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# SAP Service Cloud Version 2, Add-On for Utilities

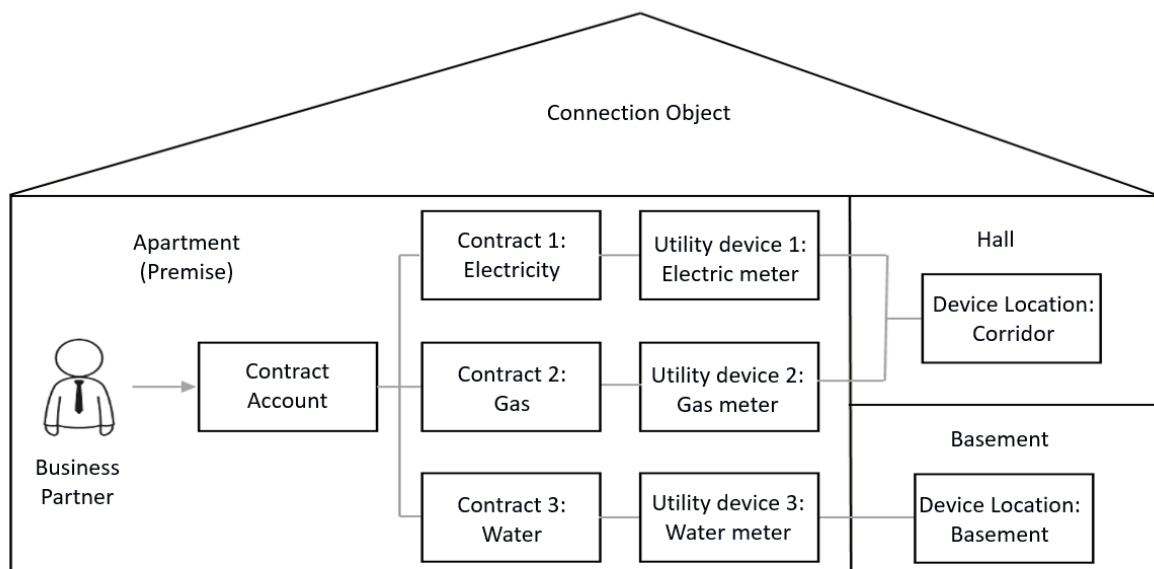
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# 1 Utilities

Utilities is an enterprise that provides certain classes of services to the public including Electricity, Gas, and Water for a business partner.



The focus is inclusive of the following utilities industry segments that classifies as sectors within the Utilities:

- Electricity- Includes the generation, trading, transmission, distribution, retail, metering, and customer care segments of electricity providers.
- Gas- Includes the distribution, metering, retail, and customer care segments of end-use natural gas providers.
- Water - Includes the supply, treatment, distribution, metering and customer care segments of water and waste water providers.

The solution helps you to optimize call center operations using modern customer engagement tools for service processes. The utilities are fully integrated SAP S/4 HANA and supports seamless transition between the different support channels.

## 1.1 Configure Utilities

As an administrator, you can configure [Utilities](#) in [System Settings](#).

Find [System Settings](#) in the user menu at the top right of the screen.

## 1.1.1 Configure General Settings

Configure all the settings for Utilities in this section.

1. To configure the meter reading table, navigate to ► [User Menu](#) ► [System Settings](#) ► [All Settings](#) ► [Utilities](#) ► [General Settings](#) ► [Settings](#) ►.
2. You can enable the following options based on your requirement:

| Option                       | Details                                                                                                                                          |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Meter Reading Table          | Turn on the switch for the expanded view of the meter reading table by default, in the <a href="#">Services</a> tab of <a href="#">Premise</a> . |
| Reconnect Terms & Conditions | Turn on the switch to view the terms and conditions when reconnecting the device.                                                                |
| Point of Delivery (POD)      | Turn on the switch to display the Point of Delivery tab and also Point of Delivery ID in the left panel of <a href="#">Premise</a> .             |

3. Choose [Save](#).

## 1.1.2 Configure Import of Code Lists

As an administrator, update all the code lists by importing the standard excel maintained in SAP S/4 HANA. You can export the codes from the SAP S/4 HANA using the **ISU\_C4C\_V2\_CODE\_LIST\_MAPPING** report. By default, the report supports codes 02, 09, and 10 for meter reading reasons.

### Procedure

1. Navigate to your user profile and select ► [System Settings](#) ► [All Settings](#) ► [Utilities](#) ► [General Settings](#) ►.
2. Choose [Browse File](#).
3. Select the excel file and choose [Import](#).

All the code lists are added to the respective collections.

#### Note

You can import code lists even without descriptions from SAP S/4 HANA. The code lists without descriptions display a hyphen.

## 1.1.3 Configure Dynamic Code List

Group the code list values based on the business processes.

### Context

This configuration is done to maintain the S/4 Code values in the admin screen.

Admin can add, edit, and delete any code value based on the business requirement.

### Procedure

1. Go to your user profile, navigate to ► [System Settings](#) ► [All Settings](#) ► [Entity](#) ►.
2. From the left pane, select the field you want to configure.
3. Use the ⊕ (Add) button to add a new field.
4. Enter Code and Description for the new field.
5. Click [Create](#) to save the changes.

You can edit the created code list using in-line edit option and view the changes in the [Changes](#) tab.

You can also delete a added entry by selecting the 🗑 (Delete) icon in the [Action](#) column and view them in the [Deletions](#) tab.

## 1.1.4 Configure Move Processes

As an administrator, configure various fields and parameters for the move process.

1. Navigate to ► [User Menu](#) ► [System Settings](#) ► [All Settings](#) ► [Utilities](#) ► [Move Processes](#) ► [General](#) ►.
1. In the list of options available, make the required updates.

Configuration Options in Move Processes

| Option         | Details                                                                                                                                                                                                                                                                    |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Date Threshold | <p>Set the date threshold for move processes to define how far in the past or future moves can be scheduled.</p> <p>For example, if the minimum is set to 10 days and the maximum to 40 days, users can select dates from 10 days before today to 40 days after today.</p> |
| Address Type   | <p>Select the default address type to be pre-selected when setting up a mailing address. You can choose from premise address, customer address mailing address, or PO box.</p>                                                                                             |

| Option           | Details                                                                                                                  |
|------------------|--------------------------------------------------------------------------------------------------------------------------|
| Country/Region   | Select the country/region to be pre-selected when setting up a mailing address.                                          |
| Currency         | Select the default currency from the drop-down.                                                                          |
| Contract Account | Select the default contract account for move processes. You can choose existing accounts or new accounts.                |
| Service          | Activate all the services in the move process by default by using the switch.                                            |
| Security Deposit | Choose to display the security deposit amount by default using the switch.                                               |
| Alerts           | Choose to display the alerts section by default when you open a move-in, move-out, or transfer process using the switch. |

2. Choose [Save](#).

## 1.1.5 Configure Terms & Conditions

As an administrator, configure the terms and condition for move processes according to your business needs.

### Procedure

1. Navigate to [User Menu](#) > [System Settings](#) > [All Settings](#) > [Utilities](#) > [Move Processes](#) > [Terms & Conditions](#).
2. Select [+ \(Add\)](#).
3. Enter the terms and conditions based on the requirement.
4. Click [Save](#).

## 1.2 Integrate with SAP S/4HANA

Integrate the SAP Service Cloud Version 2, Add-on for Utilities with SAP S/4HANA.

To perform an end-to-end integration of the solution with SAP S/4HANA, there are three steps involved.

1. Configuration in SAP Cloud Platform Integration
 

All the new and enhanced artifacts need to be upgraded to the latest available version.

To update the packages containing the new and enhanced iFlows,

  1. Go to your Cloud Integration tenant.
  2. From the left pane, choose [Design](#) > [Integrations and APIs](#).

- From the list of packages that appear, open the required package for utilities, and choose [Update package](#) on the top-right corner of the screen. The enhanced iFlows are automatically deployed if you have already deployed the initial version. For the new iFlows you must update the sender and receiver configuration details, and then deploy it.  
(Optional) If you want to update specific iFlows, select the iFlow from the relevant package, choose [⋮ \(Actions\)](#) , [Update](#) , and then [Deploy](#) .

#### Note

You must not make any updates to the standard package delivered by SAP. Doing this will lead to missing of auto-update of the integration package, and you can see an error message stating the failure of uniqueness check. For more details on the error, see [0003531297](#) .

- Configuration in SAP Service Cloud Version 2, Add-on for Utilities  
For all new features, you must update the communication configuration services.
- Configuration in SAP S/4HANA  
You must create bindings for all the new services in the SOAMANAGER transaction. You may have to re-create some of the bindings.  
After re-creating the bindings, you may encounter the following errors:
  - Error: Message "<message name>{urn:sap-com:document:sap:rfc:functions}" not supported (interface: "<interface name>" binding key: "<binding key>"),
  - Message "<message name>{urn:sap-com:document:sap:soap:functions:mc-style}" not supported (interface: "<interface name>" binding key: "<binding key>").You must then delete and re-create the binding.

## Related Information

[Extensibility](#)

[SAP Note 2818078](#) 

[Configuration in SAP Service Cloud Version 2](#)

[SAP S/4HANA Web Service Configuration \(SOA Management\)](#)

## 1.3 Implement SAP Notes

For every release of the SAP Service Cloud Version 2, Add-On for Utilities, you must implement some SAP notes.

This section covers information on the additional steps that you must follow while implementing the SAP Notes.

#### → Remember

- Ensure that all the notes from the previous releases are implemented in your system.
- While implementing the SAP note, do not alter the default selections in the objects list. Which means, you must not select or deselect any objects in the list.

### ❗ Posting Instructions

- Check if all the notes are implemented successfully.
- Ensure that the service definitions are adjusted in SE80 and activated.
- Capture all the transport requests for the modified services.

## Create Service Definitions

To create service definitions, do as follows:

1. Go to transaction SE80.
2. Select the appropriate *Function Group*.
3. Right-click *Create*, go to *Other Objects* and *Enterprise Service*.
4. Provide the *Service Definition Name* (same as *Function Group*).
5. Enter a suitable description.
6. Select the option *Map Names*.
7. Select all Function Modules shown.
8. Choose the options as per the dropdown.
9. Assign the package ISU\_C4C\_PROXY and a *Transport Request*.
10. Finish and activate.

## Add Service Operations or Function Modules to Service Definitions

To add an operation in the web service, do as follows:

1. Open the service.
  1. Go to transaction SE80.
  2. Navigate to the required service in the package ISU\_C4C\_PROXY and navigate to the service.
  3. Open it in the *Change* mode.
2. Switch to the *Internal View* tab of the selected service.
3. In the object navigator, right-click on the interface node. Note that interface names vary by service.
4. Add a new operation.
  1. Choose *Add* from the context menu.
  2. The *Function Group* is automatically derived from the service. You must not modify it.
5. Include the required function modules.
  1. Use the F4 Help on the function module field to view the available modules.
  2. Add any missing function modules that are not already listed under the interface.
  3. *Save* and *Activate* the service.

### ❗ Note

Ensure that the service is available for consumption in the relevant proxy or consumer setup.

To adjust the service definition, go to the [Systems](#) tab, select  and then . A popup message for [Service Adjustment](#) appears. Choose [Yes](#) and activate the service.

## Adjust Service Definition

To adjust or regenerate an existing service definition, do as follows:

1. Go to transaction code SE80.
2. Select object type as [Proxy](#) from the drop-down and provide the value as ISU\_C4C\_PROXY.
3. Expand the enterprise services node and expand [Service Definition](#).
4. Double click on the service you want to regenerate and select the [Service Definition](#).
5. Choose [Edit](#) and then [Syntax Check](#). In the dialog box that appears, choose [Yes](#) and then [Activate](#).

## Troubleshooting

When a service returns errors, execute the following reports:

- WS\_MANUAL\_WEBI\_AFTER\_IMPORT (enable force generation).
- WEBI\_CHECK\_REPAIR

### 1.3.1 SAP Notes (Current Release)

A list of SAP Notes need to be implemented to use the features released. Implement the notes in the same order as mentioned. You can follow the steps mentioned in the respective notes to use the features.

For the current release, you must implement all the SAP Notes consolidated in the SAP Note [3761109](#) .

### 1.3.2 SAP Notes (Previous Release)

A list of SAP Notes need to be implemented to use the features released. Implement the notes in the same order as mentioned. You can follow the steps mentioned in the respective notes to use the features.

## July 2026

Implement all the notes consolidated in [3776979](#) .

## June 2026

Implement all the notes consolidated in [3761109](#) .

## April 2026

Implement all the notes consolidated in [3749764](#) .

## March 2026

SAP Notes to be Implemented

| Order | SAP Note                                                                                                    | Details                                                                                                                      | Prerequisite Notes                                                                                          | iFlow Update | Package                                                                    | iFlow Name and Version                | Mandatory Additional Steps                                |
|-------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------|
| 1     | <a href="#">3725105</a>  | Mismatch in dunning records displayed and the actual count of dunning records for a contract account in SAP Service Cloud V2 | NA                                                                                                          | NA           | NA                                                                         | NA                                    |                                                           |
| 2     | <a href="#">3736653</a>  | Incorrect message while printing the welcome letter in the move-in process                                                   | NA                                                                                                          | NA           | NA                                                                         | NA                                    |                                                           |
| 3     | <a href="#">3717770</a>  | Enhancement points in move functionality                                                                                     | NA                                                                                                          | NA           | NA                                                                         | NA                                    |                                                           |
| 4     | <a href="#">3685098</a>  | Warning message displayed while updating communication details during move process                                           | <a href="#">3627051</a>  | Yes          | SAP Service Cloud V2 for Utilities<br>Premise Integration with SAP S/4HANA | GET MOVE (1.0.2), CREATE MOVE (1.0.4) | Service definition( ISU_C4C_V2_MOVE ) ADJUSTMENT REQUIRED |

| Order | SAP Note                                                                                                    | Details                                                                             | Prerequisite Notes                                                                                                                                                                                                                                                                                                                        | iFlow Update | Package                                                                          | iFlow Name and Version                      | Mandatory Additional Steps                                                               |
|-------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------|---------------------------------------------|------------------------------------------------------------------------------------------|
| 5     | <a href="#">3736778</a>    | Meter read history and register data displayed in improper sequence                 | <a href="#">3643556</a> <br><a href="#">3692888</a>                                                                                                                     | NA           | NA                                                                               |                                             |                                                                                          |
| 6     | <a href="#">3731439</a>    | Device location address not returned due to date format issue                       | NA                                                                                                                                                                                                                                                                                                                                        | NA           | NA                                                                               |                                             |                                                                                          |
| 7     | <a href="#">3737494</a>    | No list Available for Enhancement Points and Sections in SAP Cloud for Customer FMs | NA                                                                                                                                                                                                                                                                                                                                        | NA           | NA                                                                               |                                             |                                                                                          |
| 8     | <a href="#">3726385</a>  | SWIFT Key Not Passed in Contract Account Payment Data                               | <a href="#">3681432</a> <br><a href="#">3691975</a> <br><a href="#">3664153</a>  | Yes          | SAP Service Cloud V2 for Utilities Contract Account Integration with SAP S/4HANA | Get Payment Bank Details(1.0.1)             | Service Definition( ISU_C4C_V2_CA_PAYMENT_DATA) Adjustment required                      |
| 9     | <a href="#">3729203</a>  | IBAN Not Generated for Bank Account                                                 | <a href="#">3733152</a>                                                                                                                                                                                                                                | Yes          | SAP Service Cloud V2 for Utilities Contract Account Integration with SAP S/4HANA | Generate IBAN Based On Bank Details (1.0.0) | Add Operation(ISU_C4C_V2_IBAN_GENERATE) for the Service Definition(ISU_C4C_V2_BANK_DATA) |
| 10    | <a href="#">3731439</a>  | Device Location Address Not Returned Due to Date Format Issue                       | NA                                                                                                                                                                                                                                                                                                                                        | NA           |                                                                                  |                                             |                                                                                          |
| 11    | <a href="#">3737494</a>  | No List Available for Enhancement Points and Sections in C4C FMs                    | NA                                                                                                                                                                                                                                                                                                                                        | NA           |                                                                                  |                                             |                                                                                          |

| Order | SAP Note                                                                                                    | Details                                                                                                   | Prerequisite Notes                                                                                                                                                                                                                                                                                                                        | iFlow Update | Package                                                                          | iFlow Name and Version       | Mandatory Additional Steps                                                                           |
|-------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------|
| 12    | <a href="#">3733153</a>    | Get the history of ping request in AMI meter                                                              | <a href="#">3694054</a>                                                                                                                                                                                                                                  | Yes          | SAP Service Cloud V2 for Utilities<br>Premise Integration with SAP S/4HANA       | Get AMI Ping History(1.0.0)  | Add Opearation(ISU_C4C_V2_AMI_PIN_G_HIST_GET) for the Service Definition(ISU_C4C_V2_AMI_PIN_G)       |
| 13    | <a href="#">3730906</a>    | Contract account overview screen showing status as locked even when there is no lock on contract account. | <a href="#">3691733</a>                                                                                                                                                                                                                                  | NA           | NA                                                                               |                              |                                                                                                      |
| 14    | <a href="#">3717770</a>  | Adding relevant error message while editing bank data                                                     | <a href="#">3681432</a>                                                                                                                                                                                                                                | NA           | NA                                                                               |                              |                                                                                                      |
| 15    | <a href="#">3733152</a>  | Irrelevant error message appearing release reason and billing block                                       | <a href="#">3631992</a> <br><a href="#">3660710</a> <br><a href="#">3664153</a>  | Yes          | SAP Service Cloud V2 for Utilities Contract Account Integration with SAP S/4HANA | Update Billing Block (1.0.0) | Add Opearation(ISU_C4C_V2_CONTRACT_BILL_BLOCK) for the Service Definition(ISU_C4C_V2_CONTRACTS_GET ) |
| 16    | <a href="#">3733150</a>  | Providing relevant message if there are no locks present for contract account                             |                                                                                                                                                                                                                                                                                                                                           |              |                                                                                  |                              |                                                                                                      |

| Order | SAP Note                                                                                                  | Details                                                                | Prerequisite Notes                                                                                        | iFlow Update | Package                                                                    | iFlow Name and Version      | Mandatory Additional Steps                                              |
|-------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------|
| 17    | <a href="#">3733151</a>  | Providing sorting and pagination in BP security deposit                | <a href="#">3691716</a>  | Yes          | SAP Service Cloud V2 for Utilities<br>Premise Integration with SAP S/4HANA | Get Security Deposit(1.0.1) | Service Definition( ISU_C4 C_V2_BP_SECURITY_DEP)<br>Adjustment required |
| 18    | <a href="#">3653376</a>  | When you replicate PODs, blank spaces appear in the Premise ID column. | NA                                                                                                        |              |                                                                            |                             | Implement this note only if you are using POD functionality.            |
| 19    | <a href="#">3632284</a>  |                                                                        | NA                                                                                                        | NA           | NA                                                                         |                             |                                                                         |

### 1.3.3 SAP Notes (Older Releases)

A list of SAP Notes need to be implemented to use the features released for a specific release.

