What's New in SAP Transportation Management 9.5
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1 What's New in SAP Transportation Management 9.5

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

1.1 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 1:

<table>
<thead>
<tr>
<th>Area</th>
<th>Navigation Path</th>
<th>Customizing Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Functions</td>
<td>➤ Basic Functions ➤ General Settings</td>
<td>Define Triggers</td>
</tr>
<tr>
<td>Basic Functions</td>
<td>➤ Basic Functions ➤ General Settings</td>
<td>Define Service Type Groups</td>
</tr>
<tr>
<td>Master Data</td>
<td>➤ Master Data ➤ Agreement RFQs and Quotations</td>
<td>Define Award Confirmation Reasons</td>
</tr>
<tr>
<td>Basic Functions</td>
<td>➤ Basic Functions ➤ Charge Calculation</td>
<td>Define Forwarding Agreement Templates</td>
</tr>
<tr>
<td>Basic Functions</td>
<td>➤ Basic Functions ➤ Charge Calculation</td>
<td>Define Freight Agreement Templates</td>
</tr>
<tr>
<td>Basic Functions</td>
<td>➤ Basic Functions ➤ Charge Calculation</td>
<td>Define Internal Agreement Templates</td>
</tr>
</tbody>
</table>

Renamed Customizing Activities
Table 2:

<table>
<thead>
<tr>
<th>Area</th>
<th>Navigation Path</th>
<th>Old Name</th>
<th>New Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Functions</td>
<td><a href="#">Basic Functions ➤ General Settings ➤ Define Number of Undo Actions</a></td>
<td></td>
<td><a href="#">Define Maximum Number of Consecutive Undo and Redo Actions</a></td>
</tr>
</tbody>
</table>

1.2 Gen. Enhancements for Forwarding Order Management (SAP TM 9.5)

With this feature you can do the following:
- Copy forwarding orders without actual route information
- Displaying the customs reference number
- Create forwarding settlement documents
- Enter one-time locations on the fast order entry screen for forwarding orders
- Create a forwarding order template with a new name independently from the forwarding order type
- Define document types more easily

Technical Details

Table 3:

<table>
<thead>
<tr>
<th>Product Feature is</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Dependency</td>
<td>Valid for all countries</td>
</tr>
<tr>
<td>Software Component</td>
<td>SAPTM 160</td>
</tr>
<tr>
<td>Application Component</td>
<td>TM-FWM</td>
</tr>
<tr>
<td>Availability</td>
<td>SAP TM 9.5</td>
</tr>
</tbody>
</table>

Additional Details

Copy forwarding orders without actual route information

You can now copy forwarding orders without including the information from the actual route of the forwarding order that you want to copy. On the forwarding order user interface (UI) you can choose the new option **Copy Without Actual Route** under **Other Copy Options**. If you choose the standard option to copy forwarding orders, actual route information such as transportation stages is copied to the new forwarding order, too.
Displaying the customs reference number

You can now enter a customs reference number that was provided by the shipper directly in the **Items** tab page of the forwarding order. If you have entered multiple numbers on the **Customs** detail tab page, **Multiple** is displayed in the field on the **Items** tab page and the field is read-only. In the tooltip of this field, the individual customs reference numbers are displayed.

Create forwarding settlement documents

The **Create Forwarding Settlement Document** option has been moved from under **Follow-up** to **Charges/Settlement**. The **Calculate Charges** button has been removed and the options that were previously below it have been moved to **Charges/Settlement**.

Enter one-time locations on the fast order entry screen for forwarding orders

You can now enter deviating addresses for the source and destination locations on the fast order entry screen for forwarding orders. This is especially useful if users only have access to this fast order entry screen.

Create a forwarding order template with a new name independently from the forwarding order type

You can now create several different forwarding order templates with different names that are based on the same forwarding order type.

Up to now the names of forwarding order templates were generated automatically from the description of the forwarding order type (that has been defined in the Customizing of the forwarding order type) and the ID of the template. So you could not create two different templates based on the same forwarding order type with different names (for example, to indicate the customer name).

