

Warehouse Management I (WM I)

This case study explains an integrated warehouse management process which is triggered by a purchase order for a warehouse-managed storage location.

Product

S/4HANA 1809 Global Bike

Fiori 2.0

Level

Beginner

Focus

Warehouse Management

Authors

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Version

3.3

Last Update

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MOTIVATION

Warehousing has significant value for logistics.

Current trends such as higher cost pressure, shorter cycles of innovation, higher customer expectations and globalization of markets make great demands on companies, particularly on warehouse logistics. This is especially difficult in industries with high differentiation like the consumer goods industry. Furthermore, customers have increasingly higher demands on reliability, promptness and flexibility of deliveries.

Warehouse management systems support the global flow of goods between the producer and the purchaser and facilitate near fail-proof logistic operations in increasingly complex supply chains.

PREREQUISITES

Before you use this case study, you should be familiar with navigation in the SAP system.

In order to work successfully through this case study, it is not necessary to finish the WM exercises. Anyway, it is recommended.

NOTES

This case study uses the Global Bike (GB) data set, which has been exclusively created for SAP UA global curricula.



Process Overview

Learning Objective Understand and perform a warehousing process for externally procured goods.

Time 70 min

Scenario Due to increasing sales output in your San Diego distribution center, management has decided to install a Warehouse Management System. This implementation has just been completed and the new system needs to be tested. For this purpose, trading goods should be procured by a vendor and put in the stock in San Diego, using the new warehouse management system.

Employees involved Jennifer Brown (Plant Manager San Diego)
Carolin Bruzik (Warehouse Supervisor)
Sunil Gupta (Warehouse Employee)
Yoshi Agawa (Receiving Clerk)

In order to receive goods from a vendor you need to create a purchase order. Goods will be sent by the vendor to the distribution center and you will create a goods receipt in San Diego. The system will automatically create a transfer order for the received goods to put them into stock. In conclusion, you will check if the goods were stored in the correct storage bins. As this case study focuses on Warehouse Management, detailed instructions of how to receive the invoice and how to pay the vendor are not included. However, you may use respective parts of the Materials Management (MM) case study to finalize the procurement process and see the financial impact.

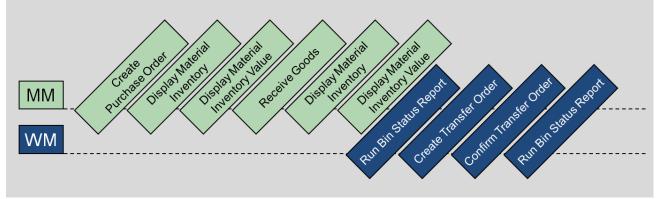


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Step 1: Create Purchase Order

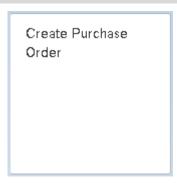
Task Create a purchase order.

Time 10 min

Short Description Use the SAP Fiori Launchpad to create an immediate purchase order for materials from a supplier, i.e. to start the procurement process without having created a purchase requisition before.

Name (Position) Jennifer Brown (Plant Manager San Diego)

To create a purchase order, use the app Create Purchase Order.



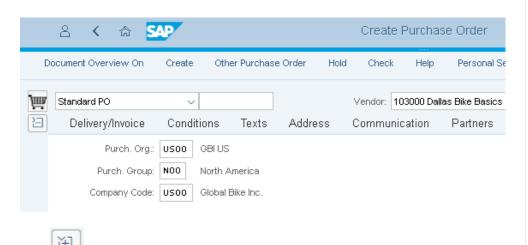
Fiori App

In the *Create Purchase Order* screen, change the type of purchase order to **Standard PO** and enter **103**### (replace ### with your number) as Vendor. Confirm your entries by clicking Enter and accept any warning messages with Enter.

Standard PO 103###

Then, fill in **US00** as Purch.Org, **N00** as Purch. Group and **US00** as Company Code.

