

SAP Transportation Management Integration Based on EWM Transportation Units

Integration between Transportation Management (TM) and Extended Warehouse Management (EWM) based on EWM transportation units (TUs) is a critical aspect of logistics operations. The integration process involves fulfilling specific prerequisites and following supported processes.



This post outlines the integration procedure between Extended Warehouse Management (EWM) and Transportation Management (TM), based on the EWM transportation unit (TU). This article gives a summary of the supported procedures, prerequisites, and additional processes. The integration process is a crucial part of logistical operations.

Prerequisites:

Before integrating the TM and EWM systems, it is important to fulfill specific requirements.

- 1. Stock Transport Order Process
- 2. Early Updates from EWM
- 3. Delivery Split
- 4. Transportation Planning with Trailers
- 5. Early Picking
- 6. Multi-Pickup, Multi-Drop
- 7. Execution-Driven Planning (Outbound)

Supported Processes: The integration process between TM and EWM is based on the EWM transportation unit (TU) and supports several processes for road freight orders.

Delivery-Based and Order-Based Planning (Outbound):

In this process, transportation activities are planned based on an outbound delivery or an order. Freight orders are sent to EWM, where warehouse workers perform tasks like loading, picking, packing, and staging. Once the truck departs, EWM sends a message to update TM, which then updates the freight order and associated freight units. Early updates from EWM to TM can also be enabled with the status Loading Finished.

Delivery-Based and Order-Based Transportation Planning (Inbound):

Similarly, transportation activities can be planned based on an inbound delivery or an order. Freight orders are sent to EWM, and warehouse workers carry out tasks like unloading.

Further Processes: Apart from the processes mentioned above, several other processes are supported, including Transportation Planning with Trailers, Stock Transport Order Process, Early Picking, Multi-Pickup, Multi-Drop, Cross-Delivery Handling Units, and Execution-Driven Planning (Outbound).

DTR and OTR in TM System Integration

The transportation management (TM) system has some features that are only applicable when integrated with external logistics systems. These include delivery-based transportation requirements (DTR) or order-based requirements (OTR).

If your logistic systems such as Logistics Execution, Sales and Distribution, or Materials Management are not located in the same SAP S/4HANA system as TM, then you need to understand external TM system integration for more information.

System Update Schedule after Planning Transportation Activities

After planning your transportation activities in TM, you need to set the load plan status or unload plan status on stop level to Finalized. The system will send a loading or unloading instruction to the Extended Warehouse Management (EWM) with the message Loading Appointment Request. You can also choose to Follow Up Send Loading Instructions or Send Unloading Instructions, and the system will send a Loading Appointment Request message to EWM.

If you enable early updates, the system will send an additional Loading Appointment Notification message to TM when warehouse workers set statuses Arrival at Checkpoint and Departure from Checkpoint, and when they post the goods issue or goods receipt.

Data Display and Changes

In a delivery-based transportation requirement, warehouse numbers from EWM are displayed on the Locations and Dates/Times tab page. For freight orders, warehouse numbers from EWM are displayed on the Overview tab page for the stop. Data changes in EWM are replicated to TM, including item hierarchy, carrier, relevant dates and times, gross weight of the vehicle, and packaging material.

Data Updates and Freight Units

When warehouse workers pack items in different handling units in EWM, the system creates items for these handling units automatically in TM. Reassignment of freight units occurs when warehouse workers load deliveries from a different freight order, the system changes the assignment of the corresponding freight units. If you assign a freight unit to a transportation unit in EWM but the freight unit is not assigned to a freight order in TM, this information is also transferred to TM.

The system will automatically assign the freight unit to the corresponding freight order. Moreover, if you reassign a complete delivery in EWM from one transportation unit to another, the system will report the reassignment to TM. In TM, the delivery will be automatically reassigned from the original freight order to the other freight order corresponding to the assigned transportation unit in EWM.

Status Updates and Document Cancellation

When you set the load plan status on stop level to Load Plan Finalized for your freight order, the system triggers the event Ready for Loading. The same applies to the load plan status Unload Plan Finalized and the event Ready for Unloading. If TM receives the Loading Appointment Notification message during outbound-delivery-based transportation planning, the cargo receipt status for the item is automatically set to Shipped.

For inbound processes, you can still cancel freight orders until the goods have arrived in the warehouse and are reported by EWM as Arrived. If the status Unload Plan (Stop) Finalized has already been set, the system will send a cancellation request to EWM, and the life cycle status of the freight document will change to Canceled.

1 Overview

In this blog post, I will explain how the TM-EWM integration in the S4HANA 1909 system will work in an integrated way in outbound delivery process. The article will include more detailed information about the EWM side and more brief information about the TM-ERP sides.

While providing this integration, the following steps will be examined and exemplified.

- TM Side
 - Planning for outbound deliveries
 - Packaging
 - Determine the loading sequence

- EWM Side
 - Automatic creation of the transport unit with TM integration and PPF in the EWM system
 - Creation of planned transport handling units with TM reference in the EWM system
 - Using PSHU's as a reference during creating warehouse orders in the EWM system and creating PICK-HU with them.
 - Operation of collection steps in the warehouse with EWM PICK HU
 - Movement of the transport unit in YARD with Yard Management
 - Loading the HUs collected in the warehouse with the reference of TM loading sequence into the vehicle with transport unit

While the above scenarios are being operated, information about the configuration steps that are seemed important regarding the related steps will also be shared.

While preparing the document and making the system testable a few blog posts that are considered as references will also be shared.

2 ERP-TM Side Process Steps

2.1 Step 1: Create Sales Order & Outbound Delivery

Since the related processes are known, details will not be given. The following documents have been created to operate the process.

Sales Orders;

- 321, 373

Outbound Deliveries;

- 80000816, 80000831

Standard Order 80000816 Display: Overview

Post Goods Issue Display JIT Calls

Outbound Deliv. 80000816 Document Date 10.07.2020

Ship-to party 20000000

Item Overview Picking Loading Shipment Status Overview Goods Movement Data TM Status

Planned GI 09.07.2020 00:00 Total Weight 977,880 KG

Actual GI Date 00:00 No. of Packages 0

Item	Material	Deliv. Qty	Un	Description	Req. Segment	Stock Segment	B.. ItCa
10	A45495	843	PC				ZS01

Standard Order 80000831 Display: Overview

Post Goods Issue Display JIT Calls

Outbound Deliv. 80000831 Document Date 10.07.2020

Ship-to party 20000000

Item Overview Picking Loading Shipment Status Overview Goods Movement Data TM Status

Planned GI 09.07.2020 00:00 Total Weight 16,200 KG

Actual GI Date 00:00 No. of Packages 0

Item	Material	Deliv. Qty	Un	Description	Req. Segment	Stock Segment	B.. ItCa
10	748-1851-01	2	PC				ZS01

System creates freight units in this step for TM planning.

Document Flow

Status Overview Display Document Service Documents Additional Links

Business Partner 0020000000

Document	On	Time	Status
Standard Order 0000000321	29.06.2020	19:27:49	Completed
Standard Order 0080000831	10.07.2020	14:42:08	In Process
Freight Unit 4100000834	09.07.2020	10:59:57	In Process

Document Flow			
	Status Overview		Display Document
Service Documents			Additional Links
Business Partner 0020000000 			
Document	On	Time	Status
Standard Order 0000000373	30.06.2020	15:30:51	In Process
Standard Order 0080000816	10.07.2020	14:41:44	Open
Freight Unit 4100000930	10.07.2020	14:41:45	In Process

2.2 Step 2: Plan freight units with TM

Generating TM's freight number.

Transportation Cockpit: Standard Layout			
	Save		Undo
	Redo		Assign Selected Items
Transportation Proposals		Optimizer Planning	
>> Display Settings			
Freight Unit Stages (2/631)		Freight Orders/Freight Bookings (1/169)	
View: Standard View		View: Standard View	
Split/Merge		New	
Create Capacity Document		Remove Vehicle	
Create Multiple Capacity Documents		Mass Change	
Remove Capacity Document		Check	
		Fix	
		Unfix	
		Calculate Charges	
		Tendering	
		Carrier Selection	
		Scheduling	
Search:		Search:	
I..		Acti...	
Freight Unit		Tran...	
TR-11-002S		Mod...	
4100000831		Document	
DE-00		10	
TR-11-002S		26 ES 248	
4100000930		F..	
TR-34-001		6100000310	

2.3 Step 3: Create package units and loading sequence for packages

Packaging planning is made for TM freight number and in-vehicle loading sequence of the relevant HUs is determined.

