

# Production Planning and Execution (PP)

This case study explains an integrated production planning and execution process in detail and thus fosters a thorough understanding of each process step and underlying SAP functionality.

## Product

S/4HANA 2020  
Global Bike

Fiori 3.0

## Level

Undergraduate  
Graduate  
Beginner

## Focus

Production Planning and Execution

## Authors

Michael Boldau  
Bret Wagner  
Stefan Weidner

## Version

4.0

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## MOTIVATION

The data entry requirements in the production planning exercises (PP 1 through PP 6) were minimized because much of the data already existed in the SAP system. This stored data, known as master data, simplifies the processing of business transactions. Examples for this were material master data, bills of materials, and routings.

In this case study, we will create consumption values for a finished product to plan and process a complete manufacturing cycle.

## PREREQUISITES

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

In order to successfully work through this case study, it is not necessary to have finished the PP exercises (PP 1 through PP 6). However, it is recommended.

## NOTES

This case study uses the Global Bike data set.



## Process Overview

**Learning Objective** Understand and perform a manufacturing process cycle.

**Time** 200 min

**Scenario** In order to experience a complete manufacturing process you will take on different roles within the Global Bike Group, e.g. production supervisor, shop floor worker and plant manager. Overall, you will be working in the Materials Management (MM) and the Production Planning and Execution (PP) departments.

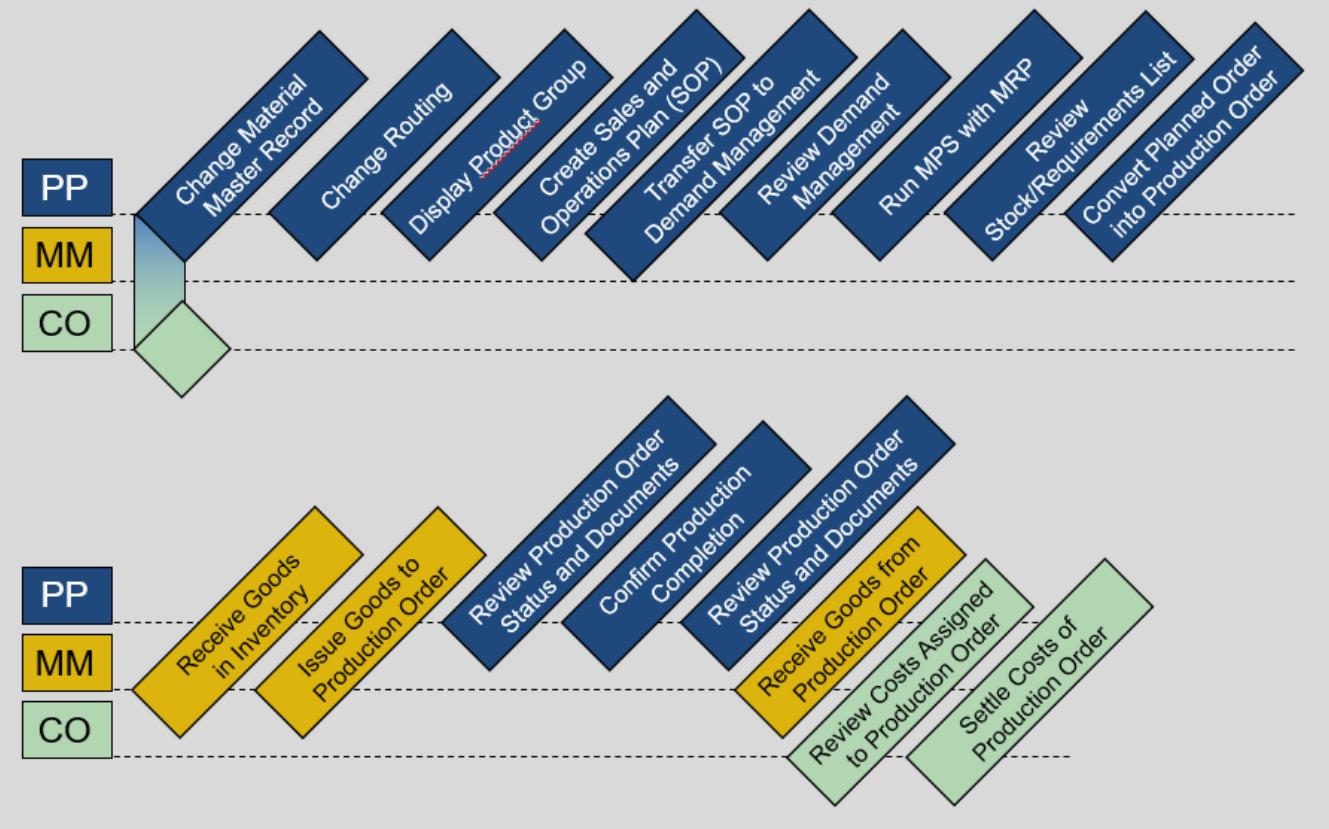
**Employees involved**

Jun Lee (Production Supervisor)  
 Hiro Abe (Plant Manager Dallas)  
 Lars Iseler (Production Order Worker)  
 Susanne Castro (Receiving Clerk)  
 Sanjay Datar (Warehouse Employee)  
 Michael Brauer (Shop Floor Worker 4)

Before you can start forecasting demand for your touring bike product group, changes in the material master record of the bikes need to be maintained.

Afterwards you will create a 12-month sales and operations plan (SOP) for your product group, receive the production relevant goods from the warehouse storage location and issue them to the production order.

To conclude the process, the production is confirmed as complete, the finished goods are received into the warehouse and costs assigned to the production order are analyzed.



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PP Challenge .....	<b>Error! Bookmark not defined.</b>

## Step 1: Change Material Master Record

**Task** Prepare a material master record for Demand Planning.

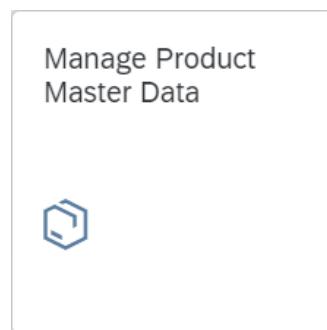
**Time** 20 min

**Short Description** In order to plan Global Bike's deluxe touring bikes (black, silver and red) prepare their material master records by adding planning-relevant data to these records.

**Name (Position)** Jun Lee (Production Supervisor)

To change the views of a material, use the *Manage Product Master Data* app in the *Production Planning and Execution* area.

Manage Product Master Data



In the search screen, enter DXTR\*### (replace ### with your three-digit number) in the search field.

DXTR\*###

The screenshot shows the SAP Fiori search interface for the 'Manage Product Master Data' app. At the top, there is a search bar with the placeholder 'Standard\*'. Below it are several filter fields: 'Editing Status' (set to 'All'), 'Product' (empty), 'Product Description' (empty), 'GTIN' (containing 'DXTR\*000'), 'Product Group' (empty), and 'Product Category' (empty). A blue 'Go' button is located at the bottom right of the filter area.

Press **Go**. Your various Deluxe Touring Bikes will be displayed.

The screenshot shows the SAP Fiori product list screen for the 'Manage Product Master Data' app. The table header includes columns for 'Products (3)', 'Create', 'Copy', 'Mass Processing', 'Show in Hierarchy', 'Hide Draft Values', 'Delete', and a settings icon. The table rows show three products: 'Deluxe Touring Bike (black)' (GTIN: DXTR1100), 'Deluxe Touring Bike (silver)' (GTIN: DXTR2100), and 'Deluxe Touring Bike (red)' (GTIN: DXTR3100). Each row contains an image icon, a link to the product details, and a timestamp ('08/23/2021, 12:36:14' for black, 'Chris Reich' for author). A blue 'Go' button is visible at the bottom left of the table.

Products (3)	Create	Copy	Mass Processing	Show in Hierarchy	Hide Draft Values	Delete	
<input type="checkbox"/> Image	Description / ID	Group / Type	GTIN	Product Category	Last Changed		
<input type="checkbox"/>	<a href="#">Deluxe Touring Bike (black)</a> DXTR1100	Finished Bikes (BIKES) Finished Product (FERT)	Product	08/23/2021, 12:36:14 Chris Reich	>		
<input type="checkbox"/>	<a href="#">Deluxe Touring Bike (silver)</a> DXTR2100	Finished Bikes (BIKES) Finished Product (FERT)	Product	08/23/2021, 12:36:58 Chris Reich	>		
<input type="checkbox"/>	<a href="#">Deluxe Touring Bike (red)</a> DXTR3100	Finished Bikes (BIKES) Finished Product (FERT)	Product	08/23/2021, 12:37:40 Chris Reich	>		

Select the line of Deluxe Touring Bike (red) (DXTR3##) to open the details of the product.

Product Type: Finished Product (FERT)    Base Unit of Measure: Each (EA)    Revision Level:  
 Product Category: Product    GTIN:  
 Product Group: Finished Bikes (BIKES)    GTIN Category:

**General Information**    Product Compliance    Components    Texts    Sales    Storage    Warehouse Management

**Basic Data**

Division: Bicycles (BI)	Created By: <a href="#">Chris Reich</a>
Old Product Number: -	Created On: 08/19/2021, 11:51:26
Batch Management Required: No	Last Changed By: <a href="#">Chris Reich</a>
Marked for Deletion: No	Last Changed On: 08/23/2021, 12:37:40

Press **Edit** to switch to the edit mode.

Use the pull-down menu to select the *Plants* section. The window automatically scrolls to the correct position.

Plants

- General Information
- Basic Data
- Descriptions
- Base Unit of Measure
- ...
- Extended Service Parts Planning
- Distribution Chains
- Plants**
- Valuation Areas
- Attachments - Document Management Services

You will see a list of all plants for which the product has been defined.

#### Plants

Plant	MRP Type	MRP Controller	Availability Check	Marked for Deletion	
DL00	M1	000	02	<input type="checkbox"/>	>
HD00	M1	000	02	<input type="checkbox"/>	>
HH00	M1	000	02	<input type="checkbox"/>	>
MI00	M1	000	02	<input type="checkbox"/>	>
SD00	M1	000	02	<input type="checkbox"/>	>

Press at the end of the line with the DL00 plant to open the plant-specific product master data.

SAP Plant ▾

Deluxe Touring Bike (red) /

Plant Dallas

DL00



Product Type: Finished Product (FERT)      Base Unit of Measure: Each (EA)      Reference Product:

Product Category: Product      GTIN:

Product Group: Finished Bikes (BIKES)      GTIN Category:

Fiscal Year of Current Period: 2021

Current Period: 9

General Information Configuration International Trade Purchasing MRP Data Advanced Planning Extended Service >

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**General Data**

Plant:  
Plant Dallas (DL00)

Plant-Specific Product Status:

Valid From Date for Status:  
 MM/dd/yyyy

Profit Center:

Negative Stocks Allowed in Plant:

Stock Determination Group:

Loading Group:  
 Hand lift

Quality Management Control Key:

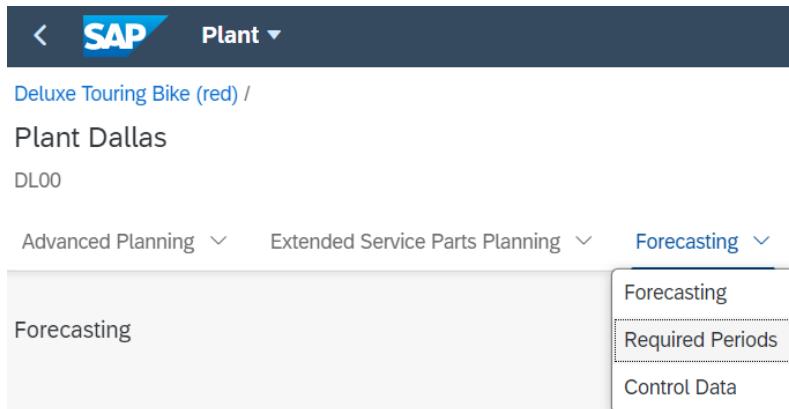
Select the *MRP data* area. The window automatically scrolls to the correct position. Enter strategy group **40** (Planning with final assembly) there.