#### February 2026

SAP Notes to be Implemented

| Order | SAP Note                                                                                                    | Details                                                                           | iFlow Update | Package                                                                                             | iFlow Name and version                                                                                                        |
|-------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 1     | <a href="#">3714651</a>  | Remove leading zeros in Security Deposit                                          | NA           |                                                                                                     |                                                                                                                               |
| 2     | <a href="#">3714650</a>  | The disconnection activity and status are not appearing in the disconnection tab. | NA           |                                                                                                     |                                                                                                                               |
| 3     | <a href="#">3712828</a>  | Installment Plan – Remaining Open Amount Not Displayed Correctly                  | Yes          | SAP Service Cloud V2 for Utilities<br>Contract Account Integration with SAP S/4HANA (version 1.2.3) | <ul style="list-style-type: none"> <li>Get Installment Plan 1.1.4</li> <li>Get Installment Plan Type Details 1.1.1</li> </ul> |

| Order | SAP Note                                                                                                    | Details                                                                     | iFlow Update | Package                                                                                          | iFlow Name and version                                                                                        |
|-------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 4     | <a href="#">3712714</a>    | Contract account locks with different dates are deleted.                    | NA           |                                                                                                  |                                                                                                               |
| 5     | <a href="#">3712670</a>    | Duplicate records are sent in the POD payload from SAP S/4HANA.             | NA           |                                                                                                  |                                                                                                               |
| 6     | <a href="#">3710061</a>    | Payment Plan Amount Change Updates Already Invoiced Items                   | Yes          | SAP Service Cloud V2 for Utilities Contract Account Integration with SAP S/4HANA (version 1.2.3) | Edit Payment Plan 1.1.1                                                                                       |
| 7     | <a href="#">3706040</a>    | Incorrect Unit of Measure Displayed for Consumption                         | Yes          | SAP Service Cloud V2 for Utilities Premise Integration with SAP S/4HANA (version 1.2.2)          | <ul style="list-style-type: none"> <li>Get Premise Services 1.1.6</li> <li>Get Meter Reading 1.1.3</li> </ul> |
| 8     | <a href="#">3690714</a>  | Incorrect device status displayed at premise services and device quick view | Yes          | SAP Service Cloud V2 for Utilities Premise Integration with SAP S/4HANA (version 1.2.2)          | Get Device Details 1.0.3                                                                                      |

## Notes for Bank Data

SAP Notes to use Bank Data

| Order | SAP Note                                                                                                    | Details                                                                                                                                                                                                                                                                                                                                |
|-------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | <a href="#">3570297</a>  | Incoming and outgoing bank and credit card details in the left panel of contract accounts.                                                                                                                                                                                                                                             |
| 2     | <a href="#">3343911</a>  | Fetch and create bank details for customers.                                                                                                                                                                                                                                                                                           |
| 3     | <a href="#">3681432</a>  | SAP Service Cloud Version 2 Utilities: Bank Details in Contract Account.<br><br>Prerequisite Notes <a href="#">3570297</a>  , and <a href="#">3343911</a>  . |
| 4     | <a href="#">3691972</a>  | Service Cloud Version 2 Utilities: Contract Account Payment Data – Exit Options                                                                                                                                                                                                                                                        |

| Order | SAP Note                                                                                                  | Details                                                                        |
|-------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| 5     | <a href="#">3691975</a>  | Service Cloud Version2 Utilities: Utilities Payment Data – Service Definitions |

After implementing these notes, you must verify the following services:

New Service Definition: ISU\_C4C\_V2\_CA\_PAYMENT\_DATA

- ISU\_C4C\_V2\_CA\_PAYMENT\_DATA
- ISU\_C4C\_V2\_CA\_PAYMTHD\_UPDATE

Existing Service Definition: ISU\_C4C\_V2\_BANK\_DATA

- ISU\_C4C\_V2\_BANK\_CREATE – Existing Service Operation
- ISU\_C4C\_V2\_BANK\_DELETE – New Service Operation
- ISU\_C4C\_V2\_BANK\_GET – Existing Service Operation
- ISU\_C4C\_V2\_BANK\_CHANGE – New Service Operation

## Notes for Meter Reading, Dunning, and Billing Amounts

SAP Notes for actions in meter reading, dunning and billing amounts

| Order | SAP Note                                                                                                    | Details                                                                                                                                                                                                                                                           |
|-------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | <a href="#">3677508</a>  | Future dunning data not being displayed in the Contract account central tab                                                                                                                                                                                       |
| 2     | <a href="#">3677573</a>  | Actual and expected consumption value for meter readings are rounded to whole number                                                                                                                                                                              |
| 3     | <a href="#">3678732</a>  | Incorrect billing amount showed in the financial metrics of contract account<br><br>Prerequisite Note <a href="#">3431888</a>  to get the billing amount details for the CA. |
| 4     | <a href="#">3676682</a>  | Customers moved out because of a new move-in were shown as inactive.                                                                                                                                                                                              |

After implementing the SAP notes, you must adjust the Service Definition ISU\_C4C\_V2\_PREMISE\_BP.

## Notes for Locks, Code List Mapping, and Security Deposit

SAP Notes for actions in meter reading, dunning and billing amounts

| Order | SAP Note                                                                                                  | Details                                                                                                                                                                                                                                                                                                                      |
|-------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | <a href="#">3691715</a>  | Incorrect lock status is being displayed by the Get Contract.                                                                                                                                                                                                                                                                |
| 2     | <a href="#">3691716</a>  | No enhancement points available in ISU_C4C_V2_BP_SECURITY_DEP_GET.                                                                                                                                                                                                                                                           |
| 3     | <a href="#">3691733</a>  | Lock status is not being displayed in contract account. iFlow is mentioned in the note. The service needs to be adjusted as per attached document in note.<br><br>Prerequisite note <a href="#">3555616</a>                               |
| 4     | <a href="#">3691714</a>  | Adding new context fields into the code list mapping download utility.<br><br>Prerequisite notes <a href="#">3572538</a>  and <a href="#">3659632</a>  |
| 5     | <a href="#">3691720</a>  | To allow blank-value input for the Billing Reason and Release Reason.<br><br>Prerequisite note <a href="#">3664153</a>                                                                                                                  |

After implementing the notes, adjust the Service Definition ISU\_C4C\_V2\_CA\_OVERVIEW.

## Notes for Utilities Entities for Accounts and Individual Customers

Implement the SAP Note [3683175](#) .

You must then create a service definition ISU\_C4C\_V2\_BP\_UTIL\_DATA.

## Older Releases

Following is a list of notes and the additional actions needed for them.

- Locks and Active Contracts [3664153](#)   
After implementing the note, you must add the new service operations and function modules to the service definition as follows:
  1. Open transaction SE80.
  2. Navigate to the service definition ISU\_C4C\_V2\_CONTRACTS\_GET.
  3. Add the new service operations.
  4. Save and activate the service definition.
- Billing Document Creation and Details Services [3646536](#)   
There are no additional steps needed. Follow the standard steps of note implementation.  
This is a note from previous release. However, this is an updated note.

- Full reversal and adjustment reversal of Invoice [3674953](#)   
After implementing the note, you must add the new service operations and function modules to the service definition. Follow the instructions mentioned in the SAP Note to manually add the following new function modules to the existing service definitions.

Service Names and New Function Modules

| Service Name             | New Function Module to be Added |
|--------------------------|---------------------------------|
| ISU_C4C_V2_INVOICES      | ISU_C4C_V2_INVOICE_SUBSEQ_GET   |
| ISU_C4C_V2_BILL_DOCUMENT | ISU_C4C_V2_BILL_DOC_SUBSEQ_GET  |

You can ignore the warnings that appear when you add the function modules to services.

- Retrieve the disconnection document [3675062](#)   
There are no additional steps needed. Follow the standard steps of note implementation.
- Consider future date items [3675006](#)   
There are no additional steps needed. Follow the standard steps of note implementation.
- Installment Plan Amount Determination for Open and Due Items [3625979](#) 
  1. Open transaction **SE80**.
  2. Navigate to the service definition **ISU\_C4C\_V2\_INSTALLMENT\_PLAN**.
  3. Make the adjustments as mentioned in the SAP Note.
  4. Save and activate the service definition.
- Payment Plan Deactivation Status [3669455](#) 
  1. Implement the SAP Note [3400650](#)  and ensure it is successful.
  2. Open transaction **SE80**.
  3. Open the service definition **ISU\_C4C\_V2\_PAYMENT\_PLAN**.
  4. Make the adjustments as mentioned in the SAP Note.
  5. Save and activate the service.
- Code list for Disconnection Activity Status and Process Variant [3675547](#)   
Follow the instructions mentioned in the SAP Note for the manual activities.

## 1.4 Contract Account

In the contract account, you can store controlling data for long-term business relationships with a business partner.

This data controls processes in invoicing, contract accounts receivable and payable, and correspondence processing. You can define several contract accounts for each business partner.

All the contract accounts within the application appear in a list view. Use the search and filter options to choose the relevant contract account. For more information on filters, see [Create and Organize Filters](#).

You can import and export the contract account details to a **CSV** or **Excel** file in **Data Import and Export** via **Settings**.

### Note

The search option is available only for the following fields:

- Contract Account ID
- Contract Account External ID
- Contract Account Name
- Collective Contract Account External ID
- Collective Contract Account Name

## Quick View

You can launch the contract account quick view by clicking the [Contract Account External ID](#) and view the key information regarding contract account prior opening in the detail view.

On quick view screen, you can view the following information:

- **Header:** Shows Contract Account Name, ID, Incoming Payment Method, and Contract Account Category.
- **Security Deposit:** Shows the deposit amount due and the paid by the customer.
- **Collective Contract Account:** Shows collective contract account tied to the contract account.
- **Premise:** Shows all the premise associated with the contract account.
- **General Information:** Shows other information such as Category, Account Determination ID, and so on for the contract account.

Click an contract account, to open the detailed view, where you can get a glance of all the important details

### 1.4.1 Header Pane

The header pane provides the basic information of the contract account in the left panel.

The information are displayed in the sections such as:

[General](#): View more information about the contract account.

- [Alerts](#): Shows the list of alerts specific to the premise. These alerts are from external systems that are integrated to SAP Sales and Service Cloud V2 and are categorized based on priority.
- [Financials](#): Shows the following details of the contract account:
  - **Amount Due:** Sum of all unpaid invoices for which the due date has elapsed.
  - **Open and Payable:** Total amount the business partner owes to the utility company with respect to the opened contract account.
  - **Payment:** Latest posted payment amount and respective posting date.
  - **Scheduled Payment:** Next scheduled payment date and payment amount.
- [Customer Information](#): Shows the Customer name, External ID and Credit Worthiness details of the contract account. If the customer has provided their email ID and phone number, they can make calls and send emails. If these details are missing, the options will be grayed out.
- [Collective Contract Account](#): Appears only when the contract account opened has a collective contract account tied to it. This section display the collective contract account ID, name, type and payment method.
- [Security Deposit](#): Shows the total amount requested/due from the customer and the amount of deposit paid by the customer.

- **Invoice Delivery Method:** Choose your preferred **Invoice Delivery Method** to deliver the invoices created in the contract account.
- **Fixed Address:** Select/edit from the standard address of business partner to add it as a fixed address for the contract account.
- **Premises:** Shows all the premises associated with the contract account which have active contract.
- **Creditworthiness:** Shows the creditworthiness score which refers to the evaluation of a business partner's payment history and financial risk. You can also view the history.

#### **Note**

- To enable the fixed address and invoice delivery method fields in the left panel for synchronous services, configure them through communication management in the settings.
- If contract account replication hasn't occurred after the upgrade, the updated fields will display the old record data type until replication in SAP S/4HANA system is done.
- All the standard fields in the General section of contract accounts left panel are listed in the default order. After the release in June 2026, all previous customizations specific to the **General** section must be reapplied.

**Timeline:** View the latest financial transactions for the opened contract account.

Date, time and the document details such as **Amount**, **Origin Text**, **Posting Date**, **Due Date**, and **Invoice Document ID** are available in the table.

You can also search using the document ID available in basic search option.

## **Related Information**

[Make Outbound Phone Calls](#)

## **1.4.2 Create Contract Accounts**

Create contract accounts from SAP Service Cloud V2 by using mashups.

### **Context**

To create a contract account in SAP Service Cloud V2, you must use a HTML mashup that links to the S/4 HANA system. You can invoke this mashup anywhere in the SAP Service Cloud V2 system. However, we recommend you add this mashup as a new workspace on the navigation menu.

Ensure that a connection is established between SAP Service Cloud V2 and SAP S/4 HANA.

## Procedure

1. Get the S/4 HANA target system's URL using the steps below:
  - a. Log into your SAP system and enter the transaction SICF.
  - b. Navigate to `/default_host/sap/bc/gui/sap/its/webgui`. You can also use the search function in SICF to locate it quickly.
  - c. If the service is inactive, right-click the service and select [Activate Service](#).
  - d. Right-click the service again and select [Test Service](#). A browser window opens, displaying a URL.
  - e. Copy the URL and modify it by appending the following parameters:

`swift`

`CopyEdit`

`/sap/bc/gui/sap/its/webgui?sap-client=<your_client>&sap-language=EN&-transaction=CAA1`

- f. Replace `<your_client>` with your SAP Client Number.
2. Create a mashup of the type [HTML](#) and enter the URL obtained.
  3. Add the mashup as a workspace.
  4. Add the service and application to the business role for which you want to allow creation of contract accounts.
  5. Go to the new workspace, enter the user name, password the first time you log into the system.
  6. In the screen that appears, enter the contract account name and provide a reference if available.
  7. Save the contract account.

## Results

This account is now created in the SAP S/4 HANA system and is available in the list of contract accounts in SAP Service Cloud V2.

## Related Information

[Create HTML Mashups](#)

### 1.4.3 Central

This tab displays cards pertaining to the contract account.

The cards are as follows:

1. [Open Items](#): The unpaid items for a billing document are grouped and displayed for each contract account. The Time slice shows the total open amount due against the range. Future due shows the open items with due dates in the future. 0-30 days range shows the amount due in the last 30 days from today's date. In

similar way 30-60 days range shows for last 30- 60 days, 60+ days range shows the rest of the total open amount due.

Click the [Make Payment](#) option to make a one time payment with the existing or new bank account.

2. [Budget Billing](#): Shows the upcoming due amount along the start and end date of the budget billing plan. The graphical view displays the number of plan items that are in **Open** and **Closed** status.
  - **Open**: The billing plan item does not have a clearing document
  - **Closed**: The billing plan item have a clearing document and clearing status

Also you can create the plan using + ([Create](#)) icon.

3. [Disconnection Documents](#): Shows the three most recent disconnection documents for the premise.

#### Note

This card is hidden by default. You must enable it via extensibility.

4. [Payment Plan](#): Shows the upcoming due amount along with the due date and the current difference value. The graphical representation displays the active payment plan amounts of all the contracts along with their corresponding consumption values in a stacked format. The average consumption of all the contracts are represented in a dotted line. Also you can create the plan using + ([Create](#)) icon.

#### Note

Either budget billing or payment plan is displayed on contract account budget billing procedure.

5. [Installment Plan](#): Shows the Latest Active Installment Plan in a pie chart with details such as plan amount paid, past due and open. Also you can create the plan using + ([Create](#)) icon.
6. [Promise to Pay](#): Promise to Pay is a commitment from customer for payment of an outstanding receivable within a specified time. This card shows the latest promise to pay plan in a pie chart with the details such as plan amount paid, past due and open. View the next due date, next due amount and number of plan already due by system date for the contract account. Also you can create the promise to pay using + ([Create](#)) icon.
7. [Dunning](#): Shows the dunning amount and the dunning step text and the graphical representation of the latest dunning amount and dunning date. It also shows the simulated value of the next dunning date and dunning value.
8. [Recent Invoices](#): Shows the latest three invoices along with the **Invoice ID**, **Status**, **Invoice Amount**, and **Due Date**. Click  (Preview) icon to view the invoice in PDF.
9. [Recent Cases](#): Shows the latest three cases for the contract account along with the **Case ID**, **Case Description**, **Priority State**, **Last Updated** and the **Case Status**. Click the hyper-linked **Case ID** and **Description** to open the case quick view. Click + ([Create](#)) to create a new case.
10. [Active Contracts](#): Shows the latest three active contracts for that particular contract account with their **Contract ID**, **Contract Address**, **Contract Log Status**, **Contract Division**, and **Moving-In** and date.
11. [Correspondence History](#): Shows the latest three correspondence linked to the contract account along with the creation date and status.

Click  (Open in Detailed View) to navigate to the detail view of that respective card.

#### Note

These cards are displayed only if the contract account has active plans.

## Related Information

### [Create Installment Plan \[page 27\]](#)

As an administrator, you can create installment for open items. The Utilities Contact Center solution supports create, change, and deactivation of an installment plan.

### [Create Promise to Pay \[page 28\]](#)

Promise to Pay is a commitment from customer for payment of an outstanding receivable within a specified time.

### [Create Budget Billing Plan \[page 29\]](#)

Utility company normally bills for its services at the end of a supply period. To remain solvent, therefore starts charging budget billing amounts throughout the current period based on the expected bill amount due. Specify the budget billing amounts and the dates that are due in the budget billing plan.

### [Create Payment Plan \[page 29\]](#)

The utility company and the customer together decide the amount to be paid with each bill.

## 1.4.3.1 Make Payment

You can make one time payments for contract account.

### Procedure

1. Click + ([Create](#)) to open the payment screen.  
The system opens the **Make a Payment** screen.
2. Choose the amount you want to pay under [Open Items](#), the **Open & Payable, Amount Due** and **Other Amount** fields.
3. Choose the bank details from the latest four bank ID's, under [Bank Information](#)
4. Optional: You can also create new bank account by using + ([Add](#)) icon.
5. Add all the necessary details and click [Make Payment](#).

