

Warehouse Management (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 2022 Global Bike

Fiori 3.0

Level

Beginner

Focus

Warehouse Management

Authors

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Version

4.2

Last Update

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MOTIVATION

Warehousing has significant value for logistics.

Current trends such as higher cost shorter cycles pressure. innovation, higher customer expectations and globalization of markets make great demands on companies, particularly logistics. warehouse This is especially difficult in industries with high distinction like the consumer industry. goods 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 (Sales Person 1 US West)

Carolin Bruzik (Warehouse Supervisor) Sunil Gupta (Warehouse Employee) Zarah Morello (Good Issue 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.

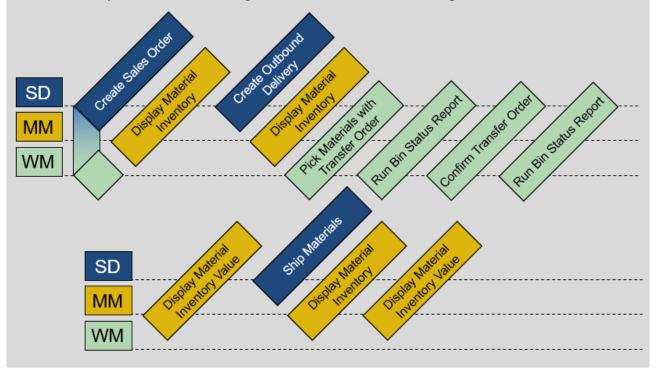


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WM III Challenge	



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 (Sales Person 1 US West)

To create a sales order, use in the *Warehouse Management* area on the *Issue from Storage* page in the *Sales Person* role the app *Manage Sales Order*.

Fiori App



In the *Manage Sales Orders* view, click on the button Create Sales Order VA01. This will switch the app, and you will navigate to the *Create Sales Documents* view.

In the *Create Sales Documents* enter **OR** (Standard Order) as Order Type, **UW00** as Sales Organization, **WH** (Wholesale) as Distribution Channel, **BI** (Bicycles) as Division, **SD00** as Sales Office and **US** as Sales Group. Confirm your entries by clicking Continue or pressing Enter.

OR UW00 WH BI SD00

< SAP Create Sales Documents
Menu∨
* Order Type: OR
Organizational Data
Sales Organization: UW00
Distribution Channel: WH
Division: BI
Sales Office: SD00

At the top of the *Create Standard Order: Overview* screen, enter **133**### (SoCal Bikes Irvine; replace ### with your number) as Sold-To Party and as Ship-To-Party, **54321**### as Cust. Reference and leave the fields Standard Order blank.

133### 54321###

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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

< SAP Create Standard Order: Overview	Search In: "Apps"	
Menu ∨ 6∂ 🗐 🗒 🛣 Σ •••		
Standard Order: Sold-to Party: 133400 Company SoCal Bikes, 18101 Von Karman Ave Ship-to Party: 133400 Company SoCal Bikes, 18101 Von Karman Ave Cust. Reference: 54321400 Cust. Ref. Date:		
Sales Item Overview Item detail Ordering party Procurement Shipping	Reason for rejection	
*Req. Deliv. Date: D 08/10/2023 Deliver. Plant: Total Weight: Volume: Billing Block: Volume: Pricing Date: 08/ Pyt Terms: 0001 Pay immediately w/o deduction Inco. Version: Incoterms: FOB Inco. Location1: San Diego		
ttem Material Req. Segment 10 PRTR2400	Order Quantity Un S Item Description 5 EA Professional Touring Bike (silver)	
Compare your entries with the screenshot your order. The system will assign a unique Standard Order 10	t above. Then, click on save to save ue standard order number. The has been saved.	Standard Order Number
Click on to return to the SAP Fiori	Launchpad.	
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Step 2: Display Material Inventory

Task View the inventory of your material.

Time 5 min

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

Name (Position) Carolin Bruzik (Warehouse Supervisor)

To display the material inventory, use in the *Warehouse Management* area on the *Issue from Storage* page in the *Warehouse Supervisor* role the app *Display Stock Overview*.

