

Getting Started Guide

PUBLIC

Document version: 1.0 – 2016-10-27

Basic Settings for SAP EWM in SAP S/4HANA



Document History

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

Version	Date	Description
1.0	2016-10-27	First version

Content

1	Basic Settings for SAP EWM in SAP S/4HANA.....	3
2	Configuration of qRFC Communication.....	4
2.1	Background Information About System Landscape Settings.....	4
2.2	Technical Prerequisites for qRFC Communication.....	6
2.3	Creating Dummy Logical System Manually.....	6
2.4	Configuring qRFC Communication and Client Settings.....	7
3	Warehouse Creation and Integration into the Enterprise Structure.....	8
3.1	Background Information About Warehouse Integration	8
3.2	Prerequisites for Warehouse Integration.....	10
3.3	Creating Organizational Units for the Warehouse.....	11
3.4	Creating and Integrating a SAP EWM Warehouse.....	12
3.5	Aligning HU Numbering	13
3.6	Activating Transaction Data Transfer	14

1 Basic Settings for SAP EWM in SAP S/4HANA

This document describes the basic settings for using SAP Extended Warehouse Management (SAP EWM) in SAP S/4HANA. It covers the following aspects of the configuration:

- Configuration of qRFC communication between SAP EWM and other SAP S/4HANA applications
- Definition of a warehouse and integration of the warehouse in the enterprise structure
- Creation of basic settings for the warehouse in EWM



CAUTION

System administrators need to pay particular attention to the following:

- Technical Prerequisites for qRFC Communication
- Creating Dummy Logical System Manually

Prerequisites

You have installed and correctly configured SAP S/4HANA, on premise edition.

For more information, see the Getting Started Guide for SAP S/4HANA, on premise edition, at help.sap.com/s4hana.

Process

Carry out the following steps:

1. Configuration of qRFC Communication
2. Warehouse Creation and Integration into the Enterprise Structure

Result

By following through this process, you create a warehouse in SAP EWM with basic settings and integrate it in the enterprise structure of SAP S/4HANA.

You can now create the warehouse structure and master data and configure the processes as needed in your warehouse. See Customizing for *Extended Warehouse Management* for the manual creation of the warehouse structure and the manual setup of the warehousing processes.

2 Configuration of qRFC Communication

You use this process to configure the queued remote function call (qRFC) communication between SAP EWM and other SAP S/4HANA applications.

SAP EWM communicates with other applications of SAP S/4HANA via queued remote function call (qRFC) for parallel processing, using system resources in parallel to increase business throughput and reduce processing time.

Process

Carry out the following steps:

1. Background Information About System Landscape Settings
2. Technical Prerequisites for qRFC Communication
3. Creating Dummy Logical System Manually
4. Configuring qRFC Communication and Client Settings

2.1 Background Information About System Landscape Settings

You use this chapter to gain an overview of the qRFC communication between SAP EWM and other SAP S/4HANA applications.

This chapter first gives an overview of the system landscape entities used in SAP EWM, and then provides two examples of system landscape.

Overview of System Landscape Entities Used in SAP EWM

The following table provides an overview of system landscape entities required by SAP EWM:

Entity	Setting Level	Customizing Transport	Comments
RFC Destination Example: S4HCLNT001	Cross-Client	No	Technical setting for RFC and qRFC communication; Naming convention: <SID>CLNT<CLIENT>; See Technical Prerequisites for qRFC Communication
Logical System Example: S4HCLNT001	Cross-Client	Yes	Technical setting for RFC and qRFC communication; Naming convention: <SID>CLNT<CLIENT>; Can be created in the <i>System Landscape Directory</i> ; Can be created by the <i>Implementation Tool for System Connection</i> in SAP EWM; The logical system is assigned to the RFC destination; Own logical system assigned to client. See Technical Prerequisites for qRFC Communication
Dummy Logical System Example: S4HEWM001	Cross-Client	Yes	Technical setting for qRFC communication (required for the definition of distribution model); Naming convention: <SID>EWM<CLIENT>; Can be created either manually or by the <i>Implementation Tool for System Connection</i> in SAP EWM; The dummy logical system is also assigned to the RFC destination
Business System Group Example: BG1	Client	No	Used in SAP EWM for master data; 1:N relationship to logical system; Can be created by the <i>Implementation Tool for System Connection</i> in SAP EWM;