US00 N00 US00

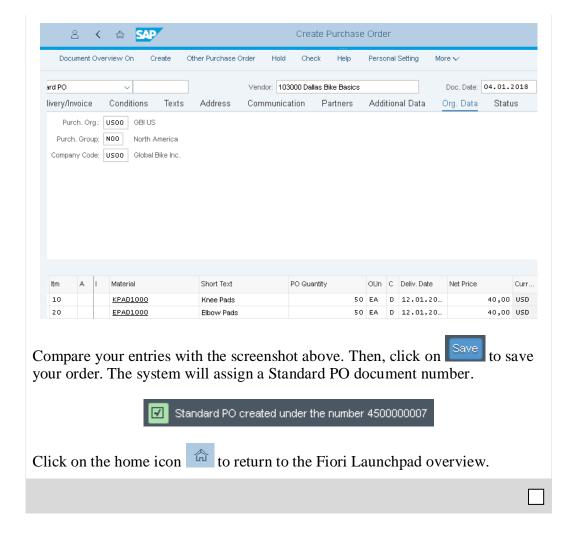


KPAD1###
50
SD00
TG00
40
8 days from today

Select to expand the Item Overview. Enter **KPAD1**### as Material (replace ### with your number), **50** as PO Quantity, **SD00** as Plant, **TG00** as Storage Location, **40** USD as Net Price and **8 days from today** as Delivery Date.

Repeat for EPAD1###

In the next row, repeat your entries but choose **EPAD1**### as Material. Confirm your entries by pressing Enter.





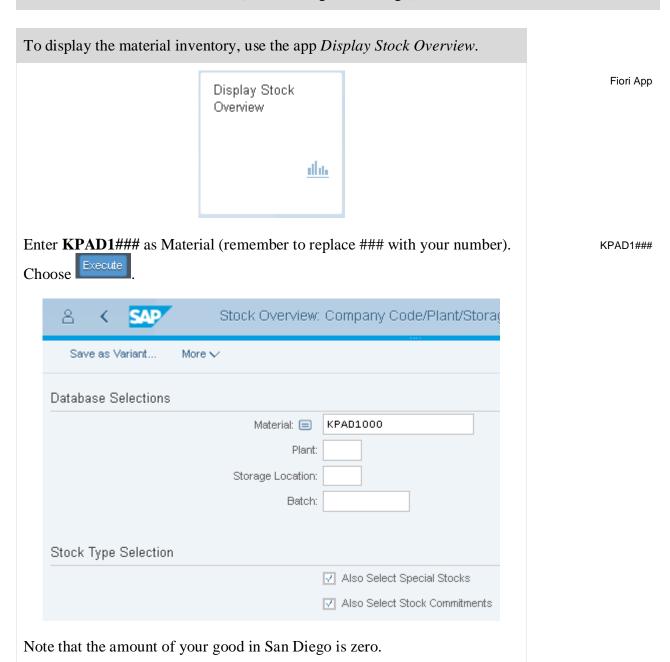
Step 2: Display Material Inventory

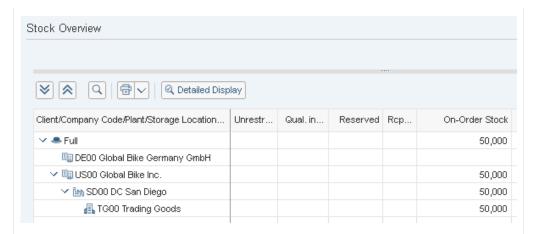
Task View the inventory of your material.

Time 5 min

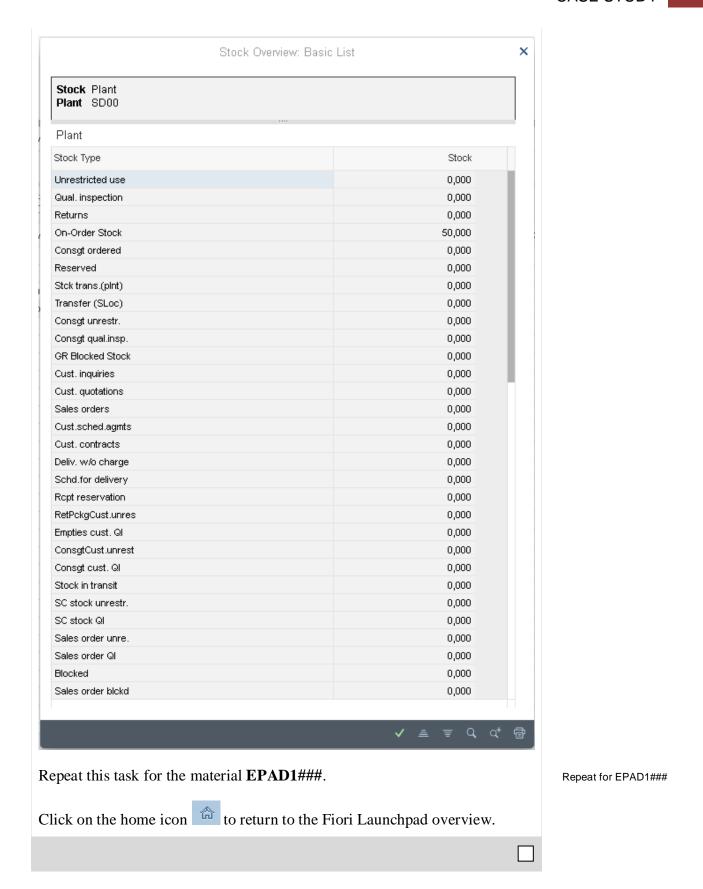
Short Description Use the SAP Fiori Launchpad to display the inventory of your material.

