

Short text**EWM, Essential Foundation Functions (New)****Use**

As of SAP Extended Warehouse Management (SAP EWM) 9.0, the business function *EWM, Essential Foundation Functions* (SCM_EWM_FND) is available.

This business function should be switched on in your SAP EWM 9.0 system directly after technical deployment of SAP EWM 9.0. It activates features that are technically situated in lower level software components in the SAP EWM software component stack. These features of lower software components are used or are useful in the context of the following features:

- Advanced returns management
- Preferred unit of measure for warehouse operations
- Displaying route master data on a geographical map
- Cartonization planning
- Dock appointment scheduling
- Business partner ID mapping

Effects on Existing Data

The user interface has been enhanced in the following ways:

- The *Maintain Warehouse Product* user interface has been enhanced with the *Preferred Unit of Measure* field on the *Storage* and *Warehouse Data* tabs.
To use this feature, on the *SAP Easy Access* screen, choose *Extended Warehouse Management -> Master Data -> Product -> Maintain Warehouse Product*.
- The *Maintain Supply Chain Unit* user interface has been enhanced with the *Supply Chain Unit Display Type* field.
To use this feature, on the *SAP Easy Access* screen, choose *Extended Warehouse Management -> Master Data -> Maintain Supply Chain Unit*.

Effects on System Administration

Short text**Pick by Voice (New)****Use**

As of SAP Extended Warehouse Management (SAP EWM) 9.0, you can use the pick by voice (PbV) feature. This is a voice-enabled transaction that is included in the RF framework. With this transaction, the system uses voice commands to guide the user through the picking process. The user interacts with the system using voice input.

Effects on Existing Data

The new transaction /SCWM/RFUI_PBV is available, which can be triggered with the new Internet Communication Framework (ICF) service RFUI_PBV.

Effects on Customizing

The new logical transaction and its Customizing are available in Customizing for *Extended Warehouse Management* under *Mobile Data Entry -> Radio Frequency (RF) Framework -> Define Steps in Logical Transactions*.

The new Business Add-In (BAI) *Modify Screen Field Voice Properties* is available in Customizing for *Extended Warehouse Management* under *Business Add-Ins (BAIs) for Extended Warehouse Management -> Mobile Data Entry*. You can use this BAI to change the voice properties of the screen and fields before the screen is processed.

Short text**Stock-Specific Unit of Measure (New)****Use**

As of SAP Extended Warehouse Management (SAP EWM) 9.0, you can use the stock-specific unit of measure (SUoM) function. The SUoM is a unit of measure (UoM) which is available in the background in the stock data and in logistic-relevant documents such as inbound and outbound deliveries and warehouse tasks. This UoM covers the data capturing during the inbound process, and the use of the data in the internal and outbound processes. It is deployable to the customer through a delivery note and/or invoice, so that the documents reflect the physical goods.

Effects on Existing Data

If you use this function, all user interfaces that refer to quantities are affected in the background.

The *Maintain Warehouse Product* user interface has been enhanced with the *Preferred Unit of Measure* field on the *Storage* and *Warehouse Data* tabs. To use this feature, on the *SAP Easy Access* screen, choose *Extended Warehouse Management -> Master Data -> Product -> Maintain Warehouse Product*.

Effects on Customizing

The following new activity is available in Customizing for *Extended Warehouse Management*:

- *Master Data -> Product -> Define Unit of Measure Attributes*
You can use this activity to assign a quantity classifier to a unit of measure. You can also specify whether or not the UoM is stock-specific.

The following new Business Add-Ins (BAdIs) are available in Customizing for *Extended Warehouse Management* under *Business Add-Ins (BAdIs) for Extended Warehouse Management*:

- *Master Data -> Product -> BAdI: Determination of Stock-Relevancy of UoM*
- *Master Data -> Product -> BAdI: Determination of Preferred UoM for Warehouse Operations*
- *Cross-Process Settings -> Warehouse Task -> Confirmation of Warehouse Task -> BAdI: Changing Quant Attributes During WT Confirmation*
- *Mobile Data Entry -> BAdI: Product Validation for Preferred UoM*
- *Mobile Data Entry -> BAdI: Product Validation for Different UoM*

The following enhanced activities are available in Customizing for *Extended Warehouse Management*:

- *Goods Receipt Process -> Inbound Delivery -> Manual Settings -> Define Item Types for Inbound Delivery Process*
This activity has been enhanced with the field *Apply ERP AUoM as SUoM*.
- *Goods Issue Process -> Outbound Delivery -> Manual Settings -> Define Item Types for Outbound Delivery Process*
This activity has been enhanced with the fields *Apply ERP AUoM as SUoM* and *Update/Split Delivery Item Based on SUoM*.
- *Master Data -> Define Storage Type*
This activity has been enhanced with the fields *Quant Addition to Stock AUoM in Storage Bin/HU* and *Mixed AUoM*.