## 1.4.4 Financials

This tab displays all the financial transactions for the selected contract account in a tabular form. You can filter transactions based on [Status](#), [Contract ID](#) and [Return Date](#).

The financials are differentiated into 6 main blocks:

- [Financial Documents](#): Shows all financial related transactions posted for the selected contract account for the last 365 days.

There are three KPI cards which displays the information such as:

- [Payment Behavior](#): Shows the number of active plans for the contract account and whether payments have been made on time or not for the latest 12 invoices in graphical form.
- [Collection Analysis](#): Shows the dunning step text and the graphical representation of the latest dunning amount and dunning date.

It also displays the count for the write offs, returns, and disconnect documents.

### Note

You can use the sort option in the table for only one field at a time.

- [Monthly Bill Amount](#): Shows the monthly billing amount over the last 12 months for the selected contract account.

### Note

The KPI cards are visible only when the [Show Financial Metrics](#) switch is enabled.

Choose [+ \(Create\)](#) if you want to create invoices, manual postings, or make payments.

### Note

The [Create Invoice](#) option is hidden by default. You must enable it through adaptation. If you have previously enabled it, it will continue to be available.

To create an invoice, follow these steps:

1. Go to the contract account, in the [Financials](#) tab, go to [Financial Documents](#) or [Invoices](#).
  2. Choose [+ \(Create\)](#) to create an invoice for the selected contract account.
  3. Select the contracts and billing documents for which you want to create the invoice. If there are no billing documents generated, choose [Submit Meter Reading](#) and create new bill orders. Once generated, choose [Bill Now](#) to generate the billing document.
  4. (Optional) Choose [Simulate Invoice](#) to see the preview of the invoices created.
  5. Choose [Invoice Now](#). You can now see the generated invoice in the [Invoices](#) section.
- [Open Items](#): Shows all the open documents posted for the last 365 days.  
In the list of [Open Items](#), you can add a [Deferral Date](#) based on your customer's requirement. Note that you can make only in-line edits to the deferral date by using [✎ \(Edit\)](#) that appears when you hover over the required field. You can select multiple open items from the list and apply a deferral date. When you edit multiple line items of the same document number, you will receive an error message stating that the document is locked.  
Choose [⋮ \(Actions\)](#), and [Reverse](#).

### Note

- The [Actions](#) column is hidden by default. You must enable it through adaptation.
- The [Reverse](#) option is enabled based on the [Transaction](#) and [Sub-Transaction](#) maintained in SAP S/4HANA. The BAPI BAPI\_CTRACDOCUMENT\_REVERSE is used to identify whether the open item is reversible or not.

- [Invoices](#): Shows all the invoices pertaining to the open contract account posted for the last 365 days. Choose  ([Preview](#)) to view the invoice in PDF. You can create invoices and simulate them from here. You can also send them as attachments through emails.

To view the PDF documents, ensure that the [Blob](#) option is enabled in the [Frame Source Section](#) of

► [System Settings](#) ► [System Preferences](#) ► [Content Security Policy](#) ►.

### Note

The [Create Invoice](#) option is hidden by default. You must enable it through adaptation.

To reverse an invoice you must first download the codelist **Invoice Reversal Reason** from SAP S/4HANA by navigating to ► [Settings](#) ► [Utilities](#) ► [General](#) ► [Import Codelists](#) ►.

You can reverse invoices using the following steps:

1. Choose  ([Actions](#)).
  2. Choose [Full Reversal](#) if you want to reverse the invoice, or choose [Adjustment Reversal](#) to reverse the underlying billing documents in the invoice.
  3. Select the reason for reversal from the dropdown. Note that you must maintain the reversal reasons in the code list in SAP Service Cloud V2, for the corresponding values to be available in SAP S/4HANA. In adjustment reversal you must select the billing documents after you select the reversal reason. In adjustment reversal, you must select the billing documents that you want to reverse.
  4. Choose [Reverse](#). Then, you can either [Rebill](#), that is create the invoice, or choose to go to the next screen to update the meter reading, which is optional. If meter readings are available after reversing, the [Next](#) option is enabled. You can edit the meter readings listed here and save your changes using [Save](#) or [Save and Override](#).
- [Payments](#): Shows all the payment documents created posted for the last 365 days.
  - [Security Deposit](#): Shows all the security deposit related details created for the contract account with latest status information.  
Perform actions such as **Reverse**, **Release** and **Partial Release** from the more option under **Actions** column.  
The actions are enabled based on the security deposit status such as:
    - Requested- Reversed
    - Reversed- No Action Enable
    - Partially Released- Partial Release/Release
    - Released- No Action Enable
    - Paid- Partially Release/ Release
    - Partial Paid- No Action Enable
  - [Collections](#): Shows the dunning, returns, correspondence history, and write-offs related to that contract account.

## 1.4.5 Locks

This tab displays all the locks on a contract account that you select, and also for the contracts within the account.

You can create these locks both at the contract account and individual contract level, which are listed in two sections on the screen.

This tab is not available by default. You must enable it via adaptation.

You must download the following Code Lists from SAP S/4HANA by navigating to ► [Settings](#) ► [Utilities](#) ► [General](#) ► [Import Codelists](#) ►:

- Dunning Lock Reason
- Incoming Payment Lock Reason
- Outgoing Payment Lock Reason
- Interest Lock Reason
- Invoice Lock Reason
- Correspondence Dunning Reason
- Posting Lock Reason
- Billing Block Reason
- Release Block Reason

Create a contract account lock as follows:

1. From the navigation menu, choose [Contract Accounts](#). Go to the [Locks](#) tab. All active locks for the contract account and contracts are displayed by default.
2. In the [Contract Account Lock](#) section, choose + [\(Create\)](#). A new row is created in the table.
3. Select the [Lock Type](#), [Lock Reason](#), [Start Date](#), and [End Date](#).
4. Choose ✓ [\(Save\)](#).

Select the [Show Expired Locks](#) checkbox to view locks that are already expired.

You can edit and delete contract account locks that you have created. To edit a contract account lock, choose the [Edit](#) option. The [Lock Reason](#), [Start Date](#), and [End Date](#) fields are editable. Make your changes and choose ✓ [\(Save\)](#).

### 📌 Note

Once you delete a lock, it is no longer displayed in the table.

Create locks for contracts inside the contract account as follows:

1. In the [Contract Locks](#) section, choose ... [\(Actions\)](#) and select [Create Contract Lock](#).
2. Select the [Lock Type](#), [Lock Reason](#), [Start Date](#), and [End Date](#).
3. Choose [Save](#).

Create a billing block for a contract as follows:

1. In the [Contract Locks](#) section, choose ... [\(Actions\)](#) and select [Create Billing Block](#).
2. Select the [Billing Block Reason](#).
3. Choose [Save](#).

To remove the billing block, choose  (*Actions*) and select *Remove Billing Block*. To delete the contract lock, choose  (*Delete*).

## 1.4.6 Payment Arrangements

View installment plans, promise to pay, payment plans, or budget billing plans by division in card or table format

In the card view, you can see all plans by their status, create and edit plans, and make payments directly from each card.

In the table view, view all plan details in a tabular form. Use the actions menu for detailed views, inline edits, and creating new plans for each contract account.

You can use the adaptation mode to view  (*More Actions*) in the card view and the left panel of the detail view.

### Note

Payment Arrangements displays both active and deactivated plans.

### 1.4.6.1 Create Installment Plan

As an administrator, you can create installment for open items. The Utilities Contact Center solution supports create, change, and deactivation of an installment plan.

## Procedure

1. From the  (*Navigation Menu*), search for *Contract Account*.
2. Select the contract for which you need to create a installment plan.
3. Click  (*Create*) icon from payment arrangement tab or from the *Installment Plan* card in the central tab.
4. Select *Open Items* as per your requirement.
5. Under *Plan Selection* specify the each parameter and click *Generate Proposal* option.
6. Review the installment plan summary under the *Confirm Installment Plan* screen and click *Save*.

### Edit or Deactivate Installment Plan

- To edit the existing installment plan, select the plan and click  (*Edit*). You can also use the *Mass Edit* option to edit multiple plans. Note that this option is hidden by default. To use this feature, you must enable it through adaptation. Also, once this feature is enabled, you cannot use the in-line edit option.
- If you add or delete installments, then you must ensure that the total installment plan corresponds to the amount of the source receivable.
- If the installment plan is unpaid or partly paid, select Deactivate to cancel the interest and charge documents and deactivate the plan. Click *Deactivate* option to deactivate the plan.

## 1.4.6.2 Create Promise to Pay

Promise to Pay is a commitment from customer for payment of an outstanding receivable within a specified time.

### Procedure

1. From the  (*Navigation Menu*), search for *Contract Account*.
2. Select the contract for which you need to create promise to pay.
3. Click  (*Create*) icon from payment arrangement tab or from *Promise to Pay* card in the central tab.
4. Select *Open Items* and enter the fields as per requirement.
5. Enter the desired fields for *Company Code*, *Plan Selection*, and *Plan Details* and click *Generate Proposal* option.
6. Review the promise to pay summary under the *Confirm Promise to Pay* screen and click *Save*.

### Edit Promise to Pay

To edit the existing promise to pay, select the plan and click  (*Edit*) icon.

You can perform the following actions in edit screen:

- **Withdraw:** Allows you to disable an open plan. You need to specify the **Reason for Withdrawal** and **Initiator of Withdrawal**.
- **Replace:** Allows you to withdraw an existing plan and create a new plan.
- **Status Change:** Allows you to modify status of an existing plan. Enter the **Levels of Fulfillment** and maintain comments.
- **Reactivate:** Enables and activates a closed plan. The system prompts you to confirm if you need to reactivate a plan. This option is only available for the deactivated promise to pay plans.

#### Note

The Levels of Fulfillment and Reactivate options is only available for the deactivated promise to pay plans.

### 1.4.6.3 Create Budget Billing Plan

Utility company normally bills for its services at the end of a supply period. To remain solvent, therefore starts charging budget billing amounts throughout the current period based on the expected bill amount due. Specify the budget billing amounts and the dates that are due in the budget billing plan.

#### Procedure

1. From the  (*Navigation Menu*), search for *Contract Account*.
2. Select the contract for which you need to create budget billing plan.
3. Click  (*Create*) icon from payment arrangement tab or from *Budget Billing* card in the central tab.
4. Select *Contract* as per requirement.
5. Enter the desired fields for budget billing period and click *Generate Proposal* option.
6. Review the budget billing plan information under the *Confirm Budget Billing Plan* screen.
7. Enter the data in the *Text for Budget Billing* field.
8. Optional: Change the due date and plan amount for each line item. You can also use the **Update Amount** to update the changes for all the plan amount in the Items list.
9. Click *Save*.

#### Edit or Delete Budget Billing

To edit the existing budget billing plan, select the plan and choose  (*Edit*) and modify the **Plan Amount** and **Text for Budget Billing**.

To delete the existing plan, select the budget billing plan and click  (*Delete*) icon.

#### Note

You can only delete plans with no payments or further activities.

### 1.4.6.4 Create Payment Plan

The utility company and the customer together decide the amount to be paid with each bill.

#### Context

Instead of paying the actual bill amount, which varies according to season, the customer then has either a fixed payment plan or a payment plan in which the fluctuation of the amount is kept to a minimum. The utility company records the difference between the payment plan amount and the actual bill amount and charges it at a later date.

#### Note

Currently we support only Budget Billing Plans (BBP) type.

## Procedure

1. From the  (*Navigation Menu*), search for *Contract Account*.
2. Select the contract for which you need to create payment plan.
3. Click  (*Create*) icon from payment arrangement tab or from *Payment Plan* card in the central tab.
4. Select *Contract* as per requirement.
5. Enter the desired fields and click *Generate Proposal* option.
6. Review the payment plan details under the *Confirm Payment Plan* screen and click *Save*.

### Edit or Delete Payment Plan

To edit the existing plan, select the payment plan and choose  (*Edit*) icon. You can also use the *Mass Edit* option to edit multiple plans. Note that this option is hidden by default. To use this feature, you must enable it through adaptation. Also, once this feature is enabled, you cannot use the in-line edit option.

To delete the existing plan, select the payment plan and click  (*Delete*) icon.

#### Note

You can only delete plans with no payments or further activities.

## 1.4.7 Bank Data

The *Bank Data* table displays the bank details of the contract account.

This tab is hidden by default. You must enable it via adaptation.

For this feature to be available, you must enable the options *Incoming Payment Method* and *Bank Details Required* in the codelist of *Contract Accounts*. You can do this by navigating to your *User Profile*,  *Settings*  *Utilities*  *Contract Accounts*  *Payment Method* .

You can create bank data using Bank Details or IBAN (International Bank Account Number).

To use the *Create Using IBAN* option, you must enable this feature on the *Feature Activation Hub*.

## Create With Bank Details

1. In the *Bank Data* tab, choose  (*Add*).
2. Choose *Create with Bank Details*.

3. In the window that appears, enter the [Country/Region](#), [Bank Key](#), [Bank Account](#), [Bank Name](#), [Account Holder](#), [SWIFT Code](#).
4. Choose [Save](#).

## Create Using IBAN

This option is hidden by default. You must enable it through adaptation.

1. In the [Bank Data](#) tab, choose [+](#) ([Add](#)).
2. Choose [Create Using IBAN](#).
3. In the [New Bank Details](#) dialog, if you know your IBAN, turn on the [IBAN Known](#) switch. Enter your IBAN and validity, and save it.
4. If you don't know your IBAN, fill the required fields and choose [Save](#). You can also use the [Generate IBAN](#) option.



Use [Assign](#) to assign the bank data to a customer with the payment details. When you choose this option, the [Assign Contract Accounts](#) dialog box appears. Select the contract account for which you want to assign the bank data and save the changes. You can also assign incoming and outgoing payment methods while assigning the bank details.



You can remove the assignment using the [Unassign](#) option.

### Note

- The [Incoming Payment Method](#) and [Outgoing Payment Method](#) dropdown menus display only the payment methods that are related to the bank information.
- For security reasons, only the last four digits of the bank account number are displayed.

### Caution

Currently, [IBAN](#) and [Bank Data](#) are not encrypted, and are used as is.

## Edit Bank Data

Edit existing bank data using the in-line edit option. You must fill all the required details and select a reason for editing.

If you haven't added your IBAN and would like to generate it, use the [Generate IBAN](#) option.

#### Note

This option is available only when you enable the [Utilities: IBAN](#) on [Feature Activation Hub](#).

When you edit the bank data which has an IBAN number, the edit screen displays a [New IBAN](#) field.

When you change the bank account number, you can choose to Generate IBAN for the updated account number using the [Generate IBAN](#) option. If you don't generate a new IBAN, the old IBAN number is retained for the updated bank details.

You can also delete the bank data using  ([Delete](#)) provided in the table. The contract accounts are then unassigned from the bank, after which the bank data is deleted.

## 1.4.8 Exceptions

The exception tab displays all the exceptions created in S/4 HANA system for the contract account.

You can add and view notes under the **Notes** column in the table.

## 1.4.9 Premises and Contracts

You can see a list of all the contracts associated with the contract account, grouped based on the premises.

A maximum of 1000 contracts are displayed in this tab. The active contracts are listed first, followed by inactive contracts.

Choose the premise to view its details in the quick view.

#### Note

This tab is hidden by default. You must enable it through adaptation.

## 1.5 Premise

The premise is an enclosed unit which allows to perform a host of utilities functions such as creating or changing move-in.

All premises within the application is listed in a list or card view.

You can import and export the premise details to a **CSV** or **Excel** file in **Data Import and Export** via **Settings**.

Use the filter option to find specific premises. Select a premise to view all its important details.

For more information on filters, see [Create and Organize Filters](#).

## Quick View

Click the [Premise External ID](#) to view key information of the premise without opening in the detail view.

In the quick view, you can access the following information:

- **Header:** Shows premise address, premise type, and owner for premise.
- **Current Customers:** Shows the active, moving in and moving out customers for premise.
- **Services:** Shows all the active services for premise.
- **General Information:** Shows other information such as External ID, Street, District, and so on of the premise.

### 1.5.1 Header Pane

The header pane provides the basic information of the premise in the left panel.

The information is displayed in the following sections:

- **Header:** Shows details about the premise address and premise type.
- **Alerts:** Shows the list of alerts specific to the premise. These alerts are from external systems that are integrated to SAP Sales and Service Cloud V2 and are categorized based on priority.
- **Service Status:** Shows the services along with their status available for the premise.
- **Customers:** Shows all the active, moving in and moving out customer linked to premise. If the customer has provided their email ID and phone number, they can make calls and send emails. If these details are missing, the options will be grayed out.
- **Owner:** Shows owner details linked to the premise
- **Details:** Shows more information about the premise

## Service Status

For each service the corresponding division is shown as icons along with the [Installation ID](#) and [Service Status](#).

By default three services are displayed on the screen. Choose **Show More** to view more available services.

The service status codes are defined as follows:

Service Status

| Status Code | Status Text in S/4 Logic             | Status Text in S/4 UI           |
|-------------|--------------------------------------|---------------------------------|
| 00          | Installation Fully Operational       | Installation not disconnected   |
| 05          | Disconnection Started                | Disconnection started           |
| 10          | Installation Completely Disconnected | Installation fully disconnected |

| Status Code | Status Text in S/4 Logic            | Status Text in S/4 UI               |
|-------------|-------------------------------------|-------------------------------------|
| 11          | Installation Partially Disconnected | Installation partially disconnected |

## Customers Status

The customer status are:

1. **Active:** Customer has moved in without move-out date specified in system.
2. **Moving In:** Customer has a future dated move-in specified.
3. **Moving Out:** Customer has a future dated move-out specified.
4. **Inactive:** Customer as all ready moved out as of today.

## Premise Address Format

The premise address is formatted and maintained consistently across all screens of the premise workspace.

The formatted address should be in the format as:

1. Address Line 1:
  - House Number
  - Street
  - House Number 2
  - Location
2. Address Line 2:
  - City
  - Region
  - Postal Code
3. Address Line 3:
  - House Supplement
  - Street Supplement
  - Street Supplement 2
  - Location Supplement

### 📘 Note

Due to space limitations, the address may appear truncated in certain areas. Hover over the address to view the full formatted version.