Business System Example: S4H_001	Client	No	Used in SAP EWM for transactional data; Naming convention: <SID>_<CLIENT>; The business system is assigned to a logical system; Can be created in the <i>System Landscape Directory</i> ; Can be created by the <i>Implementation Tool for System Connection</i> in SAP EWM; Own business system assigned to client; See Technical Prerequisites for qRFC Communication
---	--------	----	---

Note

Although no customizing transport is possible for the business system groups and business systems, you create them in the SAP EWM customizing client using the *Implementation Tool for System Connection* and transport the data set created by the tool to the other SAP EWM systems and clients.

Example 1: System Landscape Entities in a Single System Landscape

The table below shows the system connection settings in a unique SAP S/4HANA (test) system allowing customizing changes.

System Landscape Entity	Example
RFC Destination	S4HCLNT001
Logical Systems	S4HCLNT001 S4HEWM001
Business System Group	BG1
Business System	S4H_001

The proposed sequence for setting up this system landscape is the following:

1. You check that the prerequisites described in chapter Technical Prerequisites for qRFC Communication are met
2. You create a dummy logical system manually as described in chapter Creating Dummy Logical System Manually if you do not have the necessary authorizations to perform cross-client settings with the *Implementation Tool for System Connection* in SAP EWM
3. You use the *Implementation Tool for System Connection* in SAP EWM as described in chapter Configuring qRFC Communication and Client Settings to create the remaining entities, assign both logical systems to the unique RFC destination and to the unique business system group, and assign the own logical system to the own business system.

Example 2: System Landscape Entities in a Distributed System Landscape

The table below shows the required system connection settings in a distributed S/4HANA system landscape separated in customizing (system S4C), test (system S4T), and production system (system S4P).

Entity	Customizing System S4C/001	Test System S4T/001	Production System S4P/001
RFC destination	Not needed	S4TCLNT001	S4PCLNT001
Logical Systems	S4TCLNT001 S4TEWM001 S4PCLNT001 S4PEWM001	S4TCLNT001 S4TEWM001	S4PCLNT001 S4PEWM001
Business System Groups	BG1	BG1	BG1

Business Systems	S4T_001 S4P_001	S4T_001	S4P_001
------------------	--------------------	---------	---------

The proposed sequence for setting up this system landscape is the following:

1. You check that the prerequisites described in chapter Technical Prerequisites for qRFC Communication are met
2. You create the dummy logical systems S4TEWM001 and S4PEWM001 manually in the customizing system as described in chapter Creating Dummy Logical System Manually if you do not have the necessary authorizations to perform cross-client settings with the *Implementation Tool for System Connection* in SAP EWM. You transport the settings to the test system and to the production system.
3. You use the *Implementation Tool for System Connection* in the customizing system
4. You transport the data set created by the implementation tool to the test system and production system
5. You process the data set with the *Implementation Tool for System Connection* in the test system and the production system

2.2 Technical Prerequisites for qRFC Communication

You use this process to ensure the prerequisites for the qRFC communication in the SAP S/4HANA client are met.

Process

Contact your system administrator to ensure the following prerequisites are met:

- An **RFC connection** (ABAP connection) to the own client exists in the SAP S/4HANA client. For example, RFC destination S4HCLNT001 refers to system S4H and client 001.



Recommendation

For security purposes, use the current user for the RFC destination.

You can check the RFC destination with transaction *SM59*.

- The SAP S/4HANA client is registered in the *System Landscape Directory* of SAP NetWeaver, i.e. the following system landscape entities exist in the SAP S/4HANA client:
 - A **Business system** assigned as own business system to the client
For example, business system S4H_001 is assigned to system S4H and client 001.
You can check the business system with transaction *SLDCHECK*.
 - A **Logical system** assigned as own logical system to the client
For example, logical system S4HCLNT001 is assigned to system S4H and client 001.
You can check the logical system in Customizing for *SCM Basis* under *Integration* → *Basic Settings for Creating the System Landscape* → *Assign Logical Systems to a Client*.

