

Warehouse Management (WM) Case Study 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 1709 Global Bike

GUI 7.50

Level

Beginner

Focus

Warehouse Management

Authors

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Version

3.2

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, in particular 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.

Furthermore, it is mandatory to review the note GUI 7.50 Configuration. Your lecturer got this documentation together with other lecturer notes. If you do like to use the old GUI settings, please use the S/4HANA documents for SAP GUI 7.40.

In order to successfully work through this case study, it is not necessary to have finished the WM exercises. However, it is recommended.

NOTES

This case study uses the Global Bike (GBI) data set, which has exclusively been 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 there. This has just been completed and now the new system needs to be tested. For this purpose, trading goods shall be procured from a vendor and put in 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 from the vendor to the distribution center. As soon as you perform the goods receipt in San Diego, you will create a transfer order telling the Warehouse Management to the goods into stock. In conclusion, you will check that the goods were placed into the correct storage bins. Because 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.

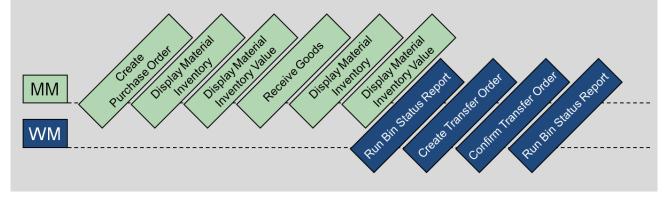


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Step 1: Create Purchase Order

Task Create a purchase order.

Time 10 min

Short Description Use the Easy Access Menu to create an immediate purchase order for materials from a vendor, i.e. to start the procurement process without having created a purchase requisition initially.

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

To create a purchase order, follow the menu path:

Menu path

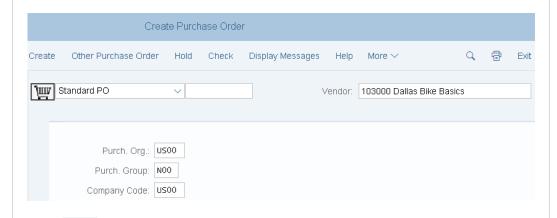
Logistics ► Materials Management ► Purchasing ► Purchase Order ► Create ► Vendor / Supplying Plant Known

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

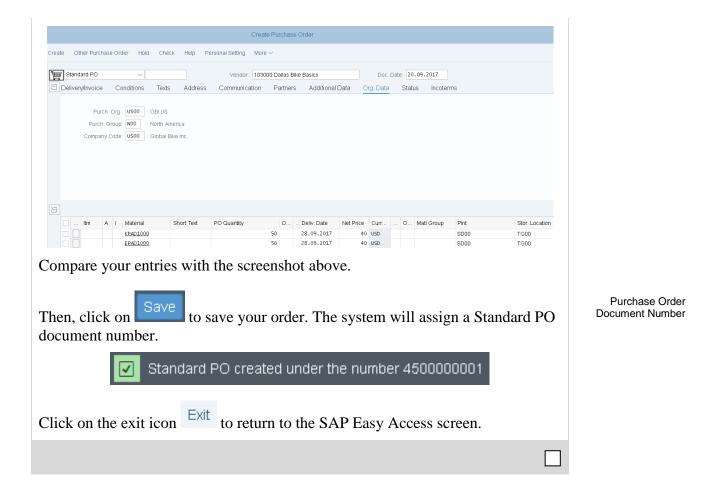


KPAD1### 50 SD00 TG00 40 8 days from today

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.

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

Repeat for EPAD1###





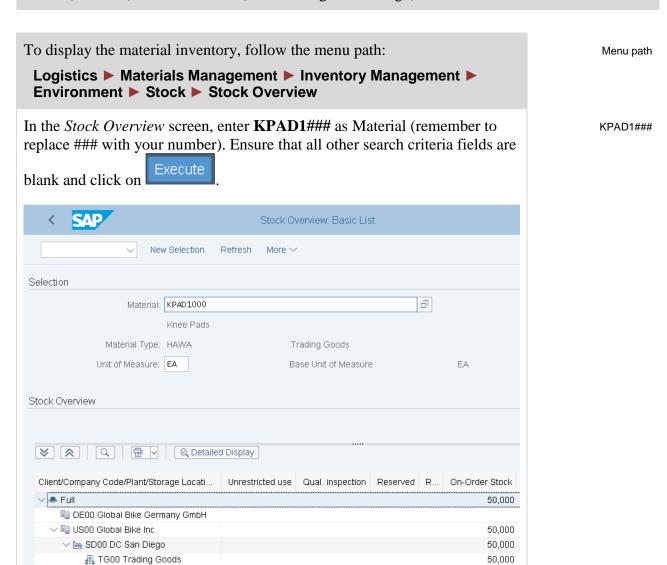
Step 2: Display Material Inventory

Task View the inventory of your material.

