

# Warehouse Management III (WM III)

This case study explains an integrated warehouse management process, which is triggered released/set off by a sales order for material, to be delivered to the customer from a warehouse-managed storage location.

#### **Product**

S/4HANA 1809 Global Bike

Fiori 2.0

#### Level

**Beginner** 

#### **Focus**

Warehouse Management

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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 distinction 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 (GBI) data set, which has been exclusively created for SAP UA global curricula.



# Process Overview

**Learning Objective** Understand and perform a warehousing sales process cycle.

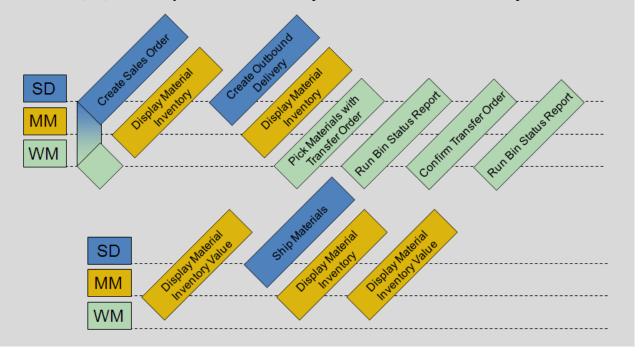
Time 70 min

**Scenario** Due to increasing sales output in your San Diego distribution center, the management has decided to install a Warehouse Management System there. After running some tests, you have some material in your warehouse and you can fulfill a new sales order.

**Employees involved** Karim Messalem (Salesperson 1)

Carolin Bruzik (Warehouse Supervisor) Sunil Gupta (Warehouse Employee) Zarah Morello (Shipping Clerk)

First, you have to create a sales order. In order to fulfill this new sales order, you need to create an outbound delivery. You may remember this part from the SD case study. However, this time the process is slightly different, because you deliver from a warehouse-managed storage location. After picking the materials, goods are shipped to the customer. Because this case study focuses on Warehouse Management, detailed instructions of how to create the invoice and how to receive the payment are not included. However, you may use respective parts of the Sales and Distribution (SD) case study to finalize the sales process and see the financial impact.



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# Step 1: Create Sales Order

Task Create a sales order.

Time 10 min

**Short Description** Use the Fiori Launchpad to create a sales order.

Name (Position) Karim Messalem (Salesperson 1)

To create a sales order, use the app Create Sales Order.

Fiori App



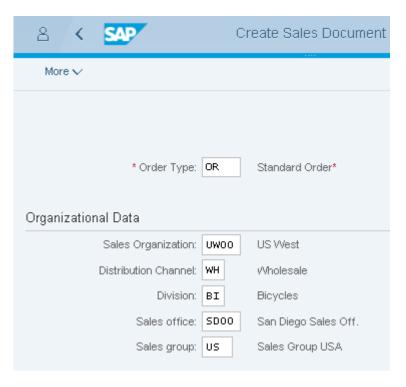
In the *Create Sales Document*, enter **OR** (Standard Order) as Order Type, **UW00** as Sales Organization, **WH** (Wholesale) as Distribution Channel, **BI** (Bicycles) as Division, **SD00** as <u>Sales Office</u> and **US** as Sales Group.

Confirm your entries by clicking



or pressing Enter.

OR UW00 WH BI SD00 US



At the top of the *Create Standard Order: Overview* screen, enter **9**### (SoCal Bikes Irvine; replace ### with your number) as Sold-To Party, **54321**### as Cust. Reference and leave the fields Standard Order and Ship-To Party blank.