Therefore, a new description field has been added to the UI of the forwarding order template. The field is automatically filled with the description that has been defined in the Customizing of the forwarding order type. You can then change it and define your own name.

Define document types more easily

The Customizing activities for defining document types have been reworked. The settings have been grouped and the groupings have been arranged according to the process flow. Settings that are relevant for most scenarios, are listed on the left. Settings that are optional or relevant for specific scenarios only, are listed on the right.

**Effects on Existing Data**

Define document types more easily

The following fields have been renamed:

<table>
<thead>
<tr>
<th>Old Name</th>
<th>New Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completeness Checks</td>
<td>Completeness Criteria</td>
</tr>
<tr>
<td>EM Integration Active</td>
<td>Enable EM Integration</td>
</tr>
</tbody>
</table>
Effects on Customizing

Improved Customizing activities for defining document types

For more information about the improved Customizing activities, see Customizing for Transportation Management under:

- [Forwarding Order Management » Forwarding Order » Define Forwarding Order Types »](#)
- [Forwarding Order Management » Forwarding Quotation » Define Forwarding Quotation Types »](#)

1.3 General Enhancements for Freight Order Management (SAP TM 9.5)

With this feature you can do the following:

- Navigate to business documents and resources from item hierarchy
- Define which blocks are propagated to successor business documents
- Define ULD classification and ULD loading instructions in Customizing and display or change it in air freight bookings
- Display actual quantities history on freight order UIs
- Display preparation and finalization start and end dates on freight order UIs
- Draw master bill of lading also for freight orders
- Define document types more easily

Technical Details

Table 5:

<table>
<thead>
<tr>
<th>Product Feature is</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Dependency</td>
<td>Valid for all countries</td>
</tr>
<tr>
<td>Software Component</td>
<td>SAPTM 160</td>
</tr>
<tr>
<td>Application Component</td>
<td>TM-FRM</td>
</tr>
<tr>
<td>Availability</td>
<td>SAP TM 9.5</td>
</tr>
</tbody>
</table>
**Additional Details**

**Navigate to business documents and resources from item hierarchy**

In freight orders, freight bookings, and transportation units, you can now navigate to the related resources or business documents by simply clicking on the corresponding link in the item hierarchy.

**Define which blocks are propagated to successor business documents**

The block profile in Customizing has been enhanced. You can now specify which blocks that have been set manually or automatically for a business document are propagated to successor business documents.

**Define ULD classification and ULD loading instructions in Customizing and display or change it in air freight bookings**

You can now define an alternative classification of a unit load device type (ULD type) in the Customizing of equipment groups and types. It can be used to define the ULD ATA designator that identifies the ULD type of the Air Transport Association of America. Further, you can define ULD loading instructions to indicate the height of a ULD or a loading limitation.

Both fields are displayed on the air freight booking UI with the values from Customizing. Further, you can change the value from Customizing for the ULD loading instructions on the air freight booking UI.

**Display actual quantities history on freight order UIs**

You can now display the actual quantities history not only on freight booking UIs, but also on freight order UIs. On the Quantities tab page of the item details of a freight order you can now choose the Actual Quantities History button. If you have entered actual quantities for different locations of a transport, these are recorded and displayed in the actual quantities history.

**Display preparation and finalization start and end dates on freight order UIs**

You can now define a preparation duration and a finalization duration in the planning profile. The preparation duration is used to account for activities that occur before loading, such as the time required for checking the truck. The finalization duration is used to account for activities that occur after loading, such as the time required for completing paperwork. For more information, see the release note for Enhancements for Vehicle Scheduling and Routing (SAP TM 9.5) [page 18].

The start and end dates or times of these durations are now displayed on the Dates/Times tab page of the stage details of a freight order.

**Draw master bill of ladings also for freight orders**

On the freight order UI under Follow Up the new option Draw Master Bill of Lading Number is available.