Display Outbound Karayolu Navlun siparişi 6100000310															
<div> <div>Save</div> <div>Cancel</div> <div>Edit</div> <div>Refresh</div> <div>Copy</div> <div>Multiple Copies</div> <div>Check</div> <div>Follow Up</div> <div>Scheduling</div> <div>Subcontracting</div> <div>Create Service Order</div> <div>Schedule</div> <div>Set Status</div> <div>Load Plan Status (Stop)</div> <div>Execution Status</div> <div>Fixing</div> </div>															
<div> <div>General Data</div> <div>Business Partner</div> <div>Items</div> <div>Stages</div> <div>Utilization</div> <div>Subcontracting</div> <div>Document Flow</div> <div>Charges</div> <div>Execution</div> <div>Notes</div> <div>Attachments</div> <div>Statuses</div> <div>Block</div> </div>															
All Items															
<div> <div>Change Hierarchy: All Items</div> <div>Insert: (Choose Item Type)</div> <div>Insert</div> <div>Create Service Order</div> <div>Adjust Subitems</div> <div>Forwarding Order</div> <div>Build Packages</div> <div>Remove Packages</div> </div>															
Item Hierarchy	Item Type	Item Type (Description)	Qua...	Qua... UoM	Qua...	Gross Weight	Gross Weight UoM	Gross Volume	Gross Volume UoM	Outer Volume	Outer Volume UoM	Product	Package ID		
Active Vehicle KAMYON 1000000			10	PC		13.378,08	KG	9,756006	M3						
Package 30 800 X 1140 Standart Palet	PACK	Package	1	PC		1.664	KG	1,14	M3	1,14	M3	P10	0000000003000008481		
Outbound Navlun birimi 4100000930			100	PC		116	KG	100	M3						
Product 10			100	PC		116	KG	100	M3			A45495			
Package 50 800 X 1140 Standart Palet	PACK	Package	1	PC		1.664	KG	1,14	M3	1,14	M3	P10	0000000003000008480		
Outbound Navlun birimi 4100000930			100	PC		116	KG	100	M3						
Product 40			100	PC		116	KG	100	M3			A45495			
Package 70 800 X 1140 Standart Palet	PACK	Package	1	PC		1.664	KG	1,14	M3	1,14	M3	P10	0000000003000008479		
Outbound Navlun birimi 4100000930			100	PC		116	KG	100	M3						
Product 60			100	PC		116	KG	100	M3			A45495			
Package 90 800 X 1140 Standart Palet	PACK	Package	1	PC		1.664	KG	1,14	M3	1,14	M3	P10	0000000003000008478		
Outbound Navlun birimi 4100000930			100	PC		116	KG	100	M3						
Product 80			100	PC		116	KG	100	M3			A45495			
Package 110 800 X 1140 Standart P...	PACK	Package	1	PC		1.664	KG	1,14	M3	1,14	M3	P10	0000000003000008477		
Outbound Navlun birimi 4100000930			100	PC		116	KG	100	M3						
Product 100			100	PC		116	KG	100	M3			A45495			
Package 130 800 X 1140 Standart P...	PACK	Package	1	PC		1.664	KG	1,14	M3	1,14	M3	P10	0000000003000008476		
Outbound Navlun birimi 4100000930			100	PC		116	KG	100	M3						
Product 120			100	PC		116	KG	100	M3			A45495			
Package 150 800 X 1140 Standart P...	PACK	Package	1	PC		1.664	KG	1,14	M3	1,14	M3	P10	0000000003000008475		
Outbound Navlun birimi 4100000930			100	PC		116	KG	100	M3						
Product 140			100	PC		116	KG	100	M3			A45495			
Package 170 800 X 1140 Standart P...	PACK	Package	1	PC		1.664	KG	1,14	M3	1,14	M3	P10	0000000003000008474		
Outbound Navlun birimi 4100000930			100	PC		116	KG	100	M3						
Product 160			100	PC		116	KG	100	M3			A45495			
Package 190 800 X 1140 Standart P...	PACK	Package	1	PC		49,88	KG	0,490656	M3	0,490...	M3	P10	0000000003000008473		
Outbound Navlun birimi 4100000930			43	PC		49,88	KG	43	M3						
Product 180			43	PC		49,88	KG	43	M3			A45495			
Package 200 850 X 1140 Standart P...	PACK	Package	1	PC		16,2	KG	0,14535	M3	0,14535	M3	P11	0000000003000008472		
Product 20			2	PC		16,2	KG	0,12484	M3			748-1851-01			

Edit Outbound Karayolu Navlun siparişi 6100000310															
<div> <div>Save</div> <div>Cancel</div> <div>Edit</div> <div>Refresh</div> <div>Copy</div> <div>Multiple Copies</div> <div>Check</div> <div>Follow Up</div> <div>Scheduling</div> <div>Subcontracting</div> <div>Create Service Order</div> <div>Schedule</div> <div>Set Status</div> <div>Load Plan Status (Stop)</div> <div>Execution Status</div> <div>Fixing</div> <div>Customs</div> <div>Charges/Settlement</div> <div>Cancel Document</div> <div>Load Plan Status (Packing)</div> <div>Load Plan Status (Packing)</div> <div>Load Plan Status (Load Planning)</div> <div>Display Settings</div> </div>															
<div> <div>General Data</div> <div>Business Partner</div> <div>Items</div> <div>Stages</div> <div>Utilization</div> <div>Subcontracting</div> <div>Document Flow</div> <div>Charges</div> <div>Execution</div> <div>Notes</div> <div>Attachments</div> <div>Statuses</div> </div>															
Load Plan															
<div> <div>View: Standard View</div> <div>Change Hierarchy: Load Plan</div> <div>Insert: (Choose Item Type)</div> <div>Insert</div> <div>Create Load Plan</div> <div>Clear Load Plan</div> <div>Build Packages</div> <div>Remove Packages</div> <div>Status (Packaging)</div> <div>Status (Load Planning)</div> <div>3D Load Plan</div> <div>Edit</div> </div>															
Item Hierarchy	L... Stati	L... (Cap)	Qua...	Qua... Unit of Measure	Gross Weight	Gross Weight UoM	Gross Volume	G... Volum UoM	Loading Sequence	Row	Stack	F			
Active Vehicle KAMYON 1000000			10	PC	13.37...	KG	9,756...	M3							
Package 30 800 X 1140 Standart Palet			1	PC	1.664	KG	1,14	M3		1	0	0			
Package 70 800 X 1140 Standart Palet			1	PC	1.664	KG	1,14	M3		2	0	1			
Package 50 800 X 1140 Standart Palet			1	PC	1.664	KG	1,14	M3		3	0	2			
Package 130 800 X 1140 Standart Palet			1	PC	1.664	KG	1,14	M3		4	1	0			
Package 90 800 X 1140 Standart Palet			1	PC	1.664	KG	1,14	M3		5	1	1			
Package 110 800 X 1140 Standart Palet			1	PC	1.664	KG	1,14	M3		6	1	2			
Package 150 800 X 1140 Standart Palet			1	PC	1.664	KG	1,14	M3		7	2	0			
Package 170 800 X 1140 Standart Palet			1	PC	1.664	KG	1,14	M3		8	2	1			
Package 190 800 X 1140 Standart Palet			1	PC	49,88	KG	0,490...	M3		9	3	0			
Package 200 850 X 1140 Standart Palet			1	PC	16,2	KG	0,14535	M3		10	3	1			

Load Planning

Quantities

Deselect All

Move Left

Move Right

Move Forward

Move Backward

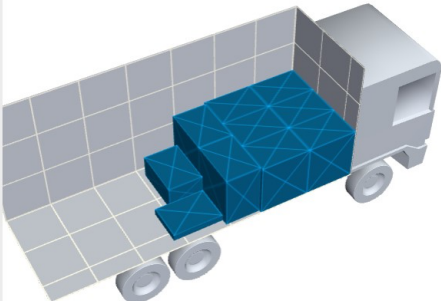
Move Up

Move Down

Rotate

Movement Increment

1,25 M



2.4 Step 4: Send Loading Instructions to EWM

The freight number is sent to EWM.