Customers must implement enhancements in S/4 to ensure the formatted address for objects in the class CL\_ISU\_C4C\_V2\_OBJECT\_ADDRESS methods.

1. **Premise Replication:** Enhancement points in the following methods must be implemented before replicating data to the CX system

- PREMISE\_ADDRESS
- CONNECTION\_OBJECT\_ADDRESS

If data has already been replicated, implement the enhancements first, then re-replicate the data.

2. **Contract Account Fixed Address:** Implement enhancements in CA\_FIXED\_ADDRESS method.
3. **Fixed Address Value Help:** Implement enhancements in FIXED\_ADDRESS method.

#### Note

An exit is provided for each address type, allowing customers to modify the address format according to their business requirements.

## Related Information

[Make Outbound Phone Calls](#)

## 1.5.2 Central

This tab displays premise details in cards such as Moving-in & Moving-out, Services, and Recent Cases.

### Moving In & Moving Out

The card displays the customer information such as customer name, future move-in date or move-out date, contract account along with services, due amount, and open and payable amount for the customer.

#### Note

This card is visible only if there is a future move-in or move-out date document for that premise.

You can also reverse the created move-in for active and moving in customers and reverse move-out for inactive and moving out customers.

If a new customer moves in while the premise has an existing active customer, the active customer is moved out. This is indicated by the status *Forced Out*.

### Services

Gives an overview about the services associated with the premise and shows the **Division**, **Installation ID** and the **Graphical View** surfaced on the cards.

This graph shows the details of the billed consumption for latest three cycles for that installation or service.

Heart icon shows the supply guarantee and next meter read date along with the service order count and implausible meter reading count.

#### Note

If the installation has multiple meters/Registers, then you have to switch to the table view for more details.

## Updates

### Recent Cases

Shows the latest three cases for the premise along with the **Case ID**, **Case Description**, **Priority State**, **Last Updated** and the **Case Status**.

Choose + [\(Create\)](#) to create a new case.

### Recent Service Orders

Shows the latest three service orders for the premise along with the meter ID, status, and priority. To see the list of service orders, open the card in detail view.

Choose + [\(Create\)](#) to create a new service order.

#### Note

The [Updates](#) section supports extensibility. If you had hidden the [Recent Cases](#) cards in the past, it will re-appear in this section. You must hide the card again if required.

## 1.5.3 Customers

View all the customer information in a card and table view along with the status associated with the premise.

The card view displays all the active, inactive, moving-in, and moving-out contracts in card and also information about the move-in date, move-out date, balance amount the customer owes, due date from the last open item date till today. You can also perform actions based on the status of the contracts.

The table view is the graphical representation of all the active, inactive, moving-in, and moving-out status of contracts for each customer are listed. By default, the contract accounts which has all active contracts are expanded, and inactive contracts are collapsed. You can perform the actions at the contract account level based on the status of the contracts.

Categorized the customers based on the contract status by providing both customer and contract account specific details in sections. The Customer status is classified based on the use case:

- [Active](#): Current date is greater than move-in date and the end date is not defined
- [Moving-In](#): Move-In date is defined for future date
- [Moving-Out](#): Move-Out date is defined (Not Infinity)
- [In Active](#): Move-Out date is past current date

You can add custom buttons under the [⋮ \(More Actions\)](#) option for each customer card. You can use the button to either go to a specific tab within the premise, or to open a URL in a different browser tab using mashups.

To create a custom button, do as follows:

1. Go to the adaptation mode.
2. Hover over [⋮ \(More Actions\)](#), and choose [✎ \(Edit\)](#) that appears beside it.
3. Choose [+ \(Add\)](#) to add a button.
4. To make the button open an existing tab in premise,
  1. Enter the [Button Text](#) and an [Event Name](#), and choose [Apply](#).
  2. Once you end the session, the button is listed under [⋮ \(More Actions\)](#).
  3. Go back to the adaptation mode. Choose [✎ \(Edit\)](#) that appears beside the tabs.
  4. Choose [✎ \(Edit\)](#) beside the tab that you want to associate to the button and select the event that you created, and choose [Apply](#).
5. To make the button open a URL in a different browser URL,
  1. Enter the [Button Text](#) and select [Mashup](#).
  2. Choose [Select Mashup](#), and select a mashup from the list of mashups available in the system.
  3. Choose [Apply](#).

You can add custom buttons from the left panel of the premise too.

## Related Information

### [Move-In Process \[page 43\]](#)

Move-in of a service means that a customer is signing up for a utilities service such as gas, electricity, water, and so on. When move-in is created in SAP Cloud Solution, it creates a corresponding move-in in the S/4HANA system also.

### [Move-Out Process \[page 46\]](#)

Move-out of a service means that a customer is signing off for a utilities service such as gas, electricity, water, and so on.

### [Transfer Process](#)

## 1.5.4 Services

This tab displays all the services associated with the premise. Here, you can see a list of services with the [Installation ID](#) and the [Rate Category](#).

### 1.5.4.1 Billed Consumption Details

This section shows details of the billed consumption of last 12 cycles for the installation or service in both graphical and table views.

In the graphical view, you can view both the active and inactive customer's consumption with different color bars. The billed consumption shown here is the summation of all individual billed consumption of the meters connected to that service.

In the table view, consumption details are listed in a table format. You can also navigate to the contract account and customer quick view.

Use [Download](#) to download the details either as a .CSV or Microsoft Excel file. This option is available in both the tabular and graphical view.

Use the [Generate Summary](#) option to generate a summary of the billed consumption for each service (installation) on a premise. This allows users to quickly grasp key information about their current consumption pattern.

#### Note

The [Generate Summary](#) option is not available by default. You must enable it via adaptation. Ensure that your administrator has enabled the [Activate Utilities Insights](#) option in [Settings](#). For more information, see the related links section.

The summary includes details of the current consumption, its pattern, and possible reasons for any spike or dip in consumption level for the last 12 billed cycles.

#### Note

Customer can customize the consumption graph with their own logic using enhancement point such as:

- **EHP\_ISU\_C4C\_TEMPERATURE\_GET** in spot **ES\_ISU\_C4C\_TEMPERATURE**: Use this point to retrieve the temperature data corresponding to the billed consumption provided by the standard
- **EHP\_ISU\_C4C\_CONSUMPT\_COMPARE** in spot **ES\_ISU\_C4C\_CONSUMPTION\_COMPARE**: Use this point to provide the comparison consumption value to be matched against the standard consumption value.

Use the enhancement section **EHS\_ISU\_C4C\_BILLED\_CONSUMPTION** in spot **ES\_ISU\_C4C\_BILL\_CONSUMPTION** to override the standard logic for determining billed consumption.

## Related Information

[Utilities Insights](#)

### 1.5.4.2 Meter Reading

The meter reading process involves creating meter reading orders for each register, which includes the information such as meter reader, scheduled meter reading date and meter reading reason.

The header shows [Meter Type](#), [Meter ID](#), [Validity Date](#), and [Next Scheduled Meter Reading Date](#).

The meter readings for the services are shown in the following views:

- **Table View:** Shows the meter reading data in table view.
- **Card View:** Shows the meter reading data in card view.

Select a meter to view its details and the device's location in the quick view. You can also view notes for the device location using the [Device Location Notes](#) option. You can also see this information in the quick view.

## AMI Meter Features

Use AMI (Advanced Metering Infrastructure) meters in SAP Service Cloud V2, Add-On for Utilities.

When you select an AMI meter in the [Services](#) tab of a premise, you can view the details of the meter, device location, and list of available AMI features in the quick view. Note that currently you cannot create or edit AMI meter readings.

For checking the voltage of an AMI meter at a particular time, use the [Ping](#) option. To see the power status in the past, use the [AMI Ping History](#) option.

You can also add [Status Code](#) as an additional field in ping history. It is a dynamic code list field and can be added through adaptation. The data in [Operational State](#) is displayed based on the [AMI Status](#) field which is dynamic code list.

You must maintain the dynamic code list for AMI Status in [User Menu](#) > [System Settings](#) > [Administration](#) > [Utilities](#) > [Premise](#) > [AMI Status](#) .

Code Lists for Status Code

| Code | Value     |
|------|-----------|
| 01   | Unknown   |
| 02   | Power On  |
| 03   | Power Off |

You must also maintain the dynamic code list for Advanced Meter Status in [User Menu](#) > [System Settings](#) > [Administration](#) > [Utilities](#) > [Premise](#) > [Advanced Meter Status](#) . The code list values must be the same as that maintained in the table TEAMI\_STAT\_CODE in SAP S/4HANA.

### Note

The [Reconnect](#) and [AMI Ping History](#) options are hidden by default. You must enable it through adaptation.

In the [Services](#) tab of [Premise](#), you can select [Reconnect](#) to reconnect an AMI meter to the respective premise. This option is enabled only if the AMI meter is active.

When you choose [Reconnect](#), you can see the [Terms and Conditions](#) which is maintained in ► [Settings](#) ► [All Settings](#) ► [Utilities](#) ► [Premise](#) ►. On confirming the message, a reconnection order is created in the linked disconnection document in the SAP S/4HANA system.

The [DisDocStat](#) (Disconnection Document Status) becomes [Reconnection started](#) (22).

For the [Reconnect](#) option to be available, the following conditions must be true:

- The meter is of type AMI only.
- In the [AMI Data](#) tab of the AMI meter, [Remote Reconnection](#) is enabled.
- [Disconnection Document Status](#) is [Disconnection Carried Out](#).

To further enhance the reconnect option, you can use the following SPOTs:

- In the [Premise Service](#) tab, use the function module `ISU_C4C_V2_PREMISE_SERVICE_GET` for the enhancement point `EHP_ISU_C4C_AMI_RECONNECT_DER` which belongs to the enhancement spot `ES_ISU_C4C_PREMISE`.
- In the quick view of the device, use the function module `ISU_C4C_V2_DEVICE_GET` for the enhancement point `EHP_ISU_C4C_DEVICE_AMI` which belongs to the enhancement spot `ES_DEVICE_DATA`.

## 1.5.4.2.1 Create or Edit Individual Meter Reading

Add new meter readings for each service corresponding to the service address of the contract.

### Procedure

1. Under the premises [Services](#) tab, go to [Meter Reading](#).
2. Choose  ([Create](#)) to create new meter reading.
3. Enter the [Meter Reading Reason](#), [Notes](#), and [Meter Reading](#).
4. Choose one of the option to determine the meter reading values:
  - **Estimate:** Estimate the meter reading and consumption for an installation
  - **Reset:** Clears all the meter reading values and you can enter fresh data.
  - **Save & Override:** Overrides the estimated value and save the meter reading.
  - **Save:** Saves the estimated meter reading and creates a new meter reading results.

The created meter reading is displayed in a table, card, and graphical form.

You can edit a meter reading using the  ([Edit](#)) icon.

#### 📘 Note

For meter reading reasons, the Excel import function supports only codes 02, 09, and 10. If additional codes are required, they must be added through ► [Settings](#) ► [Administration](#) ► [Utilities](#) ► [Premise](#) ► [Meter Reading Reason](#) ►.

By default, only these codes are supported. If new codes are added, customers must implement enhancements for the functionality to work with the new codes.

## 1.5.4.2.2 Create or Edit Multiple Meter Readings

Create or edit multiple meter readings simultaneously, for all the available devices of the service.

### Context

You can create and edit meter readings simultaneously for multiple meters and meters with multiple registers.

### Procedure

1. Go to the [Services](#) tab of [Premise](#). You can see the list of services.
2. Choose + (New Meter Readings) icon. You can see a list of meter readings in the [Create Meter Readings](#) dialog.
3. Select the required meters from the list to validate, estimate or reset them. You can also view the history.  
To edit multiple meter readings, choose the ✎ ([Edit](#)) option. In the [Edit Meter Readings](#) table that appears, select the entries and make the required changes.

## 1.5.5 Cases

Displays all the cases created for the premise along with there status in a list and card view.

Use the search option to choose the relevant cases.

#### 📘 Note

In the list view, the headers are taken from the case service. To make changes to the names, you must use language adaptation for the case entity.

## Related Information

[Language Adaptation](#)

### 1.5.6 Service Orders

View the list of service orders for the premise along with the meter ID, status, and priority. You can also add service orders for the premise.

This tab is hidden by default. You can view this by enabling it in the adaptation mode.

To create a service order, do as follows:

1. Choose [Create](#) on the top-right corner of the screen.
2. Enter the [Description](#) and select the [Service Order Type](#).
3. In the [Premise](#) section, add an existing premise.
4. Select either [Device Location](#) or [Meter](#) to link your premise.  
Use the adaptation mode to can hide or display fields in the [Select Device Location](#) and [Select Meter](#) tables that appear.
5. Select the required device location or meter from the list.
6. Choose [Add](#).

## Related Information

[Configurations in Cloud Integration](#)

### 1.5.7 Exceptions

The exception tab displays all the exceptions created in S/4 HANA system for the premise.

You can add and view notes under the **Notes** column in the table.

### 1.5.8 Disconnection Documents

View disconnection documents for the premise, in the detail view. A disconnection document is generated for each disconnection.

In this tab, you can see the list of disconnection documents associated with the premise. To view details of each document, choose  ([View Details](#)).

You can view the last three disconnection documents in the [Recent Disconnection Documents](#) card of the [Central](#) tab.

### Note

The [Disconnection Document](#) tab and [Recent Disconnection Documents](#) card are hidden by default. You must enable them via adaptation.

You must download the following codelists from SAP S/4HANA by navigating to ► [Settings](#) ► [Utilities](#) ► [General](#) ► [Import Codelists](#) ►:

- Process Variant
- Disconnection Activity Status

## 1.5.9 Move Processes

You can initiate Move-In, Move-Out, and Transfer services for a premise.

### Note

User can implement the extended fields validations in each step of move processes through SAP S/4 HANA calls.

When you initiate a move-in, move-out, or transfer process, the calendar displays the working days and holidays to help you plan the move effectively. This is also applicable when you want to change the move dates. Based on the working day calendar selected, you can plan the move-in, move-out, or transfer.

### 1.5.9.1 Move-In Process

Move-in of a service means that a customer is signing up for a utilities service such as gas, electricity, water, and so on. When move-in is created in SAP Cloud Solution, it creates a corresponding move-in in the S/4HANA system also.

An agent can view the details in the Move-In tool bar as and when the details are filled in under the different steps of guided move-in. The tool bar shows the **Customer Name**, **Move-In Address**, **Move-In Date**, **Services Chosen**, **Security Deposit Amount**, and **Mailing Address**.

#### 1.5.9.1.1 Create Move-In

For guided move-in, you can only use either Move-in or Move-in using MDT to create a new move-in.

### Procedure

1. From the navigation menu choose [Premise](#). Select the premise from the list for which you want to create move-in.

2. Go to [Customers](#) tab, where you can also view all the customers with their status associated with the premise.
3. Choose [Move-In](#).

The create move-in screen has four main sections.

- a. **Customer and Premise:** This section displays the information related to customer and premise.
  - **Who:** Select the customer using the value help. The system displays the corresponding **Total Amount Due, Open and Payable, Payment and Credit Worthiness** cards.

#### ⚠ Restriction

If an account has a large number of associated contract accounts, it may lead to performance issues, preventing value calculations for total amount due, open and payable, and payment cards causing a timeout error.

- **Where:** By default, the premise address is updated under the **Address** field. You can view the further details under Premise Details, Customers, and Service Status.
  - **When:** Choose the move-in date from the calendar when the customer wants to move-in to the premise.
- b. **Service:** This section displays the types of services (Electricity/Gas/Water) available for the customer to perform move-in.

Enable the **Activate Service** switch against the service which is chosen for move-in.

#### 📘 Note

By default the [Activate Service](#) switch is enabled for all available services. You can set it to On/Off as per the requirement.

Add the corresponding move-in meter reading for the devices available under chosen services. Also set the rate category from the **Rate** drop down.

- c. **Contract Account and Billing:** This section has four parts:
  - **Contract Account:** Choose **Use Existing Account** to use the exiting contract accounts or choose **Create New Contract Account** to create a new contract account.  
Use the search feature to find the required contract account associated with your account. You can search using either the contract account name or the contract account ID.  
When you choose **Create Contract Account**, the Contract Accounts dialogue screen pops up where you need to fill all the required fields.

#### 📘 Note

By default, the **Create New Contract Account** is enabled. If the customer has only one contract account then that is chosen as default.

- **Security Deposit and Joint Invoicing:** Select the security deposit type and reason, Joint Invoicing and enter the amount.  
Choose **Calculate Deposit** which automatically determines the amount and deposit type. If you chooses the option as **Waive** then the security deposit amount will be set to zero.

#### 📘 Note

1. When you manually choose a reason for a security deposit, the security deposit and the amount fields are made mandatory.

2. The services are visible only if the installations have the divisions with categories 01, 02, 03, and 91.

- **Mailing Address:** Specify the mailing address for correspondence with the customer. This can be maintained by any of the following four available options:
  1. **Premise Address-** Chooses the premise address as the mailing address
  2. **Customer Address-** Chooses the customer address as the mailing address
  3. **New Mailing Address-** Create a new mailing address along with validity dates
  4. **PO Box-** Create new PO Box address as the mailing address

#### 📘 Note

If you enable the [Premise Address](#) or [Customer Address](#) option, you can only modify the email ID, telephone number, mobile number and fax. To create a new address, you must use the [New Mailing Address](#) option.

If you have chosen [Premise Address](#) or [Customer Address](#), Enhancement Point :EHP\_ISU\_C4C\_ADDRESS\_LOGIC\_MI, Enhancement Spot: ES\_ISU\_C4C\_MOVE\_EDIT to provide the address that you want to make the standard address.

- **Notes:** (Optional) Enter if you have any notes.
- d. **Review:** Review all the details and agree to the terms and conditions.

#### 📘 Note

If you want to have agreeing to these terms and conditions as mandatory, ensure this setting is configured in the extensibility settings.

4. Choose Submit or Submit via MDT (Move-In using MDT) to create move-in.

#### 📘 Note

To predefine fields like date limits, default address type, country, currency, and services, configure them under ► [Setting](#) ► [Utilities](#) ► [Move Process](#) ► [General Settings](#) ►.

If you want to auto-populate any fields that need user inputs, you must enter your logic in the Enhancement point EHP\_ISU\_C4C\_MOVE\_SIMULATION under the enhancement spot ES\_ISU\_C4C\_MOVE.

