMMCHCK`) enables the logistic user to confirm that all necessary steps in the connected ERP system are carried out and that the posting of the goods and the posting of the invoice can be executed.

Activation/Deactivation

By default, this step is active and processed manually.

Customizing

Not relevant

BAdIs

Determination of Custom UI for Manual Process Steps (`/XNFE/BADI_GET_CUSTOM_UI`)

You can implement a BAdI that enables you to replace the preset UI with a custom UI by means of a Web Dynpro component. For more information, see BAdIs for NF-e Inbound [page 116].

Usage

NF-e Inbound Processing

7.2.5.13.33 GRPOSTNG: Posting Goods Receipt

The step *Posting Goods Receipt* (technical name: `GRPOSTNG`) triggers the goods receipt posting in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Step Relevant for Logistics Workplace (`LSTLOGWP`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

No BAdI available

Usage

NF-e Inbound Processing

Additional Information

- The inbound delivery number is send to the ERP system and the goods receipt for the inbound delivery is posted.
- The NFE system receives the goods receipt report from the ERP system. If the goods receipt fails, manual corrections have to be carried out in the feeder system.

- The RTP data is send to the ERP system together with the references of the inbound delivery number and position.
- The ERP posts the goods receipt with the RTP data.
- The ERP system checks that the RTP positions in the inbound delivery are still consistent.

7.2.5.13.34 GRSCON1A: Goods Receipt - Subcontracting

The step *Goods Receipt Subcontracting* (technical name: `GRSCON1A`) triggers the goods receipt posting in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically and synchronously.

Customizing

Step Relevant for Logistics Workplace (`LSTLOGWP`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

- The inbound delivery number is send to the ERP system and the goods receipt for the inbound delivery is posted.

- The NFE system receives the goods receipt report from the ERP system.
- The RTP data is send to the ERP system together with the references of the inbound delivery number and position
- The ERP posts the goods receipt with the RTP data.
- The ERP system checks that the RTP positions in the inbound delivery are still consistent
- This step can be visible/ executable in the fiscal workplace (by default) or in the logistics workplace.

7.2.5.13.35 GRSCON2D: Goods Receipt Return - Subcontr. Comp.

The step *Goods Receipt Return - Subcontr. Comp.* (technical name: `GRSCON2D`) triggers the goods receipt posting in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Step Relevant for Logistics Workplace (`LSTLOGWP`)

Control of XML Data Transfer (`TRANSTDF`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

The inbound delivery number is send to the ERP system and the goods receipt for the inbound delivery is posted.

This step can be visible/ executable in the fiscal workplace (by default) or in the logistics workplace.

7.2.5.13.36 GRSTOPST: Post Goods Receipt - Stock Transfer

The step *Post Goods Receipt - Stock Transfer* (technical name: `GRSTOPST`) triggers the goods receipt posting in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Step Relevant for Logistics Workplace (`LSTLOGWP`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Additional Information

The inbound delivery number is send to the ERP system and the goods receipt for the inbound delivery is posted.

The SAP NFE system receives the result of the goods receipt from the ERP system.

This step can be visible/ executable in the fiscal workplace (by default) or in the logistics workplace.

7.2.5.13.37 IVPOSTNG: Post Invoice and NF-e

The step *Post Invoice and NF-e* (technical name: `IVPOSTNG`) posts the invoice in the connected ERP system.

The invoice receipt is posted to the ERP system. The NFE system receives the result of the invoice receipt from the ERP system:

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Control of XML Data Transfer (`TRANSTDF`).

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

- *Extension Parameter(s) for Simulating or Posting Invoice* (technical name: `/XNFE/BADI_INVOICE_ENHANCE`)
- *Calculation of Total Value* (technical name: `/XNFE/BADI_CALCULATE_AMNT`)
- *BAdI for Enhancement of Step Result* (technical name: `/XNFE/BADI_ENHANCE_STEP_RESULT`). You can use this BAdI to carry out customer-specific validations for XML content.

For more information, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

Additional Information

RTP data is not required. The RTP lines in the NF-e are created automatically based on the lines in the material document

7.2.5.13.38 IVSCON1A: Post Invoice and NF-e - Subcontracting

The step *Post Invoice and NF-e – Subcontracting* (technical name: `IVSCON1A`) posts the invoice in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Control of XML Data Transfer (`TRANSTDF`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

- *Extension Parameter(s) for Simulating or Posting Invoice* (`/XNFE/BADI_INVOICE_ENHANCE`)
- *Calculation of Total Value* (`/XNFE/BADI_CALCULATE_AMNT`)
- You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

For more information, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

Additional Information

Post Invoice and NF-e Subcontracting mixed (technical name: `IVSCON1A`)

- The NFE system receives the result of the invoice receipt from the ERP system.
- The NF-e is created and posted in the ERP system together with the invoice receipt.
- RTP data is not required. The RTP lines in the NF-e are created automatically based on the lines in the material document

7.2.5.13.39 NFEINERP: Check Existence of NF-e in ERP

The step *Check Existence of NF-e in ERP* (technical name: `NFEINERP`) checks the existence of an incoming NF-e in the connected ERP system. In addition also the total values (`vNf`) as well as the total values of ICMS (`vICMS`) are compared.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

7.2.5.13.40 NFESIMGR: Simulate Goods Receipt and NF-e

The step *Simulate Goods Receipt and NF-e* (technical name: `NFESIMGR`) simulates the goods receipt posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values. This simulation serves as check on the ERP side to verify if a later goods receipt can be posted. The fiscal clerk can visualize the simulation and comparison results with the data of the incoming NF-e.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system. This step can also be processed manually.

Customizing

Control of XML Data Transfer (`TRANSTDF`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

All parameters must be saved before the status can be changed.

The simulation is always executed when a user enters the simulation screen. The result (for example, errors) has to be saved BEFORE it is possible to change the status of this step.

7.2.5.13.41 NFESIMSA: Simulate Goods Movement and NF-e

The step *Simulate Goods Movement and NF-e* (technical name: `NFESIMSA`) simulates the goods movement posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values. This simulation serves as check on the ERP side to verify if a later goods receipt can be posted. The fiscal clerk can visualize the simulation and comparison results with the data of the incoming NF-e.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system. This step can also be processed manually.

Customizing

Control of XML Data Transfer (`TRANSTDF`).

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

All parameters must be saved before the status can be changed.

The simulation is always executed when a user enters the simulation screen. The result (for example, errors) has to be saved BEFORE it is possible to change the status of this step.

7.2.5.13.42 NFESIMSC: Simulate Invoice and NF-e

The step *Simulate Invoice and NF-e* (technical name: `NFESIMSC`)simulates the invoice posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later post with these changed values. This simulation serves as check on the ERP side to verify if a later goods receipt and invoice receipt can be posted. The fiscal clerk can visualize the simulation and comparison results with the data of the incoming NF-e.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system. This step can also be processed manually.

Customizing

Control of XML Data Transfer (`TRANSTDF`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

- *Fill Extension Parameter(s) for Simulating or Posting Invoice* (`/XNFE/BADI_INVOICE_ENHANCE`)
- *Calculation of Total Value* (`/XNFE/BADI_CALCULATE_AMNT`)
- You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

For more information, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

Additional Information

All parameters must be saved before the status can be changed.

No RTP data is send to the ERP system. There are no simulation results for RTP.

The simulation is always executed when a user enters the simulation screen. The result (for example, errors) has to be saved BEFORE it is possible to change the status of this step.

7.2.5.13.43 NFESIMUL: Simulate Invoice and NF-e

The step *Simulate Invoice and NF-e* (technical name: `NFESIMUL`) simulates the invoice posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values. This simulation serves as check on the ERP side to verify if a later goods receipt and invoice receipt can be posted. The fiscal clerk can visualize the simulation and comparison results with the data of the incoming NF-e.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system. This step can also be processed manually.

Customizing

Control of XML Data Transfer (`TRANSTDF`).

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

You can use the following BAdIs in this step:

You can implement the BAdI *NF-e BAdI: Simulate/Post Filling of Extension Parameter for Invoice* that fills extension parameters that are handed over to the ERP system in a simulation/booking of the invoice. For more information, see BAdIs for Inbound NF-e [page 116].

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

All parameters must be saved before the status can be changed.

If you have RTP positions in your NF-e, no RTP-relevant data are send to the ERP system. There are no simulation results for RTP items.

> → Recommendation
>
> We recommend that you do not deactivate this process step to ensure the correct posting of the NF-e.

7.2.5.13.44 NPURVALD: Validation for Normal Purchasing

The step *Validation for Normal Purchasing* (technical name: `NPURVALD`) validates items of type RTP in the assignment table. It also offers the option to do some customer specific validations regarding the whole XML content (via BAdI).

Activation/Deactivation

By default, this step is active and processed automatically and synchronously.

Customizing

Not relevant

BAdIs

You can use the BAdI *NF-e BAdI: Validation of Incoming XML Document*(`/XNFE/BADI_XML_VALIDATE`) in this step to implement customer-specific validation checks.

The validation steps require the assignment information to be able to carry out the validation and for when returnable packaging (RTP) is involved to compare the units of measure of the returnable packaging items with the ERP system. The assignments are not stored in the validation steps. Instead, the assignments are stored in the subsequent steps for the purchase order assignments.

You can use the BAdI *NF-e BAdI: Assignment of Purchase Order Number and Purchase Order Item* (`/XNFE/BADI_PO_ASSIGN`) to implement a customer-specific mapping of the purchase order number and item to the NF-e item.

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry ou customer-specific valididitions for XML content.

For more information about the available BAdIs, see BAdIs for Inbound NF-e [page 116]

Usage

NF-e Inbound Processing

Additional Information

If there are RTP positions (abbreviation for *returnable packaging*), then the system checks the unit of measurement (UoM) and conversion (if necessary) in the ERP system.

There is also a validation of the XML to check that the RTP positions do not contain any taxes.

The validation in the ERP system comprises checks of units of measurements (UoM), conversions, and purchase orders (if existing).

The validation of the XML file within the NFE system checks that the data adheres to defined rules.

7.2.5.13.45 NSIMCSGR: Simulate Goods Receipt and NF-e

The step *Simulate Goods Receipt and NF-e* (technical name: `NSIMCSGR`) simulates the goods receipt posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values. This simulation serves as check on the ERP side to verify if a later goods receipt can be posted. The fiscal clerk can visualize the simulation and comparison results with the data of the incoming NF-e.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system. This step can also be processed manually.

Customizing

Control of XML Data Transfer (`TRANSTDF`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

All parameters must be saved before the status can be changed.

No RTP data is send to the ERP system. There are no simulation results for RTP.

The simulation is always executed when a user enters the simulation screen. The result (for example, errors) has to be saved BEFORE it is possible to change the status of this step.

7.2.5.13.46 NSIMCSIV: Simulate Invoice and NF-e

The step *Simulate Invoice and NF-e* (technical name: `NSIMCSIV`) simulates the invoice posting with the current assignments. This simulation serves as check on the ERP side to verify if a later goods receipt can be posted. The fiscal clerk can visualize the simulation and comparison results with the data of the incoming NF-e. The fiscal clerk can change tax codes and CFOP codes.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system. This step can also be processed manually.

Customizing

Control of XML Data Transfer (`TRANSTDF`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

- *Fill Extension Parameter(s) for Simulating or Posting Invoice* (`/XNFE/BADI_INVOICE_ENHANCE`). You can implement a BAdI that fills extension parameters that are handed over to the ERP system in a simulation/booking of the invoice. For more information, see BAdIs for Inbound NF-e [page 116].
- You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

All parameters must be saved before the status can be changed.

The simulation is always executed when a user enters the simulation screen. The result (for example, errors) has to be saved BEFORE it is possible to change the status of this step.

7.2.5.13.47 NSIMFDGR: Simulate Goods Receipt and NF-e

The step *Simulate Goods Receipt and NF-e* (technical name: `NSIMFDGR`) simulates the goods receipt posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values. This simulation serves as check on the ERP side to verify if a later invoice receipt can be posted. The fiscal clerk can visualize the simulation and comparison results with the data of the incoming NF-e.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Control of XML Data Transfer (`TRANSTDF`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

All parameters must be saved before the status can be changed.

No RTP data is send to the ERP system. There are no simulation results for RTP.

The simulation is always executed when a user enters the simulation screen. The result (for example, errors) has to be saved BEFORE it is possible to change the status of this step.

7.2.5.13.48 NSIMFDIV: Simulate Invoice and NF-e

The step *Simulate Invoice and NF-e* (technical name: `NSIMFDIV`) simulates the invoice posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values. This simulation serves as check on the ERP side to verify if a later invoice receipt can be posted. The fiscal clerk can visualize the simulation and comparison results with the data of the incoming NF-e.

Activation/Deactivation

By default, this step is active and processed automatically or manually and synchronously.

Customizing

Control of XML Data Transfer (`TRANSTDF`)

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

- *Fill Extension Parameter(s) for Simulating or Posting Invoice* (`/XNFE/BADI_INVOICE_ENHANCE`). You can implement a BAdI that fills extension parameters that are handed over to the ERP system in a simulation/booking of the invoice. For more information, see BAdIs for Inbound NF-e [page 116].
- You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

All parameters must be saved before the status can be changed.

No RTP data is send to the ERP system. There are no simulation results for RTP.

The simulation is always executed when a user enters the simulation screen. The result (for example, errors) has to be saved BEFORE it is possible to change the status of this step.

7.2.5.13.49 POASSREF: Assign Reference Purchase Order Items

The step *Assign Reference Purchase Order Items* (technical name: `POASSREF`) assigns the purchase order items to the items of the reference NF-e.

Activation/Deactivation

By default, this step is active and processed automatically or manually by the NFE system.

Customizing

Both units of measure must be defined in the NFE and ERP system.

The corresponding ISO code is required to determine the internal language-independent unit of measurement.

BAdIs

Assignment of Purchase Order Number and PO Item Number (`/XNFE/BADI_PO_ASSIGN`)

You can use a BAdI to implement a customer-specific mapping of the purchase order number and item to the NF-e item. For more information, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

Additional Information

A PO number and item must be assigned to all NF-e items. This happens either automatically, or by manual assignment if errors occurred. In addition, the following requirements must be fulfilled to complete this step:

- The PO number and item must exist in the ERP system.
- The ERP system has validated the unit of measure of the NF-e item
- If the unit of measure for the assigned PO is different than the unit of measure for the corresponding NF-e item, then a conversion must be defined in the ERP system.
- The delivery relates to the relevant invoice that must already exist in the system. The invoice must be completely assigned to orders. The delivery is assigned using the reference NF-e, that means the invoice NF-e. The system checks if the assignments from the invoice-NF-e can be taken over to the delivery NF-e. If this is possible, the assignment is used and the delivery-NF-e is assigned.

7.2.5.13.50 POASSIGN: Assign Purchase Order Items

The step *Assign Purchase Order Items* (technical name: `POASSIGN`) assigns to all item of the XML a purchase order and purchase order number. These two values can be assigned automatically if both are informed in the corresponding fields in the XML. Otherwise a user has to assign the open lines manually.

Activation/Deactivation

By default, this step is active and processed automatically or manually by the NFE system.

Customizing

Both units of measure must be defined in the NFE and ERP system.

The corresponding ISO code is required to determine the internal language-independent unit of measurement.

BAdIs

- *Assignment of Purchase Order Number and PO Item Number* (technical name: `/XNFE/BADI_PO_ASSIGN`)

You can use this BAdI to implement a customer-specific mapping of the purchase order number and item to the NF-e item.

- *BAdI for Enhancement of Step Result* (technical name: `/XNFE/BADI_ENHANCE_STEP_RESULT`)
  You can use this BAdI to carry out customer-specific validations for XML content.

For more information, see BAdIs for Inbound NF-e [page 116]

Usage

NF-e Inbound Processing

Additional Information

You must assign a PO number and item to all NF-e Future Delivery items. In addition, the following requirements must be fulfilled to complete this step:

- The PO number and item must exist in the ERP system.
- The ERP system has validated the unit of measure of the NF-e item
- If the unit of measure for the assigned PO is different than the unit of measure for the corresponding NF-e item, a conversion must be defined in the ERP system.
- If you have RTP positions in your NF-e, no RTP-relevant data are send to the ERP system. There are no simulation results for RTP items.

7.2.5.13.51 RECDANFE: Enter DANFE

The step *Enter DANFE* (technical name: `RECDANFE`) indicates that the goods for an NF-e enter the company (for example, via truck). A user enters the access key of one NF-e, compares the received XML with the preview version the system creates from the XML file. If the XML is not available in the recipient's system yet, the user has to decide how to continue with the NF-e.

Activation/Deactivation

By default, this step is active and processed manually by the NFE system.

Customizing

PDF Preview (`DANFEPRE`).

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

No BAdI available

Usage

NF-e Inbound Processing

7.2.5.13.52 SCASSIGN: Assign Items with Components

The step *Assign Items with Components* (technical name: `SCASSIGN`) assigns to all item of the XML a purchase order and purchase order number. These two values can be assigned automatically if both are informed in the corresponding fields in the XML (`xPed, nItemPed`). Otherwise a user has to assign the open lines manually.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Both units of measure must be defined in the NFE and ERP system.

The corresponding ISO code is required to determine the internal language-independent unit of measurement.

BAdIs

- *Assignment of Purchase Order Number and PO Item Number* (`/XNFE/BADI_PO_ASSIGN`)
- You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

For more information about the available BAdIs, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

Additional Information

The following requirements must be fulfilled to complete this step:

- The PO number and item must exist in the ERP system.
- The ERP system has validated the unit of measure of the NF-e item
- If the unit of measure for the assigned PO is different than the unit of measure for the corresponding NF-e item, then a conversion must be defined in the ERP system.
- If the item is a component of item type *symbolic return* and there is a PO number and item assigned, check if this PO number and item exists in one of the main items.
- If there is only one main item and the component contains no assigned PO number and item, then assign the main item PO number and item to the components that have no assignment so far.

7.2.5.13.53 SCDELCRE: Create Delivery – Subcontracting

The step *Create Delivery – Subcontracting* (technical name: `SCDELCRE`) creates the inbound delivery in the connected ERP system.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

You can use the BAdI *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`) to carry out customer-specific validations for XML content.

Usage

NF-e Inbound Processing

Additional Information

- The ERP system uses the PO, the PO item, and the XML quantity data to create an inbound delivery.
- The ERP system sends the created inbound delivery number back to the NFE system.
- If you have RTP positions in your NF-e, RTP data is sent to the ERP system. The ERP system creates additional lines for RTP and returns the inbound delivery number and position to the NFE system.

7.2.5.13.54 SCONVALD: Validate - Subcontracting

The step *Validate - Subcontracting* (technical name: `SCONVALD`) validates the RTP of this NF-e. First is checked that for an RTP item no taxes (vICMS, vIPI) are in the XML. Second check is that the RTP lines are validated (incl UM conversion) in the ERP side. A line is only ok, if it is completely assigned afterwards. Also the reference NF-e is check that it exists and is not paper based. In addition, a BAdI can be used to validate the whole content of the XML.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

- *Assignment of Purchase Order Number and PO Item Number* (`/XNFE/BADI_PO_ASSIGN`)
- *BAdI for Validation of Incoming XML Document* (`/XNFE/BADI_XML_VALIDATE`)
- *BAdI for Enhancement of Step Result* (`/XNFE/BADI_ENHANCE_STEP_RESULT`)

For more information about the available BAdIs, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

Additional Information

- The validation checks if the Symbolic Returns are marked as statistical: If not, the process stops with an error.
- The validation checks if the Symbolic Returns contain taxes: If they contain taxes, the process stops with an error.
- In addition to the validation in the ERP system, there is also a validation of the XML regarding the RTP positions. The intention is to check that the RTP positions do not contain any taxes.
- The validation in the ERP system comprises checks of units of measurements (UoM), conversions, and purchase orders (if existing).
- The validation of the XML file within the NFE system checks that the data adheres to defined rules.
- If there are RTP positions, then a check of the unit of measurement (UoM) and conversion (if necessary) is carried out in the ERP system.
- The validation steps require the assignment information to be able to carry out the validation and for when returnable packaging is involved to compare the units of measure of the returnable packaging items with the ERP system. The assignments are not stored in the validation steps. Instead, the assignments are stored in the subsequent steps for the purchase order assignments.
- BAdI for PO Assign not considered for RTP.

7.2.5.13.55 SENDACKN: Send Acknowledgment Event

The step *Send Acknowledgment Event* (technical name: `SENDACKN`) issues an *Operation Acknowledgment Event* (seeNF-e Events: Operation Acknowledgment [page 434]) to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Acknowledgment Event*.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

No BAdI available

Usage

NF-e Inbound Processing

Additional Information

Events are collected in batches. The batch collection and sending is carried out via background jobs. For details about sending NF-e events, see Sending NF-e Events [page 514].

7.2.5.13.56 SENDOPCO: Create Operation Confirmation Event

The step *Create Operation Confirmation Event* (technical name: `SENDOPCO`) issues an *Operation Confirmation Event* (see NF-e Events: Operation Confirmation [page 436]) to report the status of the transaction to the government. The step triggers the event creation and waits afterwards until the event process updates the NF-e status as soon as it receives an authorization status for the *Operation Confirmation Event*.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

Receiver Acknowledgment Events (`/XNFE/BADI_RECEIVER_ACK_EVENTS`).

For more information, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

Additional Information

Events are collected in batches. The batch collection and sending is carried out via background jobs. For details about sending NF-e events, see Sending NF-e Events [page 514].

7.2.5.13.57 SIG2VALD: Validate - Other Process with DANFE

The step *Validate - Other Process with DANFE* (technical name: `SIG2VALD`) offers a BAdI that can be used to validate the whole content of the XML.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

BAdI for Validation of Incoming XML Document (`/XNFE/BADI_XML_VALIDATE`)

You can use a BAdI in this step to implement customer-specific validation checks. For more information about the available BAdIs, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

7.2.5.13.58 SIGNATUR: Validate Signature of Business Partner

The step *Validate Signature of Business Partner* (technical name: `SIGNATUR`) checks the signature of the received NF-e and if the calculated digest value matches the value in the XML.

Step Execution

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Signature Validation (technical name: `SIGVALID`).

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

No BAdI available.

Usage

NF-e Inbound Processing

7.2.5.13.59 SIGNVALD: Validate - Other Process Without DANFE

The step *Validate - Other Process Without DANFE* (technical name: `SIGNVALD`) offers a BAdI that can be used to validate the whole content of the XML.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant.

BAdIs

BAdI for Validation of Incoming XML Document (`/XNFE/BADI_XML_VALIDATE`)

You can use a BAdI in this step to implement customer-specific validation checks. For more information about the available BAdIs, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

7.2.5.13.60 STOCVALD: Validate - Stock Transfer

The step *Validate - Stock Transfer* (technical name: `STOCVALD`) offers a BAdI that can be used to validate the whole content of the XML.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

BAdI for Validation of Incoming XML Document (`/XNFE/BADI_XML_VALIDATE`)

You can use a BAdI in this step to implement customer-specific validation checks. For more information about the available BAdIs, see BAdIs for Inbound NF-e [page 116].

Usage

NF-e Inbound Processing

7.2.5.13.61 VALIDATE: Validate NF-e from Distribution Service

The step *Validate NF-e from Distribution Service* (technical name: `VALIDATE`) offers a BAdI to validate the NF-e summary and to decide whether the XML should be received via SEFAZ distribution web service or not.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant.

BAdIs

BAdI for Download of NF-es from Authority (`/XNFE/BADI_XML_DOWNLOAD`)

For more information, see BAdIs for NF-e Inbound [page 116].

Usage

NF-e Inbound Processing

Additional Information

The whole process can be set to finish by this step (decision via BAdI).

7.2.5.13.62 XMLARRIV: Process waiting for complete NF-e

The step *Process waiting for complete NF-e* (technical name: `XMLARRIV`) waits for the arrival of the XML, either from business partner, or from the distribution web service. The stored data in the NFE system is updated with the data of the NF-e.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

No BAdI available

Usage

NF-e Inbound Processing

7.2.6 NF-e Fiscal Workplace

The NF-e Fiscal Workplace is where the fiscal clerk monitors and processes incoming NF-es.

Queries

- **Today**
  The *Today* query lists all NF-es received today with their main header data and the status information.
- **Overview**
  The *Overview* query lists all NF-es with their main header data and the status information.

List

Based on your selection criteria, the *Fiscal Workplace* displays a list of NF-es and their processing status.

The following status icons are used:

- Process Completed; NF-e Processed Successfully. This icon represents the following statuses:
  - 99 -> Process Completed; Document Successfully Processed
  - 98 -> Process Completed; Document Manually Processed
- Process Completed; NF-e Rejected. This icon represents status 89.
  The NF-e processing finished with a rejection by the user with no option to continue processing.
- Document Rejected, Can Be Overwritten. This icon represents status 88.
  The NF-e processing finished with a rejection by the user with the option to receive the XML again.
- NF-e Missing Logical System for Processing. This icon represents the following statuses:
  - 21 -> Document Without Business Process Assignment
  - 22 -> Document Missing Logical System for Processing
- Process Waiting for Asynchronous Reply. This icon represents status 11.
- Error in preceding Process Step. This icon represents the following statuses:
  - 02 -> Error in last process step
  - 03 -> Technical error in last process step
  - 04 -> Temporary error in last process step

  To correct the error, go to the status overview and check the problem description in the last activity. After correcting the problem, you can continue the process either by using the corresponding step-specific user interface or with the action *Continue Process*.
- Process Waiting for User Action. This icon represents status 01.
  The process stopped for the user to carry out necessary actions on the corresponding step-specific user interface.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Additional Information

Once you have selected an NF-e in the displayed table, tabs containing additional information about this NF-e appear at the bottom of the screen:

- **Status Overview**
  This is a description of the process with the corresponding *Status*, *Activity*, *Process*, *Status Description*, *Info Text* and *Application Log* fields.
- **History**
  This is a description of the history of this NF-e containing the *Status*, *Process*, *Activity*, *Status Description*, *Info Text*, *Executed on*, *User* and *Application Log* fields.

- **Assignments**
  The assignments tab displays information about process-relevant data on NF-e item level.
- **References**
  The references tab is only displayed for NF-es where the XML contains electronic or paper-based NF/CT references.
  - The icon indicates whether the NF-e/CT-e is stored in the NFE system.
  - The access key comes in form of a direct link to the XML of the NF-e/CT-e. To open this link, you need the authorization to display the NF-e/CT-e.
- **Events**
  This is an overview of all events related to this NF-e. For more detailed information, see Events Embedded in Monitors [page 522].

> ⚠ Caution
>
> The Events tab is only visible if there is at least 1 event for an NF-e.

Actions

Execute Process Step

The available process steps depend on the used NF-e process. For the *Normal Purchasing* process, you can manually execute the following steps:

- Assigning Purchase Orders
- Simulating NF-es
- Recording DANFEs
- Checking Goods Receipt

There are other process steps that cannot be executed manually.

Select Details:

- **Display Details**
  This action displays the XML content in multiple sub-screens. You can also access the NF-e details by clicking on the access key in the list.
- **Display XML**
  This action allows you to download/display the NF-e XML file (if existing).
- **Cancellation XML**
  This action allows you to download/display the cancellation event XML file (if existing).
- **Display DANFE**
  This action displays parts of the XML content in a DANFE preview (if existing).

Enter DANFE

Choose *Enter DANFE* to record a DANFE code manually or with a bar code reader. You have the following options:

- Do Not Enter DANFE
- Enter DANFE Before Receiving XML File

> ⚠ Caution
>
> If the DANFE is entered before the XML arrives, automatic processing is not possible in the connected ERP system.

- Download XML from Authorities

> ⓘ Note
>
> To be able to download the XML, the NF-e summary must exist in the *NF-e Fiscal Workplace* and the event *Operation Acknowledgment* must have been authorized. For more information, see Preprocessing Inbound NF-es [page 244]. If you select the action *Download XML* with a status that is not suitable, you receive an error message.

> ⓘ Note
>
> If you receive a contingency DANFE printed on security paper, see NF-e Contingency Process [page 253].

Additional Functions

- **Continue Process**
  For attempting to restart the automatic processing of an NF-e. If NF-e processing stops, investigate the reason, and then choose *Continue Process* to try to continue processing.
- **Set Process Step to OK Manually**
  For setting the current process step to OK, despite the fact that the process step was not carried out successfully.
- **Manually End NF-e**
  For ending NF-e processing in the NFE system without carrying out any further steps. The user has the option to issue a receiver acknowledgement end event of type *operation confirmation* (See: Operation Confirmation [page 436]).

  > ⓘ Note
  >
  > You must do necessary additional processing in the ERP system manually without linking to the NFE system.

- **Reject NF-e**
  For rejecting an NF-e and to stop further processing in the NFE system. The receiver acknowledgement end event of type *operation denial* (See: Operation Denial [page 438]), or *operation termination* (See: Operation Termination [page 440]) will be sent depending on the customizing settings for the rejection reasons.
  (See: *Nota Fiscal Eletrônica* > *Inbound* > *Communication to Business Partner* > *NF-e: Define Reasons for Rejection; Assign to Events*). Note that the message to the vendor is not sent automatically. To send a message about the rejection, you have to execute *Send notification to vendor* (This is active for a rejected NF-e).

  > ⓘ Note
  >
  > After rejecting an NF-e, you must do necessary additional processing in the ERP system manually without linking to the NFE system.

  If the XML is incorrect, you have the option to flag the NF-e as *Enable New Receipt of NF-e*. The NF-e receives a new status (*Status code 88 –>Document rejected, Can be overwritten*) and will be overwritten

once the same NF-e (with the same access key) arrives again in the NFE system. This is documented in the history table of the NF-e.

> ⚠ Caution
>
> The previous XML is overwritten and the processing starts again. You cannot restore an overwritten NF-e.

- **Send Notification**
  Use this action to send a notification about the rejection of an NF-e to the vendor. This can be done after the NF-e was rejected.
  Vendor notification is not triggered automatically upon rejection; you must do this manually. For more information, see NF-e Rejection Notification [page 113].
- **Query Events**
  Use this action to trigger an asynchronous NF-e status check to receive events from your business partner through the authorities.

NF-e Details

You can display the details by choosing an NF-e's *Access Key*, or by selecting the corresponding line and choosing *Display Details*. The details view displays the entire content of the XML in several tabs and grouped according to the tags in the XML

Navigation

You can access the *NF-e Fiscal Workplace* in SAP NFE via one of the following options:

- You can call up the specific menu *Fiscal Workplace* from the user role `/XNFE/WP_NFE_IN_FISCAL` *(Menu: NF-e Inbound Fiscal Workplace)*.
- You can access this option from the user role by choosing *Fiscal Workplace: Inbound Messages* ▸ *NF-e* ▸.

  NF-e Fiscal Workplace: Assignment [page 350]

  NF-e Fiscal Workplace: Simulating NF-es [page 357]

  NF-e Fiscal Workplace: Recording DANFEs [page 359]

  NF-e Fiscal Workplace: Checking Goods Receipt Quantities [page 360]

7.2.6.1 NF-e Fiscal Workplace: Assignment

The following assignment steps are carried out during the processing of an NF-e:

- Assignment of purchase order items. This step is used for the following processes:
  - *Normal Purchasing* (`NORMPRCH`)

- *Future Delivery Invoice* (`FUTDELIV`)
  For more information, see Assignment for Normal Purchasing and Future Delivery Invoice [page 351]

- Assignment of main items and optionally components. This step is used in the following process:
  - *NF-e for Subcontracting* (`SUBCON1A`)
    For more information, see Assignment for NF-e for Subcontracting (SUBCON1A) [page 353]
- Assignment of components. This step is used in the following process:
  - *NF-e for Symbolic Returns* (`SUBCON2C`)
    For more information, see Assignment for NF-e for Symbolic Returns (SUBCON2C) [page 354]
- Assignment of items of the referenced NF-e. This step is used in the following process:
  - *Future Delivery Goods Receipt* (`FUTDELGR`)
    For more information, see Assignment for Future Delivery Goods Receipt (FUTDELGR) [page 356]

Assignment for Normal Purchasing and Future Delivery Invoice [page 351]

Assignment for NF-e for Subcontracting (SUBCON1A) [page 353]

Assignment for NF-e for Symbolic Returns (SUBCON2C) [page 354]

Assignment for Future Delivery Goods Receipt (FUTDELGR) [page 356]

7.2.6.1.1 Assignment for Normal Purchasing and Future Delivery Invoice

You can choose *Execute Process Step* to manually execute the assignment of items. This step depends on the determined business process. For *Normal Purchasing*, the process step is*Assign Purchase Order Items*.

To assign purchase order items, proceed as follows:

1. Select an NF-e and choose *Execute Process Steps* –> *Assign Purchase Order Items* (for *Normal Purchasing*)
2. On the next screen, you see the following table entries:
   - *Open NF-e Items*
     - Item Number
     - Quantity
     - Unit of Measure
     - Material Number
     - PO Number
     - Purchase Order Item
   - *Available Items (for example: PO items from a reference purchase Order)*
     - PO Number
     - Purchase Order Item
     - PO Material Number
     - Purchase Order Material Short Text
     - PO Quantity
     - Purchase Order Unit
     - Purchase Order Organization
     - Purchase Order Group

> **Note**
>
> Available PO items are determined in the ERP system with search criteria provided by the XML file. For more information, see Communication with SAP ERP for Normal Purchasing [page 248] (example for business process Normal Purchasing. All other business processes also have a description of the ERP communication)

3. Types of Assignment Execution

> **Note**
>
> It is possible to assign multiple NF-e items to the same purchase order item for normal purchasing. For future delivery invoices, the assignment must be unique. For more information see Processing Inbound NF-es [page 245].

- Item-Based Search
  Select an open NF-e item in the table *Open NF-e Items*. Select an available PO item in the table *Available PO Items* and assign it to the open NF-e item by choosing *Assign Purchase Order*.
  If no available PO item is displayed, choose *Find Purchase Order Items* to search for purchase orders using specific PO numbers (*Find Purchase Order*) or other search criteria (*Extended Search for the Item-based search*).
- Global Search
  You can search for an existing individual purchase order by entering the purchase order number into the search field of the global search. If you don't know the number, use the input help (F4) for a list of proposed purchase order numbers. You are free to assign all open NF-e items to a purchase order item. You have to assign the purchase order items using drag-and-drop.

To complete this step, you must assign all open NF-e items to a purchase order item.

4. All assigned NF-e items are now displayed in the *Assigned NF-e Items* table, along with the following information:
   - *Assigned NF-e Items*
     - Item Number
     - Quantity
     - Unit of Measure
     - Material Number
     - PO Number
     - Purchase Order Item
     - PO Quantity
     - Purchase Order Unit
     - PO Material Number
     - Purchase Order Material Short Text
     - Purchase Order Organization
     - Purchase Order Group

> **Note**
>
> You can always reset assignments. Select the lines with the NF-e items to be reset, and then choose *Reset Assignment*.

5. To check if your assigned NF-e items are correct, save your assignments.

> **Note**
>
> You can also check if your assigned NF-e items are correct by running a simulation (see NF-e Fiscal Workplace: NF-e Simulation [page 357]).

7.2.6.1.2 Assignment for NF-e for Subcontracting (SUBCON1A)

You can choose *Execute Process Step* to manually execute the assignment of items. This step depends on the determined business process. For *Normal Purchasing*, the process step is*Assign Purchase Order Items*.

To assign purchase order items, proceed as follows:

1. Select an NF-e and choose *Execute Process Steps* –> *Assign Purchase Order Items* (for *Normal Purchasing*)
2. On the next screen, you see the following table entries:
   - *Open NF-e Items*
     - Item Number
     - Quantity
     - Unit of Measure
     - Material Number
     - PO Number
     - Purchase Order Item
   - *Available Items (for example: PO items from a reference NF-e*
     - PO Number
     - Purchase Order Item
     - PO Material Number
     - Purchase Order Material Short Text
     - PO Quantity
     - Purchase Order Unit
     - Purchase Order Organization
     - Purchase Order Group

   > **Note**
   >
   > Available PO items are determined in the ERP system with search criteria provided by the XML file. For more information, see Communication with SAP ERP for Normal Purchasing [page 248] (example for business process Normal Purchasing. All other business processes also have a description of the ERP communication)
3. Select an open NF-e item in the table *Open NF-e Items*. Select an available PO item in the table *Available PO Items* and assign it to the open NF-e item by choosing *Assign Purchase Order*.
   If no available PO item is displayed, choose *Find Purchase Order Items* to search for purchase orders using specific PO numbers (*Find Purchase Order*) or other search criteria (*Extended Search for the item-based search*).

Alternatively, you can search for an existing individual purchase order by entering the purchase order number into the search field of the global search. If you do not know the number, use the input help (F4) for a list of proposed purchase order numbers.
You have to assign the purchase order items using drag-and-drop.
To complete this step, you must assign a purchase order item to all open NF-e items.

4. All assigned NF-e items are now displayed in the *Assigned NF-e Items* table, along with the following information:
   - *Assigned NF-e Items*
     - Item Number
     - Quantity
     - Unit of Measure
     - Material Number
     - PO Number
     - Purchase Order Item
     - PO Quantity
     - Purchase Order Unit
     - PO Material Number
     - Purchase Order Material Short Text
     - Purchase Order Organization
     - Purchase Order Group

> **Note**
>
> You can always reset assignments. Select the lines with the NF-e items to be reset, and then choose *Reset Assignment*.

5. To check if your assigned NF-e items are correct, save your assignments.

> **Note**
>
> You can also check if your assigned NF-e items are correct by running a simulation (see NF-e Fiscal Workplace: NF-e Simulation [page 357]).

7.2.6.1.3 Assignment for NF-e for Symbolic Returns (SUBCON2C)

You can choose *Execute Process Step* to manually execute the assignment of items. This step depends on the determined business process. For *Normal Purchasing*, the process step is*Assign Purchase Order Items*.

