Warehouse Management (WM) IV

This case study explains the integrated warehouse management process of the physical inventory. A storage bin is checked by means of a continuous physical inventory.

Product

S/4HANA 2020
Global Bike

Fiori 3.0

Level

Beginner

Focus

Warehouse Management

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Version

4.1

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MOTIVATION

Warehousing is of significant importance for logistics.

For a company, it is of central importance to know about the precise inventory quantities and inventory values of its warehouse complex. The warehouse management thus gathers all position outflows and inflows both quantitatively and qualitatively. Incorrect postings, shrinkage, and operational errors, however, might lead to stock differences.

In order to reveal missing quantities and differences and in order to gather physical stocks, the warehouse management draws on physical inventory.

PREREQUISITES

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

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

Notes

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

SAP University Alliances

Process Overview

Learning Objective Conduct a physical inventory in the warehouse management. **Time** 60 min

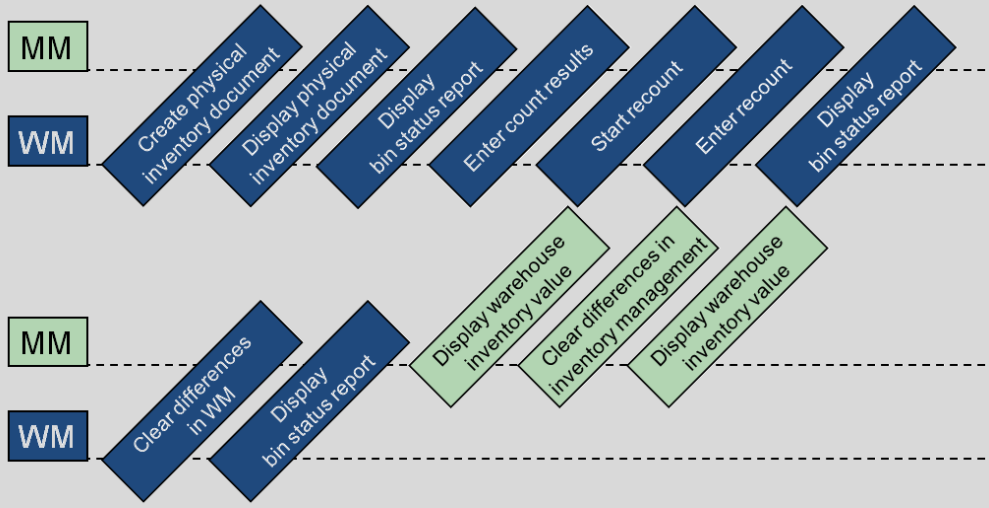
Scenario An internal security audit showed that, until now, there has been a mistake in the security concept. Through this mistake, unauthorized persons could have gained access to the pallet warehouse of the San Diego warehouse. For this reason, a continuous physical inventory will be conducted for all pallet warehouses that, according to the inventory control, contain materials and goods.

Employees involved Carolin Bruzik (Warehouse Supervisor)
Sunil Gupta (Warehouse Employee)

The basis of a physical inventory in the SAP S/4HANA Warehouse Management is a system inventory record. In contrast to the sample-based physical inventory, documents are created directly when performing the continuous physical inventory because of the low number of storage bins that have to be checked. The affected storage bins are earmarked for counting and a status is set against the storage bin. In the next step, the activation of the physical inventory document causes the lock of all storage bins that are listed in the document but this can only be conducted if all outstanding transportation orders to the destinations have been completed beforehand. The lock can only be released after clearing the inventory - a manual release is not possible.

After the counting, the results have to be entered into the system. The same applies to any possible recounts. After the finalization of the physical inventory, the difference has to be cleared in the warehouse management system. Since the locked storage bins are released by clearing, this also applies if there are no differences.

Physical inventory is completed through the correction of the storage location stocks in MM inventory management. Thereby, not only the quantity difference is updated, but also the value difference.



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Step 1: Create and activate a physical inventory document

Task Create and activate a physical inventory document. **Time** 5 min

Short Description Use the SAP Fiori Launchpad to create a physical inventory document

Name (Position) Carolin Bruzik (Warehouse Supervisor)

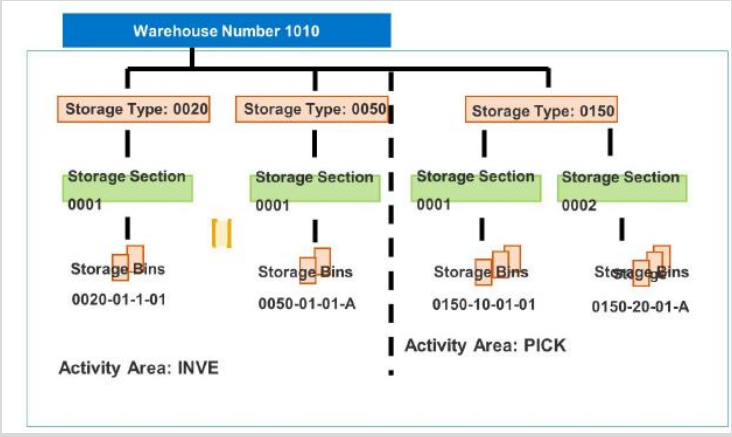
To create a physical inventory document, use in the *Warehouse Management* area on the *Physical Inventory* page in the *Warehouse Supervisor* role the app *Carry out Continuous Inventory.*

Fiori App

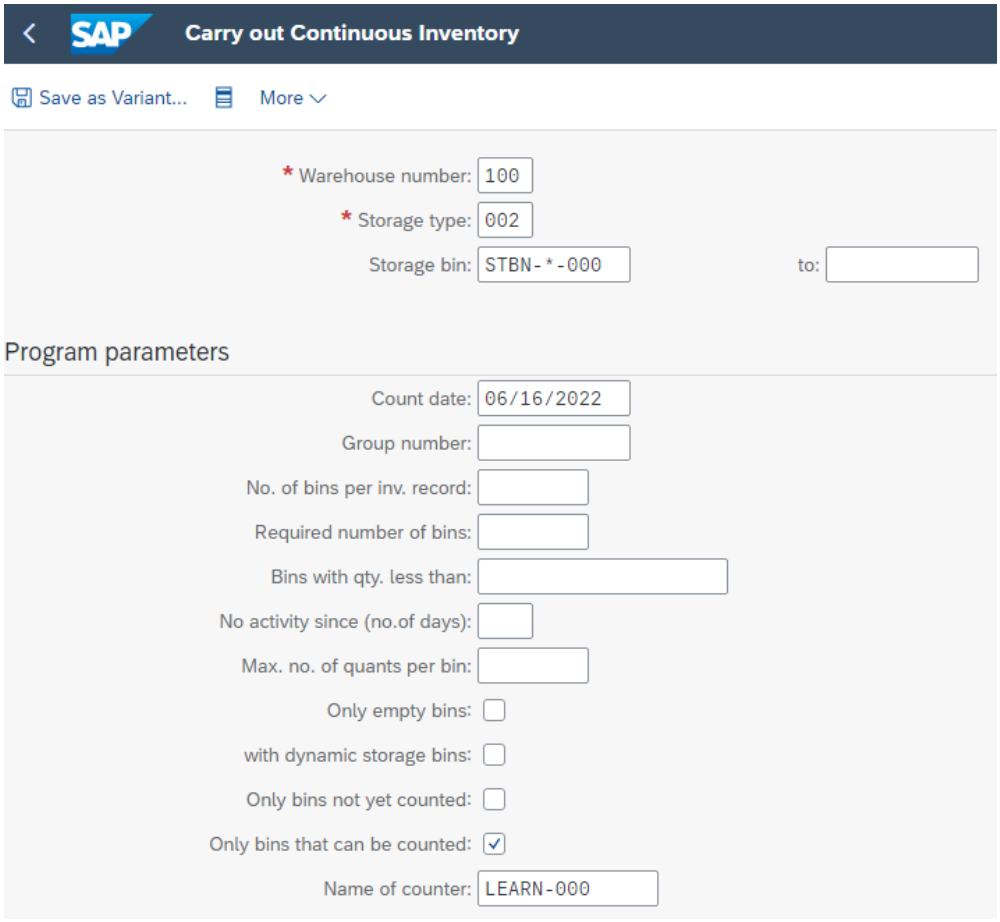
In the screen *Carry out Continuous Inventory*, enter **100** as Warehouse number, **002** as Storage type, **STBN-***-### (do not forget to replace ### with your number) as Storage bin and **LEARN-###** as Name of counter. Also make sure that the value **Only bins not yet counted** is not selected (this also displays storage bins from completed inventories). Compare with the screen below and confirm your entries with **Execute**.

