

SAP Transportation Management 8.1

Release Notes



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1	SCM Supply Chain Management	1
1.1	SCM-BAS SCM Basis	2
1.1.1	SCM-BAS-MD Master Data	3
1.1.1.1	SCM_SCMB_TM_FND1: Foundation of External Transportation Management	4
1.1.1.2	SCM-BAS-MD-LO Location	5
1.1.1.2.1	SCM_SCMB_TM_FND1: Business Partner (Enhanced)	5
1.1.1.2.2	SCM_SCMB_TM_FND1: International Address Versions (New)	6
1.1.1.2.3	SCM_SCMB_TR_NETWORK: Geocoding (Enhanced)	6
1.1.1.2.4	SCM_SCMB_TR_NETWORK: Enhanced Services for Transportation Network	7
1.1.1.3	SCM-BAS-MD-TL Transportation Lanes, TDL Profile and Planning Cost	8
1.1.1.3.1	SCM_SCMB_TR_NETWORK: Distance and Duration Determination (Enhanced)	8
1.1.1.3.2	SCM_SCMB_TR_NETWORK: Enhanced Services for Transportation Network	9
1.1.2	SCM-BAS-EHS EH&S Services	9
1.1.2.1	SCM_EHS_DG_CI_1: EH&S Services SCM: Dang. Goods (new)	9
1.1.2.2	SCM-BAS-EHS-DG Dangerous Goods Management	10
1.1.2.2.1	SCM_EHS_DG_CI_1: EH&S Services SCM: Dang. Goods (new)	10
2	TM Transportation Management	12
2.1	Structure Changes in the IMG for SAP TM	12
2.2	TM-FWM Forwarding Order Management	15
2.2.1	Blocking Business Partner (New)	15
2.2.2	SCAC in Forwarding Order Management (New)	16
2.2.3	TM-FWM-FWQ Forwarding Quotation	16
2.2.3.1	Creation of FWO Items or FWQ Items (Enhanced)	16
2.2.3.2	Process Control Attributes (New)	18
2.2.3.3	Determination of the Route (Enhanced)	18
2.2.4	TM-FWM-FWO Forwarding Order	20
2.2.4.1	Copying of Forwarding Orders (Enhanced)	20
2.2.4.2	Uncontrolled Transportation for Forwarding Orders (New)	20
2.2.4.3	Creation of FWO Items or FWQ Items (Enhanced)	21
2.2.4.4	Process Control Attributes (New)	22
2.2.4.5	Direct Creation of Freight Documents (Enhanced)	23
2.2.4.6	Determination of the Route (Enhanced)	24
2.2.4.7	Enterprise Services for SAP TM (Enhanced)	26
2.3	TM-ERP ERP Logistics Integration	27

2.3.1	TM-ERP-SHP Shipment	27
2.3.1.1	ERP Shipment Integration (Enhanced)	27
2.4	TM-FRM Freight Order Management	28
2.4.1	Building House Bills of Lading (Enhanced)	28
2.4.2	Carrier Categorization in Freight Order Management (New)	29
2.4.3	TM-FRM-FRO Freight Order	30
2.4.3.1	Discrepancy Handling in Freight Order Management (New)	30
2.4.3.2	Freight Orders with Non-Linear Stages (New)	31
2.4.3.3	Seals (New)	32
2.4.4	TM-FRM-FRR Freight Request for Quotation	33
2.4.4.1	Cargo Management (New)	33
2.4.5	TM-FRM-FRB Freight Booking	33
2.4.5.1	User Interface for Freight Bookings (Enhanced)	33
2.4.5.2	Statuses in Freight Order Management (Enhanced)	35
2.4.5.3	Buyer's Consolidation (New)	35
2.4.5.4	Cargo Management (New)	36
2.4.5.5	Discrepancy Handling in Freight Order Management (New)	37
2.4.5.6	Freight Orders for Pick-Up and Delivery (New)	37
2.4.5.7	Seals (New)	38
2.4.5.8	Service Orders for Freight Bookings (New)	39
2.4.5.9	Use of Shipping Type and Movement Type in FU and FB (New)	40
2.4.5.10	Uncontrolled Transportation for Forwarding Orders (New)	41
2.4.5.11	Enterprise Services for SAP TM (Enhanced)	41
2.5	TM-PLN Planning	43
2.5.1	TM-PLN-FU Freight Unit	43
2.5.1.1	Organization Interaction Status for FU Stages (New)	43
2.5.1.2	Use of Shipping Type and Movement Type in FU and FB (New)	43
2.5.2	TM-PLN-MP Manual Planning	44
2.5.2.1	Map Functions (Enhanced)	44
2.5.2.2	Manual Planning (Enhanced)	44
2.5.3	TM-PLN-PS Profiles and Settings	46
2.5.3.1	Selection Screen and Layout (Enhanced)	46
2.6	TM-FWS Forwarding Settlement	47
2.6.1	Credit Memos (New)	47
2.6.2	Forwarding Settlement Documents (Enhanced)	47
2.6.3	Settlements with Incoterms (New)	48
2.6.4	Integration with SAP Credit Management	49
2.6.5	Settlement Profiles (Enhancement)	50
2.6.6	Service Dates (New)	51
2.6.7	Enterprise Services for SAP TM (Enhanced)	51
2.7	TM-FRS Freight Settlement	52

2.7.1	Additional Agreement Parties (Enhanced)	52
2.7.2	Settlement Profiles (Enhancement)	53
2.8	TM-TCC Transportation Charge Calculation	54
2.8.1	Calculation Bases (Enhanced)	54
2.8.2	Charge Calculation (Enhanced)	54
2.8.3	Charges Tab (Enhanced)	56
2.9	TM-DG Dangerous Goods	57
2.9.1	Document-Based Dangerous Goods Records (New)	57
2.9.2	Document-Based Dangerous Goods Data Templates (New)	59
2.9.3	Define UI Profiles for Document-Based DG Data (New)	59
2.10	TM-GT Global Trade	60
2.10.1	Cancellation of Customs Declarations (Changed)	60
2.10.2	Customs Relevance Check (Changed)	60
2.10.3	Export Declaration by LSP in Forwarding Orders (New)	61
2.10.4	Transit Procedure Declaration by LSP (New)	62
2.11	TM-MD Master Data	63
2.11.1	TM-MD-BP Business Partner	63
2.11.1.1	Business Partner Master Data (Enhanced)	63
2.11.2	TM-MD-CM Charge Management	64
2.11.2.1	Integration of Charge Management Master Data (Enhanced)	64
2.11.2.2	Master Data Cockpit (New)	65
2.11.2.3	TM-MD-CM-AG Agreements	65
2.11.2.3.1	Agreements (Enhanced)	65
2.11.2.4	TM-MD-CM-CS Calculation Sheets	66
2.11.2.4.1	Calculation Sheets (Enhanced)	66
2.11.2.5	TM-MD-CM-RA Rates	67
2.11.2.5.1	Rate Tables and Scales (Enhanced)	67
2.11.2.6	TM-MD-CM-SC Scales	69
2.11.2.6.1	Rate Tables and Scales (Enhanced)	69
2.11.3	TM-MD-TN Transportation Network	70
2.11.3.1	Default Route Types (New)	70
2.11.3.2	Locations and Transportation Zones (Enhanced)	71
2.11.3.3	TM-MD-TN-SCH Schedule	71
2.11.3.3.1	Schedules (New)	71
2.12	TM-BF Basic Functions	72
2.12.1	TM-BF-ARC Archiving	73
2.12.1.1	Archiving (Enhanced)	73
2.12.2	TM-BF-OM Output Management	73
2.12.2.1	Output Management User Interface (Enhanced)	73

1 SCM

Supply Chain Management

1.1 SCM-BAS

SCM Basis

1.1.1 SCM-BAS-MD

Master Data

1.1.1.1 SCM_SCMB_TM_FND1: Foundation of External Transportation Management System

Use

As of SAP enhancement package 1 for SAP SCM Basis 7.0, the business function Foundation of External Transportation Management System is available. Previously, you could transfer customer and vendor header level data, for example the address, from an ERP system to the business partner in SCM Basis of a SAP Supply Chain Management (SAP SCM) system using the core interface (CIF). However, many scenarios, for example those of an external transportation management (TM) system, use organization-specific customer data definitions from the ERP system, such as company- or sales-organization-specific partner settings and priorities, that are not transferred using CIF. You can use the business function to transfer specific attributes of customer and vendor data from an ERP system to a business partner in SCM Basis using CIF. You can use the customer and vendor data as follows:

- If you have manually created an organizational structure in SCM Basis, you can use the customer and vendor data to maintain a company organization that corresponds to the company code in an ERP system and is used by, for example, Transportation Charge Management for invoicing and charge calculation. You can also, for example, create a corporate organization that groups all company organizations.
- You can maintain specific attributes of the customer and supplier in the business partner master.

Furthermore, the SCM Basis location master has been extended to maintain international address versions.

For more information, see the following release notes:

- Business Partner
- International Address Versions

See also

SAP Library for SCM Basis on SAP Help Portal at <http://help.sap.com> under *SAP Supply Chain Management -> Business Functions (SAP Enhancement Package 1 for SAP SCM 7.0) -> Business Functions in SAP SCM -> Business Functions in SAP SCM Basis -> Foundation of External Transportation Management System*.

1.1.1.2 SCM-BAS-MD-LO Location

1.1.1.2.1 SCM_SCMB_TM_FND1: Business Partner (Enhanced)

Use

Previously, you could transfer customer and vendor header level data, such as the address, from an ERP system to SCM Basis using the core interface (CIF). As of enhancement package 1 for SAP Supply Chain Management (SAP SCM), the following new features are available:

- You can create organizational structures in SCM Basis that you can use in the HR Organization and Staffing Tool of an external Transportation Management system, for example to maintain company organizations.
- You can transfer specific attributes of customer and vendor data from an ERP system to a business partner in SCM Basis using CIF.

Effects on Existing Data

The following new tab pages have been added to the business partner master (transaction BP) for the customer business partner roles *Sold-to-Party* (CRM000) and *Ship-To-Party* (CRM002):

- *Customer Data*
- *Customer Company Organizational Data*
- *Customer Organizational Data*
- *Customer Partner Functions*

The following new tab pages have been added to the business partner master (transaction BP) for the vendor business partner roles *Vendor* (BBP000) and *Carrier* (CRM010):

- *Vendor Data*
- *Vendor Company Organizational Data*
- *Vendor Organizational Data*
- *Vendor Partner Functions*

Effects on Customizing

You make settings in the following activities in Customizing for *SCM Basis* under *Master Data* -> *Business Partner* to validate field entries when maintaining business partner data:

- Define Transportation Service Level Codes
- Map ERP Shipping Conditions to Transp. Serv. Level Codes
- Define Industry Keys
- Define Terms of Payment
- Define Customer Account Groups
- Define Vendor Account Groups

- Define Business Partner Functions
- Define Delivery Priorities

1.1.1.2.2 SCM_SCMB_TM_FND1: International Address Versions (New)

Use

As of enhancement package 1 for SAP Supply Chain Management (SAP SCM), you can use international address versions for location addresses. If the customer and vendor have international address versions maintained in the SAP ERP system, the international address versions are automatically transferred with the customer and vendor data from the SAP ERP system to SCM Basis using CIF.

Effects on Existing Data

On the *Address* tab page of the location master (transaction /SAPAPO/LOC3), the *International Versions* pushbutton is now displayed to show the international address versions of the address.

Effects on Customizing

You have activated the international versions of the address that you want to use in Customizing for *SAP NetWeaver* under *Application Server -> Basis Services -> Address Management -> International Settings -> Activate International Address Versions*.

1.1.1.2.3 SCM_SCMB_TR_NETWORK: Geocoding (Enhanced)

Use

Previously, in the standard system you could only connect to the geo-service provider PTV eServer geocoding program delivered with SAP Supply Chain Management to determine geocoordinates. Only one set of geocoordinates was available for a location. As of enhancement package 1 for SAP Supply Chain Management (SAP SCM), the following enhancements are available for geocoding:

- You can create your own geocoding strategies using the process controller framework to connect to different geo-service providers. This allows you to use various strategies for geocoding that suit your needs.
- You can define geocoding levels that allow you to store geocoordinates for the address of a location on different levels of detail, for example by house number, postal code, or region. Having different levels of detail for the geocoordinates of a location, allows you to improve the performance of the distance and duration determination between locations.

Effects on System Administration

You use the *Mass Geocoding* report to determine geocoordinates for multiple locations. You use the *Delete Obsolete Geocoordinates* report to delete geocoordinates that have become obsolete as a consequence of geocoding levels that have been deleted in the system. To run scheduled jobs for these reports, you can use the *Mass Geocoding in Batch* and *Delete Obsolete Geocoordinates in Batch* reports.

You can access these reports on the *SAP Easy Access* screen for *SCM Basis* under *Master Data -> Location -> Geocoding*.

Effects on Customizing

You have defined geocoding levels and assigned geocoding strategies to them. You define geocoding levels in Customizing for *SCM Basis* under *Master Data -> Location -> Geocoding -> Define Geocoding Levels*.

To create strategies for geocoding different from the strategies in the standard system, you can use the process controller. For more information, see the Customizing activity *Configure Process Controller for Geocoding*.

See also

For more information, see SAP Library for SAP Supply Chain Management on SAP Help Portal at <http://help.sap.com> under *SCM Basis -> Master Data -> Location -> Geocoding*.

1.1.1.2.4 SCM_SCMB_TR_NETWORK: Enhanced Services for Transportation Network

Use

As of SAP enhancement package 1 for SAP SCM Basis 7.0, the business function *Enhanced Services for Transportation Network* is available. With this business function, you can improve the geographical services used in *Transportation Network* for SAP Supply Chain Management (SAP SCM).

Accurate geographical data can help to improve the quality of many features in SAP SCM applications, such as determining geocoordinates for locations, determining distances and durations between locations, and so on. The following functions have been enhanced and improved:

- Geocoding
- Distance and duration determination

For more information, see the following release notes:

- Geocoding
- Distance and Duration Determination

See also

SAP Library for SCM Basis on SAP Help Portal at <http://help.sap.com> under *SAP Supply Chain Management -> Business Functions (SAP Enhancement Package 1 for SAP SCM 7.0) -> Business Functions in SAP SCM -> Business Functions in SAP SCM Basis -> Enhanced Services for Transportation Network*.