To assign purchase order items, proceed as follows:

1. Select an NF-e and choose *Execute Process Steps* –> *Assign Purchase Order Items* (for *Normal Purchasing*)
2. On the next screen, you see the following table entries:
   - *Open NF-e Items*
     - Item Number
     - Quantity

- Unit of Measure
- Material Number
- PO Number
- Purchase Order Item

- *Available Items (for example: PO items from a reference NF-e*
  - PO Number
  - Purchase Order Item
  - PO Material Number
  - Purchase Order Material Short Text
  - PO Quantity
  - Purchase Order Unit
  - Purchase Order Organization
  - Purchase Order Group

> **Note**
>
> Available PO items are determined in the ERP system with search criteria provided by the XML file. For more information, see Communication with SAP ERP for Normal Purchasing [page 248] (example for business process Normal Purchasing. All other business processes also have a description of the ERP communication)

3. Select an open NF-e item in the table *Open NF-e Items*. Select an available PO item in the table *Available PO Items* and assign it to the open NF-e item by choosing *Assign Purchase Order*.
   If no available PO item is displayed, choose *Find Purchase Order Items* to search for purchase orders using specific PO numbers (*Find Purchase Order*) or other search criteria (*Extended Search for the Item-based search*).
   Alternatively, you can search for an existing individual purchase order by entering the purchase order number into the search field of the global search. If you do not know the number, use the input help (F4) for a list of proposed purchase order numbers.
   You have to assign the purchase order items using drag-and-drop.
   To complete this step, you must assign a purchase order item to all open NF-e items.
4. All assigned NF-e items are now displayed in the *Assigned NF-e Items* table, along with the following information:
   - *Assigned NF-e Items*
     - Item Number
     - Quantity
     - Unit of Measure
     - Material Number
     - PO Number
     - Purchase Order Item
     - PO Quantity
     - Purchase Order Unit
     - PO Material Number
     - Purchase Order Material Short Text
     - Purchase Order Organization
     - Purchase Order Group

> **Note**
>
> You can always reset assignments. Select the lines with the NF-e items to be reset, and then choose *Reset Assignment*.

5. To check if your assigned NF-e items are correct, save your assignments.

> **Note**
>
> You can also check if your assigned NF-e items are correct by running a simulation (see NF-e Fiscal Workplace: NF-e Simulation [page 357]).

7.2.6.1.4 Assignment for Future Delivery Goods Receipt (FUTDELGR)

You can choose *Execute Process Step* to manually execute the assignment of items. This step depends on the determined business process. For *Normal Purchasing*, the process step is*Assign Purchase Order Items*.

To assign purchase order items, proceed as follows:

1. Select an NF-e and choose *Execute Process Steps* –> *Assign Purchase Order Items* (for *Normal Purchasing*)
2. On the next screen, you see the following table entries:
   - *Open NF-e Items*
     - Item Number
     - Quantity
     - Unit of Measure
     - Material Number
     - PO Number
     - Purchase Order Item
   - *Available Items (for example: PO items from a reference NF-e*
     - PO Number
     - Purchase Order Item
     - PO Material Number
     - Purchase Order Material Short Text
     - PO Quantity
     - Purchase Order Unit
     - Purchase Order Organization
     - Purchase Order Group

> **Note**
>
> Available PO items are determined in the ERP system with search criteria provided by the XML file. For more information, see Communication with SAP ERP for Normal Purchasing [page 248] (example for business process Normal Purchasing. All other business processes also have a description of the ERP communication)

3. Select an open NF-e item in the table *Open NF-e Items*. Select an available PO item in the table *Available PO Items* and assign it to the open NF-e item by choosing *Assign Purchase Order*.
   If no available PO item is displayed, choose *Find Purchase Order Items* to search for purchase orders using specific PO numbers (*Find Purchase Order*) or other search criteria (*Extended Search*).
   To complete this step, you must assign a purchase order item to all open NF-e items.
4. All assigned NF-e items are now displayed in the *Assigned NF-e Items* table, along with the following information:
   - *Assigned NF-e Items*
     - Item Number
     - Quantity
     - Unit of Measure
     - Material Number
     - PO Number
     - Purchase Order Item
     - PO Quantity
     - Purchase Order Unit
     - PO Material Number
     - Purchase Order Material Short Text
     - Purchase Order Organization
     - Purchase Order Group

   > **Note**
   >
   > You can always reset assignments. Select the lines with the NF-e items to be reset, and then choose *Reset Assignment*.

5. To check if your assigned NF-e items are correct, save your assignments.

   > **Note**
   >
   > You can also check if your assigned NF-e items are correct by running a simulation (see NF-e Fiscal Workplace: NF-e Simulation [page 357]).

7.2.6.2 NF-e Fiscal Workplace: Simulating NF-es

You can choose *Execute Process Step* to manually execute the *Simulate Invoice and NF-e* process step. To run a simulation, proceed as follows:

1. Select an NF-e and choose *Execute Process Steps* > *Simulate Invoice and NF-e*. The simulation is executed in the background and you receive the simulation results immediately.
2. The result displays the following information:
   - *Simulation Results*
     - Item Number
     - PO Number
     - Purchase Order Item

        - PO Quantity
        - Purchase Order Unit
        - PO Material Number
        - Purchase Order Material Short Text
        - CFOP
        - Tax Code
    - Items
        - *Values*
          This tab page compares certain calculated and NF-e values.
        - *Taxes*
          This tab page displays tax values from the NF-e and from the simulation.
        - *Tax Conditions*
          This tab displays a table containing the tax conditions used in the feeder system for every individual item.
    - Total Values
      This tab page displays a list comparing calculated values with total tax values.
3. Messages during simulation are displayed on top of the table in a message area and offer two message types:
    - General messages
    - Item-based messages

   Every message has a link to the long text in the ERP system. If a long text is available in the ERP system, it will be displayed in a pop-up window.
4. Possible Actions
    - You can choose different values for CFOP and tax code and restart the simulation.
    - After running a simulation, you can choose *Save Parameters* to save the tax code and CFOP code used in the simulation, as well as the messages received during the simulation.
    - After saving the simulation results, you can set the status for this NF-e. You have two options:
        - Set Status to OK
          You confirm that the invoice simulation of the NF-e was without errors. You can only set the status to OK if you have an error-free simulation.
        - Set Status Not OK
          Choose this status if there are still issues to deal with.
    - Select the *Back* button to go back to the overview screen.

    > ### Note
    >
    > Exception: If you want to simulate a PO, it is not possible to set a status. The *Back* button leads to the assignment screen. The additional button *Back to Overview* leads you back to the NF-e Fiscal Workplace.
5. After setting a status, you return automatically to the NF-e Fiscal Workplace. If you do not want to set a status, use the Back button to return to the NF-e Fiscal Workplace.

7.2.6.3 NF-e Fiscal Workplace: Recording DANFEs

This step is intended to compare the XML generated PDF preview from the NFE system with the arrived DANFE paper document and to confirm that the DANFE has arrived and that the processing can continue.

The degree of displayed details in the step *Recording DANFE* can be controlled in Customizing activity *Define Control Parameters for Process Steps*. If no customizing exists, the PDF preview is displayed immediately.

For more information, see the section *Maintaining the Variant for the PDF Display* in Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

For this activity, the following settings can be made:

- Display PDF Preview (A PDF preview of the DANFE is displayed in the corresponding step immediately)
- Do not Display PDF Preview (No PDF preview of the DANFE is displayed in the corresponding step)
- Display PDF Preview Subsequently (The DANFE PDF preview is only loaded and displayed after inquiry via opening of the preview area

You can choose *Execute Process Step* to manually execute the *Goods Arrived, Enter DANFE* process step. To record a DANFE, proceed as follows:

1. Select an NF-e and choose *Execute Process Steps* > *Goods Arrived, Enter DANFE* >.
2. On the next screen, you see *Goods Arrived, Enter DANFE: <DANFE number>* along with the following information:
   - *Goods Arrived, Enter DANFE*
     - Process Type
     - CNPJ number of the NF-e issuer
     - CNPJ/CPF number of the NF-e recipient
     - Total value including tax
     - Name of NF-e issuer
     - Name of NF-e recipient
3. Display DANFE
   You can display a PDF file that is generated from the XML content. This DANFE is only a preview of the received DANFE. The purpose is to compare the preview with the data of the received DANFE.

   > **Note**
   >
   > To display the PDF file, you must have an ADS system running and connected to your environment.

4. You can now set the status for this NF-e. You have two options:
   - *Set Status to OK*
     You confirm that the goods have arrived and the entered DANFE is correct.
   - *Set Status Not OK*
     Choose this status if there are still issues to deal with.
5. After setting a status, you return automatically to the *NF-e Fiscal Workplace*. If you do not want to set a status, use the *Back* button to return to the *NF-e Fiscal Workplace*.

7.2.6.4 NF-e Fiscal Workplace: Checking Goods Receipt Quantities

You can choose *Execute Process Step* to manually execute the *Check Goods Receipt Quantities* process step. To check goods receipt quantities, proceed as follows:

1. Select an NF-e and press *Execute Process Steps* -> *Check Goods Receipt Quantities*
2. In the following screen, you see a message *Check Goods Receipt Quantities* followed by the number of the NF-e. You see the following information:
   - *Checking Goods Receipt Quantities*
     - Process Type
     - CNPJ number of the NF-e issuer
     - CNPJ/CPF number of the NF-e recipient
     - Total value including tax
     - Name of NF-e issuer
     - Name of NF-e recipient
3. You can now set the status for this NF-e. You have two options:
   - *Set Status to OK*
     You confirm the correctness of the quantities that were entered by the logistics clerk.
   - *Set Status Not OK*
     Choose this status if there are still issues to deal with.
4. After setting a status, you return automatically to the *NF-e Fiscal Workplace*. If you do not want to set a status, use the *Back* button to return to the *NF-e Fiscal Workplace*.

7.2.7 NF-e Logistics Workplace

The *NF-e Logistics Workplace* is where the NF-e logistics clerk processes an incoming NF-e. The main screen of the fiscal workplace displays a table containing NF-es and corresponding data.

Queries

- **Today**
  The *Today* query lists all NF-es received today with their main header data and the status information.
- **NF-e Logistics Workplace**
  The *NF-e Logistics Workplace* query lists all NF-es with their main header data and the status information.

List

Based on your selection criteria, the *Logistics Workplace* displays a list of NF-es and their processing status.

The following status icons are used:

- Error in last process step. This icon represents status 02.
- Process waiting for user action. This icon represents status 01.
  The process stopped for the user to carry out necessary actions.

The column *Delivery* displays the delivery number of the NF-e if the process contains a process step that creates a delivery.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Additional Information

Once you have selected an NF-e in the top table, tabs containing additional information about this NF-e appear at the bottom of the screen:

- **Status Overview**
  This is a description of the process with the corresponding *Status*, *Activity*, *Process*, *Status Description*, *Info Text* and *Application Log* fields.
- **History**
  This is a description of the history of this NF-e containing the *Status*, *Process*, *Activity*, *Status Description*, *Info Text*, *Executed on*, and the *User* fields.
- **Assignments**
  The assignments tab displays information about process-relevant data on NF-e item level.
- **Events**
  This is an overview of all events related to this NF-e. For more detailed information, see Events Embedded in Monitors [page 522].

  > **Caution**
  >
  > The Events tab is only visible if there is at least 1 event for an NF-e.

Actions

Execute Process Step

The following process steps can be executed manually:

- Enter Goods Receipt Quantities
- Prepare Goods Receipt Posting

Continue Process

For attempting to restart the automatic processing of an NF-e. If NF-e processing stops, investigate the reason, and then choose *Continue Process* to try to continue processing.

> **Note**
>
> This button is only intended for processing steps with no user interface assigned to the *Logistics Workplace* in Customizing activity *Define Control Parameters for Process Steps*.

Navigation

You can access the *NF-e Logistics Workplace* in SAP NFE via one of the following options:

- You can call up the specific menu *NF-e Logistics Workplace* from the user role `/XNFE/WP_NFE_IN_LOGISTIC` *(Menu: NF-e Inbound Logistics Workplace)*.
- You can access this option from the user role by choosing *Logistics Workplace Inbound NF-es* > *NF-e Inbound - Logistics Workplace*.

  NF-e Logistics Workplace: Entering Goods Receipt Quantities [page 362]

  NF-e Logistics Workplace: Preparing Goods Receipt Postings [page 364]

7.2.7.1 NF-e Logistics Workplace: Entering Goods Receipt Quantities

This step is intended to count arrived goods and to enter the quantities in the Logistics Workplace.

> **Note**
>
> The Logistics Clerk can only display the items that are relevant for the process steps that belong to the workplace. Only items are displayed that are countable. That includes:
>
> - Main Items
> - Returnable Packages
> - Physical Returns

The degree of displayed details in the step *Entering Goods Receipt Quantity* can be controlled in Customizing activity *Define Control Parameters for Process Steps*. If no customizing exists during processing, then the Logistics Clerk has no restrictions when displaying the NF-e values.

For more information, see the section *Maintaining the Variant for Goods Receipt Quantity Registration* in Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

For this activity, the following settings are possible:

- Include Default Values (The *Received Quantity* fields are pre-filled with the values from the NF-e)
- Exclude Default Values (The *Received Quantity* fields are not pre-filled)
- Exclude Default Values, the quantity-related fields of the NF-e are not displayed

> ⚠ Caution
>
> In addition, BAdI *Determination of Variant for Delivery Quantity Entry* exists to enable the customer to override the settings in the customizing. For more information about available BAdIs, see BAdIs for Inbound NF-es [page 116].

You can choose *Execute Process Step* to manually execute the *Prepare Enter Goods Receipt Quantities* process step, as follows:

1. Select an NF-e in the table and choose *Execute Process Steps* > *Enter Goods Receipt Quantities*.
   On the next screen, you see *Enter Goods Receipt Quantities* followed by the number of the NF-e, along with the following information:
   - *Enter Goods Receipt Quantities*
     - Process Type
     - CNPJ number of the NF-e issuer
     - Name of NF-e recipient
     - Name of NF-e issuer
     - CNPJ/CPF number of the NF-e recipient
2. Below this information, you see a table containing the following information:
   - Item Number
   - PO Number
   - Purchase Order Item
   - Delivery Number
   - Delivery Item
   - Material Number
   - Material Short Text
   - Quantity
   - Unit of Measure
   - Received Quantity
3. Select a line in the table and then choose one of following:
   - *Back*
     You return to the *NF-e Logistics Workplace* main page.
   - *Save Entered Quantities*
     You save your entered quantities, which you must do before you can set the status to *OK* or *Not OK*.
   - *Confirm Quantities and Set Status to OK*
     You confirm all entered quantities, set the status to *OK*, and are then automatically returned to the *NF-e Logistics Workplace* main page.
   - *Set Status Not OK*
     You set the status to *Not OK* and return automatically to the *NF-e Logistics Workplace* main page.

7.2.7.2 NF-e Logistics Workplace: Preparing Goods Receipt Postings

To manually execute the *Prepare Goods Receipt Posting* process step, proceed as follows:

1. Select an NF-e and choose *Execute Process Step* > *Prepare Goods Receipt Posting*.
2. On the *Prepare Goods Receipt Posting <number of NF-e>:* screen, you see the following information:
   - *Prepare Goods Receipt Posting*
     - Process Type
     - CNPJ number of the NF-e issuer
     - Name of NF-e recipient
     - Name of NF-e issuer
     - CNPJ/CPF number of the NF-e recipient
3. You can now set the status for this NF-e. You have two options:
   - Select *Set Status to OK* to confirm that all tasks in the ERP system have been carried out and that goods receipt posting can be started.
   - *Select Set Status Not OK* if there are still issues to be resolved before further processing.
4. After you set the status, you return automatically to the *NF-e Logistics Workplace*. If you do not want to set a status, you can choose *Back* to return to the workplace.

> **Note**
>
> In addition, BAdI *Determination of Custom UI for Logistics Workplace* exists to enable the customer to replace the preset UI with a custom UI. For more information about available BAdIs, see BAdIs for Inbound NF-es [page 116].

7.2.8 Receiver Acknowledgment (Manifestação do Destinatário)

The receiver acknowledgment covers the legal requirement (Manifestação do Destinatário) that the receiver of the NF-e must inform SEFAZ about the processing status of every individual NF-e through the events below:

- **Optional**
  - *Operation Acknowledgement*
    Issued to manifest the acknowledgement of the operation as there aren't yet sufficient elements to a final manifest. (link to the new webservice as this becomes mandatory to download the NF-e from SEFAZ). For more information, see NF-e Events: Operation Acknowledgment [page 434]. An authorized *Operation Acknowledgment* event is a prerequisite for downloading NF-es from the National Environment.
- **Mandatory**
  - *Operation Confirmation*
    Issued for the effective confirmation of the operation. For more information, see NF-e Events: Operation Confirmation [page 436].
  - *Operation Denial*

Issued when the operation is completely unknown (for example, possible fraud). For more information, see NF-e Events: Operation Denial [page 438].

- *Operation Termination*
  Issued for a legit operation which was not completed due to returns, cancellation, or another reason. For more information, see NF-e Events: Operation Termination [page 440].

Monitor SAP NFE

The monitoring options in SAP Nota Fiscal Eletrônica (SAP NFE) provide you with a single point-of-entry for tracking the communication statuses of NF-es and NF-e events and the communication process between the NFE application and the authorities' system. In case of communication failures, the NFE monitors allow you to trigger reprocessing and rechecking of NF-es, NF-e events, and related messages.

The following monitors are available:

- The Receiver Acknowledgment Events [page 365] workplace displays a list of NF-es and their respective deadlines and missing events.
- The DF-e Distribution Request Monitor [page 532] displays the messages you sent to the national system to receive documents (for example, NF-e summaries, NF-es, CT-es, and NF-e events) for your own CNPJs.
- The NF-e Fiscal Workplace [page 346] displays all documents received from the national environment. Depending on the type you received, the processing type is determined by the NFE system:
  - For NF-e Summary, see Preprocessing Inbound NF-es [page 244].
  - For NF-e (complete XML), see Processing Inbound NF-es [page 245].
- The Event Monitor Outbound [page 514] displays the processing information for all receiver acknowledgment events. For more details, refer to NF-e Event Processing [page 424].

Receiver Acknowledgment Events [page 365]

7.2.8.1 Receiver Acknowledgment Events

The *Receiver Acknowledgment Events* workplace is intended to send a final event describing the operation status to the National Environment to conclude the NF-e processing. You also have to consider that individual NF-es have different deadlines. For more information about the maintenance of deadlines, see customizing activity *NF-e: Maintain Receiver Acknowledgment Deadlines* in Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

Queries

- **Overview of Recipient Confirmations**
  The *Overview of Recipient Confirmation* query lists all NF-es that do not have an authorized final receiver acknowledgment event (operation confirmation, operation termination, operation denial). All NF-es are displayed with their main header data and the status information.
- **Send Events** (Again)

The *Send Events (Again)* query lists all NF-es that either have a missing final receiver acknowledgment event (operation confirmation, operation termination, operation denial) according to their processing status, or a rejected event. All NF-es are displayed with their main header data and the status information.

List

Based on your selection criteria, the *Receiver Acknowledgment Events* workplace displays a list of NF-es and their processing status.

The following status icons are used:

- Process Completed; NF-e Processed Successfully. This icon represents the following statuses:
  - 99 -> Process Completed; Document Successfully Processed
  - 98 -> Document Manually Closed
- Process Completed; NF-e Rejected or Denied (depending on the event). This icon represents status 89.

The last issued receiver acknowledgment event is displayed with the current processing status.

The following status icons are used:

- No Final Receiver Acknowledgment Event issued yet
- Last Receiver Acknowledgment Event pending
- Last Receiver Acknowledgment Event rejected
- Last Receiver Acknowledgment Event authorized

The *Days for Denial* column describes the remaining days until the denial event must be authorized by the authorities.

The *Days for Final Event* column describes the remaining days until the final event (operation confirmation or operation termination) must be authorized by the authorities.

You must maintain the maximum value in Customizing activity *NF-e: Maintain Receiver Acknowledgment Deadlines*. The displayed remaining days are calculated during the receiving process.

> **Note**
>
> Changes to Customizing activity *NF-e: Maintain Receiver Acknowledgment Deadlines* only affect NF-es received after the change.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Additional Information

Once you select a line in the displayed table, you receive additional information about this NF-e at the bottom of the screen:

- **Status Overview**
  The status overview tab displays additional information about the processing steps: *Status*, *Activity*, *Process Type*, *Status Description*, *Info Text*, *Application Log*.
- **History**
  The history tab displays the following additional information: *Status*, *Activity*, *Status Description*, *Info Text*, *Executed On*, and *User*.
- **Assignments**
  The assignments tab displays information about process-relevant data on NF-e item level.
- **References**
  The references tab displays additional information about the NF-e references.
- **Events**
  This is an overview of all events related to this NF-e. For more detailed information, see Events Embedded in Monitors [page 522].

> ⚠ Caution
>
> The Events tab is only visible if there is at least 1 event for an NF-e.

Actions

- **Select Details**
  - **Display Details**
    This action displays the entire XML content in multiple sub-screens. You can also access the NF-e details by clicking on the access key in the list.
  - **Display XML**
    This action allows you to download/display the NF-e XML file.
  - **Cancellation XML**
    This action allows you to download/display the cancellation event XML file (if existing).
  - **Display DANFE**
    This action displays parts of the XML content in a DANFE preview.
- You can issue one of the following events (depending on the process status of the NF-e):
  - **Send Operation Confirmation**
    For more information, see NF-e Events: Operation Confirmation [page 436]
  - **Send Operation Termination**
    For more information, see NF-e Events: Operation Termination [page 440]
  - **Send Operation Denial**
    For more information, see NF-e Events: Operation Denial [page 438]

> **Note**
>
> You can only issue events in this workplace that were not created in the regular NF-e processing. Exception: For rejected NF-es (status 89) it is always possible to switch between event *Operation Termination* and *Operation Denial*.

NF-e Details

You can display the invoice details by choosing an NF-e's *Access Key*, or by selecting the corresponding line and choosing *Display Details*. The details view displays the entire content of the XML in several tabs and grouped according to the tags in the XML.

Navigation

You can access the *Receiver Acknowledgment Events* workplace in SAP NFE via one of the following options:

- You can call up the specific menu *Receiver Acknowledgment Events* from the user role `/XNFE/WP_NFE_IN_FISCAL` *(User Menu NF-e Inbound Fiscal Workplace)*.
- You can navigate to the menu option in the navigation structure of the *Fiscal Workplace: Inbound Messages* in SAP NFE. You can access this option from the user role by choosing *Receiver Acknowledgment (Manifestação do Destinatário)* > *Events*.

7.2.9 Dashboards for Inbound NF-es

Dashboards provide you with a quick graphical overview of the most important NF-e data.

> **Note**
>
> Only NF-es issued with sender CNPJ (XML tag `EMIT`) are considered for the dashboards.

NF-e in process

- The *In Process* dashboard graphically presents the amount of NF-es that are currently processed. You can use a dropdown box to select the receipt period that is displayed. The options are:
  - Today
  - Last 7 Days
  - Last 30 Days

  The graph display the number of NF-es that are currently processed. An Nf-e can have one of the following different states:
  - User Action
  - Waiting
  - Technical Error

NF-e completed

- You can choose to display completed NF-es for the current date, for the last 7 days, for the last 30 days, or for the last 90 days.
- The dashboard only displays one series for all NF-es for each category.
- The following categories are possible:
  - Automatically finished: NF-e was successfully finished by the system (process successfully accomplished)
  - Manually finished: NF-e was manually set to finished by the NF-e fiscal clerk. The process is considered as successfully finished and the NFE system assumes that the Fiscal Clerk has carried out all necessary open steps in the ERP system.
  - Canceled: A cancellation XML has arrived and the NF-es have successfully been canceled.
  - Rejected: The NF-e was rejected by the fiscal clerk. The process has the status *Rejected* and is considered to be finished.

NF-e completed - Details

- Displays the five companies (by CNPJ) with the greatest number of NF-es for a given category (for example, the default category is *automatically finished*, so the number one company would be the company with the greatest number of NF-es that could be automatically processed from start to finish).

7.2.10 NF-e Reporting

NF-e reporting offers monitors for an analysis of various NF-e processing situations:

- Reporting for Rejected NF-es [page 369]
- NF-es with correct/incorrect Assignment in the XML [page 370]

Navigation

You can access the *Reports for NF-e Senders* in SAP NFE via one of the following options:

- You can call up the specific menu *Reports for NF-e Senders* from the user role `/XNFE/WP_NFE_IN_REPORTS` (Menu: NF-e Inbound - Reports).
- You can access this option from the user role by choosing *NF-e Inbound - Reports* > *Reports for NF-e Senders*

  Reporting for Rejected NF-es [page 369]

  NF-es with correct/incorrect Assignment in the XML [page 370]

7.2.10.1 Reporting for Rejected NF-es

The *Reporting for Rejected NF-es* query offers an overview of NF-es that were rejected by the Fiscal Clerk during NF-e Inbound processing.

> **Note**
>
> Only NF-es issued with sender CNPJ (XML tag `EMIT`) are considered for reporting.

List

All NF-es are grouped according to Sender/Receiver CNPJ combination. The system displays the total number of NF-es for each combination in comparison to the number of rejected NF-es. The predominant rejection reason is displayed if a predominant rejection reason can be determined. If no definite rejection reason can be specified for this CNPJ combination, the user receives the default text *No Prevalent Reason for Rejection*.

Actions

- **Details**
  All individual NF-e documents are listed for the Sender/Receiver CNPJ combination inclusive the specific rejection reason.
- **Access Key** (on detail level)
  This action displays the entire content of the XML in several tabs and grouped according to the tags in the XML.

7.2.10.2 NF-es with correct/incorrect Assignment in the XML

The *Reporting for assigned NF-es* query offers an overview of the quality of the XML data that was sent from your business partner for the purchase order assignment. The system displays the total number of NF-es per Sender/Receiver CNPJ in one row plus the number of NF-es.

> **Note**
>
> Only those process types are taken into consideration that have a purchase order assignment. For example, cancellation and stock transfer processes are not taken into consideration.
>
> Only NF-es that were completed automatically or manually (status 98 or 99) are considered for reporting.
>
> Only NF-es issued with sender CNPJ (XML tag `EMIT`) are considered for reporting.

List

All NF-es are grouped according to Sender/Receiver CNPJ combination. The total number of NF-es from this plant (Recipient CNPJ) and business partner (Sender CNPJ) is listed, as well as the number of those NF-es whose positions could be completely assigned using the specifications in the corresponding XML fields that

contain the relevant purchase order data. In addition, the amount of NF-es is stated in which at least one position was not assigned via the XML values. This can be caused by:

- Insufficient values in the XML
- Assignment by BadI
- Manual purchase order assignment by the user

These three topics are considered together. A more specific differentiation is not possible.

On the *Detail* level, the field Assignment Relationships describes the successful automatic assignments per NF-e. The relationship 2/3 means that of 3 positions in the NF-e only 2 could be assigned using specifications from the XML.

Actions

- **Details**
  All individual NF-e documents are listed for the Sender/Receiver CNPJ combination inclusive their relationship to the purchase order positions from the XML.
- **Access Key** (on detail level)
  This action displays the entire content of the XML in several tabs and grouped according to the tags in the XML.

7.3 CT-e Inbound

The CT-e Inbound of SAP Nota Fiscal Eletrônica has the scope to manage and automate the receipt of electronic invoices received from suppliers.

CT-e Inbound consists of the following topics:

- Business Process Determination for CT-es [page 372]
  - CT-e: Determination by Service Taker [page 372]
  - CT-e: Determination by BAdI [page 373]
  - CT-e: Determination by Redetermination [page 373]
- Processing Inbound CT-es [page 373]
  - CT-e Basic Process [page 375]
  - CT-e OS Basic Process [page 375]
  - CT-e Cancellation Process [page 376]
  - CT-e Flexible Process [page 377]
  - CT-e OS Flexible Process [page 378]
- CT-e for NF-e Inbound with LES (Logistic Execution System) [page 379]
  - Processing in SAP ERP: CT-e for NF-e Inbound with LES [page 381]
- CT-e for NF-e Outbound with LES (Logistic Execution System) [page 383]
  - Processing in SAP ERP: CT-e for NF-e Outbound with LES [page 385]

- CT-e for NF-e Inbound with TM (Transportation Management) [page 386]
  - Processing in SAP ERP: CT-e for NF-e Inbound with TM [page 388]
- CT-e for NF-e Outbound with TM (Transportation Management) [page 390]
  - Processing in SAP ERP: CT-e for NF-e Outbound with TM [page 392]
- CT-e Inbound Processing Steps [page 393]
- BAdIs for Inbound CT-es [page 118]
- CT-e Fiscal Workplace [page 413]
  - CT-e Fiscal Workplace: Simulating CT-es [page 416]
  - CT-e Fiscal Workplace: Recording DACTEs [page 417]
  - CT-e Fiscal Workplace: Transport Confirmation [page 417]
- DF-e Gate Monitor [page 418]

> **Note**
>
> Also see: Administration [page 524]

Business Process Determination for CT-es [page 372]

Processing Inbound CT-es [page 373]

CT-e Fiscal Workplace [page 413]

7.3.1 Business Process Determination for CT-es

The business processes for CT-es (model 57) are determined based on the CNPJ of the service taker (for more information, see CT-e: Determination by Service Taker [page 372]). For CT-e OS (model 67), this is not possible. Instead, process type CT-e OS Basic Process [page 375](`CTEBASE2`) is assigned.

For both models (57 and 67), the business process can be assigned via BAdI *CT-e BAdI: Determine Business Process*, for more information, see BAdIs for CT-e Inbound [page 118].

CT-e: Determination by Service Taker [page 372]

CT-e: Determination by BAdI [page 373]

CT-e: Determination by Redetermination [page 373]

7.3.1.1 CT-e: Determination by Service Taker

Use

You can assign specific business processes to incoming CT-es for further processing. Determination of the business process is carried out using the CNPJ of the service taker (Field `CNPJ_DERIVED_TOM` in table `/XNFE/INCTEHD`) and the indicator for the service taker (Field `TOMA` in table `/XNFE/INCTEHD`).

Maintain your settings as described in Customizing activity *CT-e: Maintain Business Process Determination for Inbound CT-es*. For more information, see Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

Procedure

Assign a process type to the combination of CNPJ (number of the service taker) plus indicator of the service taker. Permitted values for the indicator of the service taker are:

1. '*0*' = goods sender
2. '*3*' = goods receiver

CNPJ (service taker)	TOMA (indicator for service taker)	Process Type
Blank	3	A
74.544.297/0004-35	0	B

If the service taker with CNPJ 74.544.297/0004-35 acts as goods sender (TOMA = 0), then process type B is determined for the incoming CT-e. If a service taker with a differing CNPJ acts as goods receiver (TOMA = 3), then process type A is determined for the incoming CT-e.

7.3.1.2 CT-e: Determination by BAdI

After the automatic process determination was carried out, you have the option to carry out an additional process determination by BAdI that overwrites the automatic determination. Use BAdI *CT-e BAdI: Determine Business Process*. For more information, see BAdIs for CT-e Inbound [page 118].

7.3.1.3 CT-e: Determination by Redetermination

If no normal business process could be assigned, and the system assigned one of the two following processes

- *CT-e Basic Process* (technical name: `CTEBASIC`)
  For more information, see CT-e Basic Process [page 375].
- *CT-e OS Basic Process* (technical name: `CTEBASE2`)
  For more information, see CT-e OS Basic Process [page 375].

You can use report `/XNFE/CTE_NEW_BPD_AND_EXECUTE` to trigger a new business process determination after checking Customizing.

7.3.2 Processing Inbound CT-es

Use

Every CT-e is processed using a business process. These business processes consist of several steps that are executed in sequence. If a step was carried out successfully, the process continues with the next step. If the

steps returns an error, a user action is required. If a step results in a temporary error, an automatic retry can be executed (for more information, see Batch Job Planning for NF-e/CT-e Inbound [page 116]). If that retry does not solve the problem, the step eventually goes to status *Error* and requires a user action. If a step results in status *Wait*, then it is waiting for an asynchronous external response from the authorities, business partner, or ERP system.

Process

You can end the process manually by using the actions:

- *Rejection*
  Process Completed; CT-e Rejected.
- *Completion*
  Process Completed; CT-e manually ended and processed successfully.

This can be done, for example, via manual actions in your ERP system, or an action in the *Fiscal Workplace* (For more information, see CT-e Fiscal Workplace [page 413]).

Overview

Status Icon	Status	Description	Next Action
	OK	Step carried out successfully	Continue with next step: User input required
	Error/Technical Error	Step stops	User input for correction of error required
	Temporary Error	Step stops	Automatic retry first: If that does not solve the problem, a user input is required
	Wait	Step stops	Waiting for asynchronous response

For a detailed description of business processes, see:

- CT-e Basic Process [page 375]
- CT-e OS Basic Process [page 375]
- CT-e Cancellation Process [page 376]
- CT-e Flexible Process [page 377]
- CT-e OS Flexible Process [page 378]
- CT-e for NF-e Inbound with LES (Logistic Execution System) [page 379]
- CT-e for NF-e Outbound with LES (Logistic Execution System) [page 383]
- CT-e for NF-e Inbound with TM (Transportation Management) [page 386]
- CT-e for NF-e Outbound with TM (Transportation Management) [page 390]
- CT-e Inbound Processing Steps [page 393]

7.3.2.1 CT-e Basic Process

Use

The *CT-e Basic Process* covers the minimum requirements for processing incoming CT-es.

Process

The process *CT-e Basic Process* (technical name: `CTEBASIC`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`CTESIGNA`	This step checks the signature of the received CT-e if the calculated digest value matches the value in the XML. For more information, see CTESIGNA [page 410].
2. *Check Authorization After CT-e Receipt*	`CTEAUTHO`	This step executes a *CT-e Status Check* to validate the current status of this CT-e at SEFAZ. For more information, see CTEAUTHO [page 396].

7.3.2.2 CT-e OS Basic Process

Use

The *CT-e OS Basic Process* covers the minimum requirements for processing incoming CT-es for OS (CT-e model 67).

> **Note**
>
> There is no business proccess determination via Customizing. If a model 67 CT-e arrives, the NFE system automatically assigns the process type `CTEBASE2`.

Process

The process *CT-e OS Basic Process* (technical name: `CTEBASE2`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`CTESIGNA`	This step checks the signature of the received CT-e if the calculated digest value matches the value in the XML. For more information, see CTESIGNA [page 410].
2. *Check Authorization After CT-e Receipt*	`CTEAUTHO`	This step executes a *CT-e Status Check* to validate the current status of this CT-e at SEFAZ. For more information, see CTEAUTHO [page 396].

7.3.2.3 CT-e Cancellation Process

Use

When the NFE system receives a cancellation event, the process changes. Depending on the process, one of the following two different cancel processes is assigned to cancel a CT-e:

- *CT-e Cancellation Process* (technical name: `CTECANCL`)
- *CT-e Cancellation if Event before CT-e* (technical name: `CTECANC2`)

Process

1.The *CT-e Cancellation Process* (technical name: `CTECANCL`) consists of the following steps:

Step	Technical Name	Description
1. *Check Authorization After CT-e Cancel*	`CTEAUTHC`	This step executes a CT-e Status Check to validate the current status of this CT-e at SEFAZ after the cancellation has arrived. For more information, see CTEAUTHC [page 395].
2. *BAdI Call for Cancellation Process*	`CTEBADIC`	This step includes a BAdI that offers the customer the option to execute all necessary steps in the connected ERP system after a CT-e was cancelled. For more information, see CTEBADIC [page 397].
2. *Check Manual Activities in ERP*	`CTEERPTK`	This step offers the user the option to confirm that all remaining tasks in the connected ERP system are executed. For more information, see CTEERPTK [page 401].

2. The process *CT-e Cancellation if Event before CT-e* (technical name: `CTECANC2`) consists of the following steps:

Step	Technical Name	Description
1. *Process waiting for complete CT-e*	`CTEARRIV`	This step waits for the arrival of the XML either from business partner or from the distribution web service. For more information, see CTEARRIV: Process Waiting for Complete CT-e [page 394].
2. *Check Manual Activities in ERP*	`CTEERPTK`	This step offers the user the option to confirm that all remaining tasks in the connected ERP system are executed. For more information, see CTEERPTK [page 401].

7.3.2.4 CT-e Flexible Process

Use

The process *CT-e Flexible Process* offers the option to configure a flexible process that can trigger customer-specific actions, events, or processes in the ERP system.

Process

The process *CT-e Flexible Process* (technical name: `CTEFLXBL`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`CTESIGNA`	This step checks the signature of the received CT-e if the calculated digest value matches to the value in the XML. For more information, see CTESIGNA [page 410].
2. *Check Authorization After CT-e Receipt*	`CTEAUTHO`	This step executes a *CT-e Status Check* to validate the current status of this CT-e at SEFAZ. For more information, see CTEAUTHO [page 396].
3. *Call BAdI Before DACTE Receipt*	`CTEBBEFD`	This step includes a BAdI that offers the customer the option to execute all necessary steps in the connected ERP before the DACTE arrives. For more information, see CTEBBEFD [page 400].
4 *Enter DACTE*	`RECDACTE`	This step indicates that the goods for a CT-e enter the company (for example, via truck). A user enters the access key of one CT-e and decides how to continue with this CT-e. For more information, see RECDACTE [page 412].