100
002
STBN-*-###
LEARN-###
Deselect Only bins not yet counted

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.

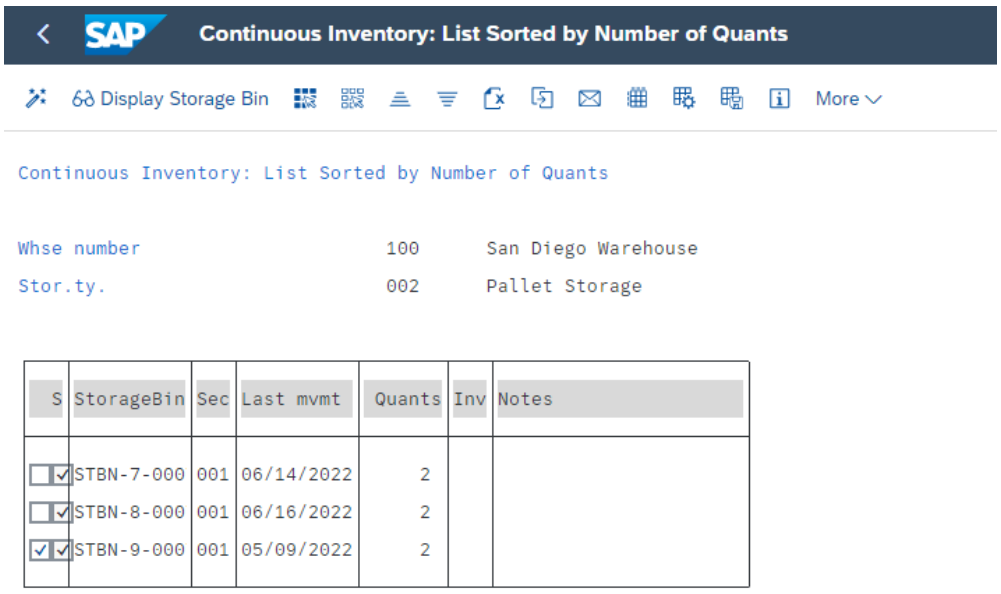


Storage bins are the lowest level of organizational structure. They are assigned to a storage type and a storage section (if one exists). Storage bins represent the physical location where the goods are stored in the warehouse.

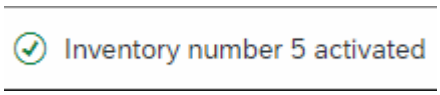


In the following screen, deselect all storage bins except for **STBN-9-###**. STBN-9-###

Now click on Activate button and thus create a physical inventory document. Through this process, the selected storage bins are blocked against stock putaways and stock removals.



Your will receive the following success message:



Click on  to return to the SAP Fiori Launchpad.

Step 2: Display physical inventory document

Task Display your physical inventory document. **Time** 5 min

Short Description Use the SAP Fiori Launchpad to watch your physical inventory document.

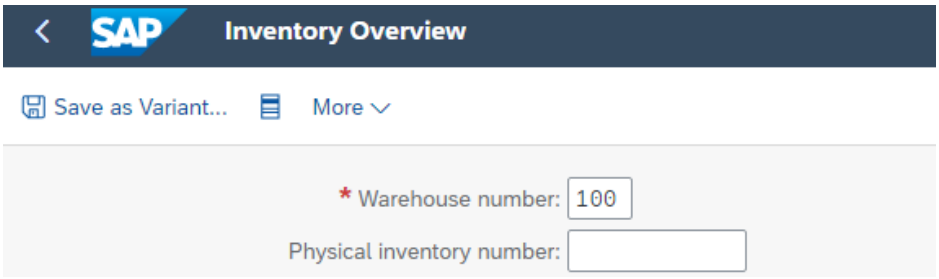
Name (Position) Carolin Bruzik (Warehouse Supervisor)

To watch your physical inventory document, use in the *Warehouse Management* area on the *Physical Inventory* page in the *Warehouse Supervisor* role the app *Inventory Overview*.

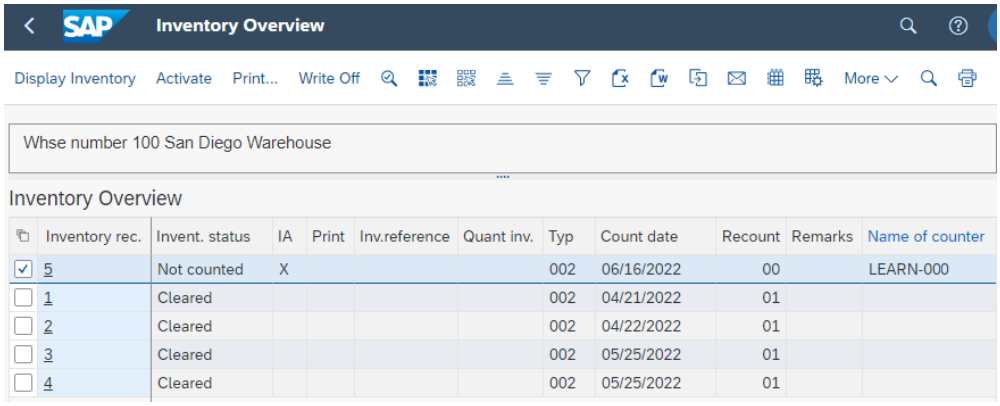
Fiori App

In the screen *Inventory Overview*, enter **100** as Warehouse number. Make sure that all other screens are empty and click **Execute**.

100



Use the name of counter in order to find and to select your physical inventory document.



Click on Display Inventory.

Check the inventory status, the storage bin, and the count date. Press Statistics in order to see additional key figures of the inventory.

Click on  to return to the SAP Fiori Launchpad.

Step 3: Display bin status report

Task Check the status of your bin status report. **Time** 5 min

Short Description Use the SAP Fiori Launchpad in order to display the bin status report, which displays a detailed report of each storage bin within the specific warehouse.

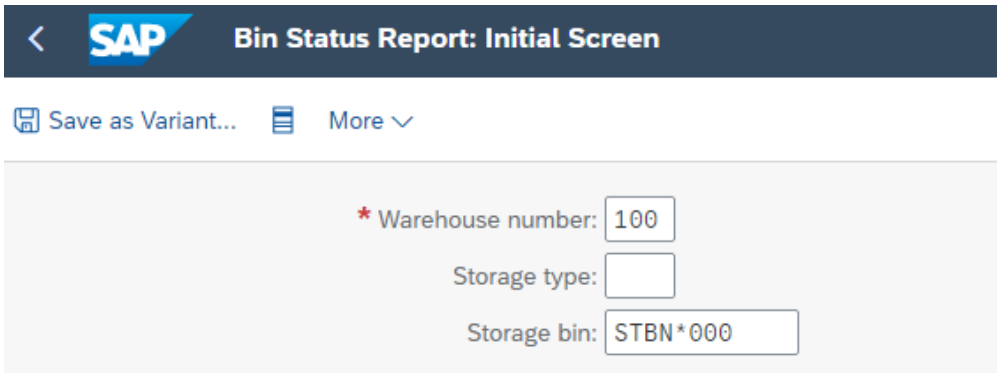
Name (Position) Carolin Bruzik (Warehouse Supervisor)

To display the bin status report, use in the *Warehouse Management* area on the *Physical Inventory* page in the *Warehouse Supervisor* role the app *Run Bin Status Report.*