Result

The following objects exist in the SAP S/4HANA client, for example for system S4H and client 001:

RFC Destination	Logical System	Business System
S4HCLNT001 Naming convention: <SID>CLNT<CLIENT>	S4HCLNT001 Naming convention: <SID>_<CLIENT>	S4H_001 Naming convention: <SID>CLNT<CLIENT>

Both the logical system and the business system are assigned to the SAP S/4HANA client.

2.3 Creating Dummy Logical System Manually

You use this procedure to create manually the dummy logical system required for the qRFC communication.

PUBLIC

© Copyright 2016 SAP SE or an SAP affiliate company.

All rights reserved.

The setting affects all clients of the SAP S/4HANA system and requires authorizations for cross-client settings on user and client level. It is the recommended procedure if only some users have the authorization for cross-client settings or if you configure cross-client settings in a separate client.

Prerequisites

You have checked in chapter Technical Prerequisites for qRFC Communication that an RFC destination to the own client exists in the SAP S/4HANA system.

Procedure

In your SAP S/4HANA customizing client allowing cross-client settings, create a dummy logical system for EWM, for example S4HEWM001, in Customizing for *Integration with Other SAP Components* under *Extended Warehouse Management* → *Basic Settings for Setting Up the System Landscape* → *Name Logical System*. Transport if necessary these setting to other SAP S/4HANA systems.

2.4 Configuring qRFC Communication and Client Settings

You use this procedure to configure the following data with the help of the *Implementation Tool for System Connection* in SAP EWM:

- System landscape settings for qRFC communication. For an overview of the system landscape in SAP EWM, see chapter Background Information About System Landscape Settings.
- Basic number ranges (on client level) in SAP EWM including packaging specifications and shipping and receiving activities
- Warehouse-independent basic settings using BC Set activation within the tool

Prerequisites

You have checked the technical prerequisites as described in chapter Technical Prerequisites for qRFC Communication.

Procedure

Carry out the following steps in your SAP EWM customizing client first and transport if necessary the data set to other clients or systems. After the transport, repeat the procedure with the transported data set in all destination clients or systems.

1. In Customizing for *Extended Warehouse Management*, choose *Interfaces* → *ERP Integration* → *Tool-Based ERP Integration* → *Implementation Tool for System Connection*.
2. Carry out the steps provided in the implementation tool.

More Information

For more information, see the Customizing documentation of the implementation tool and the quick help provided within the tool.

3 Warehouse Creation and Integration into the Enterprise Structure

You use this process to create a SAP EWM warehouse and integrate it into the enterprise structure of SAP S/4HANA. This is supported by the *Implementation Tool for Warehouse Integration*.

Note

If you migrate a warehouse from LE-WM, you already have a warehouse integrated into the enterprise structure. For more information, see SAP Library for SAP Extended Warehouse Management at help.sap.com/ewm under *SAP Extended Warehouse Management (SAP EWM)* → *Migration from LE-WM*.

Process

Carry out the following steps:

1. Background Information About Warehouse Integration
2. Prerequisites for Warehouse Integration
3. Creating Organizational Units for the Warehouse
4. Creating and Integrating a SAP EWM Warehouse
5. Aligning HU Numbering
6. Activating Transaction Data Transfer

Result

You have created an SAP EWM warehouse and integrated it into the enterprise structure in SAP S/4HANA.

3.1 Background Information About Warehouse Integration

You use this chapter to gain an overview of how an SAP EWM warehouse is integrated in the enterprise structure of SAP S/4HANA.

A prerequisite for the warehouse integration is a running SAP S/4HANA system, especially the Logistics Execution and the Inventory Management components. We do not handle the setup of these applications here but only mention the main organizational units relevant for the warehouse integration.