Name (Position) Jennifer Brown (Plant Manager San Diego)





However, after double clicking on *SD00 DC San Diego* you can see that you have an On-Order Stock balance of 50 for your distribution center.





Step 3: Display Material Inventory Value

Task View the value of your material inventory.

Time 5 min

Short Description Use the SAP Fiori Launchpad to display the value of your material inventory.

Name (Position) Jennifer Brown (Plant Manager San Diego)

To display the material inventory value, use the app *Display Warehouse Stock*.



Fiori App

In the *Display Warehouse Stocks of Material* screen, enter **KPAD1**### as Material (remember to replace ### with your number). Ensure that all other search criteria fields are blank and click on Execute.

KPAD1###

8 <	SAP				Disp	ilay Wa	arehou	ise Sto	cks o	f Materia	al		
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Material						Ma	ateria	l desc	ripti	on		Р	lnt Name 1
SLoc SL			ricted Value				sit/Tr Fotal '		In	Quality Tota	/ Insp. Value		ted-Use al Value
KPAD1000						Kr	nee Pa	ds				Н	000 Plant He
TG00			0 0,00	EA EUR			(0,00			0 0,00		o o,oo
KPAD1000						Kr	nee Pa	ds				Н	HOO DC Hambur
TG00			0 0,00	EA EUR			(0,00			0 0,00		o o,oo
KPAD1000						Kr	nee Pa	ds				М	IOO DC Miami
TG00			0 0,00	EA USD			(o 0,00			0 0,00		o 0,00
KPAD1000						Kr	nee Pa	ds				S	DOO DC San Di
TG00			0 0,00	EA USD			(0 00,00			0 0,00		o o,oo
* Total													
		×					×			×		×	

You can see that all values listed for this material are currently zero.

Repeat this task for the material EPAD1 ###.	Repeat for EPAD1###
Click on the home icon to return to the Fiori Launchpad overview.	



Step 4: Receive Goods

Task Receive goods at receiving plant.

Time 5 min

Short Description Use the Fiori Launchpad to create a goods receipt which documents the receiving of your materials in San Diego.

Name (Position) Yoshi Agawa (Receiving Clerk)

To create a goods receipt, use the app *Post Goods Movement*.



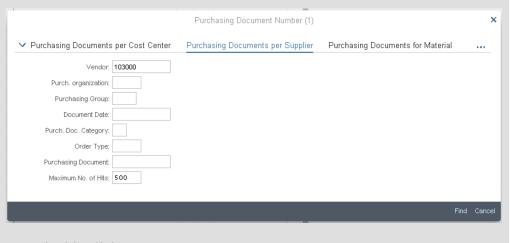
In the *Goods Receipt* screen, change the Material Document drop down to **Goods Receipt** and **Purchase Order**, and put your **Purchase Order Number** in the blank space next to it.

Goods Receipt Purchase Order PO number

If you have not written down the PO number you created in the first task, you may use the F4 help in the PO number field (first blank field next to the second drop-down field).

103###

In the following screen, use to choose the *Purchasing Documents per Supplier* tab. Then, enter **103**### as *Vendor* and press Enter.



Now double click on your entry.

After your order number is filled in, please blank out the position field (field behind your order number).