Fiori App

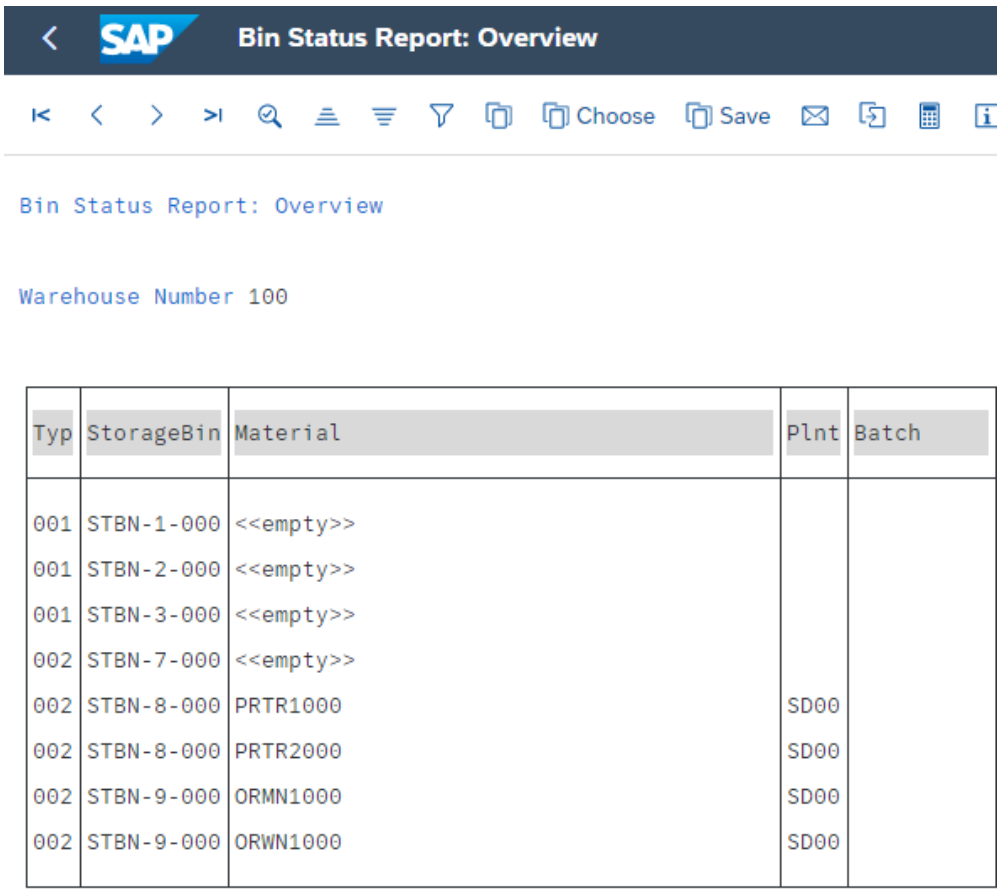
In *Bin Status Report: Initial Screen*, enter **100** (for the San Diego Warehouse) as Warehouse number and **STBN*###** as Storage bin (do not forget to replace ### with your number). Press **Execute**.

100
STBN*###

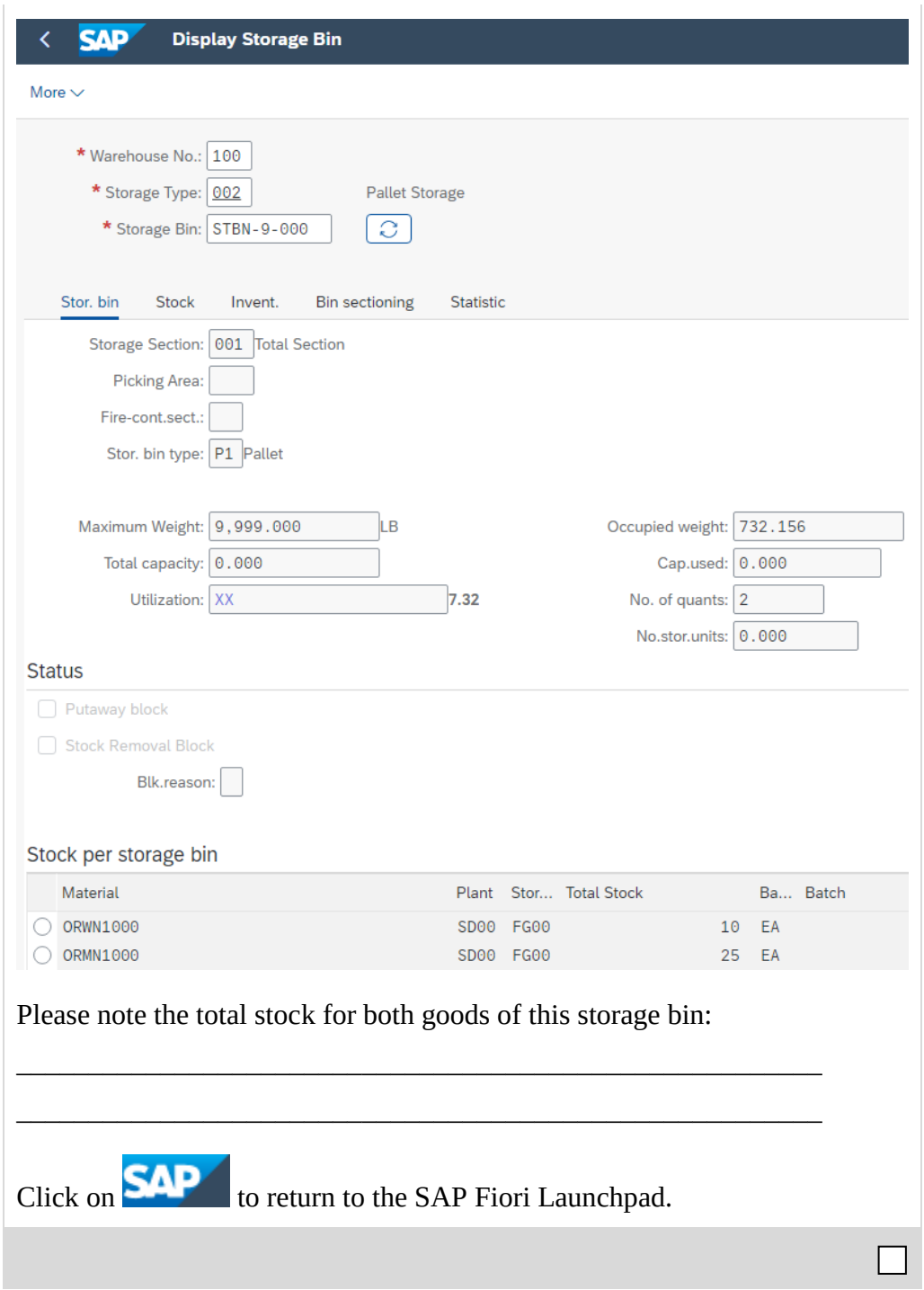


In *Bin Status Report: Overview* you should see that the storage bin **STBN-9-###** is filled. The screenshot below could be look different from your view.

STBN-9-###



Click on your storage bin in order to receive more detailed information about the warehoused goods. Additionally, this screen also includes information about the current physical inventory status.



Please note the total stock for both goods of this storage bin:

_____

_____

Click on to return to the SAP Fiori Launchpad.

Step 4: Enter count results

Task Enter your count results in the S/4HANA System. **Time** 5 min

Short Description Use the SAP Fiori Launchpad in order to enter your physical inventory document and the count information in the S/4HANA System in accounting terms.

Name (Position) Sunil Gupta (Warehouse Employee)

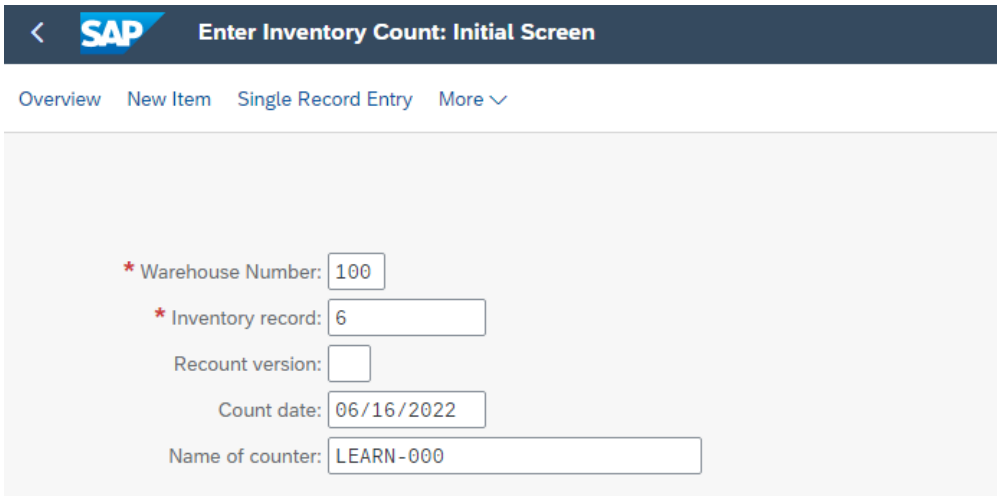
To enter your count results, use in the *Warehouse Management* area on the *Physical Inventory* page in the *Warehouse Employee* role the app *Enter Inventory Count.*

Fiori App

In the screen *Enter Inventory Count: Initial Screen*, enter **100** as Warehouse Number and **today's date** as Count date. Enter **your Inventory Record** number if it is not entered automatically. If you cannot remember your inventory record, please re-simulate the transaction of the previous step in order to find it. Also please enter **LEARN-###** as name of counter. Press Enter to confirm your entries.

