

Logistics Case Study

IVF6ILV

Integrated Value Flows

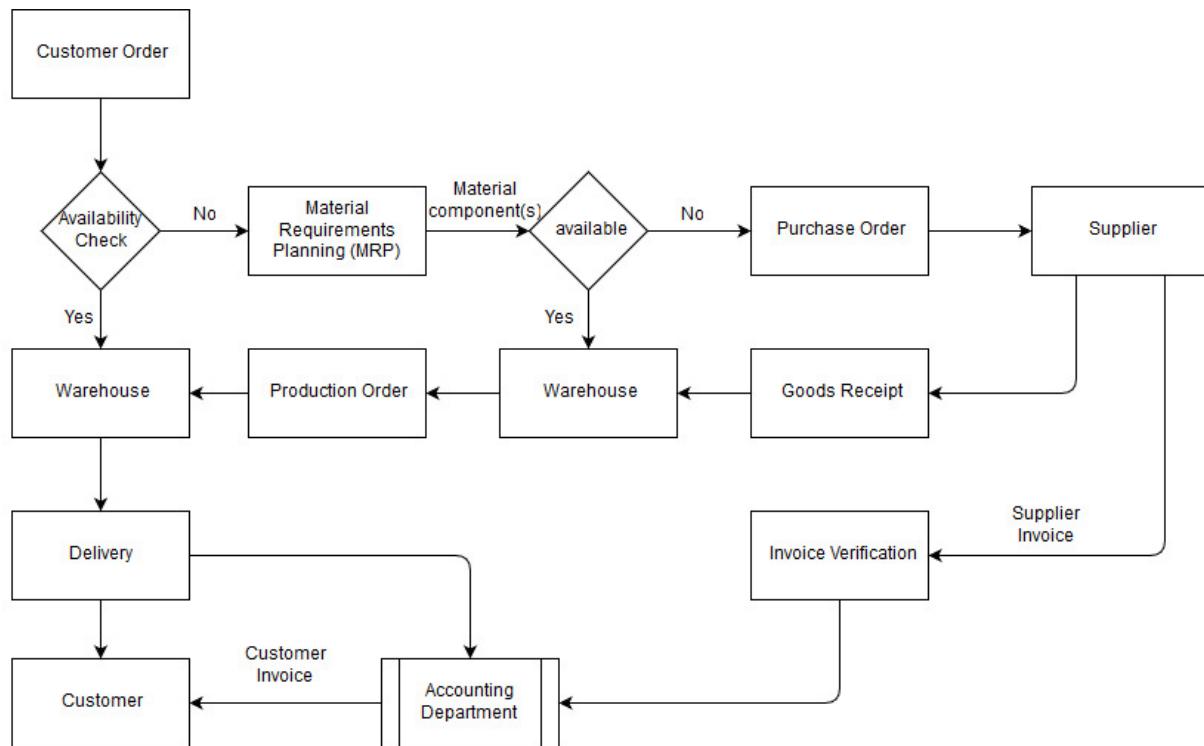
Author: Thomas Sint

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1. Overview

This case study covers an order to cash process including production. Our task is to produce DELUXE TOURING BIKE (RED) using externally procured and semi-finished materials. Most of the master data has already been created so you can focus on the processes.

The following figure shows the logistics chain:



2.Create New Customer

In this case study, we will create the master data for a new customer.

Two types of customer data are stored about a customer:

- sales data and
- accounting data.

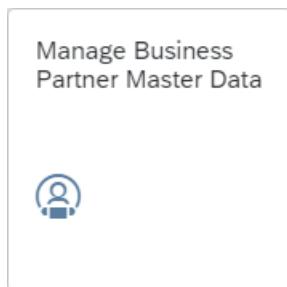
The customer master data is created in three groups, or views

- general,
- accounting, and
- sales.

Customers can be created centrally, meaning that all views are generated concurrently, or responsibility can be distributed so that different personnel in the accounting and sales areas are responsible for creating and maintaining the data in their respective views.

For this task, central creation will be used to enter all of the needed data to define a new customer.

To create a new customer, in the Sales and Distribution area use the app **Manage Business Partner Master Data**.



On the Manage Business Partner screen, select the button . A submenu will open. Click **Organization** here.

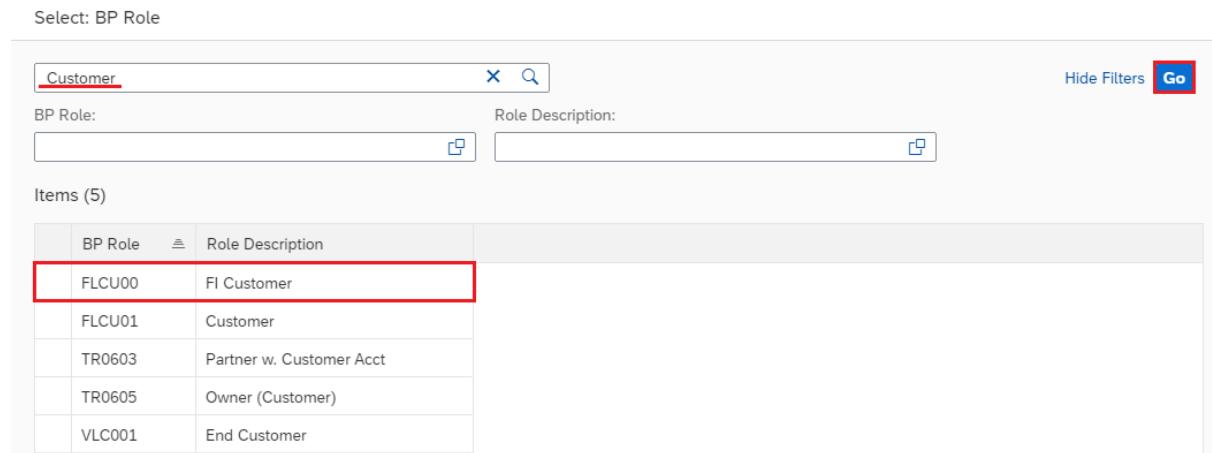
A screenshot of the SAP S/4HANA Business Partner Master Data screen. The top navigation bar includes the SAP logo, a search bar, and various menu icons. The main search area has fields for First Name/Name2, Street, City, and Country, along with dropdowns for Editing Status, Role, Business Partner, and Last Name/Name1. Below this is a table titled 'Business Partners (0)' with columns for Business Partner, Street, City, Postal Code, and Role. At the bottom right of the table, there is a context menu with options 'Person' and 'Organization'. The 'Organization' option is highlighted with a red box. Other menu items include 'Object Page', 'Copy', and 'Role'.

Note The business partner is created superordinate and assigned roles (for example customer, vendor). The different roles are created at specific organizational levels (company code, sales area). Business partners can be categorized as a person, group, or organization, as follows:

- An organization represents units, such as a company (for example, a legal person), parts of a legal entity (for example, a department) or an association. Organization is an umbrella term to map every kind of situation in the day-to-day business activities.
- A group represents a shared living arrangement, a married couple, or an executive board.

On the **Create Organization** screen, in the field BP Role click the input help icon . In the pop-up that opens, search for Customer and then select the entry FLCU00 | FI Customer.

Select: BP Role



	BP Role	Role Description
FLCU00	FI Customer	
FLCU01	Customer	
TR0603	Partner w. Customer Acct	
TR0605	Owner (Customer)	
VLC001	End Customer	

Back on the Create Organization screen, please add the following information.

Organization Title: Company
Name 1: Sport Center ###.

Remember to replace your three-digit number for ###, e.g. if your number is 003, please enter 003.

Street: 2144 N Orange Ave
City: Orlando
Postal Code: 32804
Country: US
Region: FL
Language: English

Confirm your entries with OK.

A new overview is generated. Make sure that you have selected the *Basic Data* tab. In the *General Information* area, in the field Search Term 1 add your three-digit number ###.

Basic Data < Roles Address < Bank Accounts Payment Cards Identification < Contacts Attachmen > <

General Information

Title:	Legal Form:
<input type="text" value="Company"/>	<input type="text"/>
Name 1:	Foundation Date:
<input type="text" value="Sport Center 999"/>	<input type="text"/> 
Name 2:	Liquidation Date:
<input type="text"/>	<input type="text"/> 
Name 3:	Authorization Group:
<input type="text"/>	<input type="text"/> 
Name 4:	External BP Number:
<input type="text"/>	<input type="text"/>
Search Term 1:	
<input type="text" value="999"/>	
Search Term 2:	
<input type="text"/>	

Then, select the *Roles* tab. Auto-scroll will take you to the correct position. You will see a line with the details of the business partner role as well as the validity dates. At the end of the line, click **>** to maintain further details.

Roles			
<input type="text" value="Search"/>  Create Delete Paste 			
Business Partner Role	Valid From	Valid To	
<input checked="" type="radio"/> FLCU00 	<input type="text" value="09/16/2021"/> 	<input type="text" value="12/31/9999"/> 	

A new screen is loading. Select the *Company Codes* tab. Currently, there is no record maintained for the company codes, so please select CREATE.

Company Codes				
<input type="text" value="Search"/>  Copy  Delete 				
Company Code	Reconciliation Account	Accounting Clerk	Payment Terms	Blocks
No data found.				

In the *Company Code* field, click the input help icon . The following pop-up window opens

Select: Company Code

The screenshot shows a search interface for company codes. At the top, there is a search bar with a magnifying glass icon and a 'Go' button. Below the search bar are four filter fields: 'Company Code:' with a dropdown arrow, 'Company Name:' with a dropdown arrow, 'Currency:' with a dropdown arrow, and 'Country Key:' with a dropdown arrow. To the right of these filters are 'Hide Filters' and 'Go' buttons. Below the filters, a message 'Items (2)' is displayed. A table follows, showing two rows of results:

	Co...	Cou...	Company Name
	DE00	DE	Global Bike Germany GmbH
	US00	US	Global Bike Inc.

Click on **US00** (*Global Bike Inc.*). In the *Finance* area, as the *Reconciliation Account* enter **1200000** (*Trade Receivables*) and as the *Sort Key* choose **001** (*Posting Date*). In the field *Payment Term*, please add **0001** (*Payable immediately Due net*).

The screenshot shows the 'Finance' configuration screen. It is divided into three main sections: 'Accounting', 'Interest Calculation', and 'Payment Data'. The 'Accounting' section contains fields for 'Reconciliation Account' (set to 1200000), 'Head Office' (dropdown), and 'Sort Key' (set to 'Posting date (001)'). The 'Interest Calculation' section contains 'Interest Indicator' (dropdown) and 'Calculated To' (set to 'MM/dd/yyyy'). The 'Payment Data' section contains 'Payment Terms' (set to 'Payable immediately Due net (0001)'), 'Credit Memo Payment Terms' (dropdown), and 'Tolerance Group' (dropdown). At the bottom right, there is a 'Tolerance Group' section with a dropdown.

Select **APPLY** to save the draft. You can save the customer role by clicking **APPLY** once again afterwards.

Select the *Address > Address Details* tab. You will see one line with the country details as well as the validity dates. Click **>** to maintain more details.

The screenshot shows the 'Address Details' screen. At the top, there is a toolbar with 'Search', 'Copy', 'Create', 'Delete', 'Paste', and a gear icon. Below the toolbar is a table with columns: 'Address', 'Country', 'Standard', 'Valid From', and 'Valid To'. One row is visible, showing 'Address' (radio button), 'Country' (dropdown set to 'US'), 'Standard' (checkbox checked), 'Valid From' (date 09/16/2021), and 'Valid To' (date 12/31/9999). A red square highlights the 'Valid To' field.

In the *Address* area, you can use the button **SHOW MORE** to display all the fields.

Please find the *Transportation Zone* field and click the input help icon . The following pop-up window will open.

Select: Transportation Zone

The screenshot shows a search interface for selecting a Transportation Zone. At the top, there is a search bar with a magnifying glass icon and a 'Go' button. Below the search bar are three filter fields: 'Transportation Zone' (with a dropdown arrow), 'Description' (with a dropdown arrow), and 'Country Key' (with a dropdown arrow containing '=US'). A 'Hide Filters' link is also present. Below the filters, a message says 'Items (2)'. A table displays two rows of data:

	Transportation Zone	Description
	0000000001	Region East
	0000000002	Region West

Click on **Region East** to select it. Finally, use the button **Apply** again to save your draft.

To be able to add sales area data for the customer you have just created, you have to assign a new business partner role. For this purpose, select the *Roles* tab. There, choose CREATE again to create a new row for another Business Partner Role.

The screenshot shows a table for creating a new Business Partner Role. The columns are 'Business Partner Role', 'Valid From', and 'Valid To'. There are two rows, both of which have their 'Business Partner Role' field set to 'FLCU00'. The first row has a 'Valid From' date of '09/16/2021' and a 'Valid To' date of '12/31/9999'. The second row has a 'Valid From' date of '09/16/2021' and a 'Valid To' date of '12/31/9999'. Each row has a blue 'Edit' icon and a blue 'Delete' icon.

Business Partner Role	Valid From	Valid To
FLCU00	09/16/2021	12/31/9999
FLCU00	09/16/2021	12/31/9999

In the empty *Business Partner Role* field, click the input help icon . In the pop-up that opens, search for **Customer** and then select the **FLCU01 | Customer** entry.

Select: BP Role

The screenshot shows a search interface for selecting a BP Role. At the top, there is a search bar with the text 'Customer', a magnifying glass icon, and a 'Go' button. Below the search bar are two filter fields: 'BP Role' (with a dropdown arrow) and 'Role Description' (with a dropdown arrow). A 'Hide Filters' link is also present. Below the filters, a message says 'Items (5)'. A table displays five rows of data:

BP Role	Role Description
FLCU00	FI Customer
FLCU01	Customer
TR0603	Partner w. Customer Acct
TR0605	Owner (Customer)
VLC001	End Customer

At the end of the new row, you can click > to add more details. Select *Sales Areas* tab to maintain the sales area data of your customer. Since no record currently exists, select the button CREATE.

Sales Areas

The screenshot shows a search interface for Sales Areas. At the top right are buttons for Search, Copy, Create, Delete, and Settings. Below the header are six columns: Sales Organization, Distribution Channel, Division, Delivery Block, Billing Block, and Order Block. A message 'No data found.' is centered at the bottom.

In the *Sales Organization* field, click input help icon . In the pop-up window that opens, enter the following data: As the *Sales Organization* add **UE00**, as the *Distribution Channel* enter **WH** (*Wholesale*), and as the *Division* choose **BI** (*Bicycles*). Then press GO to run the search.

Select: Sales Organization

The screenshot shows the search results for Sales Organization. It includes a search bar, filter buttons (Hide Filters, Go), and a table with one item. The table columns are Sales Organization, Sales Organization Description, Distribution Channel, Distribution Channel Description, and Division Description. The item listed is UE00, US East, Wholesale, and Bicycles.

Click **US East** to apply the entries. The fields will be filled accordingly in the *General Data* tab.

Next, please select the *Sales Area Details* tab. In the *Sales Orders* area, as *Sales District* enter **US0001** (*Pacific Northwest USA*) and make sure that as the *Currency USD* is specified.

The screenshot shows the Sales Orders area. It includes fields for Sales District (Pacific NorthwestUSA), Customer Group, PP Customer Procedure, Currency (United States Dollar), and Exchange Rate Type.

In the *Billing* area, as the *Incoterms* type in **FOB** (*Free on Board*) and as the *Incoterms Location 1* **Miami**. In the *Payment Terms* field, please add **0001** (*payable immediately due net*).

Billing

Invoice Dates:

Incoterms Version:

Incoterms: Free on board (FOB)

Incoterms Location 1: Miami

Incoterms Location 2:

Payment Terms: Payable immediately Due net (0001)

Research what Incoterms are and what FOB means.

Incoterms:

FOB:

Subsequently, fill in data for the *Shipping* area. In the fields *Delivery Priority* and *Shipping Conditions*, use the drop-down lists to select **Normal items** and **Standard** in chronological order. As the *Delivery Plant* enter **MI00 (Miami)**.

Shipping

Delivery Priority:
Normal item

Delivery Plant:
MI00

Shipping Conditions:
Standard

Order Combination:

In the *Accounting* area, as the *Account assignment group* select **Domestic Revenue**. In the following *Partial Deliveries* area, in the field *Partial Delivery Per Item*, please use the drop-down list and select **Partial delivery allowed**. Last but not least, enter data for the final area of this tab, *Pricing and Statistics*. In the *Price Group* field, use the drop-down list to select **Bulk buyer** and as the *Customer Pricing Procedure* enter **1 (Standard)**. Compare your entries with the following screenshots and confirm your entries with enter.

Accounting

Account assignment group:
Domestic Revenues

Partial Deliveries

Partial Delivery Per Item:
Partial delivery allowed

Complete Delivery Required:

Pricing and Statistics

Price Group:
Bulk buyer

Customer Pricing Procedure:
Standard (1)

Then, please select the *Taxes* tab. For all three tax categories choose the *Tax Classification 0 (Exempt)*.

Sales Area Taxes (3)			Search	Paste	⚙️
Country	Tax Category	Tax Classification			
US	UTXJ	0	<input type="button" value=""/>	>	
US	UTX2	0	<input type="button" value=""/>	>	
US	UTX3	0	<input type="button" value=""/>	>	

Select APPLY to save your adjustments as a draft. Then press APPLY again to finish editing the customer role. To finally save the business partner, use the CREATE button in the lower screen area.

The SAP system will create the master data record for the new BP and assign a unique business partner number. Write down the BP number, which you can find in the header area.

The SAP system will create the master record for the new customer and assign the customer a unique customer number.

Sport Center 999

#####



Grouping: Internal number assignment (0001)
Business Partner Category: Organization (2)

Standard Address
2144 N Orange Ave 32804 Orlando US

Standard Communication

Basic Data
Roles
Address
Bank Accounts
Payment Cards
Identification
Contacts
Attachments

General Information

Title: Company	Legal Form: –
Name 1: Sport Center 999	Foundation Date: –
Name 2: –	Liquidation Date: –
Name 3: –	Authorization Group: Stakeholder: Visibility 0 (Unrestricted)
Name 4: –	External BP Number: –
Search Term 1: 999	
Search Term 2: –	
Created By: Teach-002 Teach-002 (TEACH-002)	Master data record created
Created On:	

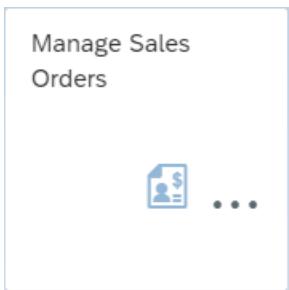
Please write down your order number somewhere as we will need it afterwards!