Display Outbound Karayolu Navlun siparişi 6100000310

Save Cancel Edit Refresh Copy Multiple Copies Check Follow Up **Scheduling** Subcontract

General Data Business Partner **Items** Stages Utilization

All Items

Change Hierarchy: All Items Insert: (Choose Item Type)

Item Hierarchy	Item Type	Item Type (Description)
Active Vehicle KAMYON 1000000		
Package 30 800 X 1140 Standart Palet	PACK	Package
Outbound Navlun birimi 4100000930		
Product 10 Samba 3f Sürgülü E...		
Package 50 800 X 1140 Standart Palet	PACK	Package
Outbound Navlun birimi 4100000930		

Start Transportation Cockpit

Build Packages

Remove Packages

Create Load Plan

Clear Load Plan

Build House Bill of Lading

Draw Master Bill of Lading Number

Return Master Bill of Lading Number

Send Loading Instruction

Cancel Loading Instruction

Send Unloading Instruction

Cancel Unloading Instruction

Create Deliveries

Display Outbound Karayolu Navlun siparişi 6100000310

Save Cancel Edit Refresh Copy Multiple Copies Check Follow Up Scheduling Subcontracting Create Service Order Scheduling

Terms and Conditions **Output Management** Packaging Material Overview

Deselect All Generate Regenerate Execute Actions

Action Status	Processing Type	Document Number
Shipping Manifest	External Communication	
Shipping Manifest	External Communication	
Shipping Manifest	External Communication	
Shipping Manifest	External Communication	
Shipping Manifest	External Communication	
Shipping Manifest	External Communication	
Shipping Manifest	External Communication	
Send Loading and Unloading Instructions	Method Call	566F395000221EDAB0D5C6D40CA94A13

**** The steps after this step are arranged to include more detailed and technical explanations.

A freight order is created for the relevant freight units in TM, and after planning, packaging and loading details are created, the process is now advanced in EWM.

After the loading instruction is sent, firstly the HU number is automatically generated for the EWM system by taking the freight order with the PPF's as reference.

3 EWM Side

3.1 Configuration Steps

Apart from the configurations below, there are a few other minor configurations that can guide the movement of the system. As these are scenario based, more basic configurations will be shared below.

3.1.1 Step 1: PPF configurations for TU

Tcode: SPPFC

Application: /SCWM/SHP_RCV Action Profile: /SCWM/TU

In this action profile we need to active these actions;

Display View "Action Definition": Overview

Dialog Structure

Action Profile

Action Definition

Processing Types

Action Profile

/SCWM/TU

Description

Transportation Unit

Action Definition

Action Definition	Description	Sort Order	Inact...
<u>/SCWM/BIF_TAPP_CANCELLED_NOTI</u>	XI Message: TU Assignment CancelledNotification	0	<input checked="" type="checkbox"/>
<u>/SCWM/BIF_TAPP_CHANGED_NOTI</u>	XI Message: TU Assignment ChangedNotification	0	<input checked="" type="checkbox"/>
<u>/SCWM/BIF_TAPP_CREATED_NOTI</u>	XI Message: TU Assignment CreatedNotification	0	<input checked="" type="checkbox"/>
<u>/SCWM/SR_PRINT_TU_WAYBILL</u>	Print Waybill	0	<input checked="" type="checkbox"/>
<u>/SCWM/SR_SEND_SHIPPL</u>	Send Message to ERP: TU Deleted	0	<input checked="" type="checkbox"/>
<u>/SCWM/SR_SEND_SHPMNT</u>	Send Message to ERP: Last TU Goods Issue Posted	0	<input checked="" type="checkbox"/>
<u>/SCWM/SR_SEND_TU</u>	Send Message to FOM (Outbound Only): TU Contents Chan...	0	<input type="checkbox"/>
<u>/SCWM/SR_SEND_TU_FINAL</u>	Send Message to FOM (Outbound Only): Loading Completed	0	<input type="checkbox"/>
<u>/SCWM/SR_SEND_TU_FINAL_CANCEL</u>	Send Message to FOM (Outbound Only): Reversal Loading C...	0	<input type="checkbox"/>
<u>/SCWM/SR_SEND_TU_LDAP_NOTI</u>	Send Message to TM	0	<input type="checkbox"/>
<u>/SCWM/SR_SET_TU_SYNC_DLV</u>	Synchronize TU with Assigned Deliveries	0	<input type="checkbox"/>
<u>/SCWM/SR_TU_CREATE_STAGING_WT</u>	Create Staging WTs for Assigned Transit HUs	0	<input checked="" type="checkbox"/>
<u>/SCWM/SR_TU_HU_TO_CREATE</u>	Create Loading WTs for Assigned HUs	0	<input checked="" type="checkbox"/>
<u>/SCWM/SR_TU_POST_GI</u>	Post GI	0	<input checked="" type="checkbox"/>
<u>/SCWM/SR_TU_PRINT_HU_LABEL</u>	Print HU Labels for Assigned Transit HUs	0	<input checked="" type="checkbox"/>
<u>PRINT_LOADLISTTU</u>	Print Freight List	0	<input checked="" type="checkbox"/>

Accordingly, the system will try to create TU automatically. Here, while making a plan in TM, a necessary material is needed for the selected means of transport.

Tcode: /SCWM/PM_MTR

Change View "Link Between Packaging Material (TU) and Means of Transporto						
68 New Entries						
Link Between Packaging Material (TU) and Means of Transport						
MTr	Pack. Material	Optional	Seq. PMs	No. PMs in MTr	Cont. PM	
AC	AC_TMARAC	✓			✓	
DC	DC_TMARAC	✓			✓	
DKM	DKM_TMARAC	✓			✓	
DKT	DKT_TMARAC	✓			✓	
HC	HC_TMARAC	✓			✓	
KM	KM_TMARAC	✓			✓	
KR	KR_TMARAC	✓			✓	
KT	KT_TMARAC	✓			✓	
MG	MG_TMARAC	✓			✓	
MGP	MGP_TMARAC	✓			✓	
OT	OT_TMARAC	✓			✓	
PT	PT_TMARAC	✓			✓	
PWHC	PWHC_TMARAC	✓			✓	
RT	RT_TMARAC	✓			✓	
SB	SB_TMARAC	✓			✓	
TR	TR_TMARAC	✓			✓	
U	U_TMARAC	✓			✓	
YC	YC_TMARAC	✓			✓	

For each TM means type is selected the relevant TM means material. The packaging material type of this material should also be selected as "A".

Display View "Packaging Material Types in WM": Overview			
68			
Packaging Material Types in WM			
Pkgi...	Description	PMCat	T
		C Packaging Materials	
		C Packaging Materials	
		C Packaging Materials	
TM01		A Means of Transport, Transporto	
		A Means of Transport, Transport Element, Transport Unit	
		C Packaging Materials	
		D Auxiliary Packaging Material	

Packaging material data			
Matl Grp Pack.Matls	TM01	Maximum level	0
Packaging Mat. Type	TM01	Stackability factor	0
Allowed pkg weight	0,000	Excess wt tolerance	0,0
Allowed pkg volume	0,000	Excess volume tol.	0,0
Ref. mat. for pkg			
<input type="checkbox"/> Closed			

3.1.2 Step 2: Configurations for PSHU's creation from TM

At this stage, taking package plan made in TM as a reference the configuration steps required to automatically create PSHU for EWM will be explained.

The creation of PSHU in EWM for the HU for each plan in TM will be provided as follows.