**Define document types more easily**

The Customizing activities for defining document types have been reworked. The settings have been grouped and the groupings have been arranged according to the process flow. Settings that are relevant for most scenarios, are listed on the left. Settings that are optional or relevant for specific scenarios only, are listed on the right.
Effects on Existing Data

Define document types more easily

The following fields have been renamed:

Table 6: Renamed fields

<table>
<thead>
<tr>
<th>Old Name</th>
<th>New Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completeness Checks</td>
<td>Completeness Criteria</td>
</tr>
<tr>
<td>Severe Execution Checks</td>
<td>Enable Additional Execution Checks</td>
</tr>
</tbody>
</table>

Effects on System Administration

As of SAP TM 9.5, changes have been implemented in the system to improve performance when TOR items are processed and subsequent processes in the area of freight order management are executed by the system. The performance improvement is achieved whenever information from predecessor order documents (for example, forwarding orders) is required.

The /SCMTEMS/XPRA_160_TOR_NODES XPRA report and the /SCMTEMS/MIGR_160_TOR_NODES migration report change the following existing database tables:

- TOR Root Party (/SCMTEMS/D_TORPTY)
- TOR Root Document Reference (/SCMTEMS/D_TORDRF)
- TOR Item (/SCMTEMS/D_TORITE)

Furthermore these reports change the following data base tables that are new in SAP TM 9.5:

- TOR Summary Report (/SCMTEMS/D_TORSUM)
- TOR Item Customs Information (/SCMTEMS/D_TORCIN)

If you upgrade from a lower SAP TM release to SAP TM 9.5 or higher, the XPRA is executed automatically. You also have to execute the migration report. The XPRA is used for current documents, the migration report for documents that have already been completed.

Effects on Customizing

Enhanced block profile

A new view has been added to the block profile in Customizing. Based on the block category (for example, time conflict, air cargo security, or manual blocks) and type (for example, planning block), you can define which blocks are propagated to successor business documents.

For more information, see Customizing for Transportation Management under ☞ Freight Order Management ☞ Define Block Profile ☞.
Improved Customizing activities for defining document types

For more information about the improved Customizing activities, see Customizing for Transportation Management under:

- Freight Order Management > Freight Order > Define Freight Order Types
- Freight Order Management > Freight Booking > Define Freight Booking Types
- Freight Order Management > Transportation Unit > Define Transportation Unit Types
- Planning > Freight Unit > Define Freight Unit Types

New fields in Customizing for equipment groups and types

The two new fields ULD Classification and ULD Loading Instr. have been added to the Transportation Unit Types view of the Customizing activity for defining equipment groups and equipment types. For more information, see Customizing for Transportation Management under Master Data > Resources > General Settings > Define Equipment Groups and Equipment Types.

1.4 Enhancements for Manual Planning (SAP TM 9.5)

With this feature you can do the following:

- Display the transportation cockpit in multiple windows
- Centrally manage profile and layout sets
- Rearrange page layouts more easily
- Redo undone actions in the transportation cockpit
- Quickly add objects to the map in the transportation cockpit
- Continue displaying objects on the map when refreshing the transportation cockpit
- Remove selected objects from the map
- Remove all instances of a document or resource type from the map
- Use the map in the transportation proposal screen more effectively
- Define the amount of context displayed when you filter a hierarchy
- Group freight unit stages by their original documents and perform manual planning based on these groupings
- Specify if a level is sorted when you sort the hierarchy by an attribute
- Create capacity documents more easily
- Create multiple documents with the same data
- Avoid incompatible assignments during manual planning
- Use the new capacity selection profile setting

Technical Details

Table 7:

<table>
<thead>
<tr>
<th>Product Feature is</th>
<th>New</th>
</tr>
</thead>
</table>
Additional Details

Display the transportation cockpit in multiple windows

To provide a major usability enhancement, you can now display different areas of the transportation cockpit in three separate windows that you can position across multiple monitors and can resize independently. This means you can now display areas such as the geographical map and the Gantt chart in independent full-screen windows.

Features:

- You can display the main window and up to two additional windows.
- The main window and additional windows are defined by separate page layouts.
- Additional windows can be opened from within the transportation cockpit or opened by default when the transportation cockpit is started.
- You can drag and drop objects between windows. In addition, clicking a button on the application toolbar in one window affects selected objects in the other windows. This is because the data displayed in the windows belongs to the same session.
- Closing the main window closes any additional windows that are open.