1.1.1.3 SCM-BAS-MD-TL Transportation Lanes, TDL Profile and Planning Cost**1.1.1.3.1 SCM_SCMB_TR_NETWORK: Distance and Duration Determination (Enhanced)****Use**

As of enhancement package 1 for SAP Supply Chain Management (SAP SCM), the following enhancements are available for the distance and duration determination (DDD):

- You can fill the DDD buffer more efficiently and delete buffered distances and durations from the DDD buffer.
- You can use the process controller to create strategies for the DDD. For more information, see the Customizing activity Configure Process Controller for Geocoding.

Effects on System Administration

To precalculate distances and duration for the DDD buffer, you can use the *Precalculation of Distance and Duration Determination* report. To delete obsolete entries from the DDD buffer, you can use the *Deletion of Buffered Distances and Durations* report. To run scheduled jobs for these reports, you can use the *Precalculation of Distance and Duration Determination in Batch* and the *Deletion of Buffered Distances and Durations in Batch* reports.

You can access these reports on the *SAP Easy Access* screen for *SCM Basis* under *Master Data -> Transportation Lane -> Distance and Duration Determination*.

Effects on Customizing

To use the enhanced distance and duration determination, you have made the following settings:

- You have defined a GIS zone that groups together a set of countries that the GIS provider specializes in. The GIS zone is necessary for defining DDD strategies. To define the GIS zone, use the Customizing activity Define GIS Zone.
- You have assigned countries to GIS zones. To assign countries to GIS zones, use the Customizing activity Assign Country to GIS Zone.

- You have defined DDD strategies for a more precise determination of distances and durations. To define DDD strategies, use the Customizing activity Define Strategy for Distance and Duration Determination.
- You have made global settings for the buffering of the distance and duration determination. To make the settings, use the Customizing activity Maintain Global Settings for Buffering of DDD.

See also

For more information, see SAP Library for SAP Supply Chain Management on SAP Help Portal at **<http://help.sap.com>** under *SCM Basis -> Master Data -> Transportation Lane -> Distance and Duration Determination*.

1.1.1.3.2 SCM_SCMB_TR_NETWORK: Enhanced Services for Transportation Network

Use

As of SAP enhancement package 1 for SAP SCM Basis 7.0, the business function Enhanced Services for Transportation Network is available. With this business function, you can improve the geographical services used in Transportation Network for SAP Supply Chain Management (SAP SCM).

Accurate geographical data can help to improve the quality of many features in SAP SCM applications, such as determining geocoordinates for locations, determining distances and durations between locations, and so on. The following functions have been enhanced and improved:

- Geocoding
- Distance and duration determination

For more information, see the following release notes:

- Geocoding
- Distance and Duration Determination

See also

SAP Library for SCM Basis on SAP Help Portal at **<http://help.sap.com>** under *SAP Supply Chain Management -> Business Functions (SAP Enhancement Package 1 for SAP SCM 7.0) -> Business Functions in SAP SCM -> Business Functions in SAP SCM Basis -> Enhanced Services for Transportation Network*.

1.1.2 SCM-BAS-EHS EH&S Services

1.1.2.1 SCM_EHS_DG_CI_1: EH&S Services SCM: Dang. Goods (new)

Use

As of SAP enhancement package 1 for SAP SCM Basis 7.0, the business function EH&S Services SCM: Dang. Goods (SCM_EHS_DG_CI_1) is available. With this business function the dangerous goods checks component has been extended to include the check method mixed loading checks.

The mixed loading checks determine whether dangerous goods can be loaded together. This requires checks at different levels and allows regulation-dependent rules and enterprise-specific special cases to be mapped.

The dangerous goods master dialogue has been extended to include the Mixed Loading tab page.

Effects on Customizing

Customizing for Dangerous Goods Management was extended to include the following IMG activities:

- IMG section Specify Settings for Mixed Loading Checks
- BAdI: Product Exchange / Multiple Component Explosion
- BAdI: Determination of Dangerous Goods Check Schema

The IMG activity *Maintain Transportation Mode* has been extended by the field *Dangerous Goods - Mode-of-Transport Category*.

See also

For more information, see the SAP Help Portal at help.sap.com.

1.1.2.2 SCM-BAS-EHS-DG Dangerous Goods Management

1.1.2.2.1 SCM_EHS_DG_CI_1: EH&S Services SCM: Dang. Goods (new)

Use

As of SAP enhancement package 1 for SAP SCM Basis 7.0, the business function EH&S Services SCM: Dang. Goods (SCM_EHS_DG_CI_1) is available. With this business function the dangerous goods checks component has been extended to include the check method mixed loading checks.

The mixed loading checks determine whether dangerous goods can be loaded together. This requires checks at different levels and allows regulation-dependent rules and enterprise-specific special cases to be

mapped.

The dangerous goods master dialogue has been extended to include the Mixed Loading tab page.

Effects on Customizing

Customizing for Dangerous Goods Management was extended to include the following IMG activities:

- IMG section Specify Settings for Mixed Loading Checks
- BAdI: Product Exchange / Multiple Component Explosion
- BAdI: Determination of Dangerous Goods Check Schema

The IMG activity *Maintain Transportation Mode* has been extended by the field *Dangerous Goods - Mode-of-Transport Category*.

See also

For more information, see the SAP Help Portal at help.sap.com.

2 TM Transportation Management

2.1 Structure Changes in the IMG for SAP TM

Use

As of SAP TM 8.1, the structure of the Implementation Guide (IMG) has changed. To copy these changes to the project IMGs, you must regenerate the project IMGs.

Deleted IMG Activities

- In the *Business Add-Ins (BAdIs) for Transportation Management* area:
 - *Basic Functions -> Charge Calculation -> BAdI: Profitability Calculation*
 - *Basic Functions -> Charge Calculation -> BAdI: Calculation Sheet Resolution*

New IMG Activities

- In the *Business Add-Ins (BAdIs) for Transportation Management* area:
 - *Basic Functions -> Credit Management Integration -> BAdI: Credit Segment Determination for Forwarding Orders*
 - *Basic Functions -> Interaction Between Organizational Units -> BAdI: Changing Organization Interaction Status*
 - *Basic Functions -> Authorizations -> Authorization Check -> BAdI: Authorization Check*
 - *Basic Functions -> Geographical Map -> Enhancement to Adapt Vehicle Positions -> BAdI: Enhancement to Adapt Vehicle Position*
 - *Forwarding Order Management -> Registry Extensions -> BAdI: Extensions of Field Registry*
 - *Basic Functions -> Dangerous Goods -> Template Data -> BAdI: Dangerous Goods Processing*
 - *Basic Functions -> Global Trade -> Declarations -> BAdI: Creation of Export Declarations on Freight Order*
 - *Basic Functions -> Global Trade -> Declarations -> BAdI: Creation of Export Declarations on Freight Unit*
 - *Basic Functions -> Global Trade -> Declarations -> BAdI: Creation of Transit Declarations on Freight Order*
 - *Basic Functions -> Global Trade -> Grouping -> BAdI: Grouping of Freight Unit Items*
 - *Settlement -> BAdI: Service Date Determination for Forwarding Settlement Document Items*
 - *Integration -> Enterprise Services -> Forwarding Order Management -> Credit Management Integration -> BAdI for CreditCommitmentNotification_Out*

- *Integration -> Enterprise Services -> Forwarding Order Management -> Credit Management Integration -> BAdI for CreditWorthinessQuery_Out*
- *Integration -> Enterprise Services -> Freight Order Management -> Booking -> Transportation Order -> BAdI for TransportationOrderBookingWaybillNotification_In*
- *Integration -> Enterprise Services -> Settlement -> Freight Settlement -> BAdI for TranspOrderSUITEInvoicingPreparationRequest_Out*
- *Integration -> Enterprise Services -> Settlement -> Freight Settlement -> BAdI for TranspOrderSUITEInvoicingPreparationCancellatn_Out*
- *Integration -> Enterprise Services -> Settlement -> Freight Settlement -> BAdI for TranspOrderSUITEInvoicingPreparationConfirmation_In*

Note that the *Settlement* node was previously called *Transportation Charge Management*.

- *Integration -> Enterprise Services -> ERP Logistics Integration -> Transportation Order -> Inbound Integration of ERP Shipments -> BAdI for TransportationOrderSCMRequest_In*
- *Integration -> Enterprise Services -> ERP Logistics Integration -> Transportation Order -> Inbound Integration of ERP Shipments ->BAdI for TransportationOrderSCMCancellationRequest_In*
- *Integration -> Enterprise Services -> ERP Logistics Integration -> Transportation Order -> Inbound Integration of ERP Shipments ->BAdI for TranspOrderSCMTenderingResultNotification_Out*
- In the *Integration* area:
 - *Integration to SAP NetWeaver Business Warehouse -> Specify Settings for BW Relevance and Data Transfer*
 - *Integration to SAP NetWeaver Business Warehouse -> Specify Status for BW Relevance*
- In the *Master Data* area:
 - *Transportation Network -> Schedule -> Define Schedule Types*
 - *Transportation Network -> Schedule -> Define Number Range Intervals for Schedules*
 - *Transportation Network -> Schedule -> Define Number Range Intervals for Voyages*
 - *Transportation Network -> Define Default Route Types*
- In the *Basic Functions* area:
 - *Credit Management Integration -> Assign Credit Segments to Sales Orgs and Company Orgs*
 - *Charge Calculation -> Rules and Conditions for Charge Calculation -> Assign Rounding Profiles to Document Currencies*
 - *Charge Calculation -> Basic Settings for Charge Calculation -> Define Calculation Profile*
 - *User Interface -> Define Settings for Business Context Viewer*

- *Type Codes and Role Codes -> General Type Codes and Role Codes -> Define Stage Types*
- *Type Codes and Role Codes -> General Type Codes and Role Codes -> Define Movement Types*
- *Type Codes and Role Codes -> General Type Codes and Role Codes -> Define Stage Type Sequence for Movement Types*
- *Type Codes and Role Codes -> General Type Codes and Role Codes -> Define Allowed Transportation Modes for Stage Types*
- *Type Codes and Role Codes -> General Type Codes and Role Codes -> Define Ventilation Settings*
- *Type Codes and Role Codes -> Master-Data-Related Type Codes and Role Codes -> Define Standard Carrier Alpha Codes*
- In the *Forwarding Order Management* area:
 - *Define Item Types for Forwarding Order Management*
 - *Define Default Agreement Party Roles for Stages*
 - *Define Cancellation Reason Codes*
 - *Forwarding Order -> Assign Item Types to Forwarding Order Types*
 - *Forwarding Order -> Define Default Freight Document Types for Stages*
 - *Forwarding Quotation -> Assign Item Types to Forwarding Quotation Types*
- In the *Settlement* area:
 - *Define Service Date Rules and Rule Prioritization*
 - *Forwarding Settlement -> Define Credit Memo Reason Code and Type*
- In the *Freight Order Management* area:
 - *Service Order -> Define Service Order Types*
 - *Service Order -> Define Service Types*
 - *Service Order -> Assign Service Types to Item Categories*
- A new structure node "Settings in SCM Basis" has been added with the following organizational Customizing activities:
 - *Master Data Settings*
 - *Integration Settings*
 - *Basic Settings*

Reassigned IMG Activities

- In the *Business Add-Ins (BADIs) for Transportation Management* area:
 - *Global Trade* area has been moved to *Basic Functions -> Global Trade*
- In the *Global Trade* area:

- *Global Trade* has been moved to *Basic Functions -> Global Trade*

Renamed IMG Activities

- In the *Master Data* area:
 - *Define Freight Agreement Types* renamed to *Define Freight Agreement Settings*
 - *Define Forwarding Agreement Types* renamed to *Define Forwarding Agreement Settings*

2.2 TM-FWM Forwarding Order Management

2.2.1 Blocking Business Partner (New)

Use

As of SAP TM 8.1, you can set order and billing blocks to a business partner (BP). When you block orders for a business partner, the system prevents the blocked business partner from being assigned to the following business documents:

- Forwarding order
- Forwarding quotation

When you block billing for a business partner, the system prevents a forwarding settlement document from being created.

You can set the blocks for the business partner on customer data level, on company organization level, or on sales organization level.

See also

For more information, see SAP Library at SAP Transportation Management under *Master Data -> Business Partner -> Business Partner Blocking*.

2.2.2 SCAC in Forwarding Order Management (New)

Use

As of SAP TM 8.1, you can assign standard carrier alpha codes (SCACs) to each of your business partners with the role *Carrier*. This enables you to quickly find the appropriate carrier when you create a forwarding order by simply entering the SCAC. If several carriers are assigned to the same SCAC, the input help for the *Carrier* field on the forwarding order user interface is restricted to the corresponding business partners.

If you enter the SCAC on the *Stages* tab page of the forwarding order but do not enter the carrier, the system automatically determines the correct carrier during the follow-up processes.

If you choose to enter the carrier directly when you create a forwarding order, the system automatically completes the SCAC field based on the information in the business partner master record.

Effects on Customizing

If you want to work with standard carrier alpha codes, we recommend that you configure the settings in the Customizing activity Define Standard Carrier Alpha Codes.

See also

For more information about standard carrier alpha codes for forwarding order management, see SAP Library for SAP Transportation Management under *Forwarding Order Management -> Determination of the Route*.

For more information about business partner master data, see the release note for Business Partner Master Data and SAP Library for SAP Transportation Management under *Master Data -> Business Partner -> Definition of Business Partners*.

2.2.3 TM-FWM-FWQ Forwarding Quotation

2.2.3.1 Creation of FWO Items or FWQ Items (Enhanced)

Use

As of SAP TM 8.1, you can define item types in Customizing and assign them to forwarding order types and forwarding quotation types. This enables you to predefine certain parameters for items, such as the item category, equipment type and group, or default units of measure. Furthermore, you can assign a dangerous goods profile to the item type and specify automatic checks, such as the overdimensional cargo check.