IMG Menu	SCM Extended Warehouse Management ® Extended Warehouse Management ® Good Issue Process ® Cartonization Planning ® Define process profiles for cartonization planning
----------	--

Change View "Process Profiles for Cartonization Planning": Details

New Entries
BC Set: Change Field Values

Warehouse No.
Process Profile: PSHU

Process Profiles for Cartonization Planning

Description: Early CAP for Truck Ordering

Creation of Planned Shipping HUs

From Transportation Planning System: B

☒ For Outbound Delivery Orders

☐ Cartonization Planning for Waves

☐ During Warehouse Order Creation

Creation of Shipping HUs

☒ Shipping HU created during picking

☐ Shipping HU created during packing

Delete PSHUs

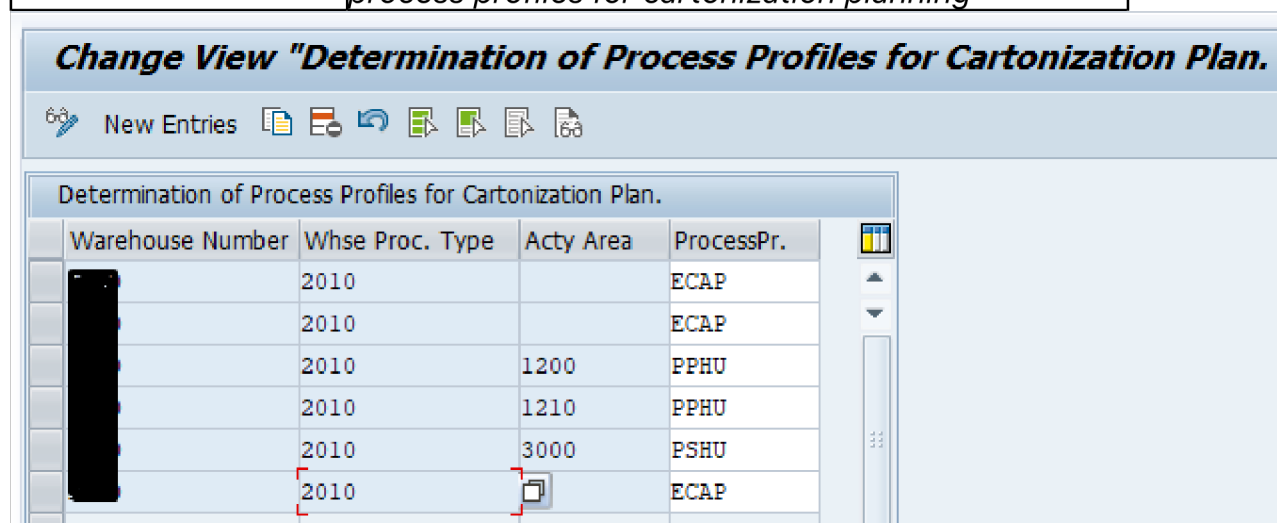
Create PSHUs from External Transportation Planning System (1) 3 Entries found

From Transportation Management	Short Descript.
	Do not create PSHUs
A	Create PSHUs only if no PSHUs exist for item in EWM yet
B	Create PSHUs and delete existing PSHUs in EWM

IMG Menu	SCM Extended Warehouse Management ® Extended Warehouse Management ® Good Issue
----------	--

In this step, a notification is given that PSHUs will be created from the TM system. And for this created PSHU, it is decided at which stage Pick-HU will be created. In our scenario, it is determined this Pick-HU will be created and used during picking in the configuration as above.

Process ® Cartonization Planning ® Determine process profiles for cartonization planning



At this stage, in which warehouse numbers, which activity areas and which processes will be used during the removal from the warehouse task are specified at this stage.

3.1.3 Step 3: Warehouse Order Creation Rules Configuration

A separate warehouse order creation is provided for each PSHU so that the system can take into account the TM plan when creating warehouse tasks for shipping. In this way, HU's which are coming out of the warehouse will be prepared on the basis of PSHUs.

There are several configuration steps that need to be done at this stage. Their details are as follows.

MG Menu	<i>SCM Extended Warehouse Management ® Extended Warehouse Management ® Cross-Process Settings ® Warehouse Order ® Define Creation Rule For WO</i>
---------	---

Change View "Warehouse Order Creation Rules": Details

New Entries

Warehouse No.

WO Creatn Rule

Warehouse Order Creation Rules





Description	<input type="text" value="Pick PSHU"/>
WO Creation Cat	<input type="text" value="A Consolidation Group"/>
Item Filter	<input type="text"/>
Subtotal Filter	<input type="text"/>
Limit	<input type="text" value="PSHU"/>
Inbound Sorting	<input type="text"/>
WO Sorting	<input type="text"/>
Packing Profile	<input type="text" value="PSHU"/>
Ship.Pack.Prof.	<input type="text" value="PSHU"/>
Prep.Time	<input type="text"/>
Time Unit	<input type="text" value="MIN"/>
Dest. Stor. Ty.	<input type="text"/>
Dest. Section	<input type="text"/>
Destination Bin	<input type="text"/>
Storage Process	<input type="text"/>
Determine WkCtr	<input type="checkbox"/>
WO Locked	<input type="checkbox"/>
CAP Compatibility	<input checked="" type="checkbox"/>

The marked areas in the screenshot above are important. These configurations need to be made.

Limit: PSHU

Owing to the configuration below, the system will divide the warehouse orders on the basis of PSHU.

Change View "Warehouse Order: Limits for Rules": Details

 New Entries      

Warehouse No.

Limit

Warehouse Order: Limits for Rules

Description	<input type="text" value="Pick HU Bazında DS yaratma"/>
Limit Val. Type	<input type="text" value="Warehouse Task"/>
Min.Items/WO	<input type="text" value=""/>
Max. Itm per WO	<input type="text" value=""/>
Minimum Volume	<input type="text" value=""/>
Max. Volume	<input type="text" value=""/>
Volume unit	<input type="text" value="M3"/>
Minimum Weight	<input type="text" value=""/>
Maximum Weight	<input type="text" value=""/>
Weight unit	<input type="text" value="KG"/>
Min. Proc. Time	<input type="text" value=""/>
Max. Extr. Time	<input type="text" value=""/>
Time Unit	<input type="text" value="MIN"/>
Max. CGr per WO	<input type="text" value=""/>
Max.CGrp per HU	<input type="text" value=""/>
Max. No. of HUs	<input type="text" value="1"/>
Min. WTs per HU	<input type="text" value=""/>
Max. WTs per HU	<input type="text" value=""/>

Packing Profile&Ship Pack Profile: PSHU

Owing to the configuration below, the system will create Pick-HU and assign them to the warehouse order when creating warehouse orders and creating references to PSHUs.

Change View "Packing Profile for Warehouse Order Creation": Details

New Entries

Warehouse No.

Packing Profile

Packing Profile for Warehouse Order Creation

Description

Pack. Mode

Sorting

Create HUs ☒

Assn WTs to HUs ☒

Split WT

Split WT based on AUoM ☐

Skip WT ☐

Check LWH ☐

IMG Menu	SCM Extended Warehouse Management ® Extended Warehouse Management ® Cross-Process Settings ® Warehouse Order ® Define Search Sequence of Creation Rules for activity areas
----------	--

Finally, with this configuration, we indicate which warehouse order creation rule we use when creating warehouse orders from which activity areas.

Warehouse Order: Search Sequence for Rules per Activity Area				
W...	Acty Area	Activity	Sequence No.	WO Cr. Rle
<input type="text"/>	1000	PICK	1	PSHU
<input type="text"/>	1100	PICK	1	PSHU
<input type="text"/>	2000	PICK	1	PSHU

3.2 Process Steps

3.2.1 Step 1: Check the TU Created in EWM

Tcode: /SCWM/TU

TU was created automatically and planned deliveries from TM were assigned.

Process TU - Warehouse - Period 19.01.2020 - 19.12.2020

Show Find

Transportation Unit Free Deliveries Free Del. Items Free HUs

Transportation Unit

TU Ass.Obj. Changed ☐ 1 / 1
 Carrier Means of Trans.
 SCAC TU Packaging Mtrl
 TU License Plate No.
 Transp.PlngType Source Door
 Receiver Yard Bin
 TransPlan.Sys. Route for TU
 Route Depart. Date

Assigned Del. Assigned Del. Items Assigned HUs Assigned Vehicles Status PPF Actions Assigned Doors

TU S&R Acty: TU

Doc. Cat.	Document	Hier. Lev.	Not Uniq...	AsgmtCat	Obj.Chngd	Status	Doc. Type	WhN	StgAreaGrip	StgArea	Stag. Bay	Whse Do...	Load/U...	GI/GR Pstd	Incoter...
PDO	80000816	✓			◆		OUTB	9420	9020		GI-ZONE		⊗	⊗	Z02
PDO	80000831	✓			◆		OUTB	9420	9020		GI-ZONE		⊗	⊗	Z02

3.2.3 Step 3: Create Warehouse order referring to PSHU's

3.2.2 Step 2: Check the PSHU's Created From TM

Tcode: /SCWM/MON

With TM plan HUs, it is checked whether PSHU's is created in the EWM system. The loading sequence detail also looks like the following.

