

# 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 2020 Global Bike

Fiori 3.0

#### Level

**Beginner** 

#### **Focus**

Warehouse Management

#### **Authors**

Simha Magal Stefan Weidner Chris Bernhardt

#### Version

4.1

#### **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.

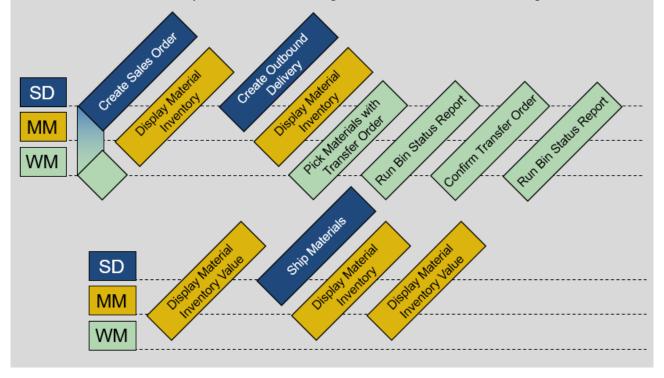
Time 70 min

**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 (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 Order* page, click on *Create Sales Order – VA01*Create Sales Order - VA01

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 US

Create Sales Documents
More ✓
* Order Type: OR
Organizational Data
Sales Organization: UW00
Distribution Channel: WH
Division: BI
Sales Office: SD00
Sales Group: US

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

133### 54321###

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Ship-To-Party, **54321**### as Cust. Reference and leave the fields Standard Order blank.

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.

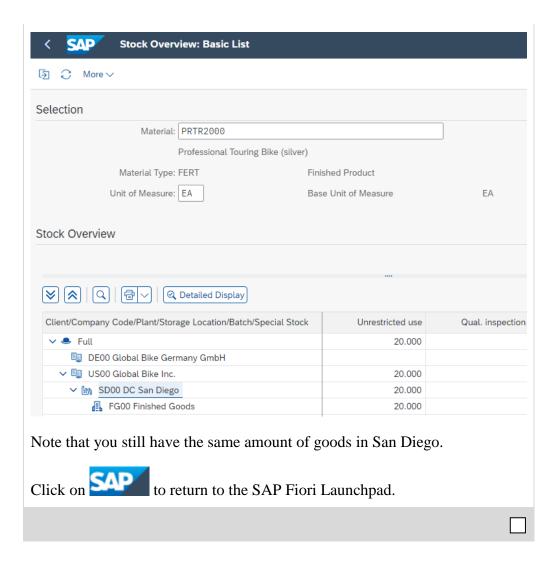
one week from today one week from today PRTR2### 5

⟨ SAP	
6ò -13 🗒 ⊗ Σ More ∨ 📯 Exit	
Standard Order:  Sold-To Party: 133000  SoCal Bikes / 18101 Von Karman Ave / Irvine CA 92612  Ship-To Party: 133000  SoCal Bikes / 18101 Von Karman Ave / Irvine CA 92612  Cust. Reference: 54321000  Cust. Ref. Date:  Sales Item Overview Item detail Ordering party Procurement Shipping Reason for rejection  * Req. Deliv.Date: D 06/22/2022  Deliver.Plant:  Complete Dlv.: Total Weight: 36,550 G  Delivery Block: Volume: 0.000  Billing Block: Pricing Date: 06/22/2022  Pyt Terms: 0001 Pay immediately w/o deduction  Inco. Version:  Incoterms: FOB	
Inco. Location1: San Diego	
All Items	
Item Material Req. Segment Order Quantity Un S Item Description	
☐ 10 PRTR2000 5 EA ☐ Professional Touring Bike (silver)	
Compare your entries with the screenshot above. Then, click on save your order. The system will assign a unique standard order number.	Chandard Order Number
Standard Order 26 has been saved.	Standard Order Number
Click on to return to the SAP Fiori Launchpad.	