5. *Check Authorization After DACTE Receipt*	CTEAUTHG	This step checks the authorization status of the CT-e for the second time after the transport has arrived. For more information, see CTEAUTHG [page 396].
6. *BAdI Call After DACTE Receipt*	CTEBAFTD	This step includes a BAdI that offers the customer the option to execute all necessary steps in the connected ERP after the DACTE has arrived. For more information, see CTEBAFTD [page 399].
7. *Notification about Received DACTE*	DARNOTIF	This step sends an email notification to the business partner that the DACTE for the CT-e XML has arrived. For more information, see DARNOTIF [page 411].

7.3.2.5 CT-e OS Flexible Process

Use

The process *CT-e OS Flexible Process* offers the option to configure a flexible process that can trigger customer-specific actions, events, or processes in the ERP system for CT-e OS (CT-e model 67).

Process

The process *CT-e OS Flexible Process* (technical name: CTEFLEX2) consists of the following steps:

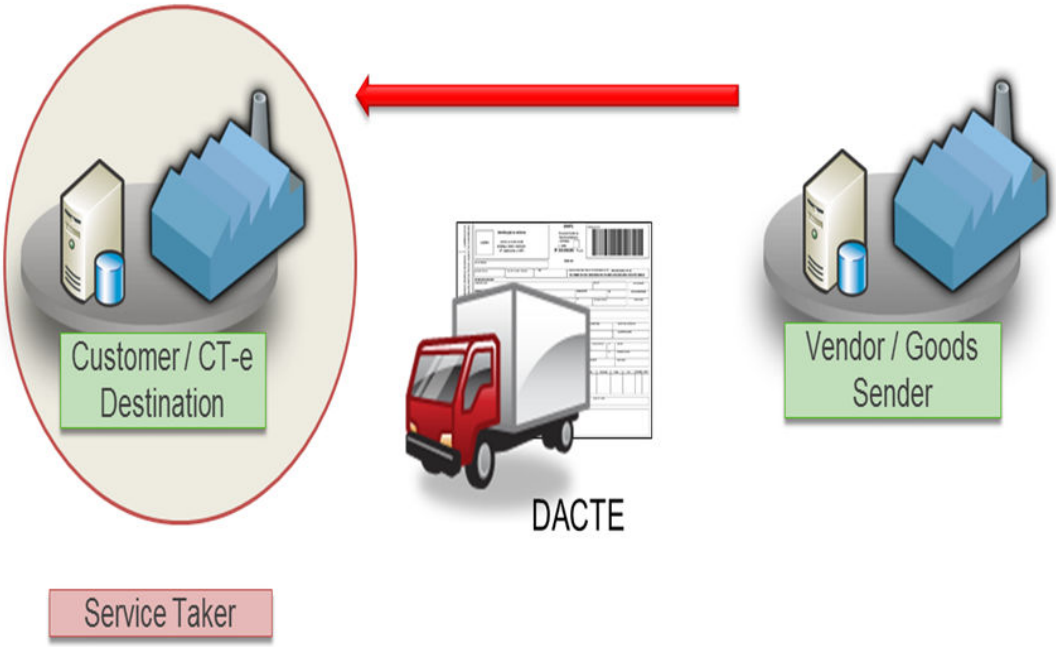
Step	Technical Name	Description
1. *Validate Signature of Business Partner*	CTESIGNA	This step checks the signature of the received CT-e if the calculated digest value matches to the value in the XML. For more information, see CTESIGNA [page 410].
2. *Check Authorization After CT-e Receipt*	CTEAUTHO	This step executes a *CT-e Status Check* to validate the current status of this CT-e at SEFAZ. For more information, see CTEAUTHO [page 396].
3. *Call BAdI Before DACTE-OS Receipt*	CTEBBED2	This step includes a BAdI that offers the customer the option to execute all necessary steps in the connected ERP before the DACTEOS arrives. For more information, see CTEBBED2: Call BAdI Before DACTE-OS Receipt [page 399].

4 *Enter DACTE*	RECDACTE	This step indicates that the goods for a CT-e enter the company (for example, via truck). A user enters the access key of one CT-e and decides how to continue with this CT-e. For more information, see RECDACTE [page 412].
5. *Check Authorization After DACTE Receipt*	CTEAUTHG	This step checks the authorization status of the CT-e for the second time after the transport has arrived. For more information, see CTEAUTHG [page 396].
6. *BAdI Call After DACTE-OS Receipt*	CTEBAFD2	This step includes a BAdI that offers the customer the option to execute all necessary steps in the connected ERP after the DACTEOS has arrived. For more information, see CTEBAFD2: Call BAdI Adter DACTE-OS Receipt [page 398].
7. *Notification about Received DACTE*	DARNOTIF	This step sends an email notification to the business partner that the DACTE for the CT-e XML has arrived. For more information, see DARNOTIF [page 411].

7.3.2.6 CT-e for NF-e Inbound with LES (Logistic Execution System)

Use

The following scenario is used as an example to illustrate this process: The goods receiver pays for the transport together with the delivery, the inbound CT-es and NF-es are posted in the system.



Example

1. The truck arrives and the driver hands over all the documents.
2. The DACTE and DANFEs are scanned. The inbound CT-e is processed in the goods receiver system according to the process *CT-e for NF-e Inbound with LES* (`CTEINBLE`).
3. Finally the invoice receipt for the CT-e is posted.

Process

CT-e for NF-e Inbound with LES (`CTEINBLE`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`CTESIGNA`	This step checks the signature of the received CT-e if the calculated digest value matches to the value in the XML. For more information, see CTESIGNA [page 410].

2. *Check Authorization After CT-e Receipt*	CTEAUTHO	This step executes a *CT-e Status Check* to validate the current status of this CT-e at SEFAZ. For more information, see CTEAUTHO [page 396].
3. *Validate*	CTEILVAL	This step checks that all preconditions for subsequent posting steps are fulfilled. For more information, see CTEILVAL [page 404].
4 *Provide LES Documents Through BAdI*	CTEILFCD	This step provides an access point to provide LES documents for logistical processing. For more information, see CTEILFCD [page 402].
5. *Simulate Invoice*	CTEILIVS	This step simulates the invoice posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate, and later on also post considering these changed values. For more information, see CTEILIVS [page 403].
6.*Enter DACTE*	RECDACTE	This step indicates that the goods for a CT-e enter the company (for example, via truck). A user enters the access key of one CT-e and decides how to continue with this CT-e. For more information, see RECDACTE [page 412].
7. *Check Authorization After DACTE Receipt*	CTEAUTHG	This step checks the authorization status of the CT-e for the second time after the transport has arrived. For more information, see CTEAUTHG [page 396].
8. *Invoice Posting*	CTEILIVP	This step posts the invoice in the connected ERP system. For more information, see CTEILIVP [page 402].

Processing in SAP ERP: CT-e for NF-e Inbound with LES [page 381]

7.3.2.6.1 Processing in SAP ERP: CT-e for NF-e Inbound with LES

Use

To automatically process the information in an incoming CT-e and create the follow-on documents, SAP Nota Fiscal Eletrônica communicates with your SAP ERP system and vice versa. This communication occurs during the following steps in the CT-e process for inbound NF-e:

- Invoice simulation
- Invoice posting

Prerequisites

- You have set up the RFC connection between SAP Nota Fiscal Eletrônica and your SAP ERP system. For more information, see Technical Settings for NF-e/CT-e Inbound [page 108]

- You have completed the necessary Customizing settings in your SAP ERP system. For more information, see Related Configuration in SAP ERP [page 123]
- You are using Logistics Execution System (LES) for processing your inbound shipment and for calculating the shipment costs and settlements with the service agent

Features

Invoice Simulation

During the invoice simulation process step, the two systems exchange information in order to simulate the invoice and the related CT-e. For that, the data of the CT-e XML that SAP Nota Fiscal Eletrônica receives from issuer is compared to the data existing in SAP ERP. SAP ERP does the following:

- Verifies if all NF-es that are related to a CT-e XML are included in one shipment document
- Finds related documents to the CT-e XML such as the service entry sheet
- Simulates the invoice and CT-e with reference to the service entry sheet

During the simulation, the system makes several checks:

- Standard checks that are also made when such a posting is made using the MIRO transaction. These include, for example, tolerance checks and a balance check.
- CT-e Issuer's CNPJ checks between the data in the XML and the master data of vendor or of the invoicing party in the purchase order.
- Service taker's CNPJ checks between the data in the XML and the master data of the business place
- Tax comparison checks between the data in the XML and the tax codes and Customizing settings in your SAP ERP system. The following is checked:
  - ICMS rate
  - ICMS Sub. Trib. rate

The simulation results show errors and warnings that may occur. If the tax comparison checks result in an error, the cause may be one or more of the following:

- XML content is not correct
- Tax code is not correct
- Customizing in your SAP ERP system (for example, related to tax rates) is not up-to-date

If needed, you can overwrite the tax codes or CFOP codes proposed by the system and run the simulation with different selections.

Posting

During the posting process, SAP ERP posts the invoice and the CT-e with reference to the service entry sheet and informs SAP Nota Fiscal Eletrônica the relevant invoice and service entry sheet numbers.

If there are differences between the XML data and the data in SAP ERP, such as different taxes values, the system uses for the simulation and posting the values coming from the XML.

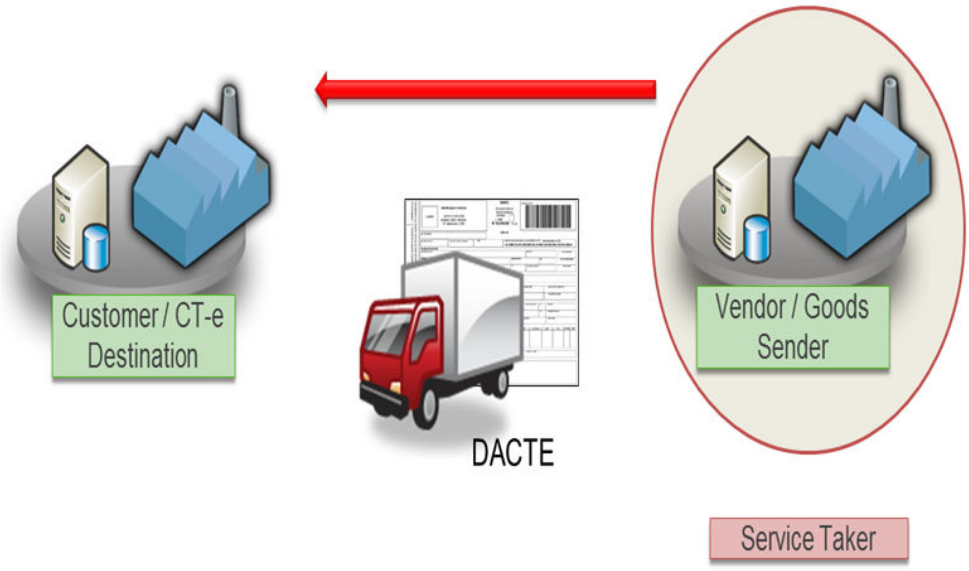
If an invoice cannot be posted, your SAP ERP system sends an error message to SAP Nota Fiscal Eletrônica. If the error can be fixed, the user can then repeat the posting step in SAP Nota Fiscal Eletrônica. If not, the

user can set the CT-e to complete in SAP Nota Fiscal Eletrônica and then post the invoice and CT-e in SAP ERP manually.

7.3.2.7 CT-e for NF-e Outbound with LES (Logistic Execution System)

Use

The following scenario is used as an example to illustrate this process: The goods sender pays for the transport, the goods are issued and outbound NF-es are created. The CT-e was created and the DACTE was printed by the transporter.



Example

1. The transporter arrives at the goods sender with the DACTE.
2. The inbound CT-e is processed in the goods sender system according to the process *CT-e for NF-e Outbound with LES* (*CTEOUTLE*).
3. The goods are issued according to the outbound NF-es referenced in the CT-e
4. The goods are loaded to the truck and the truck leaves the company with the DACTE and the DANFE.

The truck driver and the receiver of the transport need the DACTE as accompanying document for the transport, but not as invoice document for the freight costs, because the goods sender is the service taker.

Process

CT-e for NF-e Outbound with LES (`CTEOUTLE`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`CTESIGNA`	This step checks the signature of the received CT-e if the calculated digest value matches to the value in the XML. For more information, see CTESIGNA [page 410].
2. *Check Authorization After CT-e Receipt*	`CTEAUTHO`	This step executes a *CT-e Status Check* to validate the current status of this CT-e at SEFAZ. For more information, see CTEAUTHO [page 396].
3. *Validation*	`CTEOLVAL`	This step checks that all preconditions for subsequent posting steps are fulfilled. For more information, see CTEOLVAL [page 408].
4 *Invoice Simulation*	`CTEOLVIS`	This step simulates the invoice posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values. For more information, see CTEOLIVS [page 407].
5. *Transport Confirmation*	`CTEOLTRC`	This step gives the user an overview about the progress of the operation. All Receiver Acknowledgment Events that have been issued for the in the CT-e referenced NF-es are checked if a final confirmation exists. For more information, see CTEOLTRC [page 407].
6. *Check Authorization After DACTE Receipt*	`CTEAUTHG`	This step checks the authorization status of the CT-e for the second time after the transport has arrived. For more information, see CTEAUTHG [page 396].
7. *Invoice Posting*	`CTEOLIVP`	This step posts the invoice in the connected ERP system. For more information, see CTEOLIVP [page 406].

Processing in SAP ERP: CT-e for NF-e Outbound with LES [page 385]

7.3.2.7.1 Processing in SAP ERP: CT-e for NF-e Outbound with LES

Use

To automatically process the information in an incoming CT-e and create the follow-on documents, SAP Nota Fiscal Eletrônica communicates with your SAP ERP system and vice versa. This communication occurs during the following steps in the CT-e process for outbound NF-e:

- Invoice simulation
- Invoice posting

Prerequisites

- You have set up the RFC connection between SAP Nota Fiscal Eletrônica and your SAP ERP system. For more information, see Technical Settings for NF-e Outbound [page 90].
- You have completed the necessary Customizing settings in your SAP ERP system. For more information, see Related Configuration in SAP ERP [page 123]
- You are using Logistics Execution System (LES) for processing your outbound shipment and for calculating the shipment costs and settlements with the service agent

Features

Invoice Simulation

During the invoice simulation process step, the two systems exchange information in order to simulate the invoice and the related CT-e. For that, the data of the CT-e XML that SAP Nota Fiscal Eletrônica receives from issuer is compared to the data existing in SAP ERP. SAP ERP does the following:

- Verifies if all NF-es that are related to a CT-e XML are included in one shipment document
- Finds related documents to the CT-e XML such as the service entry sheet
- Simulates the invoice and CT-e with reference to the service entry sheet

During the simulation, the system makes several checks:

- Standard checks that are also made when such a posting is made using the MIRO transaction. These include, for example, tolerance checks and a balance check.
- CT-e Issuer's CNPJ checks between the data in the XML and the master data of vendor or of the invoicing party in the purchase order.
- Service taker's CNPJ checks between the data in the XML and the master data of the business place

- Tax comparison checks between the data in the XML and the tax codes and Customizing settings in your SAP ERP system. The following is checked:
  - ICMS rate
  - ICMS Sub. Trib. rate

The simulation results show errors and warnings that may occur. If the tax comparison checks result in an error, the cause may be one or more of the following:

- XML content is not correct
- Tax code is not correct
- Customizing in your SAP ERP system (for example, related to tax rates) is not up-to-date

If needed, you can overwrite the tax codes or CFOP codes proposed by the system and run the simulation with different selections.

Posting

During the posting process, SAP ERP posts the invoice and the CT-e with reference to the service entry sheet and informs SAP Nota Fiscal Eletrônica the relevant invoice and service entry sheet numbers.

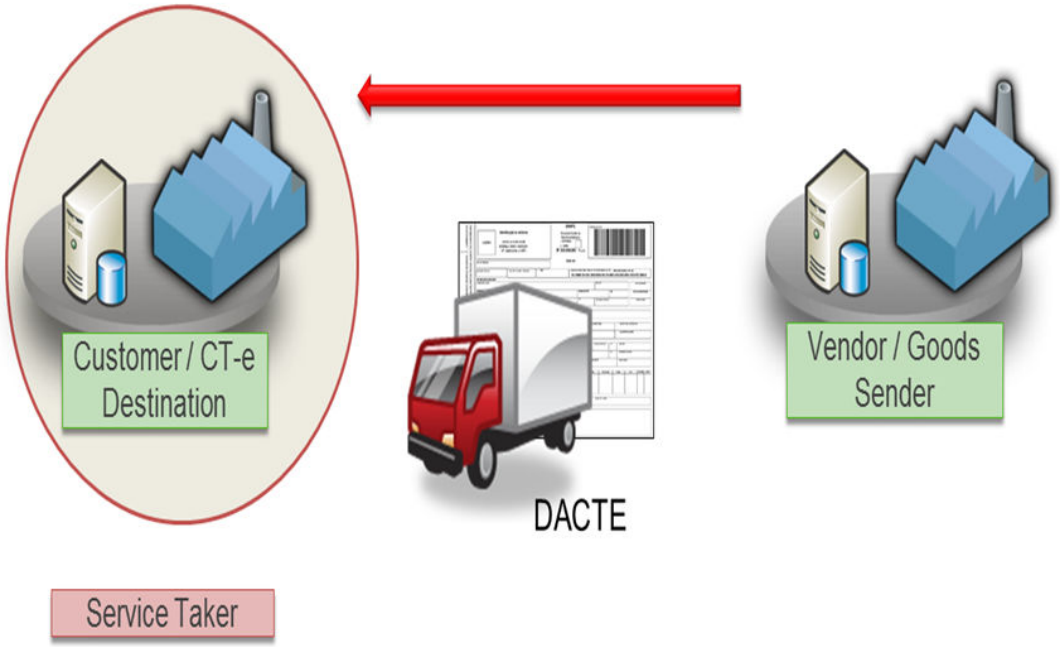
If there are differences between the XML data and the data in SAP ERP, such as different taxes values, the system uses for the simulation and posting the values coming from the XML.

If an invoice cannot be posted, your SAP ERP system sends an error message to SAP Nota Fiscal Eletrônica. If the error can be fixed, the user can then repeat the posting step in SAP Nota Fiscal Eletrônica. If not, the user can set the CT-e to complete in SAP Nota Fiscal Eletrônica and then post the invoice and CT-e in SAP ERP manually.

7.3.2.8 CT-e for NF-e Inbound with TM (Transportation Management)

Use

The following scenario is used as an example to illustrate this process: The goods receiver pays for the transport together with the delivery, the inbound CT-es and NF-es are posted in the system.



Example

1. The truck arrives and the driver hands over all the documents.
2. The DACTE and DANFEs are scanned. The inbound CT-e is processed in the goods receiver system according to the process *CT-e for NF-e Inbound with TM* (`CTEINBTM`).
3. Finally the invoice receipt for the CT-e is posted.

Process

CT-e for NF-e Inbound with TM (`CTEINBTM`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`CTESIGNA`	This step checks the signature of the received CT-e if the calculated digest value matches to the value in the XML. For more information, see CTESIGNA [page 410].

2. *Check Authorization After CT-e Receipt*	`CTEAUTHO`	This step executes a *CT-e Status Check* to validate the current status of this CT-e at SEFAZ. For more information, see CTEAUTHO [page 396].
3. *Validate*	`CTEILVAL`	This step checks that all preconditions for subsequent posting steps are fulfilled. For more information, see CTEILVAL [page 404].
4. *Simulate Invoice*	`CTEITIVS`	This step simulates the invoice posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate, and later on also post considering these changed values. For more information, see CTEITIVS [page 405].
5.*Enter DACTE*	`RECDACTE`	This step indicates that the goods for a CT-e enter the company (for example, via truck). A user enters the access key of one CT-e and decides how to continue with this CT-e. For more information, see RECDACTE [page 412].
6. *Check Authorization After DACTE Receipt*	`CTEAUTHG`	This step checks the authorization status of the CT-e for the second time after the transport has arrived. For more information, see CTEAUTHG [page 396].
7. *Invoice Posting*	`CTEITIVP`	This step posts the invoice in the connected ERP system. For more information, see CTEITIVP [page 406].

Processing in SAP ERP: CT-e for NF-e Inbound with TM [page 388]

7.3.2.8.1 Processing in SAP ERP: CT-e for NF-e Inbound with TM

Use

To automatically process the information in an incoming CT-e and create the follow-on documents, SAP Nota Fiscal Eletrônica communicates with your SAP ERP system and vice versa. This communication occurs during the following steps in the CT-e process for inbound NF-e:

- Invoice simulation
- Invoice posting

Prerequisites

- You have set up the RFC connection between SAP Nota Fiscal Eletrônica and your SAP ERP system. For more information, see Technical Settings for NF-e/CT-e Inbound [page 108]
- You have completed the necessary Customizing settings in your SAP ERP system. For more information, see Related Configuration in SAP ERP [page 123]

- You are using SAP Transportation Management (SAP TM) for processing your inbound shipment and for calculating the shipment costs and settlements with the service agent.
- In SAP Transportation Management (SAP TM), *Cost Distribution* must be active. Enabling *Cost Distribution* allows for the creation of an *Agency Business Document* which is then used to find the documents related to the incoming CT-e. The *Agency Business Document* is used as a link between the CT-e and the corresponding *Service Entry Sheet*. For more information on setup for *Cost Distribution* in SAP TM, see the documentation for *Cost Distribution Management* under http://help.sap.com/transportationmanagement *SAP Transportation Management 9.1* *Application Help* *English* *SAP Transportation Management (SAP TM)* *Settlement* *Freight Settlement* *Cost Distribution Management* .

Features

Invoice Simulation

During the invoice simulation process step, the two systems exchange information in order to simulate the invoice and the related CT-e. For that, the data of the CT-e XML that SAP Nota Fiscal Eletrônica receives from issuer is compared to the data existing in SAP ERP. SAP ERP does the following:

- Verifies if all NF-es that are related to a CT-e XML are included in one shipment document
- Finds related documents to the CT-e XML such as the service entry sheet
- Simulates the invoice and CT-e with reference to the service entry sheet

The Simulation Data section shows details of the documents related to the incoming CT-e, such as the number of the SAP TM *Freight Order*, the *Purchase Order* and the *Service Entry Sheet*.

During the simulation, the system makes several checks:

- Standard checks that are also made when such a posting is made using the MIRO transaction. These include, for example, tolerance checks and a balance check.
- CT-e Issuer's CNPJ checks between the data in the XML and the master data of vendor or of the invoicing party in the purchase order.
- Service taker's CNPJ checks between the data in the XML and the master data of the business place
- Tax comparison checks between the data in the XML and the tax codes and Customizing settings in your SAP ERP system. The following is checked:
  - ICMS rate
  - ICMS Sub. Trib. rate

The simulation results show errors and warnings that may occur. If the tax comparison checks result in an error, the cause may be one or more of the following:

- XML content is not correct
- Tax code is not correct
- Customizing in your SAP ERP system (for example, related to tax rates) is not up-to-date

If needed, you can overwrite the tax codes or CFOP codes proposed by the system and run the simulation with different selections.

Posting

During the posting process, SAP ERP posts the invoice and the CT-e with reference to the service entry sheet and informs SAP Nota Fiscal Eletrônica the relevant invoice and service entry sheet numbers.

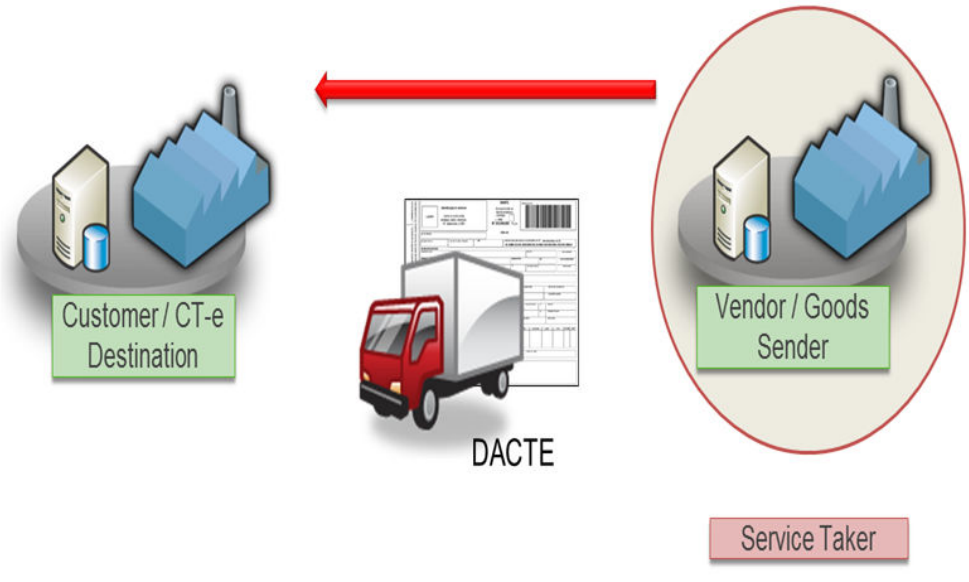
If there are differences between the XML data and the data in SAP ERP, such as different taxes values, the system uses for the simulation and posting the values coming from the XML.

If an invoice cannot be posted, your SAP ERP system sends an error message to SAP Nota Fiscal Eletrônica. If the error can be fixed, the user can then repeat the posting step in SAP Nota Fiscal Eletrônica. If not, the user can set the CT-e to complete in SAP Nota Fiscal Eletrônica and then post the invoice and CT-e in SAP ERP manually.

7.3.2.9 CT-e for NF-e Outbound with TM (Transportation Management)

Use

The following scenario is used as an example to illustrate this process: The goods sender pays for the transport, the goods are issued and outbound NF-es are created. The CT-e was created and the DACTE was printed by the transporter.



Example

1. The transporter arrives at the goods sender with the DACTE.
2. The inbound CT-e is processed in the goods sender system according to the process *CT-e for NF-e Outbound with TM* (`CTEOUTTM`).
3. The goods are issued according to the outbound NF-es referenced in the CT-e
4. The goods are loaded to the truck and the truck leaves the company with the DACTE and the DANFE.

The truck driver and the receiver of the transport need the DACTE as accompanying document for the transport, but not as invoice document for the freight costs, because the goods sender is the service taker.

Process

CT-e for NF-e Outbound with TM (`CTEOUTTM`) consists of the following steps:

Step	Technical Name	Description
1. *Validate Signature of Business Partner*	`CTESIGNA`	This step checks the signature of the received CT-e if the calculated digest value matches to the value in the XML. For more information, see CTESIGNA [page 410].
2. *Check Authorization After CT-e Receipt*	`CTEAUTHO`	This step executes a *CT-e Status Check* to validate the current status of this CT-e at SEFAZ. For more information, see CTEAUTHO [page 396].
3. *Validation*	`CTEOLVAL`	This step checks that all preconditions for subsequent posting steps are fulfilled. For more information, see CTEOLVAL [page 408].
4 *Invoice Simulation*	`CTEOTIVS`	This step simulates the invoice posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values. For more information, see CTEOTIVS [page 410].
5. *Transport Confirmation*	`CTEOLTRC`	This step gives the user an overview about the progress of the operation. All Receiver Acknowledgment Events that have been issued for the in the CT-e referenced NF-es are checked if a final confirmation exists. For more information, see CTEOLTRC [page 407].
6. *Check Authorization After DACTE Receipt*	`CTEAUTHG`	This step checks the authorization status of the CT-e for the second time after the transport has arrived. For more information, see CTEAUTHG [page 396].
7. *Invoice Posting*	`CTEOTIVP`	This step posts the invoice in the connected ERP system. For more information, see CTEOTIVP [page 409].

Processing in SAP ERP: CT-e for NF-e Outbound with TM [page 392]

7.3.2.9.1 Processing in SAP ERP: CT-e for NF-e Outbound with TM

Use

To automatically process the information in an incoming CT-e and create the follow-on documents, SAP Nota Fiscal Eletrônica communicates with your SAP ERP system and vice versa. This communication occurs during the following steps in the CT-e process for outbound NF-e:

- Invoice simulation
- Invoice posting

Prerequisites

- You have set up the RFC connection between SAP Nota Fiscal Eletrônica and your SAP ERP system. For more information, see Technical Settings for NF-e Outbound [page 90]
- You have completed the necessary Customizing settings in your SAP ERP system. For more information, see Related Configuration in SAP ERP [page 123]
- You are using SAP Transportation Management (SAP TM) for processing your outbound shipment and for calculating the shipment costs and settlements with the service agent.
- In SAP Transportation Management (SAP TM), *Cost Distribution* must be active. Enabling *Cost Distribution* allows for the creation of an *Agency Business Document* which is then used to find the documents related to the incoming CT-e. The *Agency Business Document* is used as a link between the CT-e and the corresponding *Service Entry Sheet*. For more information on setup for *Cost Distribution* in SAP TM, see the documentation for *Cost Distribution Management* under http://help.sap.com/transportationmanagement *SAP Transportation Management 9.1* > *Application Help* > *English* > *SAP Transportation Management (SAP TM)* > *Settlement* > *Freight Settlement* > *Cost Distribution Management* .

Features

Invoice Simulation

During the invoice simulation process step, the two systems exchange information in order to simulate the invoice and the related CT-e. For that, the data of the CT-e XML that SAP Nota Fiscal Eletrônica receives from issuer is compared to the data existing in SAP ERP. SAP ERP does the following:

- Verifies if all NF-es that are related to a CT-e XML are included in one shipment document
- Finds related documents to the CT-e XML such as the service entry sheet
- Simulates the invoice and CT-e with reference to the service entry sheet

The Simulation Data section shows details of the documents related to the incoming CT-e, such as the number of the SAP TM *Freight Order*, the *Purchase Order* and the *Service Entry Sheet*.

During the simulation, the system makes several checks:

- Standard checks that are also made when such a posting is made using the MIRO transaction. These include, for example, tolerance checks and a balance check.
- CT-e Issuer's CNPJ checks between the data in the XML and the master data of vendor or of the invoicing party in the purchase order.
- Service taker's CNPJ checks between the data in the XML and the master data of the business place
- Tax comparison checks between the data in the XML and the tax codes and Customizing settings in your SAP ERP system. The following is checked:
  - ICMS rate
  - ICMS Sub. Trib. rate

The simulation results show errors and warnings that may occur. If the tax comparison checks result in an error, the cause may be one or more of the following:

- XML content is not correct
- Tax code is not correct
- Customizing in your SAP ERP system (for example, related to tax rates) is not up-to-date

If needed, you can overwrite the tax codes or CFOP codes proposed by the system and run the simulation with different selections.

Posting

During the posting process, SAP ERP posts the invoice and the CT-e with reference to the service entry sheet and informs SAP Nota Fiscal Eletrônica the relevant invoice and service entry sheet numbers.

If there are differences between the XML data and the data in SAP ERP, such as different taxes values, the system uses for the simulation and posting the values coming from the XML.

If an invoice cannot be posted, your SAP ERP system sends an error message to SAP Nota Fiscal Eletrônica. If the error can be fixed, the user can then repeat the posting step in SAP Nota Fiscal Eletrônica. If not, the user can set the CT-e to complete in SAP Nota Fiscal Eletrônica and then post the invoice and CT-e in SAP ERP manually.

7.3.2.10 CT-e Inbound Processing Steps

This is an overview of all available processing steps for CT-e inbound:

CTEARRIV: Process Waiting for Complete CT-e [page 394]

CTEAUTHC: Check Authorization after Cancellation CT-e [page 395]

CTEAUTHG: Check Authorization After DACTE Receipt [page 396]

CTEAUTHO: Check Authorization After CT-e Receipt [page 396]

CTEBADIC: BAdI Call for Cancellation Process [page 397]

CTEBAFD2: Call BAdI Adter DACTE-OS Receipt [page 398]

CTEBAFTD: Call BAdI After DACTE Receipt [page 399]

CTEBBED2: Call BAdI Before DACTE-OS Receipt [page 399]

CTEBBEFD: Call BAdI Before DACTE Receipt [page 400]

CTEERPTK: Check Manual Activities in ERP [page 401]
CTEILFCD: Provide LES Documents Through BAdI [page 402]
CTEILIVP: Post Invoice [page 402]
CTEILIVS: Simulate Invoice [page 403]
CTEILVAL: Validate [page 404]
CTEITIVS: Simulate Invoice [page 405]
CTEITIVP: Post Invoice [page 406]
CTEOLIVP: Post Invoice [page 406]
CTEOLIVS: Simulate Invoice [page 407]
CTEOLTRC: Transport Confirmation [page 407]
CTEOLVAL: Validate [page 408]
CTEOTIVP: Post Invoice [page 409]
CTEOTIVS: Simulate Invoice [page 410]
CTESIGNA: Validate Signature of Business Partner [page 410]
DARNOTIF: Notify About Received DACTE [page 411]
RECDACTE: Enter DACTE [page 412]

7.3.2.10.1 CTEARRIV: Process Waiting for Complete CT-e

The step *Process waiting for complete CT-e* (technical name: `CTEARRIV`) waits for the arrival of the XML, either from business partner, or from the distribution web service. The stored data in the NFE system is updated with the data of the CT-e.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

No BAdI available

Usage

CT-e Inbound Processing

7.3.2.10.2 CTEAUTHC: Check Authorization after Cancellation CT-e

The step *Check Authorization after Cancellation CT-e* (technical name: CTEAUTHC) executes a *CT-e Status Check* to validate the current status of this CT-e at SEFAZ after the cancellation has arrived.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is asynchronous. During this communication, the step is waiting for the response from SEFAZ.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

CT-e Inbound Processing

Additional Information

The SEFAZ status is only overwritten if a status is found that is worse than the status already stored in the system. If the CT-e process is no longer waiting for a response, a history entry is written.

7.3.2.10.3 CTEAUTHG: Check Authorization After DACTE Receipt

The step *Check Authorization After CT-e Receipt* (technical name: `AUTHORIZ`) checks the authorization status of the CT-e for the second time after the transport has arrived.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is asynchronous. During this communication, the step is waiting for the response from SEFAZ.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

CT-e Inbound Processing

Additional Information

The SEFAZ status is only overwritten if a status is found that is worse than the status already stored in the system. If the CT-e process is no longer waiting for a response, a history entry is written.

7.3.2.10.4 CTEAUTHO: Check Authorization After CT-e Receipt

The step *Check Authorization After CT-e Receipt* (technical name: `AUTHORIZ`) executes a *CT-e Status Check* to validate the current status of this CT-e at SEFAZ.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is asynchronous. During this communication, the step is waiting for the response from SEFAZ.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

CT-e Inbound Processing

Additional Information

The SEFAZ status is only overwritten if a status is found that is worse than the status already stored in the system. If the CT-e process is no longer waiting for a response, a history entry is written.

7.3.2.10.5 CTEBADIC: BAdI Call for Cancellation Process

The step *BAdI Call for Cancellation Process* (technical name: `CTEBADIC`) includes a BAdI that offers the customer the option to execute all necessary steps in the connected ERP system after a CT-e was cancelled.

Step Execution

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant.

BAdIs

Call ERP System in *CT-e Cancellation Process* (`/XNFE/BADI_CTE_CANCEL_PROC`). For more information, see BAdIs for CT-e Inbound [page 118].

Usage

CT-e Inbound Processing

7.3.2.10.6 CTEBAFD2: Call BAdI Adter DACTE-OS Receipt

The step *Call BAdI After DACTE-OS Receipt* (technical name: `CTEBAFD2`) includes a BAdI that offers the customer the option to execute all necessary steps in the connected ERP after the `DACTE-OS` has arrived.

Step Execution

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

Customer-Specific Implementation of a Step for CT-e (`/XNFE/BADI_FLEXIBLE_STEP_CTE`). For more information, see BAdIs for CT-e Inbound [page 118].

Usage

CT-e Inbound Processing

7.3.2.10.7 CTEBAFTD: Call BAdI After DACTE Receipt

The step *Call BAdI After DACTE Receipt* (technical name: `CTEBAFTD`) includes a BAdI that offers the customer the possibility to execute all necessary steps in the connected ERP after the DACTE has arrived.

Step Execution

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

Customer-Specific Implementation of a Step for CT-e (`/XNFE/BADI_FLEXIBLE_STEP_CTE`). For more information, see BAdIs for CT-e Inbound [page 118].

Usage

CT-e Inbound Processing

7.3.2.10.8 CTEBBED2: Call BAdI Before DACTE-OS Receipt

The step *Call BAdI Before DACTE-OS Receipt* (technical name: `CTEBBED2`) includes a BAdI that offers the customer the option to execute all necessary steps in the connected ERP before the DACTEOS arrives.

Step Execution

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant.

BAdIs

Customer-Specific Implementation of a Step for CT-e (`/XNFE/BADI_FLEXIBLE_STEP_CTE`). For more information, see BAdIs for CT-e Inbound [page 118].

Usage

CT-e Inbound Processing

7.3.2.10.9 CTEBBEFD: Call BAdI Before DACTE Receipt

The step *Call BAdI Before DACTE Receipt* (technical name: `CTEBBEFD`) includes a BAdI that offers the customer the possibility to execute all necessary steps in the connected ERP before the DACTE arrives.

Step Execution

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant.

BAdIs

Customer-Specific Implementation of a Step for CT-e (`/XNFE/BADI_FLEXIBLE_STEP_CTE`). For more information, see BAdIs for CT-e Inbound [page 118].

Usage

CT-e Inbound Processing

7.3.2.10.10 CTEERPTK: Check Manual Activities in ERP

The step *Check Manual Activities in ERP* (technical name: `CTEERPTK`) offers the option to confirm that all remaining tasks in the connected ERP system are executed.

Activation/Deactivation

By default, this step is not active and processed manually.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

CT-e Inbound Processing

7.3.2.10.11 CTEILFCD: Provide LES Documents Through BAdI

The step *Provide LES Documents Through BAdI* (technical name: `CTEILFCD`) offers an access point to provide LES documents for logistical processing

Step Execution

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

Not relevant

Usage

CT-e Inbound Processing

Additional Information

The BAdI is used to find, create, or update LES (Logistic Execution system) documents. These LES documents must exist for a successful execution of the process. This ensures that the subsequent process steps can be carried out successfully.