Warehouse Management Monitor SAP - Warehouse Number [Redacted]

Outbound Delivery Order

Blocked	Document	Del. Date (Pl.)	TU	Whse Act.	Pickg (Pl)	Picking	Packing Status	Loading	Goods Issue
	80000816	11.07.2020	6100000310	Not Started	Not Started	Not Started	Not Calculated	Not Started	Not Started
	80000831	30.07.2020	6100000310	Not Started	Not Started	Not Started	Not Calculated	Not Started	Not Started

Planned Shipping Handling Unit

PSHU	Carrier	HU Ty...	Ro...	Stack	Load Seq	Load Sequence Number	Max. Vol.	VUn	Total Wght	Load Wght	Max
3000008481	20000037	P10	0	0	1		0	CD3	1.664	116	
3000008479	20000037	P10	0	1	2	100.109,440	100.000	0	CD3	1.664	116
3000008480	20000037	P10	0	2	3	100.109,440	100.000	0	CD3	1.664	116
3000008476	20000037	P10	1	0	4	100.109,440	100.000	0	CD3	1.664	116
3000008478	20000037	P10	1	1	5	100.109,440	100.000	0	CD3	1.664	116
3000008477	20000037	P10	1	2	6	100.109,440	100.000	0	CD3	1.664	116
3000008475	20000037	P10	2	0	7	100.109,440	100.000	0	CD3	1.664	116
3000008474	20000037	P10	2	1	8	100.109,440	100.000	0	CD3	1.664	116
3000008473	20000037	P10	3	0	9	43.109,440	43.000	0	CD3	1.597,880	49,880
3000008472	20000037	P11	3	1	10	241,120	124,840	0	CD3	34,200	16,200

Tcode: /SCWM/MON

Warehouse orders are created on the basis of the freight number. The system separates the warehouse orders it creates at the moment on the basis of PSHU's and creates a Pick-HU for each warehouse order. It also writes to this Pick-HU content which PSHU reference as taken when this created. In the next steps, this reference will determine the loading sequence.

Warehouse Management Monitor SAP - Warehouse Number 9420

Outbound Delivery Order

Blocked	Document	Del. Date (Pl.)	TU	Whse Act.	Pickg (Pl)	Picking	Packing Sta
	80000816	11.07.2020	6100000310	Not Started	Not Started	Not Started	Not Calculat
	80000831	30.07.2020	6100000310	Not Started	Not Started	Not Started	Not Calculat

Process Code Warehouse Task

- Display Item Hierarchy
- Reprint ODO
- Create WT in Background
- Update Stop Sequence
- Display Change Documents
- Assign Carrier

Outbound Delivery Order

Blocked	Document	Del. Date (Pl.)	TU	Whse Act.	Pickg (Pl)	Picking	Packing Status	Loading	Goods Issue	No. of Itms	No. of H...	No. Pro...	Ship-To	Route	Carrier
	80000816	11.07.2020	6100000310	Not Started	Not Started	Not Started	Not Calculated	Not Started	Not Started	1	0	1	20000000	34-001	200000
	80000831	30.07.2020	6100000310	Not Started	Not Started	Not Started	Not Calculated	Not Started	Not Started	1	0	1	20000000	34-001	200000

Warehouse Task

Whse Order	WO Cr. ...	Creat. C...	Hdr Whse...	Queue	Wa...	Stat...	WO ActAr...
2000000332	PSHU	A	2010	MC01			3000
2000000333	PSHU	A	2010	MC01			3000
2000000334	PSHU	A	2010	MC01			3000
2000000335	PSHU	A	2010	MC01			3000
2000000336	PSHU	A	2010	MC01			3000
2000000337	PSHU	A	2010	MC01			3000
2000000338	PSHU	A	2010	MC01			3000
2000000339	PSHU	A	2010	MC01			3000
2000000340	PSHU	A	2010	MC01			3000

BSQ(1)/100 Display logs

Overview

- Activity area 3000 activity PICK used for determining creation rule 203
 - The search sequence for activity area 3000 is used for 3 WTs 1
- Creation rule PSHU used for 3 WTs 196
 - Creation rule PSHU is of the type "Consolidation Group" 1
 - 3 WTs passed, 0 WTs did not pass item filter 1
 - Shipping HU determination started for 3 WTs 1
 - Planned shipping HUs are used for HU determination 19
 - New HU opened with packaging material P10 1
 - HU is created according to planned shipping HU 00000000003000008478 1
 - New HU opened with packaging material P10 1
 - HU is created according to planned shipping HU 00000000003000008479 1
 - New HU opened with packaging material P10 1
 - HU is created according to planned shipping HU 00000000003000008480 1
 - New HU opened with packaging material P10 1
 - HU is created according to planned shipping HU 00000000003000008473 1
 - New HU opened with packaging material P10 1
 - HU is created according to planned shipping HU 00000000003000008474 1
 - New HU opened with packaging material P10 1
 - HU is created according to planned shipping HU 00000000003000008475 1
 - New HU opened with packaging material P10 1
 - HU is created according to planned shipping HU 00000000003000008476 1
 - New HU opened with packaging material P10 1
 - HU is created according to planned shipping HU 00000000003000008477 1
 - New HU opened with packaging material P10 1
 - HU is created according to planned shipping HU 00000000003000008481 1
 - Inbound WT sorting rule used 1

Message Text

Confirm Warehouse Task in Warehouse Number 9420

Show Find WHO Warehouse Order

Mode	Whse Order	WO Status	Archive	ES	Inv.	LM Active	Processor	Resource	Queue	Start	Start Time	Fixed	Conf.	Conf.	Conf. by Wave	Act
	2000000332	Open							MC01		00:00:00			00:00:00		300

Product WT HU WT **Pick-HU**

HU ID	Handling Unit	Storage Bin	Resource	Pack.Mat.	Pkging Ty.	Pack.Mat.Type	HU Type	HU Type
1	7000000088	GI-ZONE		P10	PL01	EWM Plt Amb Malz.	P10	

Work Center



Section/Bin/HU/Item	Product	PckQty AUn	Alt....
▼			
▼ GI-ZONE			
• 7000000088	P10		

Capacity Detail 1 Detail 2 Content Open V

Handling Unit 7000000088
System Status PORT
User Status

HU Block Status

☐ Content Changes Blocked ☐ Attribute
☐ Movements Blocked ☐ Posting
☐ Customs Block

Alternative Identifications

Document Re

ID Type	HU Identification	Cat	Doc
A	00000000003000008481		

Identification Type (1) 5 Entries found

Restrictions



IDTpe	Description
A	Planned Shipping HU
C	Ultimate Consignee
D	Distribution Equipment Towing Vehicle
E	Identification of Vendors
F	Handling Unit Group