### Step 2: Display Material Inventory

Time 5 min Task View the inventory of your material. 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 Fiori App on the Issue from Storage page in the Warehouse Supervisor role the app Display Stock Overview. Display Stock Overview dh In the Stock Overview screen, enter PRTR2### as Material (remember to PRTR2### replace ### with your number). SAP Stock Overview: Company Code/Plant/Storage Location/Batch ☐ Save as Variant... More ∨ **Database Selections** Material: PRTR2000 Plant: Storage Location: Choose Execute





### 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

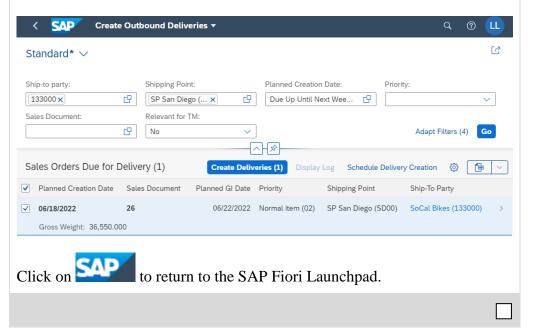


In the *Create Outbound Delivery* screen, enter **133**### (SOCAL Bikes Irvine; replace ### with your number) as Ship-To Party, **SD00** as Shipping point, and **Due up until next week** as Planned Creation Date. Start the search by pressing Go.

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*.

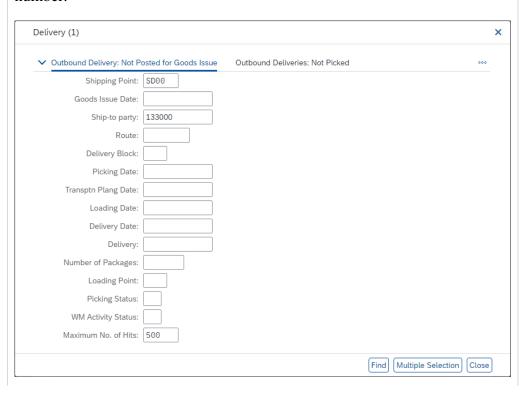
Fiori App

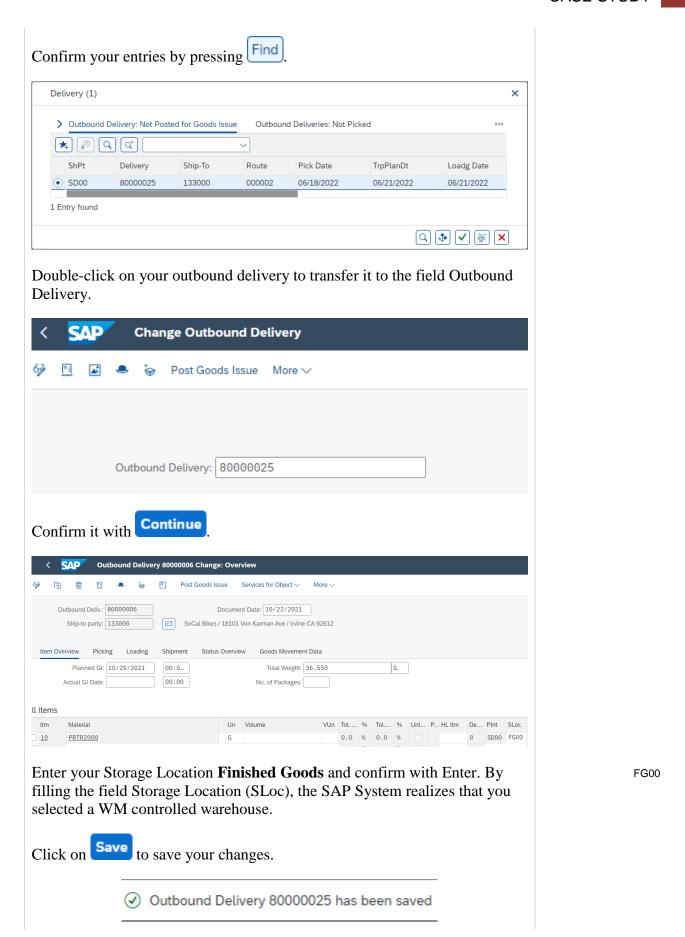


In the *Change Outbound Delivery* screen, use the F4 help in the field *Outbound Delivery*. In the tab *Outbound Delivery: Not Pasted for Goods Issue* enter **133**### (SOCAL Bikes Irvine; replace ### with your number) as Ship-To Party and **SD00** as Shipping point to find your Outbound Delivery number.