For more information about enabling the use of multiple windows, see .

Centrally manage profile and layout sets

The new Profile and Layout Set Management applications enable an administrator to centrally create, assign users, and manage profile and layout sets (PLSs) for a team or organization. This new approach simplifies the entire process of working with PLSs by removing the need for individual users to create and maintain their own.

The applications enable you to do the following:

- Create and edit PLSs centrally.
- Assign individual users, user roles or all users to a PLS.
- Merge similar PLSs to reduce repetition.
- Organize similar PLSs together for easy management.
- Transport PLSs between systems.

The following PLS management applications are available:

- Profile and Layout Set Management for Transportation Cockpit
- Profile and Layout Set Management for Carrier Selection
- Profile and Layout Set Management for Delivery Creation

For more information about creating and managing PLSs, see .
Rearrange page layouts more easily

You can now create and edit page layouts more easily with three new functions:

- **Swap Area button**
  Use the function to swap the position of the selected area with the position of another area within the page layout.

- **Move Area button**
  Use the function to move the selected area to an unoccupied space within the page layout. (The button is only displayed when a space is available.)

- **Move to Top and Move to Bottom buttons**
  Use the new buttons to move the selected content of an area to the very top or bottom of an area.

Redo actions in the transportation cockpit

The transportation cockpit now includes a **Redo** button so you can restore manual planning steps that you previously undid. The maximum number of steps that you can redo consecutively is configurable in Customizing (see below).

Quickly add objects to the map in the transportation cockpit

When the map is displayed in the transportation cockpit, you can now add an object to the map by simply selecting it in its list or hierarchy. The object is displayed on the map for as long as it is selected, and you can plan with it interactively.

The addition of the quick add function means there are now three ways to add objects to the map:

- Selecting an object (new).
- Using the functions in the **Update Map** dropdown list.
- Toggling an object’s action button.

To use the quick add function, you need to activate it in Customizing (see below).

**Note**

Using the quick add function may negatively affect system performance.

Continue displaying objects on the map when refreshing the transportation cockpit

You can specify in Customizing (see below) that when you refresh the transportation cockpit, the objects displayed on map continue to be displayed.

Remove selected objects from the map

To assist with planning on the map (in the transportation cockpit and transportation network cockpit), you can add the new **Remove Selected Entries** button to the page layout. The button is displayed in the **Update Map** dropdown list on the application toolbar.

Remove all instances of a document or resource type from the map

When using the map in the transportation cockpit, the new **Remove** function in the map context menu enables you to quickly remove all instances of a document or resource type from the map.

By default, the function is available in standard SAP page layouts that use the map. For custom page layouts that use the map, you can add the function to the context menu in Customizing (see below).
Use the map in the Transportation Proposal screen more efficiently

There are the following enhancements for page layouts of the transportation proposal results screen that use the map:

- **Show All on Map** button
  Use the new button to display all objects on the transportation proposal map.

- **Actions buttons**
  You can now use the buttons in the Action column to hide and display individual transportation proposals on the map.

- The transportation proposals are now color-coded for clarity.

Define the amount of context displayed when you filter a hierarchy

You now have more control over the amount of context that is preserved when filtering a hierarchy. Previously, when filtered, the system preserved all parent levels of the remaining entries up to the highest level in the tree as well as preserving all sub-levels of the parents.

Now, you can now specify in Customizing (see below) a reduced level of context so that only parent levels are preserved, resulting in a smaller hierarchy after filtering.

Additionally, when filtering a hierarchy or level, the number of remaining instances is now displayed, such as 3/15.

Group freight unit stages by predecessor documents and perform manual planning based on this grouping

You can group freight unit stages in the freight unit stage hierarchy by predecessor business documents from Sales and Distribution (SD), Logistics Execution (LE), and Materials Management (MM).

The freight order hierarchy also displays the assigned freight units grouped by their predecessor document.

