# Release Notes
**What's New in SAP Transportation Management 9.3**

# Document History

The following table provides an overview of the most important document changes.

Table 1

| Version | Date | Description |
|---------|------|-------------|
| 3.0 | 2016-01-21 | Updated Version (SP03) |

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**Document History**

# Content

# 1 What's New in SAP Transportation Management 9.3

In this section, you can find the release notes. Use the navigation in the left frame to find a specific release note.

# 2    Structure Changes in the IMG for SAP TM

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

## Customizing Activities

### New Customizing Activities

Table 2

| Area | Navigation Path | Customizing Activity | Support Package |
|---|---|---|---|
| EWM Integration | ▶ *Integration ＞ Integration with SAP Extended Warehouse Management* ❱ | *Define EWM Integration Profile* | SP00 |
| Basic Functions | ▶ *Basic Functions ＞ Colors* ❱ | *Define Colors for Gantt Chart, Load Planning, and Geographical Map* | SP00 |
| SCM Basis | ▶ *SCM Basis ＞ Pack ＞ Package Building* ❱ | *Define Package Building Profile* | SP00 |
| Transportation Allocation | ▶ *Planning ＞ General Settings* ❱ | *Define Transportation Allocation Number Ranges* | SP00 |

### Renamed Customizing Activities

Table 3

| Area | Navigation Path | Old Name | New Name | Support Package |
|---|---|---|---|---|
| Freight Order Management | *Freight Order Management* | *Define Discrepancy Types* | *Define Discrepancy Profile* | SP00 |
| Freight Order Management | *Freight Order Management* | *Define Hierarchical Views for Freight Documents* | *Define Hierarchical Views for Business Documents* | SP00 |
| Planning | ▶ *Planning ＞ General Settings* ❱ | *Define Hierarchical Views for Freight Documents* | *Define Hierarchical Views for Business Documents* | SP00 |
| Agreement Management | ▶ *Master Data ＞ Agreement RFQs and Quotations* ❱ | *Map Data in Non-TM Formatted Excel to TM Fields* | *Define Excel and Flat View Profiles* | SP00 |
| Gantt Chart | ▶ *Basic Functions ＞ Gantt Chart* ❱ | *Define Field Lists for Gantt Chart* | *Define Field Lists and Label Schemes for Gantt Chart* | SP00 |

**Deleted Customizing Activities**

Table 4

| Area | Navigation Path | Customizing Activity | Support Package |
|---|---|---|---|
| Agreement Management | ▶ *Master Data* ❯ *Agreement RFQs and Quotations* ❯ | *Define FWA Quotation Selection Profiles* | SP01 |

## BAdIs

You can find all BAdIs under *Business Add-Ins (BAdIs) for Transportation Management*.

**New BAdIs**

Table 5

| Area | Navigation Path | BAdI | Support Package |
|---|---|---|---|
| Agreement Management | ▶ *Master Data* ❯ *Agreement RFQs and Quotations* ❯ | *BAdI: Specification of Transit Time for Optimizer* | SP00 |
| Settlement | ▶ *Forwarding Settlement* ❯ | *BAdI: Determination of Invoice Date for FWSDs* | SP00 |
| Settlement | ▶ *Forwarding Settlement* ❯ | *BAdI: Change of Agreement Party Roles for Stage Items* | SP00 |
| SCM Basis | ▶ *SCM Basis* ❯ *Pack* ❯ *Package Building* ❯ *Business Add-Ins (BAdIs)* ❯ | *BAdI: Package Building* | SP00 |
| Master Data | ▶ *Master Data* ❯ *Business Partner* ❯ *Data Protection* ❯ | *BAdI: Data Protection and Privacy* | SP00 |

# 3 Strategic Freight Management

## 3.1 Strategic Freight Sales

This feature enables you to do the following:

- Display a forwarding agreement quotation as a flat view

  As a logistic service provider or carrier, you can view the entire forwarding agreement quotation (FWAQ) or an FWAQ item in one screen. This enables you to see a broader view of the FWAQ to make quick and efficient decisions about rates based on logistical information.

  In the flat view, the system displays the contribution and the target contribution. These are the rates obtained by the system by subtracting the rate in the cost-charge types from the total rate in all the non-cost charge types, or from the target rate in the non-cost charge types respectively.

- Create a forwarding agreement quotation assignment

  A sales manager can create an FWAQ assignment from a forwarding agreement quotation item. The manager creates the FWAQ assignment to delegate the task of rate specification for transportation services for a particular trade to an analyst who has expertise in providing rates for the trade lane. The analyst proposes rates and merges the rates back into the forwarding agreement quotation.

- Display the versions tab page in the forwarding agreement quotation

- Display the following attributes in the forwarding agreement quotation template:

  ○ *Notes*, *Attachments*, and *Output Management* tab pages at the header level

  ○ *Trade Lanes*, and *Default Routes* tab pages at the item level

  ○ Calculation sheet template at the item level

- Download a forwarding agreement quotation in the format of a customer's Microsoft Excel file

  If you have created the forwarding agreement quotation from a Microsoft Excel provided by a customer, you can download the forwarding agreement quotation in the same format of the customer's Microsoft Excel file. You can then send this file to the customer. Since the customer receives the Microsoft Excel file in a known format, it is easy for the customer to analyze the rates.

  You can also download all items, all item responses, or all items and item responses in the forwarding agreement quotation as a Microsoft Excel file

- You can specify a format type to decide if the customer is sent all the approved responses of an FWAQ item or if the customer is sent only the FWAQ item to which you have added approved rates.

- Build rates for forwarding agreement quotation items based on matching service products

  In the forwarding agreement quotation, you can automatically build rate or use the rate builder cockpit to manually build rate for forwarding agreement quotation items based on matching service products. The system finds the matching service products based on the rate records of the leading charge type you have selected in the calculation sheet of an item in the forwarding agreement quotation. Subsequently, the system tries to find matching rate records of the leading charge type in the rate records of the charge type in the service products to build rate.

> **ℹ Note**
> - The system finds only the service products that contain the same sales organization as the forwarding agreement quotation.
> - If you have not defined a calculation profile for a sales organization, the system cannot use the rates in the matching service product.
> - When you automatically build rate or build rate with responses, the system selects a rate from the rate table of the matching service product based on the middle date of the agreement validity in the forwarding agreement quotation. For example, the rates in a rate table of a matching service product are valid from April 1, 2015 to April 20, 2015 and another rate from April 21, 2015 to May 21, 2015. If the agreement validity is from April 15, 2015 to May 15, 2015, the system selects the rate that is valid on April 30, 2015, which is the middle date of the agreement validity. Therefore, the system selects the rate that is valid from April 21, 2015 to May 21, 2015.

- Create multiple forwarding agreement quotation item responses when you build rate in a forwarding agreement quotation

   When you automatically build rate in a forwarding agreement quotation, the system creates an FWAQ item response for every matching service product that the system finds.

   If you select multiple matching service products and generate FWAQ item responses in the rate builder cockpit, the system generates a FWAQ item response for every matching service product. The system does not merge all the data into one FWAQ item response.

## Technical Details

Table 6

| Technical Name of Product Feature | `TM_STRATEGIC_FREIGHT_SALES` |
|---|---|
| Product Feature Is | Changed |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-FWA-QUO |
| Availability | SAP TM 9.3 |

## Effects on Customizing

You can define flat view profiles and excel mapping profiles in one Customizing activity in *Transportation Management* under ▶ *Master Data* ❯ *Agreement RFQs and Quotations* ❯ *Define Excel and Flat View Profiles* ❯ *Define Flat View Profiles for FWAQs* ❯

To display the FWAQ as a flat view, you have defined a flat view profile in Customizing for *Transportation Management* under ▶ *Master Data* ❯ *Agreement RFQs and Quotations* ❯ *Define Excel and Flat View Profiles* ❯ *Define Flat View Profiles for FWAQs* ❯

To specify a format type, you have specified settings in Customizing for *Transportation Management* under ▶ *Master Data* ❯ *Agreement RFQs and Quotations* ❯ *Define Forwarding Agreement Quotation Types* ❯.