3.2.4 Step 4: Picking Warehouse order with Pick-HU's

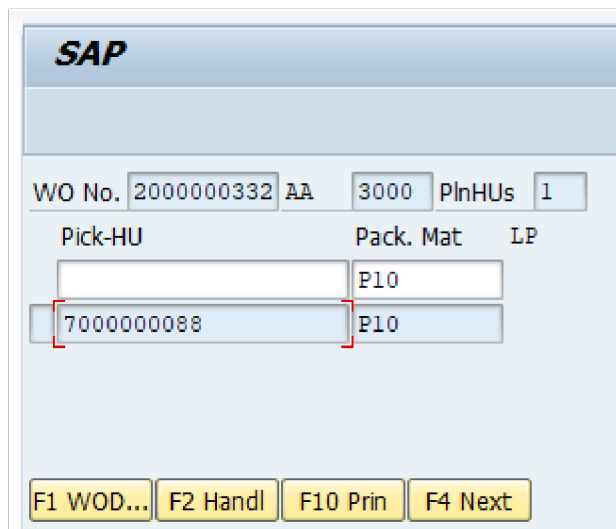
Tcode: /SCWM/RFUI

04-Outbound Processes

01-Picking

01-System Guided

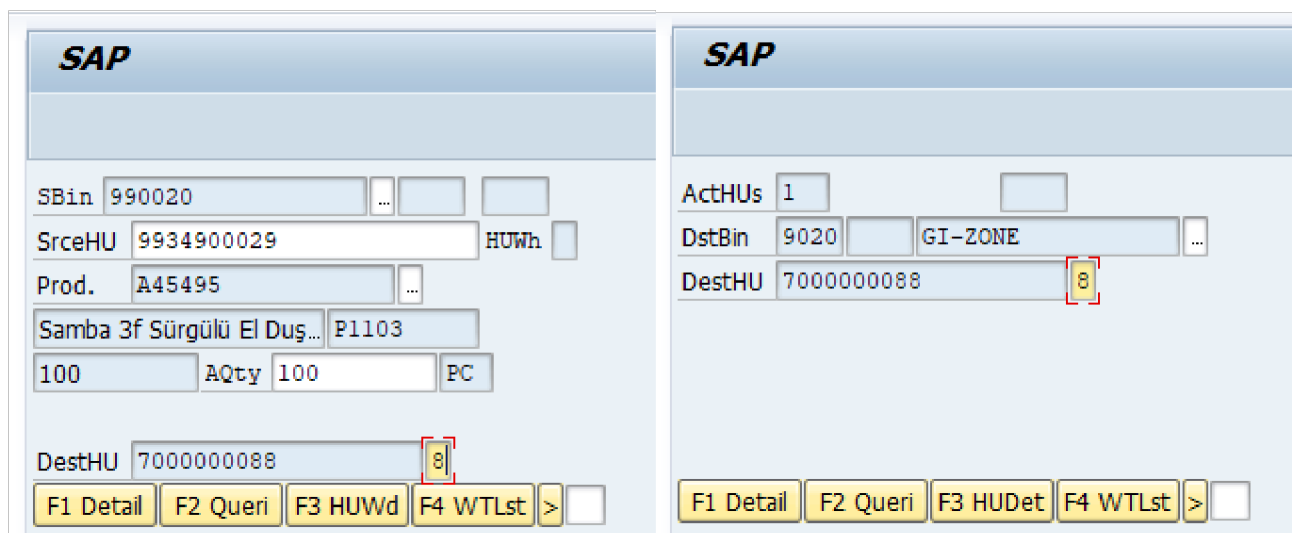
The created warehouse orders are processed.



This screenshot shows the SAP RFUI interface for selecting a warehouse order. The top bar displays the SAP logo. Below it, the 'WO No.' is set to 2000000332, 'AA' is 3000, 'PlnHUs' is 1, and 'Pick-HU' is empty. The 'Pack. Mat' is P10 and 'LP' is empty. A table below shows a list of HUs with the first row highlighted in blue and the second row selected with a red box around the HU number 7000000088. At the bottom, there are four buttons: F1 WOD..., F2 Handl, F10 Prin, and F4 Next.

Pick-HU	Pack. Mat	LP
	P10	
7000000088	P10	

- Pick HU's WO – At this stage, the same HU is not available in our warehouse with the features specified by PSHU & Pick-HU, we transfer over an existing HU.

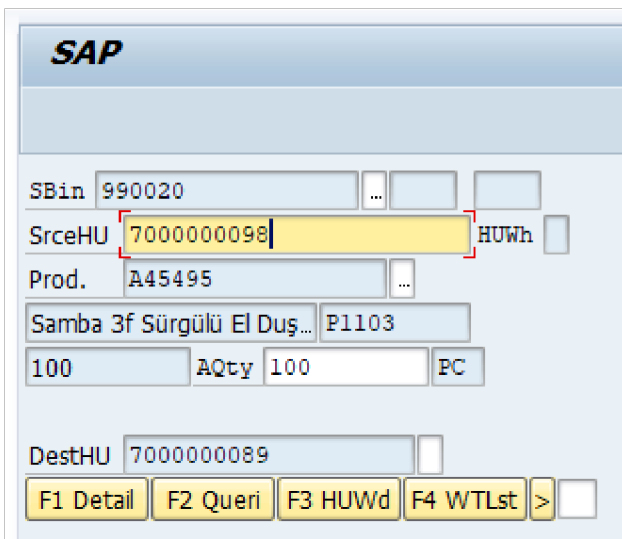


This screenshot shows the SAP RFUI interface for selecting a HU. The top bar displays the SAP logo. Below it, the 'SBin' is 990020, 'SrceHU' is 9934900029, 'Prod.' is A45495, and 'Samba 3f Sürçülü El Duş...' is P1103. The '100' quantity is entered, and 'AQty' is 100. The 'DestHU' is 7000000088, and the '8' is highlighted with a red box. At the bottom, there are five buttons: F1 Detail, F2 Queri, F3 HUWd, F4 WTLst, and a greater-than button. The right side of the screenshot shows the 'ActHUs' as 1, 'DstBin' as 9020, and 'DestHU' as 7000000088, with the '8' highlighted with a red box. At the bottom, there are four buttons: F1 Detail, F2 Queri, F3 HUWd, and F4 WTLst, followed by a greater-than button.

ActHUs	DstBin	DestHU
1	9020	7000000088

- Pick HU's WO – At this stage, our warehouse has the same HU with the features specified by PSHU & Pick-HU. When we scan this HU, the system replaces the scanned HU with PICK HU if the HU contents are the same. While making this change, it continues to keep the TM reference number on the storage HU. This reference is important because, if you

want to apply the means of transport loading sequence the way that comes in TM, this reference needs to be kept on the HUs which prepared for deliveries. In this way you don't miss the loading sequence.



SAP

SBin 990020 ...

SrcceHU 70000000098 HUWh

Prod. A45495 ...

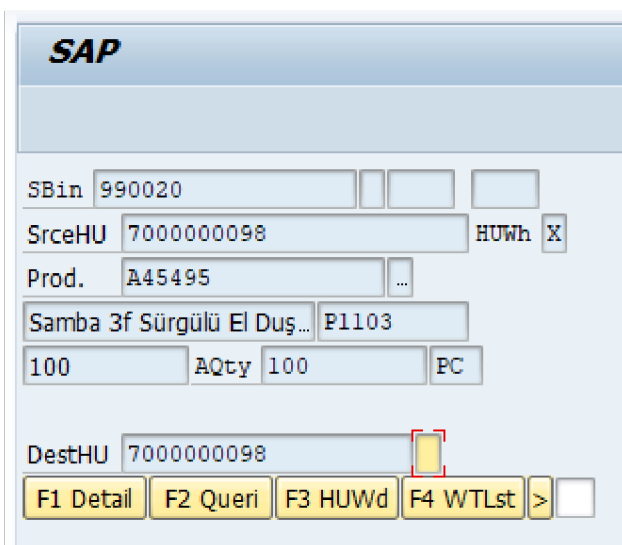
Samba 3f Sürgülü El Duş... P1103

100 AQty 100 PC

DestHU 70000000089

F1 Detail F2 Queri F3 HUWd F4 WTLst >

This screenshot shows the initial state of the SAP transaction. The 'SrcceHU' field contains the value '70000000098' and is highlighted with a red box. The 'HUWh' checkbox is unchecked. The 'DestHU' field contains '70000000089'.



SAP

SBin 990020 ...

SrcceHU 70000000098 HUWh X

Prod. A45495 ...

Samba 3f Sürgülü El Duş... P1103

100 AQty 100 PC

DestHU 70000000098

F1 Detail F2 Queri F3 HUWd F4 WTLst >

This screenshot shows the state after clicking the 'F4 WTLst' button. The 'HUWh' checkbox is now checked (marked with an 'X'). The 'DestHU' field now contains the same value as 'SrcceHU', '70000000098', and is highlighted with a red box.

3.2.5 Step 5: Check HU's and PSHU's

Tcode: /SCWM/MON

The created handling units are checked on deliveries.

OutbDelOrd Item

Wave

Warehouse Order

Warehouse Task

Handling Unit

PSHU

3.2.6 Step 6: Yard activities for TU

Tcode: /SCWM/TU

3.2.6.1 TU enters the YARD

At this stage, vehicle's yard entry notification is given. Usually, the user who performs this operation will be a security guard at the yard entrance.

After;

Before the activation

Process TU - Warehouse 9420 - Period 19.01.2020 - 19.12.2020

Show Find

Transportation Unit Free Deliveries Free Del. Items Free HUS

Transportation Unit

Activate TU

TU 6100000310 Ass.Obj. Changed 1 / 1

Carrier 20000037 Means of Trans. KM

SCAC TU Packaging Mtrl KM_TMARAC

TU License Plate No. 26 ES 248

Transp.PlngType C Source Door

Receiver BSQCLNT100 Yard Bin 9420

TransPlan.Sys. BSQCLNT100 Route for TU

Route Depart. Date :00:00

Process TU - Warehouse 9420 - Period 19.01.2020 - 19.12.2020

Show Find

Transportation Unit Free Deliveries Free Del. Items Free HUS

BSQ(3)/100 Display logs

Message Text LTxt

>>>>>>>>> Start of action "Save" at 18.07.2020 18:45:18 >>>>>>>>>

1 conditions for action /SCWM/SR_SEND_TU were read

Condition 1 returns an action template

1 conditions for action /SCWM/SR_SEND_TU_FINAL were read

Condition 1 is not met

1 conditions for action /SCWM/SR_SEND_TU_FINAL_CANCEL were read

Scheduling condition: Action /SCWM/SR_SEND_TU_FINAL_CANCEL not supported in SA...