Furthermore, you can perform manual planning based on this grouping, that is, you can assign an unplanned freight unit stage group to a resource or reassign a freight unit stage group from one freight order to another freight order.

Specify if a level is sorted when you sort the hierarchy by an attribute

You can now specify if a level is sorted or not when you sort its hierarchy by an attribute. Specifying that a level, for example, Location, is not to be sorted can be useful to preserve its logical sequence.

To specify if a level is sorted or not, configure the **Sorting Preference** setting in Customizing (see below).

Create capacity documents more easily

When planning in the transportation cockpit, it is now easier to create capacity documents. The **Create Capacity Document** and **Create Multiple Capacity Documents** functions now include dropdown lists that enable you to select the specific capacity document you want to create. The choices are as follows:

- Container unit
- Road freight order
- Trailer unit
- Rail freight order
- Railcar unit
- Air freight booking
- Ocean freight booking

For more information on how to configure the function, see Effects on System Administration (below).
Create multiple documents with the same data

Creating multiple documents with the same data is now faster and easier. Instead of copying an existing document multiple times, you can use the Number of Documents field in any document creation dialog in the transportation cockpit to specify the number of document copies to create. Afterwards, you can edit the document data individually.

Avoid incompatible assignments during manual planning

When you are performing manual planning, the system now helps you in real-time to avoid incompatible assignments. This new capability greatly improves the efficiency of manual planning.

For example:

<table>
<thead>
<tr>
<th>Defined incompatibility:</th>
<th>Dry and cooled goods must be loaded in separate compartments.</th>
</tr>
</thead>
<tbody>
<tr>
<td>During planning:</td>
<td>You assign the dry and cooled freight units to the same freight order.</td>
</tr>
<tr>
<td>System response:</td>
<td>The system automatically assigns the freight units to different compartments.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Defined incompatibility:</th>
<th>Cooled goods must only be loaded in a cooled compartment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>During planning:</td>
<td>You assign dry and cooled freight units to the same freight order.</td>
</tr>
<tr>
<td>System response:</td>
<td>The system automatically assigns all cooled freight units to a cooled compartment.</td>
</tr>
</tbody>
</table>

If an incompatible assignment is unavoidable, for example, there are no cooled compartments to which the cooled freight unit can be assigned, the system still allows the freight unit to be assigned to the freight order. However, the system will warn you of the incompatibility in post-planning checks.

During manual planning, the system can check for and avoid the following incompatibilities:

- Freight unit – freight unit (vehicle level)
- Freight unit – freight unit (compartment level)
- Freight unit – vehicle resource
- Freight unit – vehicle compartment
- Freight unit – transportation unit resource
- Container unit – container unit (vehicle level)
- Container unit – vehicle resource

For more information about configuring incompatibility checks, see Effects on System Administration (below).

Use the new capacity selection profile setting

On the Create and Edit Capacity Selection Profile pages under Application Administration > Planning > Planning Profile Settings > Capacity Selection Settings the following setting value has been replaced.
Table 8:

<table>
<thead>
<tr>
<th>Setting</th>
<th>Old Value</th>
<th>New Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributes for Vehicle Resource Selection</td>
<td>VEHICLESRES_ID</td>
<td>RES_ID</td>
</tr>
</tbody>
</table>

From now on, the system only accepts the value *RES_ID*. However, to ensure existing capacity selection profiles are valid, the value *VEHICLESRES_ID* is still supported.

**Effects on Existing Data**

**Centrally manage profile and layout sets**

The profile and layout set selection screen that is displayed when starting the Transportation Cockpit, Carrier Selection and Delivery Creation apps have also been enhanced: You can now display the new *Unplanned Requirements* column to see the number of unplanned requirements based on the selection profiles of the PLS. To refresh the number, use the new *Refresh Unplanned Requirements* button or select the new *Auto-Refresh Unplanned Requirements* checkbox.

Tip: To assist you, Quick Help is available for the PLS UIs. To display Quick Help, on the PLS UIs right-click and select *Display Quick Help*.