You can define default item types for a combination of item category and document type. This item type is used by the system if the forwarding order or forwarding quotation is received electronically. Furthermore it is used, if you do not enter an item type on the user interface (UI) of the forwarding order or forwarding quotation and only one default item type is specified for this combination of item category and document type.

Container Attributes

As of SAP TM 8.1, you can specify container attributes for temperature control in the equipment type that provides information for the user. In Customizing, you can also specify ventilation settings for containers that you can select on the forwarding order or forwarding quotation UI.

Item Split

As of SAP TM 8.1, you can split items into several new items. The number of created items refers to the number of pieces that the original item contains. A new item is created for each piece. The existing quantities are also split.

The following prerequisites apply to splitting items:

- The item has not yet been planned.
- The item contains more than one piece.
- The item has no sub-items.

Effects on Customizing

As of SAP TM 8.1, the following new Customizing activities are available for creating items in forwarding order management:

- Define Item Types for Forwarding Order Management (Required)
- Assign Item Types to Forwarding Order Types (Optional)
- Assign Item Types to Forwarding Quotation Types (Optional)
- Define Ventilation Settings (Optional)

The following Customizing activity has been enhanced:

- Define Equipment Groups and Equipment Types (Optional)

See also

For more information, see SAP Library for SAP Transportation Management under *Forwarding Order Management -> Creation of Forwarding Order Items or Forwarding Quotation Items*.

2.2.3.2 Process Control Attributes (New)

Use

As of SAP TM 8.1, you can specify several attributes in a forwarding order or forwarding quotation that control the further process of creating and executing the order. You enter these attributes in the header data of the business document in the *General Data* area. The attributes then apply to the entire business document.

You can also predefine the attributes in Customizing for the forwarding order type or forwarding quotation type. They are then automatically inserted into the business document and cannot be changed.

As of SAP TM 8.1, the following attributes are available:

- Transportation Mode (applies to the main carriage stage)
- Traffic Direction
- Shipping Type
- Movement Type

Furthermore, you can specify whether the forwarding order is to be subjected to a controlled transportation or buyer's consolidation. For more information, see the release notes *Uncontrolled Transportation for Forwarding Orders (New)* and *Buyer's Consolidation (New)*.

Effects on Customizing

To use the attributes of transportation mode and movement type, you have defined them in Customizing for *Transportation Management* under the following Customizing activities:

- Define Transportation Mode
- Define Movement Types

You can predefine the attributes in Customizing for the forwarding order type or forwarding quotation type under the following Customizing activities:

- Define Forwarding Order Types
- Define Forwarding Quotation Types

See also

For more information, see SAP Library for SAP Transportation Management under *Forwarding Order Management -> Forwarding Order -> Process Control Attributes*.

2.2.3.3 Determination of the Route (Enhanced)

Use

Until now, you could enter the route that your ordering party has requested on the *Stages* tab page of your forwarding order or forwarding quotation. The route determined by transportation planning was also displayed on this tab page.

As of SAP TM 8.1, you can also manually enter and change the actual route, which might differ from the ordered route. Alternatively, you can accept and change the route that has been determined by the system as a transportation proposal.

New Fields and Functions

Several fields and functions have been added to the stage table, some of which require Customizing settings (see below). For example, a stage type has been introduced that determines whether a stage is a main-carriage, pre-carriage, or on-carriage stage, which is important for follow-on processes such as invoicing and charge calculation. Using a movement type that is entered on the header level of a forwarding order or forwarding quotation, you can predefine the stage sequence and the required stages in the actual route. Moreover, the transportation mode can be predefined and entered for a stage that affects, for example, the creation of freight documents.

You can now create freight documents and select schedules directly for certain stages. The stage information is considered for creating these documents. After creation of the documents their ID is displayed and the document data is taken over into the stage data. For more information, see the release note for Direct Creation of Freight Documents (Enhanced).

Moreover, an organization interaction status has been introduced for stages. For more information, see the release note for Organization Interaction Status for FU Stages (New). A stage status shows whether the sales organization to which a user is assigned is responsible for a stage.

Change Between Stage View and Item View

You can now change between a stage-centric and an item-centric view on the stages. This option offers the following advantages:

- Stage View
Items are displayed for stages. You can select stages and perform activities such as creating freight documents and changing stage data.
- Item View
Stages are displayed for items. You see a list of the items with their corresponding freight units. You can select stages and perform activities such as creating freight documents and changing stage data.

Effects on Customizing

The following new Customizing activities have been introduced to control the display and functions of route determination in the forwarding order or forwarding quotation:

- Define Stage Types (required)
- Define Movement Types (required)
- Define Stage Type Sequence for Movement Types (optional)
- Define Allowed Transportation Modes for Stage Types (optional)
- Define Default Agreement Party Types for Stages (required)

See also

For more information, see SAP Library for SAP Transportation Management under *Forwarding Order Management -> Determination of the Route*.

2.2.4 TM-FWM-FWO Forwarding Order

2.2.4.1 Copying of Forwarding Orders (Enhanced)

Use

As of SAP TM 8.1, the function for copying an existing forwarding order or forwarding order template has been enhanced. You can now enter a new forwarding order type for the forwarding order to be created.

The new forwarding order type can cause inconsistencies with the data that has been copied from the existing forwarding order. This applies to data that is determined from the Customizing settings of the forwarding order type, such as the transportation mode, shipping type, traffic direction, or item type.

If there is no other option, the system removes these inconsistencies automatically and updates the data of the new forwarding order. If several options exist, you must change the affected data of the new forwarding order manually.

See also

For more information, see SAP Library for SAP Transportation Management under *Forwarding Order Management -> Forwarding Order -> Creation of a Forwarding Order*.

2.2.4.2 Uncontrolled Transportation for Forwarding Orders (New)

Use

As of SAP TM 8.1, a logistics service provider (LSP) can specify that the carrier assigned to the main

carriage stage of a forwarding order bills the ordering party directly, based on a special freight agreement between the ordering party and the carrier. In this case, the LSP can only calculate charges and create settlement documents for the pre-carriage and on-carriage stages.

To specify that the main carriage stage is controlled by the carrier, you deselect the new *Controlled* checkbox on the *General Data* tab page of the forwarding order UI. The checkbox is selected by default. If you deselect the checkbox, you can then enter the ID of the freight agreement that exists between the carrier and the ordering party in the new *External Freight Agreement* field.

Deselecting the *Controlled* checkbox in a forwarding order has the following effect on further processing:

- When you assign the freight units that belong to the forwarding order to a freight booking, the system displays the *Controlled* checkbox and the *External Freight Agreement* field on the *Terms and Conditions* tab page in the freight booking. They are both read-only. If you assign freight units from other forwarding orders to this freight booking, the forwarding orders must all have the same external freight agreement ID.

Note that the *Controlled* checkbox and the *External Freight Agreement* field are only visible in a freight booking if the checkbox has been deselected in the corresponding forwarding order.

- When you carry out forwarding settlement, the system only creates forwarding settlement documents for the pre-carriage and on-carriage stages.

See also

For more information, see SAP Library for SAP Transportation Management under *Forwarding Order Management*.

2.2.4.3 Creation of FWO Items or FWQ Items (Enhanced)

Use

As of SAP TM 8.1, you can define item types in Customizing and assign them to forwarding order types and forwarding quotation types. This enables you to predefine certain parameters for items, such as the item category, equipment type and group, or default units of measure. Furthermore, you can assign a dangerous goods profile to the item type and specify automatic checks, such as the overdimensional cargo check.

You can define default item types for a combination of item category and document type. This item type is used by the system if the forwarding order or forwarding quotation is received electronically. Furthermore it is used, if you do not enter an item type on the user interface (UI) of the forwarding order or forwarding quotation and only one default item type is specified for this combination of item category and document type.

Container Attributes

As of SAP TM 8.1, you can specify container attributes for temperature control in the equipment type that provides information for the user. In Customizing, you can also specify ventilation settings for containers that you can select on the forwarding order or forwarding quotation UI.

Item Split

As of SAP TM 8.1, you can split items into several new items. The number of created items refers to the number of pieces that the original item contains. A new item is created for each piece. The existing quantities are also split.

The following prerequisites apply to splitting items:

- The item has not yet been planned.
- The item contains more than one piece.
- The item has no sub-items.

Effects on Customizing

As of SAP TM 8.1, the following new Customizing activities are available for creating items in forwarding order management:

- Define Item Types for Forwarding Order Management (Required)
- Assign Item Types to Forwarding Order Types (Optional)
- Assign Item Types to Forwarding Quotation Types (Optional)
- Define Ventilation Settings (Optional)

The following Customizing activity has been enhanced:

- Define Equipment Groups and Equipment Types (Optional)

See also

For more information, see SAP Library for SAP Transportation Management under *Forwarding Order Management -> Creation of Forwarding Order Items or Forwarding Quotation Items*.

2.2.4.4 Process Control Attributes (New)

Use

As of SAP TM 8.1, you can specify several attributes in a forwarding order or forwarding quotation that control the further process of creating and executing the order. You enter these attributes in the header data of the business document in the *General Data* area. The attributes then apply to the entire business document.

You can also predefine the attributes in Customizing for the forwarding order type or forwarding quotation type. They are then automatically inserted into the business document and cannot be changed.

As of SAP TM 8.1, the following attributes are available:

- Transportation Mode (applies to the main carriage stage)
- Traffic Direction
- Shipping Type
- Movement Type

Furthermore, you can specify whether the forwarding order is to be subjected to a controlled transportation or buyer's consolidation. For more information, see the release notes *Uncontrolled Transportation for Forwarding Orders (New)* and *Buyer's Consolidation (New)*.

Effects on Customizing

To use the attributes of transportation mode and movement type, you have defined them in Customizing for *Transportation Management* under the following Customizing activities:

- Define Transportation Mode
- Define Movement Types

You can predefine the attributes in Customizing for the forwarding order type or forwarding quotation type under the following Customizing activities:

- Define Forwarding Order Types
- Define Forwarding Quotation Types

See also

For more information, see SAP Library for SAP Transportation Management under *Forwarding Order Management -> Forwarding Order -> Process Control Attributes*.

2.2.4.5 Direct Creation of Freight Documents (Enhanced)

Use

Until now, you could create or select a freight booking for a forwarding order on header level. As of SAP TM 8.1, you can create freight bookings and freight orders directly for selected stages of the actual route

that you have specified in your forwarding order. Moreover, you can select existing freight bookings and schedules (departures) for stages.

As of SAP TM 8.1, you can create freight documents and select freight bookings and schedules on the **Stages** tab page of the forwarding order. You cannot create or assign a freight booking on the header level of the forwarding order anymore. You select a stage of the actual route and choose the corresponding function. Depending on the transportation mode, a freight order or freight booking is created. After the freight document has been created or assigned by the system, the document ID is displayed for the stage.

If you select a schedule for a stage, the system considers the stage information (such as locations and dates) for the search of the schedule options. The data of the schedule that you have selected is transferred to the stage data.

Create Freight Documents for Multiple Stages

Moreover, you can create freight documents for multiple continuous stages. If you select more than one stage, the system first determines the freight document type of the stages from Customizing (see below). Then, according to the transportation mode, it creates a freight order or freight booking and assigns the selected stages to this document. However, this is only possible if the following conditions are met:

- A freight document type is defined in Customizing for all stages.
- The stages have the same freight document type.
- The stages have the same transportation mode, carrier, voyage, and vessel name (or this data is not defined at all for some of the stages).
- The status of the stages is *Unplanned*.

Moreover, you can unassign multiple stages from an existing freight document.

Effects on Customizing

To use this function, you must specify the types of freight documents that are created and which creation and selection functions on the forwarding order user interface are to be available. You do so in Customizing for *Transportation Management* under *Forwarding Order Management* -> *Forwarding Order* -> *Define Default Freight Document Types for Stages*.

See also

For more information, see SAP Library for SAP Transportation Management under *Forwarding Order Management* -> *Forwarding Order* -> *Direct Creation of Freight Documents and Selection of Schedules*.

2.2.4.6 Determination of the Route (Enhanced)

Use

Until now, you could enter the route that your ordering party has requested on the *Stages* tab page of your forwarding order or forwarding quotation. The route determined by transportation planning was also displayed on this tab page.

As of SAP TM 8.1, you can also manually enter and change the actual route, which might differ from the ordered route. Alternatively, you can accept and change the route that has been determined by the system as a transportation proposal.

New Fields and Functions

Several fields and functions have been added to the stage table, some of which require Customizing settings (see below). For example, a stage type has been introduced that determines whether a stage is a main-carriage, pre-carriage, or on-carriage stage, which is important for follow-on processes such as invoicing and charge calculation. Using a movement type that is entered on the header level of a forwarding order or forwarding quotation, you can predefine the stage sequence and the required stages in the actual route. Moreover, the transportation mode can be predefined and entered for a stage that affects, for example, the creation of freight documents.

You can now create freight documents and select schedules directly for certain stages. The stage information is considered for creating these documents. After creation of the documents their ID is displayed and the document data is taken over into the stage data. For more information, see the release note for Direct Creation of Freight Documents (Enhanced).

Moreover, an organization interaction status has been introduced for stages. For more information, see the release note for Organization Interaction Status for FU Stages (New). A stage status shows whether the sales organization to which a user is assigned is responsible for a stage.

Change Between Stage View and Item View

You can now change between a stage-centric and an item-centric view on the stages. This option offers the following advantages:

- Stage View
Items are displayed for stages. You can select stages and perform activities such as creating freight documents and changing stage data.
- Item View
Stages are displayed for items. You see a list of the items with their corresponding freight units. You can select stages and perform activities such as creating freight documents and changing stage data.

Effects on Customizing

The following new Customizing activities have been introduced to control the display and functions of route determination in the forwarding order or forwarding quotation:

- Define Stage Types (required)
- Define Movement Types (required)
- Define Stage Type Sequence for Movement Types (optional)
- Define Allowed Transportation Modes for Stage Types (optional)
- Define Default Agreement Party Types for Stages (required)

See also

For more information, see SAP Library for SAP Transportation Management under *Forwarding Order Management -> Determination of the Route*.