- *Goods Issue Process -> Strategies -> Specify Stock Removal Rule*
This activity has been enhanced so that stock can be sorted taking the preferred UoM into account.
- *Cross-Process Settings -> Warehouse Order -> Define Packing Profile for Warehouse Order Creation*
This activity has been enhanced with the field *Split WTs based on Alternative Unit of Measure*.

Short text

Updated Roles in SAP Extended Warehouse Management (Enhanced)

Use

As SAP Extended Warehouse Management 9.0, the following roles have been enhanced:

EWM: Warehouse Expert (/SCWM/EXPERT)

EWM: Display of Warehouse Information (/SCWM/INFORMATION)

EWM: Warehouse Specialist for Yard Management (/SCWM/YARD_SPECIALIST)

For more information, see SAP Library.

Short text**SCM_EWM_DAS: SAP Dock Appointment Scheduling (New)****Use**

As of SAP Extended Warehouse Management (SAP EWM) 9.0, you can use SAP Dock Appointment Scheduling to plan vehicle arrivals at your warehouse efficiently. This provides workload levelling for the warehouse, and more efficient planning for carriers, so they can reduce the amount of time vehicles have to wait at warehouses.

SAP Dock Appointment Scheduling allows you to collaborate with the parties involved in an appointment, for example, it allows chosen carriers to plan their own appointments directly in your system. This helps to prevent bottlenecks at the warehouse where vehicles arrive but there are no available docks or staff and they must wait. It also helps the carriers to plan their transport more efficiently.

SAP Dock Appointment Scheduling as a Standalone Solution

You can implement SAP Dock Appointment Scheduling as a standalone solution, allowing you to manage the loading appointments at your warehouse without any reference to SAP Extended Warehouse Management (SAP EWM).

This feature allows you to carry out the following tasks:

- Plan the time and capacity available for groups of docks with similar technical characteristics
- Schedule appointments for vehicles
- Allow carriers to plan their own appointments in the system
- Control the processing of appointments, for example, setting the status of the vehicle
- Alter appointments easily in reaction to changes in circumstances

SAP Dock Appointment Scheduling Integrated with SAP EWM

You can also integrate SAP Dock Appointment Scheduling with SAP EWM, which complements SAP EWM by adding extra functionality to better manage the docks of the warehouse. Integrating SAP Dock Appointment Scheduling with SAP EWM allows the system to automatically create tasks connected to the appointments in SAP EWM.

Business Function

To use this feature, you must activate the following business function:

- *EWM, Essential Foundation Functions* (SCM_EWM_FND)

Effects on System Administration

SAP Dock Appointment Scheduling includes the following new roles:

- Administrator for Dock Appointment Scheduling
- Specialist for Dock Appointment Scheduling
- Checkpoint Clerk for Dock Appointment Scheduling
- Appointment Planner for Carrier in Dock Appointment Scheduling
- Technical Role for EWM Integration to Dock Appointment Scheduling

- Technical Role for Dock Appointment Scheduling Integration to EWM

SAP Dock Appointment Scheduling also includes enhancements to the following existing roles:

- EWM: Warehouse Expert
- EWM: Warehouse Specialist for Yard Management

Effects on Customizing

Implementation of SAP Dock Appointment Scheduling as a standalone solution

To use SAP Dock Appointment Scheduling, you must make the following settings in Customizing for *Extended Warehouse Management*:

- *Dock Appointment Scheduling -> Define Number Range Intervals for Appointment Numbers*
You can use this activity to create the number range for the internal appointment numbers.

Optionally, you can also make the following settings in Customizing for *Extended Warehouse Management*:

- *Dock Appointment Scheduling -> Define Means of Transport*
You can use this activity to define the means of transport that arrive at the warehouse.

The following new Business Add-In (BAI) is available in Customizing for Extended Warehouse Management:

- *Business Add-Ins (BAIs) for Extended Warehouse Management -> Dock Appointment Scheduling -> BAI: Reference Document Number*
This BAI allows you to define the properties of the reference document number in SAP Dock Appointment Scheduling.