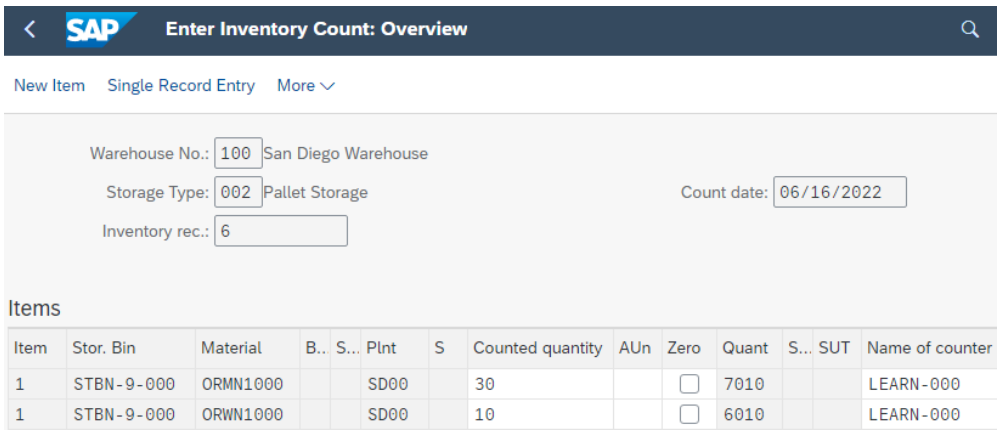
100
Your Inventory Record Number
Today's day

LEARN-###



In *Enter Inventory Count: Overview*, for the Material ORMN1###, **add 5 units to the value** of the previous step and enter this new value as counted quantity. For the Material ORWN1###, enter **the same value** which you have listed in the previous step. Press Enter.

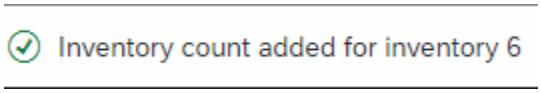
ORMN1###
Actual value +5
ORWN1###
Actual value



The deviation of the count result should be more than 20%.

For this reason, subsequently, a screen will open in which you will have to confirm the data by pressing Enter.

Press Save to update your physical inventory document with the count results.



Click on SAP to return to the SAP Fiori Launchpad.

Step 5: Start recount

Task Start the recount. **Time** 5 min

Short Description Use the SAP Fiori Launchpad in order to enter the data of the recount.

Name (Position) Carolin Bruzik (Warehouse Supervisor)

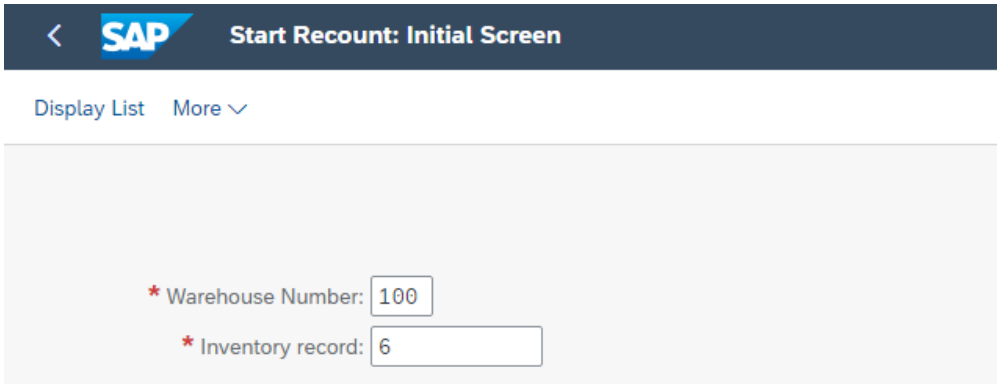
To order to enter the recount, use in the *Warehouse Management* area on the *Physical Inventory* page in the *Warehouse Supervisor* role the app *Start recount.*

Fiori App

In the screen *Start Recount: Initial Screen*, the number of your **Inventory record** and **100** as Warehouse Number should already be listed. If they are not listed, please fill in the boxes. Press Enter.

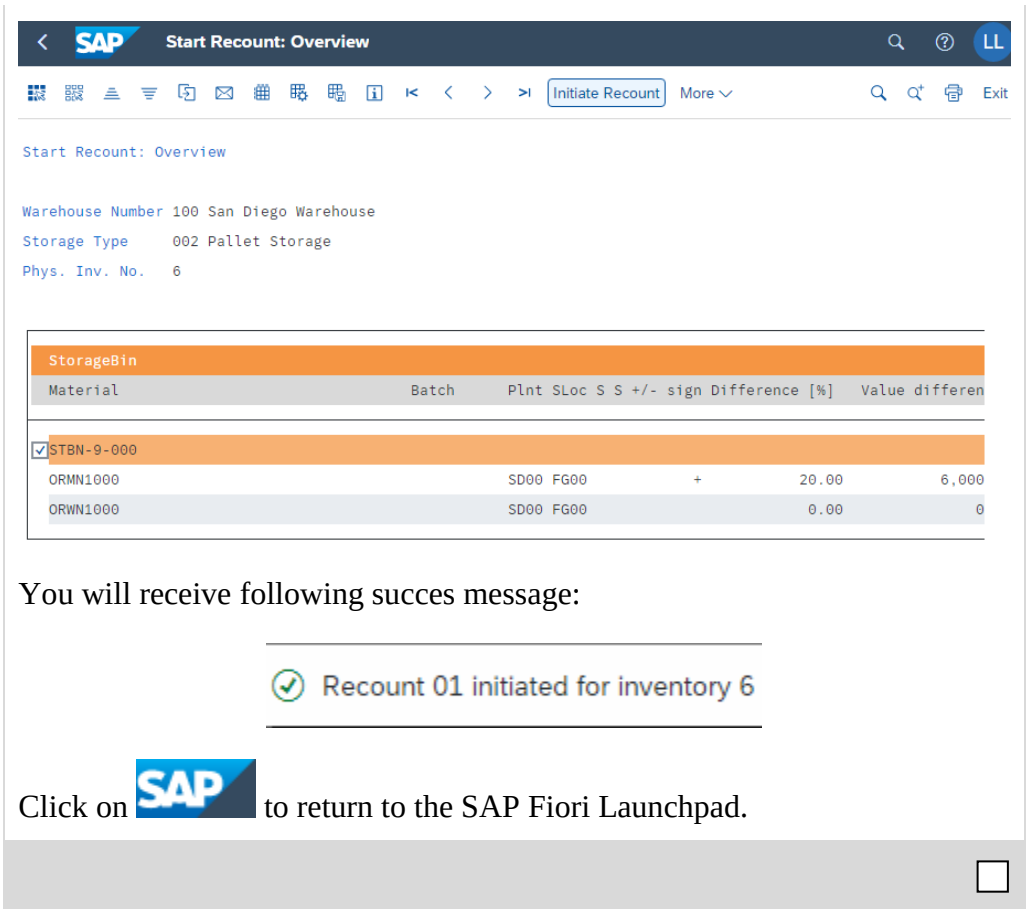
Inventory record
100

If you cannot remember the number of your inventory record, you can identify it once more as in the task *Display Physical Inventory Document*.



Make sure that your storage bin **STBN-9-###** is selected for the recount and start it by clicking Initiate Recount .

STBN-9-###



You will receive following succes message:

Click on to return to the SAP Fiori Launchpad.

Step 6: Enter recount

Task Enter the count results of your recount into the S/4HANA System. **Time** 5 min

Short Description Use the SAP Fiori Launchpad to enter the count results into the S/4HANA System.