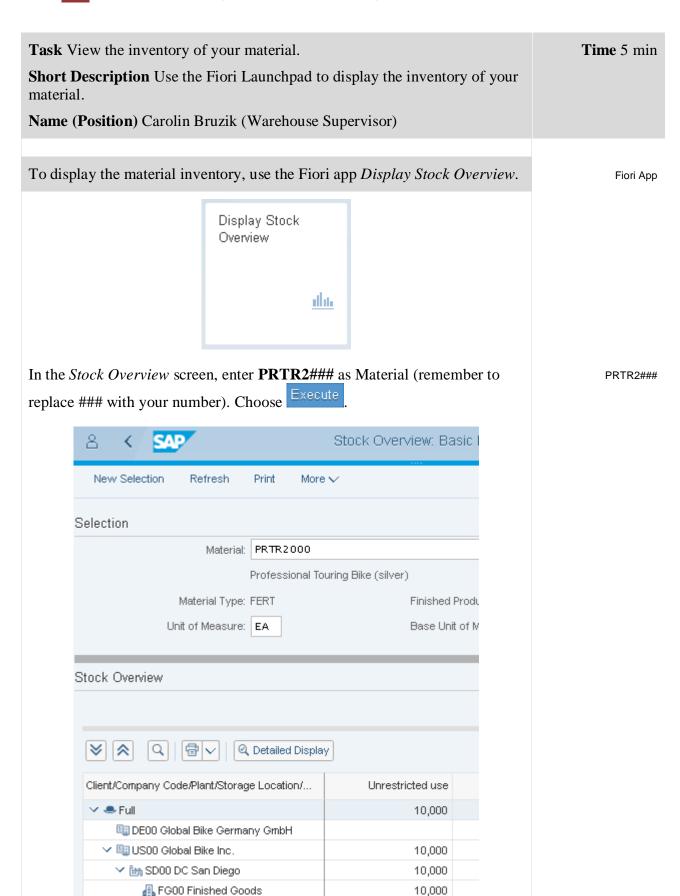
9### 54321###

In the *Sales* tab, enter **one week from today** as Req. Deliv.Date and do the same in the Pricing date field. Then, enter **PRTR2**### as Material and **5** as Order Quantity. Finally, confirm your entries by pressing Enter. You may receive a warning message which you can ignore.

one week from today one week from today PRTR2### 5

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Delivery Block			Volume:		0,000	
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Card type			Exp.date:			
Card Verif.Code						
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Inco. Version						
Incoterms	FOB					
Inco. Location1:	San Diego					
Inco. Location2						
Order Reason				~	·	
Sales Area	UW00 / WH	/ BI US West, Wh	olesale, Bicycles			
All items	: FF	M	T T	Group		
☐ Item Material	Ord	ler Quantity	Un S Description	on	Customer Material Numb	
10 PRTR2000	)	5	EA Profession	onal Touring Bike (silver)		
Compare your en save your order.	The syste	em will assig	gn a unique der 5 has been	standard ord	er number.	Standard Order Numbe
Click on the nom	e icon	to return	to the Fiori	Launchpad	overview.	
					Г	7

# Step 2: Display Material Inventory



Note that you still have the same amount of goods in San Diego.	
Click on the home icon to return to the Fiori Launchpad overview.	



# Step 3: Create Outbound Delivery

Task Create an outbound delivery.

Time 10 min

**Short Description** Use the SAP Fiori Launchpad to create the outbound delivery note for the sales order.

Name (Position) Carolin Bruzik (Warehouse Supervisor)

To create an outbound delivery, use the app Create Outbound Delivery.

Fiori App



In the *Create Outbound Delivery* screen, enter **9**### (SOCAL Bikes Irvine; replace ### with your number) as Ship-To Party, **SD00** as Shipping point, and **Due up until next week** as Planned Creation Date.