F4 133###

SD00









### 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*.



Fiori App

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

PRTR2###

election		
Material: PRTR2000		
Professional Touring Bike (silver		
Material Type: FERT Finished Product		
Unit of Measure: EA	Unit of Measure: EA Base Unit of Measure	
★ Q Image: Contract of the contr		
	k Unrestricted use	Qual. inspection
	k Unrestricted use 20.000	Qual. inspectio
Client/Company Code/Plant/Storage Location/Batch/Special Stock		Qual. inspectio
Client/Company Code/Plant/Storage Location/Batch/Special Stoci		Qual. inspection
Client/Company Code/Plant/Storage Location/Batch/Special Stoci	20.000	Qual. inspection

Note that the amount of goods in San Diego has not changed yet.





### 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

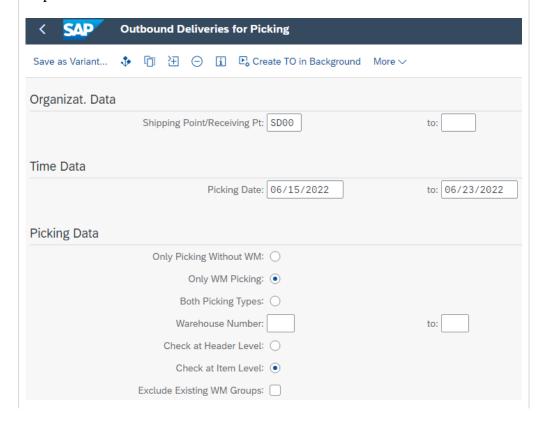


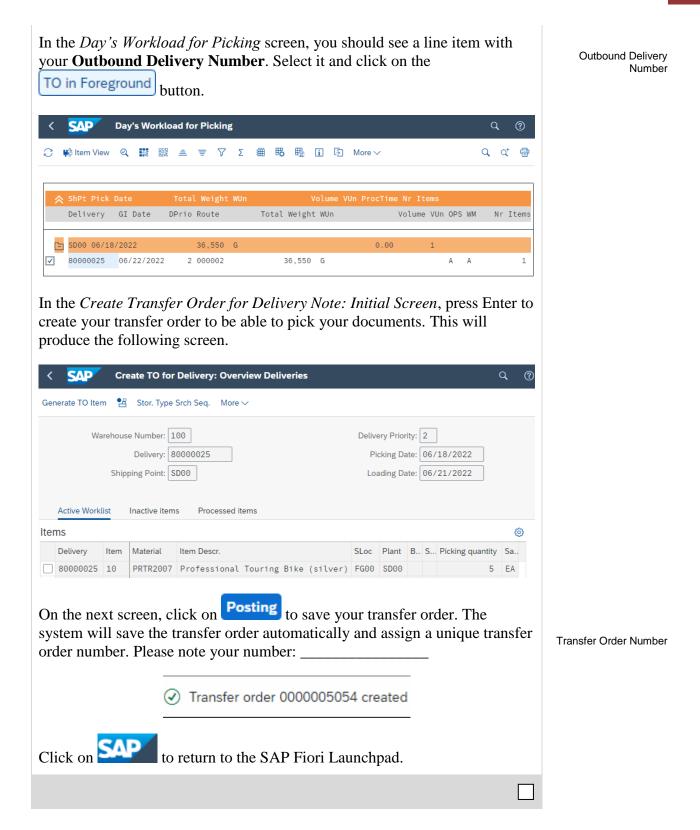


In the Outbound Deliveries for Picking screen, enter SD00 as Shipping