Once the `CTEILFCD` step is successfully executed, the system requires the availability of the service entry sheet.

7.3.2.10.12 CTEILIVP: Post Invoice

The step *Post Invoice* (technical name: `CTEILIVP`) posts the invoice in the connected ERP system..

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

No BAdI available

7.3.2.10.13 CTEILIVS: Simulate Invoice

The step *Simulate Invoice* (technical name: `CTEILIVS`) simulates the invoice posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values..

Activation/Deactivation

By default, this step is active and processed automatically or manually by the NFE system.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

CT-e Inbound Processing

Additional Information

All parameters must be saved before the status can be changed.

7.3.2.10.14 CTEILVAL: Validate

The step *Validate* (technical name: `CTEILVAL`) checks that all preconditions for subsequent posting steps are fulfilled.

Activation/Deactivation

By default, this step is active and processed automatically.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

CT-e Inbound Processing

Additional Information

- Check if there are paper references: If yes, then this is an error because only electronic references are accepted.
- Check if all referenced NF-es exist in the system and if they are authorized.
- Check if the service taker is the goods receiver.

7.3.2.10.15 CTEITIVS: Simulate Invoice

The step *Simulate Invoice* (technical name: `CTEITIVS`) simulates the invoice posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values.

Activation/Deactivation

By default, this step is active and processed automatically or manually.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

CT-e Inbound Processing

Additional Information

All parameters must be saved before the status can be changed.

7.3.2.10.16 CTEITIVP: Post Invoice

The step *Post Invoice* (technical name: `CTEITIVP`) posts the invoice in the connected ERP system..

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

No BAdI available

7.3.2.10.17 CTEOLIVP: Post Invoice

The step *Post Invoice* (technical name: `CTEOLIVP`) posts the invoice in the connected ERP system..

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

No BAdI available

7.3.2.10.18 CTEOLIVS: Simulate Invoice

The step *Simulate Invoice* (technical name: `CTEOLIVS`) simulates the invoice posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values.

Activation/Deactivation

By default, this step is active and processed automatically or manually.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

CT-e Inbound Processing

Additional Information

All parameters must be saved before the status can be changed.

7.3.2.10.19 CTEOLTRC: Transport Confirmation

The step *Transport Confirmation* (technical name: `CTEOLTRC`) gives the user an overview about the progress of the operation. All Receiver Acknowledgment Events that have been issued for the in the CT-e referenced NF-es are checked if a final confirmation exists.

Step Execution

By default, this step is processed manually.

Customizing

Not relevant

BAdIs

Not relevant

Usage

CT-e Inbound Processing

7.3.2.10.20 CTEOLVAL: Validate

The step *Validate* (technical name: `CTEOLVAL`) checks that all preconditions for subsequent posting steps are fulfilled.

Activation/Deactivation

By default, this step is active and processed automatically.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

CT-e Inbound Processing

Additional Information

The validation step carries out the following checks:

- Check if there are paper references: If yes, then this is an error because only electronic references are accepted.
- Check if all referenced NF-es exist in the system and if they are authorized.
- Check if the service taker is the goods sender.

7.3.2.10.21 CTEOTIVP: Post Invoice

The step *Post Invoice* (technical name: `CTEOTIVP`) posts the invoice in the connected ERP system..

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

No BAdI available

Usage

CT-e Inbound Processing

7.3.2.10.22 CTEOTIVS: Simulate Invoice

The step *Simulate Invoice* (technical name: `CTEOTIVS`) simulates the invoice posting with the current assignments. It is also possible to adjust the values for CFOP and tax code to simulate and later on also post considering these changed values.

Activation/Deactivation

By default, this step is active and processed automatically or manually.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

CT-e Inbound Processing

Additional Information

All parameters must be saved before the status can be changed.

7.3.2.10.23 CTESIGNA: Validate Signature of Business Partner

The step *Validate Signature of Business Partner* (technical name: `CTESIGNA`) checks the signature of the received CT-e if the calculated digest value matches the value in the XML.

Step Execution

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Define Control Parameters for Process Steps using parameter Signature Validation (`SIGVALID`).

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

No BAdI available.

Usage

NF-e Inbound Processing

7.3.2.10.24 DARNOTIF: Notify About Received DACTE

The step *Notify About Received DACTE* (technical name: `DARNOTIF`) sends an email notification to the business partner that the DACTE for the CT-e XML has arrived.

Step Execution

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

- Email sender address has to be maintained
- Email receiver address has to be maintained

BAdIs

Not relevant

Usage

CT-e Inbound Processing

7.3.2.10.25 RECDACTE: Enter DACTE

The step *Enter DACTE* (technical name: `RECDACTE`) indicates that the goods for a CT-e enter the company (for example, via truck). A user enters the access key of one CT-e and decided how to continue with the CT-e.

Activation/Deactivation

By default, this step is active and processed manually by the NFE system.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

CT-e Inbound Processing

7.3.3 CT-e Fiscal Workplace

A transport service provider can issue a freight document called *conhecimento de transporte eletrônica* (CT-e). The *CT-e Fiscal Workplace* is where the fiscal clerk processes incoming CT-es.

Queries

- **Today**
  The *Today* query lists all CT-es received today with their main header data and the status information.
- **Overview**
  The *Overview* query lists all CT-es with their main header data and the status information.

List

Based on your selection criteria, the *CT-e Fiscal Workplace* displays a list of CT-es and their processing status.

The following status icons are used:

- Process Completed; CT-e Processed Successfully. This icon represents the following statuses:
  - 99 -> Process Completed; Document Successfully Processed
  - 98 -> Document Manually Closed
- Process completed; CT-e rejected. This icon represents status 89.
  The CT-e processing finished with a rejection by the user with no option to continue processing.
- Document Rejected, Can Be Overwritten. This icon represents status 88.
  The CT-e processing finished with a rejection by the user with the option to receive the XML again.
- Process Waiting for Asynchronous Reply. This icon represents status 11.
- Error in preceding Process Step. This icon represents the following statuses:
  - 02 -> Error in last process step
  - 03 -> Technical error in last process step
  - 04 -> Temporary error in last process step

  To correct the error, go to the status overview and check the problem description in the last activity. After correcting the problem, you can continue the process either by using the corresponding step-specific user interface or with the action *Continue Process*.
- Process waiting for user action. This icon represents status 01.
  The process stopped for the user to carry out necessary actions on the corresponding step-specific user interface.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Additional Information

Once you have selected a CT-e in the displayed table, tabs containing additional information about this CT-e appear at the bottom of the screen:

- **Status Overview**
  This is a description of the process with the corresponding *Status*, *Activity*, *Process*, *Status Description*, *Info Text* and *Application Log* fields.
- **History**
  This is a description of the history of this CT-e containing the *Status*, *Process*, *Activity*, *Status Description*, *Info Text*, *Executed on*, and the *User* fields.
- **References**
  The References tab is only displayed for CT-es where the XML contains electronic or paper-based NF/CT references.
  - An icon indicates whether the NF-e/CT-e is stored in the NFE system.
  - The access key is a direct link to the XML of the NF-e/CT-e. To open this link, you need the authorization to display the NF-e/CT-e.
- **Events**
  This is an overview of all events related to this CT-e. For more detailed information, see Events Embedded in Monitors [page 522].

> ⚠ Caution
>
> The Events tab is only visible if there is at least 1 event for a CT-e.

Actions

- **Process Steps**
  Choose *Execute Process Step* to manually execute a process step.
  The available process steps depend on the used CT-e process. For the CT-e flexible process, you can manually execute the following steps:
- **Select Details:**
  - **Display Details**
    This action displays the XML content in multiple sub-screens. You can also access the CT-e details by clicking on the access key in the list.
  - **Display XML**
    This action allows you to download/display the CT-e XML file (if existing).
  - **Cancellation XML**
    This action allows you to download/display the cancellation event XML file (if existing).
  - **Enter DACTE**
    Choose *Enter DACTE* to record a DACTE manually or with a bar code reader.
- **Additional Functions**
  Use the *Additional Functions* dropdown to call the following additional functions:
  - **Continue Process**
    For attempting to restart the automatic processing of a CT-e. If CT-e processing stops, investigate the reason, then choose *Continue Process* to try to continue processing.

- **Set Process Step to OK Manually**
  For setting the current process step to OK, despite the fact that the process step was not carried out successfully.
- **End CT-e Manually**
  For ending the CT-e processing in the NFE system without carrying out any further steps.

  > ⓘ Note
  >
  > You must do necessary additional processing in the ERP system manually without linking to the NFE system.

- **Reject CT-e**
  To reject the CT-e and to stop further processing in the NFE system. The event of type `Service Delivery Disagreement` (See: CT-e Events: Service Delivery Disagreement Event [page 484]) will be sent depending on the customizing settings for the rejection reasons.

  > ⓘ Note
  >
  > After rejecting a CT-e, you must do necessary additional processing in the ERP system manually without linking to the NFE system.

  For the case that the XML is incorrect you have the option to flag the CT-e as *Enable New Receipt of CT-e*. The CT-e receives a new status (*Status code 88 –>Document rejected, Can be overwritten*) and will be overwritten once the same CT-e (with the same access key) arrives again in the NFE system. This is documented in the history table of the CT-e.

  > ⚠ Caution
  >
  > The previous XML is overwritten and the processing starts again. You cannot restore an overwritten CT-e.

- **Send Notification**
  To send a notification to your business partner.
- **Query Events**
  Use this action to trigger an asynchronous CT-e status check to receive events from your business partner through the authorities.

CT-e Details

You can display the details by choosing a CT-e's *Access Key*, or by selecting the corresponding line and choosing *Display Details*. The details view displays the entire content of the XML in several tabs and grouped according to the tags in the XML.

Navigation

You can access the CT-e Fiscal Workplace in SAP NFE via one of the following options:

- You can call up the specific menu *Fiscal Workplace* from the user role `/XNFE/WP_NFE_IN_FISCAL` *(Menu: NF-e Inbound Fiscal Workplace)*.
- You can access this option from the user role by choosing ▶ *Fiscal Workplace: Inbound Messages* ▶ *CT-e* ▶.

CT-e Fiscal Workplace: Simulating CT-es [page 416]

CT-e Fiscal Workplace: Recording DACTEs [page 417]

CT-e Fiscal Workplace: Transport Confirmation [page 417]

7.3.3.1 CT-e Fiscal Workplace: Simulating CT-es

You can choose *Execute Process Step* to manually execute the *Simulate Invoice and CT-e* process step. To run a simulation, proceed as follows:

1. Select a CT-e and choose ▶ *Execute Process Steps* ▶ *Invoice Simulation* ▶. The simulation is executed in the background and you receive the simulation results immediately.
2. The result displays the following information:
   - *Simulation Parameters*
     CFOP and tax code the simulation was executed with.
   - *Values*
     Displays the value and the value to receive of the CT-e XML in comparison to the value of the simulation. In addition, you receive certain document numbers, for example, the number of the service entry sheet. These are the numbers on which the simulation is based.
   - *Taxes*
     This displays tax values from the CT-e and from the simulation.
3. Messages during simulation are displayed on top of the simulation parameter section in a message area. Every message has a link to the long text in the ERP system. If a long text is available in the ERP system, it will be displayed in a pop-up window.
4. Possible Actions
   - You can choose different values for CFOP and tax code and restart the simulation.
   - After running a simulation, you can choose *Save Results* to save the tax code and CFOP code used in the simulation, as well as the messages received during the simulation.
   - After saving the simulation results, you can set the status for this CT-e. You have two options:
     - Set Status to *OK*
       You confirm that the invoice simulation of the CT-e was without errors. You can only set the status to *OK* if you have an error-free simulation.
     - Set Status *Not OK*
       Choose this status if there are still issues to deal with.
   - Select the *Back* button to go back to the overview screen.

After setting a status, you return automatically to the CT-e Fiscal Workplace. If you do not want to set a status, use the *Back* button to return to the CT-e Fiscal Workplace.

7.3.3.2 CT-e Fiscal Workplace: Recording DACTEs

This step is intended to compare the CT-e XML data from the NFE system with the arrived DACTE paper document and to confirm that the DACTE has arrived and that the processing can continue.

You can choose *Execute Process Step* to manually execute the *Goods Arrived, Enter DACTE* process step. To record a DACTE, proceed as follows:

1. Select a CT-e and choose *Execute Process Steps* > *Goods Arrived, Enter DACTE* .
2. You can now set the status for this CT-e. You have two options:
   - *Set Status to OK*
     You confirm that the goods have arrived and the entered DACTE is correct.
   - *Set Status Not OK*
     Choose this status if there are still issues to deal with.
3. After setting a status, you return automatically to the *CT-e Fiscal Workplace*. If you do not want to set a status, use the *Back* button to return to the *CT-e Fiscal Workplace*.

7.3.3.3 CT-e Fiscal Workplace: Transport Confirmation

This step is intended to compare the CT-e XML data from the NFE system with the arrived DACTE paper document and to confirm that the DACTE has arrived and that the processing can continue.

You can choose *Execute Process Step* to manually execute the *Transport Confirmation* process step. To confirm the arrival of your goods at the receiver site, proceed as follows:

1. Select the correct step:

Transport Confirmation	CT-e for Outbound NF-e with LES

   This step checks the processing status of the NF-e documents referenced in this CT-e. This is realized via checking the status of the Receiver Acknowledgments towards every NF-e.

2. The screen displays an overview containing all NF-es that referenced in the CT-e. The first column contains an indicator that specifies which events of the Receiver Acknowledgment family have been triggered so far for this NF-e by the business partner. The following options are possible:
   - No information available for event
   - Operation Acknowledgment event authorized
   - Operation Confirmation authorized
   - Operation Termination authorized
   - Operation Denial authorized
3. You can select one NF-e in the table and carry out the following actions:
   1. Query events (to synchronize the events with SEFAZ)
   2. Refresh the status by updating the NF-e information on the database
4. You can now set the status for this CT-e. You have two options:
   - *Set Status to OK*

You confirm that the goods transportation was completed successfully.

- *Set Status Not OK*
  Choose this status if there are still issues to deal with.

5. After setting a status, you return automatically to the *CT-e Fiscal Workplace*. If you do not want to set a status, use the *Back* button to return to the *CT-e Fiscal Workplace*.

7.4 DF-e Gate Monitor

Use

The DF-e Gate Monitor (DF-e = NF-e and CT-e) is a workplace for a user at the company gate to scan the barcodes of a shipment (Example: truck arrives with several `DACTE` and `DANFE`). After the scanning process, you receive status information of your scanned goods in form of a traffic light that indicates the following options:

- Allow the entrance of the truck
- Allow the entrance of the truck to a quarantine area to solve pending actions
- Prohibit the entrance of the truck

Process

The Gate Monitor UI guides you through the process using two activities:

1. Step 1: Insert (scan) access keys

> ### Note
>
> If some CT-e documents contain a lot of referenced NF-es, it is recommended to maintain the settings as described in Customizing activity *Control Parameters for Process-Independent Actions* to avoid scanning of all referenced NF-es. In this case it is enough to scan the CT-e document only. For more information, see Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

2. Step 2: Individual Check –> Displays the processing status of the scanned CT-e and NF-e via a traffic light

> ### Note
>
> To ensure that the truck has arrived at the correct gate, the person at the company gate must have the authorization for the receiver `CNPJ` that is linked to the gate. If this authorization is not given, you receive an authorization error for the document after the transition to the second step. For more information how to assign this authorization, see the NFE Security Guide: http://help.sap.com/nfe.

Step Insert Access Keys

In the first screen you can scan all documents with a barcode scanner.

> **Note**
>
> The only input field you see on the screen, where the barcodes are inserted, must have the input focus for scanning.

Errors during the scanning are displayed next to the input field. Possible errors are, for example,

- The scanned ID is not a valid access key
- The scanned ID is already in the list

Basic information of the scanned documents is displayed in the following columns:

- Document Type
  The document can either be a NF-e or CT-e.
- Partner
  Name of Issuer
- Access Key
  The NF-e access key is a 44 digit identifier
- Issuer Region
- Issuer Tax Number
- DF-e Number
- Series

Click the icon *Delete Entries* to remove one or more lines in the list. When all documents are scanned, you can continue with the next step and click *Next*.

Step Individual Check

During navigation from the step *Insert Access Keys* to the step *Individual Check*, the following actions are carried out:

- The processing statuses of all documents are retrieved from the data base
- An authorization check is carried out at SEFAZ.
- If one or more NF-e XML files do not exist in the NF-e Fiscal Workplace, they are downloaded from the national environment.

To be able to download an NF-e XML file automatically, some prerequisites have to be fulfilled:

- An information about this NF-e must be retrieved by the Distribution Web Service (for more information, see process Preprocess for NF-e Summary in Preprocessing Inbound NF-es [page 244]).
- The operation acknowledgment event was sent to the government (process step *Send Acknowledgment Event*) and also authorized.

> **Note**
>
> These checks take a few seconds for every document.

On the second screen of the gate monitor you see traffic light that displays the current status. The following options are possible:

- Transport can drive onto premises
- Check with fiscal area
- Transport cannot drive onto premises

The list in the Gate Monitor below shows the CT-e with reference NF-e in a tree structure with additional columns. Possible texts for a document are:

Status Code	Description	Status	Icon
01	Document XML has not arrived	Error	
02	Document rejected; processing is not possible	Error	
03	User has no authorization for processing with the target CNPJ	Error	
04	OK; document already processed	OK	
05	Document does not have a valid process	Error	
06	NF-e is not authorized by SEFAZ	Error	
07	XML version not maintained in Customizing	Error	
08	Authorization check at SEFAZ failed	Error	
09	Not all reference DF-es have been scanned	Error	
10	OK	OK	
11	DANFE/DACTE receipt not expected for process	Warning	
12	OK; document already processed	OK	
13	Pending actions before DANFE/DACTE receipt	Warning	
14	Incorrect XML layout version	Error	
15	NF-e Outbound: Error during Transformation	Error	
16	NF-e Outbound: Values in XML for `tpNF` and/or `idDest` not valid	Error	
17	NF-e Outbound: OK	OK	

Documents with a yellow status can be corrected by the fiscal clerk.

> **Note**
>
> A negative authorization check has a higher priority than the processing status. For example, if the processing status is green and the authorization status is red, the document status is red with the error text from the authorization check. The status of a document with red or yellow status with positive authorization check can change after

- Clicking refresh
- Deleting another document
- Clicking previous and next

The status of a document with red or yellow status (result of a negative authorization check) does not change as long as the document is in the list.

Click *Delete Entries* to remove one or more lines in the list. The resulting status of the traffic light will be adjusted automatically.

Click *Refresh* to determine the current processing status of the documents. This results in a refresh of the displayed status information. For example, if you call the fiscal clerk because for one NF-e, the status is *Pending actions before DANFE* (yellow), the fiscal clerk triggers the invoice simulation. After a refresh, this NF-e turns green and the traffic light is adjusted automatically.

To complete the process you must click the *Complete* button. If the status is green, the processing of all documents is triggered. The system processes all documents and carries out the following actions:

- Setting the step *waiting for DANFE/DACTE* to *OK*
- Setting the step *authorization check after DANFE/DACTE* to *OK*

In doing so, the normal processing according to the business process continues. The fiscal clerk is only involved, if the counted quantities in the logistic workplace differ from the NF-e. All other steps of the fiscal clerk are carried out automatically. If you do not use the logistic workplace, the Gate Monitor triggers the entire process including the posting of all documents in ERP.

If you click the *Complete* pushbutton and an error occurs during triggering of the processing, the Monitor display remains on the second screen and you are confronted with two possible scenarios:

1. The error is temporary and you can repeat the triggering of the processing.
2. The error is not temporary, for example, database reading error, or a technical error. This results in the error being displayed in the message area for further analysis.

After the successful triggering of the processing for all documents, the first screen is displayed with an empty documents list ready for new input.

If the status is not *green*, the processing is not triggered and the first step is displayed with an empty documents list ready for new input.

> ### Note
>
> You can implement the `BAdI: Determination of Status for Gate Monitor` that defines the DF-e status and corresponding text for the Gate Monitor. In addition, you can define a text for the status of the traffic light that determines the entrance to the company premises.

DF-e Gate Monitor for Outbound NF-es

From NFE 10.0 SP20 and higher, the *DF-e Gate Monitor* can also be used with outbound NF-es.

Background Scenario

It can happen that you have NF-es for imported goods on the truck. These NF-e have been issued by the buyer, therefore they are in the outbound data base tables instead of the inbound tables. These NF-es are not found and the gatekeeper process stops with an error message. Another scenario is that you have both, import and normal NF-es, on the same truck.

Solution

The *DF-e Gate Monitor* can also be used with outbound NF-es.

The following prerequisites for outbound NF-es must be fulfilled:

- tpNF = 0
- idDest = 3

> **Note**
>
> Note the status codes for outbound NF-es in the table above.

8 Events

SEFAZ has introduced the option to add a document to an NF-e/CT-e/MDF-e. This additional document is an *Event* and can carry additional information concerning the NF-e/CT-e/MDF-e. Events can be issued by SEFAZ, the NF-e receiver, the CT-e *Tomador*, or the NF-e/CT-e/MDF-e sender. However, all events have to be authorized by SEFAZ. It is possible to check the status for every NF-e/CT-e/MDF-e inclusive all events on the SEFAZ website. For more information, refer to the following links:

Events for NF-e [page 423]

Events for CT-e [page 478]

Events for MDF-e [page 498]

Generic Event Processing Steps [page 506]

Monitor Events [page 514]

8.1 Events for NF-e

SEFAZ has introduced the option to add a document to an NF-e to provide information. This additional document is an event for an NF-e and can carry additional information concerning the NF-e. Events can be issued by SEFAZ, the receiver, or the sender. However, all events have to be authorized by SEFAZ. It is possible to check the status for every NF-e inclusive all events on the SEFAZ website.

More detailed processing information is available for:

- NF-e Event Processing [page 424]
  - User Actions for NF-e Event Processing [page 458]
- NF-e Event Batch Processing [page 474]
  - User Actions for NF-e Event Batch Processing [page 475]

The following events are supported:

- NF-e Events: CC-e (Electronic Correction Letter) [page 426]
- NF-e Events: Cancellation Event [page 428]
- NF-e Events: EPEC Event [page 431]
- Events for Receiver Acknowledgment [page 433]
- Events for ICMS Suspension [page 443]
- Events for SUFRAMA [page 454]
- NF-e Events: Receipt of Other Event Types from SEFAZ [page 456]

Events that are issued by the NFE system are displayed in the *Event Outbound Monitor* (see Event Outbound Monitor [page 514]). NF-e events are sent in batches and can be displayed in the Event Batch Monitor (see Event Batch Monitor [page 518])

Events that are received by the NFE system are displayed in the *Event Inbound Monitor* (see Event Inbound Monitor [page 520]).

These monitors can be used to detect and solve possible issues in the event outbound/inbound processing:

> **Note**
>
> If you display an NF-e, the corresponding events are also displayed:
>
> - For outbound NF-es in the NF-e Monitor (see NF-e Monitor (Outbound) [page 162])
> - For inbound NF-es in the Fiscal Workplace (see NF-e Fiscal Workplace [page 346])

> **Note**
>
> **Digital Signature Validation for Inbound Events**
>
> - You can configure signature or reference validation as in NF-e and CT-e scenarios. For more information, see Configuration for Digital Signature Validation [page 110].
> - For events: If the corresponding NF-e is not found in the data base, signature validation is used as default.
>
> The process NF-e Events: Send NF-e Event to Business Partner [page 456] is the same for all events.

NF-e Event Processing [page 424]

NF-e Event Batch Processing [page 474]

8.1.1 NF-e Event Processing

Event-specific Processing

The event-specific processing (outbound & inbound) can be found in the corresponding event documentation for the following supported events:

- NF-e Events: CC-e (Electronic Correction Letter) [page 426]
  - CC-e Events for NF-e Outbound [page 426]
  - CC-e Events for NF-e Inbound [page 427]
- NF-e Events: Cancellation Event [page 428]
  - NF-e Outbound Cancellation Event [page 429]
  - NF-e Inbound Cancellation Events [page 430]
- NF-e Events: EPEC Event [page 431]
  - EPEC Events for Outbound [page 431]
  - EPEC Events for Inbound [page 432]
- Events for Receiver Acknowledgment [page 433]
  - NF-e Events: Operation Acknowledgment [page 434]
    - Operation Acknowledgment Events for Outbound [page 434]
    - Operation Acknowledgment Events for Inbound [page 435]
  - NF-e Events: Operation Confirmation [page 436]
    - Operation Confirmation Events for Outbound [page 436]
    - Operation Confirmation Events for Inbound [page 437]

    - NF-e Events: Operation Denial [page 438]
        - Operation Denial Events for Outbound [page 439]
        - Operation Denial Events for Inbound [page 440]
    - NF-e Events: Operation Termination [page 440]
        - Operation Termination Events for Outbound [page 441]
        - Operation Termination Events for Inbound [page 442]
- Events for ICMS Suspension [page 443]
    - 1st Extension Request (EPP1) [page 444]
        - 1st Extension Request (EPP1) for Outbound [page 444]
        - 1st Extension Request (EPP1) for Inbound [page 444]
    - 2nd Extension Request (EPP2) [page 445]
        - 2nd Extension Request (EPP2) for Outbound [page 445]
        - 2nd Extension Request (EPP2) for Inbound [page 446]
    - 1st Extension Cancellation (ECPP1) [page 447]
        - 1st Extension Cancellation (ECPP1) for Outbound [page 447]
        - 1st Extension Cancellation (ECPP1) for Inbound [page 448]
    - 2nd Extension Cancellation (ECPP2) [page 448]
        - 2nd Extension Cancellation (ECPP2) for Outbound [page 448]
        - 2nd Extension Cancellation (ECPP2) for Inbound [page 449]
    - 1st Extension Response (EFPP1) [page 450]
        - 1st Extension Response (EFPP1) Inbound for NF-e Issuer [page 450]
        - 1st Extension Response (EFPP1) Inbound for NF-e Receiver [page 450]
    - 2nd Extension Response (EFPP2) [page 451]
        - 2nd Extension Response (EFPP2) Inbound for NF-e Issuer [page 451]
        - 2nd Extension Response (EFPP2) Inbound for NF-e Receiver [page 451]
    - 1st Extension Cancellation Response (EFCPP1) [page 452]
        - 1st Extension Cancellation Response (EFCPP1) Inbound for NF-e Issuer [page 452]
        - 1st Extension Cancellation Response (EFCPP1) Inbound for NF-e Receiver [page 452]
    - 2nd Extension Cancellation Response (EFCPP2) [page 453]
        - 2nd Extension Cancellation Response (EFCPP2) Inbound for NF-e Issuer [page 453]
        - 2nd Extension Cancellation Response (EFCPP2) Inbound for NF-e Receiver [page 453]
- Events for SUFRAMA [page 454]
    - SUFRAMA - Vistoria [page 454]
    - SUFRAMA - Internalização [page 455]
- NF-e Events: Receipt of Other Event Types from SEFAZ [page 456]

The process NF-e Events: Send NF-e Event to Business Partner [page 456] is the same for all events.

Additional information:

NF-e Events: CC-e (Electronic Correction Letter) [page 426]

NF-e Events: Cancellation Events [page 428]

NF-e Events: EPEC Event [page 431]

Events for Receiver Acknowledgment [page 433]

Events for ICMS Suspension [page 443]

Events for SUFRAMA [page 454]

NF-e Events: Receipt of Other Event Types from SEFAZ [page 456]

NF-e Events: Send NF-e Event to Business Partner [page 456]

User Actions for NF-e Event Processing [page 458]

NF-e Event Processing Steps [page 460]

8.1.1.1 NF-e Events: CC-e (Electronic Correction Letter)

Use

CC-e: Carta de Correção Eletrônica (electronic correction letter)

This electronic correction letter can only be issued by the NF-e issuer to correct incorrect data in the NF-e. A correction letter can correct a previous correction letter. Only the corrections from the last authorized CC-e are valid. The maximum number of correction letters is 20. A new CC-e cannot be issued as long as there is still a pending response from the tax authority for another CC-e.

The CC-e is an event that contains a text that describes corrections for the NF-e. However, no tax relevant information is allowed. The text must at least contain 15 characters and is limited to 1000 characters.

The following processes are available:

CC-e Events for NF-e Outbound [page 426]

CC-e Events for NF-e Inbound [page 427]

8.1.1.1.1 CC-e Events for NF-e Outbound

Outbound CC-e Process (technical name `ISSUING`)

Within ERP (see SAP Note 1575364), there is a CC-e editor in the *NF-e/CT-e Monitor* to edit and issue a CC-e with reference to an existing and authorized NF-e. The ERP system calls the NFE application via a synchronous RFC. The outbound process consists of the following steps:

Outbound CC-e Process (ISSUING)

Step	Technical Name	Description
1. **Creation of an event**	CCECREAT	The event is received, the content is validated and mapped to the XML structure. For more information, see CCECREAT: Create Event [page 509].

Step	Technical Name	Description
2. **Sign the event**	EVENTSIN	The event is signed with the certificate of the event issuer CNPJ. For more information, see EVENTSIN: Sign Event [page 512]. **Note** • You can also configure signature or reference validation as in NF-e and CT-e scenarios. For more information, see Configuration for Digital Signature Validation [page 110]. • For events: If the corresponding NF-e is not found in the data base, signature validation is used as default.
3. **Check authorization of event**	ADDTOBAT	The event is sent to the authority system via batch and the NFE system is waiting for the asynchronous response. For more information, see ADDTOBAT: Authorize NF-e Event [page 461].
4. **Trigger B2B Process**	EVTRGB2B	The B2B process is created as a separate process, for more information see EVTRGB2B: Trigger B2B Process [page 512] and the description of the **Send Event to Business Partner** process in NF-e Event Processing [page 424]. **Note** This step is only relevant if the event was authorized.
5. **Update ERP system**	ERPUPDAT	The status code is forwarded to the backend system. For more information, see ERPUPDAT: Notify Feeder System [page 469].. .

8.1.1.1.2 CC-e Events for NF-e Inbound

Inbound CC-e Processes

Since CC-e are issued by the NF-e issuer, the CC-e inbound function is relevant for the NF-e recipient. There are two different ways of receiving CC-es:

- **Correction Letter CC-e from B2B** (Technical name `IBB2BCCE`)

  Inbound CC-e Process (IBB2BCCE)

Step	Technical Name	Description
1. **Create or update the event**	`EVCREUPD`	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Validation of the signature**	`SIGNVALI`	Check that the signed event matches the certificate of the corresponding CNPJ. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. **Check authorization of the event via status call to SEFAZ**	`AUTHEVNT`	Check the authorization status of the event using the NF-e status check. For more information, see AUTHEVNT: Check Authorization for Event [page 507]..

- **Correction Letter CC-e from SEFAZ** (Technical name `IBSEFCCE`)

  Inbound CC-e Process (IBSEFCCE)

Step	Technical Name	Description
1. **Create or update the event**	`EVCREUPD`	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Check for end of process**	`EVENDPRC`	Confirm that all information from the event was used during the processing and that necessary corrections were carried out. For more information, see EVENDPRC: Check for End of Process Step [page 511].

8.1.1.2 NF-e Events: Cancellation Events

Use

Cancellation Events

The event NF-e cancellation replaces the previous NF-e cancellation process. The cancellation event can only be issued by the NF-e issuer to cancel the NF-e. The cancellation event must contain the cancellation reason. The cancellation reason is a text that must contain at least 15 characters and is limited to 255 characters.

The following cancel processes are available:

NF-e Outbound Cancellation Event [page 429]

NF-e Inbound Cancellation Events [page 430]

8.1.1.2.1 NF-e Outbound Cancellation Event

Outbound Cancel Processes (technical name `ISSUCANC`)

In ERP, the cancellation event can be issued in the NF-e monitor using the button *Request Cancellation*. Once the cancellation event is authorized, the NF-e is cancelled. In case of a rejection of the cancellation event, the NF-e remains authorized. The ERP system calls the NFE application via a synchronous RFC call. This triggers the event outbound process that has the following steps:

Step	Technical Name	Description
1. **Create the event**	`CANCREAT`	The event is received, the content is validated and mapped to the XML structure. For more information, see CANCREAT: Create Cancellation Event [page 508].
2. **Sign the event**	`EVENTSIN`	The event is signed with the certificate of the corresponding issuer CNPJ. For more information, see EVENTSIN: Sign Event [page 512]. .
3. **Add the event to a batch and wait for the answer from SEFAZ**	`ADDTOBAT`	The event is send to the authority system via batch and the NFE system is waiting for the asynchronous response. For more information, see ADDTOBAT: Authorize NF-e Event [page 461].. **Note** Due to the fact that the cancellation event has to be sent as fast as possible, the NFE system tries to send this event immediately and does not wait for the event batch report. In case the sending attempt fails, the event will be sent to SEFAZ again using the same logic as for other events for outbound NF-es (for example, the electronic correction letter CC-e). This means that the event is added to a batch which is then sent to SEFAZ.
4. **Update NF-e data after cancellation**	`CANUPNFO`	Update of the NF-e data in the NF-e Cancellation Process. For more information, see CANUPNFO: Update NF-e Data After Cancellation [page 464].
5. **Trigger B2B Process**	`EVTRGB2B`	The B2B process is created as a separate process, for more information see the description of the Send Event to Business Partner process in NF-e Event Processing. For more information, see .EVTRGB2B: Trigger B2B Process [page 512]. **Note** This step is only relevant if the event was authorized.
6. **Forward the event status to ERP**	`ERPUPDAT`	The status code is forwarded to the backend system. For more information, see ERPUPDAT: Notify Feeder System [page 469].

8.1.1.2.2 NF-e Inbound Cancellation Events

Inbound Cancel Processes

Since cancellation events are issued by the NF-e issuer, the cancellation inbound function is relevant for the NF-e recipient. There are two different ways of receiving cancellation events:

- **Cancellation Event from B2B** (Technical name: `IB2BCANC`)
  The inbound cancel process **Cancellation Event from B2B** has the following process steps:

Step	Technical Name	Description
1. **Create or update the event**	`EVCREUPD`	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Validation of the signature**	`SIGNVALI`	Check that the signed event matches the certificate of the corresponding CNPJ. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. **Check authorization of the event via status call to SEFAZ**	`AUTHEVNT`	Check the authorization status of the event using the NF-e status check. For more information, see AUTHEVNT: Check Authorization for Event [page 507].
4. **Start NF-e cancel process**	`CANCLNFE`	The inbound NF-e is cancelled; the cancellation process for the NF-e is determined and the corresponding process steps are executed. For more information, see CANCLNFE: Cancel Related NF-e [page 463].

- **Cancellation Event from SEFAZ** (Technical name: `ISEFCANC`)
  The inbound cancel process **Cancellation Event from SEFAZ** has the following process steps:

Step	Technical Name	Description
1. **Create or update the event**	`EVCREUPD`	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Start NF-e cancel process**	`CANCLNFE`	The inbound NF-e is cancelled; the cancellation process for the NF-e is determined and the corresponding process steps are executed. For more information, see CANCLNFE: Cancel Related NF-e [page 463].

8.1.1.3 NF-e Events: EPEC Event

Use

In contrast to the other existing events (for example: correction letter, cancellation), the EPEC event (abbreviation for *Evento Prévio de Emissão em Contingência*, translated *Previous Event to Posting under Contingency*) is generated before the referred NF-e was authorized. However, the NF-e must already exist in the NFE system. The issuing type (technical name `tpEmis`) used in the NF-e is *4*. The EPEC event is send to the national SEFAZ system for authorization.

> **Note**
>
> - **EPEC Cancellation**
> It is not possible to cancel an EPEC event. If it is necessary to cancel, the feeder system must obtain the NF-e authorization and request the NF-e cancellation afterwards.
> - **Skipping**
> The skipping request considers EPEC events. Therefore, if there is an authorized EPEC event and the skipping of this number is requested, you receive rejection 241 *A number from the range is already used*.
> - **NF-e Status Query**
> If the EPEC event already has an authorized NF-e, then the NF-e status query returns the protocol and the event data as for any NF-e with events. If only the EPEC event exists, then the status query returns the status code 124 (*EPEC authorized*) on NF-e level.

The following EPEC events are available:

EPEC Events for Outbound [page 431]

EPEC Events for Inbound [page 432]

8.1.1.3.1 EPEC Events for Outbound

The process **Issue of NF-e EPEC** (technical name: `ISSUEPEC`) consists of the following steps:

Step	Technical Name	Description
1. **Create NF-e EPEC Event**	`EPECCREAT`	The event is received, the content is validated and mapped to the XML structure. For more information, see EPECREAT: Create NF-e for EPEC Event [page 465].
2. **Sign the event**	`EVENTSIN`	The event is signed with the certificate of the event issuer CNPJ (Maintain the SSF settings in Customizing activity Maintain System Response for Own Tax Numbers in Process Settings and Customizing (Outbound)). For more information, see EVENTSIN: Sign Event [page 512] and Process Settings and Customizing for NF-e Outbound [page 91].