## 1.5.9.1.2 Change Move-In

You can change the date for an existing move-in using the  ([Edit](#)) icon.

1. Go to the [Central](#) tab. You can see the customers in the [Moving In & Out](#) section.  
You can also access the customers for which you want to change the date, through the [Customers](#) tab.
2. Choose  ([Edit](#)).
3. Select the move-in document for which you want to edit the move-in date.  
If there is only one document available, you are directed to the [Edit Move-In](#) dialog.

#### Note

You cannot enter a date earlier than the move-in date of the previous contract.

4. In the *Edit Move-In* dialog, enter the *New Move-In Date*. Save the changes.
5. In the *Meter Reading* process, you can update all the meter readings at once for the installation, or devices in the move-in document. Choose *Submit*.

## 1.5.9.2 Move-Out Process

Move-out of a service means that a customer is signing off for a utilities service such as gas, electricity, water, and so on.

Move-out is triggered from SAP cloud solution which in turn gets implemented in S/4 HANA and creates the move out document which is then shown on SAP Cloud for Customer.

### 1.5.9.2.1 Create Move-Out

Move-out process is applicable for the active customer under premise.

#### Context

As a service agent follow the steps for guided move-out:

#### Procedure

1. Launch the guided move-out process under *Active* section in *Customer* tab of the *Premise* workspace.

A pop over dialogue box appears to choose the **Contract Account**.

2. **Customer and Premise**

- **Who:** By default, the customer details are auto populated. Once the customer is chosen it displays the corresponding **Total Amount Due, Open and Payable, Payment and Credit Worthiness** card.

#### Restriction

If an account has a large number of associated contract accounts, it may lead to performance issues, preventing value calculations for total amount due, open and payable, and payment cards causing a timeout error.

- **Where:** By default, the premise address is updated under the **Move-out Address** field. You can view the further details under Premise Details, Customers, Service Status, and Work Order cards.

- **When:** Choose the move-out date from the calendar when the customer wants to move-out of the premise.

### 3. Service

- This step shows the types of services (Electricity/Gas/Water) available for the customer to perform move-out.
- Enable the **Activate Service** switch against the service which is chosen for move-out.
- Choose the meter reading available under chosen services and do the necessary actions:
  1. Estimate
  2. Validate
  3. Override
  4. Reset

### 4. Contract Account

- The Contract account details is auto populated as you have already chosen the contract account for move-out.
- Under Mailing section, specify the mailing address for correspondence with the customer. This can be maintained by any of the following four available options:
  1. **Use Premise Address**- Chooses the premise address as the mailing address.
  2. **Use Customer Address**- Chooses the customer address as the mailing address.
  3. **New Mailing Address**- You can create a new mailing address along with validity dates
  4. **New PO Box**- You can create new PO Box address as the mailing address.

#### 📘 Note

If you enable the [Premise Address](#) or [Customer Address](#) option, you can only modify the email ID, telephone number, mobile number and fax. To create a new address, you must use the [New Mailing Address](#) option.

If you have chosen [Premise Address](#) or [Customer Address](#), Enhancement Point: EHP\_ISU\_C4C\_ADDRESS\_LOGIC\_MO , Enhancement Spot: ES\_ISU\_C4C\_MOVEOUT\_EDIT to provide the address that you want to make the standard address.

5. **Review:** Review all the details and agree to the terms and conditions.

#### 📘 Note

If you want to make agreeing to these terms and conditions as mandatory, ensure this setting is configured in the extensibility settings.

6. Choose Submit to create move-out.

#### 📘 Note

To predefine fields like date limits, default address type, country, currency, and services, configure them under ► [Setting](#) ► [Utilities](#) ► [Move Process](#) ► [General Settings](#) ►.

## 1.5.9.2.2 Change Move-Out

Change the date for an existing move-out.

1. Go to the [Central](#) tab. You can see the customers in the [Moving In & Out](#) section.  
You can also access the customers for which you want to change the date, through the [Customers](#) tab.
2. Choose [✎ \(Edit\)](#).
3. Select the move-out document for which you want to edit the move-out date.  
If there is only one document available, you are directed to the [Edit Move-Out](#) dialog.

### ⓘ Note

You cannot enter a date earlier than the move-out date of the previous contract.

4. In the [Edit Move-Out](#) dialog, enter the [New Move-Out Date](#). Save the changes.
5. In the [Meter Reading](#) process, you can update all the meter readings at once for the installation, or devices in the move-out document. Choose [Submit](#).

## 1.5.9.3 Transfer Process

You can transfer the services from an existing a premise to another premise.

### Context

Transfer is applicable for the active customer.

As a service agent follow the steps for guided transfer:

### Procedure

1. Launch the transfer process under [Active](#) section in [Customer](#) tab of the [Premise](#) workspace.  
You can also use the [Create](#) option on the top-right corner of the [Premise](#) screen. Choose [Transfer](#) to initiate a transfer of the premise.
2. **Customer and Premise**
  - **Customer:** By default, the customer details are auto populated. Once the customer is chosen it displays the corresponding **Total Amount Due, Open and Payable, Payment and Credit Worthiness** card.
  - **Moving Out Premise:** By default, displays the move-out address. You must select the date of move-out.
  - **Moving In Premise:** Choose the upcoming moving in premise details and date from the calendar to which premise customer wants to transfer.
3. **Service**

- All the **Move-In Services** and **Move-Out Services** available for that premise are displayed.
- The security deposit details are transferred if you have enabled the [Automatically transfer security deposit](#) option in SAP S/4 HANA.
- Enable the **Activate Service** switch against the service which is chosen for transfer.
- Choose the meter reading available under chosen services and do the necessary actions:
  1. Estimate
  2. Validate
  3. Override
  4. Reset

4. **Contract Account and Billing:** This section has four parts:

- **Contract Account:** Choose **Use Existing Account** to use the exiting contract accounts or choose **Create New Contract Account** to create a new contract account.  
Use the search feature to find the required contract account associated with your account. You can search using either the contract account name or the contract account ID.  
When you choose **Create Contract Account**, the Contract Accounts dialogue screen pops up where you need to fill all the required fields.
- **Security Deposit and Joint Invoicing:** Select the security deposit type and reason, Joint Invoicing and enter the amount.  
Choose **Calculate Deposit** which automatically determines the amount and deposit type. If you chooses the option as **Waive** then the security deposit amount will be set to zero.

📌 Note

- When you manually choose a reason for a security deposit, the security deposit and the amount fields are made mandatory.
- The system automatically transfers the security deposit details when moving in to a same premise.
- To calculate the security deposit, you must implement the BAdI  
ISU\_C4C\_V2\_SEC\_DEPOSIT\_CALC.

- **Mailing Address:** Specify the mailing address for correspondence with the customer. This can be maintained by any of the following four available options:
  1. **Premise Address-** Chooses the premise address as the mailing address
  2. **Customer Address-** Chooses the customer address as the mailing address
  3. **New Mailing Address-** Create a new mailing address along with validity dates
  4. **PO Box-** Create new PO Box address as the mailing address

📌 Note

If you enable the [Premise Address](#) or [Customer Address](#) option, you can only modify the email ID, telephone number, mobile number and fax. To create a new address, you must use the [New Mailing Address](#) option.

- **Notes:** (Optional) Enter if you have any notes.

5. **Review:** Review all the details and agree to the terms and conditions.

#### Note

If you want to make agreeing to these terms and conditions as mandatory, ensure this setting is configured in the extensibility settings.

6. Choose Submit or Submit via MDT to transfer the service.

#### Note

To predefine fields like date limits, default address type, country, currency, and services, configure them under  [Setting](#)  [Utilities](#)  [Move Process](#)  [General Settings](#) .

## 1.5.9.4 Dry Run

When you move-in, move-out or transfer, you can perform a dry run on some of the values so you can get the required information before submitting the process in the system.

Dry Runs allow users to check data in the SAP Service Cloud V2, Add-On for Utilities, and create validations in SAP S/4 HANA based on the available information.

As service agents, to ensure you receive the right data and make decisions before submitting the process, use the following dry run checkpoints:

- Initial screen, when the process loads.
- Selection of business partner.
- Selection of move-in/move-out dates.
- Selection of premise in move-in address (applicable only for the transfer process).
- [Next](#) option on every screen.
- [Previous](#) option on every screen.

## Alerts

During validation, if you want to display alerts to the service agent, you must fill the **ALERTS** table in the [ISU\\_C4C\\_V2\\_S\\_MOVE\\_DATA](#) structure from SAP S/4HANA.

The table contains the following fields:

- **SEQUENCE\_NUMBER**: This is the sequence of the alert messages.
- **SEVERITY**: Severity of the alert, if it is low, medium, or high
- **TEXT**: The alert message to be displayed.

You must implement the enhancement point **EHP\_ISU\_C4C\_V2\_PRE\_MOVE** in the enhancement spot **ES\_ISU\_C4C\_MOVE** to populate the alerts.

## 1.6 External Alerts

View external alerts in the SAP Service Cloud V2 system in both Contract Accounts and Premises. You can create these alerts in the SAP S/4 HANA system.

### Set Up SAP S/4 HANA

1. Access the demo service in the S/4 system by implementing the SAP note [3618340](#). You can now see the demo function module `ISU_C4C_V2_ALERTS_GET`.
2. Create your alerts service by referring to the demo function module for getting external alerts. For more information on alerts see [Alerts](#), and [Alerts System API](#).

#### → Tip

Generate the service definition (WSDL file) for the service you created and share it with the integration team to import it into the integration flow.

### Set Up Cloud Platform Integration

1. Refer the sample [Integration Flow Get Alerts](#) available in the standard package : *SAP Service Cloud V2 for Utilities Premise Integration with SAP S/4HANA*.
2. Create the integration flow and deploy it.

#### ⓘ Note

- The integration flow provided is for reference only. We recommend you to create your own for any further enhancements.  
Note that you can use the same JSON schema maintained in the sample provided.

### Set Up SAP Service Cloud V2

1. Create your communication configuration by copying the [Integrate Customer Insights with Alerts](#) configuration.
2. Update the API Path based on your requirement and activate it.
3. Open the contract account or premise. In the detail view, go to the adaptation mode.
4. In the left pane, choose [Manage Sections](#), select [Add Alerts](#) from the list and end the session.

#### ⓘ Note

You cannot see the Alerts section by default.

## Related Information

[External Alerts](#)  
[Alerts System API](#)  
[Create Communication Systems](#)  
[Manage Fields](#)

## 1.7 Search for Utilities Objects

Use APIs to find all objects specific to Utilities supported by ISU finder in SAP S/4 HANA, and view it in SAP Service Cloud Version 2, Add-On for Utilities.

### Set Up SAP Service Cloud V2

1. Make sure the outbound HTTP communication service `Get Utilities Object IDs` is activated in the communication configuration `Integrate Service Cloud Utilities with SAP S/4HANA - Move`.
2. Create a custom work center.
3. Create a mashup, and add it as a work center.
4. Open the mashup and enter the details of the item you are searching for.

### Set Up SAP Cloud Integration

As a part of completing the end-to-end utilities functionality integration setup, the respective utilities integration packages and iFlows might already be deployed.

The integration flow [Get Utilities Object IDs](#), in the package [SAP Service Cloud V2 for Utilities Premise Integration with SAP S/4HANA](#), is used to search and retrieve utilities objects from SAP S/4HANA. Ensure that this iFlow is deployed. If not, deploy it using the following steps.

1. Open the integration package [SAP Service Cloud V2 for Utilities Premise Integration with SAP S/4HANA](#).
2. Select the iFlow [Get Utilities Object IDs](#) and choose [Configure](#).
3. Under [Sender](#), choose the appropriate authorization method as per your requirement.
4. Under [Receiver](#), configure the SAP S/4HANA system details.
5. Choose **Deploy**.

## Set Up SAP S/4 HANA

To complete the integration setup between SAP Cloud Integration and the SAP S/4HANA system, you must create a binding for the SOAP service `isu_c4c_v2_object_search`. This is the final step in integrating SAP CPI and SAP S/4HANA.

1. In the SAP S/4HANA system, enter the transaction `SOAMANAGER`.
2. Navigate to ► [Service Administration](#) ► [Simplified Web Service Configuration](#) ►.
3. In the search box, enter the service name `isu_c4c_v2_object_search` and choose [Go](#).
4. Select the service and configure the authentication method: either **User Name/Password (Basic)** or **X.509 Client Certificate**, based on your requirement. Then, choose [Save](#).

The binding is created. The access URL of the service remains the same as the corresponding Cloud Integration iFlow endpoint URL. You can verify the binding URL by choosing [Display Service](#).

For example, consider that you want to search for the object of the type premise (objectType eq PREMISES).

For the query parameter where xxxx is the meter number (serialNo eq xxxx), the complete string is `https://{TENANT NAME}/sap/c4c/api/v1/utilities-common-integration-service/utilitiesSearch?$filter=objectType eq PREMISES and serialNo eq xxxx`.

Note that you can retrieve the ID for one only one object at a time.

## Related Information

[Create Communication Systems](#)

[Create HTML Mashups](#)

[Create a Mashup-Based Custom Service](#)

## 1.8 Audit Logs

Audit Logging is necessary for reproducing malicious behaviors of users and monitoring administrative activities.

The audit log for SAP Service Cloud Version 2 is managed using the table `ISU_C4C_V2_AUDIT` with its corresponding DDL view `ISU_C4C_V2_AUDIT_VIEW`, view `ISU_C4C_V2_ADT_V`, and FM to create change log `ISU_C4C_V2_AUDIT_LOG_CREATE`.

Since SAP Service Cloud Version 2 does not support principal propagation, any change documents created in the S/4HANA system will be recorded against the CPI/Technical user.

To track changes carried out from SAP Service Cloud Version 2, users can refer to the view `ISU_C4C_V2_ADT_V`, which captures all changes along with the SAP Service Cloud Version 2 user responsible for them.

# Supported Services and Corresponding Change Objects

| Service Name                   | Change Object                             |
|--------------------------------|-------------------------------------------|
| ISU_C4C_V2_BANK_CREATE         | BUPA_BUP                                  |
| ISU_C4C_V2_BP_SEC_DEP_STAT_UPD | FKK_SEC                                   |
| ISU_C4C_V2_BUDGET_BILL_DELETE  | ISU_EABP                                  |
| ISU_C4C_V2_BUDGET_BILL_EDIT    | MKK_BELEG                                 |
| ISU_C4C_V2_BUDGET_BILL_CREATE  | ISU_EABP                                  |
| ISU_C4C_V2_INSTALL_PLAN_CANCEL | MKK_BELEG                                 |
| ISU_C4C_V2_INSTALL_PLAN_CHANGE | MKK_BELEG                                 |
| ISU_C4C_V2_INSTALL_PLAN_CREATE | ISU_C4C                                   |
| ISU_C4C_V2_MDTCA_CRT           | BUPA_BUP<br>DEBI<br>BUPA_ADR<br>MKK_VKONT |
| ISU_C4C_V2_METER_READ_CREATE   | ISU_EABL                                  |
| ISU_C4C_V2_METER_READ_EDIT     | ISU_EABL                                  |
| ISU_C4C_V2_MOVE_CREATE         | ISU_EEINV<br>ISU_EANL<br>ISU_EAUSV        |
| ISU_C4C_V2_ONE_TIME_PAY_CREATE | MKK_BELEG                                 |
| ISU_C4C_V2_PAYMENT_PLAN_CREATE | ISU_EABP                                  |
| ISU_C4C_V2_PAYMENT_PLAN_DELETE | ISU_EABP                                  |
| ISU_C4C_V2_PAYMENT_PLAN_EDIT   | MKK_BELEG                                 |
| ISU_C4C_V2_PPLAN_DEACTIVATE    | ISU_EVER                                  |
| ISU_C4C_V2_P2P_WITHDRAW        | ISUC4C_P2P                                |
| ISU_C4C_V2_P2P_CREATE          | ISUC4C_P2P                                |
| ISU_C4C_V2_P2P_REACTIVATE      | ISUC4C_P2P                                |
| ISU_C4C_V2_P2P_REPLACE         | ISUC4C_P2P                                |
| ISU_C4C_V2_P2P_CHANGE_STATUS   | ISUC4C_P2P                                |

| Service Name                 | Change Object |
|------------------------------|---------------|
| ISU_C4C_V2_RATE_CATEGORY_CHG | ISU_EANL      |

## Related Information

[Audit Logs](#)

## 1.9 Agent Desktop

Utilities service agents can use the agent desktop to work on several business processes and communication items simultaneously.

Browse for a contract account and premise by entering the respective [Contract Account ID](#) and [Premise ID](#) in the search field.

Once the search result appears you can confirm the customer corresponding to contract account and premise that want to investigate more.

You can create the guided move processes (move-in and move-out) and make payment using the create option on the top of the screen and from the entity level as well.

The guided move processes opens in a wizard with all the necessary validations.

The [Customer](#) details is auto populated, and the agent should add the [Premise](#) details manually.

After confirming the customer, the [Customer Hub](#) screen appears where you can navigate to the quick view of the utility specific entities such as:

- [Contract Account](#): View the contract account ID & name, account class, and amount due in the card.

### Note

For the contract accounts where there is active contract then that contract's address is displayed in the card.

- [Premise](#): View the premise address and type where the customer has a move-in and the services for which the move-in has happened.

## Related Information

[Agent Desktop](#)  
[Customer Hub](#)

## 1.10 Utilities Sales Process

Efficiently create, edit, and view utilities sales contracts via an integrated interface, streamlining contract management and improving operational efficiency in utilities sales. Choose it to save time and reduce errors in contract handling.

### 1.10.1 Create Utilities Sales Contract

Create a Utilities Sales Contract to sign up a business partner for an energy, gas, or water supply service at a specific premise.

#### Prerequisites

- The Business Partner exists in SAP Service Cloud Version 2 and SAP S/4HANA.

#### Context

Use this procedure when a customer requests a utility service connection. The guided wizard collects the product plan, customer and premise details, and billing account information, then submits a utilities sales order to SAP S/4HANA. SAP S/4HANA creates the Utilities Sales Contract.

#### Procedure

1. Open the Agent Desktop for the Business Partner or open the Utilities Sales contract list.
2. Navigate to the [Create](#) section and choose [Utilities Sales Contracts](#).  
The guided wizard opens at **Step 1: Plan Selection**.
3. Plan Selection
  - a. Enter the Contract Start Date, the date from which the supply agreement is effective.
  - b. Select the Customer Name.
  - c. **Optional:** Select a Service Address.
  - d. Review the characteristic fields presented for the selected plan (for example, consumption profile, tariff zone, meter type). Enter or adjust values as required.
  - e. Select [Search](#) and choose the utility product or plan from the available offerings.