3. Customer Order

Create

The initial part of the logistics chain is the customer order. It triggers demand for the whole process. The app for creating a customer order can be found in your app list:

Please click on the App: Manage Sales Orders



Following screen appears:

A screenshot of the SAP Fiori 'Manage Sales Orders' application. The top navigation bar shows 'SAP' and 'Manage Sales Orders'. The search bar contains 'Standard*'. Below the search bar are fields for 'Sales Order', 'Sold-to Party', 'Customer Reference', 'Requested Delivery Date', and 'Overall Status'. A 'Document Date' field is also present. On the right, there are 'Go' and 'Adapt Filters' buttons. The main area shows a table with columns for 'Sales Order', 'Sold-to Party', 'Customer', and others. A context menu is open over the 'Customer' column, with options like 'Create', 'Reject All Items', 'Set Delivery Block', etc., visible. The 'Create' option is highlighted with a red box.

Choose „Create Sales Order – VA01“

Fill in following fields:

- Order Type „OR“,
- Sales Organisation „UE00“,
- Distribution Channel „WH“,
- Division „BI“

After filling in the fields proceed with continue:

SAP Create Sales Documents

More ▾ Exit

* Order Type: OR

Organizational Data

Sales Organization: UE00

Distribution Channel: WH

Division: BI

Sales office:

Sales group:

 Continue Create with Reference

Now we have to fill in who the customer is and what he/she wants to order from us.

In the fields Sold-to-party and Ship-to-party the customer is inserted. Please use the client you created in the chapter before.

In the Field Cust. Reference you usually type in the number of the purchase order for example, now you have to type your three digits, and press *Enter*.

In the lower part we see the item fields where the goods to order can be inserted. Additionally, in this case the master data has already been created for each user.

The ordered product, DELUXE TOURING BIKE (ROT), has the material number: "DXTR3" + your number. E.g. User 001 = DXTR3001

In the order quantity field please type in "2".

By pressing *Enter* you access the Availability Control overview. The Availability Control tells us, that in 5 working days the scissors will be available.

SAP Standard Order: Availability Control

Item: 10 Sched.line: 1
Material: DXTR3100
Deluxe Touring Bike (red)

Requirement Segment: []

Plant: MI00 DC Miami
Req.deliv.date: 03/27/2023
End lead time: 04/07/2023

Open Quantity: [] 2 EA
Max.Part.Deliveries: 0

Fix Qty/Date

One-time del. on req. del. dte : not possible

Dely/Conf.Date: 03/27/2023 / 03/29/2023 Confirmed Quantity: [] 0

Complete delivery

Dely/Conf.Date: 04/01/2023 / 04/01/2023

Dely proposal

Dely/Conf.Date: 04/01/2023 / 04/01/2023

	Confirmed qty: [] 2 <input checked="" type="checkbox"/>

Press the green checkmark.

Discuss where the availability date comes from.

Save the order, just as in the Screenshot below.

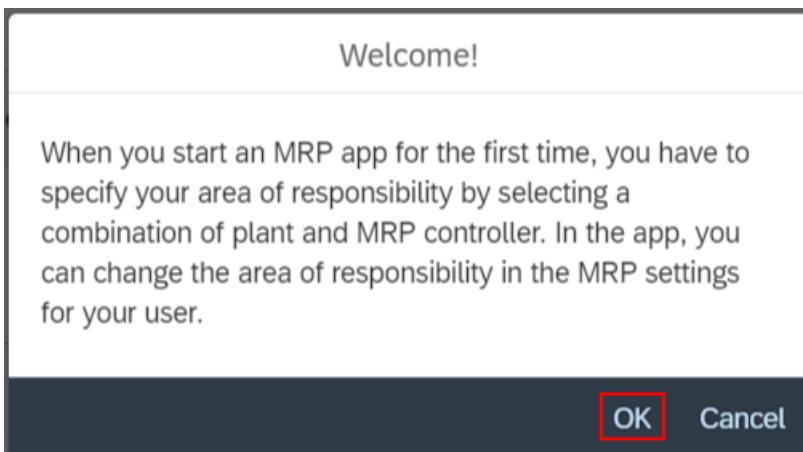
SAP Create Standard Order: Overview

Standard Order: [] Net Value: [] 6,000.00 USD
 Sold-To Party: 1003200 Sport Center 999 / 2144 N Orange Ave / Orlando FL 32804
 Ship-To Party: 1003200 Sport Center 999 / 2144 N Orange Ave / Orlando FL 32804
 Cust. Reference: 999 Cust. Ref. Date: []  

Sales	Item Overview	Item detail	Ordering party	Procurement	Shipping	Reason for rejection
* Req. Deliv.Date: D 03/27/2023				Deliver.Plant: []		
Complete Dlv.: <input type="checkbox"/>				Total Weight: [] 17,020 G		
Delivery Block: []				Volume: [] 0.000		
Billing Block: []				Pricing Date: 03/27/2023		
Pyt Terms: 0001 Pay immediately w/o deduction						
Inco. Version: []						
Incoterms: FOB						
Inco. Location1: Miami						
                                       <img alt="Print						



When this app is launched the first time by your user, you have to tell the system what your field of responsibility is.



Click on OK

Choose "MI00" with "MI MRP Controller", activate the AOR Status and click assign.

Standard* ▾

Not Filtered

Plant / MRP Controller Combinations (12)

	Plant	Plant Name	MRP Controller	MRP Controller Name	AOR Status
<input type="checkbox"/>	MI00	DC Miami	000	MI MRP Controller	
<input type="checkbox"/>	0001		001	PERSON 1	
<input type="checkbox"/>	0003		001	PERSON 1	
<input type="checkbox"/>	DL00	Plant Dallas	000	DL MRP Controller	
<input type="checkbox"/>	HD00	Plant Heidelberg	000	HD MRP Controller	
<input type="checkbox"/>	HH00	DC Hamburg	000	HH MRP Controller	
<input type="checkbox"/>	L999	Plant Munich L999	000	HH MRP Controller	
<input type="checkbox"/>	PL01	DC Hamburg	000	HH MRP Controller	
<input type="checkbox"/>	PL02	Plant Munich L02	000	HH MRP Controller	
<input type="checkbox"/>	PL03	Plant Berlin	000	HH MRP Controller	
<input type="checkbox"/>	PL05	Plant Berlin 05	000	HH MRP Controller	
<input type="checkbox"/>	SD00	DC San Diego	000	SD MRP Controller	

Then reopen the App under search: Monitor Material Coverage Net / Individual Segment.

Now only materials will be shown which are used in plant MI00 and have the MRP controller MI MRP defined in the master data.

Type in your *Material* (DXTR3##) in the corresponding field and click on *Go*.

Standard* ▾

Search

Shortage Definition:*

MRP Standard

Material:

DXTR3100

Time till Shortage:

Hide Filter Bar Restore Filters (3) Go

Individual Segment:

Following appears:

Standard* ▾

Hide Filter Bar Restore Filters (3) **Go**

Shortage Definition: * Material: Time till Shortage:

Individual Segment:

Materials (1)						
<input type="checkbox"/> Material No.	Material Description	Individual Segment	First Shortage On	Shortage Quantity	Shortage Duration (Working Days)	Stock Availability
<input type="checkbox"/> DXTR3100	Deluxe Touring Bike (red)		03/29/2023	2 EA	999	

Here you can see the stock availability of our material. By clicking on the material, you can see further details:

Materials (1)

<input type="checkbox"/> Material No.	Material Description	Individual Segment	First Shortage On	Shortage Duration (Working Days)	Stock Availability
<input type="checkbox"/> DXTR3100	Deluxe Touring Bike (red)		03/29/2023	-2.000 EA	

Check Material Coverage

And if you further click on *Open -> „Check Material Coverage”* you can see a nice overview of the Stock/ Requirements List:

Materials (1)

Material Details	
Search	REFRESH
DXTR3100	-2 EA
Deluxe Touring Bike (red) (Plant M100)	
in 2 days	
Check Material Coverage	

Stock/Requirements List (1 Shortage)

Date	MRP Element	Actions	Additional Information	Rescheduling	Quantity	Available
03/29/2023	Stock	CusOrd 36-10	No Safety Stock	Sport Center 999	0 EA	-2 EA

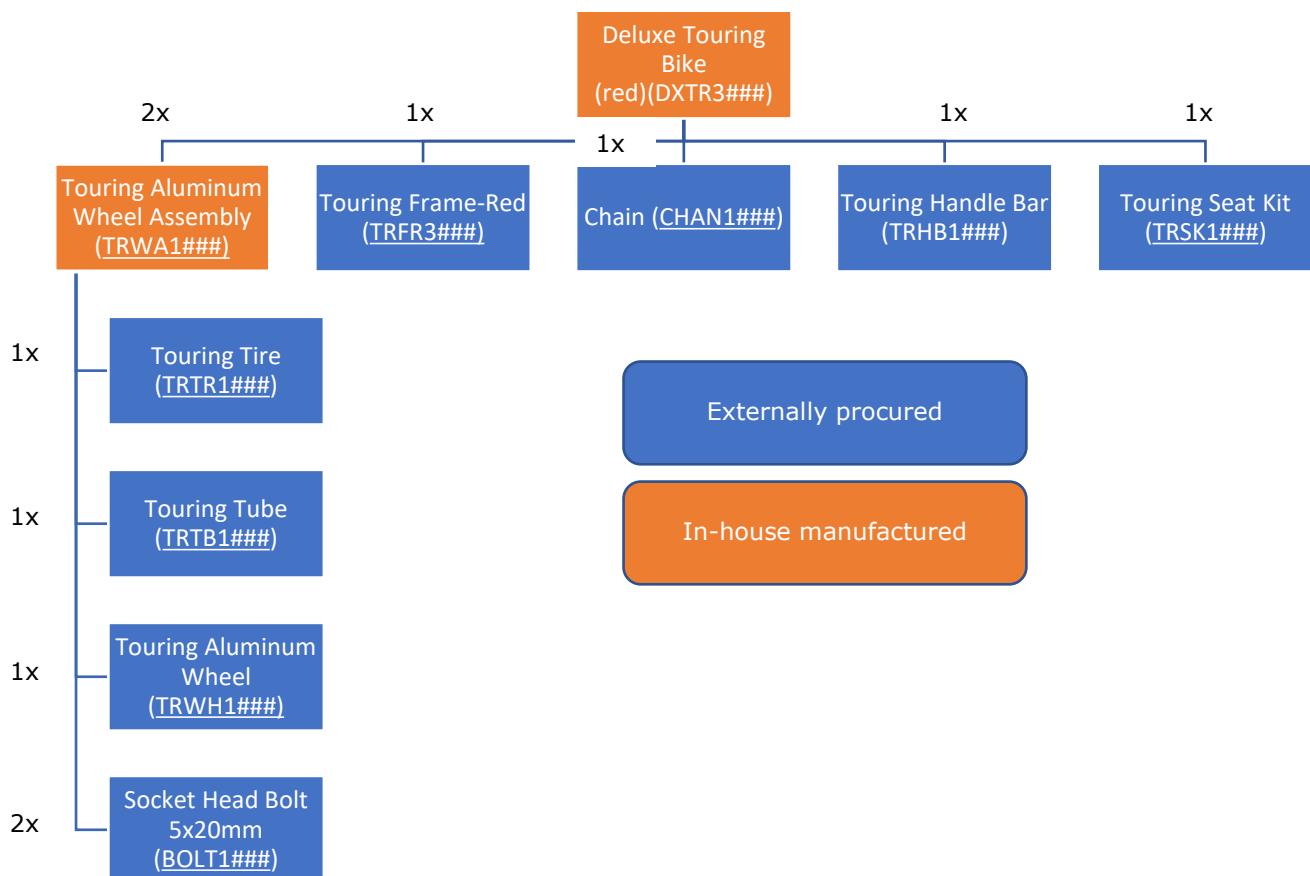
Here the customer order is shown. In addition, you see that the current stock level is 0, which means, that the demand created by the customer cannot be met yet.

4.Bill of Material (BOM)

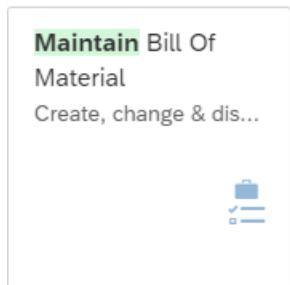
Create

A bill of material (BOM) is needed for production. One may say that it is the cooking recipe for our finished product. It contains all components (materials), including their quantity needed for the good's production. The following illustration shows the Deluxe Touring Bike BOM.

The blue materials are procured externally and the orange ones will be manufactured in-house. Left side is a semi-finished product. They need to be produced before the Deluxe Touring Bike, which are the finished good. As there are five different goods (one semi-finished and one finished) to produce, we need two single-level BOMs



Please run the App: Maintain Bill of Material



The following screen appears:

Click on “Create BOM”. We will start with the semi-finished product’s BOM. As material, please type in “TRWA1###”, for plant “MI00” and as BOM usage “1” (Production).

The following window appears. Here all the components needed for the good’s production can be typed in with their according quantities. When looking on the BOM we see that for TRWA1### we need the Touring Tire (TRTR1###), Touring Tube (TRTB1###), Touring Aluminum Wheel (TRWH1###) and Socket Head Bolt 5x20mm (BOLT1###).

Item N...	Item Category	Component	Component Description	Component Quantity	Valid From	Valid To
0010	L(Stock item)	TRTR1100	Touring Tire	1.000	EA	03/27/2023 12/31/9999 >
0020	L(Stock item)	TRTB1100	Touring Tube	1.000	EA	03/27/2023 12/31/9999 >
0030	L(Stock item)	TRWH1000	Touring Aluminum Wheel	1.000	EA	03/27/2023 12/31/9999 >
0040	L(Stock item)	BOLT1100	Socket Head Bolt 5x20mm	2.000	EA	03/27/2023 12/31/9999 >
0050	L(Stock item)			0.000		03/27/2023 12/31/9999 >
0060	L(Stock item)			0.000		03/27/2023 12/31/9999 >
0070	L(Stock item)			0.000		03/27/2023 12/31/9999 >
0080	L(Stock item)			0.000		03/27/2023 12/31/9999 >
0090	L(Stock item)			0.000		03/27/2023 12/31/9999 >
0100	L(Stock item)			0.000		03/27/2023 12/31/9999 >

The BOM can be created now by clicking on the create button. Go back by clicking on Now the same must be done the highest in the hierarchy, namely the Deluxe Touring Bike (red) (DXTR3###) BOM. Materials needed for the Deluxe Touring Bike (red) are

- Touring Aluminum Wheel Assembly (TRWA1###)
- Touring Frame-Red (TRFR3###)
- Chain (CHAN1###)
- Touring Handle Bar (TRHB1###)
- Touring Seat Kit (TRSK1###)

Please proceed exactly as with the other POM and save the BOM created.

Item N...	Item Category	Component	Component Description	Component Quantity	Valid From
0010	L(Stock item)	TRWA1100	Touring Aluminum Wheel Assembly	2.000	EA 03/27/2023
0020	L(Stock item)	TRFR3100	Touring Frame-Red	1.000	EA 03/27/2023
0030	L(Stock item)	CHAN1100	Chain	1.000	EA 03/27/2023
0040	L(Stock item)	TRHB1100	Touring Handle Bar	1.000	EA 03/27/2023
0050	L(Stock item)	TRSK1100	Touring Seat Kit	1.000	EA 03/27/2023

Congratulations, you have finished the BOM creation!

Display Multilevel Bill of Material (BOM)

Since we now created only single-level BOMs, let us have a look at the multi-level BOM. Please run the [App: Display Multilevel BOM Explosion](#)



The following screen appears. As we want to see the multi-level BOM of the Deluxe Touring Bike (red), please type in the Deluxe Touring Bike (red) (DXTR3##). The plant is still "MI00" and the BOM application is "BEST".

SAP Explode BOM: Multilevel BOM: Initial Screen

Material: **DXTR3100** Plant: MI00

Alternative BOM:

BOM Application: **BEST**

Selection

Valid From: 03/27/2023

Change Number:

Revision Level:

Required qty:

Segmentation

Stock Segment: Ignore Seg.

Now we “exploded” our BOM, which means that now we see the hierarchy of our multi-level BOM. The list below is nothing else than our BOM diagram in the beginning of the BOM chapter.

Material DXTR3100
Plant/Usage/Alt. MI00 / 1 / 01
Description Deluxe Touring Bike (red)
Base Qty (EA) 1,000
Reqd Qty (EA) 1

Explosion level	Item	Obj...	Component number	Object description	Ovfl	Comp. Qty (CUN)	Unit	Ict	Ex.	Requirement Segment	Stock Segment	Lev	PPh	B..	D..	MTyp	Plant	Version
1	0010		TRWA1100	Touring Aluminum Wheel As...		2	EA	L				1	1	M	HALB	MI00		
.2	0010		TRTR1100	Touring Tire		2	EA	L				2	1	M	ROH	MI00		
.2	0020		TRTB1100	Touring Tube		2	EA	L				2	2	M	ROH	MI00		
.2	0030		TRWH1000	Touring Aluminum Wheel		2	EA	L				2	3	M	ROH	MI00		
.2	0040		BOLT1100	Socket Head Bolt 5x20mm		4	EA	L				2	4	M	ROH	MI00		
.1	0020		TRFR3100	Touring Frame-Red		1	EA	L				1	2	M	ROH	MI00		
.1	0030		CHAN1100	Chain		1	EA	L				1	3	M	ROH	MI00		
.1	0040		TRHB1100	Touring Handle Bar		1	EA	L				1	4	M	ROH	MI00		
.1	0050		TRSK1100	Touring Seat Kit		1	EA	L				1	5	M	ROH	MI00		

5. Routings

As our cooking recipe (BOM) has been created already, we now must assign the cooking pots and plates for our dinner. In other words, we will now create the routings for the production. Routings determine how the production work steps are executed. Each work step is assigned to a work center.

Worksteps contain:

- Standard times (person and/or machine)
- Temporal availability (shift model/operating time)
- Available utilization
- Amount of machines
- Activity price
- Completion confirmation information

We produce two different goods; therefore, we need two different routings. The first routing has two assembly and a quality check step. The second routing has one assembly and a quality check step. The setup and processing times are shown below.