3. **Authorize Event**	ADDTOBAT	The event is sent to the authority system via batch and the NFE system is waiting for the asynchronous response. For more information, see ADDTOBAT: Authorize NF-e Event [page 461]. **Note** Due to the fact that the EPEC event has to be sent as fast as possible, the NFE system tries to send this event immediately and does not wait for the event batch report. In case the sending attempt fails, the event is send to the national system again using the same logic as for other events for outbound NF-es (for example, the electronic correction letter CC-e). This means that the event is added to a batch which is then sent to national system.
4. **Update of NF-e Data after EPEC**	EPEUPNFO	Update of the NF-e data in the NF-e EPEC Process. For more information, see EPEUPNFO: Update of NF-e Data After EPEC [page 466] and the description of the NF-e process with EPEC in NF-e Processing (Outbound) [page 129].
5. **Trigger B2B Process**	EVTRGB2B	The B2B process is created as a separate process, for more information see EVTRGB2B: Trigger B2B Process [page 512] and the description of the NF-e Events: Send NF-e Event to Business Partner [page 456] (technical name EVB2BNFE) process. **Note** This step is only relevant if the event was authorized.
6. **Notify Feeder System**	ERPUPDAT	The status code is transferred to the feeder system (ERP). For more information, see ERPUPDAT: Notify Feeder System [page 469].

8.1.1.3.2 EPEC Events for Inbound

Scenario: EPEC event arrives (before NF-e)

EPEC event (abbreviation for *Evento Prévio de Emissão em Contingência*, translated *Previous Event to Posting under Contingency*)

- The inbound EPEC process **Receipt of EPEC via B2B Communication** (Technical name IB2BEPEC) consists of the following process steps:

Step	Technical Name	Description
1. **Create or update the event**	EVCREUPD	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].

Step	Technical Name	Description
2. **Validation of the signature**	`SIGNVALI`	Check that the signed event matches the certificate of the corresponding CNPJ. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. **Check authorization of the event via status call to SEFAZ**	`AUTHEVNT`	Check the authorization status of the event using the NF-e status check. For more information, see AUTHEVNT: Check Authorization for Event [page 507].
4. **Create NF-e for EPEC Event**	`NFEEPCCR`	An NF-e is created for this EPEC event using the available data in the event.

- The inbound EPEC process **Receipt of EPEC via NF-e Status Request** (Technical name `ISEFEPEC`) consists of the following process steps:

Step	Technical Name	Description
1. **Create or update the event**	`EVCREUPD`	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Create NF-e for EPEC Event**	`NFEEPCCR`	An NF-e is created for this EPEC event using the available data in the event. The NF-e that is created is assigned to the process type PREPEPEC (Preprocess for NF-e with EPEC event). For more information, see NFEEPCCR: Create NF-e for EPEC Event [page 469].

8.1.1.4 Events for Receiver Acknowledgment

To control and monitor the progress of NF-e processing, SEFAZ has introduced the following event types. All Receiver Acknowledgment events are issued by the NF-e receiver to the national environment (cUF = 91).

NF-e Events: Operation Acknowledgment [page 434]

The operation acknowledgment event is used to report that the NF-e is known to the company.

NF-e Events: Operation Confirmation [page 436]

The operation confirmation event is used to confirm that an NF-e has been successfully processed by the company.

NF-e Events: Operation Denial [page 438]

The operation denial event is used to report that an NF-e is not valid for the company.

NF-e Events: Operation Termination [page 440]

The operation termination event is used to report that the processing of an NF-e was stopped by the company.

Events for Operation Acknowledgment [page 434]

Events for Operation Confirmation [page 436]

Events for Operation Denial [page 438]

Events for Operation Termination [page 440]

8.1.1.4.1 Events for `Operation Acknowledgment`

Use

Operation Acknowledgment Event

During processing of an incoming NF-e it is necessary to send events, if a certain status within the process is reached to inform the government and/or the B2B partner about the progress in processing the NF-e. The authorization of the event is done from the SEFAZ system of the receiver of the incoming NF-e. The operation acknowledgment event is used to report that the NF-e is known to the NF-e recipient.

> **Note**
>
> All Receiver Acknowledgment events are issued by the NF-e receiver to the national environment (cUF = 91)

The following Operation Acknowledgment process are available:

Operation Acknowledgment Events for Outbound [page 434]

Operation Acknowledgment Events for Inbound [page 435]

8.1.1.4.1.1 Operation Acknowledgment Events for Outbound

Outbound Operation Acknowledgment Processes (technical name `ISSUOPAC`)

The *Operation Acknowledgment* event is not triggered by the ERP system (in contrast to the CC-e event). The event is created in the NFE system of the NF-e recipient from process step *Send Acknowledgment Event* of process *Preprocess for NF-e Summary* (see Preprocessing Inbound NF-es [page 244]) and has the following steps:

Step	Technical Name	Description
1. **Creation of an event**	`CCECREAT`	The event is created, the content is mapped to the XML structure. For more information, see CCECREAT: Create Event [page 509].
2. **Sign the event**	`EVENTSIN`	The event is signed with the certificate of the corresponding own CNPJ (CNPJ of recipient). For more information, see EVENTSIN: Sign Event [page 512]

Step	Technical Name	Description
3. **Add the event to batch and wait for answer from SEFAZ**	ADDTOBAT	The event is sent to the authority system via batch and the NFE system is waiting for the asynchronous response. For more information, see ADDTOBAT: Authorize NF-e Event [page 461].
4. **Update NF-e Data - Operation Acknowledgment**	RESPOPAC	This step returns the reply from the government to the inbound process. For more information, see RESPOPAC: Update NF-e Data Operation Acknowledgment [page 472].
5. **Trigger B2B Process**	ERPUPDAT	This step updates the connected feeder system with the event status. For more information see ERPUPDAT: Notify Feeder System [page 469] and the description of the **Send Event to Business Partner** process in NF-e Event Processing [page 424]. **Note** This step is only relevant if the event was authorized.

8.1.1.4.1.2 Operation Acknowledgment Events for Inbound

Inbound Operation Acknowledgment Processes

Since operation acknowledgment events are issued by the NF-e recipient, the operation acknowledgment inbound function is relevant for the NF-e issuer. There are two different ways of receiving operation acknowledgment events:

- **Operation Acknowledgment from B2B** (technical name IB2BOPAC)

Step	Technical Name	Description
1. **Create or update the event**	EVCREUPD	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Validation of the signature**	SIGNVALI	Check that the signed event matches the certificate of the corresponding CNPJ. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. **Check authorization of the event via status call to SEFAZ**	AUTHEVNT	Check the authorization status of the event using the NF-e status check. For more information, see AUTHEVNT: Check Authorization for Event [page 507].

Step	Technical Name	Description
4. **Update NF-e Data after Receiver Acknowledgment Event**	UPDRCACK	This step updates the Outbound NF-e with information about Receiver Acknowledgment Events. For more information, see UPDRCACK: Update NF-e Data after Receiver Acknowledgment Events [page 473].

- **Operation Acknowledgment from SEFAZ** (technical name ISEFOPAC)

Step	Technical Name	Description
1. **Create or update the event**	EVCREUPD	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Update NF-e Data after Receiver Acknowledgment Event**	UPDRCACK	This step updates the Outbound NF-e with information about Receiver Acknowledgment Events. For more information, see UPDRCACK: Update NF-e Data after Receiver Acknowledgment Events [page 473].

8.1.1.4.2 Events for Operation Confirmation

Use

Operation Confirmation Event

During processing of an incoming NF-e it is necessary to send events, if a certain status within the process is reached to inform the government and/or the B2B partner about the progress in processing the NF-e. The authorization of the event is done from the SEFAZ system of the receiver of the incoming NF-e. The operation confirmation event is used to report that the NF-e is processed successfully by the NF-e recipient.

> **Note**
>
> All Receiver Acknowledgment events are issued by the NF-e receiver to the national environment (cUF = 91)

The following processes are available:

Operation Confirmation Events for Outbound [page 436]

Operation Confirmation Events for Inbound [page 437]

8.1.1.4.2.1 Operation Confirmation Events for Outbound

Outbound Operation Confirmation Processes (technical name ISSUOPCO)

The `Operation Confirmation` event is not triggered by the ERP system (in contrast to the CC-e event). The event is created in the NFE system of the NF-e recipient during the NF-e business processes. This step triggers the event outbound process that has the following steps:

Step	Technical Name	Description
1. **Creation of an event**	`CCECREAT`	The step *send operation confirmation event* (SENDOPCO) of the NF-e process triggers the creation of an event. The event content is validated and the event mapped to the XML structure. For more information, see CCECREAT: Create Event [page 509].
2. **Sign the event**	`EVENTSIN`	The event is signed with the certificate of the corresponding own CNPJ (CNPJ of recipient). For more information, see EVENTSIN: Sign Event [page 512].
3. **Add the event to batch and wait for answer from SEFAZ**	`ADDTOBAT`	The event is sent to the authority system via batch and the NFE system is waiting for the asynchronous response. For more information, see ADDTOBAT: Authorize NF-e Event [page 461].
4. **Update NF-e Data - Operation Acknowledgment**	`RESPOPCO`	This step returns the reply from the government to the inbound process. For more information, see RESPOPCO: Update NF-e Data Operation Confirmation [page 472].
5. **Trigger B2B Process**	`EVTRGB2B`	The B2B process is created as a separate process, for more information see EVTRGB2B: Trigger B2B Process [page 512] and the description of the **Send Event to Business Partner** process in NF-e Event Processing [page 424]. **Note** This step is only relevant if the event was authorized.

8.1.1.4.2.2 Operation Confirmation Events for Inbound

Inbound Operation Confirmation Processes

Since operation confirmation events are issued by the NF-e recipient, the operation confirmation inbound function is relevant for the NF-e issuer. There are two different ways of receiving operation confirmation events:

- **Operation Confirmation from B2B** (technical name `IB2BOPCO`)

Step	Technical Name	Description
1. **Receive operation termination via B2B communication**	`EVCREUPD`	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].

Step	Technical Name	Description
2. **Validation of the signature**	`SIGNVALI`	Check that the signed event matches the certificate of the corresponding CNPJ. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. **Check authorization of the event via status call to SEFAZ**	`AUTHEVNT`	Check the authorization status of the event using the NF-e status check. For more information, see AUTHEVNT: Check Authorization for Event [page 507].
4. **Update NF-e Data after Receiver Acknowledgment Event**	`UPDRCACK`	This step updates the Outbound NF-e with information about Receiver Acknowledgment Events. For more information, see UPDRCACK: Update NF-e Data after Receiver Acknowledgment Events [page 473].

- **Operation Confirmation from SEFAZ** (technical name `ISEFOPCO`)

Step	Technical Name	Description
1. **Create or update the event**	`EVCREUPD`	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Update NF-e Data after Receiver Acknowledgment Event**	`UPDRCACK`	This step updates the Outbound NF-e with information about Receiver Acknowledgment Events. For more information, see UPDRCACK: Update NF-e Data after Receiver Acknowledgment Events [page 473].

8.1.1.4.3 Events for `Operation Denial`

Use

Operation Denial Event

During processing of an incoming NF-e it is necessary to send events, if a certain status within the process is reached to inform the government and/or the B2B partner about the progress in processing the NF-e. The authorization of the event is done from the SEFAZ system of the receiver of the incoming NF-e. The operation denial event is used to report that a rejected NF-e is not accepted by the NF-e recipient.

> ⓘ Note
>
> All Receiver Acknowledgment events are issued by the NF-e receiver to the national environment (cUF = 91)

The following processes are available:

Operation Denial Events for Outbound [page 439]

Operation Denial Events for Inbound [page 440]

8.1.1.4.3.1 Operation Denial Events for Outbound

Outbound Operation Denial Processes (technical name `ISSUOPDN`)

The operation denial event is not triggered by the ERP system (in contrast to the CC-e event). The event can be created in the NFE system of the NF-e recipient if an NF-e was rejected in the *Fiscal Workplace* (See: NF-e Fiscal Workplace [page 346], section *Additional Functions*).

The event process has the following steps:

Step	Technical Name	Description
1. **Creation of an event**	`CCECREAT`	The event is created, the content is validated and mapped to the XML structure. For more information, see CCECREAT: Create Event [page 509]. **Note** The timestamp for the event is the creation date of the event.
2. **Sign the event**	`EVENTSIN`	The event is signed with the certificate of the corresponding own CNPJ (CNPJ of recipient). For more information, see EVENTSIN: Sign Event [page 512].
3. **Add the event to a batch and wait for the answer from SEFAZ**	`ADDTOBAT`	The event is sent to the authority system via batch and the NFE system is waiting for the asynchronous response. For more information, see ADDTOBAT: Authorize NF-e Event [page 461]. **Note** This step waits until the batch processing is complete and the status of the event is received from SEFAZ. You can control the batch processing in the Event Batch Monitor [page 518].
4. **Trigger B2B Process**	`EVTRGB2B`	The B2B process is created as a separate process, for more information see EVTRGB2B: Trigger B2B Process [page 512] and the description of the **Send Event to Business Partner** process in NF-e Event Processing [page 424]. **Note** This step is only relevant if the event was authorized.

8.1.1.4.3.2 Operation Denial Events for Inbound

Inbound Operation Denial Processes

Since operation denial events are issued by the NF-e recipient, the operation denial inbound function is relevant for the NF-e issuer. There are two different ways of receiving operation denial events:

- **Operation Denial from B2B** (technical name `IB2BOPDN`)

Step	Technical Name	Description
1. **Create or update the event**	`EVCREUPD`	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Validation of the signature**	`SIGNVALI`	Check that the signed event matches the certificate of the corresponding CNPJ. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. **Check authorization of the event via status call to SEFAZ**	`AUTHEVNT`	Check the authorization status of the event using the NF-e status check. For more information, see AUTHEVNT: Check Authorization for Event [page 507].
4. **Update NF-e Data after Receiver Acknowledgment Event**	`UPDRCACK`	This step updates the Outbound NF-e with information about Receiver Acknowledgment Events. For more information, see UPDRCACK: Update NF-e Data after Receiver Acknowledgment Events [page 473].

- **Operation Denial from SEFAZ** (technical name `ISEFOPDN`)

Step	Technical Name	Description
1. **Create or update the event**	`EVCREUPD`	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Update NF-e Data after Receiver Acknowledgment Event**	`UPDRCACK`	This step updates the Outbound NF-e with information about Receiver Acknowledgment Events. For more information, see UPDRCACK: Update NF-e Data after Receiver Acknowledgment Events [page 473].

8.1.1.4.4 Events for Operation Termination

Use

Operation Termination Event

During processing of an incoming NF-e it is necessary to send events, if a certain status within the process is reached to inform the government and/or the B2B partner about the progress in processing the NF-e. The

authorization of the event is done from the SEFAZ system of the receiver of the incoming NF-e. The operation termination event is used to report that the processing of a rejected NF-e was terminated by the NF-e recipient.

> **Note**
>
> All Receiver Acknowledgment events are issued by the NF-e receiver to the national environment (cUF = 91)

The following processes are available:

Operation Termination Events for Outbound [page 441]

Operation Termination Events for Inbound [page 442]

8.1.1.4.4.1 Operation Termination Events for Outbound

Outbound Operation Termination Processes (technical name `ISSUOPNA`)

The `operation termination` event is not triggered by the ERP system (in contrast to the CC-e event). The event can be created in the NFE system of the NF-e recipient if an NF-e was rejected in the *Fiscal Workplace*. (See: NF-e Fiscal Workplace [page 346], section *Additional Functions*). The termination reason is derived from the selected reason when rejecting an NF-e.

The `Operation Termination` event process has the following steps:

Step	Technical Name	Description
1. **Creation of an event**	`CCECREAT`	The event is created, the content is mapped to the XML structure. For more information, see CCECREAT: Create Event [page 509].
2. **Sign the event**	`EVENTSIN`	The event is signed with the certificate of the corresponding own CNPJ (CNPJ of recipient). For more information, see EVENTSIN: Sign Event [page 512].
3. **Add the event to batch and wait for answer from SEFAZ**	`ADDTOBAT`	The event is sent to the authority system via batch and the NFE system is waiting for the asynchronous response. For more information, see ADDTOBAT: Authorize NF-e Event [page 461]. **Note** This step waits until the batch processing is complete and the status of the event is received from SEFAZ. You can control the batch processing in the Event Batch Monitor [page 518].

Step	Technical Name	Description
4. **Trigger B2B Process**	EVTRGB2B	The B2B process is created as a separate process, for more information see EVTRGB2B: Trigger B2B Process [page 512] and the description of the **Send Event to Business Partner** process in NF-e Event Processing [page 424]. **Note** This step is only relevant if the event was authorized.

8.1.1.4.4.2 Operation Termination Events for Inbound

Inbound Operation Termination Processes

Since operation termination events are issued by the NF-e recipient, the operation termination inbound function is relevant for the NF-e issuer. The following ways of receiving operation termination events are available:

- **Operation Termination from B2B** (technical name `IB2BOPNA`)

Step	Technical Name	Description
1. **Receive operation termination via B2B communication**	EVCREUPD	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Validation of the signature**	SIGNVALI	Check that the signed event matches the certificate of the corresponding CNPJ. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. **Check authorization of the event via status call to SEFAZ**	AUTHEVNT	Check the authorization status of the event using the NF-e status check. For more information, see AUTHEVNT: Check Authorization for Event [page 507].
4. **Update NF-e Data after Receiver Acknowledgment Event**	UPDRCACK	This step updates the Outbound NF-e with information about Receiver Acknowledgment Events. For more information, see UPDRCACK: Update NF-e Data after Receiver Acknowledgment Events [page 473].

- **Operation Termination from SEFAZ** (technical name `ISEFOPNA`)

Step	Technical Name	Description
1. **Create or update the event**	EVCREUPD	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].

Step	Technical Name	Description
2. **Update NF-e Data after Receiver Acknowledgment Event**	UPDRCACK	This step updates the Outbound NF-e with information about Receiver Acknowledgment Events. For more information, see UPDRCACK: Update NF-e Data after Receiver Acknowledgment Events [page 473].

8.1.1.5 Events for ICMS Suspension

For subcontracting processes, the Delivery NF-e is issued when sending the components to the subcontractor . If this is an interstate operation (subcontractor is located in another state inside Brazil, or outside Brazil), the government allows the to suspend ICMS payments for 180 days. This means that the NF-e issuer does not have to collect ICMS within these 180 days. Some states allow this suspension even for intrastate operations. If these 180 days are not sufficient (it takes longer till the finished goods are returned), you can extend the suspension for another 180 days, and then even for another 180 days.

ICMS suspension is used for items - not necessarily the entire NF-e. The official answer to these events is not returned immediately (as status code), but they are sent as separate events. 8 different events cover the entire process.

The following events are available for ICMS tax suspension:

> ⓘ Note
>
> - The events must be sent to the local system, SVC is not supporting them.
> - The NF-e has to be completely authorized. The authorization of the EPEC event is not sufficient.
> - The NF-e cannot be cancelled with an authorized extension event.
> - Two extension events of same type (for example 111500), must have different sequence numbers
> - The events will NOT be returned by the NF-e Status Check, only via DF-e Distribution Web Service.

1st Extension Request (EPP1) [page 444]

2nd Extension Request (EPP2) [page 445]

1st Extension Cancellation (ECPP1) [page 447]

2nd Extension Cancellation (ECPP2) [page 448]

1st Extension Response (EFPP1) [page 450]

2nd Extension Response (EFPP2) [page 451]

1st Extension Cancellation Response (EFCPP1) [page 452]

2nd Extension Cancellation Response (EFCPP2) [page 453]

8.1.1.5.1 1st Extension Request (EPP1)

The 1st Extension Request (EPP1) is used to request the deadline extension at SEFAZ for the first time (180 day period).

The following 2 processes are available:

1st Extension Request (EPP1) for Outbound [page 444]

1st Extension Request (EPP1) for Inbound [page 444]

8.1.1.5.1.1 1st Extension Request (EPP1) for Outbound

Issue of 1st Extension Request

The process (technical name: ISSUEPP1) consists of the following steps:

Step	Technical Name	Description
1. *Extension Request Create Event*	EPPCREAT	This step requests the deadline extension at SEFAZ for the first time (180 day period). For more information, see EPPCREAT: Extension Request Create Event [page 466].
2. *Sign Event*	EVENTSIN	The event is signed with the certificate of the event issuer CNPJ. For more information, see EVENTSIN: Sign Event [page 512].
3. *Authorize NF-e Event*	EVTRGB2B	This step requests the authorization of the NF-e event. Therefore, a batch (different process) is created that sends events to the government web service for authorization.. For more information, see EVTRGB2B: Trigger B2B Process [page 512].
4. *Trigger B2B Process*	POASSIGN	This step creates and initializes the event B2B processing. For more information, see POASSIGN: Assign Purchase Order Items [page 335].
5. *Notify Feeder System*	ERPUPDAT	This step updates the connected feeder system with the event status. For more information, see ERPUPDAT: Notify Feeder System [page 469].

8.1.1.5.1.2 1st Extension Request (EPP1) for Inbound

Issue of 1st Extension Request

The process (technical name: ISEFEPP1) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	EVENDPRC	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

Issue of 1st Extension Request

The process (technical name: ISEFEPP1) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510]
2. *Validate Signature of Event*	SIGNVALI	This step checks the signature of an inbound event. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. *Check Authorization for Event*	AUTHEVNT	This step checks that an NF-e event is still authorized at the SEFAZ system. For more information, see AUTHEVNT: Check Authorization for Event [page 507].

8.1.1.5.2 2nd Extension Request (EPP2)

The 2nd Extension Request (EPP2) is used to request the deadline extension for the second time (second 180 day period).

The following 2 processes are available:

- 2nd Extension Request (EPP2) for Outbound [page 445]
- 2nd Extension Request (EPP2) for Inbound [page 446]

8.1.1.5.2.1 2nd Extension Request (EPP2) for Outbound

Issue of 2nd Extension Request

The process (technical name: ISSUEPP2) consists of the following steps:

Step	Technical Name	Description
1. *Extension Request Create Event*	EPPCREAT	This step requests the deadline extension at SEFAZ for the first time (180 day period). For more information, see EPPCREAT: Extension Request Create Event [page 466].
2. *Sign Event*	EVENTSIN	The event is signed with the certificate of the event issuer CNPJ. For more information, see EVENTSIN: Sign Event [page 512].
3. *Authorize NF-e Event*	ADDTOBAT	This step requests the authorization of the NF-e event. Therefore, a batch (different process) is created that sends events to the government web service for authorization. For more information, see ADDTOBAT: Authorize NF-e Event [page 461].
4. *Trigger B2B Process*	EVTRGB2B	This step creates and initializes the event B2B processing. For more information, see EVTRGB2B: Trigger B2B Process [page 512].
5. *Notify Feeder System*	ERPUPDAT	This step updates the connected feeder system with the event status. For more information, see ERPUPDAT: Notify Feeder System [page 469].

8.1.1.5.2.2 2nd Extension Request (EPP2) for Inbound

Receipt 2nd Extension Request from SEFAZ

The process (technical name: ISEFEPP2) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	EVENDPRC	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

Receipt 2nd Extension Request via B2B Communication

The process (technical name: IB2BEPP2) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].

2. *Validate Signature of Event*	SIGNVALI	This step checks the signature of an inbound event. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. *Check Authorization for Event*	AUTHEVNT	This step checks that an NF-e event is still authorized at the SEFAZ system. For more information, see AUTHEVNT: Check Authorization for Event [page 507].

8.1.1.5.3 1st Extension Cancellation (ECPP1)

The 1st Extension Cancellation (ECPP1) is used to request the cancellation of the deadline extension.

The following processes are available:

- 1st Extension Cancellation (ECPP1) for Outbound [page 447]
- 1st Extension Cancellation (ECPP1) for Inbound [page 448]

8.1.1.5.3.1 1st Extension Cancellation (ECPP1) for Outbound

Issue of 1st Extension Cancellation

The process (technical name: ISSECPP1) consists of the following steps:

Step	Technical Name	Description
1. *Extension Cancellation Create Event*	ECPPCREA	This step requests the cancellation of the first deadline extension at SEFAZ. For more information, see ECPPCREA: Extension Cancellation Create Event [page 464].
2. *Sign Event*	EVENTSIN	The event is signed with the certificate of the event issuer CNPJ. For more information, see EVENTSIN: Sign Event [page 512].
3. *Authorize NF-e Event*	ADDTOBAT	This step requests the authorization of the NF-e event. Therefore, a batch (different process) is created that sends events to the government web service for authorization. For more information, see ADDTOBAT: Authorize NF-e Event [page 461].
4. *Trigger B2B Process*	EVTRGB2B	This step creates and initializes the event B2B processing. For more information, see EVTRGB2B: Trigger B2B Process [page 512].
5. *Notify Feeder System*	ERPUPDAT	This step updates the connected feeder system with the event status. For more information, see ERPUPDAT: Notify Feeder System [page 469].

8.1.1.5.3.2 1st Extension Cancellation (ECPP1) for Inbound

Receipt 1st Extension Cancellation from SEFAZ

The process (technical name: ISEFECP1) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	EVENDPRC	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

Receipt of 1st Extension Cancellation via B2B

The process (technical name: IB2BECP1) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Validate Signature of Event*	SIGNVALI	This step checks the signature of an inbound event. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. *Check Authorization for Event*	AUTHEVNT	This step checks that an NF-e event is still authorized at the SEFAZ system. For more information, see AUTHEVNT: Check Authorization for Event [page 507].

8.1.1.5.4 2nd Extension Cancellation (ECPP2)

The 1st Extension Cancellation (ECPP2) is used to request the cancellation of the 2nd deadline extension.

The following processes are available:

2nd Extension Cancellation (ECPP2) for Outbound [page 448]

2nd Extension Cancellation (ECPP2) for Inbound [page 449]

8.1.1.5.4.1 2nd Extension Cancellation (ECPP2) for Outbound

Issue of 2nd Extension Cancellation

The process (technical name: ISSECPP2) consists of the following steps:

Step	Technical Name	Description
1. *Extension Cancellation Create Event*	ECPPCREA	This step requests the cancellation of the first deadline extension at SEFAZ. For more information, see ECPPCREA: Extension Cancellation Create Event [page 464].
2. *Sign Event*	EVENTSIN	The event is signed with the certificate of the event issuer CNPJ. For more information, see EVENTSIN: Sign Event [page 512].
3. *Authorize NF-e Event*	ADDTOBAT	This step requests the authorization of the NF-e event. Therefore, a batch (different process) is created that sends events to the government web service for authorization. For more information, see ADDTOBAT: Authorize NF-e Event [page 461].
4. *Trigger B2B Process*	EVTRGB2B	This step creates and initializes the event B2B processing. For more information, see EVTRGB2B: Trigger B2B Process [page 512].
5. *Notify Feeder System*	ERPUPDAT	This step updates the connected feeder system with the event status. For more information, see ERPUPDAT: Notify Feeder System [page 469].

8.1.1.5.4.2 2nd Extension Cancellation (ECPP2) for Inbound

Receipt of 2nd Extension Cancellation from SEFAZ

The process (technical name: ISEFECP2) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	EVENDPRC	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

Receipt of 2nd Extension Cancellation via B2B

The process (technical name: IB2BECP2) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].

2. *Validate Signature of Event*	SIGNVALI	This step checks the signature of an inbound event. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. *Check Authorization for Event*	AUTHEVNT	This step checks that an NF-e event is still authorized at the SEFAZ system. For more information, see AUTHEVNT: Check Authorization for Event [page 507].

8.1.1.5.5 1st Extension Response (EFPP1)

1st Extension Response (EFPP1) is the answer to the first extension request (180 day period).

The following processes are available:

1st Extension Response (EFPP1) Inbound for NF-e Issuer [page 450]

1st Extension Response (EFPP1) Inbound for NF-e Receiver [page 450]

8.1.1.5.5.1 1st Extension Response (EFPP1) Inbound for NF-e Issuer

Receipt 1st Extension Response from SEFAZ Out

The process (technical name: ISEFPP1O) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	EVENDPRC	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

8.1.1.5.5.2 1st Extension Response (EFPP1) Inbound for NF-e Receiver

Receipt 1st Extension Response from SEFAZ Inb

The process (technical name: ISEFPP1I) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	EVENDPRC	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

8.1.1.5.6 2nd Extension Response (EFPP2)

2nd Extension Response (EFPP2) is the answer to the second extension request (second 180 day period).

The following processes are available:

- 2nd Extension Response (EFPP2) Inbound for NF-e Issuer [page 451]
- 2nd Extension Response (EFPP2) Inbound for NF-e Receiver [page 451]

8.1.1.5.6.1 2nd Extension Response (EFPP2) Inbound for NF-e Issuer

Issue 2nd Extension Response from SEFAZ Out

The process (technical name: ISEFPP2O) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	EVENDPRC	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

8.1.1.5.6.2 2nd Extension Response (EFPP2) Inbound for NF-e Receiver

Receipt 2nd Extension Response from SEFAZ Inb

The process (technical name: ISEFPP2I) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	EVENDPRC	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

8.1.1.5.7 1st Extension Cancellation Response (EFCPP1)

The 1st Extension Cancellation Response (EFCPP1) is the reply to the 1st extension cancellation request.

The following processes are available:

1st Extension Cancellation Response (EFCPP1) Inbound for NF-e Issuer [page 452]

1st Extension Cancellation Response (EFCPP1) Inbound for NF-e Receiver [page 452]

8.1.1.5.7.1 1st Extension Cancellation Response (EFCPP1) Inbound for NF-e Issuer

Issue 1st Extension Cancellation from SEFAZ Outb

The process (technical name: ISEFCP1O) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Notify Feeder System*	ERPECPNF	This step is executed as last step of the process. For more information, see ERPECPNF: Notify Feeder System [page 467].

8.1.1.5.7.2 1st Extension Cancellation Response (EFCPP1) Inbound for NF-e Receiver

Receipt 1st Extension Cancellation from SEFAZ Inb

The process (technical name: ISEFCP1I) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	EVENDPRC	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

8.1.1.5.8 2nd Extension Cancellation Response (EFCPP2)

The 2nd Extension Cancellation Response (EFCPP2) is the reply to the 2nd extension cancellation request.

The following processes are available:

- 2nd Extension Cancellation Response (EFCPP2) Inbound for NF-e Issuer [page 453]
- 2nd Extension Cancellation Response (EFCPP2) Inbound for NF-e Receiver [page 453]

8.1.1.5.8.1 2nd Extension Cancellation Response (EFCPP2) Inbound for NF-e Issuer

Receipt 2nd Extension Cancellation from SEFAZ Outb

The process (technical name: ISEFCP2O) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Notify Feeder System*	ERPECPNF	This step is executed as last step of the process. For more information, see ERPECPNF: Notify Feeder System [page 467].

8.1.1.5.8.2 2nd Extension Cancellation Response (EFCPP2) Inbound for NF-e Receiver

Receipt 2nd Extension Cancellation from SEFAZ Inb

The process (technical name: ISEFCP2I) consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	EVENDPRC	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

8.1.1.6 Events for SUFRAMA

In Manaus (Amazon) there is a tax incentive area called *Zona Franca de Manaus (ZFM)*. The goods sent to there do not pay `ICMS` and `IPI` taxes in case of industrialization.

There are two new events issued by the government. Both events are received via the DistributionWebService (issuer & receiver of NF-e) and they prove that the goods are really entering the ZFM and hence the `ICMS` and `IPI` exemptions are OK. For more information, see the detailed description below:

SUFRAMA - Vistoria [page 454]

SUFRAMA - Internalização [page 455]

8.1.1.6.1 SUFRAMA - Vistoria

For the goods entering in *ZFM* the NF-e issuer must request a PIN code to the receiver through a SUFRAMA system. The PIN code request will be submitted when the carrier puts in data through a document called *MANIFESTO SUFRAMA*. Together with this *MANIFESTO*, the goods and the PIN code created by the receiver, the carrier must go to the SUFRAMA fiscal check point to inspect the goods. SUFRAMA will then issue the event *Vistoria SUFRAMA*.

The process **Receipt Vistoria SUFRAMA f. SEFAZ INBD** (technical name: `ISESUVII`) for NF-e receiver consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	EVCREUPD	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	EVENDPRC	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

The process **Receipt Vistoria SUFRAMA f. SEFAZ OUTB** (technical name: `ISESUVIO`) for NF-e issuer consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	`EVCREUPD`	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	`EVENDPRC`	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

8.1.1.6.2 SUFRAMA - Internalização

When the NF-e receiver located in *ZFM* receives the goods, he must check if the PIN is OK and confirm the reception through a `SUFRAMA` system. `SUFRAMA` will then issue the event `Internalização SUFRAMA`.

The process **Receipt Conf. SUFRAMA from SEFAZ INBD** (technical name: `ISESUINI`) for NF-e receiver consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	`EVCREUPD`	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	`EVENDPRC`	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

The process **Receipt Conf. SUFRAMA from SEFAZ OUTB** (technical name: `ISESUINO`) for NF-e issuer consists of the following steps:

Step	Technical Name	Description
1. *Create or Update Event*	`EVCREUPD`	This step is used to create or update an event. For more information, see EVCREUPD: Create or Update Event [page 510].
2. *Check for End of Process*	`EVENDPRC`	This step is executed as last step of the process. For more information, see EVENDPRC: Check for End of Process Step [page 511].

8.1.1.7 NF-e Events: Receipt of Other Event Types from SEFAZ

Use

SAP NFE supports various NF-e Event processes as own processes. For an overview of all available NF-e Event processes see Events for NF-e [page 423].

Other events that are received by the government (for example, via NF-e Distribution Service) do not have an own process, but can be assigned to this process, therefore enabling the customer to react in a flexible way to the specific needs of the different events.

> **Note**
>
> In order to enable this process assignment, you need to use the Customizing option *Maintain Control Parameters for Process-Independent Actions*.

The process consists of the following steps:

Receipt of other NF-e Event Types from SEFAZ (ISEFFLEX)

Step	Technical Name	Description
1. **Create or update the event**	EVCREUPD	Receive the event from the government and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510] .
2. **Customer-specific NF-e Event step**	BADARENF	This step includes a BAdI that offers the customer the possibility to execute all necessary steps in the connected systems after the events has arrived. For more information, see BADARENF: Customer-specific NF-e Event Step [page 462].

8.1.1.8 NF-e Events: Send NF-e Event to Business Partner

Use

Send NF-e Event to Business Partner (technical name: EVB2BNFE**)**

The process *Send NF-e Event to Business Partner* (technical name: EVB2BNFE) consists of the following steps:

Step	Technical Name	Description
1. **Create Event B2B Process**	EVB2BCRE	The report Send Document to B2B Partner [page 78] (must be scheduled as a background job) collects all events - independent of document relation - ready for sending to the B2B partner and processes them. For more information, see EVB2BCRE: Create Event B2B Process [page 510] and the description of the report in Batch Job Planning for NF-e Outbound [page 93].
2. **Send Event to Buyer**	B2BOUTBD	Send the NF-e event XML to the receiver. This process step is only relevant if the B2B for the partner CNPJ is activated. For more information, see B2BOUTBD: Send Event to Buyer [page 470].
3. **Send Event to Transporter**	B2BOUTCA	Send the NF-e event XML to the transporter. This process step is only relevant if the B2B for the transporter CNPJ is activated. For more information, see B2BOUTCA: Send Event to Transporter [page 471].

After the successful execution of these steps, the process of sending an NF-e event XML to the business partner is complete.

Send NF-e Event to Business Partner (technical name: EVB2BNFC**)**

The process *Send NF-e Event to Business Partner* (technical name: EVB2BNFC) for cancellation events consists of the following steps:

Step	Technical Name	Description
1. **Create Event B2B Process**	EVB2BCRE	The report Send Document to B2B Partner [page 78] (must be scheduled as a background job) collects all events - independent of document relation - ready for sending to the B2B partner and processes them. For more information, see EVB2BCRE: Create Event B2B Process [page 510] and the description of the report in Batch Job Planning for NF-e Outbound [page 93].
2. **Send Event to Buyer**	B2BOUTBD	Send the NF-e event XML to the receiver. This process step is only relevant if the B2B for the partner CNPJ is activated. For more information, see B2BOUTBD: Send Event to Buyer [page 470].
3. **Send Event to Transporter**	B2BOUTCA	Send the NF-e event XML to the transporter. This process step is only relevant if the B2B for the transporter CNPJ is activated. For more information, see B2BOUTCA: Send Event to Transporter [page 471].
4. **Update NF-e B2B Process After Cancel**	B2BUPNFO	Update of the NF-e event data in the NF-e event cancellation B2B process. For more information, see B2BUPNFO: Update NF-e B2B Process After Cancel [page 462] and the cancellation B2B process in NF-e Processing (Outbound) [page 129].

After the successful execution of these steps, the process of sending an NF-e event XML to the business partner is complete.

8.1.1.9 User Actions for NF-e Event Processing

Request Status Check

This action allows the user to trigger an asynchronous NF-e status check to receive the event status. The response returns the current NF-e status from SEFAZ including all authorized events issued for this NF-e. This action is enabled if the status of the process step *Authorize Event* displays an *Error*. This can be caused by the following situations:

- The NF-e event batch process was ended manually (for more information, see User Actions for NF-e Event Batch Processing [page 475]).
- The batch process was completed, but the event was rejected with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 573 -> Rejection: Duplicated Event

    > ⓘ Note
    >
    > Not possible for *Receiver Acknowledgment* events with status code 573. This is due to the fact that the authorities do not offer a status check via these events. Use action *Confirm Authorization* instead.

  - 580 -> Rejection: NF-e must be Authorized to Request Cancelation
  - 642 -> Rejection: Failure in Fiscal Check Point Query (try in 5 min)
  - 999 -> Rejection: Unexpected Error
- The NF-e status check (to receive the event status) failed with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely

> → Recommendation
>
> Execute the *NF-e Status Check* (action *Request Status Check*) for all statuses (before using *Continue Process* to authorize the event at SEFAZ.) and especially for status 573.

Repeat Process Step

This action allows the user to repeat the process step *Notify Feeder System* although this step was already successfully executed during the regular processing. This action is enabled if the status of the process step *Notify Feeder System* displays *OK*.

Use this action if the transfer of the event status to the connected feeder system failed, but did not return an error. Therefore, the status of the process step *Notify Feeder System* stays *OK*.