MRP Data  
40

MRP Type: *	<input type="text" value="MPS, fixing type -1- (M1)"/>	Strategy Group:	<input type="text" value="Planning with final assembly (40)"/>
MRP Controller:	<input type="text" value="000"/>	Reorder Point:	<input type="text" value="0.000"/> EA
Availability Check:	<input type="text" value="Individ. Requirement (02)"/>	Planning Cycle:	<input type="text"/>
ABC Indicator:	<input type="text"/>	Planning Time Fence:	<input type="text" value="7"/> DAY
MRP Group:	<input type="text"/>		

Select the *Forecasting* → *Required Periods* area. If the tab is not visible, you can use the pull-down menu  again.

Forecasting → Required  
Periods



In the *Periods for Initialization* field enter **12**. Scroll down to the next area *Control data*.

12

In the *Control Data* area below, click on the value help icon of the Optimization Level field and select the optimization level **F - Fine** (high optimization level). Then select **Parameter Optimization**.

F

Parameter Optimization

0,20  
0,10  
0,30  
0,30

Now assign the smoothing factors. Enter **0.20** for the alpha factor (base value), **0.10** for the beta factor (trend value), **0.30** for the gamma factor (seasonal index) and **0.30** for the delta factor (MAD).

<b>Required Periods</b>	
Historical Periods:	<input type="text" value="120"/> MON
Forecast Periods:	<input type="text" value="12"/> MON
Periods per Seasonal Cycle:	<input type="text" value="12"/> MON
<b>Control Data</b>	
Initialization Indicator:	<input type="text" value="Initialization by system (X)"/>
Model Selection Indicator:	<input type="text" value=""/>
Optimization Level:	<input type="text" value="Fine (high optimization level) (F)"/>
Tracking Limit:	<input type="text" value="4.000"/>
Model Selection Procedure:	<input type="text" value="Analytical model selection procedure (2)"/>
Weighting Group:	<input type="text" value=""/>
Reset Forecast Model Automatically:	<input type="checkbox"/>

#### Parameter Optimization:

<input checked="" type="checkbox"/>	Alpha Factor:	<input type="text" value="0.20"/>
<input type="checkbox"/>	Beta Factor:	<input type="text" value="0.10"/>
<input type="checkbox"/>	Gamma Factor:	<input type="text" value="0.30"/>
<input type="checkbox"/>	Delta Factor:	<input type="text" value="0.30"/>

Select **Apply** to save the plant-specific data for plant DL00.

Click **Save** to save your changes to the red Deluxe Touring Bike.

**Provide screenshot of above – only for DXTR3### (Red Bike)**

The SAP system updates the master data record for material DXTR3### and displays a corresponding message.

Master data record saved.

Select  to return to the Manage Product Master Data screen.

Repeat the same procedure for the silver and black Deluxe Touring Bike.  
Start with the silver one (**DXTR2###**) and then change the black bike  
(**DXTR1###**).

DXTR2###  
DXTR1###

Click  to return to the SAP Fiori Launchpad.



## Step 2: Change Routing

**Task** Change a routing for a finished good.

**Time** 15 min

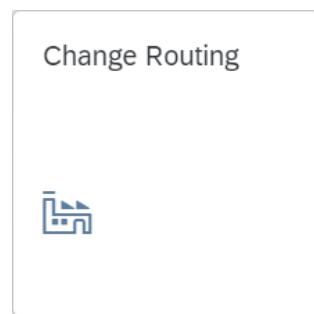
**Short Description** Change the routing for your red Deluxe Touring bike.

**Name (Position)** Jun Lee (Production Supervisor)

After the operational steps are laid out, the components must be allocated to the individual operations. This is a progressive process where each operation builds off the materials that entered production in the previous operations

To change the routing, use the Change routing app in the *Production Planning and Execution* area.

Change Routing



Enter the material number of your red Deluxe Touring bike (**DXTR3###**). In the Plant field, enter the Global Bike plant number in Dallas (**DL00**).

DXTR3###

DL00

**SAP** Change Routing: Initial Screen

< SAP Change Routing: Initial Screen

Routings Sequences Operations More ▾

Material:	DXTR3100
Plant:	DL00
Sales document:	Sales Document Item:
WBS Element:	
Group:	

Also make sure that the Planner group field is empty. Then press **Operations**.

SAP Change Routing: Operation Overview

Group: 1804 Group Counter: 1  
Material: DXTR3100 Deluxe Touring Bike (red)

**Operation Overview**

Op...	SOp	Work cen...	Plant	* C...	Standard...	Description	Lo...
<input type="checkbox"/>	0010		ASSY1000	DL00	ASSY	Material staging	<input type="checkbox"/>
<input type="checkbox"/>	0020		ASSY1000	DL00	ASSY	Attach seat to frame	<input type="checkbox"/>
<input type="checkbox"/>	0030		ASSY1000	DL00	ASSY	Attach handle bar assembly	<input type="checkbox"/>
<input type="checkbox"/>	0040		ASSY1000	DL00	ASSY	Attach derailleur gear assm. to wheel	<input type="checkbox"/>
<input type="checkbox"/>	0050		ASSY1000	DL00	ASSY	Attach front and rear wheels to chain	<input type="checkbox"/>
<input type="checkbox"/>	0060		ASSY1000	DL00	ASSY	Attach brakes	<input type="checkbox"/>
<input type="checkbox"/>	0070		ASSY1000	DL00	ASSY	Attach peddles	<input type="checkbox"/>
<input type="checkbox"/>	0080		INSP1000	DL00	ASSY	Test bike	<input type="checkbox"/>
<input type="checkbox"/>	0090		PACK1000	DL00	ASSY	Disassemble	<input type="checkbox"/>
<input type="checkbox"/>	0100		PACK1000	DL00	ASSY	Pack bike	<input type="checkbox"/>
<input type="checkbox"/>	0110		PACK1000	DL00	ASSY	Move to storage	<input type="checkbox"/>

**Note** A routing is defined by the routing group and the routing group counter. Moreover, the routing contains reference to the material whose production is described by the routing.

Besides the standard sequence, it can also have parallel or alternative sequences. Alongside the standard values, the routing also contains the time elements that are relevant for scheduling operations. Each operation in the routing may contain its own base quantity, to which these time elements may refer.

Select **Allocation** to display a list of all components. If this is not displayed, you will find the entry in the pull-down menu under **More ► Allocation**.

Select the lines Touring Frame-Red (TRFR3##) and Touring Seat Kit (TRSK1##).

TRFR3###  
TRSK1###

**Item Overview**

Ph...	Le...	Path	Ite...	Component	Quantity
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0010 TRWA1100	2
<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0	0020 TRFR3100	1
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0030 DGAM1100	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0	0040 TRSK1100	1
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0050 TRHB1100	1
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0060 PEDL1100	1
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0070 CHAN1100	1
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0080 BRKT1100	1
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0090 WDOC1100	1
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0100 PCKG1100	1

Press **New Assignment**. In the popup that appears, enter 0020 for Activity and confirm the entry with .

0020

New Assignment X

Assign to

Activity:  Sequence:

✓ Oper./act. list 🔍 ✖

Back in the *Material Component Overview* you can see that both components have now been assigned to Activity 0020.

Item Overview

Ph...	Le...	Path	It...	Component	Quantity	Sort String	Un...	It...	Ba...	Activity	Seq.
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0010 TRWA1100	2		EA	L			
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0020 TRFR3100	1		EA	L	<input type="checkbox"/>	0020	0
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0030 DGAM1100	1		EA	L			
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0040 TRSK1100	1		EA	L	<input type="checkbox"/>	0020	0
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0050 TRHB1100	1		EA	L			
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0060 PEDL1100	1		EA	L			
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0070 CHAN1100	1		EA	L			
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0080 BRKT1100	1		EA	L			
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0090 WDOC1100	1		EA	L			
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0100 PCKG1100	1		EA	L			

Repeat this process for all other components and assign them to the operations below.

Component	Operation
TRHB1### (touring handle bar)	0030
TRWA1### (touring aluminum wheel assembly)	0040
DGAM1### (derailleur gear assembly)	0040
CHAN1### (chain)	0050
BRKT1### (brake kit)	0060
PEDL1### (pedal assembly)	0070
WDOC1### (warranty document)	0100
PCKG1### (packaging)	0100

TRHB1### - 0030  
TRWA1### - 0040  
DGAM1### - 0040  
CHAN1### - 0050  
BRKT1### - 0060  
PEDL1### - 0070  
WDOC1### - 0100  
PCKG1### - 0100

Item Overview

Ph...	Le...	Path	It...	Component	Quantity	Sort String	Un...	It...	Ba...	Activity	Seq.
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0010 TRWA1100	2		EA	L	<input type="checkbox"/>	0040	0
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0020 TRFR3100	1		EA	L	<input type="checkbox"/>	0020	0
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0030 DGAM1100	1		EA	L	<input type="checkbox"/>	0040	0
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0040 TRSK1100	1		EA	L	<input type="checkbox"/>	0020	0
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0050 TRHB1100	1		EA	L	<input type="checkbox"/>	0030	0
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0060 PEDL1100	1		EA	L	<input type="checkbox"/>	0070	0
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0070 CHAN1100	1		EA	L	<input type="checkbox"/>	0050	0
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0080 BRKT1100	1		EA	L	<input type="checkbox"/>	0060	0
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0090 WDOC1100	1		EA	L	<input type="checkbox"/>	0100	0
<input type="checkbox"/>	<input type="checkbox"/>	0	0	0100 PCKG1100	1		EA	L	<input type="checkbox"/>	0100	0

Provide screenshot of above

Apply your changes with **Save**. The system issues a message that the routing has been saved.

 Routing was saved with group 1804 and material DXTR3100.

Click  to return to the SAP Fiori Launchpad.



## Step 3: Display Product Group

**Task** Display a product group.

**Time** 5 min

**Short Description** Display the product group (product family) for all your Deluxe Touring bikes.

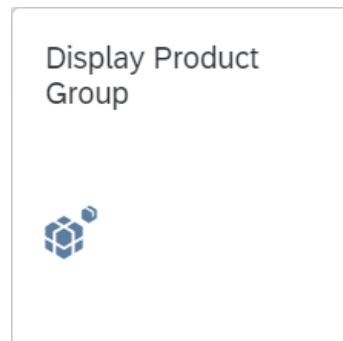
**Name (Position)** Jun Lee (Production Supervisor)

A product group (product family) supports high-level planning. This way, it is not necessary to delve into the minutia of creating planning forecasts for every material in the company.