## See also

*Strategic Freight Sales* [external document]

*Flat View* [external document]

*Creation of FWA Quotation from Non-TM Formatted Excel* [external document]

*Forwarding Agreement Quotation* [external document]

*Forwarding Agreement Quotation Assignment* [external document]

*Rate Determination for Forwarding Agreement Quotation Items* [external document]

## 3.2   Strategic Freight Procurement

This feature enables you to do the following:

- In the *Freight Agreement Management* screen on the SAP TM collaboration portal you can perform the following actions:
    - As a shipper, you can specify terms and conditions. Your carrier or logistics service provider must accept your terms and conditions the first time they open a freight agreement RFQ.
    - Your carriers can view all freight agreements that they have with you, including the freight agreements that have expired, that are valid on the current date, or are valid for a period of time in the future.
- Request rate

    In the rate table of the calculation sheet, you can select the *Request Rate* checkbox for rate records. This indicates the rate records that system downloads when you download an individual freight agreement RFQ as a Microsoft Excel file. When you upload this file into the SAP collaboration Portal, the carrier responds with rates only for these rate records.
- Target rate

    In the rate table of a calculation sheet, you can define a target rate. This specifies the maximum price you are willing to pay for a carrier's service. You also specify a tolerance as a percentage. You can disregard the carrier if the rate is beyond the target rate after applying the tolerance percentage. For example, you specify a target amount or target rate of 1000 USD. You also specify a tolerance of 10%. If the rate the carrier has proposed is higher than 1100 USD, you do not have to take the carrier into consideration while awarding the transportation service.
- Historical spend simulation

    In the optimizer, you can calculate the charges for previous freight orders with the rates that the carriers have proposed in the individual freight agreement RFQs. The system finds the previous freight orders based on the structure of a charge type you specify. The system uses these charges as the input to the optimizer to evaluate the carriers. This increases the accuracy of the optimizer.
- Freight agreement RFQ assignment

    A purchasing manager can create a freight agreement RFQ master assignment from a freight agreement RFQ master item. The manager creates the freight agreement RFQ master assignment to delegate the task of bid analysis to analysts. The analysts have expertise in analyzing bids for a trade lane. The analysts determine the best bids from the carrier bids for transportation services for a particular trade lane and merge the results back to the freight agreement RFQ master.
- Transit time

You can reward or penalize a carrier because of the difference between the requested transit time and the offered transit time in the optimizer.

## Technical Details

Table 7

| Technical Name of Product Feature | TM_STRATEGIC_PROCUREMENT_MANAG |
|---|---|
| Product Feature Is | Changed |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-FRA-RFQ |
| Availability | SAP TM 9.3 |

## Effects on Customizing

You can choose to display the target rate to your carriers. To enable this feature, select the *Publish Target Rate* checkbox in Customizing for *Transportation Management* under ▐▶ *Master Data* ❯ *Agreement RFQs and Quotations* ❯ *Define Freight Agreement RFQ Types* ❱.

For the system to consider transit time, you must implement the business add-in *BAdI: Specification of Transit Time for Optimizer* in Customizing for *Transportation Management* under ▐▶ *Business Add-Ins (BAdIs) for Transportation Management* ❯ *Master Data* ❯ *Agreement RFQs* ❱.

## See also

*Strategic Freight Procurement* [external document]

*Freight Agreement RFQ Master Assignment* [external document]

*Post-Bid Analysis* [external document]

For more information that describes the SAP TM collaboration portal for your carrier, see the following documents:

- *Collaboration Portal* [external document]
- *Freight Agreement (Collaboration Portal)* [external document]

# 4 Forwarding Order Management

## 4.1 General Enhancements for Forwarding Order Management

With this feature, you can do the following:

- Determine the route with enhanced usability
- Consider the transportation duration from the default route
- Create forwarding orders with service items only
- Enter freight terms on the forwarding order and forwarding quotation UIs
- Change forwarding order data after execution has already started
- Handle exceptions in the transportation process in an enhanced way

## Technical Details

Table 8

| | |
|---|---|
| Technical Name of Product Feature | TM_FWM_GEN_ENHANCEM_93 |
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-FWM |
| Available as of | SAP TM 9.3 |

## Additional Details

### Using Transportation Duration from the Default Route

The system now uses the transportation duration from the default route to calculate the pickup and delivery times for the ordered route. The transportation duration means the total length of time taken to complete a transportation run by a single transportation resource such as a truck. It includes the length of stay at each location in the run.

As a prerequisite you must have entered a default route that is used to determine the route.

### Forwarding Orders with Service Items Only

A forwarding order can now contain only service items. This means that it does not include any cargo items. The system does not issue error messages, when it checks the completeness. Such forwarding orders are sometimes used and required for settlement purposes.

To support this feature, the enterprise services have been extended (see below under *Effects on Data Transfer*.

## Late Changes of Forwarding Order Data

You can now change most of the forwarding order data, even if execution has already started and the status has changed to *On Hand*. However, when execution has started, the follow-up documents are no longer updated with these changes. When a forwarding settlement document for a forwarding order exists, you must cancel this document, then change the data of the forwarding order, and finally create a new forwarding settlement document.

For the following parameters there are restrictions. You cannot change these parameters, if the following conditions apply:

- Shipping Type

  The main carriage stage of the route is already in execution or a valid settlement document already exists (that means that the settlement document has not been canceled).

- Movement Type

  You have already assigned a follow-up document to one stage of the route, or a valid settlement document already exists.

- Transportation Mode

  The main carriage stage of the route is already in execution, a valid settlement document exists, or invoicing for the forwarding order is completed.

## Enhancements of Exception Handling Process

You can now handle exceptions that occur in the transportation process in an enhanced way. This applies especially when the process is integrated with SAP Extended Warehouse Management (SAP EWM). For example, a personal object worklist (POWL) for discrepancies is now available.

For more information, see Exception Handling (SAP TM) [page 27].

# Effects on Existing Data

## Stage Table

The user interface (UI) for route determination in forwarding orders and forwarding quotations has been reworked for usability reasons. The former tab page or building block *Stages* has been split up into two new tab pages or building blocks, one for the ordered route and one for the actual route. The original tab page has been deleted. This improves the usability for users that work only with the ordered route or the actual route. The functionality, however, has not been changed.

The following enhancements have been made:

- The ordered route and the actual route contain only those buttons and table columns that you need to specify and handle the stages of the corresponding route. This means that from the ordered route all non-relevant buttons and columns have been deleted. Some buttons have been adjusted and renamed as follows:

  - Ordered Route: The *Insert* button has been renamed to *Split*. This refers to the former option *By splitting Selected Stage*. This is the only option for the *Insert* button that is relevant for the ordered route.

  - Actual Route: The *Delete* button has been renamed to *Merge*. It now has the options *With Predecessor* and *With Successor*.

- The stage table has been divided into the following different sections (only displayed when corresponding stages exist):

  - *Route*: Contains the general stages of the route.

  - *BCO*: Contains the stages of the route that refer to the process of buyer's consolidation.

- ○ *SCO*: Contains the stages of the route that refer to the process of shipper's consolidation
- ○ *Empty Provisioning and Return*: Contains the stages that refer to the corresponding process.
- The *Layout* button, which you could use to switch between the item view and the stage view, has been replaced by a dropdown menu named *Change Hierachy*.

  Note that if you have selected the option *Same Locations and BPs* in Customizing of the forwarding order type, only the item view is available. For more information, see Customizing for *Transportation Management* under ▶ *Forwarding Order Management* 〉 *Forwarding Order* 〉 *Define Forwarding Order Types* ▶.