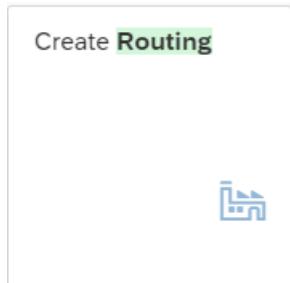
Deluxe Touring Bike (red) DXTR3###			
Work Center	Setup Time	Labor Time	Materials
ASSY1000	10 min	5 Min	Touring Frame-Red (TRFR3###) Touring Handle Bar (TRHB1###) Touring Seat Kit (TRSK1###) Touring Aluminum Wheel Assembly (TRWA1###)
ASSY1000	5 min	12 Min	Chain (CHAN1###)
QUAL1000		5 Min	

Touring Aluminum Wheel Assembly (TRWA1###)			
Work Center	Setup Time	Labor Time	Materials
ASSY1000	10 min	5 Min	Touring Tire (TRTR1###) Touring Tube (TRTB1###) Touring Aluminum Wheel (TRWH1###)

			Socket Head Bolt 5x20mm (BOLT1###)
QUAL1000		5 Min	

As the work center and activity types have already been created for you, you only must define the routings.

To do this please run the App: Create Routing.



The following screen appears. We will start with the routing for the semi-finished product.

SAP Create Routing: Initial Screen

Copy from Routings Sequences Operations More ▾ Exit

Material: TRWA1100
Plant: MI00

Sales document: Sales Document Item:

WBS Element:

Group:

Validity

Change Number:

* Key Date: 03/27/2023

Revision Level:

Additional data

Profile:

 Continue

Please type in “TRWA1###” for the material and “MI00” for the plant and go ahead with *Continue*.

The following screen appears. On the right upper side, you can give the routing a name. For *usage*, please type in “1” (Production) and for *status* “4” (Released):

SAP Create Routing: Header Details

Routings (highlighted with a blue box and arrow)

Assignment Sequences Operations More Exit

Group: Group Counter: 1 Touring Aluminum Wheel Assembly

Material: TRWA1100 Touring Aluminum Wheel Assembly

Task List

Group:

* Group Counter: 1 Touring Aluminum Wheel Assembly

* Plant: MI00 Long Text Exists:

Production line

Line Hierarchy

General Data

Deletion Flag:

* Usage: 1

* Overall Status: 4 

Planner Group:

Planning Work Center:

CAPP order:

Please click on Routings in the left upper corner. We now see the task list, which contains a task which we have named in the previous step.

SAP Create Routing: Overview

Sequences Operations Assignment Allocation More Exit

Group:

Material: TRWA1100 Touring Aluminum Wheel Assembly

Header Overview

	GrC	Description	Plant	Us...	St...	Pl...	Lot Size From	Lot Size To
<input checked="" type="checkbox"/>	1	Touring Aluminum Wheel Assembly	MI00	1	4	0	99,999,999	

Double click on the task. The following window appears where we can fill in the routings' operations. In this case the work centers are the same for all users, namely "ASSY1000" and "QUAL1000". Control keys are "PP01". You can also fill in a description for each operation.

SAP Create Routing: Operation Overview

Group: Group Counter: 1 Touring Aluminum Wheel Assembly

Material: TRWA1100 Touring Aluminum Wheel Assembly

Operation Overview

Ope...	SOOp	Work cen...	Plant	* C...	Standard...	Description	Lo...	PRT	Cl...	O...
<input type="checkbox"/>	0010	ASSY1000	MI00	PP01			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	0020	QUAL1000	MI00	PP01	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	0030		MI00				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

By double Click to the operation number you access the operation details. The first of the two operations must be defined. When looking at our routing tables at the chapter's beginning, we see that the *setup time* is *10 minutes*, and the labor *processing time* is *5 minutes*. Therefore please fill in these fields:

Standard Values

Conversion of Units

Header	Unit
<input type="text"/> 1	<input type="text"/> EA

Break Time:

Std Value	Un	Act. Type	Efficiency
Setup: <input type="text"/> 10	<input type="text"/> MIN	<input type="text"/> LABOR	<input type="text"/>
Machine: <input type="text"/>	<input type="text"/> MIN	<input type="text"/>	<input type="text"/>
Labor: <input type="text"/> 5	<input type="text"/> MIN	<input type="text"/> LABOR	<input type="text"/>

Business Process:

With the arrow you can go to the next operation.

Work center < Work center More Exit

Group: Group Counter: 1 Touring Aluminum Wheel Assembly

Material: TRWA1100 Touring Aluminum Wheel Assembly

Operation

* Activity: <input type="text"/> 0010	Suboperation: <input type="text"/>
* Control key: <input type="text"/> PP01	Routing/Ref. op. set - internal proc.
* Plant: <input type="text"/> MI00	
Work center: <input type="text"/> ASSY1000	DL Assembly
Standard Text Key: <input type="text"/>	<input type="text"/>
Long Text Exists: <input type="checkbox"/>	

Standard Values

Conversion of Units of Measure

Header	Unit	Operat.	Un
1	EA	* <=>:	1 EA

Std Value	Un	Act. Type	Efficiency
Setup: <input type="text"/> 10	MIN	LABOR	<input type="text"/>
Machine: <input type="text"/>	MIN		<input type="text"/>
Labor: <input type="text"/> 5	MIN	LABOR	<input type="text"/>
Business Process: <input type="text"/>			

Operation

* Activity: <input type="text"/> 0020	Suboperation: <input type="text"/>
* Control key: <input type="text"/> PP01	Routing/Ref. op. set - internal proc.
* Plant: <input type="text"/> MI00	
Work center: <input type="text"/> QUAL1000	DL Assembly
Standard Text Key: <input type="text"/>	<input type="text"/>
Long Text Exists: <input type="checkbox"/>	

Standard Values

Conversion of Units of Measure

Header	Unit	Operat.	Un
1	EA	* <=>:	1 EA

Std Value	Un	Act. Type	Efficiency
Setup: <input type="text"/>	MIN	LABOR	<input type="text"/>
Machine: <input type="text"/>	MIN		<input type="text"/>
Labor: <input type="text"/> 5	MIN	LABOR	<input type="text"/>
Business Process: <input type="text"/>			

Now the two operations, namely assembly and quality check have been created. In consequence, the components that have been assigned to the

semi-finished good's BOM have to be assigned to the assembly operation. Therefore, click on the *Allocation* as in the Screenshot below:

The screenshot shows the SAP Create Routing: Operation Overview interface. The 'Allocation' tab is highlighted. The material is set to 'TRWA1100'. The 'Operation Overview' table lists operations 0010, 0020, 0030, and 0040. Operation 0020 is selected. The table includes columns for Work center, Plant, Standard..., Description, Lo..., PRT, Cl..., O..., Pe..., Cu..., Su..., Base Quantity, Un..., Setup, Unit, Activit..., Machine, and Unit, Activit..., Labor.

Following Screen appears. Mark the entries and click on *New Assignment* in the left upper corner:

The screenshot shows the 'New Assignment' dialog box. In the background, the SAP interface displays the same 'Create Routing: Operation Overview' screen with the 'Allocation' tab selected. The 'Item Overview' table lists components 0010, 0020, 0030, and 0040, which are all selected (indicated by blue boxes around the checkboxes).

Now assign the activities by clicking on the *Oper./act. list*:

The screenshot shows the 'New Assignment' dialog box. It has fields for 'Activity:' and 'Sequence: 0'. At the bottom right, there is a green checkmark icon, a magnifying glass icon, and a red 'X' icon. The 'Oper./act. list' button is highlighted with a blue box.

Choose the first one: *Assembly*

Choose Operation



Seq.	OpAc	Work ctr	Operation short text
<input checked="" type="radio"/> 0	0010	ASSY1000	assmbley
<input type="radio"/> 0	0020	QUAL1000	quality check

✓
✗

The component got **blue** now – the other component also must be assigned to the assembly operation. *Save*.

In the left bottom corner following notification appears:



Now do the same for the finished good.

Please note that the routing for the finished good has three processes. Components are consumed in both process 0010 and process 0020.

Material: DXTR3100	Plant: MI00	Sequence: 0	Deluxe Touring Bike (red)	
Group:	BOM: 00028003	Alt. BOM: 1		
Item Overview				
Ph... Le... Path It... Component	Quantity	Sort String	Un... It... Ba... Activity	Seq.
<input type="checkbox"/> 0 0 0010 TRWAA1100	2		EA L <input type="checkbox"/> 0010	0
<input type="checkbox"/> 0 0 0020 TRFR3100	1		EA L <input type="checkbox"/> 0010	0
<input type="checkbox"/> 0 0 0030 CHAN1100	1		EA L <input type="checkbox"/> 0020	0
<input type="checkbox"/> 0 0 0040 TRHBB1100	1		EA L <input type="checkbox"/> 0010	0
<input type="checkbox"/> 0 0 0050 TRSK1100	1		EA L <input type="checkbox"/> 0010	0

Create Routing: Operation Overview																		
Group:		Group Counter:		Material:		Work center		Allocation		Detail								
Operation Overview																		
Ope...	SOp	Work cen...	Plant	* C...	Standard...	Description	Lo...	PRT	Cl...	O...	Pe...	Cu...	Su...	Base Quantity	Un...	Setup	Unit	Activit...
<input checked="" type="checkbox"/>	0010	ASSY1000	MI00	ASSY		assembly - Step 1	<input type="checkbox"/>	1	EA	10	MIN	LABOR						
<input checked="" type="checkbox"/>	0020	ASSY1000	MI00	ASSY		assembly - Step 2	<input type="checkbox"/>	1	EA	5	MIN	LABOR						
<input checked="" type="checkbox"/>	0030	QUAL1000	MI00	ASSY		quality check	<input type="checkbox"/>	1	EA		MIN	LABOR						

When you are done with the routings, you have basically typed into the system what is needed for production and how the production should be executed.

6. Production Versions

As there might be more than one combination of routings and BOMs per material, we must create so called Product Versions, which always combine a routing with a BOM.

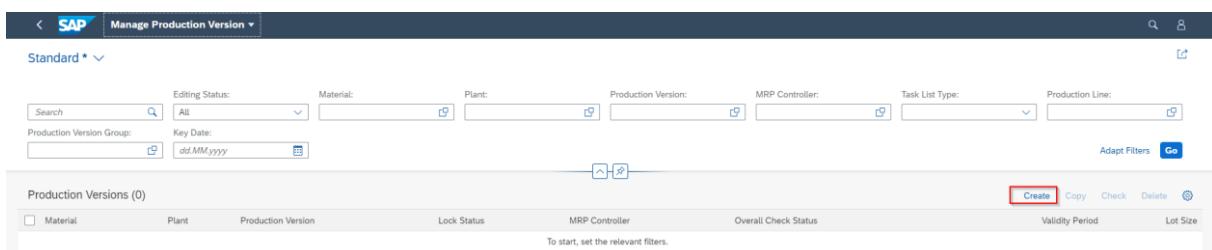
Discuss what the purpose of this may be.

The Product Versions must be created for all materials we produce ourselves: DXTR3### and TRWA1###. Let's start with TRWA1###:

Please start the App: Manage Production Versions:



Click on *Create*:



In the *Header Data* fill in following fields:

- Production Version: PXXX- three digits of your Material
- Production Version Text: Standard production

A screenshot of the "Header Data" tab in the "Manage Production Version" application. The tab is part of a horizontal navigation bar with other tabs like "Selection Criteria", "Production", "Version Details", "Component Supply & Product Putaway", and "Repetitive M...". The "Header Data" tab is currently active and has a blue underline. Below the tabs is a table with two rows. The first row contains a "Production Version:" field with the value "P100" and a "REM Allowed:" checkbox. The second row contains a "Prod'n Version Text:" field with the value "Standard production" and a "Change Number:" field with a blue "Check" button. To the right of the table is a "Check" button and a "Link" icon.

In the *Selection Criteria* fill in following fields:

- Material: TRWA1

- Plant: MI00

Selection Criteria

Material: *	Touring Aluminum Wheel Assembly (TRWA1100)	Minimum Lot Size:	1.000 EA
Plant: *	DC Miami (MI00)	Maximum Lot Size:	99,999,999.000 EA
Lock Status:	<input type="button" value="▼"/>		
Validity Start Date:	03/27/2023 <input type="button" value="..."/>		

In the *Production* fill in following fields:

- In the field Alternative BOM click on and then . Then choose your material by clicking once at it:

<input type="text" value="Search"/> <input type="button" value=""/>	<input type="button" value=""/>	<input type="button" value="Hide Filters"/> <input type="button" value="Go"/>				
Material:	Material Description:	Plant:				
TRWA1100 <input type="button" value="..."/>	<input type="text"/> <input type="button" value="..."/>	=MI00 <input type="button" value="..."/>				
BOM Usage:	Usage text:	Alternative BOM:				
=1 <input type="button" value="..."/>	<input type="text"/> <input type="button" value="..."/>	<input type="button" value="..."/>				
Items (1)						
	Material	Plant	B...	A ≡	Material Description	Usage text
	TRWA1100	MI00	1	1	Touring Aluminum Wheel Assembly	Production

- Bom Usage: Production; will be filled in

- Task List Type: Routing

Select: Group

Search  Hide Filters **Go**

Task List Type: Group: Group Counter:

=N 				
--	---	--	---	--

Material: Plant:

=TRWA1100 			=MI00 	
---	---	--	---	---

Items (1)

	Group	Gr...	Group	Ta...	Plant	Material	
	50000000	1	50000000	N	MI00	TRWA1100	

Production

Alternative BOM:

1 

Task List Type:

Routing 

BOM Usage:

Production 

Group:

50000000 

Apportionment Struct:



Group Counter:

1

Click on  in the right upper corner. Now the statuses below should be green:

BOM Check Status:

Last check o.k.

Routing Check Status:

Last check o.k.

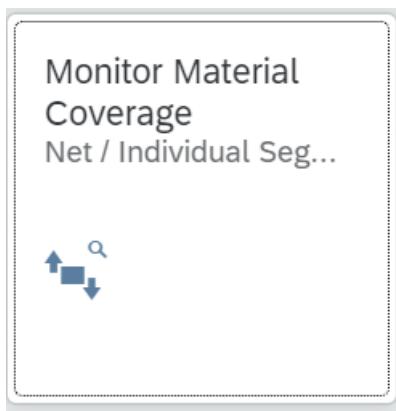
Don't forget to click on  in the right bottom corner. Please repeat these steps for your finished good: DXTR3##.

7. Material Requirements Planning (MRP)

Since now we have all the information needed for the demand planning, the MRP run may be executed.

Research what the MRP run does.

We search for the following App: Monitor Material Coverage Net / Individual Seg...



Search your finished good material. We will do the MRP run for the finished good, the Deluxe Touring Bike (red). Due to the Product Version, we created before, the system knows which ingredients are needed to produce the Deluxe Touring Bike (red).

As we will use this app frequently, we can create a standard layout for each group of material assigned to your number.

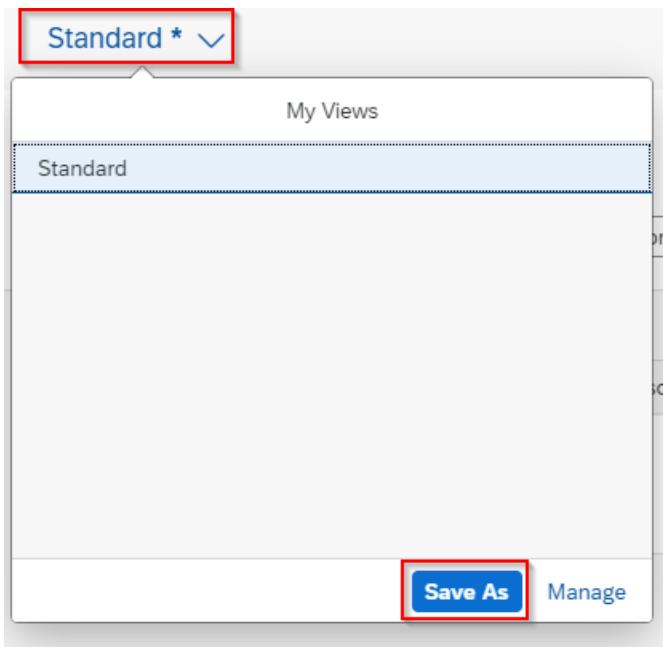
Click on the Search Help in the Material field:
Search for “your material numbers”.

Material:

 A screenshot of a search input field. To the right of the input field is a small red square button containing a white search icon (magnifying glass). The entire input field and its associated button are enclosed in a thin dotted border.

Mark all your materials and click Select.

In the left upper corner, you can click on the layout (in this case “Standard”) and choose “Save as”:



Save View

View:

V_100

Set as Default

Create Tile

Save

Cancel

Now each time you enter the app, only your materials will be displayed.

SAP Monitor Material Coverage - Net and Individual Segments ▾

V_100 ▾

Search Hide Filter Bar Restore Filters (3) Go

Shortage Definition: * Material: Time till Shortage:

MRP Standard BOLT1100 X 9 More

Individual Segment:

Materials (9)						
<input type="checkbox"/> Material No.	Material Description	Individual Segment	First Shortage On	Shortage Quantity	Shortage Duration (Working Days)	Stock Availability
<input type="checkbox"/> DXTR3100	Deluxe Touring Bike (red)		03/29/2023	2 EA	4	
<input type="checkbox"/> BOLT1100	Socket Head Bolt 5x20mm			EA	0	
<input type="checkbox"/> CHAN1100	Chain			EA	0	
<input type="checkbox"/> TRFR3100	Touring Frame-Red			EA	0	
<input type="checkbox"/> TRHB1100	Touring Handle Bar			EA	0	
<input type="checkbox"/> TRSK1100	Touring Seat Kit			EA	0	
<input type="checkbox"/> TRTB1100	Touring Tube			EA	0	
<input type="checkbox"/> TRTR1100	Touring Tire			EA	0	
<input type="checkbox"/> TRWA1100	Touring Aluminum Wheel Assembly			EA	0	

Discuss what the red and green bars mean.

If you mark all of your materials and then jump into „Managing Materials“ you should get the following information:

V_100 ▾

Search Hide Filter Bar Restore Filters (3) Go

Shortage Definition: * Material: Time till Shortage:

MRP Standard BOLT1100 X 9 More

Individual Segment:

Materials (9)

<input checked="" type="checkbox"/> Material No.	Material Description	Individual Segment	First Shortage On	Shortage Quantity	Shortage Duration (Working Days)	Stock Availability
<input checked="" type="checkbox"/> DXTR3100	Deluxe Touring Bike (red)		03/29/2023	2 EA	4	
<input checked="" type="checkbox"/> BOLT1100	Socket Head Bolt 5x20mm			EA	0	
<input checked="" type="checkbox"/> CHAN1100	Chain			EA	0	
<input checked="" type="checkbox"/> TRFR3100	Touring Frame-Red			EA	0	
<input checked="" type="checkbox"/> TRHB1100	Touring Handle Bar			EA	0	
<input checked="" type="checkbox"/> TRSK1100	Touring Seat Kit			EA	0	
<input checked="" type="checkbox"/> TRTB1100	Touring Tube			EA	0	
<input checked="" type="checkbox"/> TRTR1100	Touring Tire			EA	0	
<input checked="" type="checkbox"/> TRWA1100	Touring Aluminum Wheel Assembly			EA	0	

Revoke Acceptance of Shortages Manage Materials

Manage Material Coverage

Materials (1)

Search REFRESH DXTR3100 -2 EA Deluxe Touring Bike (red) Plant M100 in 2 days

DXTR3100

Deluxe Touring Bike (red) (Plant M100) in 2 days

STOCK/REQUIREMENTS LIST MATERIAL INFORMATION NOTES

Stock/Requirements List (1 Shortage)

Shortage Definition MRP Standard Create Order

The system cannot propose solutions for materials produced in-house.