Note If you do not clear this field, only one of the two line items of your purchase order may be transferred. 4500000007 Goods Receipt Purchase Order Then, click on Execute or press Enter. After your purchase order data appears select the check boxes in the OK OK 50 column. If one of the boxes is grayed out, click on to close the Detail TG00 101 Data Screen. Make sure that Quantity is **50**, SLoc is **TG00**, Movement Type Unrestricted Use is 101 and Stock Type is Unrestricted Use. Goods Receipt Purchase Order 4500000007 - BRUSS 8 (m SAP Help Services for Object ✓ Find (C) Q | Goods Receipt Purchase Order GR goods rec 급 General Vendor & Document Date: 04.01.2018 Delivery Note: Vendor: Dallas Bike Basics Bill of Lading: Posting Date: 04.01.2018 HeaderText: Individual Slip VMP B... Batch Line Mat. Short Text W... OK Qty in U... EUn SLoc Valu... M... Stock Type Knee Pads Elbow Pads □ ✓ 50 □ ✓ 50 101 + Unrestricted-... ∨ DC San Diego 101 + Unrestricted-... ∨ DC San Diego EA Trading Go... Elbow Pads EA Trading Go... Material document to save your receipt. The system will assign a unique Then, click on number material document number. Material document 5000000022 posted. View Details

Click on the home icon to return to the Fiori Launchpad overview.



Step 5: Display Material Inventory

Task View the inventory of your material again.

Time 5 min

Short Description Use the Fiori Launchpad to display the inventory of your material again.

Name (Position) Jennifer Brown (Plant Manager San Diego)

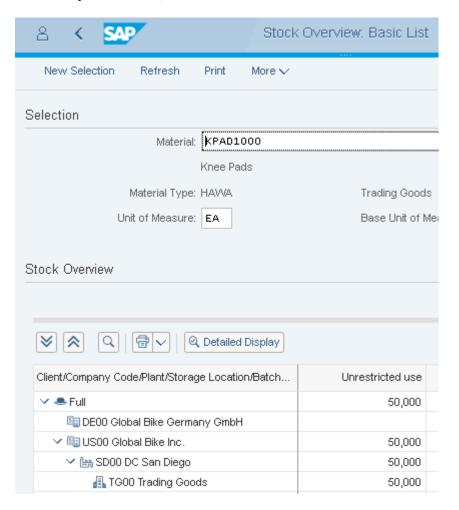
To display the material inventory, use the app Display Stock Overview.



Fiori App

In the *Stock Overview* screen, enter **KPAD1**### as Material (remember to replace ### with your number) and click Execute.

KPAD1###



Note that the amount of your good for unrestricted use in San Diego has been changed now. By double clicking on *SD00 DC San Diego* you can also see that your On-Order Stock balance is zero now.

Repeat this task for the material **EPAD1**###.

Repeat for EPAD1###

Click on the home icon to return to the Fiori Launchpad overview.



Step 6: Display Material Inventory Value

Task View the value of your material inventory again.

Time 5 min

Short Description In this step, you will use the Fiori Launchpad to display the value of your material inventory again.

Name (Position) Jennifer Brown (Plant Manager San Diego)

To display the material inventory value, use the Fiori App *Display Warehouse Stock*.



Fiori App

In the *Display Warehouse Stocks of Material* screen, enter **KPAD1**### as Material (remember to replace ### with your number). Ensure that all other search criteria fields are blank and click on

KPAD1###

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Material						Ma	teria	l desc	ripti	on		P	lnt Name 1	
SLoc SL			ricted Value					ansf. Value		-	ty Insp. al Value		ted-Use al Value	
KPAD1000						Kn	ee Pa	ds				Н	000 Plant He	ide
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KPAD1000						Kn	ee Pa	ds				Н	HOO DC Hambu	rg
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* Total														
		×					×			×		×		

As you can see the value for the 50 units of your material has been added to the distribution center in San Diego.	
Repeat this task for the material EPAD1 ###.	EPAD1###
Click on the home icon to return to the Fiori Launchpad overview.	



Step 7: Run Bin Status Report

Task Check the status of your bins.

Time 5 min

Short Description Use the SAP Fiori Launchpad to run a bin status report, which will display a detailed report of each storage bin within the specified warehouse.

Name (Position) Carolin Bruzik (Warehouse Supervisor)

To run a bin status report, use the app Run Bin Status Report.