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

SD00 Only WM-Picking







#### 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*.

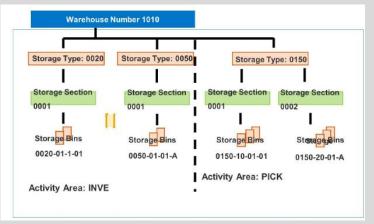
Fiori App



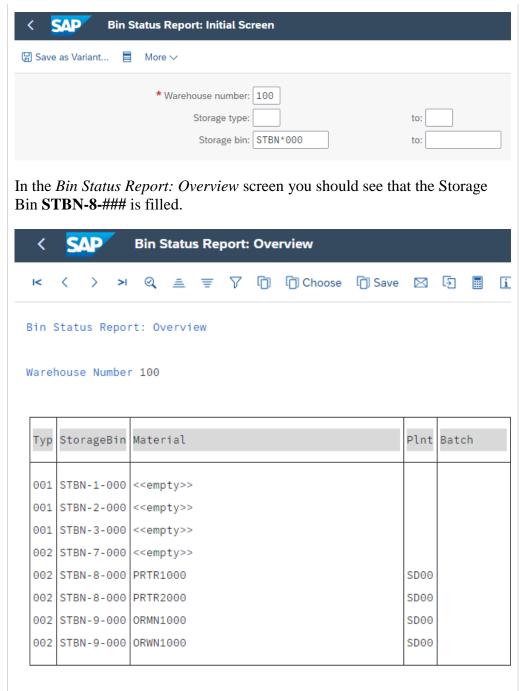
In the *Bin Status Report: Initial Screen*, enter **100** (for your San Diego Warehouse) as Warehouse Number and **STBN\*###** as Storage bin (replace ### with your number). Then, click on Execute.

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.

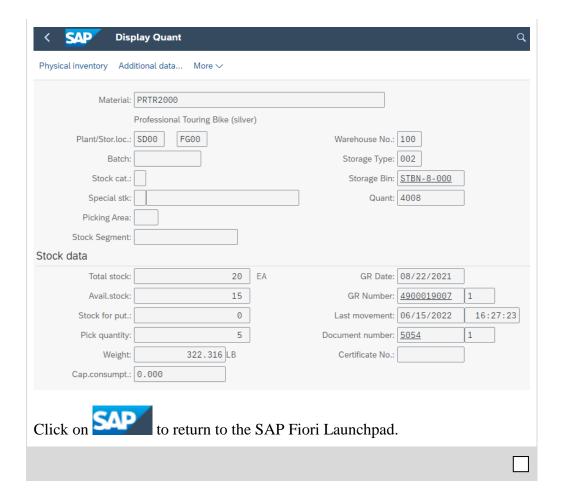


Storage bins are the lowest level of organizational structure. They are assigned to a storage type and a storage section (if one exists). Storage bins represent the physical location, where the goods are stored in the warehouse.



Click on your material to display detailed information of this quant and check whether 20 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 are physically in 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