Date	MRP Element	Actions	Additional Information	Rescheduling	Quantity	Available
03/29/2023	Stock		No Safety Stock		0 EA	0 EA
	CusOrd 36-10		Sport Center 999		-2 EA	-2 EA

Befor you run the MRP you have to change the MPR Settings one-off.

SAP Manage Material Coverage

Materials (1)

Search REFRESH

DXTR3100 -2 EA

Deluxe Touring Bike (red) Plant M100 in 2 days

Material Details

DXTR3100

Deluxe Touring Bike (red) (Plant M100)

STOCK/REQUIREMENTS LIST MATERIAL INFORMATION NOTES

Stock/Requirements List (1 Shortage)

Shortage Definition MRP Standard

The system cannot propose solutions for materials produced in-house.

Date	MRP Element	Actions	Additional Information	Rescheduling	Quantity	Available
03/29/2023	Stock	CusOrd 36-10	No Safety Stock	Sport Center 999	0 EA	-2 EA

Teach-002 Teach-002

- Recent Activities
- Frequently Used
- App Finder
- Settings
- Contact Support
- About
- MRP Settings
- Sign Out

MRP Settings

Area of Responsibility >

MRP Run Parameters >

Change Requests OFF

OK

MRP Run Parameters

Planning Scope

Material Scope: All Materials ▼

Also to Be Included in Planning

Changed BOM Components:

All Order BOM Components:

Stock Transfer Materials:

Control Parameters

Regenerative Planning:

Scheduling: Lead Time Scheduling and Capacity Planning ▼

Planning Mode: Adapt Planning Data ▼

Save Settings Cancel

If you have saved your settings, you can start the MRP Run.

The screenshot shows the SAP Manage Material Coverage interface. On the left, a sidebar displays 'Materials (1)' with a search bar, a refresh button, and a list item 'DXTR3100 -2 EA'. Below this is a note: 'Deluxe Touring Bike (red) (Plant M100) in 2 days'. The main area is titled 'Material Details' for 'DXTR3100 Deluxe Touring Bike (red) (Plant M100)'. It includes tabs for 'STOCK/REQUIREMENTS LIST', 'MATERIAL INFORMATION', and 'NOTES'. A sub-section titled 'Stock/Requirements List (1 Shortage)' shows a single row for 'Stock' with date '03/29/2023', MRP Element 'CusOrd 36-10', and Actions 'Edit'. A note states 'The system cannot propose solutions for materials produced in-house.' To the right, there are buttons for 'Create Order', 'Start MRP Run' (which is highlighted with a blue border), and 'Open...'. A note 'in 2 days' is also present.

The result of the MRP is a planned order:

This screenshot shows the same SAP interface after the MRP run. The 'STOCK/REQUIREMENTS LIST' tab is selected. The 'Stock/Requirements List (1 Shortage)' table now includes a new row for a 'Planned Order' (PldOrd 2201) with a quantity of 2 EA, due on 04/03/2023. The 'Actions' column for this row contains an 'Edit' button, which is also highlighted with a blue border. The rest of the interface remains consistent with the first screenshot, including the material details and shortage information.

8. Planned Order

For the externally procured materials (CHAN1100, BOLT1100...), the MRP run created so called purchase requisitions.

Discuss what purchase requisitions are needed for.

The screenshot shows the SAP Manage Material Coverage interface. On the left, a sidebar lists materials: DXTR3100 (-2 EA), BOLT1100 (0 EA), CHAN1100 (0 EA), TRFR3100 (0 EA), TRHB1100 (0 EA), and TRSK1100 (0 EA). The main area displays material details for BOLT1100, which is a Socket Head Bolt 5x20mm (Plant M100). The STOCK/REQUIREMENTS LIST tab is selected, showing a table for Stock / Requirements List (0 Shortages). The table has columns: Date, MRP Element, Actions, Additional Information, Rescheduling, Quantity, and Available. It shows two rows: one for PurRqs 10000147-10 (Quantity 8 EA) and another for DepReq 282-4 (Quantity -8 EA). A blue box highlights the first row.

For the inhouse produced materials (DXTR3100 and TRWA1100), the MRP run created so called Planned Order.

The screenshot shows the SAP Manage Material Coverage interface. On the left, a sidebar lists materials: CHAN1100 (0 EA), TRFR3100 (0 EA), TRHB1100 (0 EA), TRSK1100 (0 EA), TRTB1100 (0 EA), TRTR1100 (0 EA), and TRWA1100 (0 EA). The main area displays material details for TRWA1100, which is a Touring Aluminum Wheel Assembly (Plant M100). The STOCK/REQUIREMENTS LIST tab is selected, showing a table for Stock / Requirements List (0 Shortages). The table has columns: Date, MRP Element, Actions, Additional Information, Rescheduling, Quantity, and Available. It shows two rows: one for PidOrd 2202 (Quantity 4 EA) and another for DepReq 281-1 (Quantity -4 EA). A blue box highlights the first row.

9.Purchasing Info Records

Before we purchase the externally procured materials, we will create a purchasing info record. What is that you might ask? The purchasing info record as information source for procurement. We will now assign the externally procured materials to a supplier/vendor. We only have one supplier for all materials.

Please run the App: Manage Purchasing Info Records



To create an info record please click **Create** on in the right upper corner.

Type in the following:

- Purchasing Info Record Category: Standard
- Purchasing Organization: US00
- Plant: MI00
- Purchasing Group: N00
- Name of Supplier: Mid-West Supply S###
- Material: TRFR3###
- Material group: will be filled in automatically

New Purchasing Info Record

Header General Information Purchasing Data Delivery and Quantity Conditions Reference

Info Record Description: –

Purchasing Info Record Category: * Standard

Info Record: –

Purchasing Organization: * Global Bike US (US00)

Plant: MI00

Purchasing Group: * North America (N00)

Supplier: * Mid-West Supply S999 (1003147)

Material: TRFR3100

Material Group: Raw Materials (RAW)

Scroll down to Purchasing Data and type in EXW for Incoterms and Miami for Incoterm Location 1 (if already not filled in):

Incoterms	Condition Control
Incoterm: Ex Works (EXW)	Condition Group: Pricing Date Control: No Cash Discount:
Incoterm Location 1: Miami	<input checked="" type="checkbox"/>

Discuss what Incoterms are needed for

In Delivery and Quantity fill in following fields:

- Delivery Time in Days: 2
- Order Unit: PC
- Standard Order Quantity: 10

Delivery and Quantity

Delivery Information

Delivery Time in Days:*

Under Delivery Tolerance in %:

Over Delivery Tolerance in %:

Tax Code:

Unit of Measure

Order Unit:*



Conversion from Order Unit:*

Conversion to Base Unit:*

Variable Purchase Order Unit:



Quantity

Standard Order Quantity:*

EA

Minimum Order Quantity:

EA

Maximum Order Quantity:

EA

Purchasing Control

Goods-Receipt-Based Invoice Verification:



No Evaluated Receipt Settlement:



Order Acknowledgment Requirement:



Scroll down to Conditions and click on Create.

Header

General Information

Purchasing Data

Delivery and Quantity

Conditions

Reference

Create

Delete



Valid From

Valid To

Condition Type

Amount

Pricing Unit

Unit of Measure

No data found.

Fill in the price of 200.00. Warning: Use dots, not commas!

PB00

PB00

General Information

Valid From:*

03/27/2023

Amount:

200.00

USD 

Valid To:*

12/31/9999

Condition Type:

Gross Price (PB00)

 Apply Create

Click on  and then on . Go back  and create the info records for all the other externally procured materials (CHAN1###, TRHB1###, TRSK1###, TRTR1###, TRTB1###, TRWH1###, BOLT1###). Use reasonable prices!

When you have created all eight purchasing info records, please check in the list with selecting all your numbers.

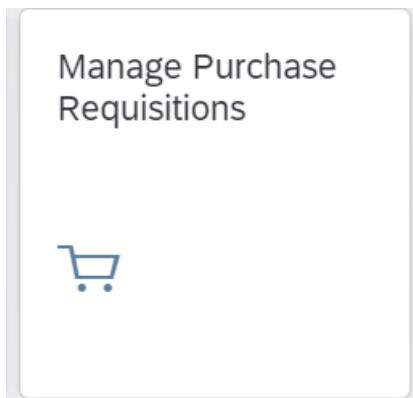
If there are less than four entries, you probably missed something.

10. Purchase Order

Create

When the purchasing info records for all four externally procured materials have been created, we will now assign the purchasing requisitions (created by the MRP run before) to actual purchase orders.

Please run the App: Manage Purchase Requisitions



In this list you can search for your purchase requisitions created by the MRP run before.

Add the filter Material with the Button (Adopt Filters): add your 8 Materials

and click on

Purchase Requisitions (8)									Create Contract	Create RFQ	Create Purchase Order		
<input type="checkbox"/> Item	Material	Product Group	Quantity	Purchase Order Quantity	Total Value	Assigned Supplier	Delivery Date	Plant	Processing Status				
<input type="checkbox"/> 10000140/10	Touring Seat Kit (TRSK1100)	Raw Materials RAW	2 EA	0 EA	100.00 USD	1 Sources	Apr 3, 2023	DC Miami MI00	Not edited				
<input type="checkbox"/> 10000141/10	Touring Handle Bar (TRHB1100)	Raw Materials RAW	2 EA	0 EA	50.00 USD	1 Sources	Apr 3, 2023	DC Miami MI00	Not edited				
<input type="checkbox"/> 10000142/10	Touring Frame-Red (TRFR3100)	Raw Materials RAW	2 EA	0 EA	400.00 USD	1 Sources	Apr 3, 2023	DC Miami MI00	Not edited				
<input type="checkbox"/> 10000143/10	Chain (CHAN1100)	Raw Materials RAW	2 EA	0 EA	20.00 USD	1 Sources	Apr 3, 2023	DC Miami MI00	Not edited				
<input type="checkbox"/> 10000145/10	Touring Tire (TRTR1100)	Raw Materials RAW	4 EA	0 EA	40.00 USD	1 Sources	Mar 31, 2023	DC Miami MI00	Not edited				
<input type="checkbox"/> 10000146/10	Touring Tube (TRTB1100)	Raw Materials RAW	4 EA	0 EA	20.00 USD	1 Sources	Mar 31, 2023	DC Miami MI00	Not edited				
<input type="checkbox"/> 10000147/10	Socket Head Bolt 5x20mm (BOLT1100)	Raw Materials RAW	8 EA	0 EA	0.80 USD	1 Sources	Mar 31, 2023	DC Miami MI00	Not edited				
<input type="checkbox"/> 10000148/10	Touring Bike - Aluminiumrad (TRWH1100)	Raw Materials RAW	4 EA	0 EA	380.00 USD	1 Sources	Mar 31, 2023	DC Miami MI00	Not edited				

In the column „Assigned Supplier“ you can choose between different sources by clicking on the sources.

Create Contract Create

Price	Assigned Supplier	Delivery Date
0.50 EUR	1 Sources	Jan

A window pops up, where you can select the source of supply.

Select: Source of Supply

Search	Total 140.00 USD (1.1.1990-31.12.9999)
Mid-West Supply S999 (1003147) Info Record (5300000082)	Cancel

In our case we have only one possible source for externally procured material, but theoretically one material could have x-number of sources (info records).

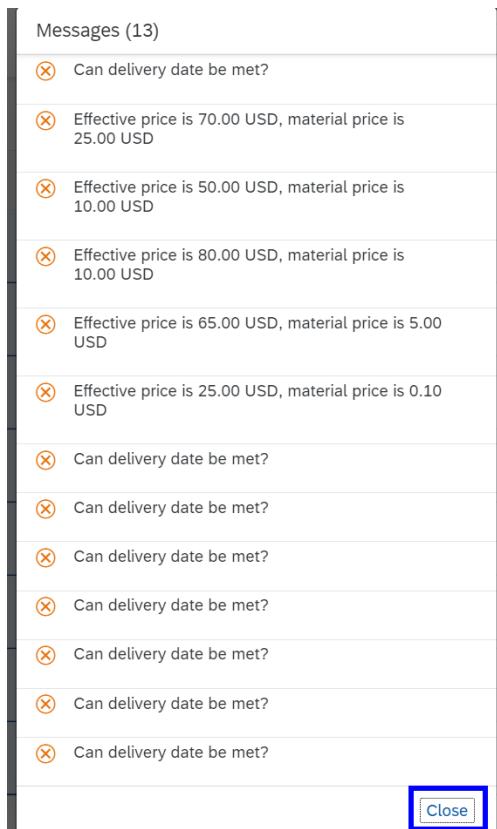
Please assign all the purchase requisition to a source of supply.

When all purchase requisitions are assigned to a supplier, mark all of them and click on Create Purchase Order.

Standard* ▾

Plant:	Purchasing Group:	Purchasing Organization:	Product Group:	Processing Status:	Material:	Save as Tile			
DC Miami (M100)					8 Items	Adapt Filters (2) Go			
Purchase Requisitions (8)									
Item	Material	Product Group	Quantity	Purchase Order Quantity	Total Value	Assigned Supplier	Delivery Date	Plant	Processing Status
10000140/10	Touring Seat Kit (TRSK1100)	Raw Materials RAW	2 EA	0 EA	100.00 USD	Mid-West Supply S999 (1003147) (Out of 1 Sources)	Apr 3, 2023	DC Miami M100	Not edited
10000141/10	Touring Handle Bar (TRHB1100)	Raw Materials RAW	2 EA	0 EA	50.00 USD	Mid-West Supply S999 (1003147) (Out of 1 Sources)	Apr 3, 2023	DC Miami M100	Not edited
10000142/10	Touring Frame-Red (TRFR3100)	Raw Materials RAW	2 EA	0 EA	400.00 USD	Mid-West Supply S999 (1003147) (Out of 1 Sources)	Apr 3, 2023	DC Miami M100	Not edited
10000143/10	Chain (CHAN1100)	Raw Materials RAW	2 EA	0 EA	20.00 USD	Mid-West Supply S999 (1003147) (Out of 1 Sources)	Apr 3, 2023	DC Miami M100	Not edited
10000145/10	Touring Tire (TRTR1100)	Raw Materials RAW	4 EA	0 EA	40.00 USD	Mid-West Supply S999 (1003147) (Out of 1 Sources)	Mar 31, 2023	DC Miami M100	Not edited
10000146/10	Touring Tube (TRTB1100)	Raw Materials RAW	4 EA	0 EA	20.00 USD	Mid-West Supply S999 (1003147) (Out of 1 Sources)	Mar 31, 2023	DC Miami M100	Not edited
10000147/10	Socket Head Bolt 5x20mm (BOLT1100)	Raw Materials RAW	8 EA	0 EA	0.80 USD	Mid-West Supply S999 (1003147) (Out of 1 Sources)	Mar 31, 2023	DC Miami M100	Not edited
10000148/10	Touring Bike - Aluminiumrad (TRWH1100)	Raw Materials RAW	4 EA	0 EA	380.00 USD	Mid-West Supply S999 (1003147) (Out of 1 Sources)	Mar 31, 2023	DC Miami M100	Not edited

In the following window you should pick purchase order type which in our case would be NB - Standard PO.



New Purchase Order

General Information Items

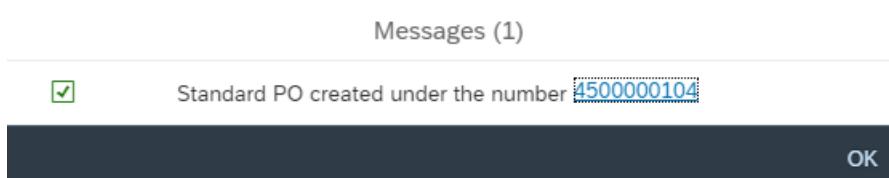
Supplier Mid-West Supply 5999 (1003147)	Purchasing Group North America (N00)
Purchase Order Type NB - Standard PO	Purchasing Organization Global Bike US (US00)

Items

Material	Quantity	Purchase Requisition Item	Net Price
Touring Aluminum Wheel (TRWH1100)	4 PC	10000148/10	80.00 USD <input checked="" type="checkbox"/>
Socket Head Bolt 5x20mm (BOLT1100)	8 PC	10000147/10	25.00 USD <input checked="" type="checkbox"/>
Touring Tube (TRTB1100)	4 PC	10000146/10	65.00 USD <input checked="" type="checkbox"/>
Touring Tire (TRTR1100)	4 PC	10000145/10	80.00 USD <input checked="" type="checkbox"/>
Chain (CHAN1100)	2 PC	10000143/10	50.00 USD <input checked="" type="checkbox"/>
Touring Frame-Red (TRFR3100)	2 PC	10000142/10	200.00 USD <input checked="" type="checkbox"/>
Touring Handle Bar (TRHB1100)	2 PC	10000141/10	70.00 USD <input checked="" type="checkbox"/>
Touring Seat Kit (TRSK1100)	2 PC	10000140/10	55.00 USD <input checked="" type="checkbox"/>

Save **Cancel**

Don't forget to click on **Save**. After saving PO you should get following notification.



Display Printout

In the *App: Monitor Material Coverage App* you will now see purchase order items with their according purchase order and position number, instead of the purchase requisitions.

First select all your materials and press the button in the right lower corner “Manage Materials”.