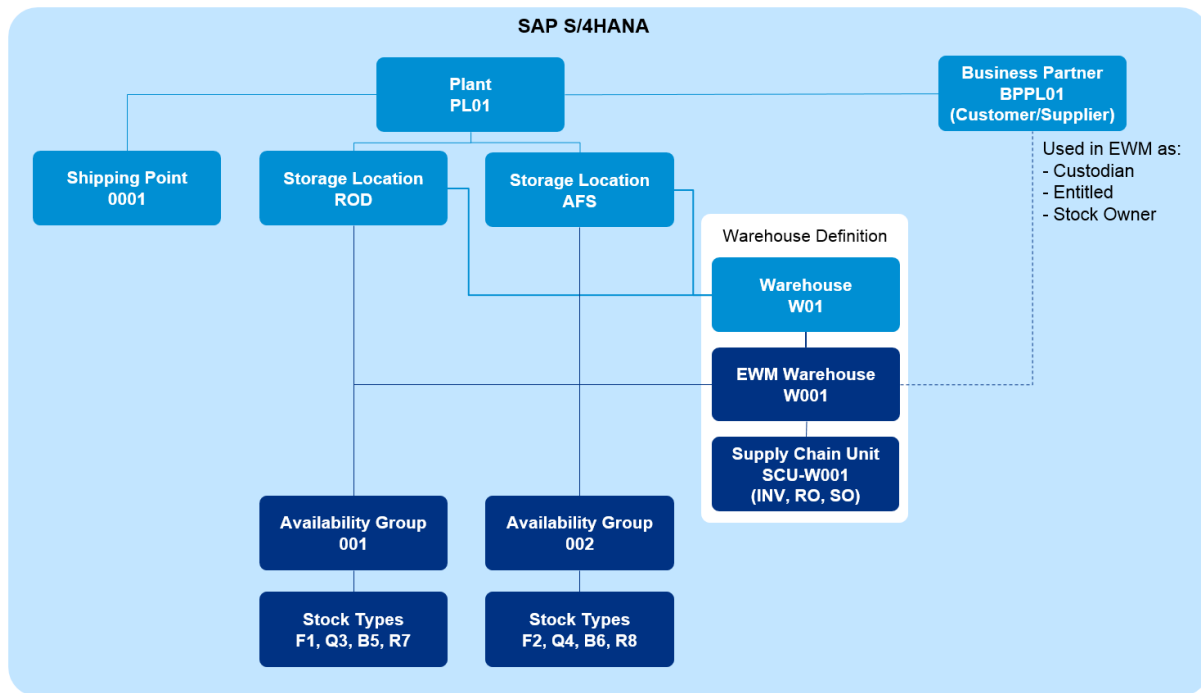


Figure 1: Example for SAP EWM Warehouse Integration in Organizational Structure of SAP S/4HANA

In Logistics Execution, the **warehouse** (3-digit number, for example W01) is flagged as SAP EWM warehouse. It is connected to one or several **storage locations in the plant** (for example, plant PL01). Two storage locations in one warehouse allow you more flexibility in the availability of the stock. For example, stock in storage location ROD (*Received On Dock*) has been received in the warehouse but has not been put away into the final bin yet and as such is not available yet for customer orders; stock in storage location AFS (*Available For Sale*) is stored in the final bin in the warehouse and is ready to be picked for customer orders.

The assignment of the warehouse to a plant and storage location is necessary for inventory management and for logistics execution purposes. The warehouse stock is managed in Inventory Management on plant and storage location level. The system automatically determines the warehouse number when you create a delivery for a plant and storage location.

Note

Depending on the processes you use in the warehouse (for example, production supply), you may need to link additional storage locations to the warehouse.

In Logistics Execution, **shipping points and goods receiving points** are assigned to the plant. At least one shipping point (for example, 0001) is necessary to work with an SAP EWM warehouse. You can also use the shipping point as goods receiving point.

The **plant** is linked to a **business partner** (for example, BPPL01), which is used as customer or supplier in delivery-based processes. In SAP EWM, the business partner linked in the supplier role to the plant represents the plant and has the function of **party entitled to dispose** of the stock. Any stock in SAP EWM must be assigned to a party entitled to dispose. If your warehouse is connected to one plant, you can assign a default party entitled to dispose to the warehouse for usability purposes. For own stock, the business partner linked to the plant is also the stock owner in SAP EWM.

The **SAP EWM warehouse** (4-digit number, for example W001) is connected to the Logistics Execution warehouse.