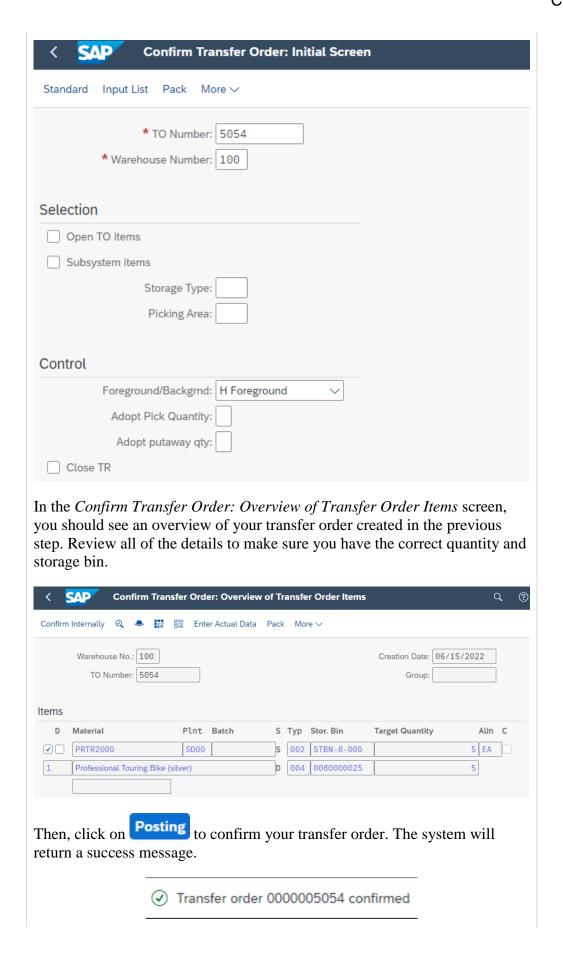
In the *Confirm Transfer Order: Initial Screen*, enter the **TO Number** from the previous task and **100** as Warehouse Number. Then, press Enter.

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.



Click on to return to the SAP Fiori Launchpad.



#### 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)

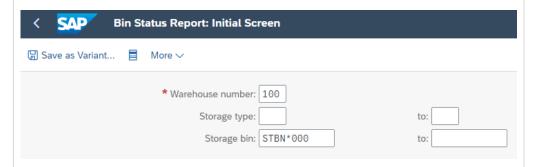
To run a bin status report, use in the *Warehouse Management* area on the *Issue from Storage* page in the *Warehouse Supervisor* role the app *Run Bin Status Report*.

Fiori App

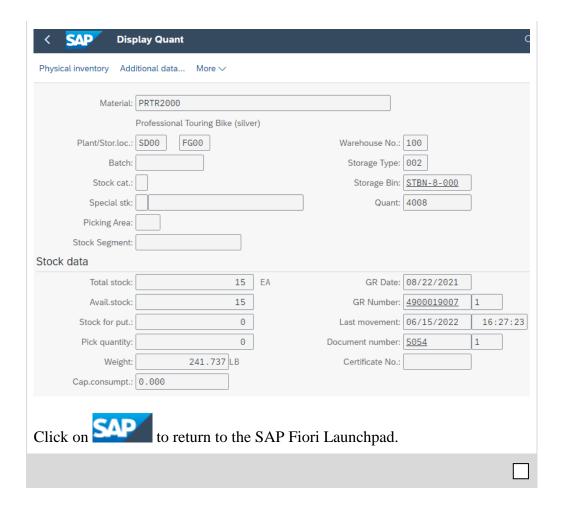


In the *Bin Status Report: Initial Screen*, enter **100** (for your San Diego Warehouse) as Warehouse Number and **STBN\*###** as Storage bin (replace ### with your number). Then, click on Execute.

100 STBN\*###



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)

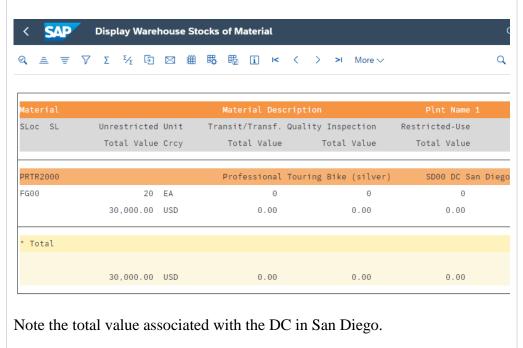
To display the material inventory value, use in the *Warehouse Management* area on the *Issue from Storage* page in the *Warehouse Supervisor* role the app *Display Warehouse Stock*.



Fiori App

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.