V_100 ▾

Search Hide Filter Bar Restore Filters (1) Go

Shortage Definition: *

MRP Standard

Materials (10)						
<input checked="" type="checkbox"/>	Material No.	Material Description	Individual Segment	First Shortage On	Shortage Quantity	Shortage Duration (Working Days)
<input checked="" type="checkbox"/>	DXTR3100	Deluxe Touring Bike (red)		03/29/2023	2 EA	4 
<input checked="" type="checkbox"/>	BOLT1100	Socket Head Bolt 5x20mm			EA	0 
<input checked="" type="checkbox"/>	CHAN1100	Chain			EA	0 
<input checked="" type="checkbox"/>	TRFR3100	Touring Frame-Red			EA	0 
<input checked="" type="checkbox"/>	TRHB1100	Touring Handle Bar			EA	0 
<input checked="" type="checkbox"/>	TRSK1100	Touring Seat Kit			EA	0 
<input checked="" type="checkbox"/>	TRTB1100	Touring Tube			EA	0 
<input checked="" type="checkbox"/>	TRTR1100	Touring Tire			EA	0 
<input checked="" type="checkbox"/>	TRWA1100	Touring Aluminum Wheel Assembly			EA	0 
<input checked="" type="checkbox"/>	TRWH1100	Touring Aluminum Wheel			EA	0 

Revoke Acceptance of Shortages Manage Materials

The screenshot shows the SAP Materials Management interface. On the left, a list of materials is displayed, including DXTR3100 (Deluxe Touring Bike), BOLT1100 (Socket Head Bolt), CHAN1100 (Chain), TRFR3100 (Touring Frame-Red), and others. The BOLT1100 row is selected. On the right, the 'Material Details' screen for BOLT1100 is shown. It includes sections for 'STOCK/REQUIREMENTS LIST', 'MATERIAL INFORMATION', and 'NOTES'. The 'Stock / Requirements List' section shows a table with one row for POItem 4500000040-70, which is highlighted with a blue border. The table columns include Date, MRP Element, Actions, Additional Information, Rescheduling, Quantity, and Available.

On all eight externally procured materials you see the same purchase order with different item numbers. Click on one of them > Open > Document Info.

This screenshot shows the SAP Materials Management interface with the TRFR3100 row selected in the material list on the left. The 'Material Details' screen for TRFR3100 is displayed on the right. The 'Stock / Requirements List' section shows a table with two rows: one for POItem 4500000040-30 (highlighted) and another for DepReq 281-2. The table columns are identical to the one in the previous screenshot.

This screenshot shows the SAP Materials Management interface with the TRFR3100 row selected. A modal window titled 'POItem 4500000040-30' is open over the 'Material Details' screen. The modal contains tabs for 'Vendor', 'Internal Contact', 'Purchase Order', 'Procurement Data', and 'Related Objects'. The 'Purchase Order' tab is active, showing details such as Document Date (03/27/2023), Schedule Line (1), Delivery Date (04/03/2023), GR Processing Time (0 workdays), and Order Quantity (2.000 PC). The 'Document Info' button in the bottom right corner of the modal is highlighted with a blue border.

Now you see the purchase order. You can browse through it. The purchase order has the status “Sent”.

SAP Purchase Order

Standard PO
4500000040

Net Value: 1,850.00 USD Status: Sent

General Information Items Limit Items Supplier Confirmation Purchase Requisition Items Purchase Contract Items Goods Receipts Supplier Invoices

Basic Data		Delivery and Payment		Recipient	
Supplier: Mid-West Supply 5999 (1003147)	Created on: 03/27/2023	Payment Terms: Pay immediately w/o deduction	Company Code: Global Bike Inc. (US00)		
Created by: Teach-002 Teach-002 (TEACH-002)	Net Value: 1,850.00 USD	Incoterms: –	Purchasing Group: North America (N00)		
		Incoterms (Part 2): –	Purch. organization: Global Bike US (US00)		

Items

Item	Product Type Group	Short Text	Material Group	Material	Delivery date	Order Quantity	Net Order Price	Price Unit	Net Order Value	Service Performer	Status
10	Material	Touring Seat Kit	Raw Materials (RAW)	Touring Seat Kit (TR5K1100)	04/03/2023	2.000 PC	55.00 USD	1 PC	110.00 USD		
20	Material	Touring Handle Bar	Raw Materials (RAW)	Touring Handle Bar (TRHB1100)	04/03/2023	2.000 PC	70.00 USD	1 PC	140.00 USD		
30	Material	Touring Frame-Red	Raw Materials (RAW)	Touring Frame-Red (TRFR3100)	04/03/2023	2.000 PC	200.00 USD	1 PC	400.00 USD		
40	Material	Chain	Raw Materials (RAW)	Chain (CHAN1100)	04/03/2023	2.000 PC	50.00 USD	1 PC	100.00 USD		
50	Material	Touring Tire	Raw Materials (RAW)	Touring Tire (TRTR1100)	03/31/2023	4.000 PC	80.00 USD	1 PC	320.00 USD		
60	Material	Touring Tube	Raw Materials (RAW)	Touring Tube (TRTB1100)	03/31/2023	4.000 PC	65.00 USD	1 PC	260.00 USD		
70	Material	Socket Head Bolt 5x20mm	Raw Materials (RAW)	Socket Head Bolt 5x20mm (BOLT1100)	03/31/2023	8.000 PC	25.00 USD	1 PC	200.00 USD		
80	Material	Touring Aluminum Wheel	Raw Materials (RAW)	Touring Aluminum Wheel (TRWH1100)	03/31/2023	4.000 PC	80.00 USD	1 PC	320.00 USD		

This indicates that the purchase order has been sent to the supplier. Let's have a look at the printout. Click on "Related Apps" and on "Manage Purchase Order".

SAP Purchase Order

Standard PO
4500000040

Net Value: 1,850.00 USD Status: Sent

General Information Items Limit Items Supplier Confirmation Purchase Requisition Items Purchase Contract Items Goods Receipts Supplier Invoices

Basic Data		Delivery and Payment		Recipient	
Supplier: Mid-West Supply 5999 (1003147)	Created on: 03/27/2023	Payment Terms: Pay immediately w/o deduction	Company Code: Global Bike Inc. (US00)		

Related Apps

- Change Purchase Order
- Create Purchase Order
- Create Purchase Order via Purchase Requisition Assignment List
- Display Process Flow - Accounts Payable
- Display Purch. Docs by Account Assignment
- Display Purchase Order
- Display Purchasing Documents by Material
- Display Purchasing Documents by Supplier
- Manage Purchase Orders **Manage Purchase Orders**
- Manage Workflows

Press the Button "Output Management".

4500000040
Standard PO

General Information Items Limit Items Delivery and Invoice Supplier Contact Data Notes Output Management Attachments Approval Details

Successfully processed 03/27/2023, 21:47:18 Open Output Details

Edit Copy Display Commitments

Press Open Output Details.

Output Message **Display Message** Message Details Trial Printout More ▾

Display Message (Shift+F8)

Purch.Doc.	Supplier	Name 1	PGr Doc.	Date							
Msg.	Lng	Partner	Role	Created On	Time	N	User Name	Output Device	Name	Fax number	Chng.
4500000040	1003147	Mid-West Supply 5999	N00	03/27/2023							
<input checked="" type="checkbox"/>	NEU	EN	1003147	LF	03/27/2023	21:47:18	4	TEACH-002	LOCL		



Global Bike Inc. 5215 N. O'Connor
Blvd. * 75039 Dallas
Tel.: 1-972-555-2000 * Fax:
1-972-555-2000

Mid-West Supply S999
335 W Industrial Lake Dr
Lincoln NE 68528

Your vendor number with us
1003147

Purchase order

PO number/date
4500000040 / 03/27/2023
Contact person/Telephone
North America

Please deliver to:
Global Bike Inc.
DC Miami
5341 Blue Lagoon Drive
Miami FL 33126

Terms of delivery: EXW Miami
Terms of payment: Payable immediately Due net Currency USD

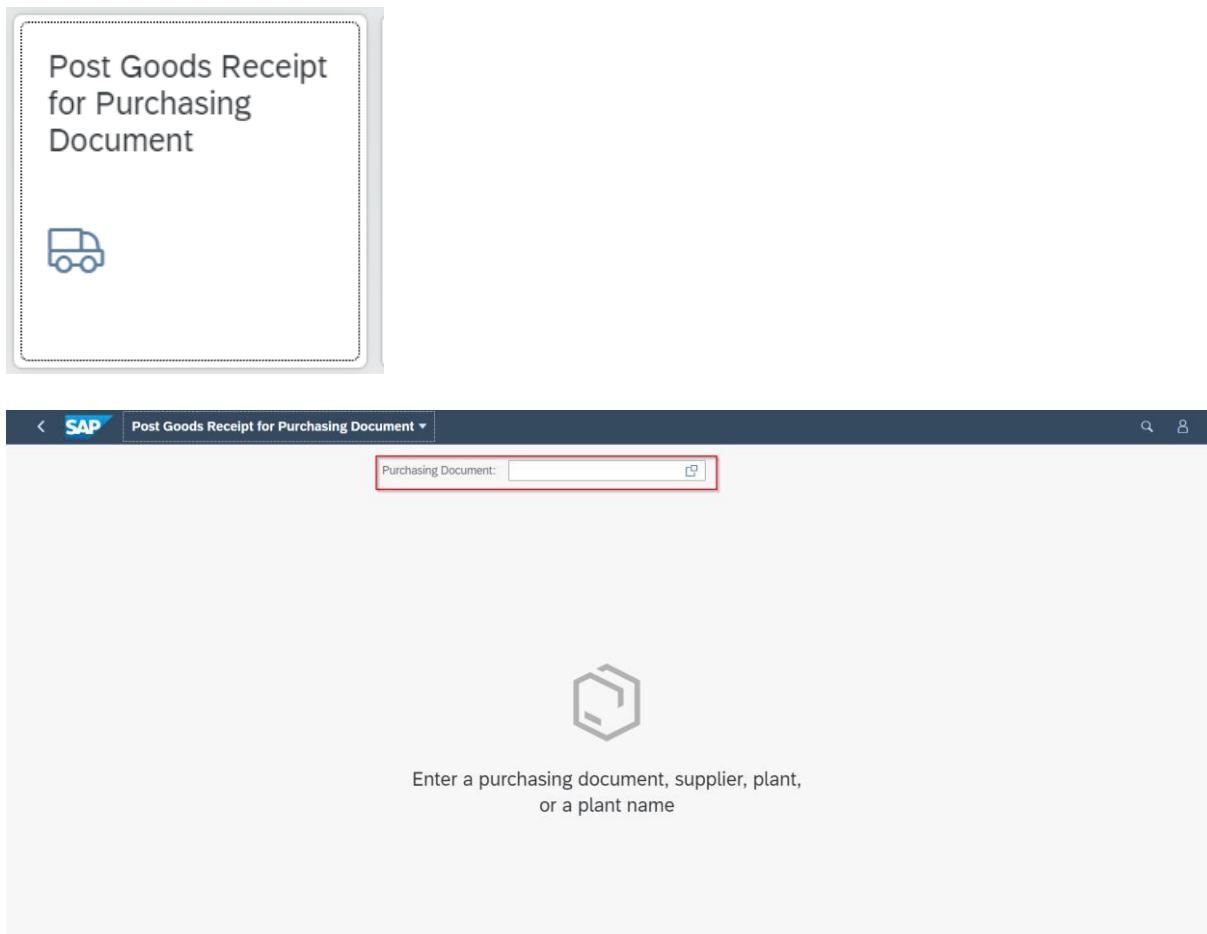
Item	Material Order qty.	Unit	Description	Price per unit	Net value
00010	TRSK1100	pc	Touring Seat Kit	110.00	110.00

Now you see the printout which has been sent to the supplier:

11. Goods Receipt

The purchase order has been created before. Imagine that the externally procured materials have already been delivered to our site. We now must type into the system that the goods have been received.

Please run the App: Post goods Receipt for Purchasing Document



Type in your *order number* and press *Enter*. The purchase order items appear on the screen.

As you see, we get the same amount we ordered of externally procured materials.

Add the Storage Location Miscellaneous to each item.

Items (8)

<input type="checkbox"/> Material	Open Quantity	Distribution	Plant
Touring Seat Kit TRSK1100	2.000 PC	+	DC Miami
Delivered:	2.000 PC		
Storage Location:	Miscellaneous		
Stock Type:	Unrestricted-Use		

Post Goods Receipt for Purchasing Document ▾

Purchasing Document: 4500000040

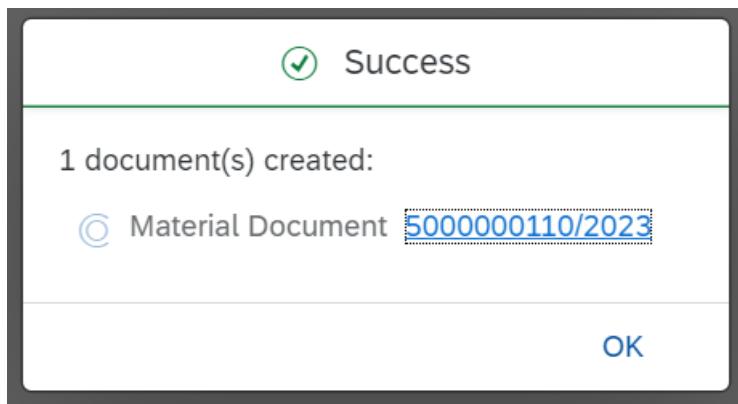
Mid-West Supply S999

Purchasing Document: 4500000040
Purchasing Document Type: Standard PO NB

General Information								Items	Attachments	
<input checked="" type="checkbox"/> Material	Open Quantity	Delivered	Distribution	Plant	Storage Location	Stock Type				
Touring Seat Kit TRSK1100	2.000 PC	2.000 PC	+	DC Miami	Miscellaneous	Unrestricted-Use				
Touring Handle Bar TRHB1100	2.000 PC	2.000 PC	+	DC Miami	Miscellaneous	Unrestricted-Use				
Touring Frame-Red TRFR3100	2.000 PC	2.000 PC	+	DC Miami	Miscellaneous	Unrestricted-Use				
Chain CHAN1100	2.000 PC	2.000 PC	+	DC Miami	Miscellaneous	Unrestricted-Use				
Touring Tire TRTR1100	4.000 PC	4.000 PC	+	DC Miami	Miscellaneous	Unrestricted-Use				
Touring Tube TRTB1100	4.000 PC	4.000 PC	+	DC Miami	Miscellaneous	Unrestricted-Use				
Socket Head Bolt 5x20mm BOLT1100	8.000 PC	8.000 PC	+	DC Miami	Miscellaneous	Unrestricted-Use				
Touring Aluminum Wheel	4.000 PC	4.000 PC	+	DC Miami	Miscellaneous	Unrestricted-Use				

Post

Mark the entries und click on *Post*.



Now our stock should have increased. Let's have a look at our stock and demand situation. To do this please run the App: Monitor Coverage Material

Monitor Material Coverage
Net / Individual Seg...



As before, mark **your materials** and click on *Manage materials* in the right bottom corner. Now you can look at the requirement lists:

The purchase order disappeared from our stock and requirements list, instead our available stock level went up.

Materials (10)

Search	REFRESH
DXTR3100	-2 EA
Deluxe Touring Bike (red)	in 2 days
Plant M100	
BOLTL100	
Socket Head Bolt 5x20mm	
Plant M100	
CHANL100	
Chain	
Plant M100	
TRFR3100	
Touring Frame-Red	
Plant M100	

Material Details

TRFR3100
Touring Frame-Red (Plant M100)

STOCK/REQUIREMENTS LIST MATERIAL INFORMATION NOTES

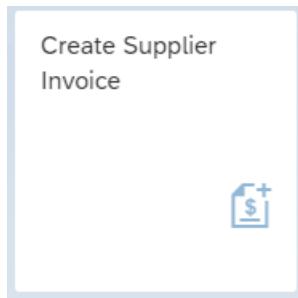
Stock / Requirements List (0 Shortages)

Date	MRP Element	Actions	Additional Information	Rescheduling	Quantity	Available
04/03/2023	Stock	DepReq 201-2	No Safety Stock		2 EA	2 EA
			DXTTR3100		-2 EA	0 EA

Create Order

12. Supplier Invoice

Now we must pay for the externally procured materials. To do this please run the App: Create Supplier Invoice:



Fill in the fields:

- Transaction: Invoice
- Company Code: US00
- Invoice Date: today
- Reference: your number ###

New Supplier Invoice

General Information Purchasing Document References G/L Account Items Tax Payment Unplanned Delivery Co > ▾

Basic Data

Transaction:	Invoice	Invoice Date:*	03/27/2023
Company Code:*	US00	Posting Date:*	03/27/2023
Gross Invoice Amount:*	0.00	USD	Reference:
			100

Scroll down and type your Purchase Order in the field Purchase Order and press Enter. We get our invoice items listed:

Purchasing Document References

Reference Document Category: Purchase Order/Scheduling Agreement

Purchase Order/Scheduling Agreement: 4500000040 X

Add the Tax Code XI to each Position.

Reference Document Category:		Purchase Order/Scheduling Agreement:					
Purchase Order/Scheduling Agreement		4500000040 x					
Invoice Items Standard ▼							
<input checked="" type="checkbox"/>	Invoice Item	Short Text	Purchasing Document Item	Amount	Quantity	Tax Code	Tax Rate
<input checked="" type="checkbox"/>	1	Touring Seat Kit	4500000040/10	110.00 USD	2.000 PC	XI	Input Tax FL0000000
<input checked="" type="checkbox"/>	2	Touring Handle Bar	4500000040/20	140.00 USD	2.000 PC	XI	Input Tax FL0000000
<input checked="" type="checkbox"/>	3	Touring Frame-Red	4500000040/30	400.00 USD	2.000 PC	XI	Input Tax FL0000000
<input checked="" type="checkbox"/>	4	Chain	4500000040/40	100.00 USD	2.000 PC	XI	Input Tax FL0000000
<input checked="" type="checkbox"/>	5	Touring Tire	4500000040/50	320.00 USD	4.000 PC	XI	Input Tax FL0000000
<input checked="" type="checkbox"/>	6	Touring Tube	4500000040/60	260.00 USD	4.000 PC	XI	Input Tax FL0000000
<input checked="" type="checkbox"/>	7	Socket Head Bolt 5x20mm	4500000040/70	200.00 USD	8.000 PC	XI	Input Tax FL0000000
<input checked="" type="checkbox"/>	8	Touring Aluminum Wheel	4500000040/80	320.00 USD	4.000 PC	XI	Input Tax FL0000000

New Supplier Invoice

Balance	Invoicing Party
-1,850.00 USD	1003147

General Information Purchasing Document References G/L Account Items Tax Payment Unplanned Delivery Costs Note Attachments

Basic Data

Transaction: **Invoice** Invoice Date: * 03/27/2023 Invoicing Party: * 1003147
 Company Code: * US00 Posting Date: * 03/27/2023 Partner Bank Type:
 Gross Invoice Amount: * 1,850.00 Reference: IBAN:
 USD SWIFT/BIC:

Show More

Purchasing Document References

Reference Document Category:	Purchase Order/Scheduling Agreement:
Purchase Order/Scheduling Agreement	4500000040 x

Invoice Items | Standard ▼

<input checked="" type="checkbox"/>	Invoice Item	Short Text	Purchasing Document Item	Amount	Quantity	Tax Code	Tax Rate	Tax Jurisdiction	History	Subseq. Debit/Credit
<input checked="" type="checkbox"/>	1									

Check Simulate Post Hold Park Save as Completed Cancel

Click on **Simulate** on the lower right corner:

Simulation Results

Company Code Simulation Currency
US00 USD

Overview Details

Debit

	Credit
9100000 (GR/IR)	110.00 USD 330000 (Mid-West Supply 5999 / Lincoln NE 68528)
9100000 (GR/IR)	140.00 USD
9100000 (GR/IR)	400.00 USD
9100000 (GR/IR)	100.00 USD
9100000 (GR/IR)	320.00 USD
9100000 (GR/IR)	260.00 USD
9100000 (GR/IR)	200.00 USD
9100000 (GR/IR)	320.00 USD
Total	1,850.00 USD Total 1,850.00 USD

Details

Standard ▼

Item	Account type	G/L Account	Name	Amount	Tax Code	Company Code
1	K	3300000	Mid-West Supply 5999 / Lincoln NE 68528	-1,850.00 USD	XI	US00
2	S	9100000	GR/IR	110.00 USD	XI	US00
3	S	9100000	GR/IR	140.00 USD	XI	US00
A	e	etnnnnn	etnnnn	nn nn nn nn	nn	nn

Post

Discuss what you see in the simulation

Click on **Post**

 Success

Documents have been created (blocked for payment).