#### 📌 Note

- The available products and the fields shown for each product are driven by scenario configuration in SAP S/4HANA.

- When you change a characteristic value, the pricing for the simulated products may change. See Product Simulation and Pricing for details.

f. Choose [Next](#).

#### 4. Customer & Premise

- Confirm that the prefilled Customer is correct.
- Confirm or select the Premise (service address) where the utility is to be delivered.
- Review the summary cards displayed for the selected business partner:
  - **Total Amount Due:** outstanding balance across all contract accounts.
  - **Open and Payable:** invoices due for payment.
  - **Credit Worthiness:** credit risk indicator from SAP S/4HANA.
- Review the premise details: service status, existing device installations, and metering points.

#### 📘 Note

If the business partner has a large number of contract accounts, loading the summary cards may take additional time. Agents should wait for the cards to fully load before proceeding.

e. Choose [Next](#).

#### 5. Contract Account

- Select an existing contract account to bill the contract under, if none is chosen a suitable contract account will be chosen or created automatically in the SAP S/4HANA system.
- Choose [Next](#).

#### 6. Review

- Review the complete order summary:
  - Selected plans
  - Terms and conditions
  - Customer and premise
  - Mailing address
  - Additional data
- If Terms and Conditions acceptance is configured for your system, read and select the [I agree to the Terms and Conditions](#) checkbox.

#### 📘 Note

The Terms and Conditions step is optional and can be made mandatory through extensibility settings by your system administrator.

7. Choose [Submit](#).

## Results

- A utilities sales order is submitted to SAP S/4HANA.
- In the Contract List a new contract appears with status [Processing](#).
- Once SAP S/4HANA completes processing, the status changes to [Released](#).

- If processing fails, the status changes to *Failed*. Open the Sales Order Monitor from the contract row to view the error details.

## Related Information

### [Utilities Sales Contract List \[page 65\]](#)

The Contract List displays all utility sales contracts associated with a business partner, contract account, premise, or installation, and provides access to the full range of contract operations.

### [Product Simulation and Pricing \[page 72\]](#)

During the plan selection step of a contract operation, the system automatically calculates a simulated price based on the characteristic values entered by the agent. This gives the agent an estimated cost to present to the customer before the order is submitted.

### [Characteristic Values and Dynamic UI \[page 74\]](#)

The fields shown during the plan selection and contract change steps are not static. They are driven by scenario metadata retrieved from SAP S/4HANA and rendered dynamically based on the selected product and operation type.

### [Process Messages \[page 76\]](#)

When a contract operation is submitted or validated, SAP S/4HANA may return process messages alongside the result. These messages provide important information about the outcome of the operation, potential issues, or actions the agent needs to take.

### [Sales Order Monitor \[page 67\]](#)

The Sales Order Monitor lets agents track the real-time processing status of sales orders submitted to SAP S/4HANA including create, change, and end contract operations.

## 1.10.2 Change Plan of Utilities Sales Contract

Modify or change the product for a plan of an existing active Utilities Sales Contract. Use this procedure when a customer wants to switch to a different energy plan, tariff, or service offering without ending their current contract.

## Prerequisites

- The contract has status *Released* or *Released with Future Changes*.
- You have identified the contract in the *Contract List*.

## Context

A change contract operation creates a sales order in SAP S/4HANA with a specified effective date. The existing product remains active until the change date, at which point the new product for the plan takes effect. The original contract is not terminated, its terms are replaced from the change date onwards.

## Procedure

1. In the [Contract List](#), locate the contract you want to change.
2. Open the row action menu and choose [Change Plan](#).  
The guided wizard opens at **Step 1: Plan Selection (Change)**.
3. Plan Selection (Change)
  - a. Enter the [Change Start Date](#), the date from which the new plan becomes effective.

### Note

The change start date can't be earlier than the current contract's start date. The system validates this and prevents you from proceeding if the date is invalid.

- b. Select [Search](#) and choose the product. The currently running product will be shown as the first item on each page for comparison.
    - c. Review and update the characteristic fields. Fields where the underlying contract attribute is marked as non-changeable are displayed as read-only; only fields explicitly enabled for change are editable.

### Note

When you modify a characteristic value, the pricing for the simulated items. See Product Simulation and Pricing for details.

- d. Choose [Next](#).
4. Review
  - a. Review the complete change order summary:
    - Product for the selected plan
    - Change start date
    - Updated characteristic values and simulated price
    - Business partner, premise, and contract account
  - b. Choose [Submit](#).

## Results

- A sales order is submitted to SAP S/4HANA.
- The contract status in the Contract List updates from [Processing](#) to [Released with Future Changes](#), the current plan remains in effect until the change date.

- On the change date, SAP S/4HANA activates the plan and the status returns to *Released*.
- If processing fails, the status changes to *Failed*. Open the *Sales Order Monitor* from the contract row to view the error details.

## Related Information

### [Utilities Sales Contract List \[page 65\]](#)

The Contract List displays all utility sales contracts associated with a business partner, contract account, premise, or installation, and provides access to the full range of contract operations.

### [Product Simulation and Pricing \[page 72\]](#)

During the plan selection step of a contract operation, the system automatically calculates a simulated price based on the characteristic values entered by the agent. This gives the agent an estimated cost to present to the customer before the order is submitted.

### [Characteristic Values and Dynamic UI \[page 74\]](#)

The fields shown during the plan selection and contract change steps are not static. They are driven by scenario metadata retrieved from SAP S/4HANA and rendered dynamically based on the selected product and operation type.

### [Sales Order Monitor \[page 67\]](#)

The Sales Order Monitor lets agents track the real-time processing status of sales orders submitted to SAP S/4HANA including create, change, and end contract operations.

### [Change Contract Start Date \[page 62\]](#)

Update the start date of an existing Utilities Sales Contract without changing its product.

### [Process Messages \[page 76\]](#)

When a contract operation is submitted or validated, SAP S/4HANA may return process messages alongside the result. These messages provide important information about the outcome of the operation, potential issues, or actions the agent needs to take.

## 1.10.3 End Utilities Sales Contract

Terminate an existing active utilities sales contract by setting a contract end date and submitting a sales order to SAP S/4HANA.

## Prerequisites

- The contract has status *Released* or *Released with Future Changes*.
- You have identified the contract in the Contract List.

## Context

Use this procedure when a customer cancels their utility service or moves out of the premises. The end contract operation creates a sales order in SAP S/4HANA that sets a defined end date on the contract. The contract remains visible in the Contract List after termination and shows the end date once processing completes.

## Procedure

1. In the Contract List, locate the contract you want to terminate.
2. Open the row action menu and choose [End Contract](#).  
The [End Contract](#) modal opens.
3. Enter the [Contract End Date](#), the date on which the utility supply should cease.
4. If SAP S/4HANA returns process messages before the order is submitted, review them carefully:
  - a. **Informational** messages can be acknowledged and you may proceed.
  - b. **Warning** messages indicate a potential issue; review before continuing.
  - c. **Error** messages block submission; resolve the issue or contact your administrator.

### Note

Process messages are returned in real time from SAP S/4HANA.

5. Choose [Submit](#).

## Results

- A sales order is submitted to SAP S/4HANA.
- The contract status in the Contract List changes to [Processing](#).
- Once SAP S/4HANA completes processing, the contract end date is set and the status returns to [Released](#).
- If processing fails, the status changes to [Failed](#). Open the [Sales Order Monitor](#) from the contract row to view the error details.

## Related Information

### [Utilities Sales Contract List \[page 65\]](#)

The Contract List displays all utility sales contracts associated with a business partner, contract account, premise, or installation, and provides access to the full range of contract operations.

### [Change Contract End Date \[page 63\]](#)

Update the end date of a Utilities Sales Contract that already has an end date set.

### [Process Messages \[page 76\]](#)

When a contract operation is submitted or validated, SAP S/4HANA may return process messages alongside the result. These messages provide important information about the outcome of the operation, potential issues, or actions the agent needs to take.

[Sales Order Monitor \[page 67\]](#)

The Sales Order Monitor lets agents track the real-time processing status of sales orders submitted to SAP S/4HANA including create, change, and end contract operations.

## 1.10.4 Change Contract Start Date

Update the start date of an existing Utilities Sales Contract without changing its product.

### Prerequisites

- The contract has status [Released](#).
- You have identified the contract in the [Contract List](#).

### Context

Use this procedure to correct or adjust the effective start date of a contract, for example, when a customer's move-in date changes after the contract was originally created. This operation only modifies the start date; it does not change the product, or any characteristic values.

### Procedure

1. In the [Contract List](#), locate the contract whose start date you want to change.
2. Open the row action menu and choose [Change Start Date](#).  
The [Change Contract Start Date](#) dialog opens, showing the current start date.
3. Enter the [New Start Date](#).

#### Note

The new start date can't be earlier than the contract's original start date. The system validates the entered date before allowing submission.

4. Choose [Save](#).

## Results

- A sales order is submitted to SAP S/4HANA with the updated start date.
- The contract status in the Contract List changes to *Processing*.
- Once SAP S/4HANA completes processing, the new start date is reflected on the contract and the status returns to *Released*.
- If processing fails, the status changes to *Failed*. Open the *Sales Order Monitor* from the contract row to view the error details.

## Related Information

### [Utilities Sales Contract List \[page 65\]](#)

The Contract List displays all utility sales contracts associated with a business partner, contract account, premise, or installation, and provides access to the full range of contract operations.

### [Change Plan of Utilities Sales Contract \[page 58\]](#)

Modify or change the product for a plan of an existing active Utilities Sales Contract. Use this procedure when a customer wants to switch to a different energy plan, tariff, or service offering without ending their current contract.

### [Change Contract End Date \[page 63\]](#)

Update the end date of a Utilities Sales Contract that already has an end date set.

### [Sales Order Monitor \[page 67\]](#)

The Sales Order Monitor lets agents track the real-time processing status of sales orders submitted to SAP S/4HANA including create, change, and end contract operations.

## 1.10.5 Change Contract End Date

Update the end date of a Utilities Sales Contract that already has an end date set.

## Prerequisites

- The contract already has an end date set.
- You have identified the contract in the *Contract List*.

## Context

Update an end date that was previously set. This is a targeted date-only change and does not affect the product, plan, or characteristic values of the contract.

To terminate a contract immediately or with a specific cancellation end date as part of a move-out process, use [End Contract](#) instead.

## Procedure

1. In the [Contract List](#), locate the contract whose end date you want to change.
2. Open the row action menu and choose [Change End Date](#).  
The [Change Contract End Date](#) dialog opens. The current end date is shown in the modal.
3. Enter the [New End Date](#).
4. Choose [Save](#).

## Results

- A sales order is submitted to SAP S/4HANA with the updated end date.
- The contract status in the Contract List changes to [Processing](#).
- Once SAP S/4HANA completes processing, the new end date is reflected on the contract and the status returns to [Released](#).
- If processing fails, the status changes to [Failed](#). Open the [Sales Order Monitor](#) from the contract row to view the error details.

## Related Information

### [Utilities Sales Contract List \[page 65\]](#)

The Contract List displays all utility sales contracts associated with a business partner, contract account, premise, or installation, and provides access to the full range of contract operations.

### [Change Plan of Utilities Sales Contract \[page 58\]](#)

Modify or change the product for a plan of an existing active Utilities Sales Contract. Use this procedure when a customer wants to switch to a different energy plan, tariff, or service offering without ending their current contract.

### [Change Contract Start Date \[page 62\]](#)

Update the start date of an existing Utilities Sales Contract without changing its product.

### [Sales Order Monitor \[page 67\]](#)

The Sales Order Monitor lets agents track the real-time processing status of sales orders submitted to SAP S/4HANA including create, change, and end contract operations.

## 1.10.6 Utilities Sales Contract List

The Contract List displays all utility sales contracts associated with a business partner, contract account, premise, or installation, and provides access to the full range of contract operations.

Agents use the Contract List as the primary starting point for any contract-related task. The list provides a consolidated view of a customer's utility agreements and surfaces the actions an agent can perform on each contract without navigating to a separate detail page.

The list is embedded in the Contract Account workspace as [Utilities Sales Contracts](#) tab.

### Accessing the Contract List

The Contract List appears in the Contract Account workspace, which shows all Utilities Sales Contracts linked to the Contract Account.

The component accepts the following context parameters, which are supplied automatically by the host workspace:

Supported Context Parameters for Contract Filtering and Navigation

| Parameter              | Description                                               |
|------------------------|-----------------------------------------------------------|
| Sold-To Party ID       | Filters contracts to a specific business partner          |
| Individual Customer ID | Alternative business partner identifier                   |
| Account ID             | Filters contracts to a specific account                   |
| Installation ID        | Filters contracts to a specific metering installation     |
| Premise External ID    | Filters contracts to a specific premise (service address) |
| Utilities Contract ID  | Opens the list pre-filtered to a single contract          |

#### Note

These parameters are supplied automatically by the workspace context when you navigate to a customer, account, or premise. No manual input is required.

### What the List Displays

Each row in the Contract List represents one logical contract. The following columns are shown:

Displayed Contract Information

| Column              | Description                                                |
|---------------------|------------------------------------------------------------|
| Product             | The utility product or plan name (electricity, gas, water) |
| Contract Start Date | The date the contract became or becomes effective          |

| Column            | Description                                                |
|-------------------|------------------------------------------------------------|
| Contract End Date | The date the contract ends; blank if open-ended            |
| Logical Item ID   | The individual metering point at the premise               |
| Contract Account  | The billing account the contract is billed under           |
| Status            | The current processing status (see status reference below) |

### Note

The list aggregates individual contract line items into logical contracts using an internal grouping identifier (logicalItemid). A single logical contract may correspond to multiple line items in SAP S/4HANA. The list displays up to 1,000 contracts at a time.

## Sorting

You can sort the list by any of the following columns:

- Contract Start Date
- Contract End Date
- Logical Item ID
- Status
- Contract Account ID
- Premise Address

Select ↓↑ in a column header to sort ascending; select ↓↑ again to sort descending.

## Row Actions

Each contract row provides the following actions via the row action menu:

Available Contract Row Actions

| Action            | Description                                               |
|-------------------|-----------------------------------------------------------|
| Change Plan       | Open the Change Plan wizard to modify the plan or product |
| End Contract      | Open the End Contract modal to terminate the contract     |
| Change Start Date | Open a modal to update the contract start date            |
| Change End Date   | Open a modal to update the contract end date              |

## Status Reference

### Contract Status Definitions

| Status                       | Description                                                            |
|------------------------------|------------------------------------------------------------------------|
| Released                     | Contract is active; no changes pending                                 |
| Released with Future Changes | Contract is active; a future-dated change order has been submitted     |
| Processing                   | An order has been submitted and SAP S/4HANA is processing it           |
| Currently Processed          | SAP S/4HANA is actively processing the order in real time              |
| Failed                       | Processing ended with an error; open the Sales Order Monitor to review |

## Related Information

### [Create Utilities Sales Contract \[page 56\]](#)

Create a Utilities Sales Contract to sign up a business partner for an energy, gas, or water supply service at a specific premise.

### [Change Plan of Utilities Sales Contract \[page 58\]](#)

Modify or change the product for a plan of an existing active Utilities Sales Contract. Use this procedure when a customer wants to switch to a different energy plan, tariff, or service offering without ending their current contract.

### [End Utilities Sales Contract \[page 60\]](#)

Terminate an existing active utilities sales contract by setting a contract end date and submitting a sales order to SAP S/4HANA.

### [Change Contract Start Date \[page 62\]](#)

Update the start date of an existing Utilities Sales Contract without changing its product.

### [Change Contract End Date \[page 63\]](#)

Update the end date of a Utilities Sales Contract that already has an end date set.

### [Sales Order Monitor \[page 67\]](#)

The Sales Order Monitor lets agents track the real-time processing status of sales orders submitted to SAP S/4HANA including create, change, and end contract operations.

### [Contract Quick View \[page 71\]](#)

The Contract Quick View provides a summary of a Utilities Sales Contract without requiring the agent to open a full detail page.

## 1.10.7 Sales Order Monitor

The Sales Order Monitor lets agents track the real-time processing status of sales orders submitted to SAP S/4HANA including create, change, and end contract operations.

Every time an agent submits a contract operation (new, change, end, change start date, change end date), a sales order is created. The monitor provides a detailed, per-order view of what happened during processing,

including individual SD (Sales and Distribution) record statuses and any error messages returned by SAP S/4HANA.

Use the monitor when:

- A contract has status Failed and you need to identify the root cause.
- A contract has been in status Processing longer than expected.
- You want to verify that a recently submitted order completed successfully.

## Accessing the Sales Order Monitor

You can open the monitor from the [Utilities Sales Contract Quick View](#). Open the quick view of a Utilities Sales Contract and select the tab [Orders](#). Select the sales order to open the Sales Order Monitor.

The monitor opens as a quick view and displays all processing messages linked to the selected order.

## Monitor Record List

The Utilities Sales Contract List displays a table of SD (Sales and Distribution) monitor records for the selected sales order if they can not be connected to a Utilities Sales Contract. Each row represents one order item and shows the following columns:

SD Monitor Record Fields

| Column                                 | Description                                                                  |
|----------------------------------------|------------------------------------------------------------------------------|
| SD (Sales and Distribution) Order      | The SAP S/4HANA sales order number (opens the Monitor Record Quick View)     |
| SD (Sales and Distribution) Order Item | The item number within the sales order (opens the Monitor Record Quick View) |
| Process Start Time                     | The date and time when processing of this record began                       |
| Product                                | The utility product description                                              |
| Status                                 | Color-coded processing status (see status reference below)                   |

A [Refresh](#) button at the top of the table reloads the record list with the latest data from SAP S/4HANA.

## Monitor Record Quick View

Selecting a SD (Sales and Distribution) Order or SD (Sales and Distribution) Order Item link opens the Monitor Record Quick View, which provides the full processing detail for that order item.