2.2.4.7 Enterprise Services for SAP TM (Enhanced)

Use

As of SAP TM 8.1, you can use new and enhanced service operations in the following process components:

- *Transportation Request Processing*

The following new service operations enable SAP TM to exchange information with SAP Credit Management:

- *Check Transportation Request Ordering Party Creditworthiness*
(CreditWorthinessQuery_Out)
- *Notify of Credit Commitment* (CreditCommitmentNotification_Out)

For more information, see the release note for *Integration with SAP Credit Management*.

- *Customer Freight Invoice Request Processing*

The new service operation *Notify of Credit Commitment* (CreditCommitmentNotification_Out) enables SAP TM to send billing information to SAP Credit Management.

For more information, see the release note for *Forwarding Settlement Documents (Enhanced)*.

- *Transportation Order Processing*

A logistics service provider (LSP) can send a freight booking from one organizational unit to another using the enhanced service operation *Notify of Transportation Order Booking Waybill* (TransportationOrderBookingWaybillNotification_Out) and the new service operation *Maintain Transportation Order Based On Transportation Order Booking Waybill Notification* (TransportationOrderBookingWaybillNotification_In). For example, an LSP has an organizational unit in Europe that handles the pre-carriage and main carriage stages for a specific freight booking, and another organizational unit in the United States that handles the on-carriage stage. In this case, the LSP sends the freight booking to the organizational unit in the United States in order to provide relevant information about the transportation of the goods. Note that if the freight booking is subsequently changed in the sending system, it is not possible to update the freight booking in the receiving system.

The new Business-Add-In (BAI) BAI for TransportationOrderBookingWaybillNotification_In is available for the service operation *Maintain Transportation Order Based On Transportation Order Booking Waybill Notification* (TransportationOrderBookingWaybillNotification_In).

2.3 TM-ERP ERP Logistics Integration

2.3.1 TM-ERP-SHP Shipment

2.3.1.1 ERP Shipment Integration (Enhanced)

Use

As of SAP TM 8.1, the following functions are available for the inbound integration of ERP shipments:

- You can use the Customizing activity *Assign Freight Order Types to ERP Shipment Types* to define which freight order type the system uses to create a freight order based on an ERP shipment. This provides you with a more flexible method of determining the relevant freight order type, for example, during shipment-based tendering.

Note that you can still define a default freight order type for ERP shipment integration in the Customizing activity *Define Freight Order Types*. The system uses the default only if it cannot find an entry for an ERP shipment type in the Customizing activity *Assign Freight Order Types to ERP Shipment Types*.

- You can create shipment-based freight orders with non-linear stages. Previously, only linear stages were supported. Note that you cannot create a shipment-based freight order that contains both linear and non-linear stages.

For more information about non-linear stages, see the release note for Freight Orders with Non-Linear Stages (New).

- The SAP TM system can create one-time locations for shipment-based freight orders. When an ERP shipment is received in SAP TM, the system checks if the locations in the shipment already exist as master data objects in SAP TM. If they do not exist, the system creates the required one-time locations and enters them in the corresponding freight order.

See also

For more information about ERP shipment integration, see SAP Library for SAP Transportation Management under *ERP Logistics Integration -> Integration of SAP TM and SAP ERP Shipment Processing*.

2.4 TM-FRM Freight Order Management

2.4.1 Building House Bills of Lading (Enhanced)

Use

As of SAP TM 8.1, you can build house bills of lading for freight orders, freight bookings, and freight units.

The system automatically groups all items that do not belong to a fixed house bill of lading according to the process controller strategy that you indicated in Customizing.

SAP delivers the following process controller strategies for building house bills of lading:

- *Build House Bill of Lading by Shipper/Consignee* (HBL_SHPCNS)
The system groups all items that have the same shipper and consignee. This is the default strategy. Moreover, the system always uses this strategy for building house bills of lading for freight units.
- *Build House Bill of Lading by Forwarding Order* (HBL_TRQID)
The system groups all items that belong to the same forwarding order.

- *Build HBL by Shipper/Consignee/Container* (HBL_SCCONT)
The system groups all items that have the same shipper and consignee and that are in the same container.
- *Build HBL by Shipper/Consignee/Transport. Group* (HBL_TRPGRP)
The system groups all items that have the same shipper and consignee and belong to the same transportation group.

As a hard constraint, the system checks whether the transportation stops of all items are identical.

One item of the original business document, for example forwarding order, can only be assigned to one house bill of lading.

Moreover, a new life cycle status for house bills of lading has been introduced. It is set automatically by the system.

Effects on Customizing

As a prerequisite, you have to indicate a process controller strategy in Customizing for your freight order type (see *Define Freight Order Types*) or freight booking type (see *Define Freight Booking Types*).

Moreover, you have to define number range intervals for your freight order type, booking type, or freight unit type (see *Define Freight Unit Types*).

See also

For more information about house bills of lading, see SAP Library for SAP Transportation Management under *Freight Order Management*.

2.4.2 Carrier Categorization in Freight Order Management (New)

Use

As of SAP TM 8.1, you can differentiate between carrier categories and business partners in freight order management. The following functions are available:

- *Standard carrier alpha code (SCAC)*
If you enter a SCAC, the system determines the related carrier and vice versa.
You can assign a SCAC to several carriers that are related to each other (see below).
Example:
Carrier A (carrier category *Carrier*) has two subsidiaries (carrier category *Subsidiary*):
 - A_US
 - A_EUMoreover, it has an agent AG (carrier category *Agent*).
Carrier A, subsidiaries A_US and A_EU, and agent AG are related via the following relationships:
 - *Has Subsidiaries/Agents*

- *Is Subsidiary/Agent Of*
Due to these assignments, the two subsidiaries and the agent have the same SCAC as carrier A. Agent AG is also assigned to carrier B. Due to this assignment, agent AG has two SCACs, that is, the SCAC of carrier A and the SCAC of carrier B.
- *Communication party*
If you enter a communication party in your freight order or freight booking and choose *Send to Carrier* (freight order) or *Send Booking* (freight booking), the system sends messages to this communication party instead of to the carrier.
In tendering, if you have assigned a communication party to a carrier in the business partner master data, the system sends messages (for example, B2B messages, e-mails, or text messages) to the contact person of the communication party and not the contact person of the carrier.
- *Executing carrier*
You can enter an executing carrier for information purposes, for example, if you want to let your NVOCC (non-vessel operating common carrier) know that you want the goods to be transported by a special carrier.

See also

For more information about defining SCACs for your business partners, see the release note for Business Partner Master Data.

For more information about SCAC in forwarding orders, see the release note for SCAC in Forwarding Order Management.

For more information about carrier categorization in freight order management, see SAP Library for SAP Transportation Management under Freight Order Management.

2.4.3 TM-FRM-FRO Freight Order

2.4.3.1 Discrepancy Handling in Freight Order Management (New)

Use

As of SAP TM 8.1, you can enter quantity discrepancies in your freight orders and freight bookings.

If you have received the quantity of a freight order or freight booking as planned, you set the freight order item or freight booking item to *Quantity Received as Planned*. The system automatically changes the cargo receipt status to *On Hand*.

If you have discovered a quantity discrepancy, however, you enter the actual quantities on the *Actual Quantities* tab page of your freight order or freight booking.

The system automatically performs the following steps:

- It changes the cargo receipt status to *On Hand* and activates the *Occurrence of Quantity Discrepancy* checkbox.
- It adjusts the actual quantities in the related freight units.

You can deselect this checkbox if the discrepancy has been resolved. You can search for forwarding orders with freight orders or freight bookings that have quantity discrepancies.

See also

For more information about the cargo receipt status, see the release note for *Statuses in Freight Order Management*.

2.4.3.2 Freight Orders with Non-Linear Stages (New)

Use

As of SAP TM 8.1, you can create freight orders with non-linear stages.

This function allows you to describe for example the following scenarios:

- A less than truck load (LTL) consolidation scenario in which the deliveries are consolidated into one container at the transshipment location. In such a scenario you can create a freight order for disconnected stages to perform freight settlement.
- An LTL deconsolidation scenario in which the goods are deconsolidated at the transshipment location. This transshipment location is supplying all successor stops (that is, the delivery locations) with goods.

Freight orders with non-linear stages can only be created using customer-specific functions or ERP shipments. That means, you cannot create this type of freight order from a forwarding order. You also cannot create freight units from such ERP shipments and you cannot carry out any planning activities.

You can create freight settlement documents for individual stages.

Example for an LTL deconsolidation scenario:

You define the following locations:

- Source location A
- Destination location B

- Destination location C

The stages look as follows:

- Stage 10 (A to B)
- Stage 20 (A to C)

Effects on Customizing

In Customizing, you have selected a stop sequence type for non-linear stages in your freight order type (see Define Freight Order Types).

In Customizing, you have selected the *Stage Split* checkbox in the relevant freight settlement profile (see Define Settlement Profile). In Customizing, you have also selected *Calculation at Stage Level* in the *Calculation Level* field of the relevant calculation profile (see Define Calculation Profile). You must define both of these settings to create freight settlement documents for individual stages.

2.4.3.3 Seals (New)

Use

As of SAP TM 8.1, you can enter one or more seals per container in your ocean freight bookings and freight orders.

You can enter the following seal information:

- Seal numbers
The seal numbers are also displayed in the corresponding house bills of lading, master bills of lading, and export declarations.
- Date, time, and time zone of sealing or unsealing
- Sealing party and unsealing party

If a forwarding order contains seals, the seals are copied to the corresponding ocean freight bookings or freight orders. If you create a freight order for pick-up or delivery from your ocean freight booking, seals are also copied to this freight order (see the release note for Freight Orders for Pick-Up and Delivery).

See also

For more information about seals, see SAP Library for SAP Transportation Management under *Freight Order Management*.

2.4.4 TM-FRM-FRR Freight Request for Quotation**2.4.4.1 Cargo Management (New)****Use**

As of SAP TM 8.1, you can assign a freight unit transported with the same freight order or ocean freight booking to more than one container (ocean freight booking) or compartment (freight order) by using drag and drop. Therefore, you can split a forwarding order among multiple containers that belong to the same ocean freight booking. A symbol indicates that the forwarding order is split among multiple containers or even ocean freight bookings.

You can use this function in an LCL (Less Than Container Load) scenario with an FCL (Full Container Load) ocean freight booking.

Moreover, you can delete items from freight orders and ocean freight bookings if one or more of these items (container, package, or product items) cannot be transported with a freight order or ocean freight booking. For example, this can be necessary if a pallet remains in the container freight station because the container is full.

On the ocean freight booking user interface, a new *Cargo Management* tab has been added. This tab is also available in the transportation cockpit.

See also

For more information about cargo management, see SAP Library for SAP Transportation Management under *Freight Order Management*.

2.4.5 TM-FRM-FRB Freight Booking**2.4.5.1 User Interface for Freight Bookings (Enhanced)****Use**

As of SAP TM 8.1, the following functions are available for ocean freight bookings:

- A new *Cargo Management* tab page is available (see Cargo Management). It replaces the *Item Overview* tab page.
On this new tab page, the following new functions are available:
 - You can insert freight units based on freight unit IDs, forwarding orders, or various selection criteria. For air freight bookings, this function is available on the *Item Overview* tab page.
 - The support for LCL freight bookings has been enhanced.
 - Data from the forwarding order is copied to the ocean freight booking, for example, shipper-owned container and interior conditions. Moreover, information about container provisioning and shipper's load and count (SLAC) is copied.
 - On the *Actual Quantities* tab page, you can enter actual quantities and the cargo receipt status. For more information, see the release notes for Discrepancy Handling in Freight Order Management and Statuses in Freight Order Management.
 - The visualization of utilization and remaining capacity has been improved (see Open Capacity in Most Critical Dimension).
 - New statuses are displayed (see the release note for Statuses in Freight Order Management).
- A new *Stages* tab page is available. You can, for example, enter the voyage or vessel, or insert a stage to add a port between the port of loading and the port of discharge.
You can also insert stages between the pick-up location and the port of loading, or between the port of discharge and the delivery location. That means there can be more than one pre-carriage stage and more than one on-carriage stage for a freight booking. Note however, that with these additional stages, you cannot model a multi pick-up scenario but only locations at which additional activities are to be performed (for example, weighing). The freight unit stage remains unchanged.
Alternatively, you can insert locations on the *Overview* tab page.
For more information about creating freight documents for multiple stages, see the release notes for Manual Planning and Direct Creation of Freight Documents.
- The *Locations and Dates/Times* tab page has been enhanced with new fields. Some fields have been moved to this tab page from the *General Data* tab page. Cut-off dates/times are either copied from a schedule (see below) or you can enter them manually.
- You can start the transportation cockpit from your ocean freight booking (*Follow-up -> Start Transportation Cockpit*).
- You can assign a schedule to your ocean freight booking (see the release note for Schedules).
- The shipping type and movement type are displayed (see the release note for Use of Shipping Type and Movement Type in FU and FB).
- The *Charges* tab page has been enhanced (see the release note for Charges Tab).
- A new *Service Orders* tab page is available (see the release note for Service Orders for Freight Bookings).

2.4.5.2 Statuses in Freight Order Management (Enhanced)

Use

As of SAP TM 8.1, the following statuses are available in the freight order management area:

- *Booking Confirmation Status*
This status is available for freight bookings.
- *Handling Execution Status*
This status is available for freight bookings and freight orders on both item level and stop level.
On item level, this status can indicate, for example, that a package has been loaded into a container at the current stop.
On stop level, this status can indicate that a vehicle resource has arrived at a stop.
The handling execution status is related to the cargo execution status.
- *Cargo Execution Status*
This status is available for freight bookings and freight orders. It indicates the progress of the execution activities of a capacity item, for example, a container has been fully loaded.
- *Shipped-on-Board Status*
This status is available for ocean freight bookings.
It is set manually by the user after a vessel has departed. The shipped-on-board date must not be in the future.
- *Cargo Receipt Status*
This status is available for ocean freight bookings, freight orders, and freight units. It indicates the receipt status of the cargo, for example, the cargo is on hand.