Product group

To view the Deluxe Touring bike product group, use the *Display Product Group* app in the *Production Planning and Execution* area.

Display Product Group



In the *Display Product Group: Initial Screen*, in the *Product group* field find and select your group for deluxe touring bikes. In order to do so, press the search icon (or pressed F4), enter ###\* in the *Material description* field. Remember to replace ### with your three-digit number, e.g. enter 009\* if your number is 009. Enter **DL00** as Plant.

###\*

DL00

Name of the product group (1)	
<input checked="" type="checkbox"/> <b>Find product group via MRP controller</b> <input type="checkbox"/> Find product group via description <input type="checkbox"/> Find product group via plant	
MRP Controller:	<input type="text"/>
Material description:	<input type="text" value="000*"/>
Language Key:	<input type="text" value="EN"/>
Product group:	<input type="text"/>
Plant:	<input type="text" value="DL00"/>
Maximum No. of Hits:	<input type="text" value="500"/>
<input type="button" value="Find"/> <input type="button" value="Multiple Selection"/> <input type="button" value="Close"/>	

Then, press Enter or click on **Find** to display the search results.

Name of the product group (1)

> Find product group via MRP controller   Find product group via description   Find product group via plant

MRP Controller	Material description	Language
<input type="radio"/>	000 PRODUCT GROUP BICYCLES	EN
<input checked="" type="radio"/>	000 PRODUCT GROUP DELUXE TOURING BICYCLE	EN
<input type="radio"/>	000 PRODUCT GROUP OFFROAD BICYCLES	EN
<input type="radio"/>	000 PRODUCT GROUP PROFESSIONAL TOURING	EN
<input type="radio"/>	000 PRODUCT GROUP TOURING	EN

5 Entries found

You will see a list of all your product groups, e.g. for mountain bikes or touring bikes. Select the group of Deluxe Touring Bikes (**PG-DXTR##**). Then click to apply the selection.

PG-DXTR##

Now that the correct product group (**PG-DXTR##**) is filled in, make sure that Plant **DL00** is entered.

DL00

< SAP Display Product Group: Initial Screen

More ▾

Product group:	PG-DXTR000
Plant:	DL00

Then, press Enter to display the product group details.

On this screen you can see that this product group defines proportions for three different bikes: the black, silver and red deluxe touring bike. For the black bike a share of 40% will be considered and 30% for the silver and the red bikes each.

<  Display Product Group: Members (Materials)

Next Level   Hierarchy Graphic   Versions...   Master Data...   Product Group Graphic   More ▾

Product group: PG-DXTR000  
000 Product Group Deluxe Touring Bicycle

Plant: DL00 : Plant Dallas  
Base Unit: EA

Member number	Plnt	Unit conv.	Aggr.fact.	Proportion	UoM	V	M	Fx	Short Text
DXTR1000	DL00	1	1	40	EA			<input type="checkbox"/>	Deluxe Touring Bike (black)
DXTR2000	DL00	1	1	30	EA			<input type="checkbox"/>	Deluxe Touring Bike (silver)
DXTR3000	DL00	1	1	30	EA			<input type="checkbox"/>	Deluxe Touring Bike (red)

Click  to return to the SAP Fiori Launchpad.



## Step 4: Create Sales and Operations Plan (SOP)

**Task** Create a sales and operations plan for a product group.

**Time** 20 min

**Short Description** Create a 12-month sales and operations plan (SOP) for your product group.

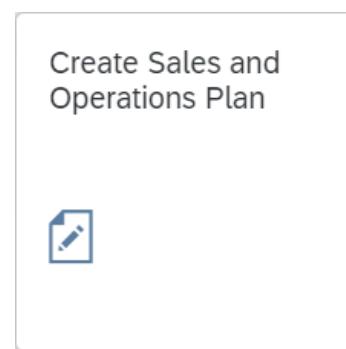
**Name (Position)** Jun Lee (Production Supervisor)

A sales and operations plan (SOP) is a planning tool used to consolidate data for forecasting future sales and production levels as well as the methods needed to meet those requirements. In this task, our SOP will be based on historical consumption values taken from a fixed period. This is in contrast to forecasting within a real-life system which would base the prediction on previous periods and their respective consumption.

Sales and operations plan

To create an SOP, use the *Create Sales and Operations Plan* app in the *Production Planning and Execution* area.

Create Sales and Operations Plan



Make sure that Product group **PG-DXTR###** and Plant **DL00** are entered.

PG-DXTR###  
DL00

Then, select **Active version**.

Record the version number: \_\_\_\_\_

In the menu bar, select:

**More ▶ Edit ▶ Create sales plan ▶ Forecast...**

Select **Period intervals**, Forecast from **current period/current year** to **previous period/next year**, Historic Data from **04/2017** to **03/2021**, Forecast execution **Aut. model selection**. Compare your screen with the one below

before clicking on **Historical...** to view the historical values.

Period intervals  
current period/current year  
previous period/next year  
04/2017  
03/2021  
Aut. model selection

**Forecast: Model Selection**

**Periods**

Period intervals

Forecast	* Fr... : 09/2021	* To : 08/2022
Historical data	* Fr... : 04/2017	* To : 03/2021

No. of periods

No. of forecast periods:	0
No. of historical values:	60

**Forecast execution**

<input type="radio"/> Constant models	<input type="radio"/> Seasonal models
<input type="radio"/> Trend models	<input type="radio"/> Season. Trend Models
<input checked="" type="radio"/> Aut. model selection	<input type="radio"/> Historical

**Forecast parameters**

Profile:	SAP
----------	-----

 Forecasting    Historical...    Forecast profile...    Version...   

You will get an overview of the passed periods in the specified time range.

**Forecast: Historical Values**

**Historical values**

Period	Val. fld	Corr.value	F	C
M 03/2021	333	333	<input type="checkbox"/>	<input type="checkbox"/>
M 02/2021	340	340	<input type="checkbox"/>	<input type="checkbox"/>
M 01/2021	363	363	<input type="checkbox"/>	<input type="checkbox"/>
M 12/2020	310	310	<input type="checkbox"/>	<input type="checkbox"/>
M 11/2020	276	276	<input type="checkbox"/>	<input type="checkbox"/>
M 10/2020	283	283	<input type="checkbox"/>	<input type="checkbox"/>
M 09/2020	306	306	<input type="checkbox"/>	<input type="checkbox"/>
M 08/2020	283	283	<input type="checkbox"/>	<input type="checkbox"/>

 Forecasting    Correct   

Click on  Forecasting.

In the next Popup the system selected *Trend and season*. Click on  Forecasting again.

In the next pop-up you can see that the system tested and found Seasonal and Trend tendencies in the past consumption data and has applied a Seasonal Trend Model.

Forecast: Results

Basic value:	319.920	Trend value:	5
MAD:	17	Error total:	57

Forecast results

Period	Orig. HV	Corr. HV	Ex-post FV	Orig. FV	Corr. FV	Season	F	C
M 04/2021				316	316	0.97	<input type="checkbox"/>	<input type="checkbox"/>
M 05/2021				343	343	1.04	<input type="checkbox"/>	<input type="checkbox"/>
M 06/2021				291	291	0.87	<input type="checkbox"/>	<input type="checkbox"/>
M 07/2021				307	307	0.90	<input type="checkbox"/>	<input type="checkbox"/>
M 08/2021				344	344	0.99	<input type="checkbox"/>	<input type="checkbox"/>
M 09/2021				383	383	1.09	<input type="checkbox"/>	<input type="checkbox"/>
M 10/2021				347	347	0.97	<input type="checkbox"/>	<input type="checkbox"/>

No forecast error messages exist

✓  Forecasting  User exit

Press , the sales forecast has been transferred to the SOP.

Look at the planning table. Note that your values may differ from the screenshot.

Change Rough-Cut Plan

Characteristic More ▾

Product group:	PG-DXTR100	100 Product Group Deluxe Touring Bicycle
Plant:	DL00	
Version:	A00 Active version	Active

SOP: plan individual product group

Planning Table	Un	M 09/2021	M 10/2021	M 11/2021	M 12/2021	M 01/2022	M 02/2022	M 03/2022
Sales	EA	382	346	336	391	431	394	382
Production	EA							
Stock level	EA	-382	-729	-1065	-1457	-1888	-2282	-2665
Target stock level	EA							
Range of Coverage								
Target days' supply								

As Target day's supply enter **5** for each forecasted period.

5

SOP: plan individual product group

Planning Table	Un	M 02/2022	M 03/2022	M 04/2022	M 05/2022	M 06/2022	M 07/2022	M 08/2022
Sales	EA	394	382	377	409	346	364	407
Production	EA							
Stock level	EA	-2280	-2662	-3039	-3448	-3794	-4158	-4565
Target stock level	EA							
Range of Coverage								
Target days' supply		5	5	5	5	5	5	5

In a production plan, you plan the quantities you need to produce in order to meet your sales plan. The system then calculates stock levels and days' supply for each period on the basis of the sales and production quantities and any target data. There are several different planning strategies available, which differ in the production values and the stock levels proposed.

As the SOP is a high-level planning, discrete production values are not necessary. The SAP system calculates discrete numbers once the SOP is transferred to the Demand Management..

In the menu bar, select:

**More ► Edit ► Create productn plan ► Synchronous to sales**

Note the change in the Production and in the Stock level lines. The production plan is created to match the sales forecast.

SOP: plan individual product group								
<input checked="" type="checkbox"/> Planning Table	Un	M 02/2022	M 03/2022	M 04/2022	M 05/2022	M 06/2022	M 07/2022	M 08/2022
<input type="radio"/> Sales	EA	394	382	377	409	346	364	407
<input type="radio"/> Production	EA	394	382	377	409	346	364	407
<input type="radio"/> Stock level	EA							
<input type="radio"/> Target stock level	EA							
<input type="radio"/> Range of Coverage								
<input type="radio"/> Target days' supply		5	5	5	5	5	5	5

In the system menu, select

**More ► Edit ► Create productn plan ► Target day's supply**

Note the impact on the production plan and stock levels. Production levels are generated to match the sales plus produce enough to put into stock to meet the target days of supply specifications.

Review the Planning Table (your numbers may be different).

SOP: plan individual product group								
<input checked="" type="checkbox"/> Planning Table	Un	M 02/2022	M 03/2022	M 04/2022	M 05/2022	M 06/2022	M 07/2022	M 08/2022
<input type="radio"/> Sales	EA	394	382	377	409	346	364	407
<input type="radio"/> Production	EA	394	373	378	412	337	365	413
<input type="radio"/> Stock level	EA	70	61	62	65	57	58	65
<input type="radio"/> Target stock level	EA							
<input type="radio"/> Range of Coverage		5	5	5	5	5	5	5
<input type="radio"/> Target days' supply		5	5	5	5	5	5	5

**Provide screenshot of above**

**Note** Although the screen displays integer production values, the SAP system calculates with decimal precision. You can display the decimal places of a series by pressing F8. Then create the production plan.

Accept the SOP with **Save**. A system message appears and you return to the initial screen.

 Plan saved under version number A00

Click  to return to the SAP Fiori Launchpad.