Additionally the SAP EWM warehouse is connected to a **supply chain unit** (SCU) with business attribute INV (SCU used as warehouse). The SCU contains the address of the SAP EWM warehouse. In a simple warehouse with one shipping/receiving point, the warehouse SCU also has the business attributes SO (shipping office) and RO (receiving office). In this case, there is no relationship between the shipping/receiving point in Logistics Execution and the shipping/receiving office in SAP EWM.

In a more complex warehouse with several **shipping and receiving offices**, you define SCUs for each shipping office and receiving office and include them in the SCU hierarchy of the warehouse. In the SCU hierarchy the business attribute SO is assigned to shipping points and the business attribute RO is assigned to goods receiving points. Using OSS note 1506256, you can link the shipping/receiving points to SAP EWM shipping/receiving offices in delivery-based processes.

The SAP EWM warehouse is also connected to a **custodian**. The custodian is a business partner representing the organization managing the warehouse and can differ from the party entitled to dispose of the stock. If your SAP EWM warehouse is connected to one plant, you can use the business partner linked to the plant as custodian. If your SAP EWM warehouse is connected to several plants, you can use as custodian either a business partner linked to one of the plants or a business partner that you create manually. The custodian is stored as information in SAP EWM but is not used in any warehousing processes.

Every plant and storage location is connected to an **availability group** in the SAP EWM warehouse. For example, storage location ROD is linked to availability group 001 (goods in putaway) and storage location AFS is linked to availability group 002 (goods completely available).



Recommendation

If your warehouse is linked to only one storage location, use availability group 002.

Each availability group is linked to several **stock types** in SAP EWM. The two-digit stock type in SAP EWM represents the storage location and the Inventory Management stock type. In our example, stock type F1 is used for unrestricted-use stock in storage location ROD ; stock type B6 is used for blocked stock in storage location AFS. Any stock in SAP EWM must be assigned to an SAP EWM stock type.



Note

If you link additional storage locations to the warehouse, you need additional availability groups and stock types in your SAP EWM warehouse.

3.2 Prerequisites for Warehouse Integration

In the SAP S/4HANA system, you have created the following objects and settings:

- A plant, (for example, PL01 as a copy of plant 0001). The plant must be assigned to the enterprise structure such as company code, purchasing organization, and sales organization.
You can check the plant in Customizing for *Enterprise Structure* under *Definition* → *Logistics – General* → *Define, copy, delete, check plant*.
- An active material ledger for the valuation area assigned to the plant.
You can check this setting in Customizing for *Controlling* under *General Controlling* → *Multiple Valuation Approaches/Transfer Prices* → *Basic Settings* → *Check Material Ledger Settings* → *Activate Valuation Areas for Material Ledger* → *Check Material Ledger Settings*.
- One or more storage locations, for example storage locations ROD and AFS in plant PL01.
You can check this setting in Customizing for *Enterprise Structure* under *Definition* → *Materials Management* → *Maintain storage location*.



Note

If you migrate a warehouse from LE-WM, you already have one or more storage locations. Depending on the migration scenario, however, you create additional storage locations. For more information, see SAP Library for SAP Extended Warehouse Management 9.0 or higher at help.sap.com/ewm under *SAP Extended Warehouse Management (SAP EWM)* → *Migration from LE-WM*.

- A business partner with predefined roles FLCU00 (*FI Customer*) and FLCU01 (*Customer*) linked as customer to the plant, for example business partner BPPL01, following the naming convention BP<plant>.
You can check this setting in Customizing for *Materials Management* under *Purchasing* → *Purchase Order* → *Set up Stock Transport Order* → *Define Shipping Data for Plants*.
- The same business partner with pre-defined roles FLVN00 (*FI Vendor*) and FLVN01 (*Vendor*) linked as supplier to the plant.