2.4.5.3 Buyer's Consolidation (New)

Use

As of SAP TM 8.1, you (as a carrier) can consolidate goods from more than one supplier in one container. The goods are not deconsolidated after the main carriage, however, but remain in the container during on-carriage. By using this concept, you can reduce transportation charges compared to an LCL (Less Than Container Load) scenario.

You can indicate that you want to use this concept in both your forwarding order and in your ocean freight booking.

See also

For more information about buyer's consolidation, see SAP Library for SAP Transportation Management under *Freight Order Management -> Freight Booking*.

2.4.5.4 Cargo Management (New)

Use

As of SAP TM 8.1, you can assign a freight unit transported with the same freight order or ocean freight booking to more than one container (ocean freight booking) or compartment (freight order) by using drag and drop. Therefore, you can split a forwarding order among multiple containers that belong to the same ocean freight booking. A symbol indicates that the forwarding order is split among multiple containers or even ocean freight bookings.

You can use this function in an LCL (Less Than Container Load) scenario with an FCL (Full Container Load) ocean freight booking.

Moreover, you can delete items from freight orders and ocean freight bookings if one or more of these items (container, package, or product items) cannot be transported with a freight order or ocean freight booking. For example, this can be necessary if a pallet remains in the container freight station because the container is full.

On the ocean freight booking user interface, a new *Cargo Management* tab has been added. This tab is also available in the transportation cockpit.

See also

For more information about cargo management, see SAP Library for SAP Transportation Management under *Freight Order Management*.

2.4.5.5 Discrepancy Handling in Freight Order Management (New)

Use

As of SAP TM 8.1, you can enter quantity discrepancies in your freight orders and freight bookings.

If you have received the quantity of a freight order or freight booking as planned, you set the freight order item or freight booking item to *Quantity Received as Planned*. The system automatically changes the cargo receipt status to *On Hand*.

If you have discovered a quantity discrepancy, however, you enter the actual quantities on the *Actual Quantities* tab page of your freight order or freight booking.

The system automatically performs the following steps:

- It changes the cargo receipt status to *On Hand* and activates the *Occurrence of Quantity Discrepancy* checkbox.
- It adjusts the actual quantities in the related freight units.

You can deselect this checkbox if the discrepancy has been resolved. You can search for forwarding orders with freight orders or freight bookings that have quantity discrepancies.

See also

For more information about the cargo receipt status, see the release note for *Statuses in Freight Order Management*.

2.4.5.6 Freight Orders for Pick-Up and Delivery (New)

Use

As of SAP TM 8.1, you can create freight orders for pick-up and delivery of containers. You use freight orders for pick-up to transport containers from a container freight station to the port of loading. You use freight orders for delivery to transport containers from the port of discharge to a container freight station.

You can create a freight order for pick-up or delivery for one or more containers. You create these freight orders from within your ocean freight bookings. The freight orders are displayed in the document flow of the corresponding ocean freight booking and vice versa.

Seals that you have entered in your ocean freight bookings are copied to your freight orders for pick-up and delivery. In these freight orders, you can enter additional seals.

The following changes are automatically copied from the ocean freight booking into the corresponding freight orders:

- Item changes
- Location changes
- Date/time changes
- Changes of seal information

Effects on Customizing

In Customizing, you define a default freight order type for both freight orders for pick-up and freight orders for delivery. For more information, see Customizing for Transportation Management under *Freight Order Management -> Freight Booking -> Define Freight Booking Types*.

See also

For more information about freight orders for pick-up and delivery, see SAP Library for SAP Transportation Management under *Freight Order Management -> Freight Booking*.

2.4.5.7 Seals (New)

Use

As of SAP TM 8.1, you can enter one or more seals per container in your ocean freight bookings and freight orders.

You can enter the following seal information:

- Seal numbers
The seal numbers are also displayed in the corresponding house bills of lading, master bills of lading, and export declarations.
- Date, time, and time zone of sealing or unsealing
- Sealing party and unsealing party

If a forwarding order contains seals, the seals are copied to the corresponding ocean freight bookings or freight orders. If you create a freight order for pick-up or delivery from your ocean freight booking, seals are also copied to this freight order (see the release note for Freight Orders for Pick-Up and Delivery).

See also

For more information about seals, see SAP Library for SAP Transportation Management under *Freight Order Management*.

2.4.5.8 Service Orders for Freight Bookings (New)**Use**

As of SAP TM 8.1, you can create service orders for freight bookings. A service order provides details of services that are to be carried out for individual items in a freight booking (for example, cleaning and fumigating a container) or for the entire freight booking (for example, customs clearance).

You create a service order directly from a freight booking by choosing the new *Create Service Order* pushbutton on the freight booking user interface. You can either create a service order for the entire freight booking or for one or more items in the freight booking. In the service order, you can do the following:

- Assign a service provider
- Assign services to the freight booking or the freight booking items
- Enter the relevant details of the services, such as the location and time at which the services are to be carried out
- Calculate the cost of the services
- Use the generic output management framework to communicate with the service provider
- Create a freight settlement document (FSD) for the service order

On the new *Service Orders* tab page in the freight booking, you can display an overview of service orders created for the freight booking and for all items in the freight booking. A new *Service Orders* tab page is also available in the *Details* area of the *Cargo Management* tab page. This provides an overview of all service orders created for a specific item that you have selected on the *Cargo Management* tab page.

To access the new user interfaces for displaying and editing service orders in SAP NetWeaver Business Client, choose *Freight Order Management -> Service Order*.

In the *Freight Settlement Document* overview, you can use the *Service Orders* query to navigate to service orders for which you want to create FSDs. You can create an FSD directly from the *Freight Settlement Document* overview. You can use create and transfer programs /SCMTMS/SFIR_CREATE and /SCMTMS/SFIR_TRANSFER to create FSDs for service orders. The system also includes service order details in the print PDF for FSDs.

Effects on Customizing

You have to configure service orders in the following new activities in Customizing for *SAP Transportation Management* under *Transportation Management -> Freight Order Management -> Service Order*:

- Define Service Order Types
- Define Service Types
- Assign Service Types to Item Categories

Note that when you define service order types, you can specify a default type that the system is to use for all freight booking types. You can also specify a default service order type for a specific freight booking type in the new *Default Service Order Type* field in the Customizing activity Define Freight BookingTypes.

See also

For more information about service orders, see SAP Library for SAP Transportation Management under *Freight Order Management*.

2.4.5.9 Use of Shipping Type and Movement Type in FU and FB (New)

Use

As of SAP TM 8.1, you can use shipping types and movement types in freight units and ocean freight bookings:

The system copies the shipping type and the movement type from the forwarding order to the freight unit. You cannot change the shipping type or the movement type in the freight unit.

For ocean freight bookings, the system uses the shipping type and movement type that you defined in Customizing.

Notes:

- For shipping types, you are not allowed to assign an FCL (Full Container Load) freight unit to an LCL (Less Than Container Load) ocean freight booking.
- For movement types, you are not allowed to assign a freight unit with movement type *Port to Port* to an ocean freight booking with movement type *Door to Door*.

Effects on Customizing

In Customizing, you define a shipping type and movement type for your ocean freight bookings (see Define Freight Booking Types).

2.4.5.10 Uncontrolled Transportation for Forwarding Orders (New)

Use

As of SAP TM 8.1, a logistics service provider (LSP) can specify that the carrier assigned to the main carriage stage of a forwarding order bills the ordering party directly, based on a special freight agreement between the ordering party and the carrier. In this case, the LSP can only calculate charges and create settlement documents for the pre-carriage and on-carriage stages.

To specify that the main carriage stage is controlled by the carrier, you deselect the new *Controlled* checkbox on the *General Data* tab page of the forwarding order UI. The checkbox is selected by default. If you deselect the checkbox, you can then enter the ID of the freight agreement that exists between the carrier and the ordering party in the new *External Freight Agreement* field.

Deselecting the *Controlled* checkbox in a forwarding order has the following effect on further processing:

- When you assign the freight units that belong to the forwarding order to a freight booking, the system displays the *Controlled* checkbox and the *External Freight Agreement* field on the *Terms and Conditions* tab page in the freight booking. They are both read-only. If you assign freight units from other forwarding orders to this freight booking, the forwarding orders must all have the same external freight agreement ID.

Note that the *Controlled* checkbox and the *External Freight Agreement* field are only visible in a freight booking if the checkbox has been deselected in the corresponding forwarding order.

- When you carry out forwarding settlement, the system only creates forwarding settlement documents for the pre-carriage and on-carriage stages.

See also

For more information, see SAP Library for SAP Transportation Management under *Forwarding Order Management*.

2.4.5.11 Enterprise Services for SAP TM (Enhanced)

Use

As of SAP TM 8.1, you can use new and enhanced service operations in the following process components:

- *Transportation Request Processing*

The following new service operations enable SAP TM to exchange information with SAP Credit Management:

- *Check Transportation Request Ordering Party Creditworthiness* (CreditWorthinessQuery_Out)
- *Notify of Credit Commitment* (CreditCommitmentNotification_Out)

For more information, see the release note for *Integration with SAP Credit Management*.

- *Customer Freight Invoice Request Processing*

The new service operation *Notify of Credit Commitment* (CreditCommitmentNotification_Out) enables SAP TM to send billing information to SAP Credit Management.

For more information, see the release note for *Forwarding Settlement Documents (Enhanced)*.

- *Transportation Order Processing*

A logistics service provider (LSP) can send a freight booking from one organizational unit to another using the enhanced service operation *Notify of Transportation Order Booking Waybill* (TransportationOrderBookingWaybillNotification_Out) and the new service operation *Maintain Transportation Order Based On Transportation Order Booking Waybill Notification* (TransportationOrderBookingWaybillNotification_In). For example, an LSP has an organizational unit in Europe that handles the pre-carriage and main carriage stages for a specific freight booking, and another organizational unit in the United States that handles the on-carriage stage. In this case, the LSP sends the freight booking to the organizational unit in the United States in order to provide relevant information about the transportation of the goods. Note that if the freight booking is subsequently changed in the sending system, it is not possible to update the freight booking in the receiving system.

The new Business-Add-In (BAI) BAI for TransportationOrderBookingWaybillNotification_In is available for the service operation *Maintain Transportation Order Based On Transportation Order Booking Waybill Notification* (TransportationOrderBookingWaybillNotification_In).

2.5 TM-PLN Planning

2.5.1 TM-PLN-FU Freight Unit

2.5.1.1 Organization Interaction Status for FU Stages (New)

Use

As of SAP TM 8.1, you can define an organization interaction status for a transportation stage. You can use this status to specify that the transportation stage has to be checked by the planning and execution organization before further processing can be carried out.

With the Business Add-In BAdI: Changing Organization Interaction Status (/SCMTMS/TOR_ORG_INT_STATUS), you can control cases in which the following situations apply:

- A transportation stage can be confirmed automatically.
- A confirmed transportation stage needs to be checked again.

See also

For more information, see SAP Library for SAP Transportation Management under *Planning -> Creation and Editing of Freight Units -> Determination of Freight Unit Building Rules -> Freight Unit -> Interaction Between Organizational Units*.

2.5.1.2 Use of Shipping Type and Movement Type in FU and FB (New)

Use

As of SAP TM 8.1, you can use shipping types and movement types in freight units and ocean freight bookings:

The system copies the shipping type and the movement type from the forwarding order to the freight unit. You cannot change the shipping type or the movement type in the freight unit.

For ocean freight bookings, the system uses the shipping type and movement type that you defined in Customizing.

Notes:

- For shipping types, you are not allowed to assign an FCL (Full Container Load) freight unit to an LCL (Less Than Container Load) ocean freight booking.
- For movement types, you are not allowed to assign a freight unit with movement type *Port to Port* to an ocean freight booking with movement type *Door to Door*.

Effects on Customizing

In Customizing, you define a shipping type and movement type for your ocean freight bookings (see Define Freight Booking Types).

2.5.2 TM-PLN-MP Manual Planning

2.5.2.1 Map Functions (Enhanced)

Use

As of SAP TM 8.1, the following functions are available on the map:

- You can assign unplanned freight orders or multirelations to resources by using drag and drop.
- You can split a stage on the map by assigning an unplanned freight unit or multirelation to a location using drag and drop.
- You can display transshipment locations that are not currently included in your planning process.
- You can assign a vehicle resource to a freight order by using drag and drop.
- You can display real street routes (georoutes) for all transportation activities shown on the map.

See also

For more information, see SAP Library for SAP Transportation Management under *Planning* -> *Interactive Planning* -> *Full Map Display*.

2.5.2.2 Manual Planning (Enhanced)

Use

As of SAP TM 8.1, the following functions are available:

- **Freight-unit stage groups**
You can group freight unit stages (FU stages) and perform planning activities for either the entire group or individual FU stages within the group. This reduces the number of stages required for your transportation activities.
- **Capacity assignment**
In the transportation cockpit, you can now assign unplanned freight units directly on the *Cargo Management* tab page and reallocate freight units that have already been planned.
- **Creation of freight documents for multiple stages**
You can create freight documents for multiple continuous stages for the same freight unit, based on the information in the forwarding order. If you select more than one stage, the system first determines the freight document type of the stages from Customizing (see below). Based on the document category, it then creates a freight order or freight booking and assigns the selected stages to this document. However, this is only possible if the following conditions are met:
 - A freight document type is defined in Customizing for all stages.
 - The status of the stages is *Unplanned*.
 - The stages are subsequent.
 - The stages are not assigned to a schedule.

If a schedule is assigned to one of the stages that you want to plan, the document type that is created is based on the settings in the corresponding Customizing activity (see below).

The transportation cockpit also displays additional locations on the *Overview* tab page. Previously, only the source and destination locations could be displayed along with the port of loading and the port of discharge.

Effects on Customizing

If you want to create freight documents directly from the stages, you must configure the settings in the Customizing activity Define Default Freight Document Types for Stages.

If you want to work with schedules, you must configure the settings in the Customizing activity Define Schedule Types.

See also

For more information about grouping freight units, see SAP Library for SAP Transportation Management under *Planning -> Interactive Planning -> Manual Planning -> Freight-Unit Stage Groups*.

For more information about creating freight documents for multiple stages, see the release notes for User Interface for Freight Bookings and Direct Creation of Freight Documents.