Supplier invoice: [5105600161/2023](#)

Do you want to create a new supplier invoice?

[Yes](#) [No](#)

Now the supplier can be paid for the goods he delivered.

13. Production Order

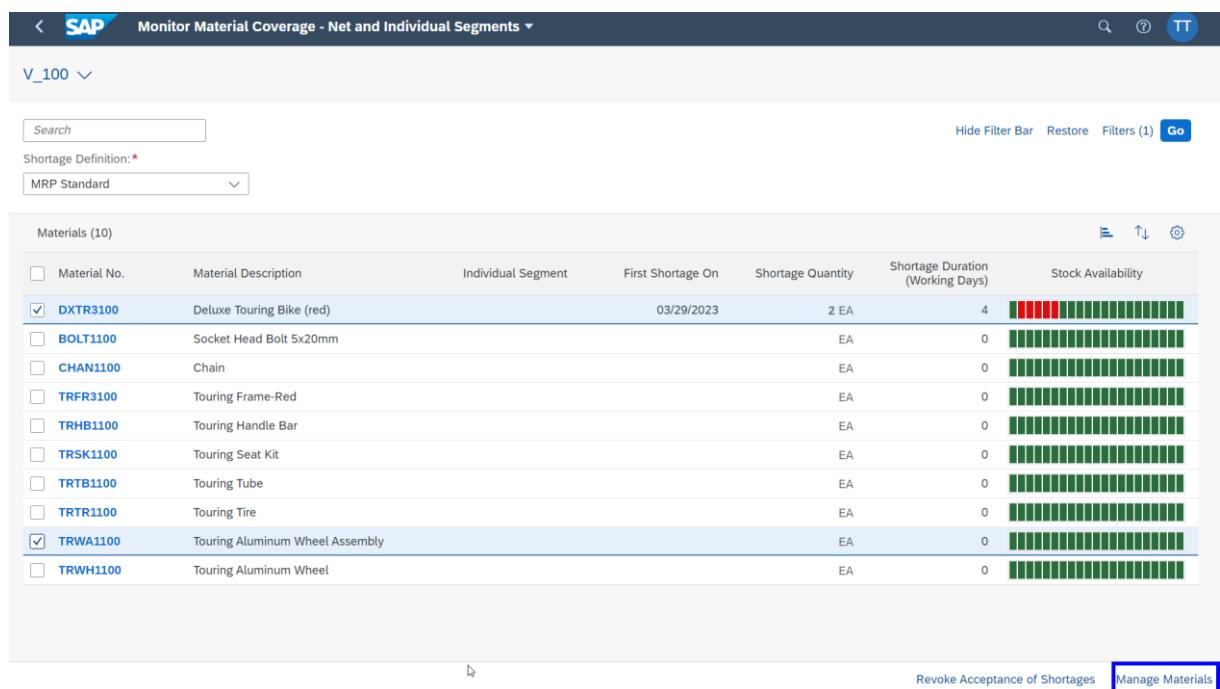
Create and Release

As we now have all materials on stock needed for the actual production, we may proceed with the production order

Please run our frequently used App: Monitor Material Coverage



To produce the Deluxe Touring Bike (red) (DXTR3###) we need our semi-finished product (Touring Aluminum Wheel Assembly TRWA1###). Therefore mark the entry and click on „Manage Materials“ in the right bottom corner:



We want to transform our planned order into production order, therefore choose in Actions: Convert from the Drop down:

Materials (2)

DXTR3100	-2 EA
Deluxe Touring Bike (red) Plant M100	in 1 day
TRWA1100	
Touring Aluminum Wheel Assembly Plant M100	

Material Details

TRWA1100

Touring Aluminum Wheel Assembly (Plant M100)

STOCK/REQUIREMENTS LIST MATERIAL INFORMATION NOTES

Stock / Requirements List (0 Shortages)

The system cannot propose solutions for materials produced in-house.

Date	MRP Element	Actions	Additional Information	Rescheduling	Quantity	Available
04/03/2023	PldOrd 2202	Edit	No Safety Stock		0 EA	0 EA
04/03/2023	DepReq 281-1	Edit	Make-to-stock		4 EA	4 EA
		Convert	DXTR3100		-4 EA	0 EA
		Delete		Convert		

By choosing „Convert to Production Order“ and confirming it with **OK**, the production order of our first semi-finished good is created.

Convert Planned Order 2201

Convert to Production Order:

Convert to Process Order:

End Date Quantity

Current: EA

OK **Cancel**

Click **OK**.

DXTR3100

Deluxe Touring Bike (red) (Plant M100) in 1 day

STOCK/REQUIREMENTS LIST MATERIAL INFORMATION NOTES

Stock/Requirements List (1 Shortage)

The system cannot propose solutions for materials produced in-house.

Date	MRP Element	Actions	Additional Information	Rescheduling	Quantity	Available
03/29/2023	CusOrd 36-10		No Safety Stock		0 EA	0 EA
03/29/2023	CusOrd 36-10		Sport Center 999		-2 EA	-2 EA
03/29/2023	CusOrd 36-10		Sport Center 999		-2 EA	-2 EA
04/03/2023	PrdOrd 1000020-1	Edit	Standard production order	←	2 EA	-4 EA

As you see, the MRP Element changed to **PrdOrd**

Now open the created Production Order by clicking on Hyperlink *ProdOrd -> Open -> Production Order*.

The top screenshot shows the 'Material Details' screen for material DXTR3100. It displays a 'Stock/Requirements List' with one shortage entry for 'CusOrd 36-10'. A modal window for 'PrdOrd 1000020-1' is open, showing 'Production Order' details: Order Type: Standard production order (PP01), Order Status: Created, Basic Start: 04/01/2023, and a table of available quantities. A callout bubble points to the 'Production Order' link in the 'Related Objects' section.

The bottom screenshot shows the 'Production order Display: Header' screen for order 1000020. The 'More' button in the header is highlighted. A context menu is open under 'Order' with 'Change' selected. The menu also includes 'Cancel', 'Functions', 'Edit', 'Goto', 'Header', 'Environment', 'System', 'Help', and 'Exit'.

We are currently in the "Display" mode. To do any changes to the production order we need to change to the "Change" mode. *More -> Order -> Change*.

SAP Production Order Change: Initial Screen

* Order: **1000020**

Selection for Collective Orders

- Order entered:
- Order sub-tree:
- Collective order:
- Display overview:

Press *Enter*.

By clicking on **Components** you see the bill of material (BOM) you created before:

SAP Production Order Change: Component Overview

Order: **1000020** Type: **PP01**
 Material: **DXTR3100** Deluxe Touring Bike (red) Plant: **MI00**

Component Overview

Item	Description	Reqmt Qty	UoM	It...	Ope...	Seq...	Plant	Stor...	Reqmnt Segment	Stock Segment
0010 TRWA1100	Touring Aluminum Wheel Assembly	4	EA	L	0010	0	MI00	MI00		
0020 TRFR3100	Touring Frame-Red	2	EA	L	0010	0	MI00	MI00		
0040 TRHB1100	Touring Handle Bar	2	EA	L	0010	0	MI00	MI00		
0050 TRSK1100	Touring Seat Kit	2	EA	L	0010	0	MI00	MI00		
0030 CHAN1100	Chain	2	EA	L	0020	0	MI00	MI00		
0060										

Enter the Storage Location MI00 for every Item.

SAP Production Order Change: Component Overview

Order: **1000020** Type: **PP01**
 Material: **DXTR3100** Deluxe Touring Bike (red) Plant: **MI00**

Component Overview

Item	Description	Reqmt Qty	UoM	It...	Ope...	Seq...	Plant	Stor...	Reqmnt Segment	Stock Segment
0010 TRWA1100	Touring Aluminum Wheel Assembly	4	EA	L	0010	0	MI00	MI00		
0020 TRFR3100	Touring Frame-Red	2	EA	L	0010	0	MI00	MI00		
0040 TRHB1100	Touring Handle Bar	2	EA	L	0010	0	MI00	MI00		
0050 TRSK1100	Touring Seat Kit	2	EA	L	0010	0	MI00	MI00		
0030 CHAN1100	Chain	2	EA	L	0020	0	MI00	MI00		
0060										
0070										
0080										
0090										
0100										
0110										

Search Results

SLoc	Pint	Stor. Loc. Descr.
MI00	MI00	Miscellaneous

By clicking on **Operations** you see the routing you created before:

The screenshot shows the SAP Production Order Change: Operation Overview screen. At the top, there are fields for Order (1000020), Material (DXTR3100, Deluxe Touring Bike (red)), Type (PP01), and Plant (MI00). Below these are buttons for material, capacity, components, documents, sequences, operations, and services. A table titled "Operation Overv." lists four operations (0016, 0020, 0030, 0040) with columns for Op., SOP, Start, Work Ce..., * P..., * C..., StdText, Operation short text, Text, SysStatus, User Stat, CO..., PRT, TP, DEP, End, and Operation C.

Op.	SOP	Start	Work Ce...	* P...	* C...	StdText	Operation short text	Text	SysStatus	User Stat	CO...	PRT	TP	DEP	End	Operation C
0016		04/02/2023	15:53:38	ASSY1000	MI00	ASSY	assembly - Step 1	<input type="checkbox"/>	CRTD	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	04/02/2023		
0020		04/02/2023	16:16:08	ASSY1000	MI00	ASSY	assembly - Step 2	<input type="checkbox"/>	CRTD	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	04/02/2023		
0030		04/02/2023	16:48:45	QUAL1000	MI00	ASSY	quality check	<input type="checkbox"/>	CRTD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	04/02/2023		
0040			00:00:00		MI00			<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

Go back to Order Header.

The screenshot shows the SAP Production Order Change: Operation Overview screen. At the top, there are buttons for material, capacity, components, documents, sequences, operations, and services. A table titled "Component Overview (F6)" lists one component (Order: 1000020, Type: PP01).

Now let's check the capacity, material availability, schedule order, determine costs and release the order for production. These actions are shown in following Screenshots.

When clicking on „**Material**“ you check the material availability. In other words, the system verifies if all material needed for production are available on site.

All checked materials in order 1000020 are available

When you click on “**Schedule Order**” the order is scheduled for production. You will see the dates and times changing when clicking on it.

The screenshot shows the SAP Production order Change: Header screen. At the top, there are buttons for material and capacity. A button labeled "Schedule Order (Ctrl+F8)" is highlighted with a hand cursor icon.

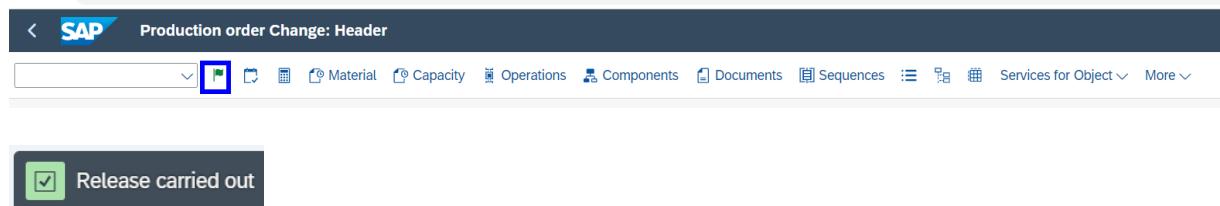
scheduling carried out

Click on “**Capacity**” to check if the work centers have enough capacity available.

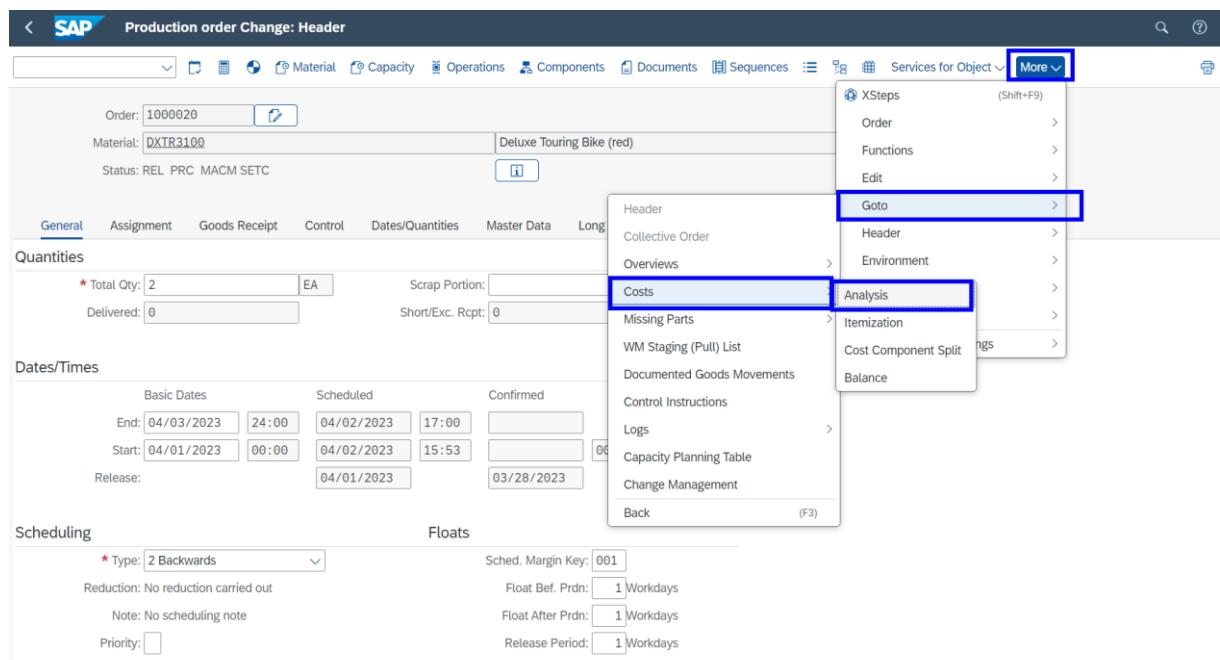
Capacity availability: Capacity available at all work centers

Optional Step:

The last step before saving is to release the order "Release Order". This step allows production to start executing the order.



Before saving, let's have a look at the costs planned for the production order. Click on *More* -> *Goto* -> *Costs* -> *Analysis*



Then click on in the upper corner and choose Cost Trend:

Choose Layout

X

Layout Setting: A All

Layout	Layout description	Default Setting
1SAP01	Target/Actual - Comparison	
1SAP02	Cost Trend	
1SAP03	Work In Process	
1SAP04	Full List	

✓ ✕

Order	1000020 DXTR3100						
Order Type	PP01 Standard production order						
Plant	M100 DC Miami						
Material	DXTR3100 Deluxe Touring Bike (red)						
Planned Quantity	2 EA each						
Target Cost Version	0 Target costs for total variances						
Results Analysis Ver	0						
Cumulative Data							
Legal Valuation							
Company Code Currency/Object Currency							
Transaction	Origin	Origin (Text)	Total Plan Costs	Total Actual Costs	Plan/actual variance	P/A var(%)	Currency
Goods Issues	0/TRFR3100	Touring Frame-Red	400.00	0.00	400.00-	100.00-	USD
	M100/CHAN1100	Chain	20.00	0.00	20.00-	100.00-	USD
	M100/TRHB1100	Touring Handle Bar	50.00	0.00	50.00-	100.00-	USD
	M100/TRSK1100	Touring Seat Kit	100.00	0.00	100.00-	100.00-	USD
	M100/TRWA1100	Touring Aluminum Wheel Assembly	452.00	0.00	452.00-	100.00-	USD
Goods Issues			1,022.00	0.00	1,022.00-		USD
Confirmations	NAPR1000/LA...	Production Costs / Labor hours	49.20	0.00	49.20-	100.00-	USD
Confirmations			49.20	0.00	49.20-		USD
			1,071.20	0.00	1,071.20-		USD

Here we see the cost analysis. Discuss the outcome.

Go back by clicking on Exit in the top right corner and **Save** the order. You may receive the following message:

Information

X

 No valuation variant found for valuation area MI00

✓ ?

Cost Calculation

X

Warning calculating costs

for order 000001000020.

see log

 Log will be deleted when you save.

Do you still want to save?

Yes	No	 Cancel
-----	----	--



Ignore that and click “Yes”.

Return to the App: Monitor Coverage Material. Mark your materials and click on *Manage Materials*.

Press on  in the upper right corner and you will notice the sign ✓ next to your **ProdOrd**:

SAP Manage Material Coverage

Materials (1)

Search

REFRESH

DXTR3100 -2 EA

Deluxe Touring Bike (red) (Plant M100)
Plant M100 in 1 day

Material Details

DXTR3100 -2 EA

Deluxe Touring Bike (red) (Plant M100) in 1 day

STOCK/REQUIREMENTS LIST MATERIAL INFORMATION NOTES

Stock/Requirements List (1 Shortage)

Shortage Definition MRP Standard

The system cannot propose solutions for materials produced in-house.