- a. Using the *SAP Easy Access* menu, choose *Logistics → Materials Management → Purchasing → Master Data → Vendor → Purchasing → Display (Current)*.
 - b. Enter the vendor number and select the *Purchasing Data* checkbox
The system automatically redirects you to the *Display Business Partner* transaction.
If you do not know the vendor number, check table T001W.
 - c. In the *Display in BP role* field, check that the role FLVN01 - *Vendor* is selected.
 - d. Choose *Goto → General Data*
 - e. Check the assigned plant in the *Vendor: General Data* tab page
- A shipping point and a goods receiving point assigned to the plant (for example shipping point 0001 also used as receiving point, and assigned to plant PL01. The shipping point should be allocated to the desired combinations of shipping condition and loading group for each plant.
You can check this setting as follows:
 - In Customizing for *Enterprise Structure* under *Definition → Logistics Execution → Define, copy, delete, check shipping point*
 - In Customizing for *Enterprise Structure* under *Assignment → Logistics Execution → Assign shipping point to plant*
 - In Customizing for *Logistic Execution* under *Shipping → Basic Shipping Functions → Shipping Point and Goods Receiving Point Determination → Assign Shipping Points*
 - In Customizing for *Logistic Execution* under *Shipping → Basic Shipping Functions → Shipping Point and Goods Receiving Point Determination → Assign Goods Receiving Points for Inbound Deliveries*
 - The current posting period for materials management is set for the company code. You can check this setting in Customizing for *Logistics – General* under *Material Master → Basic Settings → Maintain Company Codes for Materials Management*.
 - The current posting period for materials management is included in the interval defined for the posting period variant assigned to the company code. You can check this setting in Customizing for *Financial Accounting (New)* under *Financial Accounting Global Settings (New) → Ledgers → Fiscal Year and Posting Periods → Posting Periods → Open and Close Posting Periods*. Check that the last posting period allowed is in the future.
 - The current fiscal year is defined in the plan version assigned to the controlling area. This setting is only necessary if the *Profit Center Accounting* is active in the controlling area assigned to the company code.
You can check this setting as follows:
 - In Customizing for *Controlling* under *Cost Center Accounting → Activate Cost Center Accounting in Controlling Area*, you can check whether the *Profit Center Accounting* is active in the controlling area.
 - In Customizing for *Controlling* under *Profit Center Accounting → Basic Settings → Controlling Area Settings → Activate Direct Postings → Plan Versions → Maintain Plan Versions*, you can check the settings for each fiscal year.
 - A cost center is assigned to the cost elements used for scrapping. You can check this setting in Customizing for *Controlling* under *Cost Center Accounting → Actual Postings → Manual Actual Postings → Edit Automatic Account Assignment*. If you use the standard chart of account INT in the company code, check that a cost center is assigned to the cost elements used for scrapping, for example cost elements 400001 and 890001 for the scrapping of trading goods.

For more information, see the documentation of the Customizing activities.

3.3 Creating Organizational Units for the Warehouse

You use this procedure to create a warehouse number in Logistics Execution, select it as a warehouse managed by SAP EWM, and assign it to the plant and storage locations.

Procedure

Carry out the following steps and transport, if necessary, the settings to other clients or systems.

1. Define the warehouse number as follows:

- a. In Customizing for *Enterprise Structure*, choose *Definition* → *Logistics Execution* → *Define, copy, delete, check warehouse number*.
- b. In *Define, copy, delete, check warehouse number*, choose the activity *Define warehouse number*.
- c. Create the following entry, for example:

Warehouse Number	Description
W01	Warehouse W01 (EWM)

2. Assign the warehouse to the plant and storage locations in Customizing for *Enterprise Structure* under *Assignment* → *Logistics Execution* → *Assign warehouse number to plant/storage location*. Create and save an entry for each assignment.

Example:

Plant	Storage Location	Warehouse
PL01	ROD	W01
PL01	AFS	W01

3. Maintain EWM-specific parameters for the warehouse in Customizing for *Logistics Execution* under *Extended Warehouse Management Integration* → *Basic Setup of Connectivity* → *Configure SAP EWM-Specific Parameters*.

Enter or select the data for your warehouse as shown in the following table:

Field	Value
<i>Ext. WM</i>	E (ERP with Extended Warehouse Management)
<i>Comm. WM</i>	Q (Queued and Serialized Asynchronous RFC)
<i>Dist. Mode</i>	Distribution Immediately at Document Creation

Use the value help of the single fields to check if other settings are relevant in your warehouse.