2.5.3 TM-PLN-PS Profiles and Settings

2.5.3.1 Selection Screen and Layout (Enhanced)

Use

Selection Screen

As of SAP TM 8.1, you can access the transportation cockpit in one of two ways. If you work with selection profiles and planning profiles, you can continue to use the *Profile and Layout Sets* screen. Alternatively, you can access the transportation cockpit from the new *Selection* screen.

The *Selection* screen enables you to start your planning activities without first having to create a selection profile or planning profile. Instead, you simply specify the criteria that you require for planning, such as the locations, dates and times, or statuses of your freight units, freight orders, forwarding orders, and so on.

In a similar way, you can now also access the *Carrier Selection* screen without having to enter carrier selection settings.

As of SAP TM 8.1, you can also specify separate selection profiles for freight orders and freight bookings, which allows you to define separate criteria for each business document

Layout Personalization

As of SAP TM 8.1, you can configure the layout of the transportation cockpit to include up to six screen areas. A new *Requirement Group Lists* container is now available in which you can display groups of freight units.

See also

For more information about using the *Selection* screen, see SAP Library for SAP Transportation Management under *Planning -> Interactive Planning*.

For more information about grouping freight units, see the release note for Manual Planning.

2.6 TM-FWS Forwarding Settlement

2.6.1 Credit Memos (New)

Use

As of SAP TM 8.1, you can perform the following tasks:

- Create a credit memo for a forwarding settlement document (FWSD)
- Create more than one credit memo for the same FWSD
- Print a credit memo from the *Output Management* tab page in an FWSD

When you save and transfer a credit memo, the SAP TM system sends the credit memo to SAP ERP.

Effects on Customizing

To create a credit memo, you must specify a credit memo type and a credit memo reason code in the Define Credit Memo Reason Code and Type Customizing activity.

See also

For more information on printing a credit memo, see SAP Library for *SAP Business Suite* under *SAP Transportation Management -> Basic Functions -> Printing*.

2.6.2 Forwarding Settlement Documents (Enhanced)

Use

As of SAP TM 8.1, you can use the following features for forwarding settlement documents (FWSDs):

- Choose a business partner when you begin creating an FWSD for forwarding orders (FWOs) that contain Incoterms
- Create an FWSD for a business partner that has not been defined in the FWO
- Create an FWSD for an FWO for which you have specified a charge calculation level of *Calculation at Stage Level*.
- Create an FWSD for a cancelled order. This enables you to charge a business partner for costs you incurred on the order prior to cancellation.

When you create an FWSD, the system checks master data settings for the relevant business partner.

When you save and transfer an FWSD, the SAP TM system sends the FWSD to billing in SAP ERP.

If the credit limit check is enabled for the relevant FWO type, SAP TM sends billing information to SAP Credit Management. For enabled FWOs, when SAP ERP confirms invoice creation, SAP TM passes on billing information for the relevant FWSD items to SAP Credit Management. This enables SAP Credit Management to update the credit exposure information for the business partners involved. The information that SAP TM sends to SAP Credit Management includes the business partner, net amount billed, and the related forwarding orders.

Effects on Existing Data

The system checks the settings in the following table for the role *Sold-to Party* in the transaction **BP** when you create an FWSD:

<u>Tab Page</u>	<u>Setting</u>
<i>Status</i>	<i>Central Block</i>
<i>Customer Company Org. Data</i>	<i>Central posting block</i>
<i>Status</i>	<i>Archiving Flag</i>

Effects on Data Transfer

The new *Notify of Credit Commitment* (CreditCommitmentNotification_Out) service operation in the *Customer Freight Invoice Request Processing* process component enables SAP TM to send billing information to SAP Credit Management.

To change or extend the data transferred through the corresponding service interface, you can use the new Business Add-In (BAI) BAI for CreditCommitmentNotification_Out.

Effects on Customizing

You can specify the calculation level in the Define Calculation Profile Customizing activity.

2.6.3 Settlements with Incoterms (New)

Use

As of SAP TM 8.1, you can Customize how the system determines the agreement party for forwarding orders (FWOs) that contain Incoterms. When you specify an Incoterm in an FWO, the system uses the agreement party role specified in Customizing to identify the agreement party for a stage. The system uses the agreement party for a stage to determine the contract for charge calculation.

You can also use new party roles for Incoterm orders.

Effects on Customizing

To use the agreement party determination feature, you must specify an agreement party role of either *Prepaid Agreement Party* or *Collect Agreement Party* for a stage type and Incoterm combination in the Define Default Agreement Party Roles for Stages Customizing activity.

2.6.4 Integration with SAP Credit Management

Use

As of SAP TM 8.1, forwarding order (FWO) processing is integrated with the SAP Credit Management application. Integration with SAP Credit Management gives you the following benefits for FWOs:

- Early determination of the risk of losses on receivables from your business partners
- Efficient decision making in credit management

You can enable credit limit checks for each FWO type. SAP TM uses the integration with SAP Credit Management to perform the credit checks.

Effects on Data Transfer

The following new service operations in the *Transportation Request Processing* process component enable SAP TM to exchange credit information with SAP Credit Management:

- The *Check Transportation Request Ordering Party Creditworthiness* (CreditWorthinessQuery_Out) service operation requests and receives credit information about a business partner from SAP Credit Management.
- The *Notify of Credit Commitment* (CreditCommitmentNotification_Out) service operation informs SAP Credit Management about the credit limit check amount approved for a business partner in a specific forwarding order.

To change or extend the data transferred through the corresponding service interfaces, you can use the following new Business Add-Ins (BAdIs):

- BAdI for CreditWorthinessQuery_Out
- BAdI for CreditCommitmentNotification_Out

Effects on Customizing

To enable credit limit checks for an FWO type, you must select the *Enable Credit Limit Check* checkbox in the Customizing activity Define Forwarding Order Types.

To define the credit segments that SAP TM uses to access SAP Credit Management, you must define credit segment IDs and assign the IDs to company organizations and sales organizations in the Customizing activity Assign Credit Segments to Sales Orgs and Company Orgs. To ensure the system mapping works correctly, you must define the same credit segment IDs in SAP TM and SAP Credit Management.

See also

For more information about integration with forwarding settlement documents, see the release note for Forwarding Settlement Documents.

For more information on SAP Credit Management, see SAP Library for *SAP ERP* on SAP Help Portal at <http://help.sap.com/erp>. Choose a release. In SAP Library, choose *SAP ERP Central Component* -> *SAP ERP Central Component* -> *Financials* -> *SAP Financial Supply Chain Management (FIN-FSCM)* -> *SAP Credit Management (FIN-FSCM-CR)*.

2.6.5 Settlement Profiles (Enhancement)

Use

As of SAP TM 8.1, you can use the following features when you create a settlement profile:

- Specify separate profiles for forwarding settlement documents (FWSDs) and freight settlement documents (FSDs). The system uses these profiles when it creates settlement documents.
- Assign a settlement profile to a business partner

When the system creates a settlement document, it first uses the settlement profile that you have assigned to the business partner. If you have not made this assignment, the system uses the settlement profile that you specified for the relevant sales organization in the *Define General Settings* Customizing activity.

The invoice level feature has been replaced by the calculation level feature, which you can specify in the calculation profile. You can specify the calculation level at header level, item level, or stage level. You can no longer specify the calculation level for the settlement profile.

Effects on Existing Data

In the transaction **BP**, you can assign a settlement profile to a business partner. You can use the information in the following table to make the assignment:

<u>Role</u>	<u>Tab Page</u>
<i>Sold-to Party</i>	<i>Customer Org. Data</i>
<i>Vendor</i>	<i>Vendor Org. Data</i>

Effects on Customizing

You can specify a settlement profile in the Define Settlement Profile Customizing activity.

You can assign a settlement profile to a sales organization in the Define General Settings Customizing activity.

You can specify the calculation level in the Define Calculation Profile Customizing activity.

See also

For more information about calculation levels, see the release note for Charge Calculation.

2.6.6 Service Dates (New)

Use

As of SAP TM 8.1, you can use a rule to determine the service date for each item in a forwarding settlement document (FWSD). You can specify a priority for how the system determines the service date from a set of predefined dates in the transportation process, for example the actual end date of complete carriage of the goods. You can also use a Business Add-In to specify your own logic to determine the service date.

The BAdI implementation also includes a default implementation for the dates the system uses as the service date, for both export forwarding orders (FWOs) and import FWOs. You can override the BAdI implementation by specifying the relevant Customizing settings.

Effects on Customizing

To use the service date feature, you must specify the following settings in Customizing:

- The service date rules and prioritization for the rules in the Define Service Date Rules and Rule Prioritization Customizing activity.
- The appropriate rule for a settlement profile in the Define Settlement Profile Customizing activity.

You can use BAdI: Service Date Determination for Forwarding Settlement Document to specify your own logic.

2.6.7 Enterprise Services for SAP TM (Enhanced)

Use

As of SAP TM 8.1, you can use new and enhanced service operations in the following process components:

- *Transportation Request Processing*

The following new service operations enable SAP TM to exchange information with SAP Credit Management:

- *Check Transportation Request Ordering Party Creditworthiness*
(CreditWorthinessQuery_Out)
- *Notify of Credit Commitment* (CreditCommitmentNotification_Out)

For more information, see the release note for [Integration with SAP Credit Management](#).

- *Customer Freight Invoice Request Processing*

The new service operation *Notify of Credit Commitment* (CreditCommitmentNotification_Out) enables SAP TM to send billing information to SAP Credit Management.

For more information, see the release note for [Forwarding Settlement Documents \(Enhanced\)](#).

- *Transportation Order Processing*

A logistics service provider (LSP) can send a freight booking from one organizational unit to another using the enhanced service operation *Notify of Transportation Order Booking Waybill* (TransportationOrderBookingWaybillNotification_Out) and the new service operation *Maintain Transportation Order Based On Transportation Order Booking Waybill Notification* (TransportationOrderBookingWaybillNotification_In). For example, an LSP has an organizational unit in Europe that handles the pre-carriage and main carriage stages for a specific freight booking, and another organizational unit in the United States that handles the on-carriage stage. In this case, the LSP sends the freight booking to the organizational unit in the United States in order to provide relevant information about the transportation of the goods. Note that if the freight booking is subsequently changed in the sending system, it is not possible to update the freight booking in the receiving system.

The new Business-Add-In (BAI) BAI for TransportationOrderBookingWaybillNotification_In is available for the service operation *Maintain Transportation Order Based On Transportation Order Booking Waybill Notification* (TransportationOrderBookingWaybillNotification_In).

2.7 TM-FRS Freight Settlement

2.7.1 Additional Agreement Parties (Enhanced)

Use

If you have a freight order or freight booking that contains one or more additional agreement parties, the system creates a freight settlement document for each of the additional agreement parties.

As of SAP TM 8.1, when you create a freight settlement document from a freight order or freight booking, the system displays a dialog box if additional agreement parties exist in the freight order or freight booking.

You can select one or more parties and continue with the settlement process.

2.7.2 Settlement Profiles (Enhancement)

Use

As of SAP TM 8.1, you can use the following features when you create a settlement profile:

- Specify separate profiles for forwarding settlement documents (FWSDs) and freight settlement documents (FSDs). The system uses these profiles when it creates settlement documents.
- Assign a settlement profile to a business partner

When the system creates a settlement document, it first uses the settlement profile that you have assigned to the business partner. If you have not made this assignment, the system uses the settlement profile that you specified for the relevant sales organization in the *Define General Settings* Customizing activity.

The invoice level feature has been replaced by the calculation level feature, which you can specify in the calculation profile. You can specify the calculation level at header level, item level, or stage level. You can no longer specify the calculation level for the settlement profile.

Effects on Existing Data

In the transaction **BP**, you can assign a settlement profile to a business partner. You can use the information in the following table to make the assignment:

<u>Role</u>	<u>Tab Page</u>
<i>Sold-to Party</i>	<i>Customer Org. Data</i>
<i>Vendor</i>	<i>Vendor Org. Data</i>

Effects on Customizing

You can specify a settlement profile in the Define Settlement Profile Customizing activity.

You can assign a settlement profile to a sales organization in the Define General Settings Customizing activity.

You can specify the calculation level in the Define Calculation Profile Customizing activity.

See also

For more information about calculation levels, see the release note for Charge Calculation.

2.8 TM-TCC Transportation Charge Calculation

2.8.1 Calculation Bases (Enhanced)

Use

As of SAP TM 8.1, you can avail of the following calculation bases:

- MAN_DAYS
- HOURS
- PER_DOCUMENT
- DAYS
- PERSON
- SRC_UNLOCD (United Nations Code for Source Locations)
- DEST_UNLOCD (United Nations Code for Destination Location)
- POD_LOC (Port of Discharge)
- POL_LOC (Port of Lading)
- POD_UNLOCD (United Nations Code for Port of Discharge)
- POL_UNLOCD (United Nations Code for Port of Lading)

Effects on Customizing

You define the calculation bases in Customizing for *Transportation Management* under *Basic Functions -> Charge Calculation -> Data Source Binding for Charge Calculation -> Define Calculation Bases*.

2.8.2 Charge Calculation (Enhanced)

Use

As of SAP TM 8.1, the following functions are available in charge calculation:

- The system can calculate charges at header, item, or stage level.

- You can specify the calculation date type that the system uses as the basis for the rate, exchange rate, and agreement validity, and ultimately the charge calculation.
- The system can apply a single rate, known as a through rate, for multiple stages of a transportation route.
You can enable through rates so that the system finds a rate from the source location of the first stage to the destination location of the last stage when calculating charges.
- There are additional calculation bases available.
- You can assign rounding profiles to the document currencies of freight orders, forwarding orders, or settlement documents.
- The system can apply rounding rules to each charge line instead of only to the total amount of all charge lines.
- Charge lines can have different currencies and exchange rates than the sum charge line.
- The system can convert the currency from the rate currency to the document currency and then to the local currency.
- Agreement determination has been extended to always include searching for agreements within business partner hierarchies and organizational unit hierarchies, even if the system determines suitable agreements for the specific business partner and organization unit.
If the system determines multiple agreements, the system evaluates the calculation sheet and rate tables for each agreement. If the system still determines multiple agreements, the system selects the first suitable agreement.
- Agreement determination takes the leading charge type into account if there are multiple agreements for a carrier or customer.
The system skips agreements that use calculation sheets without a leading charge type. The system then skips agreements if the leading charge type does not have a rate. If there are multiple leading charge types in a calculation sheet, the first leading charge type must have a rate defined for the system to consider the agreement and calculation sheet for charge calculation.