**Freight Terms**

In addition to the Incoterms, you can now also specify freight terms on the UI of a forwarding order or forwarding quotation. In Customizing, you can define whether you can enter both terms on the UI or if you can enter only one of the two terms (see below under *Effects on Customizing*). If you have entered one of the two terms, however, the other field is no longer editable.

Futhermore, the superordinate term *Payment Terms* has been renamed to *Settlement Terms*. The term was renamed also on other UIs where it appeared (e.g. on the UI of the ocean booking).

For more information, see Freight Terms in Forwarding Order Management [page 33].

## Effects on Data Transfer

**Receive Service Items**

You can receive a list of items that represent the services to be executed and additional information about the service (for example, quantities and execution date).

## Effects on System Administration

The *Business Tr. Doc. ID* parameter (Business Transaction Document ID) has been included in the queries and personal object worklists (POWLs) of forwarding order management (as of SAP TM 9.0). Using this parameter, you can select forwarding orders and forwarding quotations by the document references of these business documents.

If you want to upgrade your SAP TM system to SAP TM 9.3 or higher releases, you must use the XPRA `/SCMTMS/XPRA_140_TRQ_DOCREF` to update the `/SCMTMS/D_TRQDRF` database with correct values for the `ROOT_KEY` database field.

After updating the database, you can also use the *Business Tr. Doc. ID* parameter for business documents that have been created before you performed the system upgrade.

## Effects on Customizing

In Customizing you can now define how you can enter settlement terms (Incoterms and freight terms) on the forwarding order or forwarding quotation UI. For more information, see Customizing for *Transportation Management* under ▶ *Forwarding Order Management* 〉 *Forwarding Order* 〉 *Define Forwarding Order Types* ▶.

**More Information**

# 5 Freight Order Management

## 5.1 General Enhancements for Freight Order Management

With this feature, you can do the following:
- Define hierarchical views for freight documents and transportation units
- Define execution start date/time and execution end date/time for service order items

### Technical Details

Table 9

| | |
|---|---|
| Technical Name of Product Feature | TM93_TOR_ENHANCEMENTS |
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-FRM |
| Available as of | SAP TM 9.3 |

### Additional Details

**Define hierarchical views for freight documents and transportation units**

The Customizing activity for defining hierarchical views in freight order management has been reworked and renamed. For example, the grouping logic has been reworked. You can now group a hierarchy level based on predefined default grouping attributes. Alternatively, you can define data access definitions to group a hierarchy level.

For more information, see Customizing for *Transportation Management* under ▶ *Freight Order Management* ▸ *Define Hierarchical Views for Business Documents* ◢ and *Use of Hierarchical Views in FOM* [external document].

**Define execution start date/time and execution end date/time for service order items**

As of SAP TM 9.3, you can define an execution start date/time and an execution end date/time for service order items.

### Effects on System Administration

**Define hierarchical views for freight documents**

Note that if you are upgrading from a lower release, you can display your hierarchical views that you created in the lower release by calling view cluster /SCMTMS/VC_TOR_OH_OLD in transaction SM34.

**Define execution start date/time and execution end date/time for service order items**

In service orders, the XPRA `/SCMTMS/XPRA_140_TOR_STOPS` (*XPRA TM 9.3: Update Assignment Category and Dates/Times of TO Stops*) migrates the execution date that was previously stored as a single field into two new fields representing start date/time and end date/time of the execution.

For more information, see the system documentation.

# 5.2 Appointments in Freight Documents and TUs

Up to now, you could enter acceptable and requested dates/times to define appointments. As of TM 9.3, you enter an appointment start date/time and an appointment end date/time to define an appointment with your carrier.

Further, loading/unloading dates/times of the assigned cargo and coupling/uncoupling dates/times of the assigned transportation units (railcar units and trailer units) are displayed in the freight document. Loading/unloading dates/times of the assigned cargo are also displayed in transportation units.

## Technical Details

Table 10

| | |
|---|---|
| Technical Name of Product Feature | TM93_TOR_APPOINTMENTS |
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-FRM |
| Available as of | SAP TM 9.3 |

## Additional Details

The user interfaces for defining dates/times in freight documents and transportation units have been reworked.

On the *Overview* and *Stages* tab pages, the *Dates* tab page has been renamed to *Dates/Times*. On this tab page, you can now enter start and end dates/times for your appointments with the carrier. Moreover, the system displays loading/unloading dates/times of the assigned cargo as well as coupling/uncoupling dates/times of the assigned transportation units (railcar units and trailer units).

## Effects on System Administration

If you migrate to SAP TM 9.3 from a lower release, the XPRA `/SCMTMS/XPRA_140_TOR_STOPS` (*XPRA TM 9.3: Update Assignment Category and Dates/Times of TO Stops*) is executed automatically.

The XPRA fills the appointment dates/times and the loading/unloading dates/times of the assigned cargo as well as the coupling/uncoupling dates/times of the assigned transportation units for freight documents and transportation units.

For more information, see the system documentation.

## See also

For more information, see SAP Library for *Transportation Management* under ▶ *Freight Order Management* ❯ *Additional Business Document Attributes in FOM* ❯ *Dates/Times in Freight Order Management* ❯.

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**Freight Order Management**

# 6 Planning and Network

## 6.1 Package Building and Enhancements for Load Planning

This feature enables you to create packages when you build freight units from forwarding orders, order-based transportation requirements, or delivery-based transportation requirements. You can enter the maximum quantity of a product that the system can put into a package. You can create packages that contain a single product only and packages that consist of layers with different products. The dimensions of your packages such as size and weight depend on the settings you made in SCM Basis. You can use these packages in load planning.

In load planning, you can check the length of the load space used by a resource. Additionally, you can apply a new rule, 2160, to your load optimizer runs. With this rule, the load optimizer builds as few stacks as possible to reduce the used length of the resource.

### Technical Details

Table 11

| | |
|---|---|
| Technical Name of Product Feature | TM93_PACKAGE_BUILDING |
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-PLN-FU-FUB |
| Available as of | SAP TM 9.3 |
| Required Business Functions | *SAP TM-Specific Enhancements in SCM Basis* [external document] |

### Effects on Customizing

In Customizing, you can do the following:

- Define a package building profile in which you define how product items are to be assigned to packages. For example, you can specify that the system creates mixed packages and mixed layers. For more information, see Customizing for *SAP Transportation Management* under ▶ *SCM Basis* ▶ *Pack* ▶ *Package Building* ▶ *Define Package Building Profiles* ▶.

- Define tooltips and colors for the display of items in the 3D load plan. Additionally, you can define a lower and an upper threshold for load utilization. For more information, see Customizing for *Transportation Management* under ▶ *Basic Functions* ▶ *Colors* ▶ *Define Colors for Gantt Chart, Load Planning, and Geographical Map* ▶.

## See also

*Package Building* [external document] in SCM Basis

*Package Building* [external document] in SAP Transportation Management

*Load Planning* [external document]

## 6.2    Enhancements for Manual Planning with Gantt Chart

With this feature you can do the following in the Gantt chart:

- Check the availability and use of handling resources at a specific location and time

    You can check whether a handling resource is available or in downtime. You can also check the available capacity, required capacity, and over-capacity of a handling resource, based on your planned loading and unloading activities.

- Perform freight unit-based planning

    You can plan freight units directly in the Gantt chart, as you would in the transportation cockpit. For example, to create a trailer unit you can drag and drop freight units to a trailer. Using the context menu, you can split or merge stages, insert or remove locations, or apply default routes for a freight unit. You can also remove assigned freight units from a document. In the chart panel, you can display freight units' planning statuses and execution statuses. These statuses are indicated by different colors and patterns.