Confirm Authorization

The action allows the user to enter authorization information, such as protocol number, authorization date and time, manually. This only applies to events that are not returned by the corresponding document status check. This is only possible for *Receiver Acknowledgment* events with status code 573.

Continue Process

The action allows the user to execute the current/next process step of the issuing process depending on:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

If an error occurred, check the error description in *Status Overview* and solve the problem before using the action *Continue Process*.

You can use this action in step *Authorize Event* for the following situations:

- The event batch process was ended manually (for more information, see User Actions for NF-e Event Batch Processing [page 475]).
- The batch process was completed, but the event was rejected with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 573 -> Rejection: Duplicated Event
  - 580 -> Rejection: NF-e must be Authorized to Request Cancelation
  - 642 -> Rejection: Failure in Fiscal Check Point Query (try in 5 min)
  - 999 -> Rejection: Unexpected Error
- The NF-e status check (to receive the event status) failed with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely

> ⓘ Note
>
> If a communication problem (for example, negative acknowledgment) occurred, you can find the corresponding PI message *GUID* in the *History*.

> → Recommendation
>
> If process step *Authorize Event* finished with an error, use the action *Request Status Check* first, before you use the action *Continue Process*.

Continue B2B Process

The action allows the user to execute the current/next process step of the B2B process depending on:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

Use this action in case of an error during sending an XML file to one of your business partners. If an error occurred, check the error description in *Status Overview* and solve the problem before using the action *Continue B2B Process*.

> **Note**
>
> If a communication problem (for example, negative acknowledgment) occurred, you can find the corresponding PI message *GUID* in the *B2B History*.

8.1.1.10 NF-e Event Processing Steps

This is an overview of all available event processing steps:

ADDTOBAT: Authorize NF-e Event [page 461]

B2BUPNFO: Update NF-e B2B Process After Cancel [page 462]

BADARENF: Customer-specific NF-e Event Step [page 462]

CANCLNFE: Cancel Related NF-e [page 463]

CANUPNFO: Update NF-e Data After Cancellation [page 464]

ECPPCREA: Extension Cancellation Create Event [page 464]

EPECREAT: Create NF-e for EPEC Event [page 465]

EPEUPNFO: Update of NF-e Data After EPEC [page 466]

EPPCREAT: Extension Request Create Event [page 466]

ERPECPNF: Notify Feeder System [page 467]

ERPEPPNF: Notify Feeder System [page 468]

ERPUPDAT: Notify Feeder System [page 469]

NFEEPCCR: Create NF-e for EPEC Event [page 469]

B2BOUTBD: Send Event to Buyer [page 470]

B2BOUTCA: Send Event to Transporter [page 471]

RESPOPAC: Update NF-e Data Operation Acknowledgment [page 472]

RESPOPCO: Update NF-e Data Operation Confirmation [page 472]

UPDRCACK: Update NF-e Data after Receiver Acknowledgment Events [page 473]

8.1.1.10.1 ADDTOBAT: Authorize NF-e Event

The step *Authorize NF-e Event* (technical name: `ADDTOBAT`) requests the authorization of the NF-e event. Therefore, a batch (different process) is created that sends events to the government web service for authorization. Every individual event is updated with the returned status code within the batch process. For more information, see NF-e Event Batch Processing [page 474]

> **Note**
>
> This step waits until the batch processing is complete and the status of the event is received from SEFAZ. You can control the batch processing in the Event Batch Monitor [page 518].

Activation/Deactivation

By default, this step is active and processed automatically. The communication is asynchronous. During this communication, the step is waiting for the response from the batch process.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

Additional Information

In case of a response message entering the system and the step is no longer the current one, a history entry is written.

8.1.1.10.2 B2BUPNFO: Update NF-e B2B Process After Cancel

This step updates the corresponding process step of the NF-e Outbound B2B cancel process. For more information, see NF-e Events: Send NF-e Event to Business Partner [page 456].

Activation/Deactivation

By default, this step is active and processed automatically and synchronously.

Customizing

Not relevant

BAdIs

Not relevant

Usage

B2B Event Processing

8.1.1.10.3 BADARENF: Customer-specific NF-e Event Step

The step *Customer-specific NF-e Event Step* (technical name: BADARENF) includes a BAdI that offers the customer the option to execute all necessary steps in the connected systems after the arrival of the events.

Activation/Deactivation

By default, this step is not active. If it is activated, the step is processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

Customer-Specific Implementation of a step (`/XNFE/BADI_FLEXIBLE_STEP_EVE`). For more information, see BAdIs for NF-e Inbound [page 116].

Usage

Event Processing

8.1.1.10.4 CANCLNFE: Cancel Related NF-e

The step *Cancel Related NF-e* (technical name: `CANCLNFE` triggers the cancellation process of the corresponding inbound NF-e.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is synchronous.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.1.1.10.5 CANUPNFO: Update NF-e Data After Cancellation

The step *Update NF-e Data After Cancellation* (technical name: `CANUPNFO` updates the corresponding process step of the NF-e Outbound process. This update is carried out via response FM of NF-e Outbound process step `NFOCANCL`

Activation/Deactivation

By default, this step is active and processed automatically. The communication is ynchronous. During this communication, the step is waiting for the response from SEFAZ.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.1.1.10.6 ECPPCREA: Extension Cancellation Create Event

The step *Extension Cancellation Create Event* (technical name: `ECPPCREA` is used to create the cancellation for the 2nd deadline extension at SEFAZ.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.1.1.10.7 EPECREAT: Create NF-e for EPEC Event

The step *Create NF-e for EPEC Event* (technical name: `EPECCREAT`) creates an Inbound NF-e based on the data of the EPEC event.

Activation/Deactivation

By default, this step is active and processed automatically and synchronously.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.1.1.10.8 EPEUPNFO: Update of NF-e Data After EPEC

The step *Update NF-e Data After EPEC* (technical name: EPEUPNFO updates the corresponding process step of the NF-e Outbound process. This update is carried out via response FM of the NF-e Outbound process step NFOAUTEP. (For more information, see EPEC Events for Outbound [page 431]).

Activation/Deactivation

By default, this step is active and processed automatically. The communication is synchronous.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.1.1.10.9 EPPCREAT: Extension Request Create Event

The step *Extension Request Create Event* (technical name: EPPCREAT is used to request the deadline extension at SEFAZ for the first time (180 day period).

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.1.1.10.10 ERPECPNF: Notify Feeder System

The step *Notify Feeder System* (technical name: `ERPECPNF` updates the connected feeder system with the event data. The event itself will be created in the connected feeder system using the data passed in this step.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

You can implement the BAdI *RFC Call of External Systems* (`/XNFE/BADI_RFC_EXTERN`). For more information, see BAdIs for NF-e Outbound [page 94].

Usage

Event Processing

8.1.1.10.11 ERPEPPNF: Notify Feeder System

The step *Notify Feeder System* (technical name: `ERPEPPNF` updates the connected feeder system with the event data. The event itself will be created in the connected feeder system using the data passed in this step.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

You can implement the BAdI *RFC Call of External Systems* (`/XNFE/BADI_RFC_EXTERN`). For more information, see BAdIs for NF-e Outbound [page 94].

Usage

Event Processing

8.1.1.10.12 ERPUPDAT: Notify Feeder System

The step *Notify Feeder System* (technical name: `ERPUPDAT`) updates the connected feeder system with the event status.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Not relevant

BAdIs

You can implement the BAdI *RFC Call of External Systems* (`/XNFE/BADI_RFC_EXTERN`). For more information, see BAdIs for NF-e Outbound [page 94].

Usage

Event Processing

8.1.1.10.13 NFEEPCCR: Create NF-e for EPEC Event

The step *Create NF-e for EPEC Event* (technical name: `NFEEPCCR` creates an Inbound NF-e based on the data of the EPEC event. The NF-e that is created is assigned to the process type `PREPEPEC` (Preprocess for NF-e with EPEC event). For more information, see NFEEPCCR: Create NF-e for EPEC Event [page 469]

Activation/Deactivation

By default, this step is active and processed automatically and synchronously.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.1.1.10.14 B2BOUTBD: Send Event to Buyer

This step sends the event XML to the business partner which is informed in:

- the NF-e XML as receiver (`XML tag <dest>`) in case you issued the NF-e.

,or

- the NF-e XML as issuer (`XML tag <emit>`) in case you received the NF-e as buyer.

> **Note**
>
> If the issuer CNPJ is empty, no event is sent.

Activation/Deactivation

By default, this step is active and processed automatically and asynchronously.

Customizing

Activate B2B Scenarios for Business Partners

Activate B2B Scenarios for Natural Persons

Activate B2B Scenarios for Foreign Partners

For more information, see Process Settings and Customizing for NF-e Outbound [page 91].

BAdIs

BAdI for Customer Enhancement to Determine E-Mail for B2B Messages (`/XNFE/EMAIL_B2B`)

For more information, see BAdIs for NF-e Outbound [page 94].

Usage

NF-e B2B Event Processing

8.1.1.10.15 B2BOUTCA: Send Event to Transporter

This step sends the event XML to the business partner which is informed in the XML as carrier (`XML tag <transp>`).

Activation/Deactivation

By default, this step is active and processed automatically and asynchronously.

Customizing

Activate B2B Scenarios for Business Partners

Activate B2B Scenarios for Natural Persons

For more information, see Process Settings and Customizing for NF-e Outbound [page 91].

BAdIs

BAdI for Customer Enhancement to Determine E-Mail for B2B Messages (/XNFE/EMAIL_B2B)

For more information, see BAdIs for NF-e Outbound [page 94].

Usage

NF-e B2B Event Processing

Additional Information

The status of the step test is set by the program Collect and process Acknowledgments from PI [page 75].

8.1.1.10.16 RESPOPAC: Update NF-e Data Operation Acknowledgment

The step *Update NF-e Data Operation Acknowledgment* (technical name: RESP0PAC updates the corresponding process step of the NF-e Inbound process.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is synchronous.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.1.1.10.17 RESPOPCO: Update NF-e Data Operation Confirmation

The step *Update NF-e Data Operation Confirmation* (technical name: RESP0PC0 updates the corresponding process step of the NF-e Inbound process. For more information, see Operation Confirmation Events for Outbound [page 436].

Activation/Deactivation

By default, this step is active and processed automatically. The communication is synchronous.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.1.1.10.18 UPDRCACK: Update NF-e Data after Receiver Acknowledgment Events

The step *Update NF-e Data after Receiver Acknowledgment Events* (technical name: UPDRCACK updates the Outbound NF-e with information about Receiver Acknowledgment Events.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is synchronous.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.1.2 NF-e Event Batch Processing

Use

You can display and control the status of your NF-e event batches in the Event Batch Monitor [page 518].

Process

> **Note**
>
> A report is available for the processing of NF-e event batches that must be scheduled as a background job. For details please refer to: Event Batch Job Planning [page 122].

The process *Send NF-e Event Batch* (technical name: EVEBATSD) consists of the following steps:

Step	Technical Name	Description
1. *Create NF-e Event Batch*	EVBATCRE	During batch creation, the NF-e events are separated according to: • System Environment (Test or Production) • Issuing Type • Code of Brazilian State (CUF) • Type of Event • CNPJ of Issuer (Only the first 8 digits) **Note** An event batch can contain up to 20 events. For more information regarding the step, see EVBATCRE: Create NF-e Event Batch [page 476].

2. *Send NF-e Event Batch*	EVBATSND	The batch is send to authorities asking for authorization of the included NF-e events. It returns the status of the included events. The received status for every event included in the batch is transferred to the NF-e events process. For more information regarding the step, see EVBATSND: Send NF-e Event Batch [page 477]. **Note** If the batch sending is not successful due to a technical error, the batch process can be terminated in the *Event Batch Monitor*. In the *Event Monitor*, you can manually perform an NF-e status check or send the events in a new batch again. For more information, see User Actions for NF-e Event Batch Processing [page 475].

After the successful execution of this step, the process of sending an NF-e Event Batch is complete.

User Actions for NF-e Event Batch Processing [page 475]

8.1.2.1 User Actions for NF-e Event Batch Processing

Finish Batch Process

The action allows the user to end the event batch process and continue the processing in the *Event Monitor* (For more information, see User Actions for NF-e Event Processing [page 458]. This action is enabled if the status of the last batch process step displays an error or is waiting:

Status of Step: Error

The following status codes are possible in case of an error status:

- The step *Send Event NF-e Batch* failed, because the batch was rejected by SEFAZ with one of the following status codes:
  - 106 -> Batch not found
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 573 -> Rejection: Duplicated Event
  - 642 -> Improper Consumption (wait at least 3 minutes before trying again)
  - 999 -> Rejection: Unexpected Error

Status of Step: Waiting

If a PI-related problem occurs, it can happen that the last batch process step (*Send NF-e Event Batch*) remains in status *Waiting*.

→ Recommendation

To solve these errors, we strongly recommend to contact your PI administrator. Only use the action *Finish Batch Process* as final option.

Restart

The action allows the user to execute the current/next process step depending on the following situations:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

If an error occurred, check the error description in *Status Overview* and *History*, and solve the problem before using the action *Restart*.

> **Note**
>
> If a communication problem (for example, negative acknowledgment) occurred, you can find the corresponding PI message *GUID* in the *History*.

NF-e Event Batch Processing Steps [page 476]

8.1.2.1.1 NF-e Event Batch Processing Steps

The following steps are available:

EVBATCRE: Create NF-e Event Batch [page 476]

EVBATSND: Send NF-e Event Batch [page 477]

8.1.2.1.1.1 EVBATCRE: Create NF-e Event Batch

The step *Create NF-e Event Batch* (technical name: EVBATCRE) creates an NF-e Event batch and assigns several events to this batch.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Batch Number Range

For additional information, see Configuration of Events [page 119].

BAdIs

No BAdI available.

Usage

NF-e Event Batch Processing

Additional Information

No step implementation, called by program `/XNFE/EVENT_BATCH_SEND`. Batch parameter fixed.

8.1.2.1.1.2 EVBATSND: Send NF-e Event Batch

The step *Send NF-e Event Batch* (technical name: `EVBATSND`) sends the batch to the authority for authorization.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system.

Customizing

Batch Number Range for Batches

For additional information, see Technical Settings for Events [page 120].

BAdIs

No BAdI available.

Usage

NF-e Event Batch Processing

Additional Information

The events will be updated in this step in case of a rejection of the batch. In this case the status code and the reason of the batch are propagated to event level.

8.2 Events for CT-e

SEFAZ has introduced the option to add a document to a CT-e to provide information. This additional document is an *Event* for a CT-e and can carry additional information concerning the CT-e. Events can be issued by SEFAZ, the *Tomador*, or the sender. However, all events have to be authorized by SEFAZ. It is possible to check the status for every CT-e inclusive all events on the SEFAZ website.

More detailed processing information is available for:

- CT-e Event Processing [page 479]
  - User Actions for CT-e Event Processing [page 488]

The following events are supported:

- CT-e Events: CC-e (Electronic Correction Letter) [page 479]
- CT-e Events: Cancellation Event [page 482]
- CT-e Events: Service Delivery Disagreement Event [page 484]
- CT-e Events: Send CT-e Event to Business Partner [page 486]
- CT-e Events: Receipt of Other Event Types from SEFAZ [page 488]

Events that are issued by the NFE system are displayed in the *Event Outbound Monitor* (see Event Outbound Monitor [page 514]).

Events that are received by the NFE system are displayed in the *Event Inbound Monitor* (see Event Inbound Monitor [page 520]).

> **Note**
>
> If you display a CT-e, the corresponding events are also displayed:
>
> - For outbound CT-es in the CT-e Monitor (see CT-e Monitor (Outbound) [page 200])
> - For inbound CT-es in the Fiscal Workplace (see CT-e Fiscal Workplace [page 413])

> **Note**
>
> **Digital Signature Validation for Inbound Events**
>
> - You can configure signature or reference validation as in NF-e and CT-e scenarios. For more information, see Configuration for Digital Signature Validation [page 110].

- For events: If the corresponding NF-e is not found in the data base, signature validation is used as default.

CT-e Event Processing [page 479]

8.2.1 CT-e Event Processing

Event-specific Processing

The event-specific processing (outbound & inbound) can be found in the corresponding event documentation for the following supported events:

- CT-e Events: CC-e (Electronic Correction Letter) [page 426]
- CT-e Events: Cancellation Event [page 428]
- CT-e Events: Service Delivery Disagreement Event [page 484]

Non-Specific Event Processing

The process *Send CT-e Event to Business Partner* is the same for all events. A detailed description can be found in the corresponding event documentation:

- CT-e Events: Send CT-e Event to Business Partner [page 486]
- CT-e Event Processing [page 479]

  CT-e Events: CC-e (Electronic Correction Letter) [page 479]

  CT-e Events: Cancellation Event [page 482]

  CT-e Events: Service Delivery Disagreement Event [page 484]

  CT-e Events: Send CT-e Event to Business Partner [page 486]

  CT-e Events: Receipt of Other Event Types from SEFAZ [page 488]

  User Actions for CT-e Event Processing [page 488]

  CT-e Event Processing Steps [page 490]

8.2.1.1 CT-e Events: CC-e (Electronic Correction Letter)

Use

CC-e: Carta de Correção Eletrônica (electronic correction letter)

This electronic correction letter can only be issued by the CT-e issuer to correct data in the CT-e. A correction letter can correct a previous correction letter. Only the corrections from the last authorized CC-e are valid. The

maximum number of correction letters is 20. A new CC-e cannot be issued as long as there is still a pending response from the tax authority for another CC-e.

The CC-e contains the fields of the CT-e that are to be corrected.

The following processes are available:

CC-e Events for CT-e Outbound [page 480]

CC-e Events for CT-e Inbound [page 481]

8.2.1.1.1 CC-e Events for CT-e Outbound

Outbound CC-e Process (technical name `ISUECCCE`)

Within ERP (see SAP Note 1575364), there is a CC-e editor in the *NF-e/CT-e Monitor* to edit and issue a CC-e with reference to an existing and authorized NF-e. The connected backend system calls the NFE application via a synchronous RFC. The outbound process consists of the following steps:

Step	Technical Name	Description
1. **Create the event**	`CCECREAT`	The event is received, the content is validated and mapped to the XML structure. For more information, see CCECREAT: Create Event [page 509].
2. **Sign event**	`EVENTSIN`	The event is signed with the certificate of the event issuer CNPJ. For more information, see EVENTSIN: Sign Event [page 512].
3. **Authorize event**	`EVCTAUTH`	This step requests the authorization of a CT-e event. For more information, see EVCTAUTH: Authorize Event [page 497].
4. **Trigger B2B Process**	`EVTRGB2B`	The B2B process is created as a separate process, for more information see EVTRGB2B: Trigger B2B Process [page 512] and the description of the **Send Event to Business Partner** process in CT-e Event Processing [page 479] . **Note** This step is only relevant if the event was authorized.

Step	Technical Name	Description
5. **Update ERP system**	ERPUPDCT	The status code is forwarded to the backend system. For more information, see ERPUPDCT: Notify Feeder System [page 495]. .

8.2.1.1.2 CC-e Events for CT-e Inbound

Inbound CC-e Processes

Since CC-e are issued by the CT-e issuer, the CC-e inbound function is relevant for the CT-e *Tomador*. There are two different ways of receiving CC-es:

- **Correction Letter CC-e Inbound via B2B** (Technical name `IBB2BCCE`)

Step	Technical Name	Description
1. **Create or update the event**	EVCREUPD	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Validation of the signature**	SIGNVALI	Check that the signed event matches the certificate of the corresponding CNPJ. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. **Check authorization of CT-e Event**	AUTHCTEV	Check the authorization status of the event using the CT-e status check. For more information, see AUTHCTEV: Check Authorization for CT-e Event [page 491].

- **Correction Letter CC-e Inbound via SEFAZ Status Check** (technical name `IBSEFCCE`)

Step	Technical Name	Description
1. **Create or update the event**	EVCREUPD	Receive the event via CT-e status check and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Check for end of process**	EVENDPRC	Confirm that all information from the event was used during the processing and that necessary corrections were carried out. For more information, see EVENDPRC: Check for End of Process Step [page 511].

8.2.1.2 CT-e Events: Cancellation Event

Use

Cancellation Event

The event CT-e cancellation replaces the previous CT-e cancellation process. The cancellation event can only be issued by the CT-e issuer to cancel the CT-e. The cancellation event must contain the cancellation reason. The cancellation reason is a text that must contain at least 15 characters and is limited to 255 characters.T

The following processes are available:

CT-e Outbound Cancellation Event [page 482]

CT-e Inbound Cancellation Process [page 483]

8.2.1.2.1 CT-e Outbound Cancellation Event

Outbound Cancel Processes (technical name `ISSUCCAN`)

In ERP, the cancellation event can be issued in the NF-e/CT-e monitor using the button *Request Cancellation*. Once the cancellation event is authorized, the CT-e is cancelled. In case of a rejection of the cancellation event, the CT-e remains authorized. The ERP system calls the NFE application via a synchronous RFC call. This triggers the event outbound process that has the following steps:

Step	Technical Name	Description
1. **Create the event**	`CANCREAT`	The event is received, the content is validated and mapped to the XML structure. For more information, see CANCREAT: Create Cancellation Event [page 508].
2. **Sign the event**	`EVENTSIN`	The event is signed with the certificate of the corresponding issuer CNPJ. For more information, see EVENTSIN: Sign Event [page 512].
3. **Authorize Event**	`EVCTAUTH`	This step requests the authorization of a CT-e event. For more information, see EVCTAUTH: Authorize Event [page 497].
4. **Update CT-e data after cancellation**	`CANUPCTO`	Update of the CT-e data in the CT-e cancellation process. For more information, see CANUPCTO: Update CT-e Data After Cancellation [page 495].

5. **Trigger B2B Process**	EVTRGB2B	The B2B process is created as a separate process, for more information see EVTRGB2B: Trigger B2B Process [page 512] and the description of the *Send Event to Business Partner* process in CT-e Event Processing [page 479]. **Note** This step is only relevant if the event was authorized.
6. **Update ERP**	ERPUPDCT	The status code is forwarded to the backend system. For more information, see ERPUPDCT: Notify Feeder System [page 495].

8.2.1.2.2 CT-e Inbound Cancellation Process

Inbound Cancel Processes

Since cancellation events are issued by the CT-e issuer, the cancellation inbound function is relevant for the CT-e Tomador. There are two different ways of receiving cancellation events:

- **Cancellation Event Inbound via B2B** (Technical name: IB2BCCAN)
  The inbound cancel process **Cancellation Event Inbound via B2B** has the following process steps:

Step	Technical Name	Description
1. **Create or update the event**	EVCREUPD	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Validation of the signature**	SIGNVALI	Check that the signed event matches the certificate of the corresponding CNPJ. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. **Check authorization of the event**	AUTHCTEV	Check the authorization status of the event using the CT-e status check. For more information, see AUTHCTEV: Check Authorization for CT-e Event [page 491].
4. **Cancel Related CT-e**	CANCLCTE	The inbound CT-e is cancelled; the cancellation process for the CT-e is determined and the corresponding process steps are executed. For more information, see CANCLCTE: Cancel Related CT-e [page 494].

- **Cancellation Event Inbound via SEFAZ Status Check** (Technical name: ISEFCCAN)

The inbound cancel process **Cancellation Event Inbound via SEFAZ Status Check** has the following process steps:

Step	Technical Name	Description
1. **Create or update the event**	EVCREUPD	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Cancel Related CT-e**	CANCLCTE	The inbound CT-e is cancelled; the cancellation process for the CT-e is determined and the corresponding process steps are executed. For more information, see CANCLCTE: Cancel Related CT-e [page 494].

8.2.1.3 CT-e Events: Service Delivery Disagreement Event

Use

Service Delivery Disagreement Event

If a CT-e is issued and the CT-e Service Taker does not agree with the issued CT-e, the CT-e service taker can issue the event `Service Delivery Disagreement`. This event notifies SEFAZ and the CT-e issuer that the CT-e was not accepted by the service taker and a new CT-e should be issued with corrected values/data.

The following processes are available:

CT-e Outbound Service Delivery Disagreement Event [page 484]

CT-e Inbound Service Delivery Disagreement Event [page 485]

8.2.1.3.1 CT-e Outbound Service Delivery Disagreement Event

The `Service Delivery Disagreement` event is not triggered by the ERP system (in contrast to the CC-e event). The event can be created in the NFE system of the CT-e tomador if a CT-e was rejected in the CT-e Fiscal Workplace [page 413], section `Additional Functions`. The reason for the disagreement is derived from the selected reason when rejecting the CT-e.

The **CT-e Outbound Service Delivery Disagreement Event** process (technical name `ISSUCPSD`) consists of the following steps:

Step	Technical Name	Description
1. **Create the event**	`PSDCREAT`	The event is received, the content is validated and mapped to the XML structure. For more information, see PSDCREAT: Create Service Disagreement [page 497].
2. **Sign the event**	`EVENTSIN`	The event is signed with the certificate of the corresponding issuer CNPJ. For more information, see EVENTSIN: Sign Event [page 512].
3. **Authorize Event**	`EVCTAUTH`	This step requests the authorization of a CT-e event. For more information, see EVCTAUTH: Authorize Event [page 497].
4. **Trigger B2B Process**	`EVTRGB2B`	The B2B process is created as a separate process, for more information see EVTRGB2B: Trigger B2B Process [page 512] and the description of the *Send Event to Business Partner* process in CT-e Event Processing [page 479]. **Note** This step is only relevant if the event was authorized.

8.2.1.3.2 CT-e Inbound Service Delivery Disagreement Event

Inbound Service Delivery Disagreement Processes

Since Service Disagreement events are issued by the CT-e Tomador, the Service Delivery Disagreement inbound function is relevant for the CT-e issuer. There are two different ways of receiving service disagreement events:

- **Receive Service Delivery Disagreement (PSD) Event via B2B** (Technical name: `IB2BCPSD`)
  The inbound process **Receive Service Delivery Disagreement Event via B2B** has the following process steps:

Step	Technical Name	Description
1. **Create or update the event**	`EVCREUPD`	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].

2. **Validation of the signature**	SIGNVALI	Check that the signed event matches the certificate of the corresponding CNPJ. For more information, see SIGNVALI: Validate Signature of Event [page 513].
3. **Check authorization of the event**	AUTHCTEV	Check the authorization status of the event using the CT-e status check. For more information, see AUTHCTEV: Check Authorization for CT-e Event [page 491].

- **Receive Service Delivery Disagreement (PSD) Event Inbound via CT-e Status Check** (Technical name: ISEFCPSD)
  The inbound cancel process **Receive Service Delivery Disagreement (PSD) Event Inbound via CT-e Status Check** has the following process steps:

Step	Technical Name	Description
1. **Create or update the event**	EVCREUPD	Receive the event via B2B and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510].
2. **Check for end of process**	EVENDPRC	Confirm that all information from the event was used during the processing and that necessary corrections were carried out. For more information, see EVENDPRC: Check for End of Process Step [page 511].

8.2.1.4 CT-e Events: Send CT-e Event to Business Partner

Use

This section describes the processing of sending a CT-e event to a business partner.

Process

Send CT-e Event to Business Partner (technical name: EVB2BCTE)

The process *Send CT-e Event to Business Partner* (technical name: EVB2BCTE) consists of the following steps:

Step	Technical Name	Description
1. **Create Event B2B Process**	EVB2BCRE	The report /XNFE/NFE_B2B_SEND (must be scheduled as a background job) collects all events - independent of document relation - ready for sending to the B2B partner and processes them. For more information, see EVB2BCTE and the description of the report in Batch Job Planning for CT-e Outbound [page 99] .
2. Forward Event to B2B Tomador	B2BOUTTO	This process step is only relevant if the customizing setting for the receiver CNPJ is activated. For more information, see B2BOUTTO: Send Event to CT-e Tomador [page 492] and customizing activity *Activate B2B Scenarios for Business Partners*) NFE will forward the event to the *Tomador* via B2B communication (only for authorized events).

Send CT-e Cancellation Event to Business Partner (technical name: EVB2BCTC)

The process *Send CT-e Cancellation Event to Business Partner* (technical name: EVB2BCTC) for cancellation consists of the following steps:

Step	Technical Name	Description
1. **Create Event B2B Process**	EVB2BCRE	The report /XNFE/NFE_B2B_SEND (must be scheduled as a background job) collects all events - independent of document relation - ready for sending to the B2B partner and processes them. For more information, see EVB2BCRE: Create Event B2B Process [page 510] and the description of the report in Batch Job Planning for NF-e Outbound [page 93].
2. Forward Event to B2B Tomador	B2BOUTTO	This process step is only relevant if the customizing setting for the receiver CNPJ is activated. For more information, see B2BOUTTO: Send Event to CT-e Tomador [page 492] and customizing activity *Activate B2B Scenarios for Business Partners*) NFE will forward the event to the *Tomador* via B2B communication (only for authorized events).
3. **Update CT-e B2B Process After Cancel**	B2BUPCTO	Update of the CT-e data in the CT-e cancellation B2B process. For more information, see CT-e Events: CC-e (Electronic Correction Letter) [page 479] and the cancellation B2B process in CT-e Processing (Outbound) [page 175]).

8.2.1.5 CT-e Events: Receipt of Other Event Types from SEFAZ

Use

SAP NFE supports various CT-e Event processes as own processes. For an overview of all available CT-e Event processes see Events for CT-e [page 478].

Other events that are received by the government (for example, via CT-e Distribution Service) do not have an own process, but can be assigned to this process, therefore enabling the customer to react in a flexible way to the specific needs of the different events.

> **Note**
>
> In order to enable this process assignment, you need to use the Customizing option *Maintain Control Parameters for Process-Independent Actions*.

The process consists of the following steps:

Receipt of other CT-e Event Types from SEFAZ (ISEFCFLX)

Step	Technical Name	Description
1. **Create or update the event**	EVCREUPD	Receive the event from the government and create the event on the database. For more information, see EVCREUPD: Create or Update Event [page 510] .
2. **Customer-specific CT-e Event step**	BADARECT	This step includes a BAdI that offers the customer the option to execute all necessary steps in the connected systems after the arrival of the events. For more information, see BADARECT: Customer-specific CT-e Event Step [page 493].

8.2.1.6 User Actions for CT-e Event Processing

Request Status Check

This action allows the user to trigger an asynchronous NF-e status check to receive the event status. The response returns the current NF-e status from SEFAZ including all authorized events issued for this NF-e. This

action is enabled if the status of the process step *Authorize Event* displays an *Error*. This can be caused by the following situations:

- The batch process was completed, but the event was rejected with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 631 -> Rejection: Duplicated Event
  - 999 -> Rejection: Unexpected Error
- The CT-e status check (to receive the event status) failed with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely

> → Recommendation
>
> Execute the *CT-e Status Check* (action *Request Status Check*) for all statuses (before using *Continue Process* to authorize the event at SEFAZ) and especially for status 573.

Repeat Process Step

This action allows the user to repeat the process step *Notify Feeder System* although this step was already successfully executed during the regular processing. This action is enabled if the status of the process step *Notify Feeder System* displays *OK*.

Use this action if the transfer of the event status to the connected feeder system failed, but did not return an error. Therefore, the status of the process step *Notify Feeder System* stays *OK*.

Continue Process

The action allows the user to execute the current/next process step of the issuing process depending on:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

If an error occurred, check the error description in *Status Overview* and solve the problem before using the action *Continue Process*.

You can use this action in step *Authorize Event* for the following situations:

- The authorization request was completed, but the event was rejected with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 631 -> Rejection: Duplicated Event

    - 999 -> Rejection: Unexpected Error
- The CT-e status check (to receive the event status) failed with one of the following SEFAZ status codes:
    - 108 -> Service Interrupted Momentarily
    - 109 -> Service Interrupted Indefinitely

> ⓘ Note
>
> If a communication problem (for example, negative acknowledgment) occurred, you can find the corresponding PI message *GUID* in the *History*.

> → Recommendation
>
> If process step *Authorize Event* finished with an error, use the action *Request Status Check* first, before you use the action *Continue Process*.

Continue B2B Process

The action allows the user to execute the current/next process step of the B2B process depending on:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

Use this action in case of an error during sending an XML file to one of your business partners. If an error occurred, check the error description in *Status Overview* and solve the problem before using the action *Continue B2B Process*.

> ⓘ Note
>
> If a communication problem (for example, negative acknowledgment) occurred, you can find the corresponding PI message *GUID* in the *B2B History*.

8.2.1.7 CT-e Event Processing Steps

This is an overview of all available event processing steps:

AUTHCTEV: Check Authorization for CT-e Event [page 491]

B2BOUTTO: Send Event to CT-e Tomador [page 492]

B2BUPCTO: Update CT-e B2B Process After Cancel [page 492]

BADARECT: Customer-specific CT-e Event Step [page 493]

CANCLCTE: Cancel Related CT-e [page 494]

CANUPCTO: Update CT-e Data After Cancellation [page 495]

ERPUPDCT: Notify Feeder System [page 495]

EVB2BCRE: Create Event B2B Process [page 496]

EVCTAUTH: Authorize Event [page 497]

PSDCREAT: Create Service Disagreement [page 497]

8.2.1.7.1 AUTHCTEV: Check Authorization for CT-e Event

The step *Check Authorization for CT-e Event* (technical name: `AUTHCTEV` checks that a CT-e event is still authorized at the SEFAZ system.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is asynchronous.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

Additional Information

If the event process is no longer waiting for a response, a history entry is written.

8.2.1.7.2 B2BOUTTO: Send Event to CT-e Tomador

The step *Send Event to CT-e Tomador* (technical name: `B2BOUTTO` sends the event XML to the business partner which is informed in the XML as tomador.

Activation/Deactivation

By default, this step is active and processed automatically and asynchronously.

Customizing

Activate B2B Scenarios for Business Partners

Activate B2B Scenarios for Natural Persons

For more information, see Process Settings and Customizing for CT-e Outbound [page 98].

BAdIs

BAdI for Customer Enhancement to Determine E-Mail for B2B Messages (`/XNFE/EMAIL_B2B`). For more information, see BAdIs for CT-e Outbound [page 100].

Usage

CT-e Event B2B Processing

8.2.1.7.3 B2BUPCTO: Update CT-e B2B Process After Cancel

The step *Update CT-e B2B Process After Cancel* (technical name: `B2BUPCTO` updates the corresponding process step of the CT-e Outbound B2B cancel process.

Activation/Deactivation

By default, this step is active and processed automatically and synchronously.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

Event Processing

Additional Information

Update via response FM of CT-e Outbound process step `CTOB2BCL`

8.2.1.7.4 BADARECT: Customer-specific CT-e Event Step

The step *Customer-specific CT-e Event Step* (technical name: BADARECT) includes a BAdI that offers the customer the option to execute all necessary steps in the connected systems after the arrival of the events.

Activation/Deactivation

By default, this step is not active. If it is activated, the step is processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

Customer-Specific Implementation of a step (`/XNFE/BADI_FLEXIBLE_STEP_EV2`). For more information, see BAdIs for CT-e Inbound [page 118].

Usage

Event Processing

8.2.1.7.5 CANCLCTE: Cancel Related CT-e

The step *Cancel Related CT-e* (technical name: `CANCLCTE` triggers the cancellation process of the corresponding inbound CT-e.

Activation/Deactivation

By default, this step is active and processed automatically and synchronously.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.2.1.7.6 CANUPCTO: Update CT-e Data After Cancellation

The step *Update CT-e Data After Cancellation* (technical name: `CANUPCTO`) updates the corresponding process step of the CT-e Outbound process via response FM of the CT-e Outbound process step `CTOCANCL`. For more information, see CT-e Outbound Cancellation Event [page 482].

Activation/Deactivation

By default, this step is active and processed automatically. The communication is synchronous.

Customizing

Not relevant

BAdIs

Not relevant

Usage

Event Processing

8.2.1.7.7 ERPUPDCT: Notify Feeder System

The step *Notify Feeder System* (technical name: `ERPUPDCT` updates the connected feeder system with the event status.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is synchronous.

Customizing

Not relevant

BAdIs

CT-e: RFC Call of External Systems (`/XNFE/BADI_CTE_RFC_EXTERN`)

Usage

Event Processing

Additional Information

Only first line of bapiret from feeder system is stored.

8.2.1.7.8 EVB2BCRE: Create Event B2B Process

The step *Create Event B2B Process* (technical name: `EVB2BCRE` indicates that the B2B process was created.

Activation/Deactivation

By default, this step is active and processed automatically and synchronously.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

Event Processing

8.2.1.7.9 EVCTAUTH: Authorize Event

The step *Authorize NF-e Event* (technical name: `EVCTAUTH` requests the authorization of a CT-e event.

> **Note**
>
> For the processing of the event authorization, the report `/XNFE/CTE_EVENT_SEND` must be scheduled as a background job. For details please refer to Event Batch Job Planning [page 122].

Activation/Deactivation

By default, this step is active and processed automatically. The communication is asynchronous.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.2.1.7.10 PSDCREAT: Create Service Disagreement

The step *Create Service Disagreement* (technical name: `PSDCREAT` triggers the creation of a service disagreement event.

Activation/Deactivation

By default, this step is active and processed automatically and synchronously.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.3 Events for MDF-e

Events for MDF-es can be only issued from the feeder system. However, all events have to be authorized by SEFAZ. It is possible to check the status for every MDF-e inclusive all events on the SEFAZ website.

More detailed processing information is available for:

- MDF-e Event Processing [page 499]
  - User Actions for MDF-e Event Processing [page 502]

The following events are supported:

- MDF-e Events: Outbound Cancellation Event [page 499]
- MDF-e Events: Closing Event [page 500]
- MDF-e Events: Addition of Driver Event [page 501]

Events that are issued by the NFE system are displayed in the *Event Outbound Monitor* (see Event Outbound Monitor [page 514]). This monitor can be used to detect and solve possible issues in the event outbound processing.