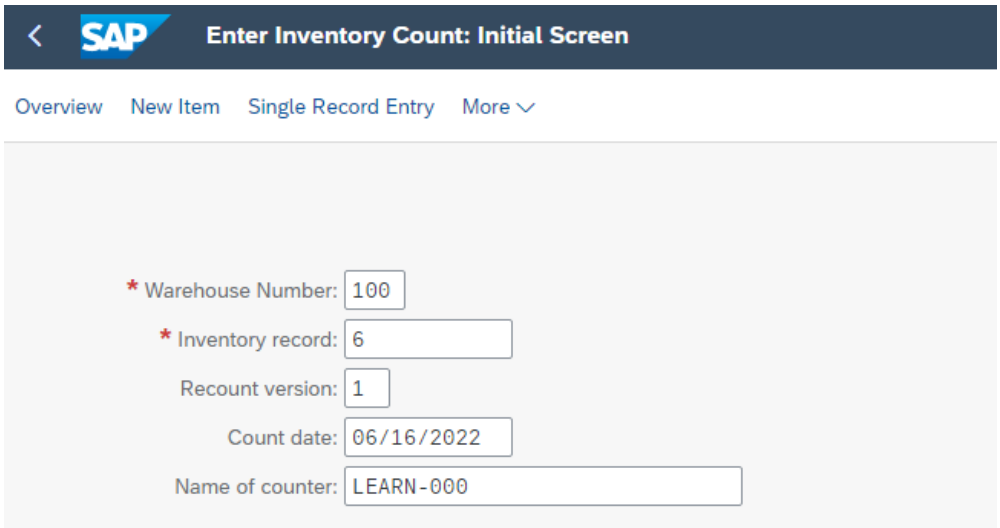
Name (Position) Sunil Gupta (Warehouse Employee)

To enter the count result of the recount, use in the *Warehouse Management* area on the *Physical Inventory* page in the *Warehouse Employee* role the app *Enter Inventory Count.*

Fiori App

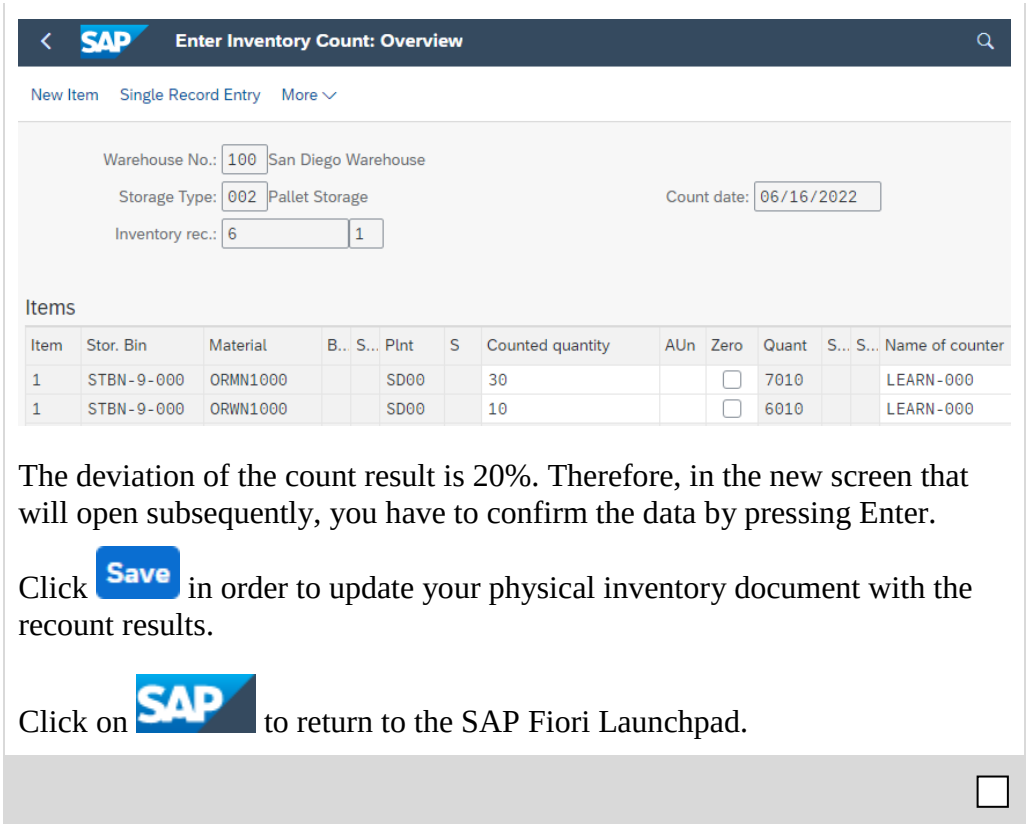
In the screen *Enter Inventory Count: Initial Screen*, enter **100** as Warehouse Number, **1** as Recount version, **LEARN-###** as Name of counter and **today's date** as Count date. Please enter your **Inventory Record Number** if it is not listed automatically. Confirm your entries by pressing Enter.

100
1
LEARN-###
Today's date
Inventory Record Number



In the screen *Enter Inventory Count: Overview*, enter **the same data** that was entered in the first count. Please enter **LEARN-###** as Name of counter for both positions. Press Enter.

Same as in the first count
LEARN-###



The deviation of the count result is 20%. Therefore, in the new screen that will open subsequently, you have to confirm the data by pressing Enter.

Click Save in order to update your physical inventory document with the recount results.

Click on SAP to return to the SAP Fiori Launchpad.

Step 7: Display bin status report

Task Check the status of your bin status report. **Time** 5 min

Short Description Use the SAP Fiori Launchpad in order to display the bin status report that displays a detailed report of every storage bin within the specific warehouse.

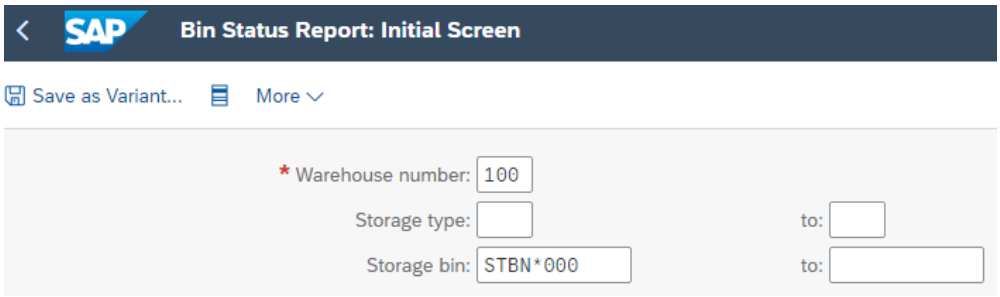
Name (Position) Carolin Bruzik (Warehouse Supervisor)

To display the bin status report, use in the *Warehouse Management* area on the *Physical Inventory* page in the *Warehouse Supervisor* role the app *Run Bin Status Report.*