- Display and solve warnings in the Gantt chart

    The Gantt chart presents you with the "missing stage" warning that is indicated by one icon. You can solve a warning using the context menu. You can choose to display or hide this type of warning in the Gantt chart by using the *Missing Stage* checkbox in the legend.

### Technical Details

Table 12

| | |
|---|---|
| Technical Name of Product Feature | TM93_GANTT_CHART |
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-PLN |
| Available as of | SAP TM 9.3 |

### Effects on Existing Data

In Customizing, you can define label schemes and tooltip schemes that are to be displayed for activities, resources, and documents in the Gantt chart. For more information, see Customizing for *Transportation Management* under ‖ *Basic Functions* ❭ *Gantt Chart* ❭ *Define Field Lists and Label Schemes for Gantt Chart* ❭.

### See also

*Gantt Chart* [external document]

*Overview of the Gantt Chart Functions* [external document]

*Personalization in the Gantt Chart* [external document]

## 6.3 General Enhancements for Transportation Planning

With these features you can do your transportation planning more efficiently.

- In interactive planning on the map, you can do the following:
  - You can search for resources as well as unplanned freight units and transportation units within a particular radius from any spot on the map.
  - You can report the exact position of a resource at any given time on the map.
  - You can display all the freight orders including the stops for a particular resource.
- In Vehicle Scheduling and Routing (VSR) optimization, you can automatically accept the results of any optimizer run without further confirmation. To do so, select the *Skip Planning Result Screen* checkbox in the optimizer settings of your planning profile.
- With context determination, you expand your selection of resources and documents to be displayed in the transportation cockpit. The expanded selection includes documents and resources that, within the planning horizon, are assigned to the documents and resources you selected on the selection screen of the transportation cockpit. You can use context determination to expand your selection to all documents assigned to the following resources:
  - Trucks
  - Trailers
  - Containers
  - Locomotives
  - Railcars

  You can use context determination for the following documents:
  - Road freight orders
  - Trailer units
  - Container units
  - Rail freight orders
  - Railcar units

### Technical Details

Table 13

| Technical Name of Product Feature | TM93_ENHANCE_PLN |
|---|---|
| Product Feature Is | New |
| Country Dependency | Valid for all countries |

| | |
|---|---|
| Software Component Version | SAP TM 1.40 |
| Application Component | TM-PLN |
| Available as of | SAP TM 9.3 |

## See also

*Context Determination* [external document]

*Map Functions* [external document]

*Interactive Planning on the Map* [external document]

# 6.4 General Enhancements for Transportation Network

With these features you can maintain your transportation network more efficiently.

- You can upload ocean carrier schedules from an external source to the SAP Transportation Management (SAP TM) system. For more information on the upload of ocean carrier schedules, see SAP Note 2136548 .

  You can also create your own upload strategies in Customizing for *SAP Transportation Management* under ▶ *SCM Basis* ▶ *Process Controller* . For more information about defining upload strategies in SAP TM, see SAP Note 1743069 .

- You can enter the transportation duration for transports based on a default route. The transportation duration includes the transit duration from one stop to another as well as the length of stay at each stop. You can either define the transportation duration per transportation stage or for the entire transportation run by a single resource.

  When you create a forwarding order and assign a default route, the system derives the delivery times and the pick-up times of the forwarding order based on the transportation duration of the default route.

## Technical Details

Table 14

| | |
|---|---|
| Technical Name of Product Feature | TM93_ENHANCE_NETWORK |
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAP TM 1.40 |
| Application Component | TM-MD-TN |
| Available as of | SAP TM 9.3 |

## See also

*Creating Schedules* [external document]
*Default Route* [external document]

# 6.5    Driver Management (Part 1, SP03)

If you work with trucks and drivers, you can do the following:

- Define drivers as business partners in master data and indicate non-working times and absences
- Define qualifications for drivers and define a validity period for a qualification, specifying a start and end date within which the qualification is valid

  Note that qualifications are only taken into consideration for the planning of drivers that are assigned to a particular truck as the default driver.
- Assign a default driver to a truck
- Assign drivers to road freight orders
  - Assigning a single driver or a driver team of two drivers including:

    Note that assigning a driver team means that they take turns driving and sleeping.
  - Assigning drivers to the entire road freight order or to individual transportation stages
  - Assigning drivers not defined in master data in the freight order user interface
- Create road freight orders in the transportation cockpit using the truck's default driver assignment

## Technical Details

Table 15

| Technical Name of Product Feature | TM93_DRIVERMANAGEMENT |
|---|---|
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-MD-BP, TM-FOM, TM-PLN, TM-PLN-GNT |
| Available as of | SAP TM 9.3 SP03 |
| Required Business Functions | *SAP TM-Specific Enhancements in SCM Basis* [external document] (SCM_SAPTM_SCMB_FND ) |

## Additional Details

You can assign drivers both in the freight order user interface and in the transportation cockpit, for example, by using drag and drop in the transportation cockpit.

When you assign drivers and save your road freight order, the system performs a number of checks. For example, a driver must not be assigned several times to a transportation stage or to two overlapping road freight orders.

Moreover, the system automatically checks the driver's validity and availabililty within the time frame of the road freight order. You can also perform these checks manually by selecting ▶ *Check* ❯ *Document* ❯ or *Resources*. The driver assignment status indicates, for example, if you have assigned too many drivers to one transportation stage.

Drivers are taken into account during manual planning in the transportation cockpit. If you use context determination, the system includes all road freight orders the drivers you selected on the selection screen of the transportation cockpit are assigned to.

## Effects on System Administration

You can enhance your layouts for the transportation cockpit to include information on drivers and any road freight orders they are assigned to. For more information, see *Use of Drivers in Planning* [external document]

## Effects on Customizing

You can define driver settings in the freight order type, for example the required number of drivers and if drivers are to be assigned per stage or per road freight order. For more information, see Customizing for Transportation Management under ▶ *Freight Order Management* ❯ *Freight Order* ❯ *Define Freight Order Types* ❯.

## See also

For more information about the use of drivers in freight order management, see *Use of Drivers in Freight Order Management* [external document].

For more information about the use of drivers in manual planning, see *Use of Drivers in Planning* [external document].

For more information about the use of drivers in master data, see *Driver* [external document]

# 7 Integration

## 7.1 Transit Warehousing (SAP TM)

This feature enables you to seamlessly integrate your planned flow of goods in SAP Transportation Management (SAP TM) and the physical flow of goods in SAP Extended Warehouse Management (SAP EWM). The integration is based on execution documents resulting from forwarding orders.

You can organize cargo over the entire transportation chain and get transparency over warehouse-specific data. The process of handling cargo at a location can be repeated for several locations.

In SAP EWM, the warehouse-specific processes are based on business documents that are created using loading and unloading instructions that are sent from SAP TM. You can configure the warehouse layout according to the specific requirements of the transit warehousing process. For example, specific storage types are available and a product master is no longer necessary. Further, the handling of cargo is done on package level and not on product level.

### Technical Details

Table 16

| | |
|---|---|
| Technical Name of Product Feature | TM_TRANSIT_WAREHOUSE |
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-INT-EWM |
| Available as of | SAP TM 9.3 |

### Additional Details

This feature allows you to do the following:

- Distribute business partner and location master data from SAP TM to SAP EWM
- Send and cancel loading and unloading instructions from SAP TM to SAP EWM for freight documents

    You can also send and cancel loading and unloading instructions for transportation units if they are included in a freight document. Freight orders for customer self-delivery and customer pick-up are also supported.

    Sending of loading and unloading instructions is done automatically and triggered by a status change. You can also trigger the sending manually and multiple times. After you have sent a loading or unloading instruction, changes of forwarding order data are still transferred to the freight order until the goods have been received in the warehouse and the actual quantities and attributes have been reported by SAP EWM.

    The new *Transmission-to EWM Status* informs you about the status of the message exchange.