## Step 5: Transfer SOP to Demand Management

**Task** Transfer SOP to Demand Management.

**Time** 10 min

**Short Description** Transfer the Sales and Operations Plan to Demand Management.

**Name (Position)** Jun Lee (Production Supervisor)

Demand Management is the tool used to disaggregate planning data from high-level plans down to the detailed planning level. For this task, planning for the Deluxe Touring Product Group will be broken down into the individual components that belong to this group.

Demand Management

To transfer sales/rough planning to Demand Management, use the *Transfer Planning Data to Demand Management* app in *Production Planning and Execution* area.

Transfer Planning Data to Demand Management

Transfer SOP to Demand Manage-...  
Transfer the Sales a...



Enter Product group **PG-DXTR###**, Plant **DL00**, and the version saved in the previous task (**A00**).

PG-DXTR###  
DL00  
A00

Select **Prod.plan for mat. or PG members as proportion of PG** and **Active**. Then, deselect the **Invisible transfer** indicator to present the disaggregation results on another screen allowing the planner to modify the results before saving them manually to Demand Management.

Prod.plan for mat. or PG members as prop. of PG Active  
**Invisible transfer**

**SAP Transfer Planning Data to Demand Management**

Transfer now More ▾

\* Product group: PG-DXTR100  
100 Product Group Deluxe Touring Bicycle

\* Plant: DL00 Plant Dallas

Version: A00

**Transfer strategy and period**

- Sales plan for material or PG members
- Sales plan for mat. or PG members as proportion of PG
- Production plan for material or PG members
- Prod.plan for mat. or PG members as proportion of PG

From: 09/26/2021 To: [ ]

Invisible transfer

**Independent requirement specifications**

Requirements type: [ ]  
Version: [ ]

Active

Select **Transfer now** and examine the Planned Independent Requirements generated for **DXTR1###**.

**SAP Plnd Ind. Reqmts: Planning Table**

Planning start: 09/26/2021 Planning End:

Table Items Schedule Lines

Material	MRP ...	V	A	BU	Reqmnt Segment	M 09/2021	M 10/2021	M 11/2021	M 12/2021	M 01/2022	M 02/2022
DXTR1100	DL00	AG	<input checked="" type="checkbox"/>	EA		178	135	134	159	175	158

Then click on **Save** to save the demand for the DXTR1###.

After saving, the system jumps to the independent requirement of the next material (DXTR2###). Now examine the independent requirement generated for DXTR2###.

Table Items Schedule Lines

Material	MRP ...	V	A	BU	Reqmnt Segment	M 09/2021	M 10/2021	M 11/2021	M 12/2021	M 01/2022	M 02/2022
DXTR2110	DL00	AG	<input checked="" type="checkbox"/>	EA		134	101	101	119	131	118

Continue with **Save**. Finally, examine the planned independent requirement of material DXTR3###.

Material	MRP ...	V	A	BU	Reqmnt Segment	M 09/2021	M 10/2021	M 11/2021	M 12/2021	M 01/2022	M 02/2022
DXTR3110	DL00	AG	<input checked="" type="checkbox"/>	EA		134	101	101	119	131	118

Also save this requirement with **Save**.

Provide screenshot of above

Note DXTR1### makes up 40%, DXTR2### makes up 30% and DXTR3### another 30% of the production plan created in your Sales and Operations Plan. **How is this derived?**

You will automatically return to the initial screen. The system also gives you a message that the requirement has been saved. You could also see this in the other materials in advance.

 Requirement saved

Click  to return to the SAP Fiori Launchpad.



## Step 6: Review Demand Management

**Task** Review the requirements for a product group.

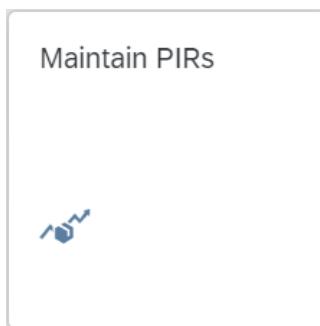
**Time** 10 min

**Short Description** Review the requirements for the product group to ensure that there are production requirements for the individual production items.

**Name (Position)** Hiro Abe (Plant Manager Dallas)

To view planned requirements, use the Maintain PIRs app in *Production Planning and Execution* area.

Maintain PIRs



A welcome message is displayed informing you that you do not yet belong to any area of responsibility. Confirm this with **OK**. You will be forwarded automatically.

The *My Area of Responsibility* screen appears with a list of existing plants. Set your responsibility for the plant **DL00**.

DL00

Plant / MRP Controller Combinations (7)					Assign	Unassign	⋮
<input type="checkbox"/>	Plant	Plant Name	MRP Controller	MRP Controller Name			
<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			

Then click to return. In the *Maintain PIRs* screen expand the search by pressing .

Standard\* ▾  
Filtered By (3): Plant, Period Indicator, Version Active

Material	Plant	Reach	Accuracy - Current Period	Accuracy - Last Week	Version Active	Last Modified Date
DGRB2000	Plant Dallas (DL00)	0 Months	100 %	0 %	Yes	09/03/2021 >
DGRW2000	Plant Dallas (DL00)	1 Months	100 %	0 %	Yes	09/16/2021 >
DXTR1000	Plant Dallas (DL00)	11 Months	99999 %	0 %	Yes	09/13/2021 >

The plant in Dallas (DL00) is already preselected. Now enter **DXTR\*###** as the *search term* and change the *Version Active* field to **No** and select **Yes**.

DXTR\*###  
No  
yes

Standard\* ▾

Material: DXTR\*110      Plant: Plant Dallas (DL00)      MRP Area:

Accuracy: Current Period:      Last Modified Date: MM/dd/yyyy - MM/dd/yyyy      Period Indicator: Monthly (M)      Reach:

Version Active:

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<input checked="" type="checkbox"/> Yes	

Adapt Filters (4) Go

Press **Go** to run the search with the new criteria. You will now be shown your three Deluxe Touring Bikes.

Materials (3)

Material	Plant	Reach	Accuracy - Current Period	Accuracy - Last Week	Version Active	Last Modified Date
DXTR1110	Plant Dallas (DL00)	11 Months	99999 %	0 %	Yes	09/27/2021 >
DXTR2110	Plant Dallas (DL00)	11 Months	99999 %	0 %	Yes	09/27/2021 >
DXTR3110	Plant Dallas (DL00)	11 Months	99999 %	0 %	Yes	09/27/2021 >

Select all three lines and click **Edit (3)**.

View planned independent demands for the Deluxe Touring Bike product group for all 3 materials.

Maintain Quantities per Period (3) Sep 27, 2021

Material (Plant / MRP Area / Version /ReqType)	Version is Ac...	ReqPlan	ReqSeg	UoM	M09.2021	M10.2021	M11.2021	M12.2021	M01.2022	M02.2022
DXTR1110 (DL00 / DL00 / AG / VSF)	YES		EA	178	135	134	159	175	158	
DXTR2110 (DL00 / DL00 / AG / VSF)	YES		EA	134	101	101	119	131	118	
DXTR3110 (DL00 / DL00 / AG / VSF)	YES		EA	134	101	101	119	131	118	

Provide screenshot of above

Click  to return to the SAP Fiori Launchpad.

## Step 7: Run MPS with MRP

**Task** Run Master Production Scheduling (MPS).

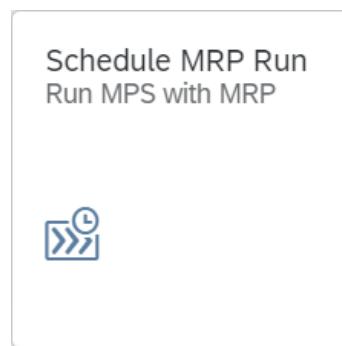
**Time** 10 min

**Short Description** Run Master Production Scheduling (MPS) to generate a series of planned orders that satisfy the requirements from SOP and demand management. Concurrently with MPS, the MRP materials will be processed leading to the generation of planned orders for dependent requirements that have been created by the BOM explosion process.

**Name (Position)** Jun Lee (Production Supervisor)

To start Master Production Scheduling, use the *Schedule MRP Run - Run MPS with MRP* app in the *Production Planning and Execution* area.

Schedule MRP Run



Enter your material **DXTR3###**, and as plant **DL00**.

DXTR3###  
DL00

The control parameters can be adopted and should be filled in by the system as follows:

- Processing Key: NETCH (Net-Change in Total Horizon) NETCH
- Create Purchase Req.: 2 (Purchase requisition in opening period) 2
- SA Deliv. Sched. Lines: 3 (Schedule lines) 3
- Create MRP List: 1 (MRP list) 1
- Planning mode: 1 (Adapt planning data (normal mode)) 1
- Scheduling: 1 (Determination of Basic Date for Planned) 1

Then, select **Display material list**.

Display material list

More ▾

\* Material: DXTR3110

MRP Area: [ ]

Plant: DL00

**Scope of Planning**

Product group

**MRP Control Parameters**

* Processing Key: NETCH	Net Change in Total Horizon
* Create Purchase Req.: 2	Purchase requisitions in opening period
* SA Deliv. Sched. Lines: 3	Schedule lines
* Create MRP List: 1	MRP list
* Planning mode: 1	Adapt planning data (normal mode)
* Scheduling: 1	Determination of Basic Dates for Planned

**Process Control Parameters**

Also Plan Unchanged Components

Display Results Prior to Saving

Display material list

Simulation mode

Press Enter. A warning message will appear asking you to check input parameters. Press Enter to confirm and bypass the warning message.

**Note** In MRP, a net requirements calculation is executed in the planning run to determine whether a material shortage exists for a certain material. In addition, stock and fixed receipts that currently exist (for example, purchase orders, production orders, fixed purchase requisitions and planned orders) are compared with the safety stock and requirements. The result of this comparison is the quantity available for planning.

If the quantity available for planning is lower than zero, a material shortage exists. MRP reacts to material shortages by creating new procurement proposals (purchase requisitions and planned orders). The suggested procurement quantity results from the lot-sizing procedure that is set in the material master.

As soon as the planning run is completed, a result overview is displayed. Check the planning details of the result overview.

Single-Item, Multi-Level	
Materials	More ▾
<b>Statistics</b>	
Materials planned	17
Materials with New Exceptions	17
Materials with Termination MRP List	

Parameters	
MRP Area	DL00
Plnt	DL00
Processing Key	NETCH
Create Purchase Requisition	2
SA Schedule Line	3
Create MRP List	1
Planning Mode	1
Scheduling	1

### Provide screenshot of above

Scroll down further, there you will see a detailed listing of all materials considered.

Ranking List of Materials with Highest CPU Times (in ms)						
Material	Runtime	Read	Net Calc.	MRP Area	Plnt	Update
DXTR3110				DL00		
5,071	318	827	458	0	436	
BRKT1110				DL00		
366	2	302	0	0	20	
TRWA1110				DL00		
334	1	5	264	0	63	
BOLT1110				DL00		
228	1	39	0	0	187	
HXNT1110				DL00		
81	1	24	0	0	55	
TRWH1110				DL00		
71	1	26	0	0	43	
DGAM1110				DL00		
59	2	36	0	0	17	
TRFR3110				DL00		
54	1	34	0	0	18	
CHAN1110				DL00		
48	1	26	0	0	18	
LWSH1110				DL00		
47	1	23	0	0	22	

### Provide screenshot of above

Click  to return to the SAP Fiori Launchpad.