Time 5 min

Short Description Use the Easy Access Menu to display the inventory of your material.

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



Note that the amount of your good in San Diego is zero. 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 Easy Access Menu to display the value of your material inventory.

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

To display the material inventory value, follow the menu path:

Menu path

Logistics ► Materials Management ► Inventory Management ► Environment ► Stock ► Warehouse Stock

In the *Display Warehouse Stocks of Material* screen, enter **KPAD1**### as Material (remember to replace ### with your number). Ensure that all other

Execute

Dieplay Warohougo Stocks of Matorial

search criteria fields are blank and click on

KPAD1###

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TG00	0,0	0 EA)0 EUR		0 0,00		0,0	0	0,00
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TG00	0,0	0 EA)0 EUR		0 0,00		0,0	0 0	0,00
KPAD1000			Knee Pa	ads				MI00 DC
TG00	0,0	0 EA)0 USD		0 0,00		0,0	0	0 0,00
KPAD1000			Knee Pa	ads				SD00 DC
TG00	0,0	0 EA)0 USD		0 0,00		0,0	0	0 0,00
* 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 exit icon	Exit	twice to return to the SAP Easy Access screen.



Step 4: Receive Goods

Task Receive goods at receiving plant.

Time 5 min

Short Description Use the Easy Access Menu to create a goods receipt which documents the receiving of your materials in San Diego.

Name (Position) Yoshi Agawa (Receiving Clerk)

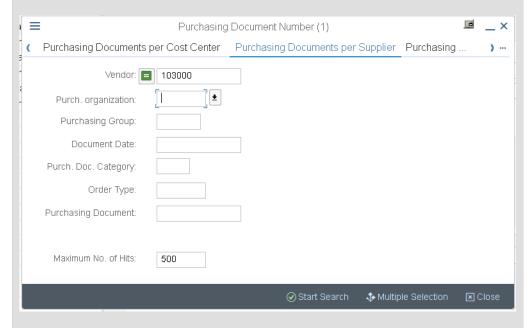
To create a goods receipt, follow the menu path:

Logistics ► Materials Management ► Inventory Management ► Goods Movement ► GR for Purchase Order

In the *Goods Receipt Purchase Order – Username* screen, change the Material Document drop down to **Goods Receipt**, adjust the type of Goods Receipt to a **Purchase Order**, and input your **Purchase Order Number** in the blank space next to it.

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).

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).

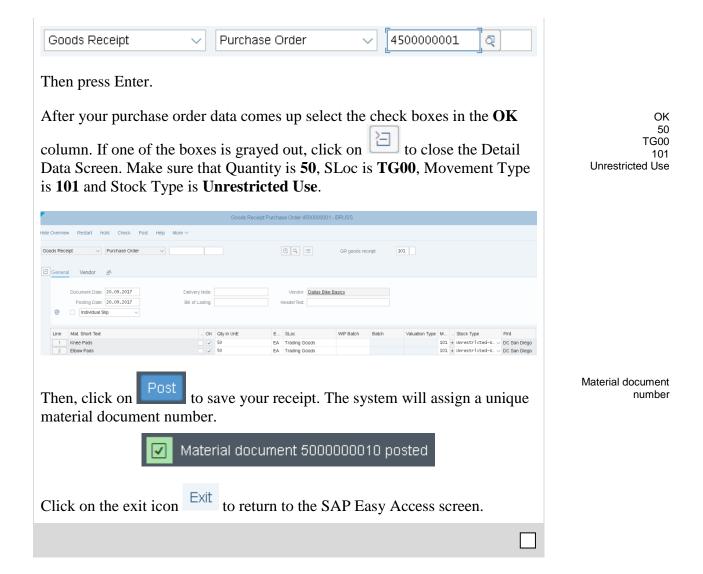
Note If you do not clear this field, only one of the two line items of your purchase order may be transferred.

Menu path

Goods Receipt Purchase Order PO number

103###

© SAP SE





blank and click on

Step 5: Display Material Inventory

Task View the inventory of your material again.

Time 5 min

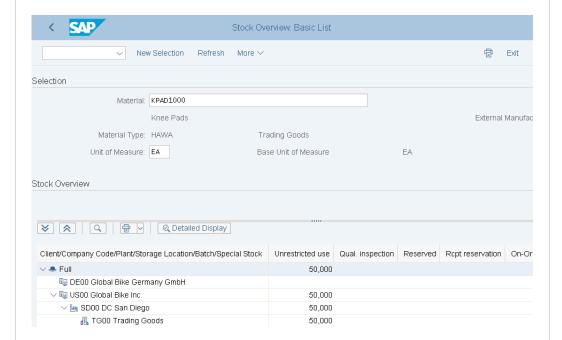
Short Description Use the Easy Access Menu to display the inventory of your material again.