Date	MRP Element	Actions	Additional Information	Rescheduling	Quantity	Available
03/29/2023	Stock		No Safety Stock		0 EA	0 EA
03/29/2023	CusOrd 36-10		Sport Center 999		-2 EA	-2 EA
03/29/2023	CusOrd 44-08		Sport Center 001		-2 EA	-6 EA
03/29/2023	CusOrd 47-08		Sport Center 002		-2 EA	-6 EA
04/03/2023	<input checked="" type="checkbox"/> PrdOrd 1000020-1	Edit	Standard production order	←	2 EA	-4 EA

Create Order

Please do the same for the semi-finished good and also write down the production order's number.

Picking Components

As the production orders for both semi-finished and finished goods have been created and released, we now must post the externally procured materials to the production order. In other words, the components must be "consumed" for the production order.

To do so please run the App: Pick Components for Production Orders:



Start with the Production Order for the semi-finished goods.

Type in one of the production order number and execute:

A screenshot of the SAP Picking List: Initial Screen. The header shows 'Picking List: Initial Screen' and the SAP logo. The main area is titled 'Selection at Header Level' and contains fields for 'Production order' (with value '1000020'), 'Material', 'Plant', 'Order type', 'MRP controller', 'Production Supervisor', 'Sold-To Party', 'Sales Order', 'WBS element', 'Sequence Number', 'Priority', 'Status Selection Profile', 'System Status', 'Excl.', 'Stock Segment', and 'and' and 'Excl.' checkboxes. Below this is a section titled 'Selection at Operation Level' with fields for 'Work center' and 'Plant'. A blue arrow points from the bottom right towards the 'Execute' button, which is highlighted in blue.

A screenshot of the Order Information System: Detail List of Components. The header shows 'Order Information System: Detail List of Components' and the SAP logo. The toolbar includes icons for Picking, Change Order, Display Order, Display Operations, Display Components, Logs for Order, Save, and Exit. The main area displays a table with columns: Order, Material, BOM item, Reqmts date, Reqmnt qty, Qty withdrawn, Unit, Material description, Batch, Seqn., Activity, Item no., Plant, SLoc, Type, and Status. There are four rows listed, each with a checkmark in the first column. The last row is highlighted with a blue border. The status column for all rows shows 'RE'.



Mark the entries and select „Picking“.

In the left upper corner and in the following screen press „Post“:

SAP Pick list: Wrong components

Goods Movements Overview

Material	Quantity	Un... Plant	Stor...	Reqmnt Segment	Stock Segment	Batch	Valuation Type	De...	M...	S...	Supplier
TRWH1100	4 EA	MI00	MI00				H	261			
TRTB1100	4 EA	MI00	MI00				H	261			
BOLT1100	8 EA	MI00	MI00				H	261			
TRTR1100	4 EA	MI00	MI00	MI00			H	261			

Entry: 1/ 4(4):

Post Cancel

After „ Refresh “ your list should be empty.

SAP Order Information System: Detail List of Components

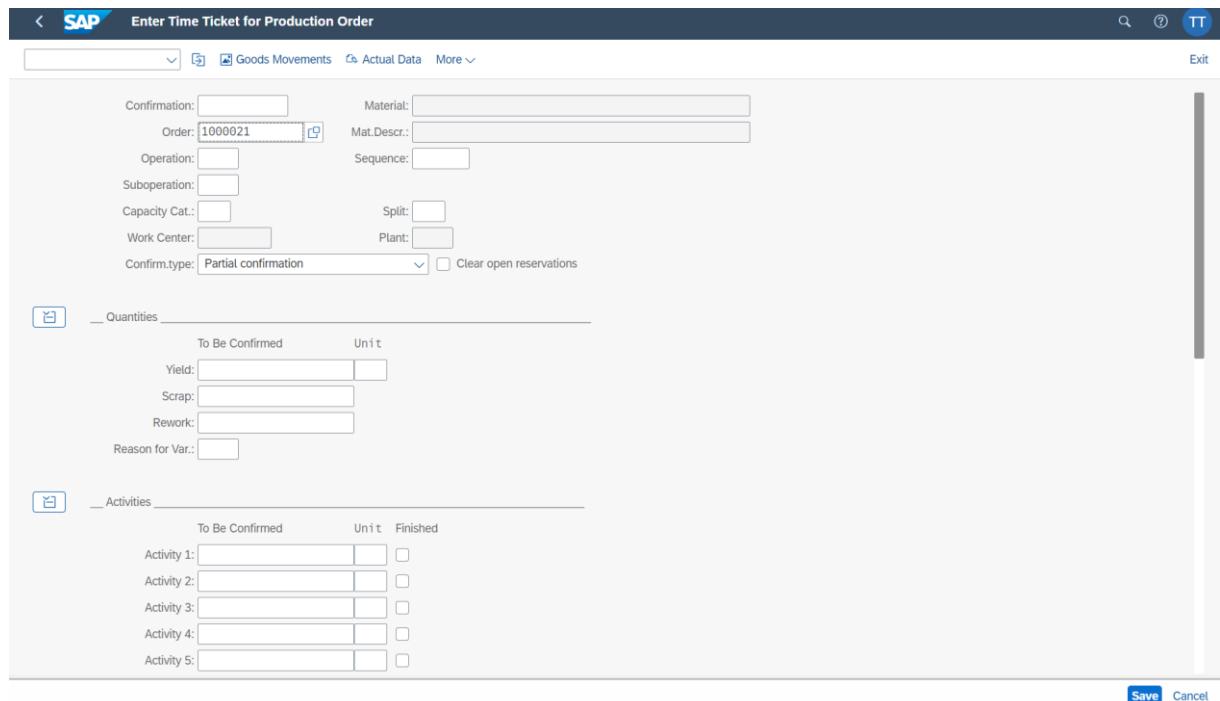
Order	Material	BOM item	Reqmts date	Reqmnt qty	Qty withdrawn	Unit	Material description	Batch	Sequen.	Activity	Item no.	Plant	SLoc	Type	Sta
-------	----------	----------	-------------	------------	---------------	------	----------------------	-------	---------	----------	----------	-------	------	------	-----

Confirm Production Order

After completing the production order, the system needs to be notified, that production has been executed. To confirm the production, click on the App: Confirm Production Order Operation



Following appears:



The screenshot shows the SAP Enter Time Ticket for Production Order interface. At the top, there's a navigation bar with icons for SAP, back, forward, search, help, and exit. The main title is "Enter Time Ticket for Production Order". Below the title, there are tabs for "Goods Movements", "Actual Data", and "More". The main form area contains several input fields:

Confirmation:	Material:
Order: 1000021	Mat.Descr.:
Operation:	Sequence:
Suboperation:	
Capacity Cat.:	Split:
Work Center:	Plant:
Confirm.type: Partial confirmation	<input type="checkbox"/> Clear open reservations

Below these fields, there are two sections: "Quantities" and "Activities".

Quantities:

To Be Confirmed	Unit
Yield:	
Scrap:	
Rework:	
Reason for Var.:	

Activities:

To Be Confirmed	Unit	Finished
Activity 1:		<input type="checkbox"/>
Activity 2:		<input type="checkbox"/>
Activity 3:		<input type="checkbox"/>
Activity 4:		<input type="checkbox"/>
Activity 5:		<input type="checkbox"/>

At the bottom right of the form are "Save" and "Cancel" buttons.

Fill in following fields:

- Order: your production order number
- Operation: **0010**
- Confirm type: final confirmation
- Yield: 4 EA

Save.

The same must be done for the second operation of the same production order.:

- Order: your production order number
- Operation: **0020**

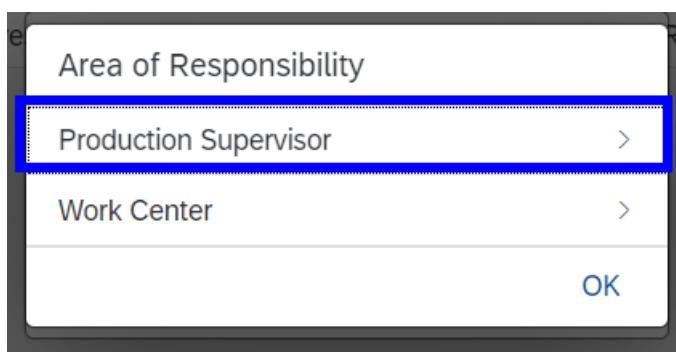
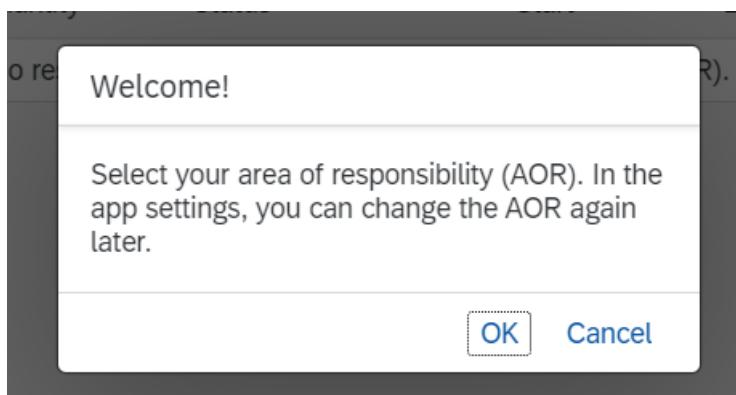
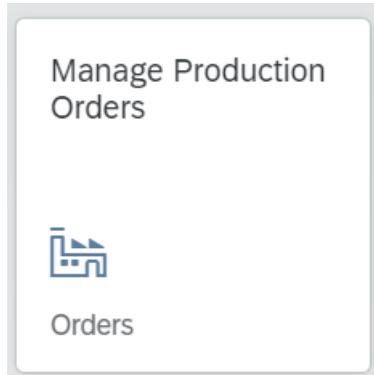
- Confirm type: final confirmation
- Yield: 4 EA

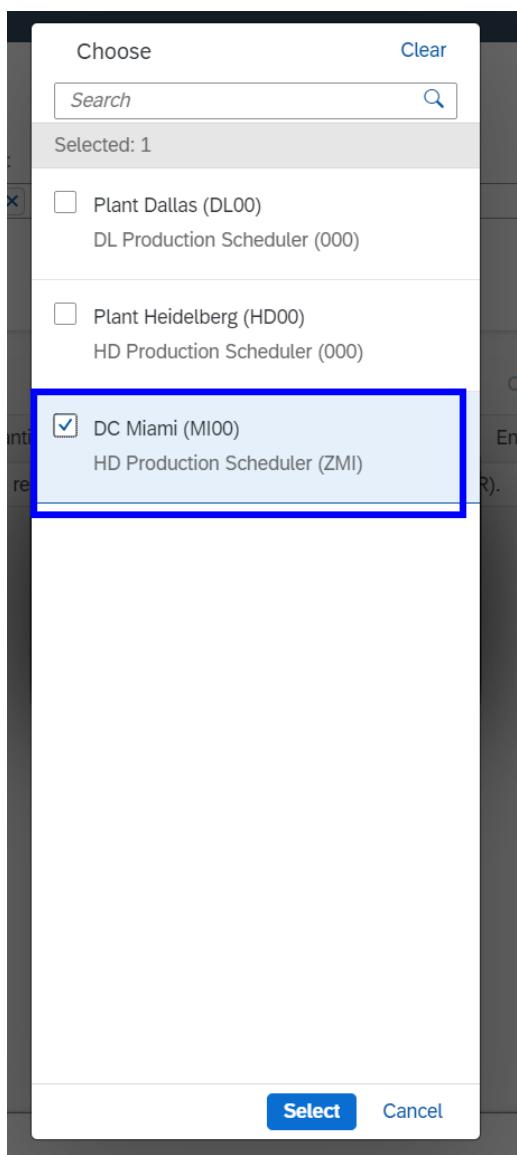
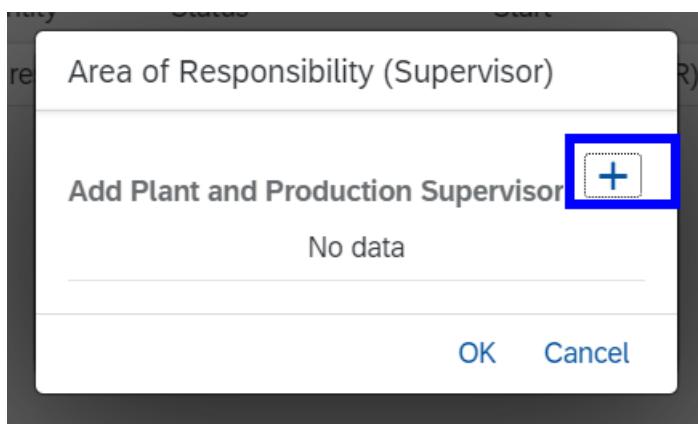
Save.

Confirmation appears:



Open the App: Manage Production Orders





Search your production order:

Status: Issue Type: Delay Duration: Order: Material:

Search Delivered x 6 More No Filter x >= 0 Hours 1000021 Adapt Filters (4)

Scheduled Start:

Orders (1)

Order	Material	Open Quantity	Status	Start	End	Progress of Operation	Issues
1000021	TRWA1100 Touring Aluminum Wheel Assembly	4 EA	Confirmed	Tue, Mar 28, 2023 09:42	Tue, Mar 28, 2023 09:43	quality check (0020)	4 of 4

You should see that the status is confirmed and the progress of operation is green (4 of 4).

Go to the Detail page:

Status: Issue Type: Delay Duration: Order: Material:

Search Delivered x 6 More No Filter x >= 0 Hours 1000021 Adapt Filters (4)

Scheduled Start:

Orders (1)

Order	Material	Open Quantity	Status	Start	End	Progress of Operation	Issues
1000021	TRWA1100 Touring Aluminum Wheel Assembly	4 EA	Confirmed	Tue, Mar 28, 2023 09:42	Tue, Mar 28, 2023 09:43	quality check (0020)	4 of 4

Under components you can see the posted materials.

< SAP Manage Production Orders ▾

1000021 Display Configuration Release Read Master Data

Issues Order Information Components Order Schedule Confirmation Inspection

All Missing

Material	Quantity	Coverage	Backflush	Component Scrap	Requirement Date/Time	Storage Location
BOLT1100 Socket Head Bolt 5x20mm	Total Quantity: 8 EA Open Quantity: 0 EA	8 EA	No	0.00 %	Sat, Apr 1, 2023 16:03	
TRTB1100 Touring Tube	Total Quantity: 4 EA Open Quantity: 0 EA	4 EA	No	0.00 %	Sat, Apr 1, 2023 16:03	
TRTR1100 Touring Tire	Total Quantity: 4 EA Open Quantity: 0 EA	4 EA	No	0.00 %	Sat, Apr 1, 2023 16:03	
TRWH1100 Touring Aluminum Wheel	Total Quantity: 4 EA Open Quantity: 0 EA	4 EA	No	0.00 %	Sat, Apr 1, 2023 16:03	

Order Schedule

Under Operations you see the status of all operations.

Issues Order Information Components Order Schedule Confirmation Inspection

Operations

Operation	Work Center	Progress	Status	Scheduled Start	Actual Start	Scheduled End	Actual End
0010 assmbley	ASSY1000 DL Assembly	4 of 4	Confirmed	Sat, Apr 1, 2023 16:03	Tue, Mar 28, 2023 09:42	Sat, Apr 1, 2023 16:37	Tue, Mar 28, 2023 09:42
0020 quality check	QUAL1000 DL Assembly	4 of 4	Confirmed	Sat, Apr 1, 2023 16:37	Tue, Mar 28, 2023 09:43	Sat, Apr 1, 2023 17:00	Tue, Mar 28, 2023 09:43

Additionally, we see the confirmations on the detail page.

Issues	Order Information	Components	Order Schedule	Confirmation	Inspection
Order Confirmations					
Confirmation	Confirmation Count	Reversed	Reversal	Reversed Count	Operation
304	1	No	No		0010 TEACH-002
Scrap: 0 EA Rework: 0 EA					
305	1	No	No		0020 TEACH-002
Scrap: 0 EA Rework: 0 EA					
Confirmed By	Confirmed	Final Confirmation	Quantity	Yield	
	Tue, Mar 28 09:42	No	4 EA	4 EA	>

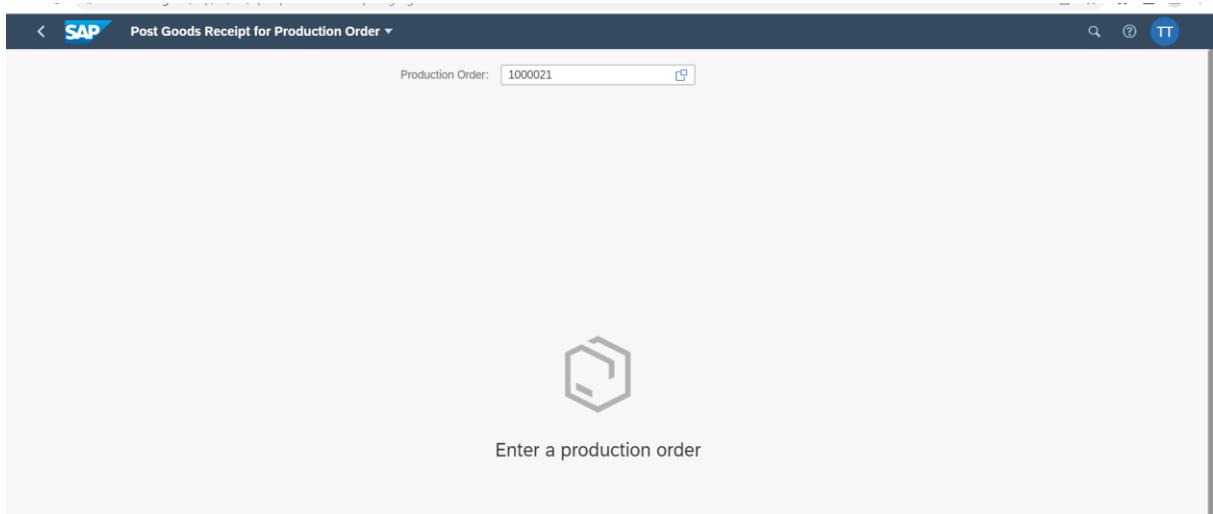
Goods Receipt

As the semi-finished production processes are confirmed (completed), we now must transport the goods we produced back from production to our storage location MI00 Miscellaneous. This process is called Goods Receipt.

Please run the App: Post Goods Receipt for Production Order



Fill in your production order and press *Enter*. Following screen appears:



Add the Storage Location Miscellaneous and post the goods receipt.