> **Note**
>
> If you display an MDF-e, the corresponding events are also displayed. For outbound MDF-es in the MDF-e Monitor (see MDF-e Monitor (Outbound) [page 227])

MDF-e Event Processing [page 499]

8.3.1 MDF-e Event Processing

Event-specific Processing

The event-specific processing can be found in the corresponding event documentation for the following supported events:

MDF-e Events: Outbound Cancellation Event [page 499]

MDF-e Events: Closing Event [page 500]

MDF-e Events: Addition of Driver Event [page 501]

User Actions for MDF-e Event Processing [page 502]

MDF-e Event Processing Steps [page 503]

8.3.1.1 MDF-e Events: Outbound Cancellation Event

Use

Cancellation Event

The event MDF-e cancellation can only be issued by the MDF-e issuer to cancel the MDF-e. The MDF-e cancellation event must contain the cancellation reason. The cancellation reason is a text that must contain at least 15 characters and is limited to 255 characters.

The following process is available:

Issue of MDF-e Cancellation (technical name `ISSMCANC`)

The *MDF-e Cancellation Event* is issued by the feeder system. Once the cancellation event is authorized, the MDF-e is cancelled. In case of a rejection of the cancellation event, the MDF-e remains authorized. The feeder system calls the NFE application via a synchronous RFC call. This triggers the event outbound process that has the following steps:

Step	Technical Name	Description
1. **Create Cancellation Event**	`CANCREAT`	The event is received, the content is validated and mapped to the XML structure. For more information, see CANCREAT: Create Cancellation Event [page 508].
2. **Sign the event**	`EVENTSIN`	The event is signed with the certificate of the corresponding issuer CNPJ. For more information, see EVENTSIN: Sign Event [page 512].

3. **Authorize event**	EVMFAUTH	The event is waiting to be picked for the authorization request. Then, the event is sent to the authority system synchronously. The status code is updated instantly. For more information, see EVMFAUTH: Authorize MDF-e Event [page 506].
4. **Update Feeder System**	ERPUPDMF	The status code is forwarded to the backend system. For more information, see ERPUPDMF: Notify Feeder System [page 505].
5. **Update MDF-e Data after Cancellation**	CANUPMFO	The MDF-e data is updated. For more details, see CANUPMFO: Update MDF-e Data After Cancellation [page 503] and *Issue of MDF-e Cancellation* in MDF-e Processing (Outbound) [page 211].

8.3.1.2 MDF-e Events: Closing Event

Use

Closing Event

The event *MDF-e Close* can only be issued by the MDF-e issuer to close the MDF-e.

Process

Issue of MDF-e Close (technical name ISSMCLOS)

The *MDF-e Closing Event* is issued by the feeder system. Once the close event is authorized, the MDF-e is closed. In case of a rejection of the close event, the MDF-e remains authorized. The feeder system calls the NFE application via a synchronous RFC call. This triggers the event outbound process that has the following steps:

Step	Technical Name	Description
1. **Create Cancellation Event**	CANCREAT	The event is received, the content is validated and mapped to the XML structure. For more information, see CANCREAT: Create Cancellation Event [page 508].
2. **Sign the event**	EVENTSIN	The event is signed with the certificate of the corresponding issuer CNPJ. For more information, see EVENTSIN: Sign Event [page 512].
3. **Authorize MDF-e event**	EVMFAUTH	The event is waiting to be picked for the authorization request. Then, the event is sent to the authority system synchronously. The status code is updated instantly. For more information, see EVMFAUTH: Authorize MDF-e Event [page 506].

4. **Update Feeder System**	`ERPUPDMF`	The status code is forwarded to the backend system. For more information, see ERPUPDMF: Notify Feeder System [page 505].
5. **Update MDF-e Data after Close**	`CLOUPMFO`	Update of the MDF-e data in the MDF-e. If the MDF-e close event is authorized, the MDF-e issuing process is completed. For more information, see CLOUPMFO: Update MDF-e Data After Close [page 504].

8.3.1.3 MDF-e Events: Addition of Driver Event

Use

Addition of Driver Event

The *MDF-e Addition of Driver Event* can only be issued by the MDF-e issuer to add a driver to the MDF-e. This is only possible for the mode `Road` and as long as the MDF-e is not cancelled or closed.

Process

Issue of MDF-e Addition of Driver (technical name `ISSMDRIV`)

The *MDF-e Addition of Driver Event* is issued by the feeder system. The feeder system calls the NFE application via a synchronous RFC call. This triggers the event outbound process that has the following steps:

Step	Technical Name	Description
1. **1.Create the Event**	`CCECREAT`	The event is received, the content is validated and mapped to the XML structure. For more information, see CCECREAT: Create Event [page 509].
2. **Sign the event**	`EVENTSIN`	The event is signed with the certificate of the corresponding issuer CNPJ. For more information, see EVENTSIN: Sign Event [page 512] .
3. **Authorize MDF-e event**	`EVMFAUTH`	The event is waiting to be picked for the authorization request. Then, the event is sent to the authority system synchronously. The status code is updated instantly. For more information, see EVMFAUTH: Authorize MDF-e Event [page 506].
4. **Update Feeder System**	`ERPUPDMF`	The status code is forwarded to the backend system. For more information, see ERPUPDMF: Notify Feeder System [page 505] .

8.3.1.4 User Actions for MDF-e Event Processing

Request Status Check

This action allows the user to trigger an asynchronous MDF-e status check to receive the event status. The response returns the current MDF-e status from SEFAZ including all authorized events issued for this MDF-e. This action is enabled if the status of the process step *Authorize Event* displays an *Error*. This can be caused by the following situations:

- The batch process was completed, but the event was rejected with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 631 -> Rejection: Duplicated Event
  - 999 -> Rejection: Unexpected Error
- The MDF-e status check (to receive the event status) failed with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely

> → Recommendation
>
> Execute the *MDF-e Status Check* (action *Request Status Check*) for all statuses.

Repeat Process Step

This action allows the user to repeat the process step *Notify Feeder System* although this step was already successfully executed during the regular processing. This action is enabled if the status of the process step *Notify Feeder System* displays *OK*.

Use this action if the transfer of the event status to the connected feeder system failed, but did not return an error. Therefore, the status of the process step *Notify Feeder System* stays *OK*.

Continue Process

The action allows the user to execute the current/next process step of the issuing process depending on:

- The status of the last process step displays *OK*; Then the process is restarted and continues with the next step.
- The status of the last process step displays an *Error*; Then the process is restarted and the last erroneous step is repeated.

If an error occurred, check the error description in *Status Overview* and solve the problem before using the action *Continue Process*.

You can use this action in step *Authorize Event* for the following situations:

- The batch process was completed, but the event was rejected with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely
  - 631 -> Rejection: Duplicated Event
  - 999 -> Rejection: Unexpected Error
- The MDF-e status check (to receive the event status) failed with one of the following SEFAZ status codes:
  - 108 -> Service Interrupted Momentarily
  - 109 -> Service Interrupted Indefinitely

> ⓘ Note
>
> If a communication problem (for example, negative acknowledgment) occurred, you can find the corresponding PI message *GUID* in the *History*.

> → Recommendation
>
> If process step *Authorize Event* finished with an error, use the action *Request Status Check* first, before you use the action *Continue Process*.

8.3.1.5 MDF-e Event Processing Steps

This is an overview of all available MDF-e event processing steps:

CANUPMFO: Update MDF-e Data After Cancellation [page 503]

CLOUPMFO: Update MDF-e Data After Close [page 504]

ERPUPDMF: Notify Feeder System [page 505]

EVMFAUTH: Authorize MDF-e Event [page 506]

8.3.1.5.1 CANUPMFO: Update MDF-e Data After Cancellation

The step *Update MDF-e Data After Cancellation* (technical name: `CANUPMFO` updates the corresponding process step of the MDF-e Outbound process. This update is carried out via response FM of the MDF-e Outbound process step `MFOCANCL`. For more information, see MDF-e Events: Outbound Cancellation Event [page 499].

Activation/Deactivation

By default, this step is active and processed automatically. The communication is synchronous.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

Event Processing

8.3.1.5.2 CLOUPMFO: Update MDF-e Data After Close

The step *Update MDF-e Data After Close* (technical name: `CLOUPMFO` updates the corresponding process step of the MDF-e outbound process.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is synchronous.

Customizing

Not relevant

BAdIs

No BAdI available

Usage

Event Processing

Additional Information

Update via response FM of MDF-e Outbound process step `MFOCLOSE`

8.3.1.5.3 ERPUPDMF: Notify Feeder System

The step *Notify Feeder System* (technical name: `ERPUPDMF` updates the connected feeder system with the event status.

Activation/Deactivation

By default, this step is active and processed automatically.

Customizing

Not relevant

BAdIs

MDF-e: RFC to External Systems (`/XNFE/BADI_MDFE_RFC_EXTERN`)

For more information, refer to BAdIs for MDF-e Outbound [page 105].

Usage

Event Processing

8.3.1.5.4 EVMFAUTH: Authorize MDF-e Event

The step *Authorize MDF-e Event* (technical name: `EVMFAUTH` requests the authorization of an MDF-e event.

> **Note**
>
> For the processing of the event authorization, the report `/XNFE/MDFE_EVENT_SEND` must be scheduled as a background job. For details please refer to Event Batch Job Planning [page 122].

Activation/Deactivation

By default, this step is active and processed automatically. The communication is synchronous.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.4 Generic Event Processing Steps

This is an overview of all generic event processing steps that are used by NF-e, CT-e, and MDF-e:

- AUTHEVNT: Check Authorization for Event [page 507]
- CANCREAT: Create Cancellation Event [page 508]
- CCECREAT: Create Event [page 509]
- EVB2BCRE: Create Event B2B Process [page 510]
- EVCREUPD: Create or Update Event [page 510]

EVENDPRC: Check for End of Process Step [page 511]
EVENTSIN: Sign Event [page 512]
EVTRGB2B: Trigger B2B Process [page 512]
SIGNVALI: Validate Signature of Event [page 513]

8.4.1 AUTHEVNT: Check Authorization for Event

The step *Check Authorization for Event* (technical name: `AUTHEVNT`) checks that an NF-e event is still authorized at the SEFAZ system.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is asynchronous. During this communication, the step is waiting for the response from SEFAZ.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

Additional Information

A history entry is written if the expected step is not the current one.

8.4.2 CANCREAT: Create Cancellation Event

The step *Create Cancellation Event* (technical name: `CANCREAT`) receives information about a cancellation event in ABAP structures. The data is validated, transformed to XML and stored in the NFE database tables.

Activation/Deactivation

By default, this step is active and processed automatically and synchronously.

Customizing

For more detailed information, see the documentation for the following customizing activities

- *NF-e: Maintain Version of Message Types* (for NF-e/NF-e events)
- *CT-e: Maintain Version of Message Types* (for CT-e/CT-e events)
- *MDF-e: Maintain Version of Message Types* (for MDF-e/MDF-e events)

This information can be found in Customizing and in the following topics:

- Process Settings and Customizing for NF-e Outbound [page 91]
- Process Settings and Customizing for CT-e Outbound [page 98]
- Process Settings and Customizing for MDF-e Outbound [page 103]

BAdIs

No BAdI availabe

Usage

Event Processing

Additional Information

This step has no step implementation.

8.4.3 CCECREAT: Create Event

The step *Create Event* (technical name: `CCECREAT`) receives information about an event in ABAP structures. The data is validated, transformed to XML and stored in the NFE database tables.

Activation/Deactivation

By default, this step is active and processed automatically and synchronously.

Customizing

For more detailed information, see the documentation for the following customizing activities

- *NF-e: Maintain Version of Message Types* (for NF-e/NF-e events)
- *CT-e: Maintain Version of Message Types* (for CT-e/CT-e events)
- *MDF-e: Maintain Version of Message Types* (for MDF-e/MDF-e events)

This information can be found in Customizing and in the following topics:

- Process Settings and Customizing for NF-e Outbound [page 91]
- Process Settings and Customizing for CT-e Outbound [page 98]
- Process Settings and Customizing for MDF-e Outbound [page 103]

BAdIs

No BAdI availabe

Usage

Event Processing

Additional Information

This step has no step implementation

8.4.4 EVB2BCRE: Create Event B2B Process

The step *Create Event B2B Process* (technical name: EVB2BCRE) step indicates that the B2B process was created.

Activation/Deactivation

By default, this step is active and processed automatically. The communication is synchronous.

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

Additional Information

No step implementation, step set by regular event process (step EVTRGB2B) and program /XNFE/NFE_B2B_SEND.

8.4.5 EVCREUPD: Create or Update Event

The step *Create or Update Event* (technical name: EVCREUPD) is used to create or update an event

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

No BAdI available.

Usage

Event Processing

8.4.6 EVENDPRC: Check for End of Process Step

The step *Check for End of Process Step* (technical name: `EVENDPRC`) is executed as last step of the process.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

No BAdI available.

Usage

Event Processing

8.4.7 EVENTSIN: Sign Event

The step *Sign Event* (technical name: `EVENTSIN` signs the event with the certificate of the event issuer CNPJ.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system. (No user interaction required).

Customizing

Define Control Parameters for Process Steps using parameter Signature Validation (`SIGVALID`).

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

No BAdI available

Usage

Event Processing

8.4.8 EVTRGB2B: Trigger B2B Process

The step *Trigger B2B Process* (technical name: `EVTRGB2B` creates and initializes the event B2B processing.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Not relevant

BAdIs

No BAdI availabe

Usage

Event Processing

8.4.9 SIGNVALI: Validate Signature of Event

The step *Validate Signature of Event* (technical name: `SIGNVALI` checks the signature of an inbound event.

Activation/Deactivation

By default, this step is active and processed automatically by the NFE system (No user interaction required).

Customizing

Define Control Parameters for Process Steps (`SIGVALID`).

For more detailed information, see the documentation for customizing activity *Define Control Parameters for Process Steps* in Customizing and Process Settings and Customizing for NF-e/CT-e Inbound [page 110].

BAdIs

No BAdI available

Usage

Event Processing

8.5 Monitor Events

SAP Nota Fiscal Eletrônica (SAP NFE) runs in different components when communicating with regional tax authorities. SAP NFE gives you access to monitors with differing levels of detail to control the communication process and to solve problems.

The monitoring options in SAP Nota Fiscal Eletrônica (SAP NFE) provide you with a single point-of-entry for tracking the communication statuses of NF-e/CT-e/MDF-e events (both individual and batched), and the communication process between the NFE application and the authorities' system. In case of communication failures, the NFE monitors allow you to trigger resending and rechecking of events and their related messages.

- The Event Monitor Outbound [page 514] displays an overview list of all events (for NF-e, CT-e, MDF-e) sent individually to government systems and to business partners, along with all event-related messages. You can also resend certain messages from the filtered lists in this monitor.
- The Event Batch Monitor [page 518] displays the messages you send to and receive from government systems about the status of the NF-e event batches.
- The Event Monitor Inbound [page 520] displays an overview list of all events (for NF-e, CT-e) received from business partners or government systems. You can also reprocess certain messages from the filtered lists in this monitor.
- The Events Embedded in Monitors [page 522] offer to display all available events for a selected document (for example, NF-e in the NF-e Outbound Monitor).

  Event Monitor Outbound [page 514]

  Event Batch Monitor [page 518]

  Event Monitor Inbound [page 520]

  Events Embedded in Monitors [page 522]

8.5.1 Event Monitor Outbound

The purpose of this monitor for self-issued events is to solve technical problems with the signature, sending of events, receiving of replies from the tax authorities, the status update with ERP, and the sending to B2B partners (if B2B is customized). You can only see events of NF-es/CT-es/MDF-es, for which you have the authorization.

Queries

- **Overview**
  The query *Overview* lists successfully processed events and events in error status with their main header data and the status information.
- **Overview Errors**
  The query *Overview Errors* lists events sending failures with their main header data and the status information.

List

Based on your selection criteria, the *Event Monitor Outbound* displays a list of events and their processing status.

The following status icons are used:

- Process Completed; Event Processed Successfully. This icon represents status 99.
  Depending on the SEFAZ status, this means:
  - Event authorized (SEFAZ Status Code 135)
  - Event authorized (SEFAZ Status Code 136)
  - Event Cancellation authorized out of deadline (SEFAZ Status Code 155)
- Process completed; Event rejected. This icon represents status 88.
  Depending on the event type, the event can be issued again by the feeder system or by the NFE system.
- Process is waiting. This icon represents the following statuses:
  - 11 -> Process waiting for response
  - 12 -> Status check: step waiting for asynchronous response
  - 13 -> Step waiting for external process
- Error in last process step. This icon represents status 02.
  To correct the error, go to the status overview and check the problem description in the last activity. After correcting the problem, you can continue the process using the action *Continue Process*.
- Process waiting for user action. This icon represents status 01.
  The process stopped for the user to carry out necessary actions.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Additional Information

Once you select a line in the displayed table, you receive additional information about this event at the bottom of the screen:

- **Status Overview**
  This is a description of the process with the corresponding *Status*, *Activity*, *Status Description*, and *Info Text* fields.
- **History**
  This is a description of the history of this event containing the *Status*, *Activity*, *Status Description*, *Info Text*, *Executed on*, and the *User* fields.

Actions

- **Select Details**
  - **Event Details**
    This action allows you to display the content of the event (if the event contains content).
  - **Display Event XML**
    This action allows you to download/display the event XML file (if existing).
- **Continue Process**
  You can select an event with an error in the event process and then check the problem description in the last activity. After correcting the problem, you can continue the process using the *Continue Process* button.
- **Continue B2B Process**
  You can select an event with an error in the B2B process and then check the problem description in the last activity. After correcting the problem, you can continue the process using the *Continue B2B Process* button.
- **More Functions:**
  - **Request Status Check**
    This action allows the user to trigger an asynchronous NF-e/CT-e/MDF-e status check. The response returns the current NF-e/CT-e/MDF-e status from SEFAZ.
  - **Confirm Authorization**
    This action allows the user to enter authorization information, such as protocol number, authorization date and time, manually. This only applies to events that are not returned by the corresponding document status check. This is only possible for *Receiver Acknowledgment* events with status code 573.
  - **Repeat Process Step**
    This action allows the user to repeat the *Update Feeder System* process step although this step was already successfully executed during the regular processing.
  - **Send XML File**
    This action allows the user to send an event XML using the *Send XML File* action. This button is active if the event is authorized and the B2B scenario for the business partner is activated. You can choose to send the event XML to one of your business partners, for example, the event recipient. The following situations are supported:
    - The XML file was not yet sent due to the fact that the B2B scenario for the business partner was not activated. After activation, the *Process Status* of the event process will not be changed,

because this step was already marked during processing as *not relevant for the event*. A history entry is added.

- The event XML file was already sent successfully. The *Process Status* of the event process will not be changed, because this step was either already marked during processing as *not relevant for the event*, or already successfully executed. A history entry is added.

> **Note**
>
> Errors during the initial B2B sending process must be solved in the *Event Monitor Outbound* and cannot be solved using the action *Send XML File*.

> **Note**
>
> MDF-e events are not sent to business partners. Therefore, the *Send XML File* action is not available.

Details

- You can display the details of the event by selecting *Event Details* (if the event contains content).
- You can display the details of the corresponding event batch (NF-e events only!) by choosing the event batch ID. The corresponding details view displays the event batch details including all events that belong to this batch.
- You can display the details by choosing the *Access Key* of a document. The corresponding details view displays the entire content of the XML in several tabs and grouped according to the tags in the XML

Navigation

You can access the *Event Monitor Outbound* in SAP NFE via one of the following options:

- You can call up the specific menu *Event Monitor Outbound* from the user role `/XNFE/WP_NFE_OUT_MONITOR` *(Outgoing User Menu)*.
- You can navigate to the menu option in the navigation structure of *Message Monitor* in SAP NFE. You can access this option from the user role by choosing *Monitor Outbound NF-es/Events* > *Event Monitor Outbound*.
- You can navigate to the menu option in the navigation structure of *Message Monitor* in SAP NFE. You can access this option from the user role by choosing *Monitor Outbound CT-es/Events* > *Event Monitor Outbound*.
- You can navigate to the menu option in the navigation structure of *Message Monitor* in SAP NFE. You can access this option from the user role by choosing *Monitor Outbound MDF-es/Events* > *Event Monitor Outbound*.

8.5.2 Event Batch Monitor

> **Note**
>
> This monitor is only for **NF-e** events! Events for other documents are not sent in batches !

This monitor has the purpose to show all statuses for the batches, in which you packaged events for the communication with the authorities. One batch can contain up to 20 events. After sending the batch to SEFAZ the answer contains the batch status as well as the status for each packaged event. There is no batch status request as for NF-e batches. The statuses are displayed in the batch details view. If the communication process for sending batches fails, the system provides individual lists for a quick overview and specific status information.

Queries

- **Overview of Event Batches**
  The *Overview* query lists all event batches with their main header data and the status information
- **Batch Send Incorrect**
  The *Batch Send Incorrect* query lists batches with errors with their main header data and the status information.

List

Based on your selection criteria, the *Event Batch Monitor* displays a list of event batches and their processing status.

The following status icons are used:

- Process completed; Document successfully processed. This icon represents status 99.
  The event batch processing finished with no option to continue processing.
- Process completed; This icon represents the following statuses:
  - Status 98: Process manually finished
    The event batch is finished manually by the user by using the respective action in the monitor.
  - Status 88: Document rejected
    The batch sending or batch request was rejected by the authorities.
- Process waiting for asynchronous answer. This icon represents status 11.
  The process waits for a response.
- Error in last process step. This icon represents status 02.
  Check the problem description of the last activity in the status overview. After correcting the problem, you can continue the process using the action *Continue Process*.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Additional Information

Once you select a line in the displayed table, you receive additional information about this event batch at the bottom of the screen:

- **Status Overview**
  This is a description of the process with the corresponding *Status*, *Activity*, *Status Description*, and *Info Text* fields.
- **History**
  This is a description of the history of this event batch containing the *Status*, *Activity*, *Status Description*, *Info Text*, *Executed on*, and the *User* fields.

Actions

- **Details**
  This action allows you to display all details of the batch and the individual events packaged in the batch (for which you have the authorization). For each event listed in the batch details you can access the event details and event XML.
- **Restart**
  You can select an event batch with an error in the event process and then check the problem description in the last activity. After correcting the problem, you can continue the process using the *Restart* button.
- **Finish Batch Process**
  You can select an event batch in status *error* or *wait* and check the problem description in the last activity. If you cannot correct the problem, for example due to technical problems with the SEFAZ system, you can finish the batch process using the action *Finish Batch Process*. This finishes the batch process and sets the status of the step `Authorize Event` of every event in the batch to *error*. The new status for every individual event of the batch allows you to continue the event process in the *Event Monitor Outbound*. To receive a valid status from SEFAZ, the NF-e status check requests a status for every individual event.

> **Note**
>
> **Error Handling after Ending the Batch Process**
>
> The event status turns to *Error* (for the activity *check authorization of event*) and you have to deal with the problem in the *Event Monitor*: Navigate to the *Event Monitor*, choose the erroneous event and use the *Continue Process* action. The NF-e status check is triggered asynchronously to SEFAZ (NF-e Status Check scenario) and the status of the event process turns to *step waiting for asynchronous reply* (for the activity *check authorization of event*). Once the response is received, the status of the event turns to *OK* or *Error* depending on the response from SEFAZ. The event status is set to *Error*, if:
>
> - The SEFAZ status code is 108/109;

- The SEFAZ status code is empty;
- The protocol number from SEFAZ is not filled or not numeric

Erroneous events are not sent to the feeder system (ERP) or B2B partner. However, you can repeat the NF-e status check by using the action *Continue Process*.

Details

You can display the details of the event batch by selecting the batch number or by selecting the corresponding line and choosing *Details*. The details view displays the event batch data including all events that belong to this batch.

Navigation

You can access the *Event Batch Monitor* inSAP NFE via one of the following options:

- You can call up the specific menu *Event Batch Monitor* from the user role `/XNFE/WP_NFE_OUT_MONITOR` *(Outgoing User Menu)*.
- You can navigate to the menu option in the navigation structure of *Message Monitor* in SAP NFE. You can access this option from the user role by choosing *Monitor Outbound NF-es/Events* > *Event Batch Monitor*.

8.5.3 Event Monitor Inbound

You receive events either from your business partner via B2B communication or from SEFAZ via the *Query Events* action in the NF-e/CT-e monitors (outbound or inbound).

The purpose of the *Event Monitor Inbound* is to observe incoming events and to detect possible problems. Identified problems can then be solved using the problem descriptions. You can only see events of NF-es/CT-es, for which you have the authorization.

Queries

- **Overview**
  The query *Overview* lists successfully processed events and events in error status with their main header data and the status information.
- **Overview Errors**
  The query *Overview Errors* lists events sending failures with their main header data and the status information.

List

Based on your selection criteria, the *Event Monitor Inbound* displays a list of events and their processing status.

The following status icons are used:

- Process Completed; Event processed Successfully. This icon represents status 99.
  The event processing finished with no option to continue processing.
- Document Rejected, Can Be Overwritten. This icon represents status 88.
  The event processing finished with a rejection by the user with the option to receive the XML again.
- Process is waiting. This icon represents the following statuses:
  - 11 -> Process waiting for response
  - 12 -> Status check: step waiting for asynchronous response
- Error in last process step. This icon represents status 02.
  To correct the error, go to the status overview and check the problem description in the last activity. After correcting the problem, you can continue the process using the action *Continue Process*.
- Process waiting for user action. This icon represents status 01.
  The process stopped for the user to carry out necessary actions.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

Additional Information

Once you select a line in the displayed table, you receive additional information about this event at the bottom of the screen:

- **Status Overview**
  This is a description of the process with the corresponding *Status*, *Activity*, *Status Description*, and *Info Text* fields.
- **History**
  This is a description of the history of this event containing the *Status*, *Activity*, *Status Description*, *Info Text*, *Executed on*, and the *User* fields.

Actions

- **Select Details**
  - **Event Details**
    This action allows you to display the content of the event (if the event contains content).
  - **Display Event XML**
    This action allows you to download/display the event XML file (if existing).

- **Continue Process**
  You can select an event with an error in the event process and then check the problem description in the last activity. After correcting the problem, you can continue the process using the action *Continue Process*.
- **Reject Event**
  For the case that the XML is incorrect, you have the option to flag the event as *Enable New Receipt of Event*. The event receives a new status (*Status code 88 –>Document rejected, Can be overwritten*) and will be overwritten once the same event (with the same access key event type and sequence number) arrives again in the NFE system. This is documented in the history table of the event.

  > ⚠ Caution
  >
  > The previous XML is overwritten and the processing starts again. You cannot restore an overwritten event.

Details

- You can display the details of the event by selecting *Event Details* (if the event contains content).
- You can display the details by choosing an NF-e/CT-e's *Access Key*. The corresponding details view displays the entire content of the XML in several tabs and grouped according to the tags in the XML.

Navigation

You can access the *Event Inbound Monitor* in SAP NFE via one of the following options:

- You can call up the specific menu *Event Monitor Inbound* from the user role `/XNFE/WP_NFE_OUT_MONITOR` *(Outgoing User Menu)*.
- You can navigate to the menu option in the navigation structure of *Message Monitor* in SAP NFE. You can access this option from the user role by choosing *Monitor Inbound Message* > *Event Monitor Inbound*.

8.5.4 Events Embedded in Monitors

> ⚠ Caution
>
> The Events tab is only visible if there is at least 1 event for an NF-e/CT-e/MDF-e.

The main purpose is to provide information to the user about events for the selected document. The user must decide how running processes are affected, and therefore a list of the current authorized and pending events (both self-issued and others) is displayed. The user can display all events per event type in a dialog box. More actions are available for every selected event in the list.

Actions

- **Event Details**
  By selecting one event, you can display its content (if available) depending on its type.
- **Display Event XML**
  The *Display Event XML* action allows you to open or save the XML document.
- **Event Status**
  The *Event Status* action allows you to display the current and former process steps with *Status*, *Activity*, *Status Description*, and *Info Text*.
- **Event History**
  The *Event History* action allows you to display the history of an event with *Status*, *Activity*, *Process*, *Status Description*, *Info Text*, *Executed On*, and *User*.
- **Event B2B Status**
  The *Event B2B Status* action allows you to display the current and former B2B process steps with *Status*, *Activity*, *Status Description*, and *Info Text*.
- **Event B2B History**
  The *Event B2B History* action allows you to display the B2B history of an event with *Status*, *Activity*, *Status Description*, *Info Text*, *Executed On*, and *User*.
- **Display Versions**
  The *Display Versions* action allows you to see all other available versions of the selected event.
- **Send XML File**
  With the *Send XML File* action, you have the option to send an event XML. The action is active if the event is authorized and the B2B scenario for the business partner is activated. You can choose to send the event XML to one of your business partners, for example, the event recipient. The following situations are supported:
  - The XML file was not yet sent due to the fact that the B2B scenario for the business partner was not activated. After activation of the B2B scenario and sending, the *Process Status* of the event process will not be changed. However, a history entry is added.
  - The event XML file was already sent. After sending, the *Process Status* of the event process will not be changed. However, a history entry is added.

  > ⓘ Note
  >
  > Errors during the initial B2B sending process must be solved in the Event Outbound Monitor [page 514] and cannot be solved using the *Send XML File* action.

  > ⓘ Note
  >
  > MDF-e events are not sent to business partners. Therefore, the *Send XML File* action is not available.
- **Batch Number** (NF-e events only!)
  You can display the event batch data including all events that belong to this batch.
- **Refresh**
  The *Refresh* action updates the event list to the latest version.

9 General Functions for SAP NFE

Administration [page 524]

Archiving in SAP Electronic Invoicing for Brazil (SAP Nota Fiscal Eletrônica) [page 533]

UI Configuration [page 542]

Operation Information [page 543]

9.1 Administration

In the administration, you carry out administrative settings and monitor the SAP Nota Fiscal Eletrônica (SAP NFE) application. The administrator can perform the following tasks in the various areas of the *Administration* workplace:

Administration

- Download XML Files [page 532]
- DF-e Distribution Request Monitor [page 532]

Signature

- *Define SSF Applications*
  In this area, you see an overview of existing SSF (*Secure Store and Forward*) applications. You must create entries for each of your tax numbers. For more information, see SAP Note 1524196.
- *Maintain Application-Dependent SSF Information*
  In this area, you can specify parameters for the SSF applications that you previously defined.
- *Maintain System Security Information*
  You must import the certificates for each SSF application into *Trust Manager*. For more information, see SAP Note 1524196.

Inbound

- *Maintain Logical System for Own Tax Numbers*
- *Maintain Control Parameter for Process Flow*

In this area, you can control which process steps are processed manually and which ones are processed automatically.
    - Use the *Control* column to configure the process step.
    - Use the *Deactiv* column to deactivate certain process steps.
- *Maintain Communication Parameters for Partner Tax Numbers*
- **NF-e**
    - *NF-e: Maintain Process Determination for Inbound NF-es*
    - *Repeat NF-e Business Process Determination*
      This function lets you can define a new business process for NF-es.
    - *Revoke Rejection of NF-e*
- **CT-e**
    - *CT-e: Maintain Process Determination for Inbound CT-es*

Outbound

- *Configuration Checks*
  This report helps you to check the consistency of your configuration for issuing NF-es. You can run the report for a specific issuer CNPJ or for all available CNPJs. The report runs the following checks:
    - Batch Jobs
    - Version Customizing
    - Validity of Certificates for Signature
- *Maintain System Response for Own Tax Numbers*
  You configure the system behavior and the storage location for your digital signature for each tax number at your company.
- *Maintain Control Parameters for Process Flow*
  In this activity, you can make the settings for the process steps for further processing of a document (NF-e, CT-e, MDF-e, events). The process steps are derived from the business process that is assigned to the document. The process flow for this business process is contained in table `/XNFE/PROCFLOW`.
  In this activity, you can influence the handling of the process flow, This is possible, depending on the sender's and/or recipient's CNPJ number in the document. The "Control Settings" field lets you influence automatic processing of a process step. It has the following options:
    - "Manual" = The process step is not processed automatically during the process. The automatic process stops at this process step. The user performs this step manually.
    - "Automatic" = The process step is performed automatically during the process - that is, without user interaction. If processing is successful, the step status is set to "OK" and the process is continued.
    - The "Inactive" field can be used to deactivate a process step. It has the following options:
        - " " = The process step is active: The process step is executed automatically or manually, depending on the settings in the *Control Settings* field.
        - "*X*" = The process step is deactivated: The process step is not carried out. The status of this step is set to *OK* and the process is continued.

You can maintain a blank entry for the CNPJ codes. The system uses the following search sequence to determine the valid entry:

1. Search with both CNPJ numbers to find an entry

2. Search with the sender's CNPJ number to find an entry
3. Search with the recipient's CNPJ number to find an entry
4. Search with two blank CNPJ numbers to find an entry

Steps that are essential to the process flow cannot be deactivated. Define the process type and process step that you want to influence. Enter the CNPJ numbers in accordance with the criteria listed above, taking the search sequence into account. Define the suitable control options.

- *Activate B2B Scenarios for Business Partners*
  You determine the business partners with whom you want to exchange electronic invoices (NF-e) and freight documents (CT-e). To do this, you need the business partner's CNPJ and you must set the flag to activate electronic communication. This indicator enables the system to mark the relevance of that business partner for sending and receiving NF-es and CT-es with SAP Nota Fiscal Eletronica (SAP NFE) during communication with the SAP NetWeaver Process Integration.
- *Activate B2B Scenarios for Natural Persons*
  You determine the natural persons with whom you want to exchange electronic invoices (NF-e) and freight documents (CT-e). To do this, you need the natural person's CPF and you must set the flag to activate electronic communication. This indicator enables the system to mark the relevance of that natural person for sending and receiving NF-es and CT-es with SAP Nota Fiscal Eletronica (SAP NFE) during communication with the SAP NetWeaver Process Integration.
- **NF-e**
  - *NF-e: Maintain Connected Authority Systems*
    You use the tax number of your company in combination with the logical system to define the authority systems you want to communicate with and whether you use the productive or test system environment for communication.
  - *NF-e: Maintain Versions of Message Types*
    You use the tax number of your company in combination with the logical system to define the XML version of each message type that is send to the authorities.

    > **Note**
    >
    > To enter all needed values you can use the F4-help. Only Tax Numbers maintained in Customizing Activity NF-e: Maintain Connected Authority Systems will be accepted. You can also use a blank tax number to define a version for all CNPJs. The available XML versions for each message type are delivered in system table /XNFE/XMLVERSION The following message types had to be maintained:
    >
    > - NFE –> Send NF-e and NF-e Service Status Check
    > - INUTNFE –> Send Skipping Request

  - *NF-e: Define Service Status Request for Authority (SEFAZ)*
    Specify the region of the SEFAZ system whose service status you want to query and define if you want to query the availability of the productive or test system for this region. Maintain the control parameters for the service status query.

    > **Caution**
    >
    > Prerequisite: The following Customizing activities have to be maintained if you want to use service status checks.
    >
    > - NF-e: Define Versions of Message Types
    > - NF-e: Define Connected Government Systems

- NF-e: Define Query for Service Status of Authority (SEFAZ)

- *NF-e: Execute Service Status Request for Authority*
  You can use the report `/XNFE/NFE_CHECK_SRV_STATUS_MAN` to initiate the service status check immediately. You have to specify:
  - Issuer Region (CUF)
  - Authority System Environment

  As a result, you see the status of the SEFAZ and contingency system displayed in a table. This is only for your information and the result is not persisted on the database.

  > **Note**
  >
  > There are two SVC systems:
  >
  > - SVC Rio Grande do Sul
  > - SVC National

- *NF-e: Maintain Batch Parameters*
  You define the following parameters for collecting NF-es in batches:
  - Max. Collecting Time (in Sec)
    Maximum time NF-es for one region are collected before the batch is send to the authorities.
  - Max. Batch Size (in Byte)
    The maximum size is calculated based on the signed NF-e. For more information about NF-e signatures, see Communication Flow for Sending NF-es [page 126]. The maximum allowed value is 500.000 Byte. If you maintain a higher value, it will be replaced by the maximum value during the processing.
  - Max. Number of NF-es
    The maximum allowed value is 50 NF-es per batch. If you maintain a higher value, it will be replaced by the maximum value during the processing.
  - Wait Time (sec.)
    Waiting time in seconds until the system send the batch status request. During processing the actual used time can be shorter, as the authorities sends an average answering time within the batch answer. The process will used the smaller value of both (the value maintained in customizing and the average answering time), when triggering the batch request.
  - Max. Repeat
    Maximum number of automatic repeats for sending the batch status request. This value will be used for the automatic resend of batch request, when the first batch request ends up with status code 105 *Batch still in process by the authorities*. If the maximum value of repeats is reached, the batch will be set to error and you have the possibility to manually restart the batch in the Batch Monitor.
  - Compressed
    Indicates whether the batch will be sent in a compressed format (as zip file) to the authorities.

  You have the option of defining a standard setting. To do this, create an entry with a blank CUF field and fill in the desired values. This set the parameters for all regions. If you didn't maintain batch parameter for your region or a standard entry for all regions, the standard values are used to create and request batches. The standard values are:
  - Max. Collecting Time (in Sec): 30
  - Max. Batch Size (in Byte): 500.000
  - Max. Number of NF-es: 50

- Wait Time (sec.): 120
- Max. Repeat: 5
- Compressed: No

> **Note**
>
> These parameters have a high influence on the CPU usage, disk usage, and overall performance of SAP NFE. Therefore, change the parameters according to your business needs and try to create the batches with the highest NF-e number in an acceptable time. Be aware that using small values for Max. Collecting Time, Max. Batch Size or Max. Number of NF-es increases the number of batches. This can cause processing performance issues.
>
> The creation of NF-e batches is also influenced by the way you scheduled the job for the batch report. For more information about batch jobs, see Batch Job Planning for NF-e Outbound [page 93].