Effects on Existing Data

When you upgrade to SAP TM 8.1, the system automatically uses the XPRA for Calculation Profiles (/SCMTMS/XPRA_101_TCC_CALC_PROF) report to implement the following changes because of the new Customizing activity *Define Calculation Profile*:

- Move affected data from the Customizing activity *Define General Settings* to the corresponding fields in the Customizing activity *Define Calculation Profile*
- Map the invoicing level in the Customizing activity *Define Settlement Profile* to the calculation level in the Customizing activity *Define Calculation Profile*
- Set the following default settings:

<u>Field</u>	<u>Setting</u>
<i>Calc. Date Ty.</i> (Calculation Date Type)	<i>Order Date</i>
<i>Data Source</i>	Blank
<i>Through Rate</i>	Deselected

Effects on Customizing

You enable through rates, define the calculation level, and specify the calculation date type in Customizing for *Transportation Management* under *Basic Functions -> Charge Calculation -> Basic Settings for Charge Calculation -> Define Calculation Profile*.

You define the calculation bases in Customizing for *Transportation Management* under *Basic Functions -> Charge Calculation -> Data Source Binding for Charge Calculation -> Define Calculation Bases*.

You assign rounding profiles to document currencies and indicate whether the system applies the rounding rule to each charge line in Customizing for *Transportation Management* under *Basic Functions -> Charge Calculation -> Rules and Conditions for Charge Calculation -> Assign Rounding Profiles to Document Currencies*.

You specify leading charge types in Customizing for *Transportation Management* under *Basic Functions -> Charge Calculation -> Basic Settings for Charge Calculation -> Define Charge Type Codes*.

See also

For more information about calculation bases, see the release note for Calculation Bases.

2.8.3 Charges Tab (Enhanced)

Use

As of SAP TM 8.1, the following functions are available:

- The *Charges* tab page is available in credit memos.
- You can choose to view the charge items in a grouped view, where the system groups the charge lines that have the following same attributes into a single aggregated row:
 - Charge type
 - Equipment type
 - Rate amount
 - Rate currencyThe system totals the final amount, calculated amount, and group count for all the charge lines grouped together. You can expand the aggregated row to see the individual charge lines.
- You can see the details of the currency exchanges and the exchange rates between document currencies, local currencies, and rate currencies for each charge item and charge line on the *Exchange Rates* tab page.
- You can manually create charge lines.
- A simplified and restructured user interface, for example:

- The number of tab pages and their content has been reduced.
- The tab pages and their content have been rearranged so the more important columns appear first.

Effects on Customizing

You can specify the default charges view, grouped or ungrouped, on the *Charges* tab page in Customizing for *Transportation Management*. Depending on which SAP TM component the *Charges* tab page is located in, you can specify the default charges view in the following Customizing activities:

- *Basic Functions -> Charge Calculation -> Basic Settings for Charge Calculation -> Define General Settings*
- *Forwarding Order Management -> Forwarding Order -> Define Forwarding Order Types*
- *Forwarding Order Management -> Forwarding Quotation -> Define Forwarding Quotation Types*
- *Freight Order Management -> Freight Order -> Define Freight Order Types*
- *Freight Order Management -> Freight Booking -> Define Freight Booking Types*
- *Settlement -> Forwarding Settlement -> Define Forwarding Settlement Document Types*
- *Settlement -> Freight Settlement -> Define Freight Settlement Document Types*

The system applies the default charges view specified in the Customizing activity *Define General Settings* if there is no default charges view specified in the other Customizing activities listed above.

See also

For more information about credit memos, see the release note for Credit Memos.

2.9 TM-DG Dangerous Goods

2.9.1 Document-Based Dangerous Goods Records (New)

Use

As of SAP TM 8.1, you can manually add document-based dangerous goods (DG) data when you create a forwarding order. You create the records on item level. Within the forwarding order, you can perform the following actions:

- Create a document-based dangerous goods record

As a prerequisite, you have to define a user interface (UI) profile and assign it to the forwarding order item type. The UI profile defines which fields are available in the document-based dangerous goods record and also the attributes of the fields (for example, whether a field is mandatory). For more information, see the release note for Define UI Profiles for Document-Based DG Data (New).

- Save a document-based dangerous goods record

You save the document-based dangerous goods record only in combination with the forwarding order.

When you save a document-based dangerous goods record, you can save the data entered as a template. For more information, see the release note for Document-Based Dangerous Goods Data Templates (New).

- Find a document-based dangerous goods template and use it to create a document-based dangerous goods record
- Create and change phrases
- Select phrases

Effects on System Administration

- You use the authorization object *EHS: Phrase Item* (C_EHSP_TPP) to control the authorizations for the phrase items. You can define whether users are permitted to carry out the following functions:
 - 02 Change
 - 03 Display
- You use the authorization object *EHS: Phrase Library and Phrase Group* (C_SHEP_TPG) to control the authorizations for the phrase library and the phrase groups. You can define whether users are permitted to carry out the following functions:
 - 01 Add or Create
 - 02 Change
 - 03 Display

Effects on Customizing

You have created a UI profile for the DG and assigned it to a forwarding order item type. For more information, see Customizing for *Transportation Management* under *Forwarding Order Management -> Define Item Types for Forwarding Order Management*.

See also

For more information, see SAP Library for SAP Transportation Management under *Basic Functions -> Considering Dangerous Goods -> Dangerous Goods Records Creation*.

2.9.2 Document-Based Dangerous Goods Data Templates (New)

Use

As of SAP TM 8.1, you can create templates for document-based dangerous goods (DG) data. A template helps you enter dangerous goods data manually within a forwarding order. To use a template, it must have the processing status *Released*.

You can work with templates in the following ways:

- Create a released or unreleased template when you save a document-based dangerous goods record
- Find a released template and use it to create a new document-based dangerous goods record

Effects on Existing Data

The system uses the master data in the SAP Environment, Health & Safety (SAP EH&S) application. You can view and edit the document-based dangerous goods data templates in SAP EH&S.

Effects on System Administration

You use the authorization object *DG Material Master: Master Data* (M_MATE_DGM) to control the authorizations for master data. You can define whether users are permitted to carry out the following functions:

- 01 Add or create dangerous goods master data
- 02 Change dangerous goods master data
- 03 Display dangerous goods master data

Effects on Customizing

You can use the Business Add-In (BAI) BAI: Dangerous Goods Processing to read template data from an external database instead of the SAP EH&S database. For more information, see *Customizing for Transportation Management under Business Add-Ins (BAIs) for Transportation Management -> Basic Functions -> Dangerous Goods -> Template Data -> BAI: Dangerous Goods Processing*.

See also

For more information, see SAP Library for SAP Transportation Management under *Basic Functions -> Considering Dangerous Goods -> Creation and Use of Dangerous Goods Templates*.

2.9.3 Define UI Profiles for Document-Based DG Data (New)

Use

As of SAP TM 8.1, you can define a user interface (UI) profile for document-based dangerous goods

(DG) data. You have to specify a UI profile when you manually enter DG data for a forwarding order. The profile consists of a set of dangerous goods data that appears on the UI as fields. A dangerous goods document data profile can define a subset of master data from the SAP Environment, Health & Safety (SAP EH&S) application.

You define UI profiles in SAP NetWeaver Business Client under *Application Administration -> General Settings -> Conditions -> Define UI Profile for Document-Based Dangerous Goods Data*.

Effects on Existing Data

The system uses the master data of SAP EH&S.

See also

For more information, see SAP Library for SAP Transportation Management under *Basic Functions -> Considering Dangerous Goods -> Definition of UI Profiles for Document-Based DG Data*.

2.10 TM-GT Global Trade

2.10.1 Cancellation of Customs Declarations (Changed)

Use

As of SAP TM 8.1, you can cancel customs declarations in forwarding orders or freight orders as follows:

- If you handle customs data automatically, choose *Customs -> Cancel Customs Declaration*.
- If you handle customs data manually, set the respective customs status manually.

See also

For more information, see SAP Library for SAP Transportation Management under *Basic Functions -> Global Trade -> Cancellation of Customs Declarations*.

2.10.2 Customs Relevance Check (Changed)

Use

As of SAP TM 8.1, the checks used to determine if a customs declaration is necessary have changed.

For an export declaration triggered in a forwarding order, the system performs the relevance check on the freight unit. The system checks if the source and destination countries belong to the European Union (table T005-XEGLD) but it cannot identify if a country belongs to a different customs union. As a prerequisite, the *Export Declaration by LSP* checkbox must be selected in the forwarding order.

For a transit procedure, the system performs the relevance check on the freight unit or the freight order. The following prerequisites apply:

- At least one item has the customs activity *Transit Inbound*.
- At least one stage is marked as transit relevant.
- No transit procedure is open.

The system sets the customs status to *Relevant*. Furthermore, the blocking status is set to *Blocked Due to Customs*.

Effects on Customizing

You define the customs relevance check in Customizing for *Transportation Management* under *Basic Functions* -> *Global Trade* -> *Define Customs Relevance Check*.

See also

For more information, see SAP Library for SAP Transportation Management under *Basic Functions* -> *Global Trade* -> *Customs Relevance Check*.

2.10.3 Export Declaration by LSP in Forwarding Orders (New)

Use

As of SAP TM 8.1, you can trigger an export declaration from a forwarding order in the following way:

1. Create a forwarding order with customs relevant data and select the *Export Declaration by LSP* checkbox.
2. Trigger export declaration creation by choosing *Customs* -> *Create Export Declaration*.

Alternatively, the shipper might provide the LSP with all relevant customs data. If this is the case, or if there is no integrated customs management system, you enter the customs data manually.

If you have integrated a customs management system, the SAP TM system can update the customs status automatically, depending on what you have specified in Customizing.

Effects on Customizing

To use this function, you have to define customs handling for forwarding orders in Customizing for *Transportation Management* under *Forwarding Order Management* -> *Forwarding Order* -> *Define Forwarding Order Types*.

See also

For more information, see SAP Library for SAP Transportation Management under *Basic Functions* -> *Global Trade* -> *Export Declarations* -> *Export Declaration by LSP within Forwarding Order*.

2.10.4 Transit Procedure Declaration by LSP (New)

Use

As of SAP TM 8.1, you can trigger the creation of transit procedure declarations. The transit procedure allows the customs-monitored transportation of bonded goods with temporary suspension of the duty applicable to imports. You can carry out customs clearance formalities at the destination rather than at the point of entry into the customs union. In Customizing, you can specify if you want to set the statuses manually. Provided you have an integrated customs management system, you can specify that the system sets the statuses automatically. Otherwise, you set the statuses manually.

You can perform the following functions:

- You **open the transit procedure** in a forwarding order or freight order by choosing the *Create Transit* pushbutton. The SAP TM system performs the customs relevance check; updates the customs statuses; and, if you have integrated a customs management system, the SAP TM system provides the customs reference number as soon as it is available. Otherwise, you enter the customs reference number manually.
If you have integrated a customs management system, the SAP TM system can update the customs status automatically, depending on what you have specified in Customizing.
- You can **trigger an unload request** when the goods reach the specified destination of the transit procedure. You are only allowed to unload the goods after receiving approval from customs authorities.
You request the unloading of goods on the freight order business document. If you have integrated a customs management system, the SAP TM system can update the customs status automatically, depending on what you have specified in Customizing.
- You can **close transit procedures** when the goods arrive at the specified transit end location. Once you have received the reply from the customs authorities, you set the status to show that the transit procedure is now closed.

Effects on Customizing

You have to make the following settings in Customizing for *Transportation Management*:

- Define whether customs handling is manual or automatic under *Forwarding Order Management -> Forwarding Order -> Define Forwarding Order Types*
- Define the customs profile under *Basic Functions -> Global Trade -> Define Customs Profile*
- Define the customs relevance check under *Basic Functions -> Global Trade -> Define Customs Relevance Check*

See also

For more information, see SAP Library for SAP Transportation Management under *Basic Functions -> Global Trade -> Transit Declarations*.

2.11 TM-MD Master Data

2.11.1 TM-MD-BP Business Partner

2.11.1.1 Business Partner Master Data (Enhanced)

Use

As of SAP TM 8.1, the following functions are available when you create a new business partner:

- You can enter one or more standard carrier alpha codes (SCAC) on the *Vendor Data* tab page. SCACs can also be inherited, for example, from a global carrier.
- You can further define your carriers by specifying a carrier category. Available categories are *subsidiary*, *carrier*, *agent*, and *non-vessel operating common carrier*.
- You can specify the following relationships between business partners:
 - Has Communication Partner
 - Is Communication Partner Of
 - Has Subsidiaries/Agents
 - Is Subsidiary/Agent Of

- You can now assign the following items at business partner level. This enables a greater degree of flexibility if, for example, your sales or purchasing organization works with multiple business partners (previously, these items could be assigned only at sales organization or purchasing organization level and were, therefore, inherited by all business partners assigned to the respective organizations):
 - Freight settlement profile
 - Forwarding settlement profile
 - Calculation profile

Effects on Customizing

In the Customizing activity Define Standard Carrier Alpha Codes, you can specify the SCACs that you want the system to propose in the input help (F4) for the carrier on, for example, the forwarding order user interface.

See also

For more information about standard carrier alpha codes, see the release notes for SCAC in Forwarding Order Management and Carrier Categorization in Freight Order Management.

For more information about forwarding settlement, see the release note for Forwarding Settlement Documents.

For more information about charge calculations, see the release note for Charge Calculations.

For more information about business partners, see SAP Library for SAP Transportation Management under *Master Data -> Business Partners -> Definition of Business Partners*.