Fiori App



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

PRTR2###

< SAP Stock Overview: Company Code/Plant/Storage Location	/Batch
Menu ✓ 🖫 Save as Variant 👓	
Database Selections	
Material: PRTR2400	
Plant:	to:
Storage Location:	to:
Batch:	to:
Choose Execute. Stock Overview	
★ Q © Detailed Display	
Client/Company Code/Plant/Storage Location/Batch/Special Stock	Unrestricted use
∨ ● Full	20.000
DE00 Global Bike Germany GmbH	
✓ 🗓 US00 Global Bike Inc.	20.000
▼ Image: SD00 DC San Diego	20.000
FG00 Finished Goods	20.000

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



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 in the *Warehouse Management* area on the *Issue from Storage* page in the *Warehouse Supervisor* role the app *Create Outbound Delivery*.

Fiori App

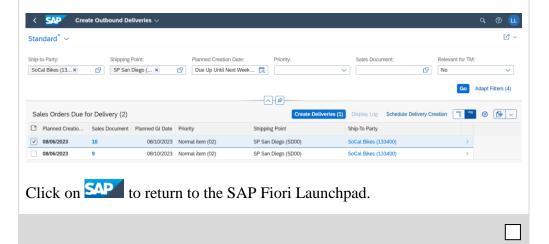


In the *Create Outbound Delivery* screen, enter **133**### (SOCAL Bikes Irvine; replace ### with your number) as Ship-To Party, **SD00** as Shipping point, and **Due up until next week** as Planned Creation Date. Start the search by pressing

133### SD00

Due up until next week

In the *Create Outbound Deliveries* screen, select the Sales Document and click on the button Create Deliveries (1). You will receive a message that one log was created.





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)

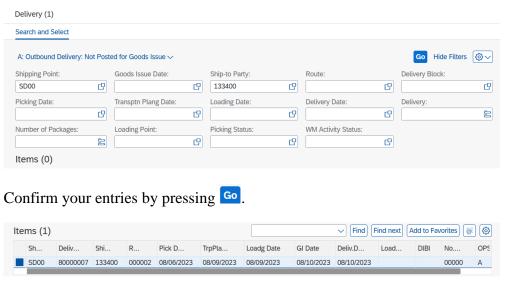
To change the outbound delivery, use in the *Warehouse Management* area on the *Issue from Storage* page in the *Warehouse Supervisor* role the app *Change Outbound Delivery*.

Fiori App



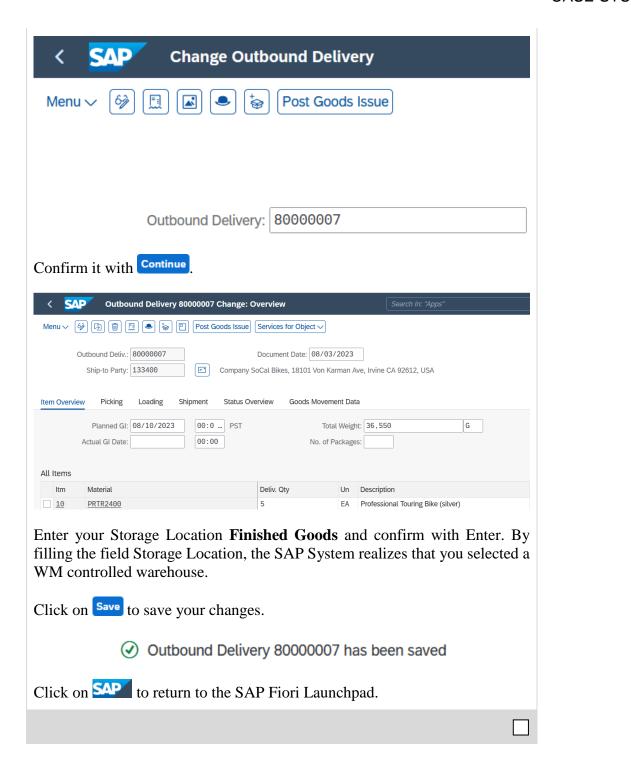
In the *Change Outbound Delivery* screen, use the F4 help in the field *Outbound Delivery*. In the tab *Outbound Delivery: Not Pasted for Goods Issue* enter **133**### (SOCAL Bikes Irvine; replace ### with your number) as Ship-To Party and **SD00** as Shipping point to find your Outbound Delivery number.