## Header

The Quick View header shows:

Quick View Header Information

| Field                                                                       | Description                                         |
|-----------------------------------------------------------------------------|-----------------------------------------------------|
| SD (Sales and Distribution) Order or SD (Sales and Distribution) Order Item | Combined identifier (for example, 1000001 - 10)     |
| Status                                                                      | Color-coded status tag (see status reference below) |
| Process Start Time                                                          | Timestamp when processing started                   |
| Product                                                                     | Product description                                 |
| Business Partner                                                            | The sold-to party associated with this order item   |
| Installation                                                                | The metering installation ID                        |

## Tabs

The Quick View contains up to three tabs:

- Overview
- Processing Messages
- Sub Process Messages

## Overview

The Overview tab displays three collapsible sections:

Utilities Sales Order

| Field               | Description                                                    |
|---------------------|----------------------------------------------------------------|
| Order Type          | The SD (Sales and Distribution) order type code                |
| Order Item Category | The SD (Sales and Distribution) item category code             |
| Rejection Reason    | Rejection reason code and text, if the order item was rejected |
| Device              | The device (meter) ID linked to this order item                |

Contract

| Field                | Description                                     |
|----------------------|-------------------------------------------------|
| Contract Item        | The utilities sales contract ID and item number |
| Contract Item Status | The contract item status code and description   |

### Note

This section is collapsed by default if no sub-process is present.

Integration Process

| Field  | Description                                         |
|--------|-----------------------------------------------------|
| Status | The integration process status code and description |

| Field      | Description                             |
|------------|-----------------------------------------|
| Process    | The process short text description      |
| Process ID | The technical process identifier (UUID) |

## Sub Process

Integration Process

| Field      | Description                                 |
|------------|---------------------------------------------|
| Status     | The sub-process status code and description |
| Process    | The sub-process short text description      |
| Process ID | The technical sub-process identifier (UUID) |

### Note

This section is collapsed by default if no sub-process is present.

## Processing Messages

The [Processing Messages](#) tab displays all messages returned by SAP S/4HANA for the main integration process. See [Process Messages](#) for details on message severity levels and recommended actions.

## Sub Process Messages

The [Sub Process Messages](#) tab is shown only when the order item has a linked sub-process (for example, a dependent downstream process in SAP S/4HANA). The tab label reflects the sub-process name. It displays the messages specific to that sub-process.

Order Status Reference

| Status     | Indicator | Description                                                                         |
|------------|-----------|-------------------------------------------------------------------------------------|
| Processing | Grey      | The order has been received; SSAP S/4HANA is currently processing it                |
| Done       | Green     | The order was processed successfully                                                |
| Failed     | Red       | An error occurred during processing; open the Processing Messages tab for details   |
| Outdated   | Yellow    | A newer order for the same contract superseded this one; this order was not applied |

Recommended Actions for Failed Orders

| Situation                                          | Recommended Action                                                |
|----------------------------------------------------|-------------------------------------------------------------------|
| Rejection Reason is populated                      | Review the rejection reason; correct the input data and re-submit |
| Processing Messages tab shows an error             | Read the error text; correct data if possible and retry           |
| Error indicates an SAP S/4HANA configuration issue | Contact your system administrator                                 |

| Situation                                         | Recommended Action                                                           |
|---------------------------------------------------|------------------------------------------------------------------------------|
| Order is stuck in Processing for an extended time | Contact your system administrator to check the SAP S/4HANA integration queue |
| Status is Outdated                                | No action required; a newer order superseded this one                        |

## Related Information

### [Utilities Sales Contract List \[page 65\]](#)

The Contract List displays all utility sales contracts associated with a business partner, contract account, premise, or installation, and provides access to the full range of contract operations.

### [Process Messages \[page 76\]](#)

When a contract operation is submitted or validated, SAP S/4HANA may return process messages alongside the result. These messages provide important information about the outcome of the operation, potential issues, or actions the agent needs to take.

## 1.10.8 Contract Quick View

The Contract Quick View provides a summary of a Utilities Sales Contract without requiring the agent to open a full detail page.

Agents use the Utilities Sales Contract Quick View to quickly confirm key contract information, such as the product, dates, and status, while remaining in the current workspace. The Quick View is accessible directly from the Contract List and from related workspace panels.

### Note

The Contract Quick View is read-only. To perform operations on the contract (change, end, update dates), use the row actions in the Contract List.

## Accessing the Contract Quick View

In the [Contract List](#), select the logical item ID in a row.

The Quick View panel opens on the right side of the screen.

## Quick View Display

The Quick View header pane shows:

| Field               | Description                                       |
|---------------------|---------------------------------------------------|
| Product             | The utility plan or product name                  |
| Status              | Current contract status with a status badge       |
| Contract Start Date | The effective start date of the contract          |
| Contract End Date   | The end date of the contract; blank if open-ended |

The Quick View body contains the following sections:

- **Installation:** Installation ID, the metering point or device identifier at the premise.
- **Premise:** Premise address, the service address where the utility is delivered.
- **Contract Account:** Contract Account ID, the billing account reference.

## Available Actions from the Quick View

The following navigation actions are available directly from the Quick View:

| Action                   | Description                                          |
|--------------------------|------------------------------------------------------|
| Open Premise Quick View  | Open the detail view for the linked premise          |
| Open Customer Quick View | Open the detail view for the linked business partner |

## Related Information

### [Utilities Sales Contract List \[page 65\]](#)

The Contract List displays all utility sales contracts associated with a business partner, contract account, premise, or installation, and provides access to the full range of contract operations.

### [End Utilities Sales Contract \[page 60\]](#)

Terminate an existing active utilities sales contract by setting a contract end date and submitting a sales order to SAP S/4HANA.

## 1.10.9 Product Simulation and Pricing

During the plan selection step of a contract operation, the system automatically calculates a simulated price based on the characteristic values entered by the agent. This gives the agent an estimated cost to present to the customer before the order is submitted.

Product simulation is a real-time pricing estimate triggered by the SAP S/4HANA pricing engine. It is not the final invoice amount, it is an indicative price based on the current characteristic inputs and the plan's configured pricing conditions.

Simulation runs automatically during:

- **Create Contract:** Plan Selection step
- **Change Plan:** Plan Selection (Change) step

## How Simulation Works

### Trigger Conditions

A simulation is triggered automatically when the search button is selected, this triggers a simulation for all products assigned to the plan.

The system runs the calculation for the selected product in the background and updates the displayed price as you edit.

### Simulation Inputs

The following example characteristic keys could drive the pricing simulation. The actual characteristics shown depend on the scenario configuration in SAP S/4HANA:

Simulation Input Characteristics

| Characteristic Key | Description                                                         |
|--------------------|---------------------------------------------------------------------|
| SIM_CONS1          | Primary consumption value (for example, annual kWh for electricity) |
| SIM_CONS2          | Secondary consumption value (for example, off-peak consumption)     |
| SIM_CONS3          | Tertiary consumption value (for example, a third register or meter) |
| SIM_PERIOD         | The billing period used for the simulation (for example, 12 months) |

#### Note

These keys are assigned in SAP S/4HANA scenario configuration. Your system may use different or additional keys depending on the utilities product configuration.

### What Is Displayed

Once simulation completes, the Plan Selection step shows:

- Estimated total price for the entered consumption and period.
- A breakdown by price component if configured in SAP S/4HANA.

If simulation can't be completed (for example, because mandatory consumption values have not yet been entered), the price display is blank or shows a placeholder until all required inputs are provided.

## Related Information

### [Create Utilities Sales Contract \[page 56\]](#)

Create a Utilities Sales Contract to sign up a business partner for an energy, gas, or water supply service at a specific premise.

### [Change Plan of Utilities Sales Contract \[page 58\]](#)

Modify or change the product for a plan of an existing active Utilities Sales Contract. Use this procedure when a customer wants to switch to a different energy plan, tariff, or service offering without ending their current contract.

### [Process Messages \[page 76\]](#)

When a contract operation is submitted or validated, SAP S/4HANA may return process messages alongside the result. These messages provide important information about the outcome of the operation, potential issues, or actions the agent needs to take.

## 1.10.10 Characteristic Values and Dynamic UI

The fields shown during the plan selection and contract change steps are not static. They are driven by scenario metadata retrieved from SAP S/4HANA and rendered dynamically based on the selected product and operation type.

When an agent selects a product in the Create Contract or Change Contract wizard, the system loads a scenario from SAP S/4HANA. A scenario defines:

- Which fields (characteristics) are displayed for that product.
- Whether each field is editable or read-only.
- What values are allowed (free text, numeric, dropdown with predefined values).
- The display order and grouping of fields.

This means the set of fields an agent sees depends entirely on how the SAP S/4HANA scenario is configured, not on the SAP Service Cloud Version 2 UI itself. An administrator in SAP S/4HANA controls what agents see.

## Characteristics

A characteristic is a single configurable attribute of a utility product. Examples include:

- Tariff zone or region
- Annual consumption (kWh, m<sup>3</sup>)
- Meter type or register count
- Payment method preference
- Service level

Each characteristic has a type that determines how the agent interacts with it:

## Supported Characteristic Types

| Characteristic Type               | UI Representation      |
|-----------------------------------|------------------------|
| Free text                         | Single-line text input |
| Numeric                           | Number input           |
| Predefined values (single-select) | Dropdown list          |
| Date                              | Date picker            |
| Boolean                           | Toggle or checkbox     |

## Predefined Values

For characteristics with a fixed list of allowed values, the system fetches the valid options from SAP S/4HANA when the scenario loads. Agents can select from the list, free-text entry is only permitted when it is defined as such in SAP S/4HANA. The list is refreshed each time the scenario is loaded, so newly added values in SAP S/4HANA are immediately available without a UI deployment.

## Administrator Guidance

All characteristic configuration is managed in SAP S/4HANA. To change which fields appear, their order, their allowed values, or their changeability:

1. Open the relevant scenario configuration in SAP S/4HANA.
2. Modify the characteristic assignments and settings for the product or scenario.
3. Save and activate the scenario.

Changes take effect immediately for all new contract operations in SAP Service Cloud Version 2. No UI redeployment is required.

## Related Information

### [Create Utilities Sales Contract \[page 56\]](#)

Create a Utilities Sales Contract to sign up a business partner for an energy, gas, or water supply service at a specific premise.

### [Change Plan of Utilities Sales Contract \[page 58\]](#)

Modify or change the product for a plan of an existing active Utilities Sales Contract. Use this procedure when a customer wants to switch to a different energy plan, tariff, or service offering without ending their current contract.

### [Product Simulation and Pricing \[page 72\]](#)

During the plan selection step of a contract operation, the system automatically calculates a simulated price based on the characteristic values entered by the agent. This gives the agent an estimated cost to present to the customer before the order is submitted.

## 1.10.11 Process Messages

When a contract operation is submitted or validated, SAP S/4HANA may return process messages alongside the result. These messages provide important information about the outcome of the operation, potential issues, or actions the agent needs to take.

Process messages appear in two contexts:

- **Before submission:** When the system fetches pre-check messages (for example, during the End Contract dialog). These messages allow the agent to review and acknowledge potential issues before confirming the operation.
- **After submission:** When SAP S/4HANA returns messages as part of processing the sales order. These indicate whether the operation succeeded or encountered a problem.

The messages originate either directly from SAP S/4HANA business logic where they reflect conditions in the backend system, or from the SAP Sales and Service Cloud V2 where they represent processing errors.

### Message Severity Levels

Message Severity Reference

| Severity    | Indicator              | Description                                                                                                                                                                   |
|-------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Information | Blue or Info icon      | The operation completed as expected. The message provides supplementary context (for example, "Contract start date adjusted to next business day"). No agent action required. |
| Warning     | Yellow or Warning icon | The operation was processed, but a condition was detected that the agent should be aware of. Review the message and confirm whether to proceed.                               |
| Error       | Red or Error icon      | The operation could not be completed. The agent must resolve the reported issue before the order can be submitted or resubmitted.                                             |

### Where Process Messages Appear

#### End Contract Dialog

When the agent opens the End Contract dialog, the system may retrieve pre-submission messages from SAP S/4HANA based on the contract data. These are displayed within the dialog before the [Submit](#) button is enabled:

- **Information or Warning:** The agent can review and proceed.
- **Error:** The agent can't submit the termination order until the blocking condition is resolved.

## Sales Process Wizard (Create or Change)

During the wizard steps, messages may appear:

- On the [Plan Selection](#) step after a product simulation returns warnings or errors about the selected plan.
- On the [Review](#) step after the agent chooses [Submit](#), if SAP S/4HANA returns a message before finalizing the order.

## Sales Order Monitor

If a submitted order results in a Failed status, the error messages from SAP S/4HANA are visible in the Sales Order Monitor. Each failed SD monitor record shows the specific error text.

## Recommended Agent Actions

Severity Levels and Recommended Actions

| Message Severity                      | Recommended Action                                                                                                                                                 |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Information                           | Acknowledge and continue                                                                                                                                           |
| Warning                               | Read the message carefully; proceed only if the described condition is acceptable.                                                                                 |
| Error (pre-submission)                | Do not submit; correct the input data or contact the system administrator.                                                                                         |
| Error (post-submission, Failed order) | Open the Sales Order Monitor; review the error text; correct data if possible and retry; escalate to administrator if the error is from SAP S/4HANA configuration. |

## Related Information

### [End Utilities Sales Contract \[page 60\]](#)

Terminate an existing active utilities sales contract by setting a contract end date and submitting a sales order to SAP S/4HANA.

### [Create Utilities Sales Contract \[page 56\]](#)

Create a Utilities Sales Contract to sign up a business partner for an energy, gas, or water supply service at a specific premise.

### [Change Plan of Utilities Sales Contract \[page 58\]](#)

Modify or change the product for a plan of an existing active Utilities Sales Contract. Use this procedure when a customer wants to switch to a different energy plan, tariff, or service offering without ending their current contract.

### [Sales Order Monitor \[page 67\]](#)

The Sales Order Monitor lets agents track the real-time processing status of sales orders submitted to SAP S/4HANA including create, change, and end contract operations.

## 1.11 Extensibility

Extensibility allows you and your partners to extend the software platform without having to modify the original code base. So, you can add to the base functionality, thereby offering new capabilities and outputs.

When you want to create extension fields, there are three phases:

1. Create the custom field for the entity in SAP Service Cloud V2 and generate OpenAPI schema.
2. Create the custom field in SAP S/4HANA and generate the WSDL.
3. Integrate the OpenAPI schema generated from SAP Service Cloud V2 and the WSDL file from SAP S/4HANA.

### 1.11.1 Create Extension Fields

Extension fields are additional fields that you, as an administrator, can add to a cloud solution from SAP.

#### Context

Extension fields provide the means to store additional data for specific use cases beyond what is natively present in the solution. You can create these fields for a screen that has been enabled for extension fields.

#### Procedure

1. Navigate to ► [User Menu](#) ► [System Settings](#) ► [All Settings](#) ► [Extensibility](#) ► [Extensibility Administration](#) ►.

The system opens a new screen and displays a list of all business entities in the left panel. These entities are grouped by services.

2. Select the [Extendable](#) checkbox to view the entities that can be extended.
3. Drill down to the entity that you want to add an extension field to, and select it. The system opens the corresponding worklist.
4. In the [Custom Fields](#) tab, select + [\(Add\)](#) to open the [Create Fields](#) quick create screen.
5. Enter the [Label](#). The system automatically generates the [Technical Name](#). You can edit the technical name if the system displays a duplication error.

#### Note

Technical names must be unique and are not case-sensitive.

6. Select the [Data Type](#) and the corresponding [Data Format](#).
7. (Optional) If the [Data Type](#) is [String](#) and the [Data Format](#) is [UUID](#), you can make this field a standard value help option. To do so the [Standard Value Help](#) checkbox, and choose the desired value help from the dropdown list to associate it with the extension field.

### Note

Standard Value Help has restricted availability and is available only for Sales Quotes and Sales Orders. To request access to these features, you must create a case with the component CEC-CRM-CZM-EXT.

8. (Optional) If the *Data Type* is **String** and the *Data Format* is **Code**.
  1. To export, choose  (*Export*).
    1. In the *Export* screen, select the file type as either *Excel* or *CSV* and choose *Export*.
  2. To import, choose  (*Import*).
    1. In the *Import* screen, you can select *Create* for creating new values or *Update* for updating the existing values.
    2. Select the file type as either *Excel* or *CSV*.
    3. Browse for the prepared data file you want to upload.

### Remember

When using *Update*, the system replaces the entire list of values. Ensure that you export the existing values, make the required updates in the file, and then import the file back.

4. Choose *Import* and save your changes.

### Remember

To import or export code list values, add at least one code list value and save the extension field.

9. (Optional) If you want to map this field with an existing field in a different entity, turn on the *Default Mapping* switch and select  (*Add from List*).
10. Select the field either from the direct or indirect references.

### Note

- In the direct references, when the value of the mapped entity changes, the value of custom fields update automatically. There are associated entity references.
- Indirect references are follow-up or create with reference type entity. The value of the custom field remains unchanged until manually updated.

11. (Optional) If you want to mark the custom field that you are creating as a custom reference, enable the *Custom Reference Attribute* switch. Based on the data type and data format you enter, you must select the attributes. Any changes made to this standard field is automatically updated in the reference attributes across the referenced entities. You can select both standard fields and extension fields.

### Note

The following field types are not supported:

- Country/Region
- Amount
- Quantity
- Extension fields of standard OVS
- Custom code lists

12. Select *Apply* and save your changes.

The extension field is now created and is listed under the *Custom Fields* tab.

**Note**

You can create up to 150 extension fields for root or main entity and up to 30 extensions fields for a child entity.

**Related Information**

[Extension Field Data Types \[page 80\]](#)

Extension Field Data Types refer to the various formats or structures of data that can be used when creating custom fields (extension fields) in an application. These data types define the kind of data the field can store, such as text, numbers, dates, boolean values, amounts , ensuring that the data entered aligns with the intended use and system requirements.

[Field Attributes \[page 82\]](#)

Field attributes, also known as column attributes or field properties, are characteristics or settings associated with a database field (column) that define various aspects of how data is stored, displayed, and processed within a database. These attributes help ensure data integrity, enforce constraints, and control how the data is used.

[Delete Extension Fields](#)

**1.11.1.1 Extension Field Data Types**

Extension Field Data Types refer to the various formats or structures of data that can be used when creating custom fields (extension fields) in an application. These data types define the kind of data the field can store, such as text, numbers, dates, boolean values, amounts , ensuring that the data entered aligns with the intended use and system requirements.