## Step 8: Review Stock/Requirements List

**Task** Review the Stock/Requirements List.

**Time** 10 min

**Short Description** Review the Stock/Requirements List for your deluxe touring bike.

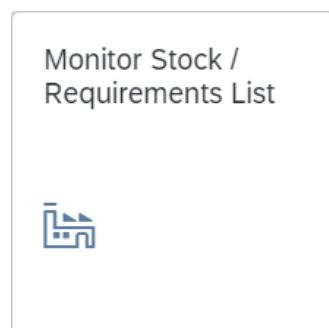
**Name (Position)** Lars Iseler (Production Order Worker)

The Stock/Requirements List is a list which dynamically changes whenever a transaction occurs using the given material. Display and review the Stock/Requirements List for all materials of the red deluxe touring bike on hand and the demand that exists against these products. The report shows that there is no stock and therefore nothing is available for use at this time.

Stock/Requirements List

To display the stock/requirements list, use the *Monitor Stock/Requirements List* app in *Production Planning and Execution* area.

Monitor  
Stock/Requirements List



On the *Individual access* tab, enter Material **DXTR3###** and Plant **DL00**.

DXTR3###  
DL00

Click on **Continue** to display the associated stock/requirements list.

SAP Stock/Requirements List: Initial Screen

More ▾

Individual access      Collective access

\* Material:   
 Description:   
 MRP Area:   
 Plant:  Plant Dallas

With filter:

Currently the system lists all entries as single lines.

Stock/Requirements List as of 11:04 hrs									
Show Overview Tree								More	
	Material:	DXTR3110							
	Description:	Deluxe Touring Bike (red)							
	MRP Area:	DL00	Plant Dallas						Ex. manuf.:
	Plant:	DL00	MRP type:	M1	Material type:	FERT			Unit:
									EA
	68								Date
	09/27/2021	Stock							0
	09/01/2021	IndReq	VSF					134-	134-
	10/01/2021	IndReq	VSF					101-	235-
	10/04/2021	---->	End of Planning Time						
	10/04/2021	PldOrd	0000000401/STCK	09/01/2021	30			134	101-
	10/04/2021	PldOrd	0000000402/STCK	10/01/2021	30			101	0
	11/01/2021	PldOrd	0000000403/STCK					101	101
	11/01/2021	IndReq	VSF					101-	0
	12/01/2021	PldOrd	0000000404/STCK					119	119
	12/01/2021	IndReq	VSF					119-	0
	01/01/2022	PldOrd	0000000405/STCK					131	131
	01/01/2022	IndReq	VSF					131-	0

Choose  (Switch to Period Totals). This will allow you to see the planned independent requirements, planned receipts, and ATP quantities based on time - days, weeks, or months.

Days		Weeks		Months							
Date	GR	ST	On	Page	1 / 1						
A...	Period/Segment	PInd	ind.req...	Requirement	Receipts	Avail.	Quantity	ATP quantity	Actual ...		
	Stock					0	0	27.0-			
	09/01/21		134-	0	0	134-	0	34.0-			
	10/01/21		101-	0	0	235-	0	4.0-			
<b>10/04/21 End of Planning</b>											
	10/04/21		0	0	235	0	235	0.0			
	11/01/21		101-	0	101	0	101	0.0			
	12/01/21		119-	0	119	0	119	0.0			
	01/01/22		131-	0	131	0	131	0.0			
	02/01/22		118-	0	118	0	118	0.0			
	03/01/22		112-	0	112	0	112	0.0			
	04/01/22		113-	0	113	0	113	0.0			
	05/01/22		124-	0	124	0	124	0.0			
	06/01/22		101-	0	101	0	101	0.0			
	07/01/22		110-	0	110	0	110	0.0			
	08/01/22		124-	0	124	0	124	0.0			

Select  to go back to the individual lines.

To view the details of the first planned order (PldOrd), select  (Element Details).

Additional Data for MRP Element

Plnd Order:	0000000401	Make-to-stock	Order End Date:	10/04/2021	GR pr.time:	0
Order Qty.:	134	EA	Order Start:	09/30/2021	Proc. Type:	E
Scrap:	0		Opening Date:	09/29/2021	Order Type:	LA
Exception:	30	= Plan process according to schedule (09/01/21)				

Select to display the pegged requirements.

Pegged Requirements

Plnd order 0000000401/STCK

Material	DXTR3110	Deluxe Touring Bike (red)
MRP Area	DL00	Plant Dallas
Plant	DL00	Plant Dallas
Receipt Date	10/04/2021	
PO Quantity	134 EA	
Quantity Without Source	0 EA	

Pegged Requirements

Planned dates	Material	Material description	Material Memo	MRP Area	El	MRP elmnt data	Rec./reqd.qty	Quantity	Unit
09/01/2021	DXTR3110	Deluxe Touring Bike (red)		DL00	PP	VSF	134	134	EA

### Provide screenshot of above

You can see that this planned order is to fulfill our Safety Stock and the first planned independent requirement that was created when we disaggregated our SOP.

Click to return to the SAP Fiori Launchpad.

So far what we have done is just Production Planning. From Step 9 onwards we will be doing Production Execution

## Step 9: Convert Planned Order into Production Order

**Task** Convert a planned order into a production order.

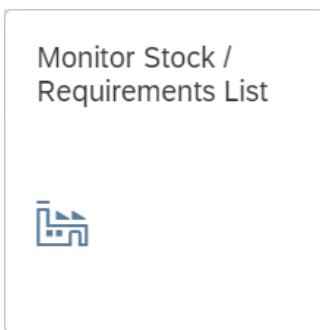
**Time** 10 min

**Short Description** Convert a planned order generated in the MPS/MRP run to a production order. The stock requirements list displays the suggested planned orders from the MPS run.

**Name (Position)** Lars Iseler (Production Order Worker)

To convert planned orders into production orders, use the SAP Fiori App *Monitor Stock / Requirements List in Production Planning and Execution area*.

Monitor Stock / Requirements List



Enter Material **DXTR3###**, Plant **DL00**, and click on **Continue**.

DXTR3###  
DL00

Stock/Requirements List as of 17:58 hrs									
		Show Overview Tree							
Mater...:	DXTR3110	Description:	Deluxe Touring Bike (red)	Ex. manuf.:		Plant:	DL00	MRP Area:	DL00
Plant:	DL00	MRP type:	M1	Material type:	FERT	Unit:	EA		
	Date	MRP e...	MRP element data	Rescheduling...	E...	Receipt/Rqmnt	Available Qty	Pro...	
	09/30/2021	Stock					0		
	09/01/2021	IndReq	VSF			134-	134-		
	10/01/2021	IndReq	VSF			101-	235-		
	10/04/2021	PldOrd	0000000401/STCK*	09/01/2021	10	134	101- 0001		
	10/04/2021	PldOrd	0000000402/STCK*	10/01/2021	10	101	0 0001		
	10/07/2021	.....>	End of Planning Time						
	11/01/2021	PldOrd	0000000403/STCK			101	101 0001		
	11/01/2021	IndReq	VSF			101-	0		
	12/01/2021	PldOrd	0000000404/STCK			119	119 0001		
	12/01/2021	IndReq	VSF			119-	0		

Choose at the beginning of the **third** planned order. A popup opens with details about the order.

## Additional Data for MRP Element

Plnd Order:	0000000403	Make-to-stock	Order End Date:	11/01/2021	GR pr.time:	0
Order Qty.:	101	EA	Order Start:	10/28/2021	Proc. Type:	E
Scrap:	0		Opening Date:	10/27/2021	Order Type:	LA

✓ -> Prod.Ord. -> PartConvProdOrder -> Proc.Old. -> SubProcOrd -> Pur.Req.

The planned order is now to be converted into a production order. To do this, press [-> Prod.Old.](#). The system creates a temporary production order, identified by the generic order number, and releases it automatically.

Production order Create: Header

Order: %000000000001

Material: DXTR3110 Deluxe Touring Bike (red)

Status: REL MACM SETC

General Assignment Goods Receipt Control Dates/Quantities Master Data Long Text Administration

**Quantities**

* Total Qty: 101 EA	Scrap Portion: 0.00 %
Delivered: 0	Short/Exc. Rcpt: 0

**Note** At this point, please note down the total quantity in your production order. You will need it later when confirming your order.

Total quantity

Determine the status of your order by clicking on .

Status			Business processes			
Syst. Status						
X	Stat...	Text				
<input checked="" type="checkbox"/>	REL	Released				
<input checked="" type="checkbox"/>	MACM	Material committed				
<input checked="" type="checkbox"/>	SETC	Settlement rule created				

**Note** When you converted the planned order to a production order scheduling takes place, an availability check was automatically carried out and a reservation was placed on the materials specified within the bill of materials.

Click on , to go back to the *Production order Create: Header* screen and save your production order with .

**Note** When you save the production order the system will automatically calculate the planned costs for the production order.

The system assigns a unique number to the production order. Please make a note of the production order number.

Order number 1000040 saved

Production order number

---

Sie kehren automatisch zur Bedarfs-/Bestandliste zurück. Wählen Sie , um die Liste aufzufrischen. Der Planauftrag **PldOrd**, den Sie gewählt hatten, liegt nun als Fertigungsauftrag **Fe-Auf** vor.

You will automatically return to the requirements/inventory list. Select to refresh the list. The planned order **PldOrd** that you had selected is now available as a production order **PrdOrd**.

Stock/Requirements List as of 18:26 hrs							
A...	Date	MRP e...	MRP element data	Rescheduling...	E...	Receipt/Reqmt	Available Qty
	09/30/2021	Stock					0
	09/01/2021	IndReq	VSF			134-	134-
	10/01/2021	IndReq	VSF			101-	235-
	10/04/2021	PldOrd	0000000401/STCK*	09/01/2021	<u>10</u>	134	101- <u>0001</u>
	10/04/2021	PldOrd	0000000402/STCK*	10/01/2021	<u>10</u>	101	0 <u>0001</u>
	10/07/2021	---->	End of Planning Time				
	11/01/2021	PrdOrd	000001000040/PP01/Re			101	101 <u>0001</u>
	11/01/2021	IndReq	VSF			101-	0

Provide screenshot of above

Click to return to the SAP Fiori Launchpad.



## Step 10: Receive Goods in Inventory

**Task** Receive goods in the Dallas plant.

**Time** 10 min

**Short Description** Receive enough goods in the Dallas storage locations to start the production process.

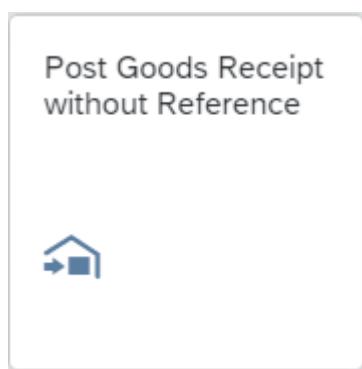
**Name (Position)** Susanne Castro (Receiving Clerk)

Usually, at this point the purchasing department in Dallas would take over and procure enough raw materials from vendors to fill the inventory so that the production process can be initiated. In this case study, we are bypassing this procurement process (this process is explained in the MM unit in detail). Because the inventory for all DXTR3### components is empty, we will assume that we find 500 pieces each in the storage location.

Goods receipt

To receive goods in the inventory, use the app *Post Goods Receipt without Reference* in Production Planning and Execution area.

Post Goods Receipt without Reference



The document and posting date are already defaulted with the current date and can thus be transferred.