F4 133### SD00



Double-click on your outbound delivery to transfer it to the field Outbound Delivery.

FG00





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.

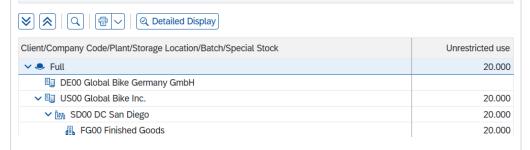
Name (Position) Carolin Bruzik (Warehouse Supervisor)

To display the material inventory, use in the *Warehouse Management* area on the *Issue from Storage* page in the *Warehouse Supervisor* role the app *Display Stock Overview*.

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 to return to the SAP Fiori Launchpad.



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 in the *Warehouse Management* area on the *Issue from Storage* page in the *Warehouse Employee* role 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

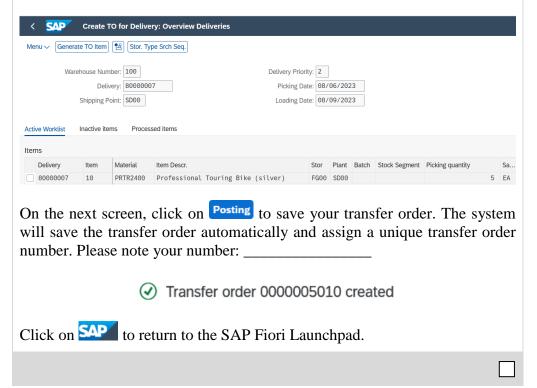
< SAP Outbound Deliveries for Picking	
Menu ✓ Save as Variant ♣ ြ ि ि Create TO in Background	
Organizat. Data	
Shipping Point/Receiving Pt: SD00	to:
Time Data	
Picking Date: 08/03/2023	to: 08/11/2023
Picking Data	
Only Picking Without WM:	
Only WM Picking:	
-	
Warehouse Number:	to:
Check at Header Level:	
Check at Item Level: ●	
Exclude Existing WM Groups:	

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 To in Foreground button.

Outbound Delivery Number



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.



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 in the Warehouse Management area on the Issue from Storage page in the Warehouse Supervisor role the app Run Bin Status Report.

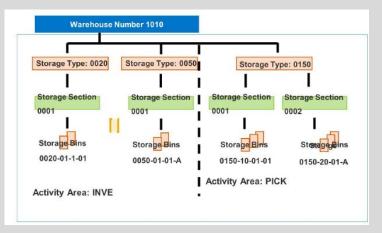
Fiori App



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.

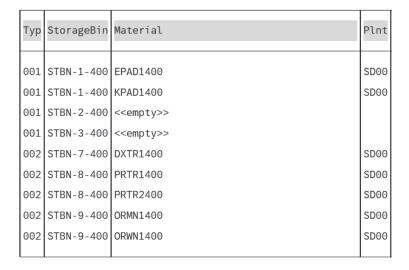
100 STBN*###

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.



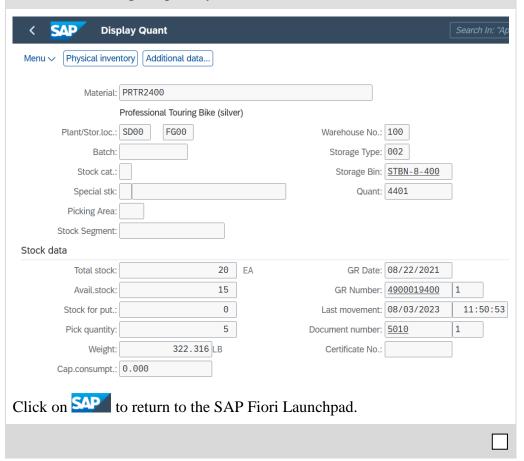
Storage bins are the lowest level of organizational structure. They are assigned to a storage type and a storage section (if one exists). Storage bins represent the physical location, where the goods are stored in the warehouse.