Extension Field Data Types

| Data Type | Data Format      | Description                                                                                                                                             |
|-----------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| STRING    | STRING (Default) | This data type is used for storing alpha-numeric characters. It can be a single line or a multiline text field.                                         |
|           | UUID             | A UUID (Universally Unique Identifier) is a 128-bit identifier used for unique resource identification, typically represented as a 36-character string. |
|           | EMAIL            | Email data types are designed for storing email addresses and often include validation checks.                                                          |

| Data Type | Data Format     | Description                                                                                                                                                                                                                                                                                    |
|-----------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | CODE            | <b>CODE</b> data type is used for code list. Fixed code lists are defined via Enum options. Dynamic code lists are defined via reference to the corresponding entity.                                                                                                                          |
|           | TOKEN           | A <b>TOKEN</b> represents a small piece of data, often a single word, number, or symbol used as a fundamental unit in programming or language processing.                                                                                                                                      |
|           | URI             | A URI (Uniform Resource Identifier) is a text string used to identify a resource, typically consisting of a scheme, authority, path, query, and fragment components. Example: <b>https://www.example.com/resource?param=value#section</b> .                                                    |
| NUMBER    | FLOAT (Default) | Number data types can include integers, decimals, or floats. They are used for storing numeric values. Use <b>FLOAT</b> when memory conservation is critical, and you can tolerate lower precision                                                                                             |
|           | DOUBLE          | The <b>DOUBLE</b> data type is used to represent real numbers with a high level of precision. Double provides a higher level of precision compared to the <b>FLOAT</b> data type. It can represent approximately 15-16 decimal digits accurately.                                              |
| BOOLEAN   |                 | Boolean fields can have only two values - true or false. They are used for binary data or simple yes/no choices.                                                                                                                                                                               |
| OBJECT    |                 | <b>OBJECT</b> is a versatile and often generic data type that can represent a wide range of values, data structures, or entities.                                                                                                                                                              |
|           | AMOUNT          | <b>AMOUNT</b> stores numerical values that represent quantities, prices, costs, or any other kind of monetary or non-monetary amounts.                                                                                                                                                         |
|           | QUANTITY        | <b>QUANTITY</b> typically refers to a numerical value that represents a count, measurement, or amount. Such values are generally represented using standard numeric data types, which can be either integer or floating-point types, depending on the nature of the quantities being measured. |

#### 📌 Note

Do not store ID fields as the number data type. Use the string data type for ID values. Even if the IDs consist only of numbers, we recommend that you store them as string type, especially when number formatting is not required.

| Data Type | Data Format        | Description                                                                                                                                                                                                                                                                                                                         |
|-----------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTEGER   | INT32 (Default)    | The <b>INT32</b> data type can store a range of integer values, both positive and negative, within the constraints of a 32-bit binary representation. Int-32 is more memory-efficient than larger integer types like int-64, making it a good choice for applications where memory optimization is a concern.                       |
|           | INT64              | The <b>INT64</b> data type is capable of storing a wide range of integer values, both positive and negative, within the constraints of a 64-bit binary representation. The range of values for a 64-bit integer is extensive, making it suitable for applications where very large or very small integer values need to be handled. |
| DATETIME  | DATETIME (Default) | <b>DATETIME</b> data types store information about both the date (day, month, and year) and time (hours, minutes, seconds, and sometimes fractions of a second).                                                                                                                                                                    |
|           | DATE               | Date fields store date values, including options for time and time zone settings.                                                                                                                                                                                                                                                   |
|           | TIME               | Time fields store time values without date information.                                                                                                                                                                                                                                                                             |
|           | DURATION           | Duration fields are used to represent a specific length of time, typically measured in terms of hours, minutes, seconds, and sometimes milliseconds. It allows you to work with time intervals or durations, as opposed to specific points in time, which are handled by date and time data types.                                  |

#### 📌 Note

- You can add up to 100 codes in a code list field. For existing static code lists having more than 100 codes, further code addition is restricted. However, other modifications such as activation / deactivation of the codes are allowed.

## 1.11.1.2 Field Attributes

Field attributes, also known as column attributes or field properties, are characteristics or settings associated with a database field (column) that define various aspects of how data is stored, displayed, and processed

within a database. These attributes help ensure data integrity, enforce constraints, and control how the data is used.

#### Available Field Attributes

| Field Attribute | Description                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| creatable       | <p>Createable fields indicate whether a field can be populated with data when inserting a new record (i.e., during the creation of a new record in a database table).</p> <p>If a field is createable, you can provide a value for it when adding a new record to the database. If it's not createable, the field must remain empty or be set to a default value during insertion.</p>                        |
| updatable       | <p>Updateable fields determine whether a field's value can be modified after the record has been created.</p> <p>If a field is updateable, you can change its value when updating existing records. Fields marked as non-updateable typically remain unchanged after the record's creation, but this behavior can be controlled using field attributes.</p>                                                   |
| nullable        | <p>A field is nullable if it can contain null values, meaning that it's not required to have a value in every record.</p> <p>If a field is nullable, you can leave it empty (null) when creating or updating a record. If a field is not nullable, it must always have a valid value, and it can't be null. Non-nullable fields are typically used for data that's required and must always have a value.</p> |
| required        | <p>Required fields are those that must have a value in every record, and null values are not allowed.</p> <p>When defining a field as required, you must ensure that it is populated with a valid value whenever a new record is created or an existing record is updated. These fields are essential for data integrity and accuracy.</p>                                                                    |
| hidden          | <p>Hidden fields are not visible to the user by default, but they may contain data that is used for various purposes, such as calculations or internal processing.</p> <p>Hidden fields are often used in forms or data structures where the data is needed for processing but doesn't need to be displayed to the user.</p>                                                                                  |

#### Note

- You cannot change the **searchable** property for the **OBJECT**, **ARRAY**, **INTEGER**, **NUMBER**, and **DATETIME** datatypes.
- You cannot change the **filterable** and **sortable** properties for the **OBJECT**, **ARRAY**, **INTEGER**, and **NUMBER** datatypes.

- The `required` and `nullable` properties are not applicable for the `BOOLEAN` datatype.
- `OBJECT` datatype can not have `dataFormat` as `DEFAULT` or not defined. `dataFormat` `AMOUNT` or `QUANTITY` or `TEXT` are only supported for custom/extension attributes.
- You cannot update `dataType` and `dataFormat`.

## 1.11.2 Create Extension Fields in SAP S/4HANA for Utilities

Extend a standard function module in SAP S/4HANA by adding extension fields to the API request and exposing those fields through the service definition so they are available externally.

### Procedure

1. Identify the relevant function module / RFC used by the utilities integration.
2. Use the transaction `SE11` to review the parameter structure that contains the output fields. This structure contains standard fields sent by the API.
3. Extend this structure with custom fields. For this, In the menu bar choose [Goto](#) and [Append Structure](#).
4. Create a new append structure. This append structure will hold your custom fields.
5. Define all required custom fields inside the append structure.
6. Locate the enhancement points provided in the function module code.

These are predefined hooks where customer logic can be implemented. They enable you to insert custom logic without modifying SAP standard code. You may also use implicit enhancements (pre-exit, post-exit) if available.

7. Create an enhancement implementation using the provided enhancement points.
8. Open the corresponding SOAP service proxy and go to the service definition in the edit mode.
9. Perform a syntax check, if extended fields were added, there will be a prompt to regenerate the service metadata.
10. Choose [Regenerate](#) to refresh the service definition. This ensures the custom fields are included in the external API (SOAP payload).
11. Activate the updated service definition.

Without regenerating the service definition, the custom fields added to the RFC structures will not be visible outside the SAP S/4HANA system.

#### → Tip

To access the list of enhancement spots along with the enhancement points and sections, run the program (report) `ISU_C4C_V2_FM_ENHANCEMENTS` using the `se38` transaction in SAP S/4HANA.

Select the package as `ISU_C4C_INT`.

## 1.11.3 Integrate Using Cloud Integration (CI)

After creating custom fields in SAP Service Cloud Version 2 and SAP S/4HANA, you must integrate the OpenAPI schema generated from SAP Service Cloud V2 and the WSDL file from SAP S/4HANA.

The platform integration packages include both synchronous integration flows (transactional data) and asynchronous integration flows (master data). The types of integration flows are as follows:

- **Asynchronous flow:** Initiating from the S4H system in XML format, the integration flow includes mapping that converts XML data into JSON format before sending it to the SAP Service Cloud Version 2 system.
- **Synchronous flow:** These consist of two types: **Get calls** and **Post calls**. Get calls retrieve transactional data from S4H, while Post calls retrieve data and create, update, or delete data in the S4H system.
  - **Get Integration Flow:** Originating from the SAP Service Cloud Version 2 system via HTTP query, this flow uses two Groovy scripts: one processes HTTP query parameters to structure JSON in message headers, and the other converts JSON data into custom XML format stored in the message body. The XML request is then sent to the S4 system, which responds with XML. Response mapping converts the XML response into JSON format.
  - **Post Integration Flow:** Starting from the SAP Service Cloud Version 2 system in JSON format, this flow undergoes request mapping before sending the XML request to the S4H system. The S4H system responds with XML, and response mapping converts the XML response into JSON format before sending it back to the SAP Service Cloud Version 2 system.

All integration flows use either message mapping, Groovy scripts, or a combination of both to map data formats between systems, converting between XML and JSON as needed.

### 1.11.3.1 Custom Extensions

Based on the customers requirements, some enhancements are needed at the mapping level to allow for the transfer of additional information between SAP Service Cloud Version 2 and S4H systems, which are not included in the standard mapping content but are specific to the customers implementation.

#### Note

One way of handling this is editing the standard integration flows. It is important to note that editing the standard integration flows will result in them no longer receiving updates from SAP. Therefore, it is recommend enabling the extensibility feature which are provided for all the utilities standard integration flows.

### Custom Exists

The integration flows are designed with custom exit points, allowing users or customers to enhance SAP delivered content without modifying the standard integration flow. This ensures that users or customers are always notified of future patches and enhancements for those artifacts.

Each integration flow offers parameters that determine the need for a custom extension: Custom Exit for Asynchronous, Request Exit, and Response Exit for Synchronous. If the parameter value is set to **true**, the

source payload is saved to a message header property and makes a call to the local integration flow via the process direct adapter. If the parameter value is set to **false**, the default route is taken, and the standard mapping is applied without further extension.

In the local integration flow, customers or users can specify their requirements without modifying any standard integration flows.

#### 📌 Note

Both standard and custom integration flows are deployed on the same tenant and processed together, communicating with each other using the **Process Direct Adapter**.

### 1.11.3.1.1 Asynchronous Replication

Let us consider **Replicate Utilities Premise Connection Object from SAP S/4HANA** as an example to understand the flow in detail.

This integration flow replicates Premise and Connection Object master data from SAP S/4HANA to SAP Service Cloud Version 2.

The messages are sent via SOAP (XML) format from SAP S/4HANA to SAP Cloud Integration, where they are converted to JSON format and delivered to the SAP Service Cloud Version 2 system. The integration flow includes a parameter (Custom Exit) that determines if a custom extension is needed. If the parameter is set to **true**, the source payload is saved to a message header property and an exit flow call is made via the **Process Direct** adapter.

The address of the process direct adapter is externalized and can be configured during the integration flow setup. Customers must ensure that the address of the process direct receiver adapter matches the one used in the process direct sender adapter of the local integration flow.

#### 📌 Note

Due to differing data formats, they cannot be combined into a multi mapping message (which only supports combining messages of a single data format) in the local integration flow. Therefore, a Groovy script is used to enrich the message to meet customer-specific requirements

The sample Groovy code snippet is as below:

#### 📄 Sample Code

```
import com.sap.gateway.ip.core.customdev.util.Message
import groovy.json.JsonOutput
import groovy.json.JsonSlurper
import groovy.util.XmlSlurper
def Message processData(Message message) {
    def body = message.getBody(java.io.Reader)
    def json = new JsonSlurper().parse(body)
    def xmlString = message.getHeader("sourcePayload", java.io.Reader)
    def xml = new XmlSlurper().parse(xmlString)
    json.messageRequests.eachWithIndex { request, index ->
        // Extracting the first field
        def previousName1 =
xml.PremiseConnObjReplicateRequestMessage[index].PremiseConnectionObject.Premi
seType.text()
```

```

        // Extracting the second field
        def previousName2 =
xml.PremiseConnObjReplicateRequestMessage[index].PremiseConnectionObject.ConnectionObjectId.text()
        // Extracting the third field
        //def previousName3 =
xml.PremiseConnObjReplicateRequestMessage[index].PremiseConnectionObject.comment2.text()
        // Adding the first field to the extensions array
        request.body.extensions = ["Ext_PremiseType": previousName1]
        // Adding the second field to the extensions array
        request.body.extensions << ["Ext_connectionObjectId": previousName2]
        // Adding the third field to the extensions array
        //request.body.extensions << ["Demo_Tech": previousName2]
    }
    def modifiedJson = JsonOutput.toJson(json)
    message.setBody(modifiedJson)
    return message
}

```

The following codes are executed by the script:

1. **Read the JSON and XML Data:** The script retrieves JSON data from the message body and XML data from the message header.
2. **Extract Information from XML:** It extracts specific information from the XML data.
3. **Add Information to JSON:** The extracted information is then added to each JSON request as additional details.
4. **Update the Message:** The script converts the updated JSON data back to a string format.
5. **Return the Updated Message:** Finally, it sets the updated JSON as the new message body and returns the message.

The modified/enriched JSON is sent to main integration flow which in turn is delivered to target system.

### 1.11.3.1.2 Synchronous Replication

Synchronous extensibility allows users to customize integration flows to meet specific business requirements, such as adding new fields or custom logic to the integration process.

To illustrate this, let's examine the **Create Bank Account for Business Partner Integration Flow**, which handles sending requests from SAP Service Cloud Version 2 to SAP S/4HANA, which then responds with a message back to SAP Service Cloud Version 2.

Messages are initially sent in JSON format from SAP Service Cloud Version 2 to SAP Service Cloud Version 2, where they undergo request mapping to convert them into SOAP (XML) format before being delivered back to the SAP S/4HANA system. The SAP S/4HANA system responds in SOAP (XML) format, and response mapping converts the XML data to JSON format and sends it to the SAP Service Cloud Version 2 system.

The integration flow includes parameters i.e Request Exit and Response Exit, which determines if a custom extension is needed or not. If the parameter is set to true, the source payload is saved to a message header property as **CNSRequestPayload**. A Groovy script in the request mapping is executed to convert the JSON format to XML format, and then the Request Exit flow is called via the process direct adapter.

## Request Exit

In the **Request Exit** integration flow, a Groovy script takes the data stored in the message header property of the main integration flow, extracts specific fields from the header, adds custom fields, and forms the XML body payload. It then returns the updated message, now containing both standard fields and customer extension fields, which is sent back to the main integration flow.

The sample Groovy code snippet is as below:

### Sample Code

```
import com.sap.gateway.ip.core.customdev.util.Message
import groovy.xml.XmlUtil
import groovy.util.XmlSlurper
import groovy.json.JsonSlurper
def Message processData(Message message) {
    // Get header value
    def header = message.getHeaders().get("CNSRequestPayload")
    def jsonSlurper = new JsonSlurper()
    def headerValue = jsonSlurper.parseText(header as String)
    // Extract required fields from header
    def BusinessPartnerId = headerValue.extensions.ZbusinessPartnerId
    //def premiseId = headerValue.extensions.ZpremiseId
    // Get existing body payload
    def bodyPayload = message.getBody(String) ?: ''
    def xml = new XmlSlurper().parseText(bodyPayload)
    // Add extracted fields to the XML body
    xml.appendNode {
        IvBusinessPartner(BusinessPartnerId)
        // IvLanguage(premiseId)
    }
    // Convert updated XML back to string
    def updatedPayload = XmlUtil.serialize(xml)
    // Set updated payload to message body
    message.setBody(updatedPayload)
    return message
}
```

The following codes are executed by the script:

1. **Retrieve Header Data:** The script retrieves the value of a specific header from the message, which contains JSON data.
2. **Extract Information from JSON:** It passes this JSON data to extract specific fields, such as the Business Partner ID.
3. **Read Existing XML Body:** It reads and passes the existing XML data from the message body.
4. **Update XML with New Data:** It adds the extracted information from the JSON into the XML data as new elements.
5. **Update and Return Message:** The script converts the updated XML back to a string format, sets this updated XML as the new message body, and returns the message.

## Response Exit

The request XML data is sent to the SAP S/4HANA system via a SOAP adapter, and the system responds with XML containing both standard and custom fields. This data is saved as **S4HResponsePayload** in the main

integration flow. The standard response message mapping is then executed, but the output does not include the custom fields. After the response message mapping, a response Exit call is made, which triggers **Response Exit Integration Flow**.

The Response Exit integration flow uses a Groovy script to handle the message by extracting XML data from the header **S4HResponsePayload**, adding specific XML content as an extension to the JSON payload in the message body, and updating the message body with the modified JSON. It then returns the updated message, which now includes both standard and custom fields, to the main integration flow. The main integration flow subsequently sends the response back to SAP Service Cloud Version 2.

The sample Groovy code snippet is as below:

#### Sample Code

```
import com.sap.gateway.ip.core.customdev.util.Message
import groovy.json.JsonOutput
import groovy.json.JsonSlurper
import groovy.util.XmlSlurper
def Message processData(Message message) {
    def body = message.getBody(java.io.Reader)
    def json = new JsonSlurper().parse(body)
    def xmlString = message.getHeader("S4HResponsePayload", java.io.Reader)
    def xml = new XmlSlurper().parse(xmlString)
    // Extracting the first field
    def previousName1 = xml.EsBankDetail.BankName.text()
    // Assuming json is a single record and not a list
    // Adding the extensions segment to the json
    json.value.extensions = [
        zBankName: previousName1.toString()
    ]
    // Add more fields as necessary
    // Convert the modified JSON object back to a JSON string
    def modifiedJson = JsonOutput.toJson(json)
    message.setBody(modifiedJson)
    return message
}
```

The following codes are executed by the script:

1. **Read the JSON Body:** The script retrieves and reads the JSON data from the message body.
2. **Get XML Data from Header:** It extracts XML data from a specific header in the message.
3. **Extract Data from XML:** The script extracts specific information (e.g., bank name) from the XML.
4. **Update JSON with Extracted Data:** It adds the extracted information as an extension to the JSON data.
5. **Update and Return Message:** The script converts the updated JSON data back to a string format, sets it as the new message body, and returns the message.

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