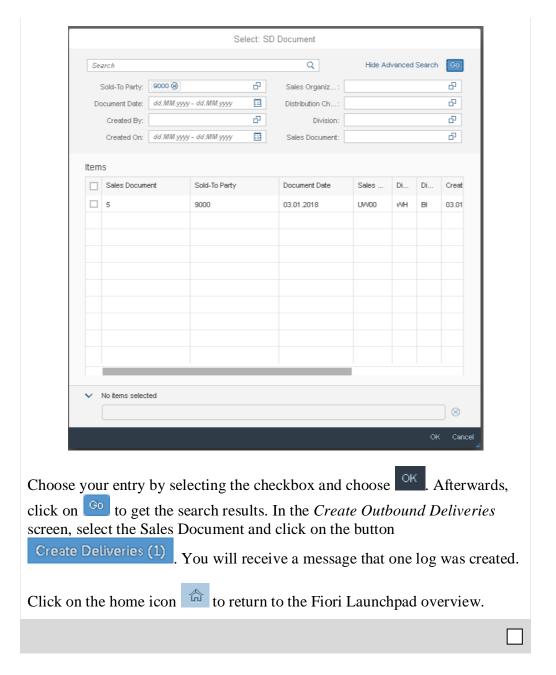
9### SD00

Due up until next week



Use the F4 help to search for your **Sales document** number of the order you have created in the first task as Order. Compare with the screenshot below and start the search by pressing Go.

All Sales document





# Step 4: Change Outbound Delivery

Task Change the outbound delivery.

Time 10 min

**Short Description** Use the SAP Fiori Launchpad to assign the storage location to the outbound delivery note for the sales order.

Name (Position) Carolin Bruzik (Warehouse Supervisor)

To change the outbound delivery, use the app Change Outbound Delivery.

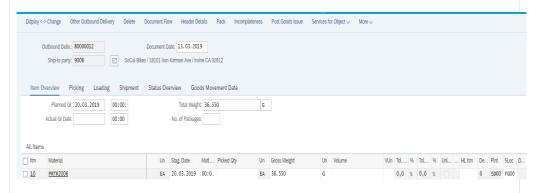
Fiori App



In the *Change Outbound Delivery* screen, use the F4 help. In there, enter 9### (SOCAL Bikes Irvine; replace ### with your number) as Ship-To Party and **SD00** as Shipping point to find your Outbound Delivery number.

F4 9### SD00

Confirm your entries by pressing Find . Double-click on your outbound delivery to transfer it to the field Outbound Delivery. Confirm it with Continue



FG00

Enter your Storage Location **Finished Goods** and confirm with Enter. By filling the field Storage Location, the SAP System realizes that you selected a WM controlled warehouse.

Click on Save your changes.

		Outbound delivery saved		
Click on the home icon	命	to return to the Fiori La	aunchpad 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) Carolin Bruzik (Warehouse Supervisor)

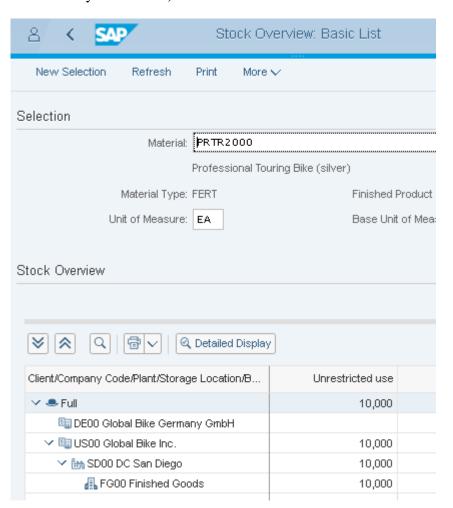
To display the material inventory, use the app *Display Stock Overview*.



Fiori App

In the *Stock Overview* screen, enter **PRTR2**### as Material (remember to replace ### with your number). Confirm with Execute.

PRTR2###



Note that the amount of goods in San Diego has not changed yet.	
Click on the home icon to return to the Fiori Launchpad overview.	



# Step 6: Pick Materials with Transfer Order

**Task** Create a transfer order to pick the materials.

Time 10 min

**Short Description** Use the Fiori Launchpad to create a transfer order based on the delivery note created previously.

Name (Position) Sunil Gupta (Warehouse Employee)

To create an outbound delivery, use the app *Outbound Deliveries for Picking*.