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 15 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 have been physically picked from the storage bin, indicated in the transfer order.

Name (Position) Sunil Gupta (Warehouse Employee)

To confirm a transfer order, use in the Warehouse Management area on the Issue from Storage page in the Warehouse Employee role the app Confirm Transfer Order.



Fiori App

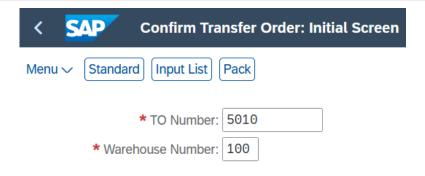
In the *Confirm Transfer Order: Initial Screen*, enter the **TO Number** from the previous task and **100** as Warehouse Number. Then, press Enter.

TO Number 100

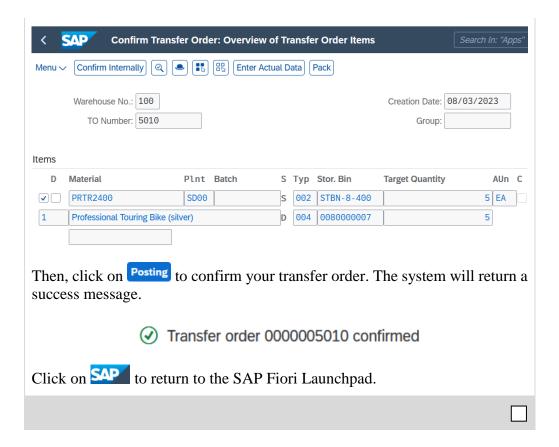
Note If you have not written down the number, you can search for it using the app *Display Transfer Order*.

100

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



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 in the *Warehouse Management* area on the *Issue from Storage* page in the *Warehouse Supervisor* role the app *Run Bin Status Report*.

Fiori App

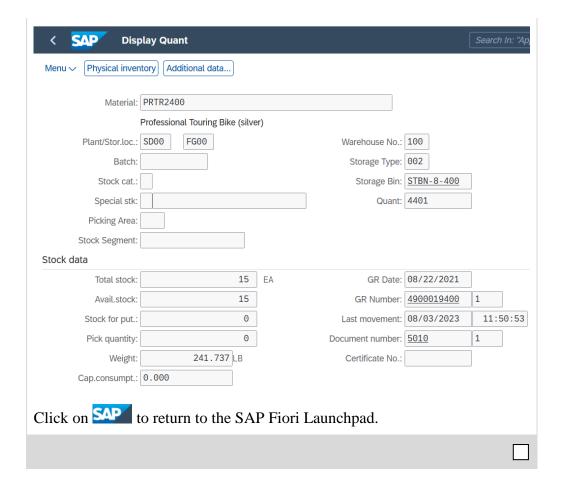


In the *Bin Status Report: Initial Screen*, enter **100** (for your San Diego Warehouse) as Warehouse Number and **STBN***### as Storage bin (replace ### with your number). Then, click on Execute.

100 STBN*###

SAP Bin Status Report: Initial Screen	[
Menu ✓ 🖫 Save as Variant 📳 👓	
* Warehouse number: 100	
Storage type:	to:
Storage bin: STBN*400	to:

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 15 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 in the *Warehouse Management* area on the *Issue from Storage* page in the *Warehouse Supervisor* role the app *Display Warehouse Stock*.



Fiori App

PRTR2### SD00

In the *Display Warehouse Stocks of Material* screen, enter **PRTR2**### as Material (replace ### with your number) and **SD00** as Plant. Ensure that all other search criteria fields are blank and click on Execute.