- NF-e: Maintain Process Determination for Outbound NF-es

- **CT-e**
  - *CT-e: Maintain Connected Authority Systems*
    You use the tax number of your company in combination with the logical system to define the authority systems you want to communicate with and whether you use the productive or test system environment for communication.
  - *CT-e: Maintain Versions of Message Types*
    You use the tax number of your company in combination with the logical system to define the XML version of each message type that is send to the authorities.

    > **Note**
    >
    > To enter all needed values you can use the F4-help. Only Tax Numbers maintained in Customizing Activity CT-e: Maintain Connected Authority Systems will be accepted. You can also use a blank tax number to define a version for all CNPJs. The available XML versions for each message type are delivered in system table `/XNFE/XMLVERSION` The following message types had to be maintained:
    >
    > - `CTE` –> Send CT-e
    > - `AEREOCTE` –> CT-e: Transport mode Ship (only relevant from version 2.00 and higher)
    > - `AQUAVCTE` –> CT-e: Transport mode Ship (only relevant from version 2.00 and higher)
    > - `DUTOCTE` –> CT-e: Transport mode Pipeline (only relevant from version 2.00 and higher)
    > - `FERROVCTE` –> CT-e: Transport mode Rail (only relevant from version 2.00 and higher)
    > - `RODOCTE` –> CT-e: Transport mode Rail (only relevant from version 2.00 and higher)
    > - `MULTMODCTE` –> CT-e: Transport mode Multimodal (only relevant from version 2.00 and higher)
    > - `INUTCTE` –> Send Skipping Request

  - *CT-e: Define Service Status Request for Authority (SEFAZ)*
    Specify the region of the SEFAZ system whose service status you want to query and define if you want to query the availability of the productive or test system for this region. Maintain the control parameters for the service status query.

    > **Caution**
    >
    > Prerequisite: All three Customizing activities

- *CT-e: Define Versions of Message Types*
- *CT-e: Define Connected Government Systems*
- *CT-e: Define Query for Service Status of Authority (SEFAZ)*

have to be maintained if you want to use service status checks.

- *CT-e: Execute Service Status Request for Authority*
  You can use the report `/XNFE/CTE_CHECK_SRV_STATUS_MAN` to initiate the service status check immediately. You have to specify:
  - Issuer Region (CUF)
  - Authority System Environment

  As a result, you see the status of the SEFAZ and contingency system displayed in a table. This is only for your information and the result is not persisted on the database.
  - The administrator has to be able to control the statuses of SEFAZ and of the contingency systems (SVC systems) per region (CUF) and environment to decide which system to use is the best option. This information in the status check allows the administrator to determine if a manual shift to SVC is preferable due to poor performance from SEFAZ, or a notification about a temporary deactivation of SEFAZ. You can also use the report `/XNFE/CTE_CHECK_SRV_STATUS_MAN` in transaction `SE38` to receive the status information of the SEFAZ and SVC systems.

> **Note**
>
> There are two SVC systems:
>
> - SVC Rio Grande do Sul
> - SVC SP Sao Paulo

- **MDF-e**
  - *MDF-e: Maintain Connected Authority Systems*
    You use the tax number of your company in combination with the logical system to define the authority systems you want to communicate with and whether you use the productive or test system environment for communication.
  - *MDF-e: Maintain Versions of Message Types*
    You use the tax number of your company in combination with the logical system to define the XML version of each message type that is sent to the authorities.

> **Note**
>
> To enter all needed values you can use the F4-help. Only Tax Numbers maintained in Customizing Activity MDF-e: Maintain Connected Authority Systems will be accepted. You can also use a blank tax number to define a version for all CNPJs. The available XML versions for each message type are delivered in system table `/XNFE/XMLVERSION` The following message types had to be maintained:
>
> - `MDFE` –> Send MDF-e
> - `AEREOMFE` –> MDF-e: Transport mode Ship
> - `AQUAVMFE` –> MDF-e: Transport mode Ship
> - `FERROVCTE` –> MDF-e: Transport mode Rail
> - `RODOMFE` –> MDF-e: Transport mode Rail

  - *MDF-e: Define Service Status Request for Authority (SEFAZ)*

Specify the region of the SEFAZ system whose service status you want to query and define if you want to query the availability of the productive or test system for this region. Maintain the control parameters for the service status query.

> ⚠ Caution
>
> Prerequisite: All three Customizing activities
>
> - *MDF-e: Define Versions of Message Types*
> - *MDF-e: Define Connected Government Systems*
> - *MDF-e: Define Query for Service Status of Authority (SEFAZ)*
>
> have to be maintained if you want to use service status checks.

- *MDF-e: Execute Service Status Request for Authority*
  You can use the report `/XNFE/CTE_CHECK_SRV_STATUS_MAN` to initiate the service status check immediately. You have to specify:
  - Issuer Region (CUF)
  - Authority System Environment

  As a result, you see the status of the SEFAZ and contingency system displayed in a table. This is only for your information and the result is not persisted on the database.
  - The administrator has to be able to control the statuses of SEFAZ and of the contingency systems (SVC systems) per region (CUF) and environment to decide which system to use is the best option. This information in the status check allows the administrator to determine if a manual shift to SVC is preferable due to poor performance from SEFAZ, or a notification about a temporary deactivation of SEFAZ. You can also use the report `/XNFE/CTE_CHECK_SRV_STATUS_MAN` in transaction `SE38` to receive the status information of the SEFAZ and SVC systems.

> ⓘ Note
>
> There are two SVC systems:
>
> - SVC Rio Grande do Sul
> - SVC SP Sao Paulo

Archiving

- *Display Archived Inbound NF-es*
  Using this function, you can display your archived inbound NF-es.
- *NF-e 2.00: Display Archived Outbound NF-es*
  Using this function, you can display your archived inbound NF-es for layout 2.00.
- *Display Archived Outbound NF-es*
  Using this function, you can display your archived inbound NF-es.
- *Display Archived Inbound CT-es*
  Using this function, you can display your archived inbound CT-es.
- *Display Archived Outbound CT-es*
  Using this function, you can display your archived outbound CT-es.
- *Display Archived Outbound MDF-es*

Using this function, you can display your archived outbound MDF-es.

Deletion Reports

- **Inbound**
  - *Delete NF-e List & Download Entries*
    This program deletes entries in the *List & Download Monitor*. With the introduction of the *NF-e Distribution WebService* by the government (NT 2014.002: `NFeDistribuicaoDFe`), this monitor is no longer used and no new entries are generated. The lines of this monitor are stored in the database tables `/XNFE/NFELISTHD`, `/XNFE/NFELISTXML`, and `/XNFE/NFELISTBAT`. These tables can grow depending on the number of entries you receive. After processing, these entries are no longer needed and can therefore be deleted. The deletion is realized with the report `/XNFE/NFELIST_DB_DELETE`. For more information, see the report documentation.
  - *Delete NF-e List Status Entries*
    This program deletes entries in the *Status Monitor NF-e List*. This monitor displayed the result of the communication between the NFE system and the web service to retrieve a list of NF-es issued for one of your CNPJs from the National Environment before the introduction of the *NF-e Distribution WebService* by the government (NT 2014.002: `NFeDistribuicaoDFe`). The results of the request are stored in the database table `/XNFE/NFELISTSTA`. This table can grow depending on the number of entries you receive. After processing, these entries are no longer needed and can therefore be deleted. The deletion is realized with the report `/XNFE/NFELIST_STA_DB_DELETE`.
  - *Delete NF-e Distribution Entries*
    This program deletes entries in the DF-e Distribution Request Monitor [page 532]. This monitor displays the result of the communication between the NFE system and the web service to retrieve a list of NF-es issued for one of your CNPJs from the National Environment and is regularly checked in the background by the job `/XNFE/COLLECT_DOCUMENTS`. The results of the request are stored in the database tables `/XNFE/NFEDISTSTA` and `/XNFE/NFEDISTXML`. These tables can grow depending on the number of entries you receive which can result in a significantly lower performance of the database. We provide a report to delete no longer necessary results. The deletion is realized with the report `/XNFE/NFEDIST_DB_DELETE`.
- **Outbound**
  - *NF-e: Delete Results for Service Status Requests from Authorities*
    Every company must regularly check the system availability at a defined frequency. The availability of the authority systems is regularly checked in the background by the job `/XNFE/NFE_CHECK_SRV_STATUS`. The results of the service status request are stored in the database table `/XNFE/NFE_SRVSTA`. This table can grow rapidly to several million entries resulting in a significantly lower performance of the database. We provide a report to delete or archive no longer necessary service status results. The deletion is realized with the report `/XNFE/SRV_DB_DELETE`. The customer can decide to delete the status results using this report, or archive the results using the archiving report.
  - *CT-e: Delete Results of Service Status Requests from Authorities*
    Every company must regularly check the system availability at a defined frequency. The availability of the authority systems is regularly checked in the background by the job `/XNFE/CTE_CHECK_SRV_STATUS`. The results of the service status request are stored in the database table `/XNFE/CTE_SRVSTA`. This table can grow rapidly to several million entries resulting in a significantly lower performance of the database. We provide a report to delete or archive no longer necessary service status results. The deletion is realized with the report `/XNFE/CTE_SRV_DB_DELETE`. The

customer can decide to delete the status results using this report, or archive the results using the archiving report.

- *MDF-e: Delete Results of Service Status Requests from Authorities*
  Every company must regularly check the system availability at a defined frequency. The availability of the authority systems is regularly checked in the background by the job `/XNFE/MDFE_CHECK_SRV_STATUS`. The results of the service status request are stored in the database table `/XNFE/MDFE_SRVSTA`. This table can grow rapidly to several million entries resulting in a significantly lower performance of the database. We provide a report to delete or archive no longer necessary service status results. The deletion is realized with the report `/XNFE/MDFE_SRV_DB_DELETE`. The customer can decide to delete the status results using this report, or archive the results using the archiving report.

Download XML Files [page 532]

DF-e Distribution Request Monitor [page 532]

9.1.1 Download XML Files

You have 5 different options for XML download. Each option has scenario-specific search options:

- *Inbound NF-es*
- *Inbound NF-es (Release 1.0)*
- *Outbound NF-es*

  > **Note**
  >
  > This option includes NF-es in layout 2.00 and higher layout versions.

- *Inbound CT-es*
- *Outbound CT-es*
- *Outbound MDF-es*

Use the action *Download XML Data* to create a `ZIP` file that contains the XML files that you specified in your search request. If the electronic document (Inbound and Outbound) contains events, then their respective XML files are automatically added to the `ZIP` file.

If certain data for a document is not accessible, then the respective access keys are listed in a table for manual error correction.

> **Caution**
>
> The XML download application reads the selected search criteria from the database as well as from the archive (if existing).

9.1.2 DF-e Distribution Request Monitor

This monitor displays the result of the communication between the NFE system and the web service to retrieve a list of NF-es/CT-es issued for one of your CNPJs from the National Environment. The web service is

called via a batch job, for more information see Query Documents (NF-e) from Authority [page 78] and Query Documents (CT-e) from Authority [page 83]. The status of every entry in the monitor indicates whether the communication with the National Environment was successful.

List

Based on your selection criteria, the *DF-e Distribution Request Monitor* displays a list of list requests and their processing status.

The following status icons are used:

- Processing Completed Error-Free with the following SEFAZ status codes:
  - 137 -> No documents available for CNPJ
  - 138 -> Documents available for CNPJ
- Processing Completed with Error
  This error is either due to communication error or a negative status code from SEFAZ.

> **Note**
>
> All fields in SAP NFE that display a point in time, display a value converted to the local date and time of the user.

The field *Highest Authority Index* describes the highest available index in the government systems.

The field *Last Authority Index* describes the latest returned index. When the last returned index equals the highest index, then no further documents are available.

Navigation

You can access the *DF-e Distribution Request Monitor* in SAP NFE by calling up the *DF-e Distribution Request Monitor* in the *Administration* menu.

9.2 Archiving in SAP Electronic Invoicing for Brazil (SAP Nota Fiscal Eletrônica)

Why Archive?

Archiving data from the production database makes the production database faster as it is carrying less unproductive data. Searching archived documents is possible via the provided monitors (see table below). From there it is possible to open archived documents in the standard SAP NFE UIs in display mode, as if they were in the production database.

Archiving Dependent Objects

The system archives charge information, address information, or information from texts or attachments when you archive a business object. It also archives other objects that are used in business objects for tendering. It does not archive master data objects in general (with the exception of business partner master).

Index Criteria

You can specify database indexes to enable a query to search for data records efficiently. Ideally, you should have no more than 8 indexes defined for a database table; otherwise the performance of the query decreases. The database indexes in SAP NFE improve the performance of active business queries, and not archiving queries. For example, you usually do not search the database table for a product ID in forwarding order items for business reasons. For this reason, we do not provide database indexes for archiving. The system in general performs a full table scan during preprocessing.

You can use transaction AOBJ to create archiving objects. You can specify archiving objects for preprocessing, writing, and deleting activities. For more information, see Customizing for SAP NetWeaver under *Application Server* > *System Administration* > *Data Archiving* > *Archiving Object-Specific Customizing*. Archiving for SAP Nota Fiscal Eletrônica is carried out with the help of archiving objects. The following table gives an overview of the available archiving objects and respective monitors:

Objects in NFE	Archiving Object	Monitor
Archive Outbound NF-es for Layout 2.00 [page 536]	/XNFE/NFE	NF-e 2.00: Monitor for Archived Outbound NF-es
Archive Outbound NF-es for Layout 3.10+ [page 536]	/XNFE/ONFE	Monitor for Archived Outbound NF-es
NF-e Batch for Layout 2.00 [page 537]	/XNFE/BAT	Display via archiving transactions
Archive Batches for NF-e, CT-e, MDF-e, Events [page 538]	/XNFE/BATC	Display via archiving transactions
Archive Inbound NF-es [page 539]	/XNFE/INNF	NF-e Fiscal Workplace for archived NF-es
Archive Outbound CT-es [page 539]	/XNFE/CTE	CT-e Monitor for archived CT-es
Archive Inbound CT-es [page 540]	/XNFE/INCT	CT-e Fiscal Workplace for archived CT-es
Archive Outbound MDF-es [page 541]	/XNFE/MDFE	Monitor for Archived Outbound MDF-es

> **Note**
>
> Events do not have an own archiving object. They are archived together with the corresponding main object (NF-e/CT-e/MDF-e). The used archiving class is /XNFE/EVENT.

You can also extend these standard archiving objects to suit your own business requirements. You can specify the database tables from which the system archives the information for the archiving object.

You can use transaction SARA to schedule when the system executes the preprocessing, writing, and deleting activities for an archiving object. For more information, see *SAP Easy Access* > *Tools* > *Administration* > *SARA - Data Archiving*. You can use the following features in transaction SARA:

- Writing
  The system selects all instances of a business object that have the archiving status *Archiving in Process*. It copies the instances into the archive. You can control the memory used during writing in the same way as for preprocessing.
- Deleting
  The system deletes all records that are archived from the registered database tables.
- Deleting from Archive
  All SAP NFE archiving objects are ILM-enabled. For more information about SAP Information Lifecycle Management (SAP ILM), see https://help.sap.com/viewer/p/SAP_INFORMATION_LIFECYCLE_MANAGEMENT.

You can load archived documents into the standard SAP NFE Monitors. The system uses only the display mode for these archived documents. We provide each business object in SAP NFE with the following settings:

- Individual archiving object
- Archiving status: Statuses include *Not Archived*, *Archiving in Process*, and *Archived*.
- `CHECK_ARCHIVABILITY` action
- Programs for each of the preprocessing, write, and delete steps
- Individual query to select business objects for the preprocessing step
- POWL for archived documents

More Information

For more information about the Archive Information System, see SAP Library for *SAP NetWeaver* on SAP Help Portal at http://help.sap.com/nw. Under Application Help for *Function-Oriented View*, open SAP Library and choose *Solution Life Cycle Management* > *Data Archiving* > *Data Archiving in the ABAP Application System* > *Data Archiving with Archive Development Kit (ADK)* > *Archive Information System*.

For more information about tables and archiving objects, see SAP Library for *SAP NetWeaver* on SAP Help Portal at http://help.sap.com/nw. Under Application Help for *Function-Oriented View*, open SAP Library and choose *Solution Life Cycle Management* > *Data Archiving* > *Data Archiving in the ABAP Application System* > *Data Archiving with Archive Development Kit (ADK)* > *Archive Administration* > *Tables and Archiving Objects*.

Archive Outbound NF-es for Layout 2.00 [page 536]

Archive Outbound NF-es for Layout 3.10+ [page 536]

NF-e Batch for Layout 2.00 [page 537]

Archive Batches for NF-e, CT-e, MDF-e, Events [page 538]

Archive Inbound NF-es [page 539]

Archive Outbound CT-es [page 539]

Archive Inbound CT-es [page 540]

Archive Outbound MDF-es [page 541]

9.2.1 Archive Outbound NF-es for Layout 2.00

Definition

You can use the archiving object `/XNFE/NFE` to archive and delete Outbound NF-es for Layout 2.00.

Structure

Tables

SAP NFE uses the archiving object `/XNFE/NFE` to archive all Outbound NF-e related data (such as database tables `/XNFE//NFEHD`, also for events). For more detailed information, see transaction `AOBJ` in your system for all related database tables.

Programs

The following programs are available for `/XNFE/NFE`:

Program	Function
`/XNFE/NFE_ARCHIVE_WRITE`	*Write*
`/XNFE/NFE_ARCHIVE_DELETE`	*Delete*
`/XNFE/NFE_ARCHIVE_RELOAD`	*Reload*

9.2.2 Archive Outbound NF-es for Layout 3.10+

Definition

You can use the archiving object `/XNFE/ONFE` to archive and delete Outbound NF-es for Layout 3.10+.

Structure

Tables

SAP NFE uses the archiving object /XNFE/ONFE to archive all Outbound NF-e related data (such as database tables /XNFE/OUTNFEHD, also for events). For more detailed information, see transaction AOBJ in your system for all related database tables.

Programs

The following programs are available for /XNFE/ONFE:

Program	Function
/XNFE/OUTNFE_ARCHIVE_WRITE	*Write*
/XNFE/OUTNFE_ARCHIVE_DELETE	*Delete*
/XNFE/OUTNFE_ARCHIVE_RELOAD	*Reload*

Prerequisites for Writing Outbound NF-es for Layout 3.10+

If the following prerequisites are met, the system can archive an Outbound NF-e for Layout 3.10+:

- The document adheres to the selection criteria.
- The document has the status 88 - *Process Completed; Document Rejected*.
- The document has the status 89 - *Process Completed; Document Denied*.
- The document has the status 99 - *Process Completed; Document Successfully Processed*.

9.2.3 NF-e Batch for Layout 2.00

Definition

You can use the archiving object /XNFE/BAT to archive and delete Outbound NF-e batches for Layout 2.00.

Structure

Tables

SAP NFE uses the archiving object /XNFE/BAT to archive all Outbound NF-e batch related data (such as database tables /XNFE/BATSTA, also for events). For more detailed information, see transaction AOBJ in your system for all related database tables.

Programs

The following programs are available for /XNFE/BAT:

Program	Function
/XNFE/BAT_ARCHIVE_WRITE	*Write*
/XNFE/BAT_ARCHIVE_DELETE	*Delete*
/XNFE/BAT_ARCHIVE_RELOAD	*Reload*

9.2.4 Archive Batches for NF-e, CT-e, MDF-e, Events

Definition

You can use the archiving object /XNFE/BATC to archive and delete Outbound batches for NF-es (Layout 3.10+), CT-es, MDF-es and Events.

Structure

Tables

SAP NFE uses the archiving object /XNFE/BATC to archive all Outbound batch related data for NF-es (Layout 3.10+)/CT-es/MDF-es/Events (such as database table /XNFE/BATCHHD). For more detailed information, see transaction AOBJ in your system for all related database tables.

Programs

The following programs are available for /XNFE/BATC:

Program	Function
/XNFE/BATCH_ARCHIVE_WRITE	*Write*
/XNFE/BATCH_ARCHIVE_DELETE	*Delete*
/XNFE/BATCH_ARCHIVE_RELOAD	*Reload*

9.2.5 Archive Inbound NF-es

Definition

You can use the archiving object `/XNFE/INNF` to archive and delete Inbound NF-es.

Structure

Tables

SAP NFE uses the archiving object `/XNFE/INNF` to archive all Inbound NF-e related data (such as database tables `/XNFE/INNFEHD`, also for events). For more detailed information, see transaction `AOBJ` in your system for all related database tables.

Programs

The following programs are available for `/XNFE/INNF`:

Program	Function
`/XNFE/INNFE_ARCHIVE_WRITE`	*Write*
`/XNFE/INNFE_ARCHIVE_DELETE`	*Delete*
`/XNFE/INNFE_ARCHIVE_RELOAD`	*Reload*

Prerequisites for Writing Inbound NF-es

If the following prerequisites are met, the system can archive an Inbound NF-e:

- The document adheres to the selection criteria.
- The document has the status `89` - *Process Completed; Document Rejected*.
- The document has the status `98` - *Process Completed; Document Manually Processed*.
- The document has the status `99` - *Process Completed; Document Successfully Processed*.

9.2.6 Archive Outbound CT-es

Definition

You can use the archiving object `/XNFE/CTE` to archive and delete Outbound CT-es.

Structure

Tables

SAP NFE uses the archiving object /XNFE/CTE to archive all Outbound CT-e related data (such as database tables /XNFE/OUTCTEHD, also for events). For more detailed information, see transaction AOBJ in your system for all related database tables..

Programs

The following programs are available for /XNFE/CTE:

Program	Function
/XNFE/CTE_ARCHIVE_WRITE	*Write*
/XNFE/CTE_ARCHIVE_DELETE	*Delete*
/XNFE/CTE_ARCHIVE_RELOAD	*Reload*

Prerequisites for Writing Outbound CT-es

If the following prerequisites are met, the system can archive an Outbound CT-e:

- The document adheres to the selection criteria.
- The document has the status 88 - *Process Completed; Document Rejected*.
- The document has the status 89 - *Process Completed; Document Denied*.
- The document has the status 99 - *Process Completed; Document Successfully Processed*.

9.2.7 Archive Inbound CT-es

Definition

You can use the archiving object /XNFE/INCT to archive and delete Inbound CT-es.

Structure

Tables

SAP NFE uses the archiving object /XNFE/INCT to archive all Inbound CT-e related data (such as database tables /XNFE/INCTEHD, also for events). For more detailed information, see transaction AOBJ in your system for all related database tables.

Programs

The following programs are available for /XNFE/INCT:

Program	Function
/XNFE/INCTE_ARCHIVE_WRITE	*Write*
/XNFE/INCTE_ARCHIVE_DELETE	*Delete*
/XNFE/INCTE_ARCHIVE_RELOAD	*Reload*

Prerequisites for Writing Inbound CT-es

If the following prerequisites are met, the system can archive an Inbound CT-e:

- The document adheres to the selection criteria.
- The document has the status 89 - *Process Completed; Document Denied*.
- The document has the status 98 - *Process Completed; Document Manually Processed*.
- The document has the status 99 - *Process Completed; Document Successfully Processed*.

9.2.8 Archive Outbound MDF-es

Definition

You can use the archiving object /XNFE/MDFE to archive and delete Outbound CT-es.

Structure

Tables

SAP NFE uses the archiving object /XNFE/MDFE to archive all Outbound MDF-e related data (such as database tables /XNFE/OUTMDFHD, also for events). For more detailed information, see transaction AOBJ in your system for all related database tables.

Programs

The following programs are available for /XNFE/MDFE:

Program	Function
/XNFE/OUTMDFE_ARCHIVE_WRITE	*Write*
/XNFE/OUTMDFE_ARCHIVE_DELETE	*Delete*

Program	Function
/XNFE/OUTMDFE_ARCHIVE_RELOAD	*Reload*

Prerequisites for Writing Outbound MDF-es

If the following prerequisites are met, the system can archive an Outbound MDF-e:

- The document adheres to the selection criteria.
- The document has the status 88 - *Process Completed; Document Rejected*.
- The document has the status 89 - *Process Completed; Document Denied*.
- The document has the status 97 - *Process completed; Processing in Feeder System Completed*.
- The document has the status 98 - *Process Completed; Document Manually Processed*.
- The document has the status 99 - *Process Completed; Document Successfully Processed*.

9.3 UI Configuration

The POWL (Personal Object Work List) offers central, personalized access to all relevant work lists. You can display the number of business objects per work list on the overview screen and can therefore handle a great number of work lists, business objects, and documents. You can configure the UI of SAP NFE according to your needs. The main configuration settings can be applied using the following actions on the UI:

- **Change Query**
  The *Change Query* action enables you to search using all available selection criteria for the current query. You can limit the search results by specifying the available characteristics. The action *Criteria Personalization* enables the user to add search criteria to the *Quick Search Criteria*. These are then displayed directly above the result list.

  > → Recommendation
  >
  > We recommend maintaining *Quick Criteria* due to performance reasons. For example, if a user is only working with a certain CNPJ, then that CNPJ can be defined as limiting factor.

- **Define New Query**
  You have to define your new query in three steps:
  1. Select object type
     The available values are predefined by the NFE application and depend on the type of the monitor.
  2. Maintain Criteria
     This is done as described in action *Change Query*.
  3. Finish
     You can optionally assign the query to a new or already existing category. The query has to be activated before you can use it.

  > → Recommendation
  >
  > We recommend maintaining *Quick Criteria* due to performance reasons. For example, if a user is only working with a certain CNPJ, then that CNPJ can be defined as limiting factor.

- **Personalize**
  This action enables the user to maintain all available queries. This includes activating and deactivating queries and deletion of inactive self-defined queries. In addition, in the Layout tab you can switch between different display options of the POWL queries.
- View
  This action enables the user to switch between the standard ALV view and a personalized view.
- Filter
  This action enables the user to filter a specific column of the list.
- Settings
  This action enables the user to personalize the list display. For example: You can add hidden columns to the standard list display and save your changes in a personalized view.
- Refresh
  This action executes a search for the given search criteria for the current query.
- Refresh All
  This action executes a search for the given search criteria for all active queries.

> ⚠ Caution
>
> A POWL authorization is prerequisite for most of the listed actions. If you do not have this authorization, you only have access to a limited subset of all available actions.

9.4 Operation Information

This section provides a starting point for managing your SAP solutions and keeping them up and running optimally. You can use this section in connection with other sources of information such as the *Master Guide*, the *Technical Operations Manual for SAP NetWeaver*, and the SAP Library. The following NetWeaver documentation is especially important, as it covers topics specific to SAP Nota Fiscal Eletrônica (SAP NFE).

Starting and Stopping the SAP NFE application

See *Starting and Stopping the System* in the *Technical Operations Manual for SAP NetWeaver* in SAP Library (https://help.sap.com/viewer/p/SAP_NETWEAVER_702) under *SAP NetWeaver 7.0 including Enhancement Package 2* > *System Administration* > *Technical Operations Manual* > *Administration of SAP NetWeaver Systems* > *AS ABAP (Application Server for ABAP)* > *Management*.

Periodic Tasks

For more information about standard background jobs and periodic tasks for SAP NetWeaver components, see the *Technical Operations Manual for SAP NetWeaver* in SAP Library (https://help.sap.com/viewer/ff5a1fb46c551014a931890caa648c6a/7.02.20/en-US/480dd91ad6013d1be10000000a42189d.html) under *SAP NetWeaver 7.0 including Enhancement Package 2* > *System Administration* > *Technical Operations Manual* > *Administration of SAP NetWeaver Systems* > *Administration* > *Background Processing*.

Scheduled Periodic Tasks for SAP NetWeaver 7.0 EHP2 SP06

Required Manual Periodic Tasks for SAP NFE:

See NF-e Batch Job Planning (Outbound) [page 93], CT-e Batch Job Planning (Outbound) [page 99], MDF-e Batch Job Planning (Outbound) [page 105], and Event Batch Job Planning [page 122].

Application Maintenance Concept/Software Change Management

The goal of Software Change Management is to establish consistent, solution-wide change management that allows for specific maintenance procedures, global rollouts (including localizations), and open integration with third-party products. SAP Nota Fiscal Eletrônica and its component SLL-NFE are based on SAP NetWeaver Application Server ABAP 7.0 of SAP NetWeaver 7.0 EHP2 SP06. You can find information about the Software Change Management in the relevant document section of the *Technical Operations Manual for SAP NetWeaver* in SAP Library under *SAP NetWeaver 7.0 Including Enhancement Package 2* > *System Administration* > *Technical Operations Manual* > *Administration of SAP NetWeaver Systems* > *AS ABAP (Application Server for ABAP)* > *Software Logistics*. The following topics are covered in the SAP NetWeaver document:

Transport and Change Management

Development Request and Development Release Management

Support Packages and SAP Notes Implementation

Release and Upgrade Management

Quality Management and Test Management

Template Management

Concept for Handling Customer Development/Transport and Change Management

SAP NetWeaver includes the Change and Transport System (CTS) tool that helps you to organize development projects in the ABAP Workbench and in Customizing, and then transport the changes between the SAP Systems in your system landscape.

For more information, see the Technical Operations Manual for SAP NetWeaver in SAP Library under http://help.sap.com/nw702 > *SAP NetWeaver 7.0 including Enhancement Package 2* > *System Administration* > *Technical Operations Manual* > *Administration of SAP NetWeaver Systems* > *AS ABAP (Application Server for ABAP)* > *Software Logistics* > *Transport and Change Management* and *SAP NetWeaver 7.0 including Enhancement Package 2* > *Functional View* > *SAP NetWeaver by Key Capability* > *Solution Life Cycle Management by Key Capability* > *Software Life Cycle Management* > *Software Logistics* > *Change and Transport System*.

Development Requests and Development Release Management

The transport workflow provides a framework for transporting enhancements or new developments of existing business functions in a system landscape. It manages the transport process, determines the user for each individual step automatically, and then displays an interface that they can use to perform the task directly.

For more information, see the *Technical Operations Manual for SAP NetWeaver* in SAP Library under http://help.sap.com/nw702 > *SAP NetWeaver 7.0 including Enhancement Package 2* > *System Administration* > *Technical Operations Manual* > *Administration of SAP NetWeaver Systems* > *AS ABAP (Application Server for ABAP)* > *Software Logistics* > *Releasing Software Changes and Quality Management*.

Support Packages and SAP Notes Implementation

Information about the Support Packages (SPs) available for SAP NFE can be found in the *Schedules for Maintenance Deliveries* on SAP Support Portal under https://support.sap.com/en/release-upgrade-maintenance/maintenance-information/schedules-for-maintenance-deliveries.html.

Support Packages for components based on the SAP NetWeaver Application Server ABAP 7.0 EHP2 SP06 are applied using the Support Package Manager. For more information, see the *Technical Operations Manual for SAP NetWeaver* in SAP Library at http://help.sap.com/nw702 ▶ *SAP NetWeaver 7.0 including Enhancement Package 2* ▶ *System Administration* ▶ *Technical Operations Manual* ▶.

Detailed instructions about applying a Support Package Stack to SAP NetWeaver are given in the *Support Package Stack Guide for SAP NetWeaver 7.0 EHP2 SP06*, found on SAP Help Portal under ▶ *EHP2 SPS06* ▶ *Support Package Stack Guide* ▶.

SAP Notes that require code changes for components based on SAP NetWeaver Application Server ABAP 7.0 EHP2 SP06 can be applied using the *SAP Note Assistant*. For more information, see the documentation in SAP Library under ▶ *SAP NetWeaver 7.0 including Enhancement Package 2* ▶ *Functional View* ▶ *SAP NetWeaver by Key Capability* ▶ *Solution Life Cycle Management by Key Capability* ▶ *Software Life Cycle Management* ▶ *Software Maintenance* ▶ *Note Assistant* ▶.

Release and Upgrade Management

You can check which components are installed in your system by logging on to your SAP NFE and selecting from the menu options ▶ *System* ▶ *Status* ▶. For more information about release and upgrade options or plans for SAP NFE, see https://support.sap.com/pam.

Quality and Test Management

You can test interfaces with the test workbench for SAP NetWeaver Application Server (ABAP). For more information, see the documentation in SAP Library under ▶ *SAP NetWeaver 7.0 including Enhancement Package 2* ▶ *Functional View* ▶ *SAP NetWeaver by Key Capability* ▶ *Solution Life Cycle Management by Key Capability* ▶ *Testing* ▶.

Troubleshooting

In case of problems, see SAP Library under ▶ *SAP NetWeaver 7.0 including Enhancement Package 2 SP06* ▶ *System Administration* ▶ *Technical Operations Manual* ▶ *General Administration Tasks* ▶ *Troubleshooting for SAP Web Application Server* ▶.

The *SAP NetWeaver Problem Analysis Guide* contains the following problem analysis scenarios for the various components of usage type *Application Server*:

Security Problem Analysis Scenarios

Adobe Document Services Problem Analysis Scenarios

System Landscape Directory Problem Analysis Scenarios

Process Monitoring Infrastructure Problem Analysis Scenarios

SAP Knowledge Warehouse Problem Analysis Scenarios

Change Management Server Problem Analysis Scenarios

Design Time Repository Problem Analysis Scenarios

For more information about problem analysis and troubleshooting for all SAP NetWeaver Usage Types, see the SAP NetWeaver Problem Analysis Guide (PAG) in the SAP Library under ▶ *SAP NetWeaver 7.0 including Enhancement Package 2* ▶ *Functional View* ▶ *SAP NetWeaver by Key Capability* ▶ *Solution Lifecycle Management by Key Capability* ▶ *SAP NetWeaver PAG* ▶ *Usage Type Application Server ABAP* ▶

Backup/Restore and Recovery

To ensure that you can restore and recover your system in case of failure, you should back up your system landscape regularly. The backup and restore procedure for SAP NFE as an add-on is identical to that for SAP NetWeaver 7.0 EHP2 SP06 on which SAP NFE is installed. For more information about the following topics see the relevant section in the *Technical Operations Manual for SAP NetWeaver* in SAP Library under *SAP NetWeaver 7.0 including Enhancement Package 2* > *System Administration* > *Technical Operations Manual*

For *Backup and Recovery*, see section *Administration of SAP NetWeaver Systems* > *AS ABAP (Application Server for ABAP)* > *Administration → Backup and Recovery*

For *High Availability*, see the *General Administration Tasks* section.

The backup and restore process for your system landscape should not consider only SAP systems. It should be embedded in your overall business requirements and take into account the overall process flow of your company.

Support Desk Management

Support Desk Management enables you to set up an efficient internal support desk for your support organization that integrates your users, internal support employees, partners, and SAP Active Global Support specialists with an efficient problem resolution procedure.

Remote Support Setup

SAP support uses a remote connection with SAProuter to address the specific problems that you log by creating a customer message in the SAP Support Portal. For information about SAProuter, see SAP Note 486688. SAP Note 812386 provides further assistance. Refer also to https://support.sap.com/remoteconnection.

Problem Message Handover

For sending problem messages or tickets to SAP, use components SLL-NFE* and provide a detailed problem description.

Services for SAP NFE

SAP NFE offers the following safeguarding and solution management services to optimize your implementation project:

Solution Management Assessment (SMA)

The *SAP Solution Management Assessment* maps your solution landscape and your core business processes. It identifies weak points and the impact they have on your core business processes, and recommends solutions.

GoingLive Check

The *SAP GoingLive Check* helps you manage technical risk to ensure optimal performance, availability, and maintainability of SAP NFE. You can use it during a new implementation or when you experience a significant increase of data and user volume. It proactively analyzes your core business processes within your solution landscape to guide you to a smooth start of production and technically robust operations afterwards.

Early Watch Check

The *SAP Early Watch Check* analyzes the components of your SAP solution, your operating system, and database to determine how to optimize performance and keep your total cost of ownership to a minimum.

Technical Integration Check (TIC)

The technical integration check safeguards your implementation project from complications due to integration issues. It looks at the critical interfaces in your core business processes and makes sure they meet the requirements of SAP NFE in terms of availability, performance, maintainability, and data consistency.

Volume Test Optimization (VTO) package

With this package, SAP helps you optimize your test procedure and administration during the volume and stress test phase of a project. This service provides recommendations on how to improve your current test environment and how to effectively use latest SAP test technologies.

For more information about these services, see *SAP ActiveEmbedded* on SAP Support Portal at http://sapsupport.info/offerings/sap-activeembedded/.

Important SAP Notes

30289: *SAProuter documentation*

19227: *Get the latest saposcol*

209834: *CCMS agent technology*

BC SAP High Availability NW 7.0

This document provides a general discussion about high availability for the SAP NetWeaver Application Server. It is part of the standard SAP documentation package delivered with SAP NetWeaver Application Server. It deals comprehensively with safeguarding SAP NetWeaver Application Server system operation. You can find this document at https://help.sap.com/doc/erp2005_ehp_03/6.03/en-US/72/cd1e4261ea5433e10000000a155106/frameset.htm ▶ *Media Library* ▶ *Documentation* ▶ *HA Documentation* ▶.

Switchover

For information about switchover, see the information for infrastructure at https://help.sap.com/doc/erp2005_ehp_03/6.03/en-US/72/cd1e4261ea5433e10000000a155106/frameset.htm ▶ *Planning* ▶ *Technical Infrastructure Guide* ▶ *High Availability Support for Failover Clustering (HA)* ▶ *Switchover Units and the installation information* ▶.

▶ *Installation - SAP NetWeaver Systems* ▶ *SAP NetWeaver 70* ▶.

Installation Documentation: For information about specific switchover products, contact your hardware and switchover software vendor. If you have any questions about the integration of SAP NetWeaver Application Server with a specific switchover product, contact the Competence Centers of SAP's hardware partners in Walldorf, Germany

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