Goods Receipt without Reference

General Information   Items   Attachments

Printing:

Note:

Document Date:

Delivery Note:

Posting Date:

Directly below you will find the *Items*. The table there is ready for input and offers *item 01* in advance.

Items

Items					<input type="button" value="Copy"/>	<input type="button" value="Delete"/>	<input type="button" value="Create"/>
<input type="checkbox"/>	Item	Material	Quantity / Unit	Plant	Storage Location		
<input type="checkbox"/>	01		0.000				
Stock Type:							

Click on the line of item 01, you will switch to a separate input window.

Enter your Material **TRWA1###** and press Enter.

TRWA1###  
500  
EA

Now you can enter the *Quantity 500* with *Unit EA*.

DL00  
SF00

Next, choose *Plant DL00*. When choosing the *Storage Location* your storage for semi-finished goods is will be proposed. You can check the status directly in the selection screen.

### Select Storage Location

<i>Search</i>	
<b>Standard</b>	
<b>Semi-Fin. Goods</b>	Unrestricted... 0.000 EA
SF00	Quality 0.000 EA
	Blocked 0.000 EA

Choose the *Storage Location SF00*. The *Stock Type* is automatically set to **Unrestricted-Use**, and the stock is **none special stock**.

Unrestricted-Use  
None

The screenshot shows the SAP Goods Receipt Item interface. At the top, it says 'SAP Goods Receipt Item'. Below that, 'Item 01' is selected. The main area has tabs for 'Material', 'Storage Location / Stock Type', and 'Additional Information'. Under 'Material', 'Material:' is set to 'TRWA1110' and 'Quantity / Unit:' is '500.000 EA'. Under 'Storage Location / Stock Type', 'Plant:' is 'Plant Dallas' and 'Storage Location:' is 'Semi-Fin. Goods'. To the right, 'Stock Type:' is 'Unrestricted-Use' and 'Special Stocks:' is 'None'.

Klicken Sie auf **Übernehmen und neu** um Ihre Eingaben zu übernehmen und gleichzeitig eine neue Position angeben zu können. Das System bestätigt die Übernahme der Position. Click on **Apply and New** to accept your entries and to be able to specify a new item at the same time. The system confirms the transfer of the item.

Item 01 is applied.

Now repeat the procedure for the other components of the bike DXTR3###.

Material	Quantity	Unit	Plant	SLoc
TRFR3### (Touring-Frame-Red)	500	EA	DL00	RM00
DGAM1### (Derailleur Gear Assembly)	500	EA	DL00	RM00

TRFR3###  
DGAM1###

TRSK1### (Touring Seat Kit)	500	EA	DL00	RM00
TRHB1### (Touring Handle Bar)	500	EA	DL00	RM00
PEDL1### (Pedal Assembly)	500	EA	DL00	RM00
CHAN1### (Chain)	500	EA	DL00	RM00
BRKT1### (Brake Kit)	500	EA	DL00	RM00
WDOC1### (Warranty Document)	500	EA	DL00	RM00
PCKG1### (Packaging)	500	EA	DL00	RM00

TRSK1###  
TRHB1###  
PEDL1###  
CHAN1###  
BRKT1###  
WDOC1###  
PCKG1###

As soon as you create the last item, confirm it with **Apply** to automatically return to the goods receipt posting. There you will see all created items.

Items							
	Item	Material	Quantity / Unit	Plant	Storage Location	Stock Type	Special Stocks
□ 01		TRWA1110	500.000	EA	Plant Dallas	Semi-Fin. Goods	Unrestricted-Use
□ 02		TRFR3110	500.000	EA	Plant Dallas	Raw Materials	Unrestricted-Use
□ 03		DGAM1110	500.000	EA	Plant Dallas	Raw Materials	Unrestricted-Use
□ 04		TRSK1110	500.000	EA	Plant Dallas	Raw Materials	Unrestricted-Use
□ 05		TRHB1110	500.000	EA	Plant Dallas	Raw Materials	Unrestricted-Use
□ 06		PEDL1110	500.000	EA	Plant Dallas	Raw Materials	Unrestricted-Use
□ 07		CHAN1110	500.000	EA	Plant Dallas	Raw Materials	Unrestricted-Use
□ 08		BRKT1110	500.000	EA	Plant Dallas	Raw Materials	Unrestricted-Use
□ 09		WDOC1110	500.000	EA	Plant Dallas	Raw Materials	Unrestricted-Use
□ 10		PCKG1110	500.000	EA	Plant Dallas	Raw Materials	Unrestricted-Use

**Note** If you have forgotten an item, you can add further items by clicking on **Create**. Furthermore, you can also correct entries if necessary.

Provide screenshot of above

**Post**

Secure your goods receipt with **Post**. The SAP system will assign a unique number to the goods receipt and issue an associated message.

 Success

1 document(s) created:

Material Document [4900032061/2021](#)

Material Document number

**OK**

Confirm the success message with **OK**.

Click  to return to the SAP Fiori Launchpad.



## Step 11: Issue Goods to Production Order

**Task** Issue goods to a production order.

**Time** 10 min

**Short Description** Now that all necessary components are on stock issue them to your production order in precise quantity.

**Name (Position)** Sanjay Datar (Warehouse Employee)

The goods issue process is fully defined in the production order, BOM, and routing. The quantities and the materials are reserved for this specific production order, they will be withdrawn with reference to the order number, and will be used to assign actual costs to the production order for managerial accounting purposes.

To issue goods to a production order, use the app *Post Goods Movement in Production Planning and Execution area*.

Post Goods Movement



Make sure that *Goods Issue* and *Order* are selected in the drop-down menus.

The *Document Date* as well as the *Posting date* should be already set to the current date. The *Movement Type* should be set to 261 (GI for order).

Enter your noted **production order** number.

Alternatively, click the value help icon  in the order field. In the Order Number popup (1), use the icon on the far right  to display a list of all tabs. Select the tab *Process Orders using the Info System*. On this tab, enter your material **DXTR3###** in the material field and click . Select your order and accept it with .

Once you have found or entered your production order number, press  to load the order details.



**Note** Goods issues posting for the required components is another milestone in the production order process. The following functions are performed when a GI for the components of the production order is posted:

- Storage-location-specific update of the stock and consumption fields
- Reduction of the reservation (for planned withdrawal)
- Update of costs for unplanned withdrawals
- Determination of actual costs (valuation) and order update
- Consumption update
- Generation of material and accounting documents (FI and CO documents)
- Creation of material document.
- Creation of accounting document
- Creation of controlling document
- Printing of GI document

The goods issues posting is controlled through a movement type (261), to which each posting refers. This can take place manually or automatically.

An itemized list will appear. It lists all the materials and their respective quantities that need to be issued to your order. You need to tell the system what Storage Location the materials should be withdrawn from. For the Touring Aluminum Wheel Assembly (TRWA1###), enter **SF00** (Semi-finished goods) and for all other materials **RM00** (Raw materials) in the SLoc fields. Before pressing Enter compare your screen with the one shown below. Notice that your quantity could be different.

SF00  
RM00

Flag each item with **OK**.

OK

Line	Mat. Short Text	Wa...	OK	Qty in UnE	EUn	S...	SLoc
1	Touring Frame-Red	<input type="checkbox"/>	<input checked="" type="checkbox"/>	101	EA		RM00
2	Derailleur Gear Assembly	<input type="checkbox"/>	<input checked="" type="checkbox"/>	101	EA		RM00
3	Touring Seat Kit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	101	EA		RM00
4	Pedal Assembly	<input type="checkbox"/>	<input checked="" type="checkbox"/>	101	EA		RM00
5	Touring Handle Bar	<input type="checkbox"/>	<input checked="" type="checkbox"/>	101	EA		RM00
6	Chain	<input type="checkbox"/>	<input checked="" type="checkbox"/>	101	EA		RM00
7	Brake Kit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	101	EA		RM00
8	Warranty Document	<input type="checkbox"/>	<input checked="" type="checkbox"/>	101	EA		RM00
9	Packaging	<input type="checkbox"/>	<input checked="" type="checkbox"/>	101	EA		RM00
10	Touring Aluminum Wheel Assembly	<input type="checkbox"/>	<input checked="" type="checkbox"/>	202	EA		SF00

Click on and record the material document number.

Material document 4900032062 posted [View Details](#)

Material Document number

Click to return to the SAP Fiori Launchpad.



## Step 12: Review Production Order Status

**Task** Review the production order status.

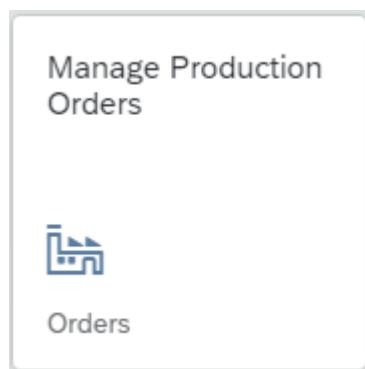
**Time** 10 min

**Short Description** Review the current production order with respect to the status of the order.

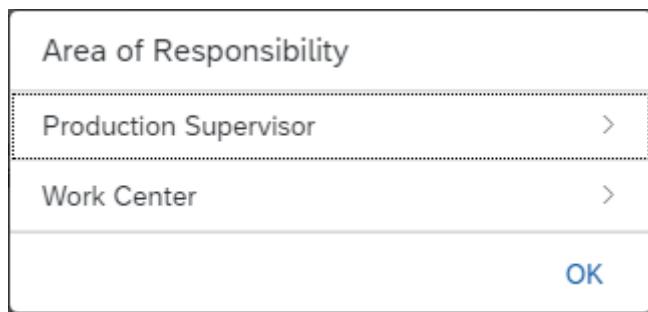
**Name (Position)** Michael Brauer (Shop Floor Worker 4)

To display the production order, use the app *Manage Production Orders - Orders in Production Planning and Execution area*.

Manage  
Production Orders  
- Orders



When you open the app for the first time, you will see a welcome message telling you to select an area of responsibility. Confirm this with **OK**, another popup will appear.



Choose *Production Supervisor*. No Plant is currently assigned. Click on **+** an choose the **Plant Dallas**. Confirm your selection with **Select**.

Area of Responsibility (Supervisor)

Add Plant and Production Supervisor +

Plant Dallas (DL00)

DL Production Scheduler (000) X

OK Cancel

Confirm your selection with  now click on *Work Center*.

Click on  again and choose the **Work Center DL Assembly (ASSY1000), DL Inspection (INSP1000) and DL Packaging (PACK1000)** from your Plant

Dallas and click on 

Area of Responsibility (Work Center)

Add Plant and Work Center +

Plant Dallas (DL00)

DL Assembly (ASSY1000) X

Plant Dallas (DL00)

DL Inspection (INSP1000) X

Plant Dallas (DL00)

DL Packaging (PACK1000) X

OK Cancel

Confirm your selection with , and press  to leave the selection or the area of Responsibility.

You will receive an overview of all existing orders. Depending on the progress of your course, there may be several production orders with different processing statuses.