1 conditions for action /SCWM/SR_SEND_TU_LDAP_NOTI were read

1 conditions for action /SCWM/SR_SET_TU_SYNC_DLV were read

Action "Save" executed successfully;

Data was saved successfully

Technical Information

3.2.6.2 Door Assignment

It is assigned through which door the freight will be loaded.

Assigned Del.

Assigned Del. Items

Assigned HUs

Assigned Vehicles

Status

PPF Actions

Assigned Doors

TU

6100000310

20000037

S&R Acty: TU

171

▲

▼

📄

🔄 Door Assignment

🗑 Door Assignment

🔗

👤

👥

🏠

🔗

🔍

📄

🔄

🗑

🔗

🔍

Whse Do...	S&R ActyDr	ActyState	State of S&R Activity (Text)	Direction	S&RActType	S&RAct.Cat	S&RActy...	StDatPldSt	StTimPlSt	EnDatPlSt	EnTimPlSt	StDatPlE...
DOR1	205	0	Planned	➡	1		2	18.07.20...	18:50:10	18.07.20...	19:20:10	19.12.20...

3.2.6.3 Yard move checkpoint to door

Tcode: /SCWM/RFUI & /SCWM/TU & /SCWM/YMOVE

The transfer of the vehicle to the door which it was assigned from the checkpoint will be operated by the hand terminal.

05- Internal Processes

06- Yard Movements

02- Create&Confirm Yard WT

The screenshot shows the SAP RFUI transaction screen. At the top, the SAP logo is visible. Below it, there are input fields for ID (6100000310), ProTyp (9999), Src Bin (CHK1), Dest.Bin (DOOR1), and DestHU. A yellow button labeled 'F2 Queri' is located at the bottom left.

The screenshot shows the SAP TU transaction screen. At the top, there are tabs for 'Transportation Unit', 'Free Deliveries', 'Free Del. Items', and 'Free HUs'. Below the tabs, there is a toolbar with various icons and buttons, including 'Assign Del. Immed.', 'Load', 'Unload', 'Create WTs', and 'Goods Issue'. The main area contains input fields for TU (6100000310), Carrier (20000037), SCAC, TU License Plate No. (26 ES), Transp.PlngType (C), Receiver (BSQCLNT100), TransPlan.Sys. (BSQCLNT100), Ass.Obj. Changed, Means of Trans. (KM), TU Packaging Mtrl (KM_TMARAC), Source Door (9420 DOR1), Yard Bin (9420 YARD DOR1 DOOR1), Route for TU, and Route Depart. Date (00:00:00).

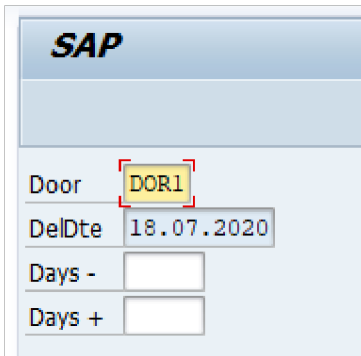
3.2.7 Step 7: Loading referring to TM load sequence

Tcode: /SCWM/RFUI

04- Outbound Processes

06- Loading

You can choose whatever you want, i'm going to do with by door.



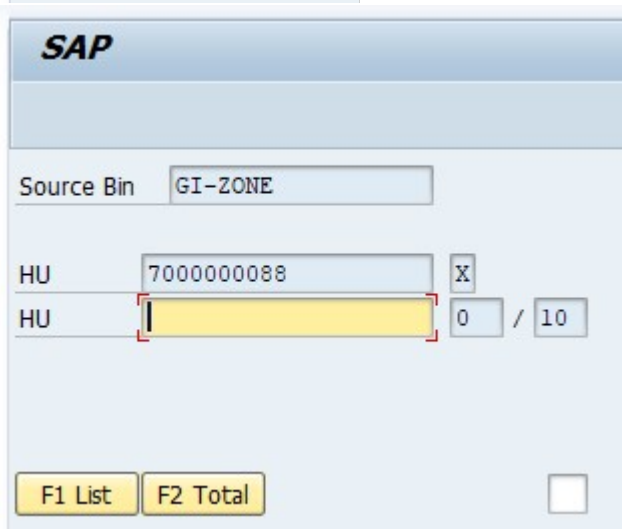
SAP

Door **DOR1**

DelDte 18.07.2020

Days -

Days +



SAP

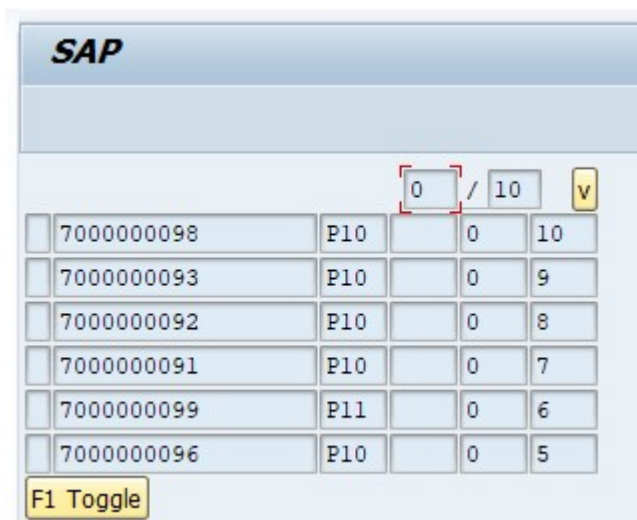
Source Bin GI-ZONE

HU 7000000088 X

HU 0 / 10

F1 List F2 Total

When you press the list button you can see whole HUs and load sequence.



SAP

0 / 10 V

<input type="checkbox"/>	7000000098	P10	<input type="text"/>	0	10
<input type="checkbox"/>	7000000093	P10	<input type="text"/>	0	9
<input type="checkbox"/>	7000000092	P10	<input type="text"/>	0	8
<input type="checkbox"/>	7000000091	P10	<input type="text"/>	0	7
<input type="checkbox"/>	7000000099	P11	<input type="text"/>	0	6
<input type="checkbox"/>	7000000096	P10	<input type="text"/>	0	5

F1 Toggle

When a HU other than the one to be loaded is scanned, it will give an error as follows.

The screenshot shows the SAP 'Handling Unit Identification' screen. At the top, the SAP logo is visible. Below it, the 'Source Bin' is set to 'GI-ZONE'. There are two input fields for 'HU' (Handling Unit). The first field contains '7000000088' and has a checkbox 'X' next to it. The second field is empty and highlighted in yellow, with a '0 / 10' indicator next to it. At the bottom, a message bar displays the error: 'E: Handling unit 7000000089 is not sched'.

HU number 7000000088 is requested to be scan first because this HU was created based on PSHU number 00000000003000008481.

The screenshot shows the 'Handling Unit Identification' table in SAP. The table has four columns: 'Handling Unit', 'IDT...', 'HU Identification', and 'Σ Count...'. The 'HU Identification' column contains a list of 10 HUs, each with a unique 'HU Identification' number. The last row, corresponding to HU 7000000088, is highlighted in yellow and has a red border around its 'HU Identification' value, '00000000003000008481'. The 'Σ Count...' column shows a total of 10 for the highlighted row.

Handling Unit	IDT...	HU Identification	Σ Count...
7000000098	A	00000000003000008472	
7000000093	A	00000000003000008473	
7000000092	A	00000000003000008474	
7000000091	A	00000000003000008475	
7000000090	A	00000000003000008476	
7000000099	A	00000000003000008477	
7000000096	A	00000000003000008478	
7000000095	A	00000000003000008479	
7000000094	A	00000000003000008480	
7000000088	A	00000000003000008481	10

PSHU 00000000003000008481 is the first HU number in means of transport loading sequence coming from TM.