PRTR2### SD00



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)

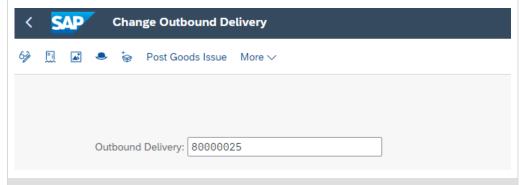
To ship materials, use in the *Warehouse Management* area on the *Issue from Storage* page in the *Good Issue Clerk* role the app *Change Outbound Delivery*.



Fiori App

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

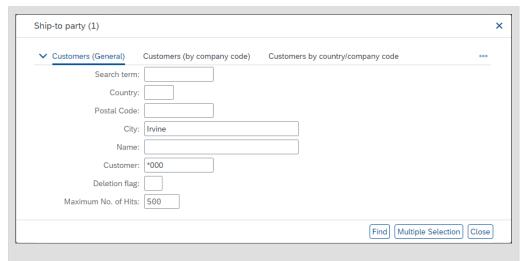
Outbound Delivery Number



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

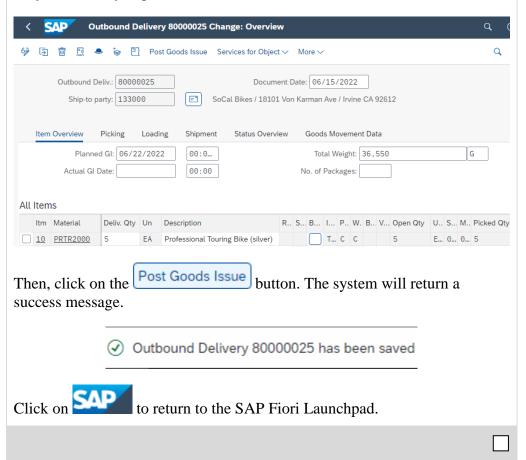
For doing it, please select the *Ship-To Party* field and press F4. In the *Select: Ship-To Party* pop up, enter **Irvine** as City and \*### as Customer. Then, click on Find or press Enter.

Irvine \*###



Select your customer by double-clicking..

In the *Outbound Delivery ##### Change: Overview* screen, choose the *Item Overview* tab and scroll to the right until you can see the *Picked Qty* column. As you can see you picked the full amount to be delivered.





### 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*.

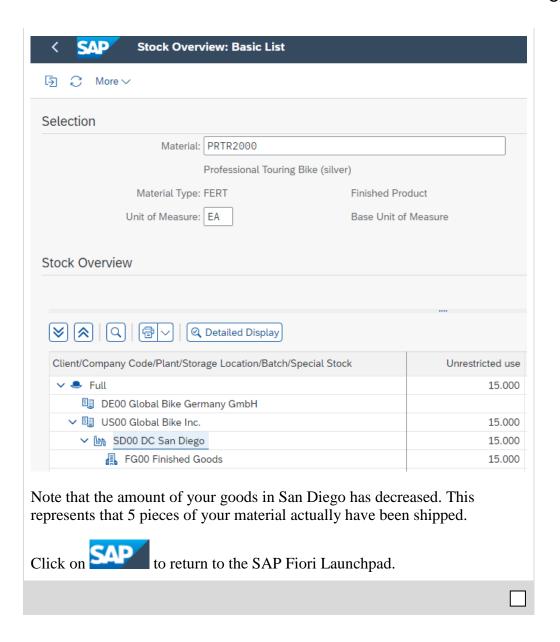
Fiori App

Display Stock Overview

dh

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

PRTR2###





### 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



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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

PRTR2### SD00

C SAP Display Warehouse Stocks of Material							
Q = \vec{v}	7 Σ ½ Θ	⊠ #	曝 鴫 ⅰ Κ	< > > I More ∨			
Material							
SLoc SL	Unrestricted	Unit	Transit/Transf.	Quality Inspection	Restricted-Use		
	Total Value	Crcy	Total Value	Total Value	Total Value		
PRTR2000			Professional	Touring Bike (silver)	SD00 DC San Diego		
FG00	15	EA	Θ	Θ	0		
	22,500.00	USD	0.00	0.00	0.00		
* Total							
	22,500.00	USD	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.





**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.