The screenshot shows the SAP Manage Production Orders interface. A search bar at the top includes filters for Status (Delivered), Issue Type (No Filter), Delay Duration (>= 0 Hours), Order (Search field), Material (Search field), and Scheduled Start (Search field). Below the search bar is a table titled 'Orders (4)'. The table has columns: Order, Material, Open Quantity, Status, Start, End, Progress of Operation, and Issues. One row is selected, showing Order 1000040 with Material DXTR3110 (Deluxe Touring Bike (red)). The status is Released, and the open quantity is 101 EA. The start date is Sun, Oct 24, 2021, 14:09, and the end date is Sat, Oct 30, 2021, 17:00. The progress of operation shows three tasks: Move to transport (0000), Move to storage (0110), and Material staging (0010), all completed with 100% completion.

Provide screenshot of above

DXTR3###

In the field *Material* enter your material **DXTR3###** and choose to display your order.

This screenshot shows the same SAP interface as the previous one, but with a different search result. It shows a single order entry for Order 1000040 with Material DXTR3110 (Deluxe Touring Bike (red)). The status is Released, and the open quantity is 101 EA. The start date is Sun, Oct 24, 2021, 14:09, and the end date is Sat, Oct 30, 2021, 17:00. The progress of operation shows one task: Material staging (0010), which is completed at 100%.

Provide screenshot of above

The tabular overview already provides you with various information about your order, such as the current status and the current processing status.

For further information select the entry, you will be forwarded to the details of the production order.

This screenshot shows the detailed view of Order 1000040. At the top, it displays the order number 1000040 and the material DXTR3110 (Deluxe Touring Bike (red)) with a status of Released. Below this, there are tabs for Issues, Order Information, Components, Order Schedule, Confirmation, and Inspection. The Order Information tab is active, showing a summary table with General, Dates/Times, and Quantities sections. The General section includes fields like Production Plant (DL00), MRP Area (DL00 Plant Dallas), Planning Plant (DL00 Plant Dallas), Production Version (0001 Generated Version 0001), MRP Controller (000), and Processing (Sequential). The Dates/Times section shows scheduled start (Sun, Oct 24, 2021, 14:09) and end (Sat, Oct 30, 2021, 17:00). The Quantities section shows total quantity (101), confirmed yield (0), confirmed scrap (0), GR quantity (0), and open quantity (101).

Click on the status **Released** for more information. You can see that your production order is precosted and a settlement rule has been created.

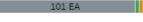
1000040

Material: **DXTR3110** (Deluxe Touring Bike (red))      Status: **Released**

Status Overview
Released
Precosted
Settlement Rule Created

Now click on the *Components* tab. The screen scrolls to the corresponding position.

Components

Components		
Material	Quantity	Coverage
<b>TRFR3110</b> Touring Frame-Red	Total Quantity: <b>101 EA</b> Open Quantity: <b>0 EA</b>	
<b>TRSK1110</b> Touring Seat Kit	Total Quantity: <b>101 EA</b> Open Quantity: <b>0 EA</b>	
<b>TRHB1110</b> Touring Handle Bar	Total Quantity: <b>101 EA</b> Open Quantity: <b>0 EA</b>	
<b>DGAM1110</b> Derailleur Gear Assembly	Total Quantity: <b>101 EA</b> Open Quantity: <b>0 EA</b>	

In the last task, you posted the goods issue for the production order. In the production order, you now see that there are no more open quantities for this order.

Click  to return to the SAP Fiori Launchpad.



## Step 13: Confirm Production Completion

**Task** Confirm production order completion.

**Time** 10 min

**Short Description** Confirm completion for your production order.

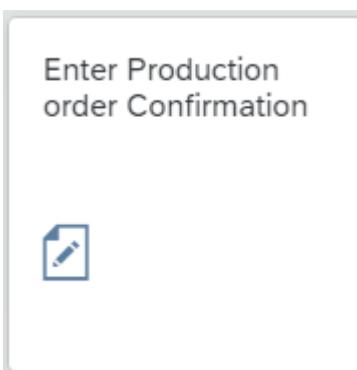
**Name (Position)** Michael Brauer (Shop Floor Worker 4)

When the assembly has been completed for the current production order, we need to confirm that certain procedures and activities have been completed and record the quantity of the finished product that has been manufactured.

Production completion

To confirm production completion, use the app *Enter Production order Confirmation in Production Planning and Execution area*.

Enter Production order Confirmation



Enter your **production order** number and click on **Continue** or Enter.

Production order number

Alternatively, use the Input-Help-Symbol and switch in the popup with to the tab *production orders by material and routing*, enter your material number DXTR3## there and search for your order.

Check if **Final Confirm.** and **Clear Open Reserv** is already checked in the *Confirmation Type* section.

Final Confirm.  
Clear Reservation  
Amount

The screenshot shows the SAP Fiori app interface for confirming a production order. At the top, it displays the title "Confirmation of Production Order Enter : Actual Data". Below the title, there are input fields for "Order" (1000040), "Status" (REL PRC GMPS MACM SETC), "Material" (DXTR3110), and "Material Descr." (Deluxe Touring Bike (red)). Under the heading "Confirmation Type", there are three radio buttons: "Partial confirmation" (unchecked), "Final Confirmation" (checked), and "Autom. Final Conf." (unchecked). To the right of the "Final Confirmation" button is a checked checkbox labeled "Clear Open Reservs.".

Furthermore, in the *actual data* tab, the quantity of bicycles that you should produce for this order should already be entered in the *yield Quantity* field. Change the *Start Execution* to **1 hour earlier** than the preset time.

1 hour earlier

Actual Data			
Curr. t/b Conf.	Unit	Confirmed to Date	Planned t/b Conf. Unit
Yield Quantity: 101	EA	0	101 EA
Scrap Quantity:		0	0
Rework Quantity:		0	
Reason for Var.:			
Personnel no.: <input type="text"/>			
To Be Confirmed	Confirmed to Date	Planned t/b Conf.	
Start Execution: 09/30/2021 14:07:16		10/24/2021	
Finish Execut.: 09/30/2021 15:07:16		10/30/2021	
Posting Date: 09/30/2021			

Save your entries with **Save**. You will get a confirmation from the System.

 Confirmation of order 1000040 saved

**Note** When the confirmation is saved, labor costs for the order are calculated automatically. The quantity yield also establishes the parameters for the goods receipt into Inventory.

Click  to return to the SAP Fiori Launchpad.



## Step 14: Review Production Order Status

**Task** Review the production order status.

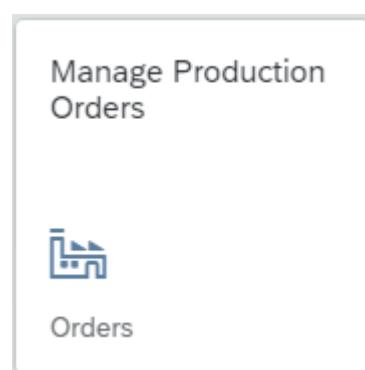
**Zeit 10 Min.**

**Short Description** Review the current production order with respect to the status of the order.

**Name (Position)** Michael Brauer (Shop Floor Worker 4)

To display the production order, use the app *Manage Production Orders - Orders in Production Planning and Execution area*.

Manage  
Production Orders  
- Orders



In the field *Material* enter your material **DXTR3###** and choose **Go** to display your order.

**DXTR3###**

Order	Material	Open Quantity	Status	Start	End	Progress of Operation	Issues
1000040	DXTR3110	101 EA	Confirmed	Thu, Sep 30, 2021 14:07	Thu, Sep 30, 2021 15:07	Move to storage (0110)	101 of 101
Deluxe Touring Bike (red)							

As you can see, the status of your production order has changed from *Released* to *Confirmed*. Furthermore, the processing status is now at *Move to storage*.

For more information, select the entry, you will be redirected to the details of the production order. Click on the *Confirmation* tab to go to the related area.

**Confirmation**

Confirmation	Confirmation Count	Reversed	Reversal	Reversed Count	Operation	Confirmed By	Confirmed	Final Confirmation
313	1	No	No		LEARN-110	Thu, Sep 30 15:07	No	

Quantity: 101 EA  
Yield: 101 EA  
Scrap: 0 EA  
Rework: 0 EA

An order confirmation is now available. You can see that the complete quantity of your production order has been confirmed and that there is no scrap.

After the confirmation, the goods receipt must now take place so that the order is completed.

Click  to return to the SAP Fiori Launchpad.



## Step 15: Receive Goods from Production Order

**Task** Post a goods receipt from production order.

**Time** 15 min

**Short Description** Post a goods receipt from your production order.

**Name (Position)** Susanne Castro (Receiving Clerk)

Receive the completed products into finished goods inventory. Check the quantity proposed against the quantity specified in the production order and the quantity specified during confirmation. If there are any discrepancies, the system will decide if an error or warning message should be generated depending upon the deviation identified.

Goods receipt

To post the goods receipt, use the app *Post goods receipt for production order*. To do this, use the app search and enter **Goods receipt for production order**. Then select the app from the list.

Post goods receipt for production order



Enter your noted **production order** and press Enter.

Production order

As an alternative use the Input-Help-Search and enter your material **DXTR3###** and click **Go**. Then select your production order from the result list.

DXTR3###

Your production order is loaded and displayed.

This screenshot shows the 'General Information' screen of the 'Post Goods Receipt for Production Order' application. At the top, it displays the production order number '1000040'. Below that, there are fields for 'Document Date' (09/30/2021) and 'Posting Date' (09/30/2021). The 'Items' section shows one item: 'Deluxe Touring Bike (red)' with material code 'DXTR3110', open quantity '101.000 EA', and distribution 'Plant Dallas'. The 'Storage Location' field is currently set to 'Unrestricted-Use'.

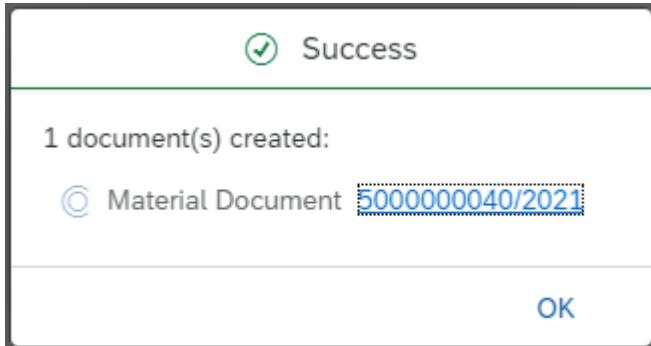
Add the storage location **FG00** for end products, all other settings can be accepted.

This screenshot shows the 'Items' screen of the application. It lists the same item as before: 'Deluxe Touring Bike (red)' with material code 'DXTR3110', open quantity '101.000 EA', and distribution 'Plant Dallas'. However, the 'Storage Location' field has been changed to 'Finished Goods', indicated by a red border around the dropdown menu. The other settings remain the same as in the previous screenshot.

Provide screenshot of above

**Post**

Save your goods receipt with **Post**. The SAP system will assign a unique number to the goods receipt and issue a corresponding message.



Material Document  
number

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Furthermore, this updates the current value of the material produced to the production order.

Confirm the successmessage with **OK**.

Click  to return to the SAP Fiori Launchpad.



## Step 16: Review Costs Assigned to Production Order

**Aufgabe** Lassen Sie sich Ihrem Fertigungsauftrag zugeordnete Kosten anzeigen.

Zeit 5 Min.

**Beschreibung** Anzeigen und Durchsehen aller Kosten, die Ihrem Fertigungsauftrag zugeordnet wurden.

**Name (Stelle)** Jamie Shamblin (Kostenbuchhalter)

To view the cost of a manufacturing job, use the Production Cost Analysis app. To do this, use the app search and enter **Production costs**. Then select the app from the list.