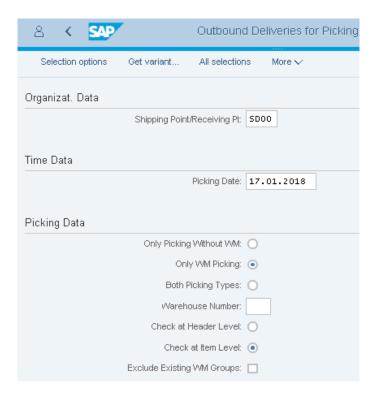
Fiori App



In the Outbound Deliveries for Picking screen, enter SD00 as Shipping

Point/Receiving Pt and select **Only WM Picking**. Then, click on press F8 to execute.

SD00 Only WM-Picking



In the *Day's Workload for Picking* screen, you should see a line item with your **Outbound Delivery Number**. Select it and click on the button.

Outbound Delivery



In the *Create Transfer Order for Delivery Note: Initial Screen*, press Enter to create your transfer order to be able to pick your documents. This will produce the following screen.



On the next screen, click on to save your transfer order. The system will save the transfer order automatically and assign a unique transfer order number. Please note your number:



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

Transfer Order Number



#### Step 7: Run Bin Status Report

Task Check the status of your bins.

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.

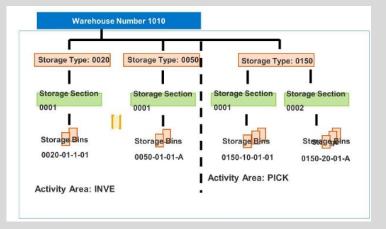
Fiori App



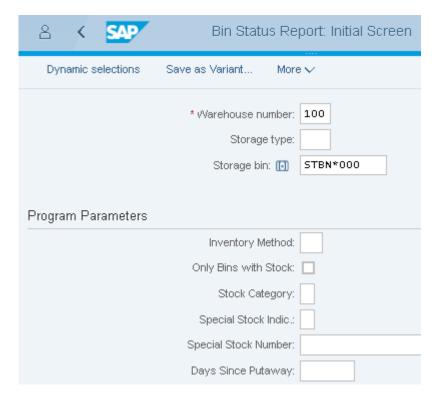
In the *Bin Status Report: Initial Screen*, enter **100** (for your San Diego Warehouse) as Warehouse Number and **STBN\*###** as Storage bin (replace ### with your number). Then, click on

100 STBN\*###

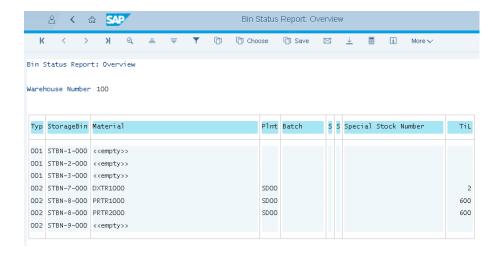
**Note:** The warehouse number is the highest level of organizational unit in warehouse management. In practice, the warehouse number usually corresponds to a physical building or distribution center. Each warehouse number has a substructure that maps the spatial relationship in the warehouse complex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

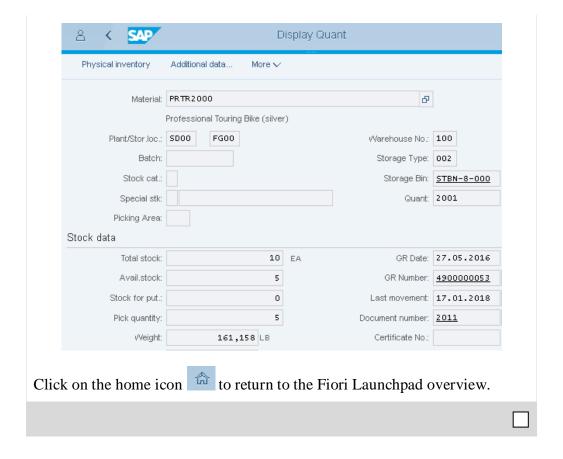


In the *Bin Status Report: Overview* screen you should see that the Storage Bin **STBN-8-**### is filled.