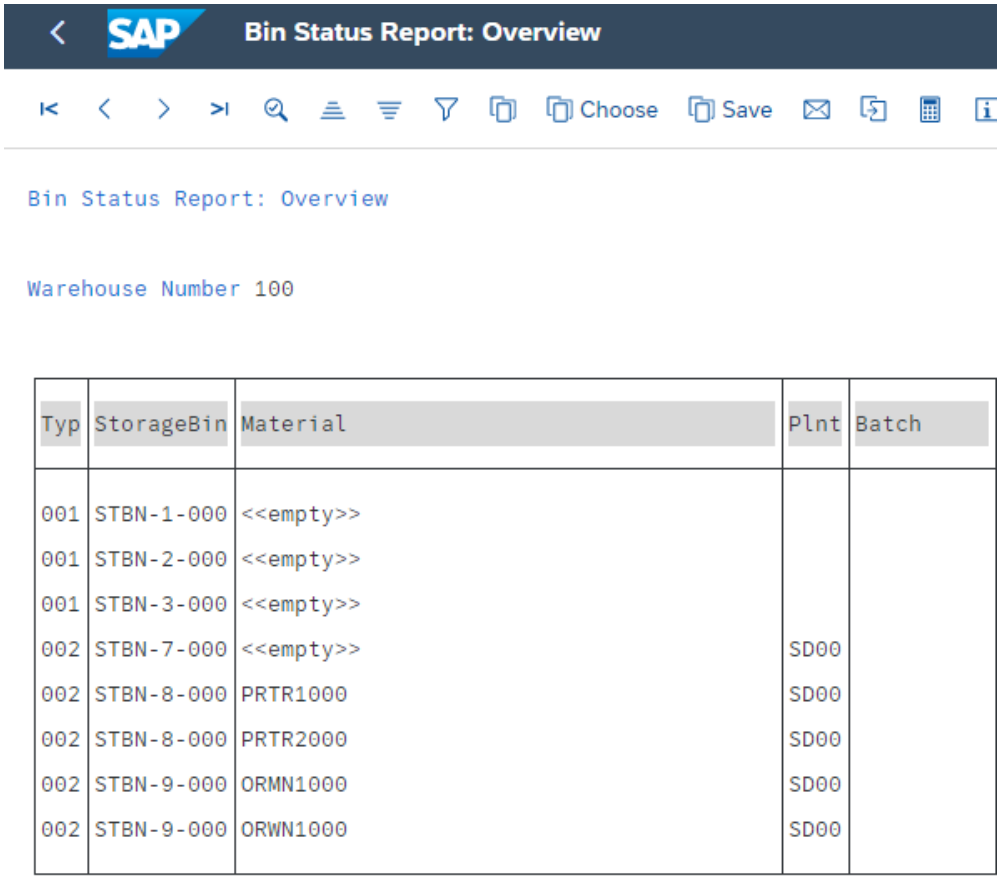
Fiori App

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

100
STBN*###



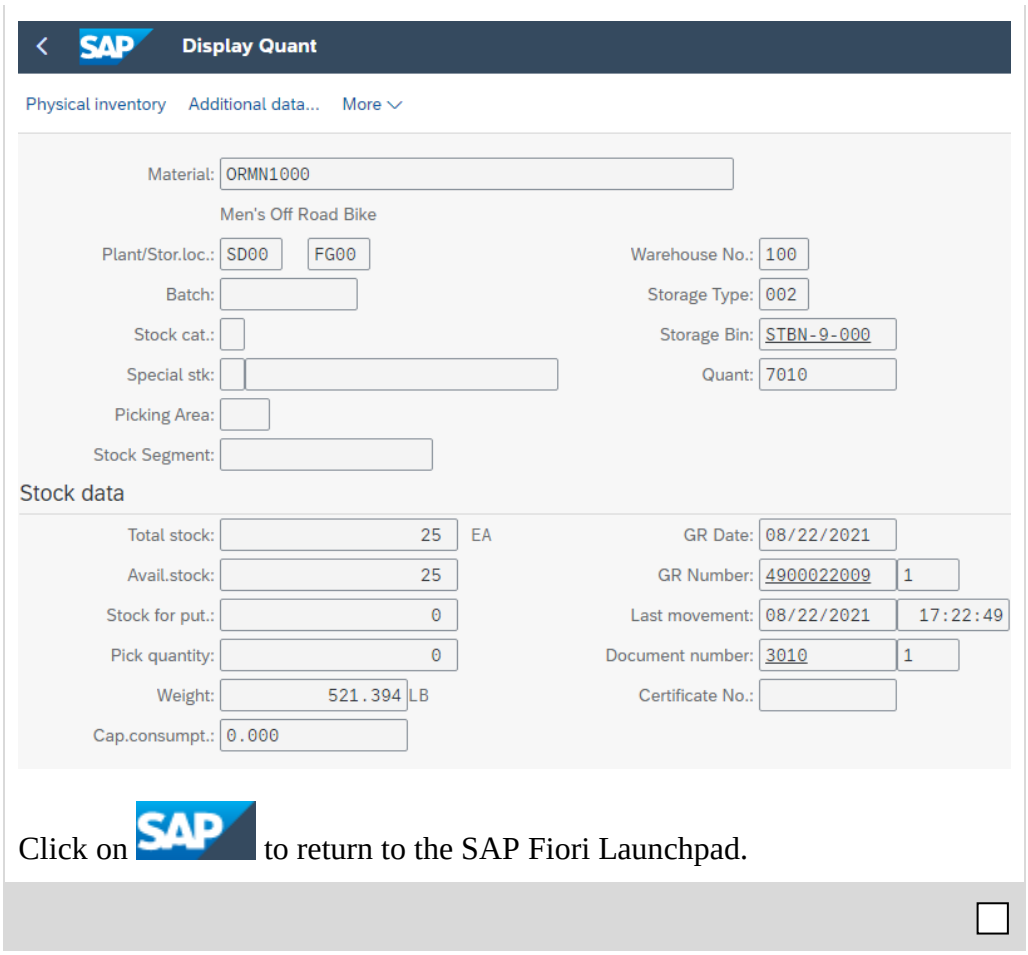
In *Bin Status Report: Overview*, you should notice that the storage bin **STBN-9-###** is filled. The screenshot below could be look different from your view.



Typ	StorageBin	Material	Plnt	Batch
001	STBN-1-000	<<empty>>		
001	STBN-2-000	<<empty>>		
001	STBN-3-000	<<empty>>		
002	STBN-7-000	<<empty>>	SD00	
002	STBN-8-000	PRTR1000	SD00	
002	STBN-8-000	PRTR2000	SD00	
002	STBN-9-000	ORMN1000	SD00	
002	STBN-9-000	ORWN1000	SD00	

Click on your material ORMN1### in order to receive detailed information of this quant and check if the amounts have already changed.

Note As you can see, small adjustments have been made since the stock difference has not been booked into the warehouse management yet.



Click on to return to the SAP Fiori Launchpad.

Step 8: Clear differences in the warehouse management

Task Clear the differences in the warehouse management. **Time** 5 min

Short Description Use the SAP Fiori Launchpad in order to clear the stock differences within the warehouse management.

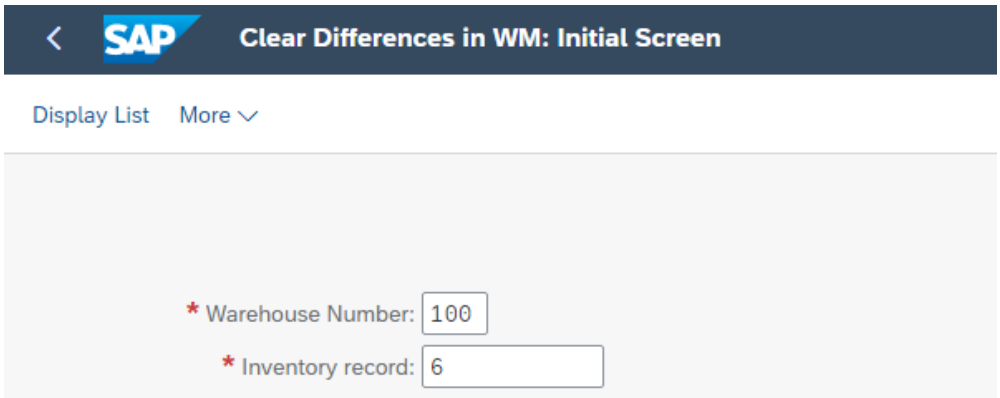
Name (Position) Carolin Bruzik (Warehouse Supervisor)

To order to clear the differences, use in the *Warehouse Management* area on the *Physical Inventory* page in the *Warehouse Supervisor* role the app *Clear Differences in WM.*

Fiori App

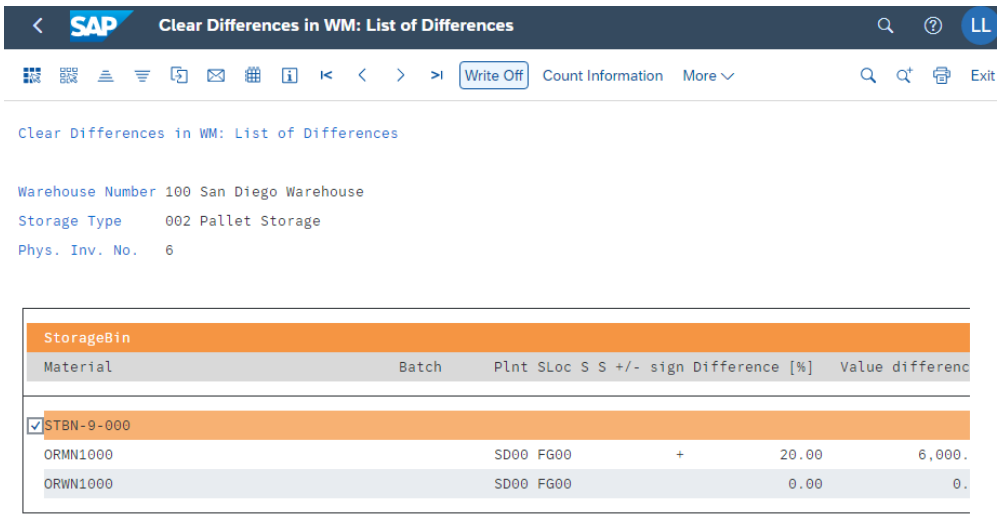
In the screen *Clear Differences in WM: Initial Screen*, the Warehouse Number **100** and the number of **your Inventory record** should already be entered. If this is not the case, please enter the corresponding figures. Press Enter.

100
Inventory record

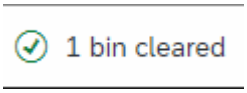


In the list of differences, select your storage bin **STBN-9-###**. Afterwards, click on Write Off.

STBN-9-###



You will receive the following success message:



Click on  to return to the SAP Fiori Launchpad.

Step 9: Display bin status report

Task Recheck the bin status report. **Time** 5 min

Short Description Use the SAP Fiori Launchpad in order to watch the status of your bin status report. It will offer a detailed overview over each storage bin.