3.4 Creating and Integrating a SAP EWM Warehouse

You use this procedure to create your own SAP EWM warehouse. With the *Implementation Tool for Warehouse Integration*, you configure the following data in SAP EWM:

- SAP EWM warehouse definition and assignment to the Logistics Execution warehouse
- Supply chain unit (SCU) of the warehouse, which is also used as shipping office and receiving office
- Assignment of following organizational units to the SAP EWM warehouse:
 - Custodian
 - Parties entitled to dispose (plants) linked to the warehouse
 - Default party entitled to dispose (optional)
- Assignment of SAP EWM stock types to the corresponding plants and storage locations by means of availability groups
- Warehouse-dependent and warehouse-independent number ranges (optional)

Procedure

Carry out the following steps in your SAP EWM customizing client first and transport if necessary the data set to other clients or systems. After the transport, carry out the procedure with the transported data set in all destination clients or systems.

1. In Customizing for *Extended Warehouse Management* under *Interfaces* → *ERP Integration* → *Tool-Based ERP Integration* → *Implementation Tool for Warehouse Integration*.
2. Carry out the steps provided in the implementation tool.

More Information

For more information, see the Customizing documentation of the implementation tool and the quick help provided within the tool.

3.5 Aligning HU Numbering

You use this procedure to align the handling unit (HU) numbering in Logistics Execution and EWM and to activate if necessary the lean HU status update in Logistics Execution.

HUs used in deliveries are communicated from EWM to Logistics Execution or the other way around. The HU number used in one application must not overlap with the free internal HU number range defined in the other application, as this would lead to queue errors.

The following table gives an example of aligned HU number range intervals in Logistics Execution and in EWM:

Application	Internal Ranges	External Ranges
Logistics Execution	1000000000 - 7999999999 (10 digits)	8000000000 - 9999999999 (10 digits)
EWM (warehouse-specific)	800000000 - 899999999 (9 digits) 1000000 - 1999999 (7 digits)	None (all numbers outside the internal number ranges allowed)

In case you use several warehouses to the same S/4HANA system, you must check manually that the warehouse-specific number ranges do not overlap, especially if you use stock transport orders for the transfer of goods between warehouses.

For this purpose, we review the basic rules for HU numbering and give an overview of the applications (Logistics Execution or EWM) in which HUs are created and of the ways the HUs are created (using internal or external numbers).

Basic Rules for HU Numbering in EWM in S/4HANA

- Logistics Execution (LE) accepts all HU numbers from EWM except if they are within the free internal LE number range. For example, in case of an internal LE number range from 1000 to 7999 with a current number range status 1555, LE accepts all numbers from EWM except in the interval of free numbers 1556-7999.
- EWM accepts HU numbers from LE if they are within the external EWM number range or within the assigned internal EWM number range (reusing existing HUs).
- If no external number range is defined explicitly in EWM, all numbers outside the free internal number range belong to the external number range. This is an implicit external number range.

➔ Recommendation

It is technically not necessary to define an external number range in Logistics Execution for HU numbers communicated by EWM. When working with multiple warehouses, however, we recommend defining external number ranges in Logistics Execution for documentation purposes.

The following table lists the number range definitions based on where and how you create HUs:

New HU Created In	Number Range Definition
EWM (internal)	EWM: internal number range necessary LE: external number range not necessary. EWM number must be outside the free internal LE number range
EWM (external)	EWM: implicit or explicit external number range necessary LE: external number range not necessary. EWM number must be outside the free internal LE number range

Logistic Execution (internal)	LE: internal number range necessary EWM: implicit or explicit external number range necessary
Logistic Execution (external)	LE: external number range necessary EWM: implicit or explicit external number range necessary



Recommendation

If you receive advanced shipping notifications (ASNs) from vendors and want to reuse the HU number from the vendors in the warehouse, we recommend using Serial Shipping Container Code (SSCC) instead of HU numbers from HU number ranges. The SSCC number ranges should not overlap with the HU number ranges.

In addition to the definition of the HU number ranges, you can use this procedure to activate the lean HU status update and the non-unique HU numbering in Logistics Execution. This setting is necessary for stock transport order (STO) processes involving cross-delivery HUs.