- Receive multiple updates and confirmations from SAP EWM and update freight documents, transportation units and freight units
- Handle discrepancies and exceptions

  For more information, see the release note for Exception Handling (SAP TM) [page 27].
- Reassign unexpected package items in SAP TM that are part of a confirmation message from SAP EWM
- Split package items that are already assigned to a transportation unit and distribute them among several transportation units (for example, between two transit warehouses)

  When SAP EWM has reported the goods as *Received*, the item hierarchy in SAP TM is automatically updated. This split function is integrated with SAP EWM only for trailer units.
- Cancel freight documents before the goods have arrived at the warehouse

  A cancellation request is automatically sent by SAP TM to SAP EWM. The freight document can be cancelled in SAP TM until the goods have been reported by SAP EWM as *Arrived*.The freight document can only be cancelled in SAP TM when the cancellation has been confirmed by SAP EWM.
- Use document flow to navigate to SAP EWM business documents from SAP TM business documents

## Effects on System Administration

If you migrate to SAP TM 9.3 from a lower release, the XPRA `/SCMTMS/XPRA_140_EWM_INT_REL` (*XPRA TM 9.3: Determine EWM Integration Relevance of TO Documents*) is executed automatically.

As of SAP TM 9.3, a new indicator Extended Warehouse Management Integration Relevance (EWM_INT_REL) is available. It specifies whether a transportation order document (TO document), that is, a freight document or a transportation unit, is relevant for the integration with SAP EWM. A TO document is relevant for integration with SAP EWM if its items or at least one of its transportation stops contain a warehouse number and a logical system (EWM system). The XPRA determines if the transportation stops or items contain a warehouse number and a logical system (EWM system) and sets the indicator accordingly.

For more information, see the system documentation.

## Effects on Customizing

To use transit warehousing, you need to define the following profiles in Customizing:
- An EWM integration profile

  For more information, see Customizing for *Transportation Management* under ▶ *Integration* ▶ *Integration with SAP Extended Warehouse Management* ▶ *Define EWM Integration Profile* ▶.
- A discrepancy profile

  For more information, see Customizing for *Transportation Management* under ▶ *Freight Order Management* ▶ *Define Discrepancy Profile* ▶.

Futher, you need to assign these profiles to your business document types in Customizing:
- ▶ *Freight Order Management* ▶ *Freight Order* ▶ *Define Freight Order Types* ▶
- ▶ *Freight Order Management* ▶ *Freight Booking* ▶ *Define Freight Booking Types* ▶

For more information about prerequisites, see *Transit Warehousing* [external document].

If you want to work with freight orders for customer self-delivery and pick-up, you need to select one of the following stop sequence types in your freight order type:
- *Star-Shaped Based on FU Stages (Reversed)* for freight orders for customer self-delivery

- *Star-Shaped Based on FU Stages* for freight orders for customer pick-up

## See also

*Transit Warehousing* [external document]

The SAP Library documentation for the different types of integration with SAP EWM has been assembled in one place. It comprises the following:

- Shipment-based integration with SAP EWM (formerly called *Integration with SAP Extended Warehouse Management* and located under *ERP Logistics Integration*)
- Delivery-based integration with SAP EWM (formerly called *Direct Integration with SAP EWM*)
- Transit warehousing

For more information, see *Integration with SAP Extended Warehouse Management* [external document].

For more information about transit warehousing in SAP EWM, see SAP Library for SAP EWM on SAP Help Portal under help.sap.com/ewm . In SAP Library, choose *Transit Warehousing* or ▶ *What's New in SAP Extended Warehouse Management 9.3* ▶ *Transit Warehousing (SAP EWM)* ▶.

# 7.2 Exception Handling (SAP TM)

With this feature you can handle and solve exceptions and discrepancies in SAP Transportation Management (SAP TM). You can, for example, use exception handling in the transit warehousing process in SAP TM, which is integrated with SAP Extended Warehouse Management (SAP EWM). However, the exception handling functions can also be used in other processes that do not extend to SAP EWM.

During execution in SAP EWM, you can determine discrepancies between the actual quantities and the quantities that have been ordered by the customer. Furthermore, exceptions can occur such as missing or damaged cargo. This data is sent from SAP EWM to SAP TM and copied automatically into the freight order or freight booking.

The customer service agent or transportation planner must decide together with the ordering party how to proceed with the discrepancies. Depending on this decision, the customer service agent can adjust the ordered data to the actual data or can plan the subsequent delivery of missing cargo.

To support this exception handling process, the following functions of SAP TM have been added or enhanced:

- Discrepancy profile with the option to define discrepancy subcategories
- Personal object worklist (POWL) for discrepancies
- Copy of actual data from freight document to ordered data of forwarding order
- Change of forwarding order data after execution has started
- Assignment of local freight document items to forwarding orders and freight units
- Manual freight unit split after execution has started
- Manual corrections of items after transfer of data from SAP EWM
- Integration of reversals of warehouse activities with SAP TM

## Technical Details

Table 17

| Technical Name of Product Feature | TM_EXCEPTION_HANDLING |
|---|---|
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-FWM, TM-FRM |
| Available as of | SAPTM 9.3 |

## Additional Details

In detail, the following enhancements have been made to the exception handling process in SAP TM:

- **Solving of missing cargo discrepancies**

  You can solve a discrepancy of the subcategory *Missing Cargo* in a partially-automated way. Depending on your settings in the Customizing activity *Define Discrepancy Profile* (see below), the original freight unit is split. You can then decide whether you solve the discrepancy and delete the freight unit (when the missing cargo is not delivered anymore) or whether you keep the freight unit for further planning (when, for example, the missing cargo is delivered later).

- **Copy of actual data and change of ordered data**

  You can copy actual data that has been reported by SAP EWM or entered manually in the freight document to the ordered data of the forwarding order. The system displays in the details of the forwarding order item whether discrepancies exist and whether actual data differs from ordered data.

  You can change most of the ordered data even if execution has already started (cargo receipt status is *On Hand*). However, the changes are then no longer propagated to follow-up documents such as freight units and freight orders. If a settlement document already exists, you must cancel the settlement document first, then change the data, and finally create a new settlement document.

- **Assignment of local freight document items**

  When SAP EWM sends a message to SAP TM that unexpected cargo has been detected which is not assigned to a forwarding order item, SAP TM creates a local item in the freight document. You can then assign this item to a forwarding order and freight unit to solve the discrepancy.

- **Manual freight unit split**

  When damaged items have been detected during execution, you can split freight units manually and create a freight unit for the damaged cargo, even when the *Cargo Receipt Status* has already been set to *On Hand*. You can then assign the freight unit to another freight document to return it or replan it for a subsequent delivery.

- **Manual corrections of items**

  You can manually correct items in SAP TM that you have received from SAP EWM, for example, if the warehouse workers inform you by phone about necessary corrections.

- **Integration of Reversals of Warehouse Activities with SAP TM**

  When warehouse workers reverse activities that have already been reported as completed (for example, loading or unloading of handling units), this process is integrated with SAP TM. SAP TM receives the information about reversed activities either directly (for example, arrival of goods) or after the warehouse worker has reported the activities as completed again (for example, loading and unloading activities).

In SAP TM the freight order and freight units are automatically updated. In some cases, however, the transportation planner in SAP TM has to solve discrepancies that have been created on the basis of the updated information.

For more information, see *Reversal of Warehouse Activities in Transit Warehousing* [external document].

## Effects on Existing Data

The following changes have been made to the SAP NetWeaver Business Client user interface of SAP TM:

- New POWL and query for discrepancies

  You can access this POWL under ▌▶ *Forwarding Order Management* ❯ *Worklist* ❯ *Overview Forwarding Order* ❩. You can display discrepancies with all relevant data. Furthermore, you can solve discrepancies directly and access the related documents such as forwarding orders and freight orders. The POWL includes options for solving missing cargo discrepancies with and without keeping the freight units that have been automatically created by the system. Furthermore, it includes an option to solve discrepancies with unexpected cargo and assign the local freight order items to forwarding order and freight unit items.