Click on your material to display detailed information of this quant and check whether 10 pieces of your good are stored in it.

**Note:** As you can see 5 pieces of your material are marked as available stock and the other 5 as pick quantity.





# Step 8: Confirm Transfer Order

Task Confirm your transfer order.

Time 5 min

**Short Description** Use the Fiori Launchpad to confirm the transfer order, you created in the previous step. This confirms 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

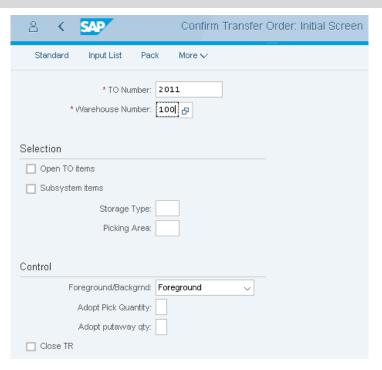
In the *Confirm Transfer Order: Initial Screen*, enter the **TO Number** from the previous task and **100** as Warehouse Number. Then, press Enter.

TO Number 100

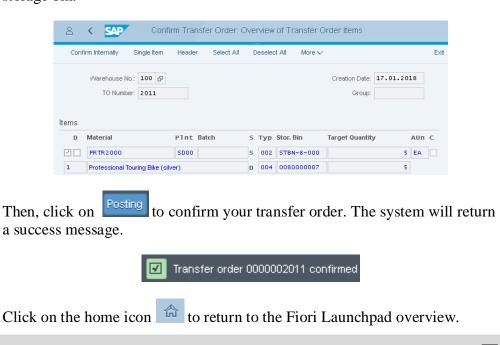
**Note:** If you have not written down the number, you can search for it using the app *Display Transfer Order*.

100

In the *Transfer Orders: List of Resident Documents* you have to fill in **100** as *Warehouse number*. Then, click on



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.





#### Step 9: 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 displays a detailed report of each storage bin within the specified warehouse.

Name (Position) Carolin Bruzik (Warehouse Supervisor)

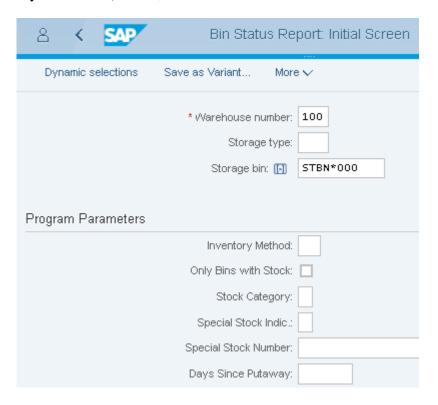
To run a bin status report, use the app Run Bin Status Report.

Fiori App

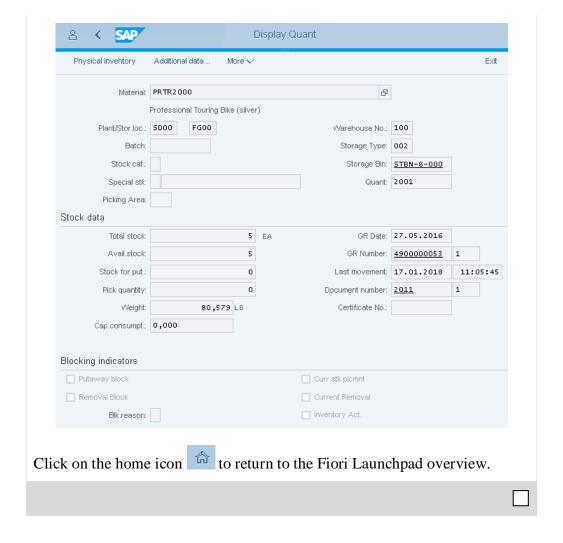


In the *Bin Status Report: Initial Screen*, enter **100** (for your San Diego Warehouse) as Warehouse Number and **STBN\*###** as Storage bin (replace ### with your number). Then, click on Execute.