2.11.2 TM-MD-CM Charge Management

2.11.2.1 Integration of Charge Management Master Data (Enhanced)

Use

As of SAP TM 8.1, you can create a calculation sheet, rate table, and scale from within an agreement. You can now create all Charge Management master data from within an agreement, as follows:

- Create a calculation sheet for an agreement item in the *Items* screen area
- Create a rate table for a calculation sheet item on the *Calculation Sheet* tab page of the *Items* screen area
- Create a scale for a rate by going to the rate table details in the *Items* screen area

You can also copy and delete the calculation sheets, rate tables, and scales from within an agreement.

You can access or view the details of calculation sheets, rate tables, and scales from within the related agreements, calculation sheets, and rate tables.

The user interface has also been improved and restructured to accommodate this integration of charge management master data, for example, screen areas have been changed to tab pages and columns have been rearranged so the more important columns appear first.

2.11.2.2 Master Data Cockpit (New)

Use

As of SAP TM 8.1, you can access an overview of the Charge Management master data per organizational unit, business partner, and charge type. The system also shows the relationship between the different types of Charge Management master data.

See also

For more information, see the SAP Library under *SAP Business Suite -> SAP Transportation Management -> Master Data -> Charge Management -> Setup of Master Data for Charge Management -> Master Data Cockpit*.

2.11.2.3 TM-MD-CM-AG Agreements

2.11.2.3.1 Agreements (Enhanced)

Use

As of SAP TM 8.1, the following functions are available for agreements:

- You can create a calculation sheet, rate table, and scale from within an agreement.
- You can add or remove the following new fields at agreement and agreement item level:
 - Transportation Mode

- Shipment Type
- Traffic Direction
- Stage Type
- Service Level

The system uses these fields as preconditions during agreement determination.

- You can reference your business partner's reference number for an agreement, if it is different to the agreement identification in the SAP TM system.
- You can search for agreements related to a zone so no longer need to specify an exact source or destination location.

Effects on Customizing

You add or remove the new fields in Customizing for *Transportation Management* under *Master Data* -> *Agreements* -> Define Freight Agreement Settings or Define Forwarding Agreement Settings.

See also

For more information about creating a calculation sheet, rate table, and scale from within an agreement, see the release note for Integration of Charge Management Master Data.

2.11.2.4 TM-MD-CM-CS Calculation Sheets

2.11.2.4.1 Calculation Sheets (Enhanced)

Use

As of SAP TM 8.1, the following functions are available for calculation sheets:

- You can create a calculation sheet from within an agreement and you can create a rate table and scale from within a calculation sheet.
- The following fields are new and the system uses these fields as preconditions during calculation sheet determination:
 - Shipment Type
 - Stage Type
 - Service Level
- You can decide whether you want to set the charge type as an absolute value or a percentage value each time you assign it to a calculation sheet line item. You no longer need to decide when defining charge types in Customizing.
- You can enter a charge type description in multiple languages.

- You can assign a calculation rule to a calculation sheet line item using the *Amount* field, instead of assigning a rate table.
- You can specify a flat rate (amount) for a calculation sheet line item by entering an amount and a valid currency.
- You can specify that a calculation sheet line item is a percentage of another calculation sheet line item.
- You can specify a leading charge type that must have a value for the system to consider the calculation sheet for charge calculation. If there are multiple leading charge types in a calculation sheet, the first leading charge type must have a rate defined for the system to consider the agreement and calculation sheet for charge calculation.
- You can set a validity period for each calculation sheet line item so that the calculation sheet line item is relevant only during that period.
- You can specify a minimum amount and a maximum amount for each calculation sheet line item with the *Standard* instruction type. If the system calculates the charges to be lower than the minimum amount or higher than the maximum amount, the system enters the minimum amount or maximum amount as the charge.
- You can display or hide rate table details using the *Rate Table Details* button.
-

Effects on Customizing

You make it possible to decide whether a charge type is an absolute value or a percentage value when assigning it to a charge item, specify leading charge types, and enter charge type descriptions in multiple languages in Customizing for *Transportation Management* under *Basic Functions* -> *Charge Calculation* -> *Basic Settings for Charge Calculation* -> Define Charge Type Codes.

You can specify a minimum amount and a maximum amount for each calculation sheet line item in a calculation sheet template in Customizing for *Transportation Management* under *Basic Functions* -> *Charge Calculation* -> *Basic Settings for Charge Calculation* -> Define Calculation Sheet Templates.

See also

For more information about creating a calculation sheet from within an agreement and a rate table and scale from within a calculation sheet, see the release note for Integration of Charge Management Master Data.

For more information about leading charge types and charge calculation, see the release note for Charge Calculation.

2.11.2.5 TM-MD-CM-RA Rates

2.11.2.5.1 Rate Tables and Scales (Enhanced)

Use

As of SAP TM 8.1, the following functions are available for rate tables and scales:

- You can create a rate table and scale from within a calculation sheet and you can create a scale from within a rate table.
- You can maintain scale items in a rate table in various ways, for example:
 - Generate incremental scale items in a rate table for a numeric scale if it does not already contain any scale items.
 - Add a scale item on the *Scale Items* tab page.
- You can specify a default calculation type for a scale type based on the calculation base of the scale base.
- You can specify a calculation type for a scale if there is no default calculation type for the scale (based on the calculation base).
You must enter a calculation type before creating scale items.
- You can have different currencies for each rate in the rate table.
- You can indicate the scales that are relevant for the currency of the rate.
- You can generate incremental scale items in a rate table for a numeric scale if it does not already contain any scale items.
- You can assign a calculation rule to each scale item.
- You can specify the level at which the system applies the calculation rule in the rate table, for example, at rate-table level or scale-item level.
- The system creates a default calculation rule at the rate-table level for scale items if the scale is relative and contains at least one scale item that is also relative.
- You can trigger the system to add a scale item with no value to a scale.
When calculating the charges, the system uses the scale item with no value if no scale items match the value of the calculation base in the freight order or forwarding order or if the calculation base has no value.
- You can display or hide the scale item descriptions for same scales in the *Rates* table on the *Dates and Values* tab page.
- You can freeze and unfreeze columns in a rate table.

Effects on Existing Data

When you upgrade to SAP TM 8.1, the system automatically uses the *XPRA for Rate Tables* (/SCMTMS/XPRA_101_TC_RATES) report to convert rate tables from the TM 8.0 format to the TM 8.1 format.

Note that an internal number range must be maintained for the scale number range object /SCMTMS/SC

and there must be many numbers available in this number range.

Effects on Customizing

You can set a default calculation type for the scale type in Customizing for *Transportation Management* under *Basic Functions -> Charge Calculation -> Data Source Binding for Charge Calculation -> Define Calculation Bases*.

See also

For more information about creating a rate table and scale from within a calculation sheet and a scale from within a rate table, see the release note for Integration of Charge Management Master Data.

2.11.2.6 TM-MD-CM-SC Scales

2.11.2.6.1 Rate Tables and Scales (Enhanced)

Use

As of SAP TM 8.1, the following functions are available for rate tables and scales:

- You can create a rate table and scale from within a calculation sheet and you can create a scale from within a rate table.
- You can maintain scale items in a rate table in various ways, for example:
 - Generate incremental scale items in a rate table for a numeric scale if it does not already contain any scale items.
 - Add a scale item on the *Scale Items* tab page.
- You can specify a default calculation type for a scale type based on the calculation base of the scale base.
- You can specify a calculation type for a scale if there is no default calculation type for the scale (based on the calculation base).
You must enter a calculation type before creating scale items.
- You can have different currencies for each rate in the rate table.
- You can indicate the scales that are relevant for the currency of the rate.
- You can generate incremental scale items in a rate table for a numeric scale if it does not already contain any scale items.
- You can assign a calculation rule to each scale item.
- You can specify the level at which the system applies the calculation rule in the rate table, for example, at rate-table level or scale-item level.
- The system creates a default calculation rule at the rate-table level for scale items if the scale is relative and contains at least one scale item that is also relative.

- You can trigger the system to add a scale item with no value to a scale.
When calculating the charges, the system uses the scale item with no value if no scale items match the value of the calculation base in the freight order or forwarding order or if the calculation base has no value.
- You can display or hide the scale item descriptions for same scales in the *Rates* table on the *Dates and Values* tab page.
- You can freeze and unfreeze columns in a rate table.

Effects on Existing Data

When you upgrade to SAP TM 8.1, the system automatically uses the *XPRA for Rate Tables* (/SCMTMS/XPRA_101_TC_RATES) report to convert rate tables from the TM 8.0 format to the TM 8.1 format.

Note that an internal number range must be maintained for the scale number range object /SCMTMS/SC and there must be many numbers available in this number range.

Effects on Customizing

You can set a default calculation type for the scale type in Customizing for *Transportation Management* under *Basic Functions* -> *Charge Calculation* -> *Data Source Binding for Charge Calculation* -> Define Calculation Bases.

See also

For more information about creating a rate table and scale from within a calculation sheet and a scale from within a rate table, see the release note for Integration of Charge Management Master Data.

2.11.3 TM-MD-TN Transportation Network

2.11.3.1 Default Route Types (New)

Use

As of SAP TM 8.1, you can specify a default route type if there is no direct connection between your locations. The default route type determines the sequence of transshipment locations for a given pair of locations and, in an LCL ocean freight scenario, identifies the route for a forwarding order.

You can also assign a transportation mode to your default route type to specify, for example, whether freight is to be transported by road or sea.

Effects on Customizing

You define default route types in the Customizing activity Define Default Route Types.

See also

For more information about default route types, see SAP Library for SAP Transportation Management under *Master Data -> Transportation Network -> Schedule -> Default Route*.

2.11.3.2 Locations and Transportation Zones (Enhanced)

Use

As of SAP TM 8.1, the following functions are available:

- You can now explicitly exclude locations from a transportation zone, for example, if you want to manage a transportation zone for your customers but you do not want this zone to include your own locations.
- You can enter a UN/LOCODE when you create a location, which the system can then use in the forwarding order, for example, instead of the location ID.
- You no longer have to create a transportation zone hierarchy. Instead, the hierarchy is created automatically by the system.

See also

For more information about excluding locations from transportation zones, see SAP Library for SAP Transportation Management under *Master Data -> Transportation Network -> Transportation Zone -> Definition of Transportation Zones*.

2.11.3.3 TM-MD-TN-SCH **Schedule**

2.11.3.3.1 Schedules (New)

Use

As of SAP TM 8.1, you can use the new schedules as part of your transportation planning activities.

The schedules support the following features:

- You must assign a transportation mode to your schedule type to specify that freight is to be transported by road or sea, for example.

- You can specify whether your schedule uses gateways such as container freight stations (CFS), for example, in an LCL ocean freight scenario.
- You can specify whether your gateways are connected to each other directly or whether intermediate locations such as ports are involved.
- You can define the document type that is to be created by default when you assign a freight unit to a schedule departure.
- You can delete schedules or schedule departures using the Schedule Deletion report.

Note that the schedules are not supported by the optimizer.

The following schedule types are provided:

Ocean Carrier Schedule Type

You use the ocean carrier schedule type to book capacity and define the actual route taken by the carrier as a list of ports.

When you create an ocean carrier schedule, you can define departure rules and create voyages on the basis of these rules. You can also create voyages directly.

Sailing Schedule Type

You use the sailing schedule type to define a connection between a source CFS and a destination CFS, including information about the port of loading and port of discharge.

You can also enter a reference to an ocean carrier schedule and transfer departure rules and voyages from the carrier schedule to the sailing schedule.

You can select a sailing schedule directly from the forwarding order.

LCL Overland Schedule Type

You use the LCL overland schedule type to define a direct connection between two gateways in a less-than-container load scenario. Freight is transported between the two gateways by road.

Effects on Customizing

To use the new schedules, you must define number range intervals for both schedules and voyages using the Customizing activities Define Number Range Intervals for Schedules and Define Number Range Intervals for Voyages.

See also

For more information about schedule types, see SAP Library for SAP Transportation Management under *Master Data -> Transportation Network -> Schedule -> Schedule (New Concept)*.

2.12 TM-BF Basic Functions

2.12.1 TM-BF-ARC Archiving

2.12.1.1 Archiving (Enhanced)

Use

As of SAP TM 8.1, the following functions are available when archiving Charge Management master data objects, that is, agreements, calculation sheets, rate tables, and scales:

- You can use archive information structures to access archived Charge Management master data objects using the Archive Information System.
- The system does not allow you to edit or delete Charge Management master data objects when the archiving status is *Archiving in Process* or *Archived*.
- Calculation sheets, rate tables, and scales that are created from within another Charge Management master data object are automatically marked for archiving when archiving begins for the Charge Management master data object.
- Calculation sheets, rate tables, and scales that are created independently of another Charge Management master data object but are referenced in a Charge Management master data object are not marked for archiving when archiving begins for the Charge Management master data object.
- You cannot reference a calculation sheet, rate table, or scale in a Charge Management master data object if the referenced calculation sheet, rate table, or scale is marked for archiving.

See also

For more information about agreements, see the release note for Agreements.

For more information about calculation sheets, see the release note for Calculation Sheets.

For more information about rate tables, and scales, see the release note for Rate Tables and Scales.

2.12.2 TM-BF-OM Output Management

2.12.2.1 Output Management User Interface (Enhanced)

Use

As of SAP TM 8.1, you can use the following features in the output management user interface (UI):

- Enable and disable print, fax, and e-mail communication methods for an output action. If you enable the print method, you can enter the printer name and the number of print copies.
- Add or change a subject title for an e-mail. Use body texts for e-mails that are predefined during Customizing.
- Use the following attachment features:
 - Add attachments that are predefined during Customizing for the Post Processing Framework (PPF).
 - Add further attachments from the attachments folder of the consuming application. You can display and remove the additional attachments.
The system copies attachments from the attachments folder of the consuming application. This means the attachments from output management and the attachments from the consuming application are independent of each other in the system.
- Select an action from all the possible actions that are available for a business document in the consuming application. The system displays the actions that are valid for the given business document. You can also generate actions with condition checks or without condition checks.
- Edit print preview documents in PDF format. The system uses the edited document for the output action. You can also use the edited document in a repeated action.

The system also classifies output actions according to the processing status.