Implementation with integration with SAP EWM

To use SAP Dock Appointment Scheduling, you must make the following settings in Customizing for *Extended Warehouse Management*:

- *Cross-Process Settings -> Shipping and Receiving -> Dock Appointment Scheduling -> Define Number Range Intervals for Appointment Numbers*

Optionally, you can also make the following settings in Customizing for *Extended Warehouse Management*:

Cross-Process Settings -> Shipping and Receiving -> Dock Appointment Scheduling -> Define Means of Transport

The following new Business Add-In (BAI) is available in Customizing for Extended Warehouse Management:

- *Business Add-Ins (BAIs) for Extended Warehouse Management -> Cross-Process Settings -> Shipping and Receiving -> Dock Appointment Scheduling -> BAI: Reference Document Number*
This BAI allows you to define the properties of the reference document number in SAP Dock Appointment Scheduling.

Short text**SAP Reference IMG for Extended Warehouse Management (Enhanced)****Use**

As of SAP Extended Warehouse Management 9.0, the following enhancements were made:

- *Geographical Map* structure node copied over from the SAP Transportation Management reference IMG under *Basic Functions* and inserted under *Extended Warehouse Management ->Interfaces ->Non-SAP Systems ->Geographic Map*.
- New value *Transportation Planning Type* added to *Define Transportation Planning Type (Outbound)* under *Goods Issue Process ->Outbound Delivery ->Integration with Transportation*.
- Activity *Map Shipment Number and TU Number* added under *Interfaces ->ERP Integration ->Transportation*.
- New key and data fields, *MTr* and *Keep shipment open*, added to *Define Default Values for IDoc Outbound*.
- Activity *Define Number Ranges for Waybill Numbers* added under *Shipping and Receiving ->Number Ranges ->Define Number Ranges for Waybill Numbers*.
- New field *Waybill Number* added to activity *Define Control Parameters for Forming Vehicles/Transportation Units* under *Cross Process Settings ->Shipping and Receiving ->General Settings*.

Short text

Easy Access Menu for Extended Warehouse Management (New)

Use

As of SAP Extended Warehouse Management 9.0, the following transactions were added:

- /SCWM/POD_IMP for *Maintain Proof of Delivery* under *Extended Warehouse Management*
->*Interfaces* ->*ERP Integration* ->*Maintain Proof of Delivery*.
- /SCWM/WHCOST for *Maintain Warehouse Cost and FTE Data* under *Extended Warehouse Management* ->*Master Data* ->*Maintain Warehouse Cost and FTE Data*.

For more information, see SAP Library.

Short text**SAP_EWM_MON: Mass Quantity Adjustment (New)****Use**

As of SAP Extended Warehouse Management 9.0, you adjust quantities of delivery items to pick quantities as a mass transaction, in order to close incomplete orders. You can also create an outbound delivery order for delivery items with quantity zero.

Effects on Existing Data

The following actions are now available in the *Monitor Methods* menu of the *Outbound Delivery Order Item* screen:

- Adjust Quantity
- Adjust Quantity and Create OD

Short text**Analytics in EWM (New)****Use**

As of SAP Extended Warehouse Management 9.0, you can use the following functions to improve warehouse efficiency:

- Proof of delivery to conduct analyses on reported differences in goods received and warehouse efficiency
- Warehouse cost and FTE data to compare efficiency of warehouses in terms of costs per outbound delivery

Effects on Existing Data

Data on proof of delivery (PoD) is received in the ERP system. The existing PoD data is imported from ERP and enriched in SAP Extended Warehouse (SAP EWM) with warehouse-internal information such as processor and source activity area during picking.

The warehouse cost and FTE data are time-dependent and can be maintained for both past and future time intervals using transaction /SCWM/WHCOST in EWM. An overlap in the time intervals is not allowed.

Effects on Data Transfer

The ERP system sends information about PoD relevance with the existing delivery interface /SCWM/OUTB_DLV_SAVEREPLICA from SAP_APPL 6.06 SP01 on.

A new report /SCWM/RPOD_IMP is used to trigger the creation and deletion of the PoD data in EWM. To call the report, enter transaction **/SCWM/POD_IMP**. For report execution, the control parameters, *Create*, *Delete*, and *Test Run* are available for flagging.

You can monitor PoD data in EWM using the EWM monitor under Outbound ->Documents ->Proof of Delivery.

The following transactions have been enhanced to display PoD relevance:

- /SCWM/ODR Maintain Outbound Delivery Request
- /SCWM/PRDO Maintain Outbound Delivery Order
- /SCWM/FD Maintain Outbound Delivery

The following transactions have been enhanced to select PoD relevant documents:

- /SCWM/PRDO Maintain Outbound Delivery Order
- /SCWM/FD Maintain Outbound Delivery

The warehouse cost and FTE data (data source OWM_WH COST) are extracted with outbound delivery data (data source OWM_DLVI_OUT) to BI where you can run the query *Average Warehouse Costs and Delivery Efficiency per FTE* or call up an Xcelsius dashboard to compare the performance of individual warehouses in terms of daily average ratio of outbound delivery items per FTE and in terms of daily average costs per outbound delivery item.