  The same UI options for solving discrepancies have also been added to the *Discrepancy* tab page of the item details (forwarding order and freight documents).

- Discrepancy subcategories

  The discrepancy subcategories that you have defined in the discrepancy profile in Customizing (such as *Missing Cargo* or *Damaged Cargo*) are displayed on the *Discrepancy* tab page of the item details of the forwarding order and freight document. Furthermore, they are displayed in the discrepancy POWL.

- Copy of actual data

  On the item detail screen of the forwarding order UI you can see whether actual data differs from ordered data. In the item table you have the option to copy actual quantities and attributes to the ordered data of a forwarding order item.

  A new status in the item details *(Item Processing Status)* indicates whether actual data has already been copied to ordered data. Furthermore, it shows whether the item is statistical, which means that it has no freight units anymore. In this case, the system has deleted the freight units of the forwarding order item after you have solved a discrepancy and copied actual data to the ordered data (as the quantity of the item was zero).

## Effects on Customizing

You can define a discrepancy profile and assign discrepancy types with their subcategories. For example, the following subcategies can be defined:

- Missing cargo
- Unexpected cargo
- Damaged cargo
- Overdimensional cargo
- Different equipment type or package type
- More or less weight or volume than expected
- Dangerous goods
- High-value cargo

Furthermore, you can define discrepancies for missing cargo so that predecessor documents (freight units) are automatically split. For the Transit Warehousing scenario, you have to define this automatic split.

For more information, see Customizing for *Transportation Management* under ▶ *Freight Order Management* ▶ *Define Discrepancy Profile* ▶.

## See also

*Handling Discrepancies in Transit Warehousing Process* [external document] (SAP Library Documentation)

Transit Warehousing (SAP TM) [page 25] (Release Note)

# 8 Settlement

## 8.1 Group Logistics Scenario

You can use a group logistics process to consolidate all the transportation requirements from all the companies in your enterprise into one central logistics company.

Your core business activity can be something other than providing transportation services. For example, your core business activity can be manufacturing. However, you need to transport the goods you manufacture to your customers. To enable this, you can have a company in your group of companies that provides transportation services to all the other companies.

You can use the internal settlement process to settle the freight costs between the group logistics company and the other companies in your group of companies.

### Technical Details

Table 18

| | |
|---|---|
| Technical Name of Product Feature | TM_EMBEDDED_LSP |
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SCMTM 1.40 |
| Application Component | TM-FRS |
| Available as of | SAP TM 9.3 |
| Required Business Functions | LOG_TM_INV_INT_II (SAP ERP) |

### Additional Details

This feature enables you to consolidate the transportation activities in your company so that you get the following business benefits:

- Better transportation rates from your logistics service providers (LSPs) or shippers
- Centralized transportation operation that gives you full visibility to your transportation demand
- Standardized tracking of your shipments across all the companies in your enterprise
- Focus of a single company in your enterprise on transportation activities

You can perform the following transportation activities:

- Settle freight costs between individual companies in your enterprise (perform intercompany settlement for the freight cost )
- Post freight costs to the financial accounting system in SAP ERP for both the company that requests the transportation service and the company that provides the transportation service

- Post the breakdown of freight costs to the level of transportation demand items in the financial system of the company that requests the transportation service

The group logistics features in the SAP Transportation Management (SAP TM) 9.3 SP00 release supports the following business models:

- Dedicated internal provider of transportation services

  The only function of the group logistics company is to provide transportation services to all other companies in the group of companies.

- Consolidator of internal transportation requirements

  The group logistics company consolidates internal transportation requirements and pays the external carrier for providing transportation services. The core business activity of the group logistics company is not in providing internal transportation services, but in providing another business activity, for example, manufacturing.

## Effects on Existing Data

You must upgrade to SAP TM 9.3 SP00 and SAP ERP EHP7 SP08. Only new order-based transportation requirements (OTRs) and delivery-based transportation requirements (DTRs) in the upgraded versions of the software can participate in the group logistics process.

A *Calculate Internal Charges* button has been added to the OTR and DTR screens. This enables you to calculate charges in the OTR and DTR.

## Effects on Customizing

In Customizing, you must specify the following settings:

- Company organization

  You must enable the *Group Logistics Process* checkbox for your company organization. For more information, see Customizing for *Transportation Management* under ▌ *Master Data* ❯ *Organizational Management* ❯ *Organizational Model* ❯ *Change Organizational Model* ▐ (transaction `PPOME`).

- OTR and DTR types

  You must specify an OTR type in Customizing for *Transportation Management* under ▌ *Integration* ❯ *ERP Logistics Integration* ❯ *Order-Based Transportation Requirement* ❯ *Define Order-Based Transportation Requirement Types* ▐. You must specify a DTR type in Customizing for *Transportation Management* under ▌ *Integration* ❯ *ERP Logistics Integration* ❯ *Delivery-Based Transportation Requirement* ❯ *Define Delivery-Based Transportation Requirement Types* ▐.

  You can enable the following settings in both the OTR and DTR types:

  - Internal charge calculation
  - Internal settlement
  - Stage profile

    You can assign a stage profile to the OTR and DTR type. The enables the system to determine the stage type in the freight units.

  - Stage profile condition

    You can specify the condition the system uses to determine the default stage profile in the freight units.

  - Internal settlement document type

You can specify a forwarding settlement document type for internal settlement documents. For more information, see Customizing for *Transportation Management* under ▌ *Settlement* ❭ *Forwarding Settlement* ❭ *Define Forwarding Settlement Document Types* ▌.

- Cost distribution

  You must enable internal settlement document types for cost distribution.

- Overwrite the settings for an Incoterm, stage type, and party role combination

  You can use the *BAdI: Change of Agreement Party Roles for Stage Items* to overwrite the settings for an Incoterm, stage type, and party role combination that you specify in the *Define Default Agreement Party Roles for Stages* Customizing activity. For more information, see Customizing for *Transportation Management* under ▌ *Business Add-Ins (BAdIs) for Transportation Management* ❭ *Settlement* ❭ *Forwarding Settlement* ❭ *BAdI: Change of Agreement Party Roles for Stage Items* ▌.

## See also

*Group Logistics Scenario* [external document]

# 8.2 Freight Terms in Forwarding Order Management

This feature enables you to use freight terms and not Incoterms as a basis for settling forwarding quotations and forwarding orders. The freight terms feature enables you to fulfill the following business requirements:

- Create just one forwarding agreement

  You use just one agreement with your ordering party to capture the settlement basis for a forwarding quotation and a forwarding order.

  You agree the transportation charges in advance with your ordering party. The charges give you the basis for settling the overall transportation costs. You can also agree on freight terms for the individual parts of the freight cost in advance. You know in advance the individual parts of the transportation that are paid by either the prepaid payer or the collect payer.

- Create just one forwarding quotation

  You use just one forwarding quotation with freight terms to calculate the prepaid and collect charges.

- Create just one forwarding order

  In the standard scenarios for logistics service providers (LSPs), you use two business documents, an export forwarding order and an import forwarding order, to deliver a forwarding order. When you use a freight term, you work with just one forwarding order.

  You specify a prepaid payer and a collect payer. These parties pay for the freight cost. You also specify a prepaid invoicing party and a collect invoicing party. These parties invoice the prepaid payer and collect payer.