The screenshot shows the 'Planned Shipping Handling Unit' table in SAP. The table has four columns: 'PSHU', 'Carrier', 'HU Ty...', and 'LdS...'. The 'PSHU' column contains a list of 10 PSHUs, each with a unique 'PSHU' number. The first row, corresponding to PSHU 3000008481, is highlighted in yellow and has a red border around its 'PSHU' value, '3000008481'. The 'LdS...' column shows a sequence of numbers from 1 to 10.

PSHU	Carrier	HU Ty...	LdS...
3000008481	20000037	P10	1
3000008479	20000037	P10	2
3000008480	20000037	P10	3
3000008476	20000037	P10	4
3000008478	20000037	P10	5
3000008477	20000037	P10	6
3000008475	20000037	P10	7
3000008474	20000037	P10	8
3000008473	20000037	P10	9
3000008472	20000037	P11	10

3.2.8 Step 8: Good's Issue

Tcode: /SCWM/TU

Goods issue transactions are made on the basis of transportation unit.

Process TU - Warehouse ~~9120~~ - Period 19.01.2020 - 19.12.2020

Show Find

Transportation Unit Free Deliveries Free Del. Items Free HUs

Mode	TU	Carrier	SCAC	S&R Acty	TU Int	Obj.Chngd	ActyState	ActStatTxt	S&RActyDir	Directn	S&RActType	StDatPldSt	StTimPlSt	EnDatPl
61	6100000310	20000037		171	6500000120	1	Active	2	1	09.07.2020	00:00:00	09.07.2020		

Assigned Del. Assigned Del. Items Assigned HUs Assigned Vehicles Status PPF Actions Assigned Doors

TU 6100000310 20000037 S&R Acty: TU 171

Handling Unit	Hier. Lev.	Not Unique	AsgmtCat	Obj.Chngd	Status	Load/Unld	GI/GR Pstd	SysStatus	User Sts	Cross-D HU	Ld/Unld WT	LoadWT	Ty.	Sec Bin
7000000090						<input type="checkbox"/>	<input checked="" type="checkbox"/>	Load PORT		<input type="checkbox"/>			9020	GI-ZONE
7000000091						<input type="checkbox"/>	<input checked="" type="checkbox"/>	Load PORT		<input type="checkbox"/>			9020	GI-ZONE
7000000092						<input type="checkbox"/>	<input checked="" type="checkbox"/>	Load PORT		<input type="checkbox"/>			9020	GI-ZONE
7000000093						<input type="checkbox"/>	<input checked="" type="checkbox"/>	Load PORT		<input type="checkbox"/>			9020	GI-ZONE
7000000094						<input type="checkbox"/>	<input checked="" type="checkbox"/>	Load PORT		<input type="checkbox"/>			9020	GI-ZONE
7000000095						<input type="checkbox"/>	<input checked="" type="checkbox"/>	Load PORT		<input type="checkbox"/>			9020	GI-ZONE
7000000096						<input type="checkbox"/>	<input checked="" type="checkbox"/>	Load PORT		<input type="checkbox"/>			9020	GI-ZONE
7000000098						<input type="checkbox"/>	<input checked="" type="checkbox"/>	Load PORT		<input type="checkbox"/>			9020	GI-ZONE
7000000099						<input type="checkbox"/>	<input checked="" type="checkbox"/>	Load PORT		<input type="checkbox"/>			9020	GI-ZONE

3.2.9.1 TU moves door to checkpoint

Creation of Warehouse Tasks in Yard

Show Find

Warehouse Task Data

Internal TU No.	6500000120	Int. Vehicle No.	6600000080	1 / 1
TU	6100000310	Vehicle	6100000310	
TU License Plate No.	26 ES	License Plate Number	26 ES	
Priority Points	0	Route		
Open WT No.		Route Origin		
Crt'd WT Exists	<input type="checkbox"/>	Whse Proc. Type	9999	
Source Yard Bin	YARD DOR1 DOOR1	Confirm WT	<input checked="" type="checkbox"/>	
Source Door	DOR1	Dest. Yard Bin	YARD CHK1 CHK1	
Source-Checkpoint		Dest. Door		
Plnd Exec.Date	00:00:00	Dest.-Checkpoint	CHKQ	
		Printer		

3.2.9.2 TU departures from yard

Transportation Unit Edit Goto **Action** System Help

Process TU - Warehouse

Show

2020 - 19.12.2020

TU NUM EXT Transport... 61*310

Transportation Unit

TU	6100000310	Ass.Obj. Changed		1 / 1
Carrier	20000037	Means of Trans.	KM	
SCAC		TU Packaging Mtrl	KM_TMARAC	
TU License Plate No.	26 ES	Source Door		
Transp.PlngType	C	Yard Bin	YARD CHK1 CHK1	
Receiver	BSQCLNT100	Route for TU		
TransPlan.Sys.	BSQCLNT100	Route Depart. Date	00:00:00	

3.2.10 Step 10: TM status updates from EWM

As soon as the yard entry notification is given for the transportation unit on the EWM side, it updates this status on the TM side. An example is shared below for yard entry.

Display Outbound Karayolu Navlun siparişi 6100000310

Save

Cancel

Edit

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Follow Up

Scheduling

Subcontracting

Create Service Order

Schedule

Set Sta

General Data

Business Partner

Items

Stages

Utilization

Subcontracting

Document Flow

Charges

Execution

Report Event

Insert Event

Statu...	Event	Planned Date	Actual Event Date	Actual Event Time	Time Zone	Source of Exec. Information	Location	Descrip
@5B@	Arrival at Destination		18.07.2020	18:45:14	TUR...	Received via (Un)Loading Notification	SP_1131 -- Shipping Poin	Shipping

The system also triggers notifications in such events as loading start, loading completion, TU leaving the yard etc. The example is shared only for the above.

Apart from this, the first numbers in TM regarding the HUs collected in the warehouse and their quantities were replaced with HU numbers in the warehouse. This section contains some improvement.

Package 250 800 X 1140 Stand...	1	PC	1.664	KG	100,10944	M3	P10	7000000088
Product 420 Samba 3f Sürgül...	100	PC	116	KG	100	M3	A45495	
Package 260 800 X 1140 Stand...	1	PC	1.664	KG	100,10944	M3	P10	7000000090
Product 410 Samba 3f Sürgül...	100	PC	116	KG	100	M3	A45495	
Package 270 800 X 1140 Stand...	1	PC	1.664	KG	100,10944	M3	P10	7000000091
Product 400 Samba 3f Sürgül...	100	PC	116	KG	100	M3	A45495	
Package 280 800 X 1140 Stand...	1	PC	1.664	KG	100,10944	M3	P10	7000000092
Product 390 Samba 3f Sürgül...	100	PC	116	KG	100	M3	A45495	
Package 290 800 X 1140 Stand...	1	PC	1.597,88	KG	43,10944	M3	P10	7000000093
Product 380 Samba 3f Sürgül...	43	PC	49,88	KG	43	M3	A45495	
Package 300 800 X 1140 Stand...	1	PC	1.664	KG	100,10944	M3	P10	7000000094
Product 370 Samba 3f Sürgül...	100	PC	116	KG	100	M3	A45495	
Package 310 800 X 1140 Stand...	1	PC	1.664	KG	100,10944	M3	P10	7000000095
Product 360 Samba 3f Sürgül...	100	PC	116	KG	100	M3	A45495	
Package 320 800 X 1140 Stand...	1	PC	1.664	KG	100,10944	M3	P10	7000000096
Product 350 Samba 3f Sürgül...	81	PC	93,96	KG	81	M3	A45495	
Product 430 Samba 3f Sürgül...	19	PC	22,04	KG	19	M3	A45495	
Package 330 800 X 1140 Stand...	1	PC	1.664	KG	100,10944	M3	P10	7000000098
Product 340 Samba 3f Sürgül...	100	PC	116	KG	100	M3	A45495	

4 Additional Notes & References

After the configuration, process test is done. For error checking, the following transaction code will help you to look at the logs.

- SRT_MONI : EWM side log control
- SBGRFCMON : TM side inbound, outbound log control
- SLG1 : User based application log
- SMQ1 : Outbound Queue
- SMQ2 : Inbound Queue

Apart from the configurations described above, systematic master data should also be maintained. For example, the system is looking for a maintenance in PACKSPEC according to the route information in the TM freight plan. It is also important to perform this maintenance, if not done, system cannot take into account PSHU at the time of creating warehouse orders.

Apart from these, we have also received a lot of support from our basic teams, while running the process the work that needs to be done on that side will be the subject of a separate blog posts.