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

To display the material inventory, follow the menu path:

Logistics ➤ Materials Management ➤ Inventory Management ➤
Environment ➤ Stock ➤ Stock Overview

In the Stock Overview screen, enter KPAD1### as Material (remember to replace ### with your number). Ensure that all other search criteria fields are



Note that the amount of your good for unrestricted use in San Diego has 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 exit icon Exit to return to the SAP Easy Access screen.



Step 6: Display Material Inventory Value

Task View the value of your material inventory again.

Time 5 min

Menu path

Short Description In this step, you will use the Easy Access Menu to display the value of your material inventory again.

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

To display the material inventory value, follow the menu path:

Logistics ► Materials Management ► Inventory Management ► **Environment** ► Stock ► Warehouse Stock

Execute

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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		A 7	F 7 Σ Σ	<u>↓</u>		More ✓
Material			Material d	escriptio	n	Plnt Na
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	Total Valu	e Crcy	Total Val	ne	Total Value	Total Val
KPAD1000			Knee Pads			HD00 Pl
TG00	0	EA	ı)	0	
	0,00	EUR	0,0)	0,00	0,0
KPAD1000			Knee Pads			HH00 DC
TG00	0	EA	ı)	0	
	0,00	EUR	0,0)	0,00	0,0
KPAD1000			Knee Pads			MIOO DC
TG00	0	EA	ı)	0	
	0,00	USD	0,0)	0,00	0,0
KPAD1000			Knee Pads			SD00 DC
TG00	50	EA	ı)	0	
	2.000,00	USD	0,0)	0,00	0,0
* 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 ###.	Repeat for EPAD1###
Click on the exit icon Exit twice to return to the SAP Easy Access screen.	



Step 7: Run Bin Status Report

Task Check the status of your bins.

Time 5 min

Short Description Use the Easy Access Menu 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, follow the menu path:

Menu path

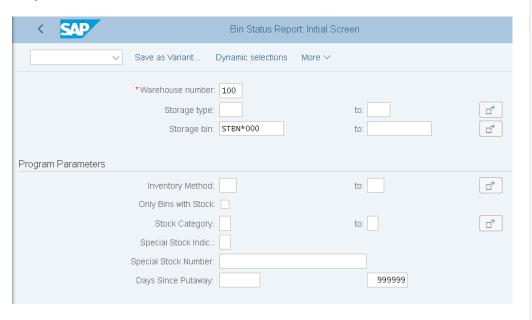
Logistics ► Logistics Execution ► Internal Whse Processes ► Bins and Stock ► Display ► Bin Status Report

100 STBN*###

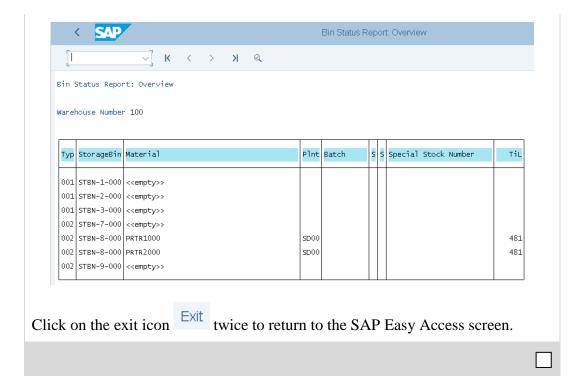
In the *Bin Status Report: Initial Screen*, enter **100** (for your San Diego Warehouse) as Warehouse Number and **STBN***### as Storage bin (replace ###

Execute

with your number). Then, click on



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 note 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 Easy Access Menu to create a transfer order to place your goods into your storage bin. It is a handoff from MM inventory management to WM 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, follow the menu path:

Logistics ► Logistics Execution ► Inbound Process ► Goods Receipt for Purchase Order, Order, Other Transactions ► Putaway ► Create Transfer Order ► For Material

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.