Material							
Locat SL	Unrestricted	Unit	Transit/Transf.	Quality Inspection	Restricted-Use	Blocked	Return
	Total Value	Crcy	Total Value	Total Value	Total Value	Total Value	Total Valu
PRTR2400			Professional	Touring Bike (silver)	SD00 DC San	Diego	
FG00	20	EA	0	0	0	0	0
	30,000.00	USD	0.00	0.00	0.00	0.00	0.00
* Total							
	30,000.00	USD	0.00	0.00	0.00	0.00	0.00

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

Click on to return to the SAP Fiori Launchpad.



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 (Good Issue Clerk)

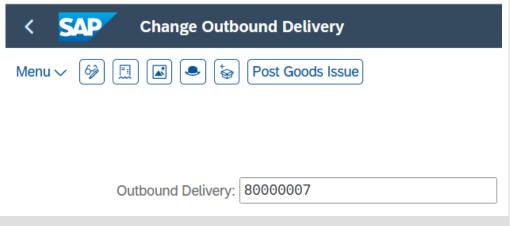
To ship materials, use in the *Warehouse Management* area on the *Issue from Storage* page in the *Good Issue Clerk* role the app *Change Outbound Delivery*.



Fiori App

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

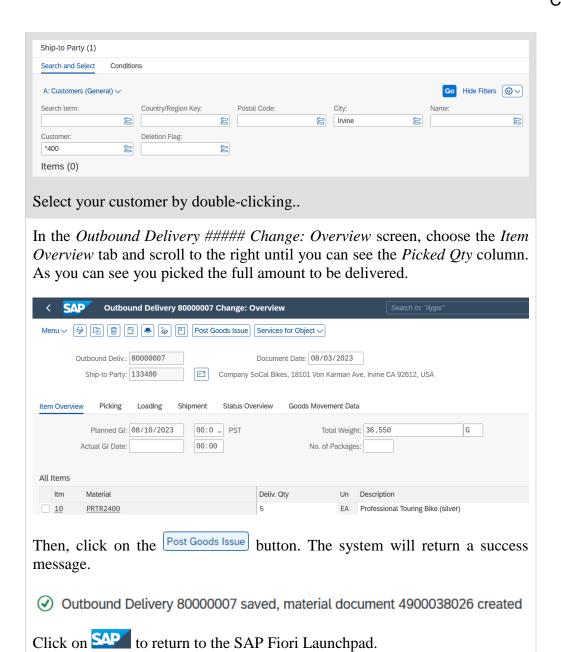
Outbound Delivery Number



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

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

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)

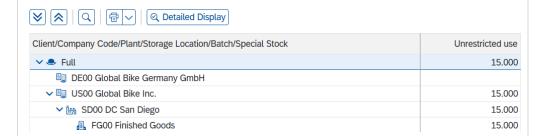
To display the material inventory, use in the *Warehouse Management* area on the *Issue from Storage* page in the *Warehouse Supervisor* role the app *Display Stock Overview*.

Fiori App



In the Stock Overview screen, enter PRTR2### as Material (remember to

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 to return to the SAP Fiori Launchpad.

replace ### with your number). Choose Execute

П



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 in the *Warehouse Management* area on the *Issue from Storage* page in the *Warehouse Supervisor* role 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) and **SD00** as Plant. Ensure that all other search criteria fields are blank and click on Execute.

PRTR2### SD00

Material							
Locat SL	Unrestricted	Unit	Transit/Transf.	Quality Inspection	Restricted-Use	Blocked	Return
	Total Value	Crcy	Total Value	Total Value	Total Value	Total Value	Total Value
PRTR2400			Professional	Touring Bike (silver)	SD00 DC San	Diego	
FG00	15	EA	0	0	0	0	0
	22,500.00	USD	0.00	0.00	0.00	0.00	0.00
* Total							
	22,500.00	USD	0.00	0.00	0.00	0.00	0.00

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 change of ownership after processing the shipping order.

Click on to return to the SAP Fiori Launchpad.

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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.