100 STBN\*###



In the *Bin Status Report: Overview* screen click on your material in Storage Bin **STBN-8-**### to display detailed information and check if there are just 5 pieces of your good left.





# Step 10: Display Material Inventory Value

**Task** View the value of your material inventory.

Time 5 min

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

Name (Position) Carolin Bruzik (Warehouse Supervisor)

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



Fiori App

In the *Display Warehouse Stocks of Material* screen, enter **PRTR2**### as Material (replace ### with your number). Ensure that all other search criteria

PRTR2###

fields are blank and click on Execute



Note the total value associated with the DC in San Diego.

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

L



# Step 11: Ship Materials

**Task** Ship the materials.

Time 5 min

**Short Description** Use the Fiori Launchpad to ship the materials by posting a goods issue. This will reduce unrestricted stock to reflect that the inventory is shipped. It also indicates a change of ownership.

Name (Position) Zarah Morello (Shipping Clerk)

To ship materials, use the app *Change Outbound Delivery*.



Fiori App

In the *Change Outbound Delivery* screen, enter your **Outbound Delivery Number** from the *Create Outbound Delivery* task and press Enter.

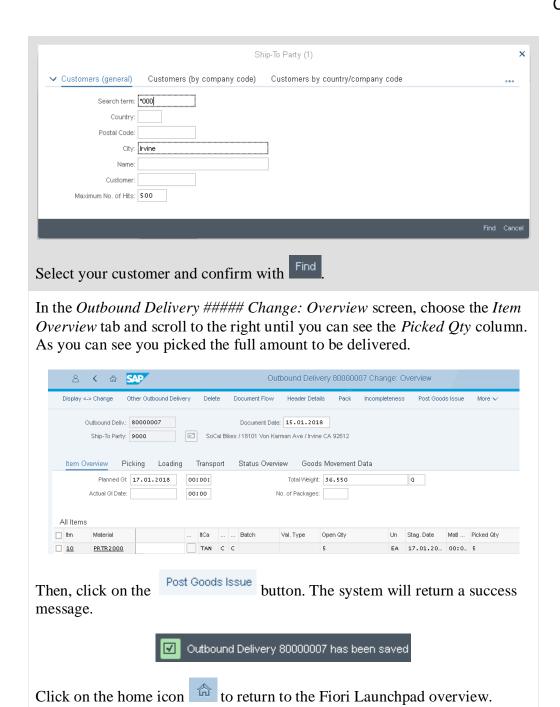




**Note:** If you have not written down the number you can search for it using the F4 help by choosing .

For doing it, please select the *Ship-To Party* field and click on Find or press F4. In the *Select: Ship-To Party* pop up, enter **Irvine** as City and \*### as Customer. Then, click on Find or press Enter.

Irvine



# Step 12: Display Material Inventory

**Task** View the inventory of your material again.

Time 5 min

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

Name (Position) Carolin Bruzik (Warehouse Supervisor)

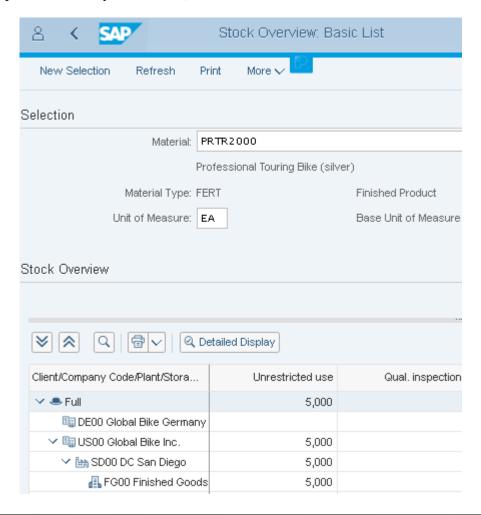
To display the material inventory, use the app *Display Stock Overview*.