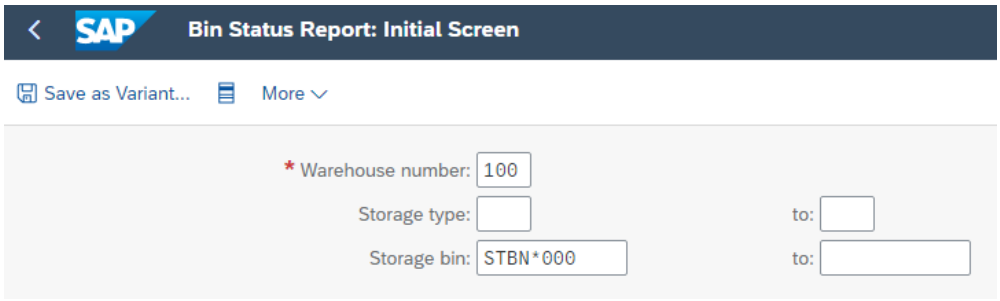
Name (Position) Carolin Bruzik (Warehouse Supervisor)

To display the bin status report, use in the *Warehouse Management* area on the *Physical Inventory* page in the *Warehouse Supervisor* role the app *Run Bin Status Report.*

Fiori App

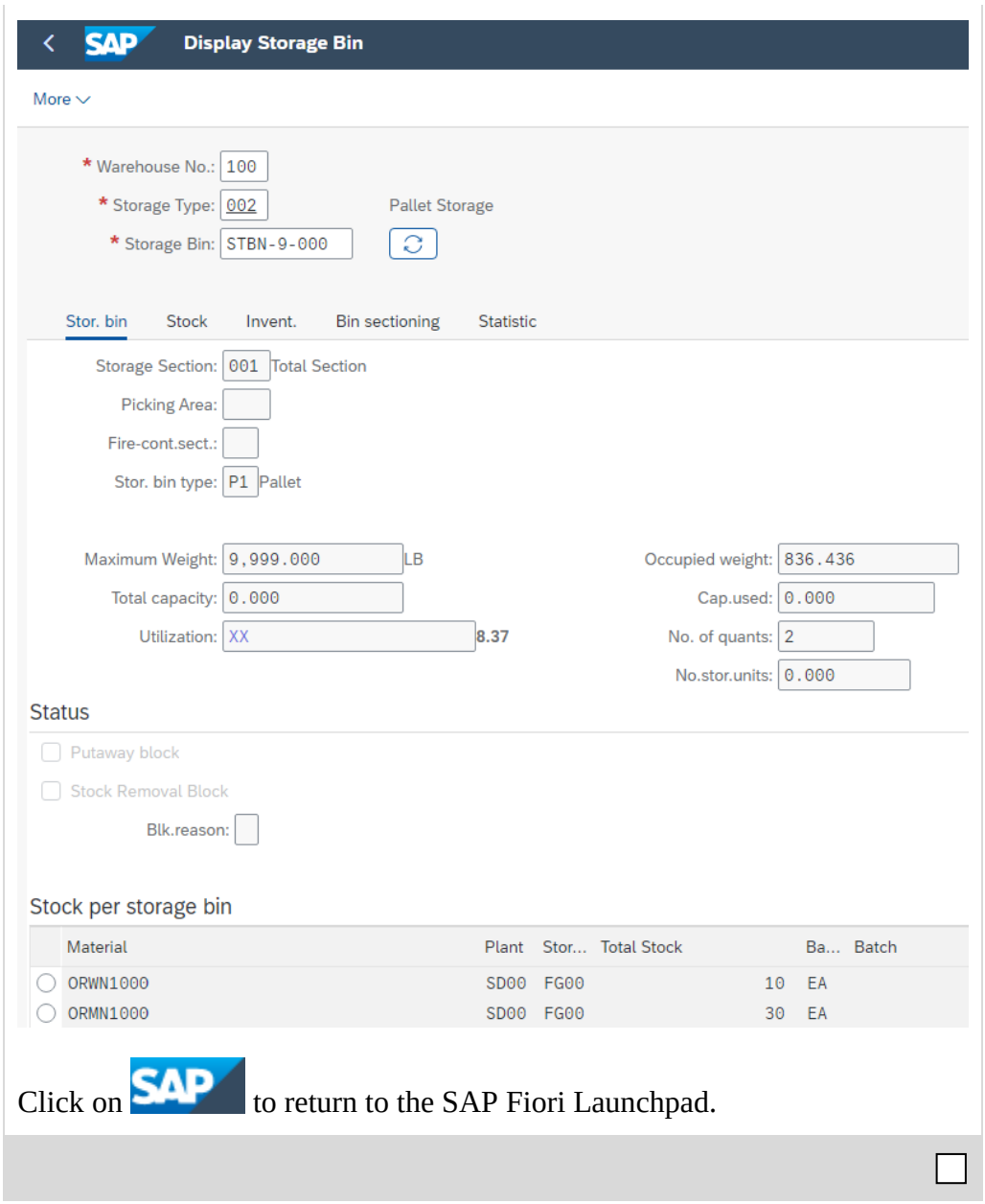
In *Bin Status Report: Initial Screen*, enter **100** as Warehouse number (for your San Diego warehouse) and **STBN*###** as Storage bin (replace ### with your number). Click **Execute**.

100
STBN*###



In the screen *Bin Status Report: Overview*, click on your storage bin **STBN-9-###** in order to get detailed information. Make sure if the amount of your ORMN1### was adjusted.

STBN-9-###



Click on SAP to return to the SAP Fiori Launchpad.

Step 10: Display warehouse inventory value

Task Display the warehouse stock. **Time** 5 min

Short Description Use the SAP Fiori Launchpad in order to watch the warehouse stock.

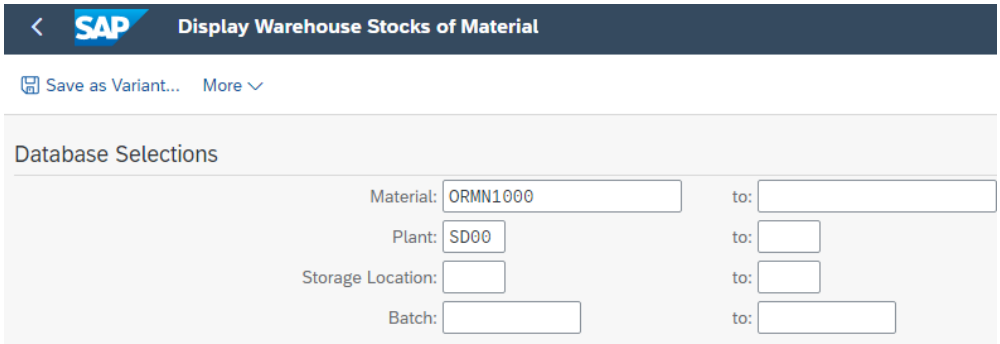
Name (Position) Carolin Bruzik (Warehouse Supervisor)

To display the warehouse stock, use in the *Warehouse Management* area on the *Physical Inventory* page in the *Warehouse Supervisor* role the app *Display Warehouse Stock.*

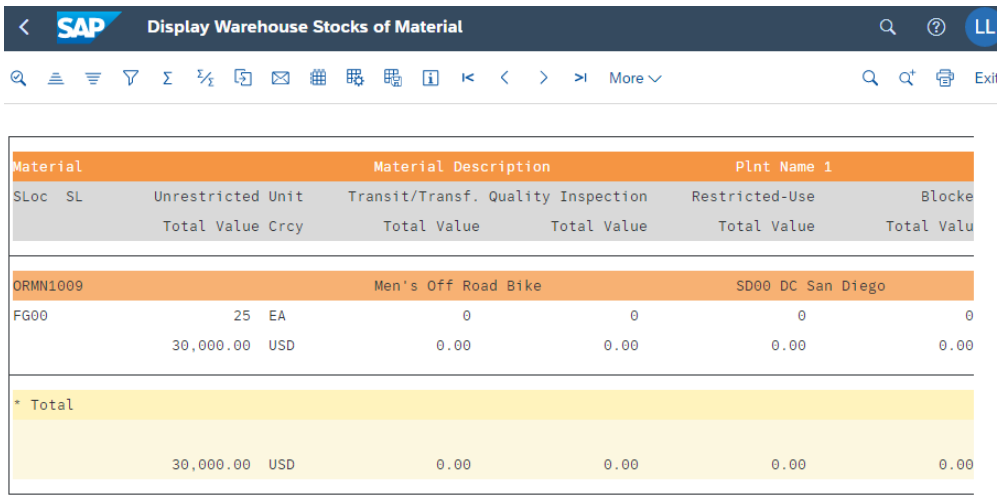
Fiori App

In the screen *Display Warehouse Stocks of Material*, enter **ORMN1###** as Material (replace ### with your number) and as SD00 as Plant. Make sure that all boxes are empty and click **Execute**.

ORMN1###
SD00



Pay attention to the fact that the stock difference, although booked for the warehouse management, is not cleared for the inventory management yet. This becomes clear since the data for the distribution center San Diego displays the old stock quantity.