Fiori App

In the *Bin Status Report: Initial Screen*, enter **100** (for your San Diego Warehouse) as Warehouse Number and **STBN*###** as Storage bin (replace

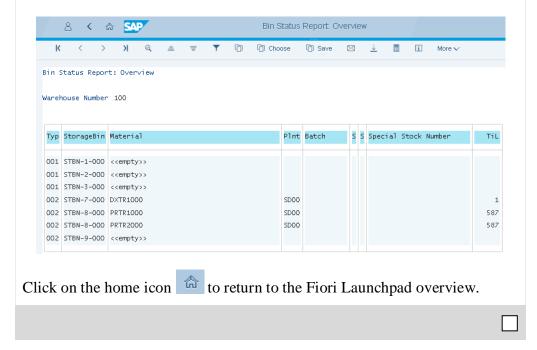
100 STBN*###

with your number). Then, click on

Bin

A SAP		Bin Status Report: Initial Screen
Dynamic selections	Save as Variant Mor	re 🗸
	* Warehouse number: Storage type: Storage bin:	to:
Program Parameters		
	Inventory Method: Only Bins with Stock:	
	Stock Category:	H
	Special Stock Indic: Special Stock Number:	
	Days Since Putaway	

In the *Bin Status Report: Overview* screen you should see a list of all your storage bins for the entire warehouse in San Diego. Double click on one of your storage bins to get detailed information. As you can see the ordered materials are not present yet. Currently they are located in temporary bins.





Step 8: Create Transfer Order

Task Create a transfer order.

Time 10 min

Short Description Use the Fiori Launchpad to create a transfer order to place your goods into your storage bin. It is a handoff from inventory management to warehouse management. The system recognizes that there are goods that have been received but need to be put away.

Name (Position) Sunil Gupta (Warehouse Employee)

To create a transfer order, use the app Create Transfer Order.

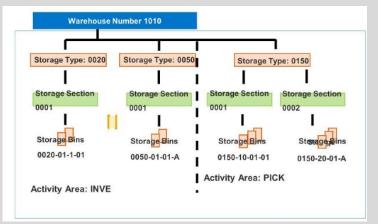


Fiori App

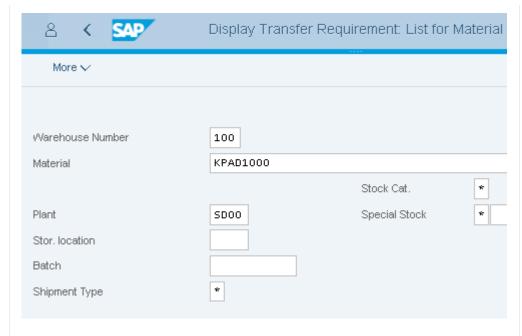
In the *Display Transfer Requirement: List of Material* screen, enter **100** (for your San Diego Warehouse) as Warehouse Number, **KPAD1**### as Material (replace ### with your number) and **SD00** as Plant. Then, press Enter.

100 KPAD1### SD00

Note: The warehouse number is the highest level of organizational unit in warehouse management. In practice, the warehouse number usually corresponds to a physical building or distribution center. Each warehouse number has a substructure that maps the spatial relationship in the warehouse complex in detail.

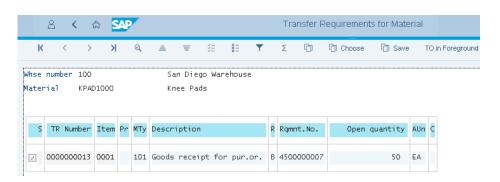


Storage bins are the lowest level of organizational structure. They are assigned to a storage type and a storage section (if one exists). Storage bins represent the physical location where the goods are stored in the warehouse.