Fiori App



In the *Stock Overview* screen, enter **PRTR2**### as Material (remember to replace ### with your number). Choose Execute.

PRTR2###



Note that the amount of your goods in San Diego has decreased. This represents that 5 pieces of your material actually have been shipped.								
Click on the home icon to return to the Fiori Launchpad overview.								



# Step 13: Display Material Inventory Value

**Task** View the value of your material inventory again.

Time 5 min

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

Name (Position) Carolin Bruzik (Warehouse Supervisor)

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

Fiori App



In the *Display Warehouse Stocks of Material* screen, enter **PRTR2**### as Material (remember to replace ### with your number). Ensure that all other search criteria fields are blank and click on Execute.

PRTR2###

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Q = 7	₹ ₹	Σ	Σ/Σ	<u></u>	⊠ #	睱	體	i	K	<	>	К	More ✓			
Material							cription						t Name 1			
SLoc SL	Unrest Total	ricted Value			Transit/Tr Total								ed-Use Value	Bloc Total Va		Re Total
PRTR2000					Profess	ional	Touring	Bike	(sil	ver)		DLO	D Plant Da	illas		
FG00		0 0,00	EA USD			0 0,00			0,00				0 0,00	0,	,00	
PRTR2000					Profess	ional	Touring	Bike	(sil	ver)		HD0	D Plant He	idelberg		
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As you can see the values, associated with the material in San Diego, has been decreased. So there is no value associated to the *Transit/Transf.* for San

Diego. This indicates the order.	change of ownership after processing the shipping	
Click on the home icon	to return to the Fiori Launchpad overview.	
		]

# Learning Snacks

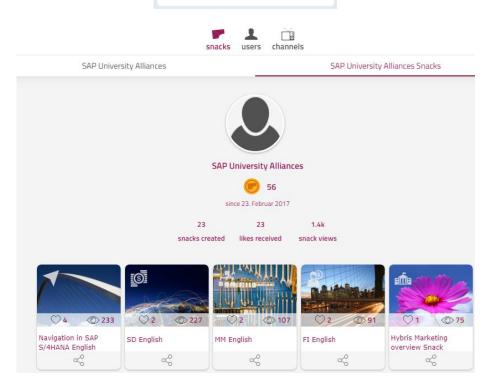
In order to test and consolidate your knowledge, use the app *Learning Snack WM*.

Learning Snacks

WM

Single-Choice

Fiori App



Learning Snack

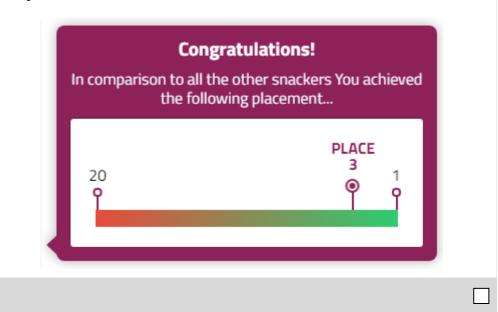
You see all the snacks for the individual case studies. Select the Snack WM English and answer all nine questions.

#### 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**.



After you answered all the questions, you will receive a success message and your placement.



# WM III Challenge

**Learning Objective** Understand and perform a warehousing sales process cycle.

Time 75 min

**Motivation** After having finished the *Warehouse Management III* 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. Due to a higher demand of bikes for the Tour de France, black Professional Touring Bikes are almost out of stock in Europe. They are still available in the Distribution Center in San Diego, so the delivery of the wholesale sales order can be managed by the new warehouse management system.

The customer VeloDOM from Magdeburg (Germany) ordered 20 black Professional Touring Bikes with a delivery time of 10 days.

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