**Effects on System Administration**

**Centrally manage profile and layout sets**

If you upgrade from a lower release of SAP Transportation Management (SAP TM) to SAP TM 9.5 or higher, the *XPRA/SCMTMS/XPRA_160_PL_SETS* is executed.

**Create capacity documents more easily**

Consider the following:

- In the transportation cockpit page layout, you can add the menus in hierarchical views and the geographical map. In the map area, you can use the create capacity document functions in combination with objects types such as freight units and resources. In a hierarchy, the functions consider only documents selected in that hierarchy.

- When using the *Create Multiple Capacity Documents* function, the number of multiple documents created depends on how the setting *Rule for Creating Capacity Documents* is configured: The system creates either a document per freight unit (default) or a document for each freight unit stage. You can configure the setting on the *Manual Planning Setting* tab of the planning profile.

- If you have multiple types of a capacity document, you can specify which type is used by default in the planning profile. Alternatively, you can use the *Change Planning Settings* to temporarily overrule the default setting for the duration of the session.
Avoid incompatible assignments during manual planning

To enable the system to avoid incompatible assignments, complete the following steps:

1. Define the incompatibilities you want to check for on the Create Incompatibility Settings screen under Application Administration > Planning > General Settings > Incompatibility Settings.
2. In the planning profile you use for manual planning, select the incompatibility settings you defined in step 1.

Effects on Customizing

Redo actions in the transportation cockpit

To define the number of redo actions that you can perform consecutively, specify the number of actions in Customizing. For more information, see Customizing for Transportation Management under Basic Functions > General Settings > Define Maximum Number of Consecutive Undo and Redo Actions.

Quickly add objects to the map in the transportation cockpit

To use the quick add function, select the Quick Add checkbox in Customizing. For more information, see Customizing for Transportation Management under Basic Functions > Geographical Map > Define Layouts for Geographical Map.

Continue displaying objects on the map when refreshing the transportation cockpit

To use the function, select the KeepObject checkbox in Customizing. For more information, see Customizing for Transportation Management under Basic Functions > Geographical Map > Define Layouts for Geographical Map.

Define the amount of context displayed when you filter a hierarchy

To specify the amount of context, use the Filter Type setting in Customizing. For more information, see Customizing for Transportation Management under Planning > General Settings > Define Hierarchical Views for Business Documents.

Group freight unit stages by predecessor documents and perform manual planning based on this grouping

You must define a hierarchy level for the predecessor business documents from SD, LE, and MM in Customizing. For more information, see Customizing for Transportation Management under Planning > General Settings > Define Hierarchical Views for Business Documents.

Remove all instances of a document or resource type from the map

To use the remove function in the map context menu of custom page layouts, you must add the function to the context menu. For more information, see Customizing for Transportation Management under Basic Functions > Geographical Map > Define Layouts for Geographical Map > Context Menu Entries.
Specify if a level is sorted when you sort the hierarchy by an attribute

To specify if a level is sorted or not, use the Sorting Preference setting in Customizing. For more information, see Customizing for Transportation Management under Planning General Settings Define Hierarchical Views for Business Documents Hierarchy Levels.

1.5 Enhancements for Package Building and Load Planning (SAP TM 9.5)

With this feature you can do the following:

- Perform load planning with height-adjustable double-deck (split deck) resources
- Perform load planning checks during vehicle scheduling and routing (VSR) optimization
- Specify the usage of separation material in mixed packages
- Check load plans adhere to the axle weight limits of a resource

Technical Details

Table 9:

<table>
<thead>
<tr>
<th>Product Feature is</th>
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<tbody>
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<td>Application Component</td>
<td>TM-PLN-LP</td>
</tr>
<tr>
<td>Availability</td>
<td>SAP TM 9.5</td>
</tr>
</tbody>
</table>

Additional Details

Perform load planning with height-adjustable double-deck (split deck) resources

The system now supports load planning with height-adjustable split deck resources, which enables you to use your resources even more effectively. To support this new capability, the Sections area on the Resource Viewer screen includes new fields that enable you to enter the details of your split deck, including its size and range of movement.