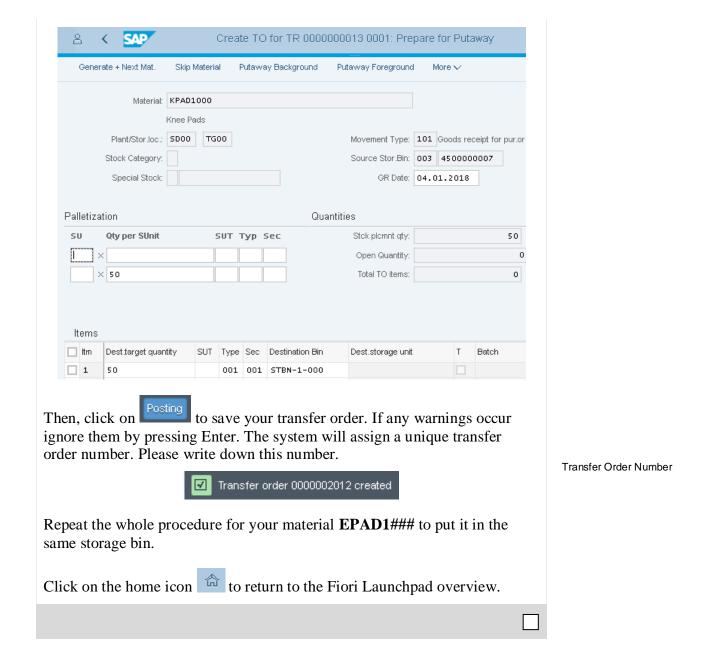
In the *Transfer Requirements for Material* screen, you should see a line item describing the goods just received for your purchase order. The requirement number should be the same as the purchase order number you received earlier. Make sure that the line item is selected and click on the

TO in Foreground button.



In the *Create TO for TR 00000000XX 0001: Prepare for Putaway* screen, hit Enter to copy your quantity of 50 from the *Palletization* section to the *Items* section. Enter **001** as Sec, **STBN-1-###** as Destination Bin (replace ### with your number) and use F4 to select **Shelf Storage** as Type. Confirm your entries by pressing Enter.

001 STBN-1-### 001 (Shelf Storage)





Step 9: Confirm Transfer Order

Task Confirm your transfer order.

Time 10 min

Short Description Use the Fiori Launchpad to confirm the transfer order you created in the previous step. This is to confirm that the goods are physically in the storage bin indicated in the transfer order.

Name (Position) Sunil Gupta (Warehouse Employee)

To confirm a transfer order, use the app *Confirm Transfer Order*.



Fiori App

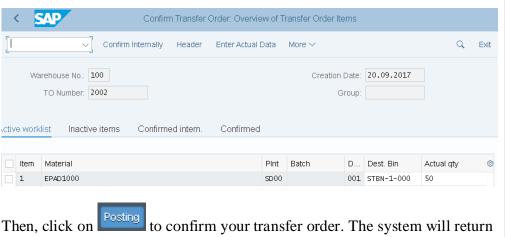
In the Confirm Transfer Order: Initial Screen, enter the Transfer Order **Number** from the previous task and **100** as Warehouse Number. Then press Enter.

Transfer Order Number

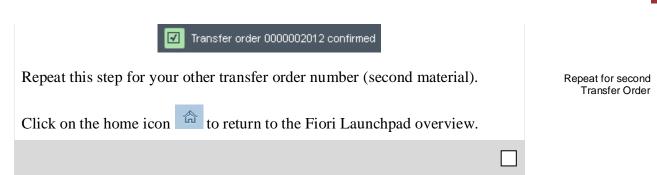
Note If you have not written down the number, you can search for it using the app Display Transfer Order. In the Transfer Orders: List of Resident Documents you have to fill in 100 as Warehouse number. Then, click on

100

In the Confirm Transfer Order: Overview of Transfer Order Items screen you should see an overview of your transfer order created in the previous step. Review all of the details to make sure you have the correct quantity and storage bin.



a success message.





Step 10: Run Bin Status Report

Task Check the status of your bins again.

Time 5 min

Short Description Use the Fiori Launchpad to run a bin status report, which will display a detailed report of each storage bin within the specified warehouse.

Name (Position) Carolin Bruzik (Warehouse Supervisor)

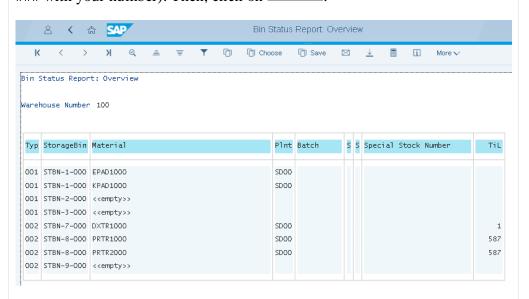
To run a bin status report, use the app Run Bin Status Report.