Production Order: 1000021

Touring Aluminum Wheel Assembly
TRWA1100

Production Order: 1000021
Order Type: Standard production order PP01

General Information Items Attachments

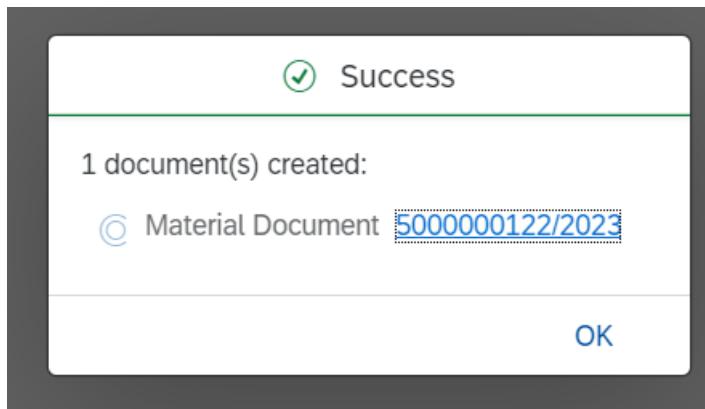
Printing:	No print	Note:		Document Date:*	03/28/2023
		Delivery Note:		Posting Date:*	03/28/2023

Items

Items (1)

Material	Open Quantity	Delivered	Distribution	Plant	Storage Location	Stock Type
Touring Aluminum Wheel Assembly TRWA1100	4.000 EA	4.000 EA	+ DC Miami	Miscellaneous	Unrestricted-Use	

Confirm the Items and Post. As you can see the delivered items, and storage location must be filled in. Check if the correct plant is typed in. As this is a material movement you will receive a material document notification:



Finally, we have our semi-finished good in stock and can produce our Deluxe Touring Bike (red)(DXTR3###). To do so perform the same steps as before starting from chapter Production Order - Picking Components

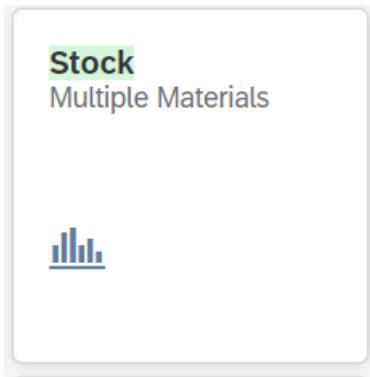
Hint: For the finished good use the storage location "Finished Goods".

Items (1)

Material	Open Quantity	Delivered	Distribution	Plant	Storage Location	Stock Type
Deluxe Touring Bike (red) DXTR3100	2.000 EA	2.000 EA	+ DC Miami	Finished Goods	Unrestricted-Use	

Attachments

To track the changes, you can go in the App: *Stock Multiple Materials* and type in your material DXTR3###- proceed as before. You can see that now we have finished goods in stock.



SAP Stock - Multiple Materials ▾

Standard* ▾

Material Number: Plant: Storage Location: Base Unit: Reporting Date: MMddyyyy

Materials (1)

Item	Plant	Plant Name	Storage Location	Description of Storage	Unrestricted Stock	Special Stock Type Description
Bike (red)	MI00	DC Miami	FG00	Finished Goods	2.000 EA	
					2.000 EA	

Delivery of Goods to Customer

Create Delivery

As the Deluxe Touring Bike (red) DXTR3### production has been processed, we now can finish the customer order that has been created in the beginning. To be able to deliver the goods today, we must cheat a little bit as we have theoretically produced the goods in the future. Therefore, the delivery date must be changed.

Please run the App: Manage Sales Orders



Search for your order and click on it.

A screenshot of the SAP Fiori "Manage Sales Orders" application. At the top, there is a search bar with placeholder text "Search" and a magnifying glass icon. Next to it are fields for "Sales Order", "Sold-To Party", "Customer Reference", "Requested Delivery Date", and "Overall Status", each with a dropdown arrow. Below the search bar is a section for "Document Date" with a dropdown arrow. On the right side of the header, there are buttons for "Adapt Filters (1)" and "Go". The main area shows a table titled "Sales Orders (1) Standard". The table has columns for "Sales Order", "Sold-To Party", "Customer Reference", "Requested Delivery Date", "Overall Status", "Net Value", and "Document Date". One row is visible, showing "36" as the Sales Order, "Sport Center 999 (1003200)" as the Sold-To Party, "999" as the Customer Reference, "03/27/2023" as the Requested Delivery Date, "Open" as the Overall Status, "6,000.00 USD" as the Net Value, and "03/27/2023" as the Document Date. There are also buttons for "Create Sales Order - VA01", "Reject All Items", "Set Delivery Block", "Remove Delivery Block", "Set Billing Block", "Remove Billing Block", and a gear icon.

Click **Change** so you jump from “Display” mode to “Change” mode.

A screenshot of the SAP Fiori "Display Standard Order 36: Overview" screen. At the top, there is a back arrow, the SAP logo, and the title "Display Standard Order 36: Overview". Below the title is a toolbar with icons for search, filter, and more. The main area contains several input fields and labels. On the left, there are fields for "Standard Order" (containing "36"), "Net Value" (containing "6.000.00 USD"), "Sold-To Party" (containing "1003200" which is expanded to show "Sport Center 999 / 2144 N Orange Ave / Orlando FL 32804"), "Ship-To Party" (containing "1003200" which is expanded to show "Sport Center 999 / 2144 N Orange Ave / Orlando FL 32804"), "Cust. Reference" (containing "999"), and "Cust. Ref. Date" (with an empty field). On the right, there are two small buttons with icons.

Click double to the Item 10:

SAP Change Standard Order 36: Overview

Standard Order: 36 Net Value: 6.000,00 USD

Sold-To Party: 1003200 Sport Center 999 / 2144 N Orange Ave / Orlando FL 32804

Ship-To Party: 1003200 Sport Center 999 / 2144 N Orange Ave / Orlando FL 32804

Cust. Reference: 999 Cust. Ref. Date:

Sales Item Overview Item detail Ordering party Procurement Shipping Reason for rejection

* Req. Deliv.Date: Deliver.Plant:

Complete Div.: Total Weight: 17.020 G

Delivery Block: Volume: 0.000

Billing Block: Pricing Date: 03/27/2023

Pty Terms: 0001 Pay immediately w/o deduction

Inco. Version:

Incoterms: FOB

Inco. Location1: Miami



All Items

Item	Material	Req. Segment	Order Quantity	Un	S	Item Description	Customer Material Number	ItCa
10	DXTR3100		2	EA	<input checked="" type="checkbox"/>	Deluxe Touring Bike (red)		TAN

Within Shipping add the Storage Location FG00.

SAP Change Standard Order 36: Item Data

Sales Document Item: 10 Item category: TAN Standard Item

Material: DXTR3100 Deluxe Touring Bike (red)

Sales A	Sales B	Shipping	Billing Document	Conditions	Account Assignment	Schedule lines	Partner	Texts	Order Data	Status	Structure	Addit...
Ship-to party: 1003200 Sport Center 999 / 2144 N Orange Ave / Orlando FL 32804												

Shipping

Unloading Point:	Receiving Point:
Department:	Delivery Prior.: 2 Normal item
Plant: MI00 DC Miami	Stor. Loc.: FG00 <input type="button" value=""/>
Shipping Point: MI00 SP Miami	Part.dlv/item: <input type="checkbox"/>
Route: 000001 Northern Route	Max.Part.Deliv.: <input type="checkbox"/>
Mat.freight grp: <input type="checkbox"/>	Order Combinat.: <input type="checkbox"/>
MnsOfTrns Type: <input type="checkbox"/>	Shipping Type: <input type="checkbox"/>
MeansTransp.: <input type="checkbox"/>	Spec.Processing: <input type="checkbox"/>
POD-relevant: <input type="checkbox"/>	

Go back.

SAP Change Standard Order 36: Item Data

Sales Document Item: 10 Item category: TAN Standard Item
Material: DXTR3100 Deluxe Touring Bike (red)

Sales A Sales B **Shipping** Billing Document Conditions Account Assignment Schedule lines Partner Texts Order Data Status Structure

Ship-to party: 1003200 Sport Center 999 / 2144 N Orange Ave / Orlando FL 32804

Shipping

Unloading Point:	Receiving Point:
Department:	Delivery Prior.: 2 Normal item
Plant: MI00 DC Miami	Stor. Loc.: FG00 <input type="button" value="Search"/>
Shipping Point: MI00 SP Miami	Part.dlv./item:
Route: 000001 Northern Route	Max.Part.Deliv.:
Mat.freight grp.:	Order Combinat.:
MrsOfTrns Type.:	Shipping Type.:
MeansTransp.:	Spec.Processing.:
POD-relevant: <input type="checkbox"/>	

Mark your item and click on which is the ATP check.

Sales Item Overview Item detail Ordering party Procurement Shipping Reason for rejection

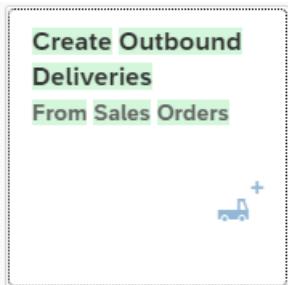
* Req. Deliv.Date: D 03/27/2023 Deliver.Plant:
Complete Dlv.: Total Weight: 17,020 G
Delivery Block: Volume: 0.000
Billing Block: Pricing Date: 03/27/2023
Pty Terms: 0001 Pay immediately w/o deduction
Inco. Version:
Incoterms: FOB
Inco. Location1: Miami

All Items

Item	Material	Req. Segment	Order Quantity	Un	S	Item Description
<input checked="" type="checkbox"/> 10	DXTR3100		2 EA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Deluxe Touring Bike (red)

Click the green checkmark again and save the order.

Now please run the App: Create Outbound Deliveries from Sales Order:



Click on **Go** and search for your customer order

Planned Creation Date	Sales Document	Planned GI Date	Priority	Shipping Point	Ship-To Party	Gross Weight
03/28/2023	36	04/03/2023	Normal item (02)	SP Miami (M100)	Sport Center 999 (1003200)	17,020.000

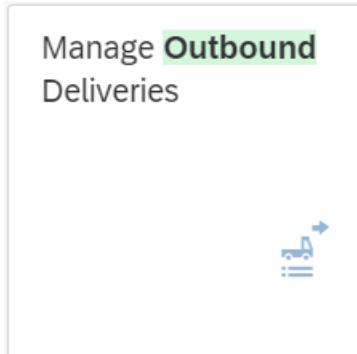
Mark the item and click on **Create Deliveries (1)**. Now your delivery has been created.

Click on **Display Log**
Here you see your delivery number – please write it down.

Delivery	Overall Status	Ship-to party	Supplier
80000035	Open	Sport Center 999 (1003200)	

Pick and Deliver Goods to Customer

As the delivery has been created in the system, the goods now must be brought to the place where the truck is loaded. This part is called “picking”. Therefore, please run App: *Manage Outbound Deliveries*



The screenshot shows the SAP Fiori interface for managing outbound deliveries. At the top, there's a search bar and a 'Go' button. Below it, there are filter fields for 'Shipping Point', 'Picking Date', 'Ship-to party', and 'Planned GI Date'. A large table below is titled 'Deliveries (0)' and shows a single row for an 'Outbound Delivery' with ID '80000035'. The table includes columns for 'Picking Date', 'Priority', 'Picking Status', and 'Confirmation Status'. The 'Picking Status' for the entry is 'Not Yet Processed (A)'. On the right side of the screen, a dropdown menu is open under 'Overall Status', with 'Ready for Picking' selected. Other options in the menu include 'Ready for Confirmation', 'Ready to Post GI', 'GI Posted', 'All Open Deliveries', and 'All'.

Change the status to “Ready for Picking” and click **Go**.

This screenshot shows the same SAP Fiori interface after changing the status. The dropdown menu for 'Overall Status' now shows 'Ready for Picking' as the selected option. The table below shows one delivery entry with ID '80000035'. The 'Picking Status' for this entry is now 'Not Yet Processed (A)'. The 'Pick' button in the toolbar is highlighted with a blue border.

You will see that your delivery’s “Picking Status” is “Not Yet Processed”. Mark the entry and klick on **Pick**.

You can now proceed with the picking. Scroll down, fill the picking quantity, and save:

SAP Pick Outbound Delivery

Delivery: 80000035

Actual GI Date:	<input type="text" value="MM/dd/yyyy"/>	Gross Weight:	<input type="text" value="17,020"/>	G														
Planned GI Date:	<input type="text" value="04/03/2023"/>	Net Weight:	<input type="text" value="17,020"/>	G														
Picking Status:	Not Yet Processed																	
Confirmation Status:	Not Relevant																	
Show More																		
0 of 1 Picking > Gi Not Ready 0																		
Delivery Items (1) <table border="1"> <thead> <tr> <th>Item</th> <th>Material</th> <th>Delivery Quantity</th> <th>Picking Quantity</th> <th>Serial Number Status</th> <th>Picking Status</th> <th>Confirmation Status</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 000010</td> <td>Deluxe Touring Bike (red) (DXTR3100)</td> <td><input type="text" value="2"/> EA <input type="button" value=""/></td> <td><input type="text" value="2"/> EA</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					Item	Material	Delivery Quantity	Picking Quantity	Serial Number Status	Picking Status	Confirmation Status	<input type="checkbox"/> 000010	Deluxe Touring Bike (red) (DXTR3100)	<input type="text" value="2"/> EA <input type="button" value=""/>	<input type="text" value="2"/> EA			
Item	Material	Delivery Quantity	Picking Quantity	Serial Number Status	Picking Status	Confirmation Status												
<input type="checkbox"/> 000010	Deluxe Touring Bike (red) (DXTR3100)	<input type="text" value="2"/> EA <input type="button" value=""/>	<input type="text" value="2"/> EA															
Copy Picking Quantity (0) Delete Item (0) Delete Delivery Save <input type="button" value=""/>																		

Outbound delivery saved

Now the picking is completed. Therefore, the so called "Goods Issue" can be posted. This means, that the goods are posted out of your stock and have left your site.

Status: Ready to Post GI	Planned GI Date: 04/03/2023	Ship-To Party: Sport Center 999 (1003200)
Gross Weight: 17,020 G	Address: 2144 N Orange Ave, Orlando FL 32804, USA	Volume: 0
Net Weight: 17,020 G	Priority: Normal item	
<input type="button" value="Post GI"/>	Delete Delivery	Save <input type="button" value=""/>

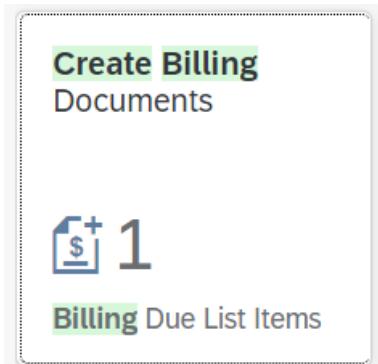
GI posted

Check again your stock for the material DXTR3# #.

What can you see?

14. Create Billing Document for Customer

Now start the App: Create Billing Documents VF01:



Type in your delivery number and press Enter.

Standard* ▾

Sales document:	SD Document Category:	Sold-To Party:	Billing Date:
<input type="text"/> Search	<input type="text"/>	<input type="text"/>	<input type="text"/> To (03/28/2023)
<input type="button"/> <input type="button"/>		<input type="button"/> <input type="button"/> Adapt Filters (1) <input type="button"/> Go	
Billing Due List Items (1)			
<input checked="" type="checkbox"/> Sales document	SD Document Category	Sold-To Party	Billing Date
<input checked="" type="checkbox"/> 80000035	Delivery	Sport Center 999 (1003200)	03/28/2023
			Net Value
			6,000.00 USD

< SAP Manage Billing Documents ▾

Invoice
TMP0000034

Payer	Sold-To Party	Status	Net Value	Tax Amount	Total Amount
Sport Center 999 (1003200)	Sport Center 999 (1003200)	Temporary	6,000.00 USD	0.00 USD	6,000.00 USD

General Information Terms and Conditions Items Accounting Data Process Flow Pricing Data Pricing Elements Taxes Texts Output Items

Document Data

Billing Date: 03/28/2023	Organizational Data	Additional Data
Billing Type: Invoice (F2)	Company Code: Global Bike Inc. (US00)	Shipping Conditions: Standard
Reference: 999	Sales Organization: US East (UE00)	Man. Invoice Maint.: No
Customer Reference: 999	Distribution Channel: Wholesale (WH)	
	Division: Bicycles (B1)	
	Sales District: Pacific NorthwestUSA (US0001)	

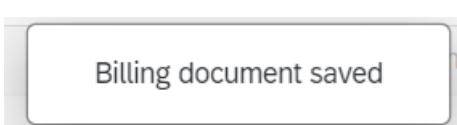
Terms and Conditions

Incoterms: Free on board (FOB)	Payment terms: Pay immediately w/o deduction
Incoterms Location 1: Miami	

Items

Item	Product	Billed Quantity	Net Value	Total Amount

Save Cancel



The Billing number is displayed in the upper right corner.

SAP Manage Billing Documents

Invoice
90000034

Payer	Sold-To Party	Status
Sport Center 999 (1003200)	Sport Center 999 (1003200)	To Be Posted

Open the App: Display Billing Documents.



Enter your Billing number.



SAP

Display Billing Documents



Items



Accounting



More ▾

Billing Document:

90000034



More Search Criteria

Document Number:

Company Code:

Fiscal Year:

Reference:

Search

Enter.

Display the Document Flow:

Display Document Flow (Shift+F7)

F2 Invoice 90000034 Net Value: 6,000.00 USD

Payer: 1003200 Sport Center 999 / 2144 N Orange Ave / Orlando FL 32804

Billing Date: 03/28/2023

Item Description Billed Quantity SU Net Value Curr... Tax Amount Req. Segment

Item	Material	Item Description	Billed Quantity	SU	Net Value	Curr...	Tax Amount	Req. Segment
<input checked="" type="checkbox"/>	10 DXTR3100	Deluxe Touring Bike (red)	2	EA	6,000.00	USD	0.00	
<input type="checkbox"/>								
<input type="checkbox"/>								

What can you see in the document flow?

The screenshot shows a SAP Fiori application interface. At the top, there is a navigation bar with icons for search, status overview, and a highlighted 'Display Document' button. Below the navigation bar, the title 'Business Partner 0001003200 Sport Center 999' is displayed. Underneath the title are several small navigation icons. A table follows, listing documents with columns for 'Document', 'On', 'Time', and 'Status'. The table shows three entries: a Standard Order (Completed), an Outbound Delivery (Completed), and an Invoice (Blocked). The 'Invoice' row is highlighted with a yellow background.

Document	On	Time	Status
Standard Order 0000000036	03/27/2023	14:29:29	Completed
Outbound Delivery 0080000035	03/28/2023	19:55:54	Completed
→ Invoice 0090000034	03/28/2023	20:08:04	Blocked

Congratulations, you have finished the case study!