Effects on Customizing

You can define a specific RFC connection for pull of PoD data in Customizing for *Assign RFC*

Destinations to Logical Systems under *Interfaces ->ERP Integration ->General Settings > Assign RFC Destinations to Logical Systems*. In the field *Function*, enter the new value **E** for proof of delivery.

The following new Business Add-Ins (BAdIs) are available in Customizing under *Business Add-Ins (BAdIs) for Extended Warehouse Management ->Goods Issue Process ->Outbound Delivery ->Proof of Delivery*:

- *BAdI: Determine POD Relevance for Delivery Item Created in EWM*
- *BAdI: Selection of PoD Data for Outbound Deliveries*
- *BAdI: Enrich PoD Data by EWM Process Data*

Short text**SCM_EWM_MON: Rough Bin or Staging Area Redetermination (New)****Use**

As of SAP Extended Warehouse Management 9.0, you can trigger an automatic rough bin determination for a number of outbound delivery order items if the original rough bin determination for the picking bin failed. You can also update the staging area or door of the outbound delivery order items in line with the new rough bin determination.

Effects on Existing Data

The following action is now available in the Monitor Methods menu of the Outbound Delivery Order Item screen:

- Det. Rough Bin/Staging Area

Effects on Customizing

A new BAdI Method *Adjust Source Bin Checks* has been implemented in the BAdI *BAdI: Check of Specified Bin*:

Customizing for *Extended Warehouse Management -> Business Add-Ins (BAIs) for Extended Warehouse Management -> Goods Issue Process -> Strategies -> Stock Removal Strategies -> BAdI: Check of Specified Bin*.

Short text**Roles in SAP Extended Warehouse Management (New)****Use**

As of SAP Extended Warehouse Management 9.0, the following new roles are available:

- Shipping Office Clerk (/SCWM/SO_CLERK)
- Appointment Planner for Carrier in Dock Appointment Scheduling (/SCWM/DAS_EXT_CARR_PLANNER)
- Specialist for Dock Appointment Scheduling (/SCWM/DAS_SPECIALIST)
- Administrator for Dock Appointment Scheduling (/SCWM/DAS_ADMINISTRATOR)
- Checkpoint Clerk for Dock Appointment Scheduling (/SCWM/DAS_CP_CLERK)
- Technical Role for EWM Integration to Dock Appointment Scheduling (/SCWM/EWM_TO_DAS_INTEGRATION)
- Technical Role for Dock Appointment Scheduling Integration to EWM (/SCWM/DAS_TO_EWM_INTEGRATION)

For more information, see SAP Library.

Short text**SCM_EWM_WC: Scale Connection to Work Center (New)****Use**

As of SAP Extended Warehouse Management (SAP EWM) 9.0, you can get the gross weight of a HU after packing and store it in the HU, by connecting a scale to your work center using the BAdI *BAdI: Determination of HU Weight Using Scale*.

The new BAdI contains an example implementation, which you can use to connect the OPC server of a scale to a SAP Plant Connectivity system that is connected to EWM.

Effects on Existing Data

The BAdI is called in the packing work center when you choose the *Weigh* button.

Effects on Customizing

The following new Business Add-In (BAdI) is available in Customizing for *Extended Warehouse Management*:

Business Add-Ins (BAdIs) for Extended Warehouse Management -> Master Data -> Work Center -> Adjust User Interface for Work Center -> BAdI: Determination of HU Weight Using Scale.

Short text**Integration: TM-ERP-EWM (New)****Use**

As of SAP Extended Warehouse Management (EWM) 9.0, new functions are available to support outbound processes in the context of an integrated TM-ERP-EWM scenario using shipments in ERP. The following TM-ERP-EWM integration scenarios (outbound) are covered:

- Order-based transportation planning in TM
- Delivery-based transportation planning in TM
- Order-based transportation planning in TM with shipment deletion triggered by EWM
- EWM-driven process: transportation planning and warehouse execution in EWM with freight order settlement (and optionally shipment execution from the warehouse to the customer) in TM

Among the new features:

- With SAP note 1665773, the sequence issue with shipment IDOC /delivery qRFC upon GI resolved (downported to ERP 6.0 EhP 3)
- Handling of delivery splits triggered by EWM in TM
- Handling of delivery re-assignment/un-assignment to TU in TM
- Automatic creation of a shipment HU in ERP upon shipment creation from TM
- Cancel/delete freight order in TM after shipment deletion by EWM

For more information on features, see SAP Library.

Effects on Data Transfer

All integration scenarios use ERP shipments for the communication of transportation data between TM and EWM. There is no direct communication between TM and EWM.