- Create forwarding settlement documents from the forwarding order

  You can create forwarding settlement documents to settle charges between the following parties:

  ○ Prepaid invoicing party and prepaid payer for prepaid charges

  ○ Collect invoicing party and collect payer for the collect charges

## Technical Details

| | |
|---|---|
| Technical Name of Product Feature | `TM930_FWM_FREIGHT_TERM_FWO` |
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SCMTM 1.40 |
| Application Component | TM-FRS |
| Available as of | SAP TM 9.3 |

## Effects on Customizing

- You have specified freight terms for transportation mode categories in Customizing for *Transportation Management* under ▐▶ *Basic Functions* ❯ *Charge Calculation* ❯ *Basic Settings* ❯ *Freight Term Settings for Transportation Modes* ❯ *Define Freight Terms for Transportation Modes* ❭.

  You use the freight term settings you have defined for transportation modes when you create a forwarding quotation or forwarding order. You can assign the freight term that corresponds to the transportation mode in the ▐▶ *General Data* ❯ *Settlement Terms* ❯ *Freight Term* ❭ field of a forwarding quotation or forwarding order.

- You have specified the following charge calculation settings in Customizing for *Transportation Management* under ▐▶ *Basic Functions* ❯ *Charge Calculation* ❯ *Basic Settings* ❭:

  - Under *Define Charge Profiles*, a charge profile for sales on the forwarding side.

    You have assigned the charge profile for sales to a sales organization in your company in Customizing for *SCM Basis* under ▐▶ *Master Data* ❯ *Business Partner* ❯ *Organizational Management* ❯ *Organizational Model* ❯ *Change Organizational Model* ❭ (transaction `PPOME`).

    The system uses the charges profile when you calculate charges in a forwarding quotation or forwarding order, when the forwarding quotation or forwarding order contains the sales organization.

  - General settings for charge calculation, including a local currency. You have assigned a calculation profile to a charge profile.

  - Under *Define Charge Types*, you have specified the settings for the charge types that you assign to calculation sheets and rate tables including the freight term and payer for a charge type.

- You can specify freight terms on the *Freight Term* tab page of the calculation sheet item. You can use the calculation sheet in a forwarding agreement. The system uses the freight term settings to determine if the resulting charge in the forwarding quotation or forwarding order is prepaid or collect.

- You have specified the settlement terms that the system uses as the basis for settlement in a forwarding quotation. For more information, see Customizing for *Transportation Management* under ▐▶ *Forwarding Order Management* ❯ *Forwarding Quotation* ❯ *Define Forwarding Quotation Types* ❭.

- You specified the settlement terms that the system uses as the basis for settlement in a forwarding order. For more information, see Customizing for *Transportation Management* under ▐▶ *Forwarding Order Management* ❯ *Forwarding Order* ❯ *Define Forwarding Order Types* ❭.

- You have specified the appropriate business partners for the following party roles on the *Business Partner* tab page of a forwarding quotation or forwarding order:

  - Prepaid payer

- ○ Collect payer
- ○ Prepaid invoicing party
- ○ Collect invoicing party

## See also

*Freight Terms in Forwarding Orders* [external document]

*Freight Term Prerequisites* [external document]

*Freight Term Features* [external document]

*Process Differences Between Freight Terms and Incoterms* [external document]

*Incoterms in Forwarding Orders* [external document]

# 9 Charge Calculation

## 9.1 Enhancements to Charge Calculation

**Rate Determination of Forwarding Agreement Quotation Items**

As of SAP TM 9.3, the system enables you to determine the rates you want to provide to shippers or logistics service providers for forwarding agreement quotation items based on the existing service products. In this case, the system does not perform charge calculation but provides logistical information about the customer by analyzing the existing and past service products. For more information, see *Rate Determination of Forwarding Agreement Quotation Items* [external document].

**Freight Terms**

You can use freight terms as the basis of settling forwarding orders and forwarding quotations. You can agree the transportation charges in advance with your ordering party. The charges give you the basis for settling the overall transportation costs. You can also agree on freight terms for the individual parts of the freight cost in advance.

You can use a single forwarding quotation or a forwarding order with freight terms to calculate the prepaid and collect charges. The system creates two charge items; one for the prepaid payer and one for the collect payer. You can create forwarding settlement documents to settle charges between the following parties:

- Prepaid invoicing party and prepaid payer for prepaid charges
- Collect invoicing party and collect payer for the collect charges

For more information, see Freight Terms in Forwarding Order Management [page 33].

## Technical Details

Table 20

| Technical Name of Product Feature | SCMTMS_CC_ENHNCE_RATE_BUILDER |
|---|---|
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-TCM |
| Available as of | SAP TM 9.3 |

## Effects on Customizing

You assign freight terms to charge types in Customizing for Transportation Management under ▶ *Basic Functions* 〉 *Charge Calculation* 〉 *Basic Settings* 〉 *Define Charge Types* ▶.

In Customizing, you carry out the activities for Transportation Management under ▶ *Basic Functions* 〉 *Charge Calculation* 〉 *Basic Settings* ▶.

## 9.2   Enhancement to Agreement Determination

In scenarios such as forwarding agreement quotation, you may want the system to determine agreements of all validity periods including expired agreements and service products.

To enable this, you must set the parameter SEL_SP as **x** in the back-end and deselect the *Eval. All Agreements* checkbox in the *Define Charges Profiles* Customizing activity.

### Technical Details

Table 21

| | |
|---|---|
| Technical Name of Product Feature | SCMTMS_AGR_DET_ENHNCE_FWAQ |
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-TCM |
| Available as of | SAP TM 9.3 |

### Effects on Customizing

You select or deselect *Eval. All Agreements* checkbox in Customizing for Transportation Management under ▷ *Basic Functions* ❭ *Charge Calculation* ❭ *Basic Settings* ❭ *Define Charges Profiles* ❭.

In Customizing, you carry out the activities for Transportation Management under ▷ *Basic Functions* ❭ *Charge Calculation* ❭ *Basic Settings* ❭.

### More Information

*Rate Determination of Forwarding Agreement Quotation Items* [external document]

## 9.3   Refactoring

As of SAP TM 9.3, the charges data model has been restructured in order to improve charge calculation. The following changes have been made:

- The system stores the payment term information in the charge items.
- The system stores the rate and amount information in the charge lines.
- The system stores the calculation base quantities in the calculation basis.

## Technical Details

Table 22

| | |
|---|---|
| Technical Name of Product Feature | SCMTMS_DO_REFACTOR |
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-TCM |
| Available as of | SAP TM 9.3 |

## Effects on Existing Data

When you upgrade from SAP TM 9.2 or lower to SAP TM 9.3, the system uses the `XPRA /SCMTMS/ XPRA_140_DO_REFACTOR` to automatically migrate the charges in business documents that are not complete or not cancelled from SAP TM 9.2 or lower.

If you want to migrate the charges in business documents that are complete and cancelled, you must run the migration report `/SCMTMS/MIGR_140_DO_REFACTOR/` manually.

## Effects on Customizing

In Customizing, you carry out the activities for Transportation Management under ⫿ *Basic Functions* > *Charge Calculation* > *Basic Settings* ⫾.

## More Information

*Charge Calculation* [external document]

# 10 Data Privacy and Protection in SAP TM

## 10.1 Data Privacy and Protection in SAP TM

This feature enables you to control the retention, blocking, and destruction of business partner master data in SAP TM. The system uses an end-of-purpose (EoP) check to determine whether the business partner is still relevant for business activities or can be blocked because the end of purpose for the business partner is reached. You can control how long the system retains blocked data and when the system deletes blocked data.

### Technical Details

Table 23

| | |
|---|---|
| Technical Name of Product Feature | TM_DPP |
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-BF |
| Availability | SAP Enhancement Package 3 of TM 9.0 |
| Required Business Functions | • Information Lifecycle Management (ILM)<br>• Business Partner ILM (BUPA_ILM_BF) |

### Additional Details

- When a business partner is created in the system, different business documents, for example offers, orders or payments can use this business partner.

- As soon as a document is completed, the business has ended for the business partner with respect to this document.