Material			Material Description		Plnt Name 1	
SLoc	SL	Unrestricted Total Value	Unit Crcy	Transit/Transf. Total Value	Quality Inspection Total Value	Restricted-Use Total Value	Blocke Total Valu
ORMN1009				Men's Off Road Bike		SD00 DC San Diego	
FG00		25	EA	0	0	0	0
		30,000.00	USD	0.00	0.00	0.00	0.00
* Total							
		30,000.00	USD	0.00	0.00	0.00	0.00

Click on  to return to the SAP Fiori Launchpad.

Step 11: Clear the differences in MM inventory management

Task Clear the differences in MM inventory management. **Time** 5 min

Short Description Use the SAP Fiori Launchpad in order to clear the stock differences in the inventory management.

Name (Position) Carolin Bruzik (Warehouse Supervisor)

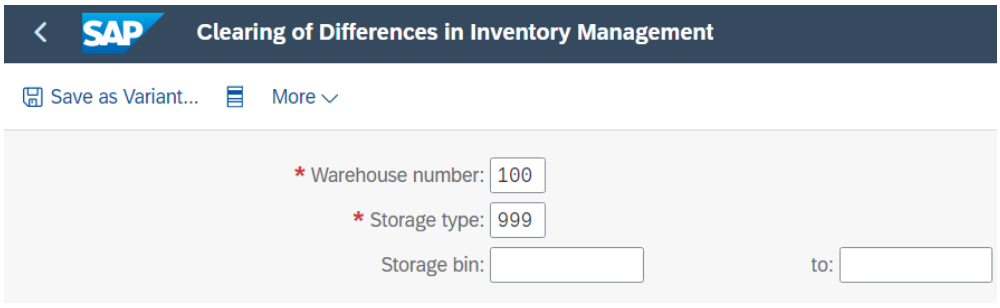
To clear the differences in the inventory management, use in the *Warehouse Management* area on the *Physical Inventory* page in the *Warehouse Supervisor* role the app *Clear Differences in Inventory Management*.

Fiori App

In the screen *Clearing of Differences in Inventory Management*, enter **100** as Warehouse number and **999** as Storage type. Press **Execute**.

100

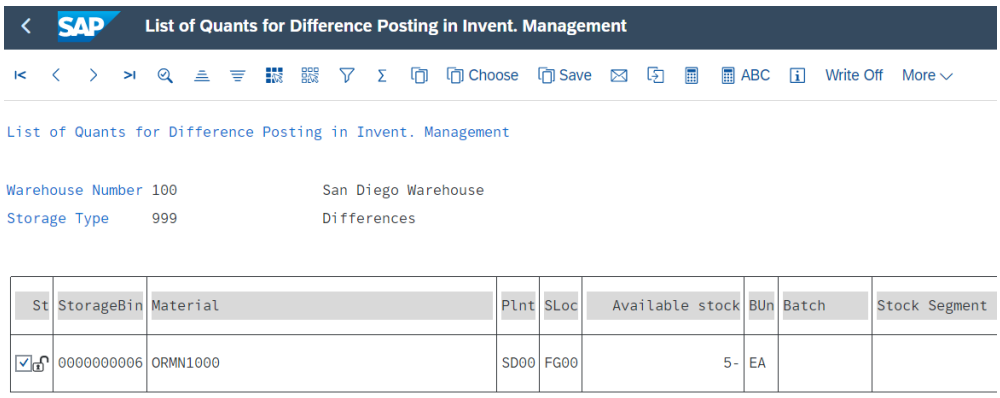
999



Note Storage types are represented as a group of warehouse bins with similar characteristics. Storage types are defined on the basis of their spatial or organizational features.

In the screen *List of Quants for Difference Posting in Inventory Management*, select your Material **ORMN1###**. Make sure that no other elements are selected. Click **Write Off**.

ORMN1###



On the next screen you will receive a message that your material document is now created.

Click on to return to the SAP Fiori Launchpad.

Step 12: Display warehouse inventory value

Task Display the warehouse stock again. **Time** 5 min

Short Description Use the SAP Easy Access Menu in order to see the warehouse stock.

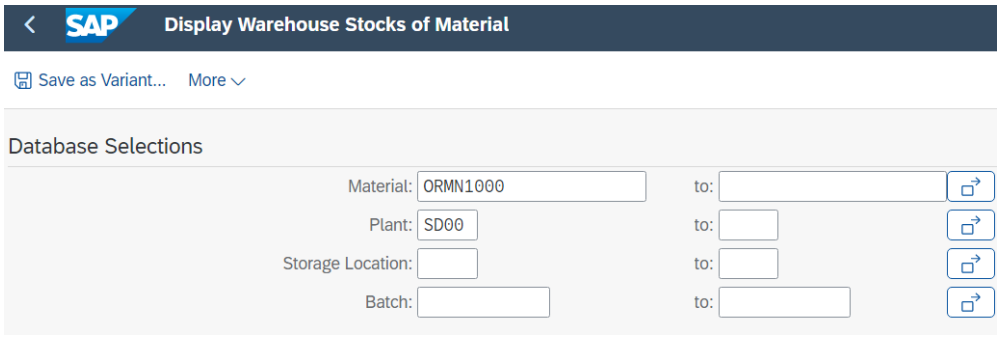
Name (Position) Carolin Bruzik (Warehouse Supervisor)

To display the warehouse stock, use in the *Warehouse Management* area on the *Physical Inventory* page in the *Warehouse Supervisor* role the app *Display Warehouse Stock*.

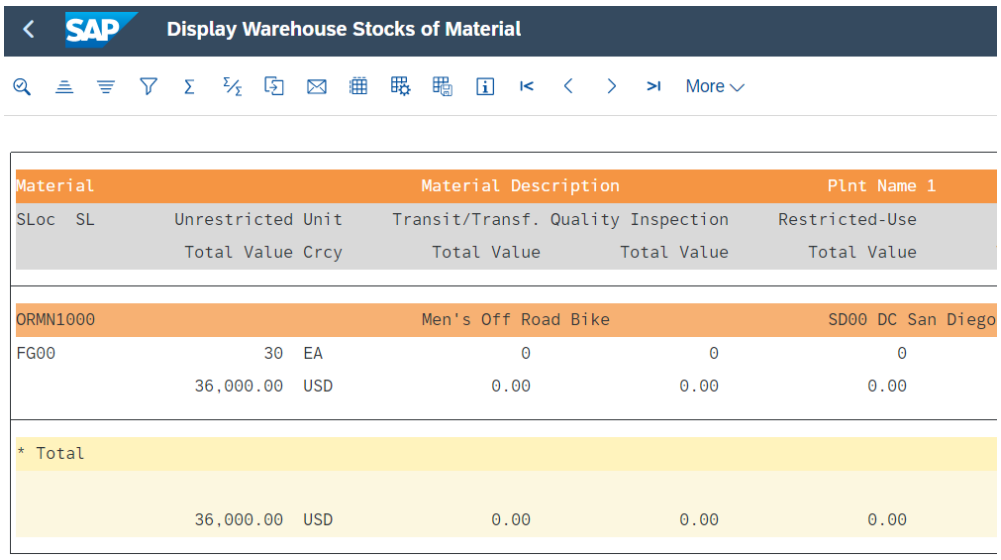
Fiori App

In the screen *Display Warehouse Stocks of Material*, enter **ORMN1###** as Material (replace ### with your number) and **SD00** as Plant. Make sure that all boxes are empty and click Execute.

ORMN1###
SD00



As you can see, the amount of material and the associated data in San Diego has increased.



Click on  to return to the SAP Fiori Launchpad.

WM IV Challenge

Learning Objective Conduct a physical inventory. **Time** 60 min

You have successfully gone through the Case Study *Warehouse Management IV*. Now you are able to demonstrate and to apply your knowledge. For this purpose, you should solve the following additional task on your own.

Scenario As a warehouse manager, you are in control of the necessary physical inventories within your warehouse. The San Diego warehouse applies the method of continuous inventory. In the course of this inventory, your aim is to check all storage locations of the storage type *pallet storage*.

In the course of the physical inventory of the storage bin STBN-9-###, which is listed as empty, 120 units of your off-road helmets (*OHMT1###)* are found in storage location *TG00*. Strict investigations revealed that they were part of the last delivery and were not entered into the system at all. The goods were also put away into the wrong storage bin, as STBN-3-### would be the standard bin for them. Start this physical inventory within the system, add the count and clear it.

To reconcile the stocks, use a transportation order in order to restore the 120 units from the storage bin STBN-9-### to the storage bin STBN-3-###.

Task Information You are free to use the Case Study *Warehouse Management IV* as an aid. It is however recommended to accomplish this advanced task without any help in order to thus put your acquired knowledge to a test.