Tip: To assist you with entering the details, there is help available for each field. You can display the help by right-clicking the fields and selecting More Field Help.

For more information about working with split decks, see .
Perform load planning checks during vehicle scheduling and routing (VSR) optimization

During VSR optimization the system can now perform simple load planning checks to improve space utilization and to ensure limitations regarding package stackability (some packages cannot be stacked upon) and package position (some packages must be loaded on the lower deck) are respected.

For this purpose, the setting Consider Load Planning has been added to the Optimizer Settings screen under Application Administration ➔ Planning ➔ Planning Profile Settings.

Features:

- Improvements are possible only when all pallets have at least the same footprint dimensions (length and width).
- Due to the limitations, VSR optimization may still create freight orders that Vehicle Scheduling Optimization (VSO) cannot plan completely.

Note

- Considering load planning during VSR optimization may affect performance.
- The load planning checks are not a replacement for the full load planning function and do not produce a load plan.

Specify the usage of separation material in mixed packages

The new settings on the Define Product Package Assignment screen enable you to specify the following information:

- **Separation Material**
  Use the field to specify the type of separation material used.

- **Separation Material Mandatory**
  Select the checkbox to always place the separation material on top of the product, even when another product is not put on top. If deselected, the separation material is only used when another product is put on top.

To ensure accuracy during package building, the height and weight of the material separator is considered.

Check load plans adhere to the axle weight limits of a resource

The new load chart provides a visual aid for checking load plans adhere to axle weight limitations.

The higher the chart line, the higher the weight limit is in that area of the resource. In the graphic below, the highest weight limit is in between the front and rear axles.

In addition, by hovering over the chart, you can display the precise weight limit for each specific area of the resource.

To display the load chart, right-click the load plan and select Switch Load Chart.
Effects on System Administration

Specify the usage of separation material in mixed packages
To select the separation material, you must first specify the properties of the material on the Define Product screen under Master Data ➤ General.

Check load plans adhere to the axle weight limits of a resource
To use the load chart, you must first specify the axle weight limits of the resource.

1.6 Enhancements for Vehicle Scheduling and Routing (SAP TM 9.5)

With this feature you can do the following:
- Calculate the duration of a stop accurately
- Schedule unplanned requirement documents

Technical Details

Table 10:

<table>
<thead>
<tr>
<th>Product Feature is</th>
<th>New</th>
</tr>
</thead>
</table>
Additional Details

Calculate the duration of a stop accurately

On the Scheduling Settings tab of a planning profile, there is a new way to calculate the duration of a stop. The method enables you to define a rule-set that specifies a fixed duration and a variable duration (time per unit) for loading and unloading activities at a location. In addition, you can define the duration required to prepare and finalize a stop at a location so the time required for activities such as completing paperwork and driving through a depot are accounted for.

For more information about defining the rule-set, see .

In addition, the following changes were made to the Scheduling Setting tab to improve usability:

- The dropdown list Dependence is now called Calculate Loading and Unloading Duration.
- The dropdown list and fields Consider Requirement Document Dates, Scheduling Strategy and Scheduling Direction were moved from the Planning Profile tab of a planning profile to the Scheduling Settings tab.

Schedule unplanned requirement documents

To improve your planning decisions, you can now quickly generate the approximate transportation time for requirement documents without planning the documents. In addition, the Gantt chart now correctly displays the stage sequence (with transportation times) to provide a useful visual aid.

For more information on enabling the scheduling function, see .

Effects on System Administration

Calculate the duration of a stop accurately

If you upgrade from a lower release of SAP Transportation Management (SAP TM) to SAP TM 9.5 or higher, the Xpra /scmtms/xpra_160_schedsett is executed.
Effects on Customizing

Schedule unplanned requirement documents

For each freight unit type that you want to schedule, select the setting Enable Automatic Determination from the Distance/Duration dropdown list in Customizing. For more information, see Customizing for Transportation Management under Planning » Freight Unit » Define Freight Unit Types.