Fiori App

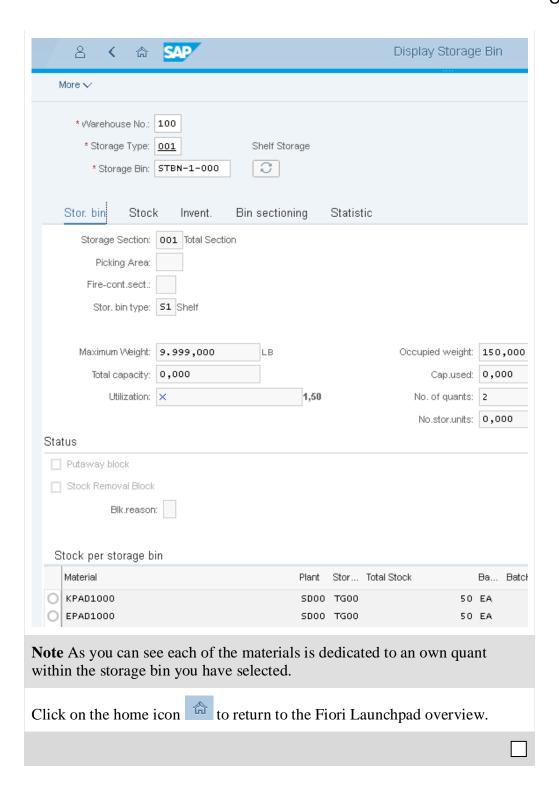
In the *Bin Status Report: Initial Screen*, enter **100** (for your San Diego Warehouse) as Warehouse Number and **STBN***### as Storage bin (replace

with your number). Then, click on



In the *Bin Status Report: Overview* screen you should see that the Storage Bin **STBN-1-**### is filled now. Click on one of your storage bins to display detailed information and check whether 50 of each of your goods are stored in it.

100 STBN*###



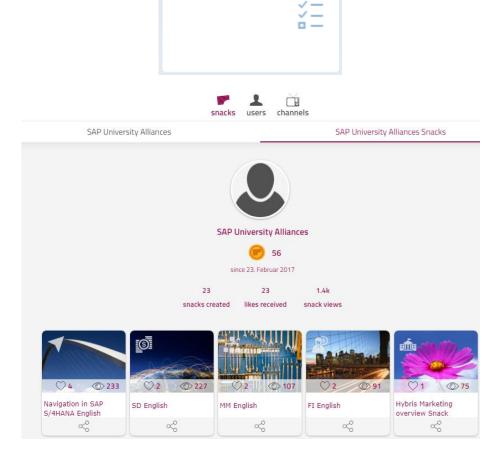
Learning Snacks

In order to test and consolidate your knowledge use the app *Learning Snack WM*.

Learning Snacks
WM

Single-Choice

Fiori App



Learning Snack

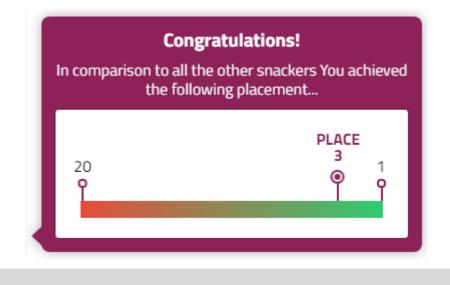
You see all the snacks for the individual case studies. Select the Snack WM English and answer all nine questions.

Hint:

If you do not see any Apps, you need to change the language on the page Learning Snacks. Therefore click on the current language right next to *change language* and choose **English**.



When you have answered all the questions you will receive a success message and your placement.



WM I Challenge

Learning Objective Understand and perform a warehousing process for ext. goods.

Time 70 min

Motivation After having finished the *Warehouse Management I* case study successfully, you should now be able to solve the following challenge.

Scenario The warehouse management system has been tested without any problems, so the management decided to use the system productively. Now your task is to order two different products (water bottles and road helmets) from the supplier *Spy Gear*, 50 pieces each. A water bottle will cost 11 USD and a road helmet will cost 27 USD. The trading goods should be delivered in 8 days.

After the goods arrived in your Distribution Center in San Diego, they need to be transferred in two different bins.

Task Information You can use the *Warehouse Management I* case study as a guideline, but it is recommended to complete this challenge without further assistance to prove your WM skills.