- As soon as all business documents, which use a business partner, are completed, the business partner is deemed to have reached its end of business. This is the start of retention time(SoRT). Note that reaching end of business is not grounds for blocking a business partner.

- The next milestone in the process is end of purpose. This point is reached if the end of business has been reached and the residence period maintained for the business partner in ILM has elapsed. A business partner can be blocked as soon as it reaches its end of purpose.

- In the blocking period, no further business can be done with the business partner and the system only displays personal data to users with a special authorization.

- The business partner can be archived during the blocking period if required. When the business partner has reached its end of retention, the system can delete the data.

- The ILM framework considers the retention times maintained for the business partner in ILM and determines the appropriate retention period starting from SoRT. The framework determines how long the business partner is blocked for and the date on which a business partner can be destroyed. Where more than one retention time may be appropriate the system selects the longer period.

## Effects on System Administration

Only users with the correct authorization can view blocked data.

## Effects on Customizing

For residence and retention periods, ILM policies must be defined in the customer system.

## See also

*Blocking and Deletion of Personal Data in SAP TM* [external document]

▶ help.sap.com/erp 🔗 ❭ *Application Help* ❭ *SAP ERP Cross-Application Functions* ❭ *Cross-Application Components* ❭ *SAP Information Lifecycle Management* ❭

# 11 Customs

## 11.1 Customs and Security Filing

This feature enables you to submit Security Filings to customs authorities that require them and provides B2B enterprise services for transportation order processing related to such submissions.

For example, ocean freight destined for import to the United States, needs to be approved by USCBP (US Customs and Border Protection), before loading can begin at the origin port.

The new B2B enterprise services in addition can be used for requesting export, import, or transit declarations by using an integrated customs management application.

### Technical Details

Table 24

| | |
|---|---|
| Technical Name of Product Feature | TM93_CUSTOMS_SECURITY_FILING |
| Product Feature Is | New |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-CF-GT |
| Availability | SAP Enhancement Package 3 of TM 9.0 |

### Additional Information

- You can trigger the security filing process from either of the following documents:
  - Forwarding order
  - Freight booking
- You can use the new SOA services to work with:
  - requesting the creation of declaration documents
  - requesting the cancellation of declaration documents
  - confirmations of the creation or cancellation of such declaration documents
- These documents are prerequisites for the following:
  - export declaration
  - import declaration
  - transit declaration
  - security filing

## More Information

*Security Filing* [external document]

*Transportation Order Processing* [external document]

- *Transportation Customs Declaration Requesting In* [external document]
  - *Change Transp. Order Based on Transp. Custms. Decl. Conf.* [external document]
- *Transportation Customs Declaration Requesting Out* [external document]
  - *Request Transportation Customs Declaration* [external document]
  - *Request Transportation Customs Declaration Cancellation* [external document]

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# 12 Agreements and Master Data

## 12.1 Charge Management Master Data and Agreements

This feature enables you to do the following:

- Specify freight terms for each charge type in a calculation sheet so that you can calculate prepaid export charges and collect import charges for a single forwarding order (see *Freight Terms in Forwarding Orders* [external document]).

  The *Freight Term* (`FREIGHT_TERM`) calculation base with the *Freight Term* (`FRGHTR`) scale base is available for rate tables based on freight terms.

- Specify validity periods at rate level within the validity period of the parent rate table (see *Rate-Level Validity Periods* [external document]).

- Display the business partners associated with the business document in the business partner tab page. The business partner tab page is available in the following documents:
  - Freight agreement RFQ masters
  - Freight agreement RFQs
  - Freight agreement RFQ assignments
  - Forwarding agreement quotations
  - Forwarding agreement quotation assignments
  - Freight agreements
  - Forwarding agreements
  - Internal agreements
  - Mutual agreements

- Release agreements with rate tables.

  In freight agreements, forwarding agreements, and internal agreements, you can simultaneously release the agreement and the corresponding rate tables.

  In the forwarding agreement management worklist and the freight agreement management worklist, you can select and release multiple agreements with the corresponding rate tables.

  > **i Note**
  >
  > If you have enabled an approval workflow for the agreement and the corresponding rate tables, the system processes the agreement release workflow and then the rate table release workflow before it releases the agreement with the corresponding rate table.

- In agreement documents, add items or service products from other agreement documents.

- Specify an output profile and an additional output profile for the following business documents.
  - Freight agreement RFQs
  - Forwarding agreement quotations
  - Freight agreements
  - Forwarding agreements

- Internal agreements
- Protect rate table and calculation sheet item in forwarding agreement quotations, forwarding agreement quotation assignments, and forwarding agreements.

  The system does not allow you to change the amount in the calculation sheet item or the rate table.

## Technical Details

Table 25

| | |
|---|---|
| Technical Name of Product Feature | TM_930_COST_RATE_MANAGEMENT |
| Product Feature Is | Changed |
| Country Dependency | Valid for all countries |
| Software Component Version | SAPTM 1.40 |
| Application Component | TM-MD-CM<br>TM-FRA<br>TM-FWA |
| Availability | SAP TM 9.3 |

## Effects on Existing Data

When you upgrade from SAP TM 9.1 or SAP TM 9.2, the system automatically uses the following XPRA reports:

- *XPRA for Migrating Zero Rates* (/SCMTMS/XPRA_140_ZERO_RATE) – to migrate the database records for zero rates to a new format in SAP TM 9.3
- *XPRA for Populating Rate Validity Timestamps* (/SCMTMS/XPRA_140_RATE_VALIDITY) – to default the validity period of rates created from TM 9.1 onwards to the validity period of the parent rate table

## Effects on Customizing

You can assign freight terms to charge types in Customizing for *Transportation Management* under ▶ *Basic Functions* ❭ *Charge Calculation* ❭ *Basic Settings* ❭ *Define Charge Types* ❭.

You can specify an output profile and an additional output profile in the following Customizing activities in Customizing for *Transportation Management* under ▶ *Master Data* ❭:

- ▶ *Agreement RFQs and Quotations* ❭ *Define Freight Agreement RFQ Types* ❭
- ▶ *Agreement RFQs and Quotations* ❭ *Define Forwarding Agreement Quotation Types* ❭
- ▶ *Agreements and Service Products* ❭ *Define Freight Agreement Types* ❭
- ▶ *Agreements and Service Products* ❭ *Define FWA and Service Product Catalog Types* ❭
- ▶ *Agreements and Service Products* ❭ *Define Internal Agreement Types* ❭

## See also

- *Business Partner Determination* [external document]
- *Output Management* [external document]
- *Agreement Maintenance* [external document]

# Typographic Conventions

Table 26

| Example | Description |
|---|---|
| **`<Example>`** | Angle brackets indicate that you replace these words or characters with appropriate entries to make entries in the system, for example, "Enter your **`<User Name>`**". |
| ▶ *Example* ❭ *Example* ❭ | Arrows separating the parts of a navigation path, for example, menu options |
| **Example** | Emphasized words or expressions |
| **`Example`** | Words or characters that you enter in the system exactly as they appear in the documentation |
| www.sap.com ↗ | Textual cross-references to an internet address |
| /example | Quicklinks added to the internet address of a homepage to enable quick access to specific content on the Web |
| 123456 ↗ | Hyperlink to an SAP Note, for example, SAP Note 123456 ↗ |
| *Example* | • Words or characters quoted from the screen. These include field labels, screen titles, pushbutton labels, menu names, and menu options.<br>• Cross-references to other documentation or published works |
| `Example` | • Output on the screen following a user action, for example, messages<br>• Source code or syntax quoted directly from a program<br>• File and directory names and their paths, names of variables and parameters, and names of installation, upgrade, and database tools |
| `EXAMPLE` | Technical names of system objects. These include report names, program names, transaction codes, database table names, and key concepts of a programming language when they are surrounded by body text, for example, `SELECT` and `INCLUDE` |
| `EXAMPLE` | Keys on the keyboard |