< SAP		Display Transfer Requirement: Lis	st for Material
	More ~		
Warehouse Number	100		
Material	KPAD1000		
		Stock Cat.	ń
Plant	SD00	Special Stock	k
Stor. location			
Batch			
Shipment Type	ŵ		

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

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Menu path

100 KPAD1###

SD00

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)

	Material: KPAD10										
	Plant/Stor.loc.: SD00	TG00			1	Movement ⁻	Type: 10	O1 Goods r	eceipt fo	or pur.	or.
	Stock Category:					Source Sto	r.Bin: 00	4500000	0001		
	Special Stock:					GR I	Date: 20	0.09.2017			
	tion Qty per SUnit	SUT	Тур	Sec	Quantitie	s Stck plcmn	nt qty:			50	EA
SU		SUT	Тур	Sec						50	EA
SU .	Qty per SUnit	SUT	Тур	Sec		Stck plcmn	antity:				EA
SU .	Qty per SUnit	SUT	Тур	Sec		Stck plcmn Open Qua	antity:			0	EA
<u>'</u> ,	Qty per SUnit	SUT	Тур	Sec		Stck plcmn Open Qua Total TO it	antity:	age unit		0	EA

Then, click on to save your transfer order. If any warnings occur ignore them by pressing Enter. The system will assign a unique transfer order number. Please write down this number.

☑ Transfer order 0000002001 created

Repeat the whole procedure for your material **EPAD1**### to put it in the same storage bin.

Transfer Order Number



Step 9: Confirm Transfer Order

Task Confirm your transfer order.

Time 10 min

Short Description Use the Easy Access Menu to confirm the transfer order you created in the previous step. This is confirming 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, follow the menu path:

Menu path

Logistics ► Logistics Execution ► Inbound Process ► Goods Receipt for Purchase Order, Order, Other Transactions ▶ Putaway ▶ Confirm Transfer Order ► Single Document ► In One Step

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

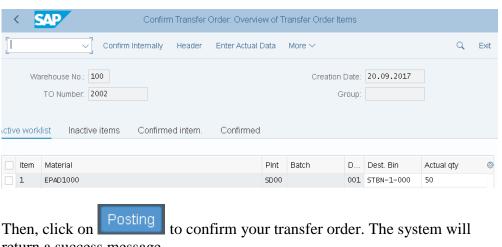
Note If you have not written down the number you can search for it using the transaction code LT23.

In the Transfer Orders: List of Resident Documents you have to fill in 100 as

100

Execute: 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.



return a success message.



Repeat this step for your other transfer order number (second material).

Repeat for second Transfer Order

Click on the exit icon	Exit	to return to the SAP Easy Access screen.	



Step 10: Run Bin Status Report

Task Check the status of your bins again.

Time 5 min

Short Description Use the Easy Access Menu 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, follow the menu path:

Logistics ➤ Logistics Execution ➤ Internal Whse Processes ➤ Bins and Stock ➤ Display ➤ Bin Status Report

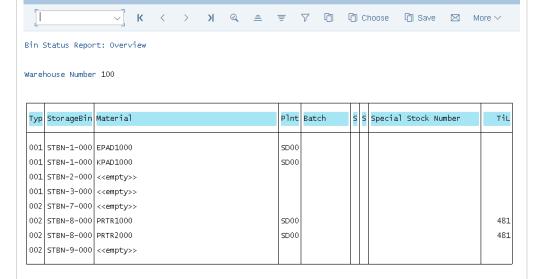
In the *Bin Status Report: Initial Screen*, enter **100** (for your San Diego Warehouse) as Warehouse Number and **STBN*###** as Storage bin (replace

with your number). Then, click on

SAP



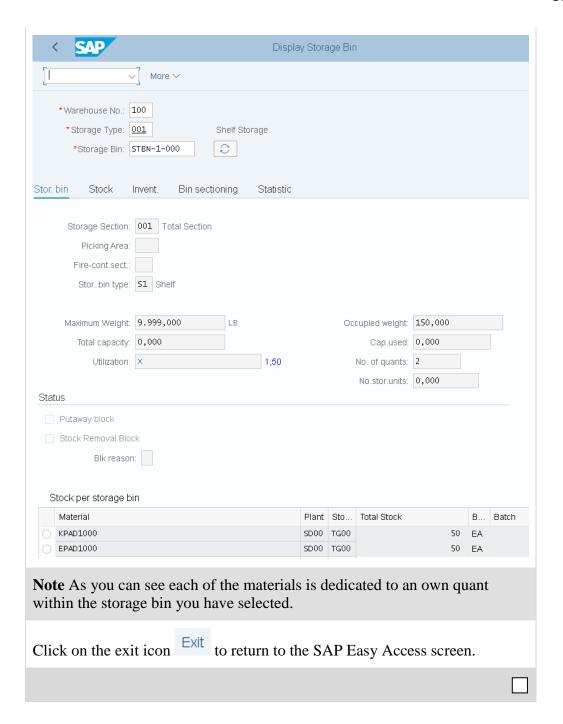
Bin Status Report: Overview



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.

Menu path

100 STBN*###



WM I Challenge

Learning Objective Understand and perform a warehousing process for ext. **Time** 70 min goods.

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.