Procedure

If you implement your own warehouse or if you implement the standard warehouse in a more complex system landscape, carry out the following steps:

1. Check if HU number ranges are already defined in EWM:
 - a. Note the internal number range numbers assigned to the packaging material types in Customizing for *Extended Warehouse Management* under *Cross-Process Settings* → *Handling Units* → *External Identification* → *Assign Number Range Intervals to Packaging Material Types*.
 - b. Note the internal and external number ranges defined in your warehouse in Customizing for *Extended Warehouse Management* under *Cross-Process Settings* → *Handling Units* → *External Identification* → *Define Number Range for HU Identification*.
2. Check if HU number ranges are already defined in Logistics Execution:
 - a. Note the internal and external number range numbers assigned to the packaging material types in Customizing for *Logistics – General*, under *Handling Unit Management* → *External Identification* → *Define Number Assignment for Each Packaging Material Type*.
 - b. Note the internal and external number ranges defined in Customizing for *Logistics – General*, under *Handling Unit Management* → *External Identification* → *Number Range Maintenance for HU Identification*.
3. Decide in which application (Logistics Execution or EWM) you create HUs and if you use an internal or an external number range for the HUs. Define the number ranges in EWM and LE following the rules described above and transport if necessary the settings to other systems or clients.
4. If you use STO processes with cross-delivery HUs, activate the lean HU status update in the Logistics Execution customizing system in Customizing for *Logistics Execution* under *Extended Warehouse Management Integration* → *Cross-Process Settings* → *Handling Unit Management* → *Set Lean HU Status Update in Non-unique HU Numbering Scenario*.

For more information about this setting, see the Customizing documentation.

3.6 Activating Transaction Data Transfer

You use this procedure to activate in SAP S/4HANA the transfer of transaction data (inbound deliveries, outbound deliveries, and production material requests) to SAP Extended Warehouse Management (EWM) using queued remote function call (qRFC).

Since only deliveries created in the Logistics Execution warehouse linked to EWM should be transferred to EWM, you activate the delivery split by warehouse to ensure that no deliveries are created containing centrally-managed and EWM-managed items in the same document.

You then generate a distribution model containing the Logistics Execution warehouse.

Procedure

Carry out the first step of the following procedure in the SAP S/4HANA Customizing client and transport if necessary the settings to other clients or systems. Carry out the second step in the client in which you create transaction data for EWM:

1. Define delivery split by warehouse in Customizing for *Logistics Execution* under *Shipping* → *Deliveries* → *Define Split Criteria for Deliveries* → *Delivery Split by Warehouse Number*:
 - a. In *Delivery Split by Warehouse Number*, choose the activity *Define delivery split per delivery type*.
 - b. Select the *Delivery Split* checkbox for all delivery types you use in your warehouse., for example:
 - EL (*Inbound Delivery*)
 - LF (*Outbound Delivery*)
 - LO (*Delivery w/o Ref.*)
 - LR (*Returns Delivery*)
 - c. In *Delivery Split by Warehouse Number*, choose the activity *Determine delivery split per warehouse number*.
 - d. Select the *Delivery Split* checkbox for your warehouse.
2. Generate the distribution model for the Logistics Execution warehouse:
 - a. In Customizing for *Logistics Execution*, under *SAP EWM Integration* → *Basic Setup of Connectivity* → *Generate Distribution Model from SAP S/4HANA to SAP EWM*.
 - b. Enter data in the following fields:
 - *Warehouse Number*, for example, W01
 - *Logical System of SAP EWM*, for example S4HEWM001
 - *Distribution Model View*, for example, EWM
 - c. In the *Objects* screen area, select *All* to create entries for inbound deliveries, outbound deliveries and production material requests.
 - d. In the *Action* screen area, select *Create Entries*.
 - e. Choose *Execute*.A protocol for all selected warehouses is created.

Result

You have activated the data transfer to EWM. If you create an inbound delivery or an outbound delivery in a plant and storage location linked to the EWM warehouse, the system transfers the delivery data to EWM.

Note

If you have not yet completed the configuration of the warehouse requests used for deliveries on the EWM side, the automatic distribution might lead to queue errors. You can prevent this by stopping temporarily the distribution of deliveries for the warehouse in Customizing for *Logistics Execution* under *SAP EWM Integration* → *Basic Setup of Connectivity* → *Configure SAP EWM-Specific Parameters*.