1.7 Enhancement for Manual Planning with Gantt Chart (SAP TM 9.5)

With this feature, you can perform the following tasks:

- Personalize the appearance of the table area.
- Drag and drop items using the magnetic mode and the assign and schedule based on original time mode.
- Use document separators to precisely view the document start and document end.
- Use time windows to visualize when goods are to be picked up and delivered.
- Define the color and height of notifications and define when to display certain types of notifications.
- Edit certain fields for a capacity document directly in the table area.
- View the real-time number of warnings for each warning type in the legend area.
- View dynamic legend items in the legend area.
- View the weekday for a date when managing your transportation plan.
- Use buttons to add objects from a Gantt chart to the map and to remove them from the map.
- Use the Prepare and Finalize activities.
- Use multiple windows to simultaneously display the Gantt chart and other UIBBs.

Technical Details

<table>
<thead>
<tr>
<th>Table 11:</th>
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</thead>
<tbody>
<tr>
<td>Product Feature is</td>
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<td>Country Dependency</td>
<td>Valid for all countries</td>
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<tr>
<td>Software Component</td>
<td>SAPTM 160</td>
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<td>Application Component</td>
<td>TM-PLN</td>
</tr>
<tr>
<td>Availability</td>
<td>SAP TM 9.5</td>
</tr>
</tbody>
</table>
Additional Details

- Drag and drop modes
  - By using the assign and schedule based on original time mode, you explicitly keep the original start time and end time of a freight unit or freight order when you drag and drop it to a resource.
  - In the magnetic drag and drop mode, if you drag an object and drop it close to another one, the system automatically moves the object you have dropped right after or right before the adjacent object.

- Editable fields for capacity documents
  Depending on how you edit the fields for a capacity document directly in the table area, the Gantt chart dynamically updates the corresponding shape in the chart area to reflect the change.

- New activities
  - The prepare activity is referred to as all operations performed within the time frame from the arrival of goods at a stop to the start of a loading or unloading activity. For a source location, which does not involve goods arrival, the prepare activity is referred to as to all operations performed before loading.
  - The finalize activity is referred to as all operations performed within the time frame from the end of a loading or unloading activity to the departure of goods from a stop. For a destination location, which does not involve goods departure, the finalize activity is referred to as all operations performed after unloading.

- Multi-window support
  When you simultaneously display the Gantt chart and other UIBBs in multiple windows, operations you perform on the documents and activities are synchronized across all windows. For example, if you delete a freight order in the freight order UIBB, the shape corresponding to the order is also deleted in the Gantt chart. Note that only one Gantt chart instance is supported in a multi-window scenario.

See also

1.8 bgRFC-Based Trigger Concept

The concept of trigger processing has been reworked. The new concept uses the standard background RFC (bgRFC) technology to automatically process triggers asynchronously. The new concept has the following advantages:

- Higher stability
- Less administration and monitoring
- Better performance

The program /SCMTMS/PROCESS_TRIGGER_BGD is no longer used.
Technical Details

Table 12:

<table>
<thead>
<tr>
<th>Product Feature is</th>
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<tbody>
<tr>
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<td>TM-BF</td>
</tr>
<tr>
<td>Availability</td>
<td>SAP TM 9.5</td>
</tr>
</tbody>
</table>

See also

For more information about processing of triggers, see .

For more information about bgRFC, see SAP Library for SAP NetWeaver under [SAP NetWeaver Library: Function-Oriented View > Application Server > Application Server Infrastructure > Functions and Tools of SAP NetWeaver Application Server > Connectivity > Components of SAP Communication Technology > Classic SAP Technologies (ABAP) > RFC > Background Communication > bgRFC (Background Remote Function Call)]

1.9 Enhancements for Dispute Management (SAP TM 9.5)

With this feature, you can maintain multiple disputes in a dispute management scenario. If you specify one or more additional agreement parties in your freight order. In some of the transportation scenarios, you as a requester of transportation services, can have multiple service providers execute a single freight order. In such scenarios, you may have to maintain multiple disputes with multiple service providers. SAP TM enables you to create and maintain multiple disputes in a single freight order.

Technical Details

Table 13:

<table>
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