Production Cost Analysis



In the search enter **Material DXTR3###** and change the **Order Status** from open to **closed**

DXTR3###  
Closed

Profit Center:	Plant:	Order Type:	Material:	Order:
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="DXTR3110"/>	<input type="text"/>
Plan Category:*	Order Status:*	Period From:*	Period To:*	
<input type="text"/>	<input type="text" value="Closed"/>	<input type="text" value="009/2021"/>	<input type="text" value="009/2021"/>	<input type="button" value="Go"/> <input type="button" value="Clear"/> <input type="button" value="Adapt Filters (5)"/>

Click on **Go** to start the search. Your just completed production order will be displayed.

Order List (1) Standard		Orders		
Exception Status	Order	Material	Tgt DR/Actl DR...	Target Cost Debit
(i)	1000040	DXTR3110 (Delux...)	10.20 USD	73,772.05 USD
			10.20 USD	73,772.05 USD
				73,782.25 USD
				-154.80 USD
				Closed >

This overview lists the summed target and actual costs and shows any variances. Click on **>** at the end of the entry to open the cost details.

PP01: 1000040

Exception Status: Order Balance  
No Defined Exception Rule: -154.80 USD

GENERAL INFORMATION		COST DETAILS			
Material: DXTR3110 (Deluxe Touring Bike (red))	Planned Quantity: 0 EA	From Period: 009/2021			
Plan Category: Production Order Standard Cost	Total Actual Quantity: 101 EA	To Period: 009/2021			
<b>COST DETAILS</b>					
<b>Standard</b> <span>▼</span> <span>Target/Actual by G/L Account</span> <span>▼</span>		<span>⚙️</span> <span>🖨️</span> <span>⌄</span>			
G/L Account	Total Target Cost	Total Actl Cost	Tgt/Act CostVar		
<span>▼</span> Group Name: 7520000 (Settle. Ma...	-73,937.05 USD	-73,937.05 USD	0.00 USD		
<span>▼</span> Group Name: Human Resources 8000000 (Labor)	2,516.55 USD	2,526.75 USD	10.20 USD		
<span>▼</span> Group Name: Raw Materials					
5001000 (RM Consu... 5001000 (RM Consu...	7,070.00 USD 1,010.00 USD 7,575.00 USD 353.50 USD 4,545.00 USD 20,200.00 USD 2,525.00 USD 5,050.00 USD 101.00 USD	7,070.00 USD 1,010.00 USD 7,575.00 USD 353.50 USD 4,545.00 USD 20,200.00 USD 2,525.00 USD 5,050.00 USD 101.00 USD	0.00 USD 0.00 USD 0.00 USD 0.00 USD 0.00 USD 0.00 USD 0.00 USD 0.00 USD 0.00 USD	101 EA 101 EA 101 EA 101 EA 101 EA 101 EA 101 EA 101 EA 101 EA	DL00/BRKT1110 DL00/CHAN1110 DL00/DGAM1110 DL00/PCKG1110 DL00/PEDL1110 DL00/TRFR3110 DL00/TRHB1110 DL00/TRSK1110 DL00/WDOC1110
	-165.00 USD	-154.80 USD	10.20 USD	1,060.535 *	

### Provide screenshot of above

Now that the finished products have been received in the Inventory, the Manufacturing Output Settlement Variance has been added. **How is this figure calculated by the system?**

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Click  to return to the SAP Fiori Launchpad.

## Step 17: Settle Costs of Production Order

**Task** Settle costs of your production order.

**Time** 20 min

**Short Description** Settle the costs of your production order. The costs are temporarily captured in the production order and they need to be assigned to an appropriate cost object. Compare the actual costs to the planned costs to identify any deviations or potential problems in this regard.

**Name (Position)** Jamie Shamblin (Cost Accountant)

To settle costs of a production order, use the app *Run Actual Settlement - Order - Single* in *Production Planning and Execution* area.

Run Actual Settlement -  
Order - Single



If you have to input the Controlling Area, enter **NA00**, and click on

NA00

**Continue**

Enter your **production order number**, alternatively search for it with your material DXTR3### in the Input-Help. In the *Parameters* section enter *Settlement- and posting period* as **current month** (e.g. 006 for June). Enter as *Fiscal Year* the **current year**. Make Sure that **Test Run** is checked in the *Processing Options* section.

Orderer number

current month  
current year

Test Run

Controlling Area: NA00

\* Order:

**Parameters**

* Settlement Period: <input type="text"/>	Posting period: <input type="text"/>
* Fiscal Year: <input type="text"/>	Asset Value Date: <input type="text"/>
* Processing Type: 1 Automatic	

**Processing Options**

Test Run

Check Trans. Data

Click on **Execute** to proceed. Confirm any occurring pop-ups with enter.  
You enter the screen *Actual Settlement: Order Basic list*.

The screenshot shows the SAP Actual Settlement: Order Basic list interface. At the top, there is a header bar with the SAP logo and the title "Actual Settlement: Order Basic list". Below the header, there are three small icons: a list icon, an information icon, and a "More" dropdown. The main area is divided into sections:

- Selection**: A table showing various parameters:
 

Selection Parameters	Value	Name
Order	1000040	Deluxe Touring Bike (red)
Period	009	
Posting Period	009	
Fiscal Year	2021	
Processing Type	1	Automatic
Posting Date	09/30/2021	
Controlling Area	NA00	Global Bike North America
Currency	USD	United States Dollar
Value Date	09/30/2021	
- Processing Options**: A table showing processing parameters:
 

Selection Parameters	Value
Execution Type	Settlement Executed
Processing Mode	Test run

Processing completed with no errors

#### Statistics

Processing Category	Number
Settlement Executed	1
No Change	
Not Relevant	
Inappropriate Status	
Error	

Click on to open the detail lists.

#### Detail list - Settled values

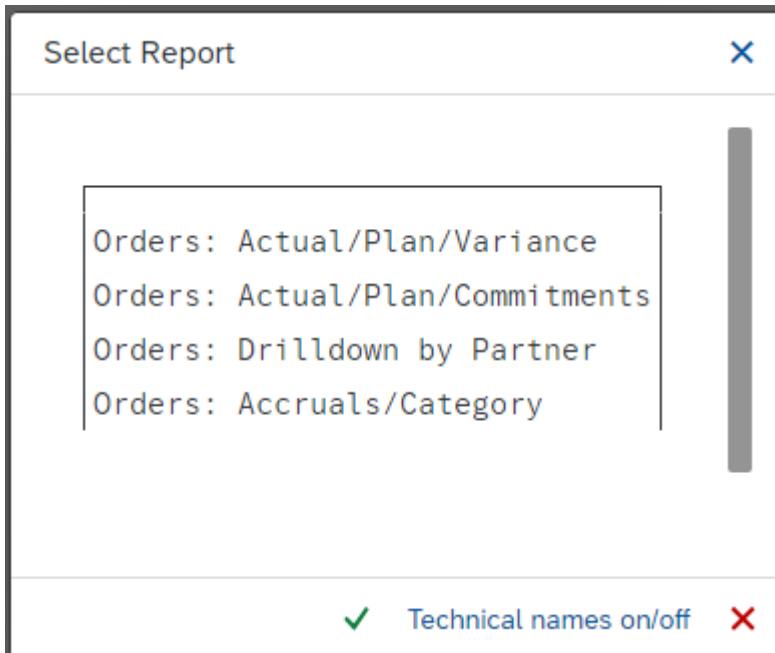
Send	Text send.	Receiver	ValCOArCur	Addit. Information
ORD 1000040	Deluxe Touring Bike (red)	MAT DL00/DXTR3110	154.80-	
			154.80-	

From the Menu bar choose:

Menu Bar

## More ► Environment ► Report

The *Select Report* pop-up will appear.



Click on **Actual/Plan/Variance** and confirm your selection with . A corresponding report group is generated and displayed.

Actual/Plan/Variance

Orders: Actual/Plan/Variance		Date: 10/01/2021 08:32:07	Page: 2 / 2
Order/Group	1000040	000001000040	
Fiscal year	2021		
Period	1 - 9		
Cost Elements	Actual	Plan	Var.(Abs.)
5001000 RM Consumpt Expense	48,429.50		48,429.50
5004000 SF Consumpt Expense	22,826.00		22,826.00
8000000 Labor	2,526.75		2,526.75
* Costs	73,782.25		73,782.25
7520000 Settle. Manuf Output	73,937.05-		73,937.05-
* Deliveries to Stock	73,937.05-		73,937.05-
** Balance	154.80-		154.80-

The test run is now complete and the actual *actual settlement* should now be performed.

Click on to go back. Confirm the Message to leave the report with . Afterwards press two times to get back to the entry screen.

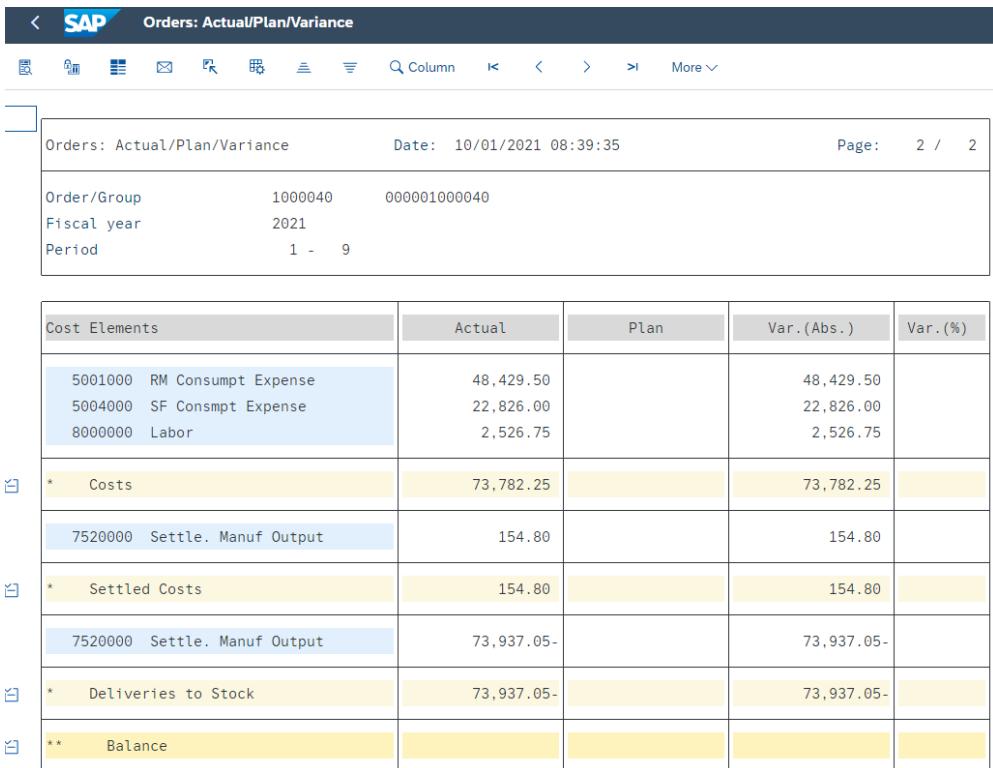
Deselect Test Run and again click on **Execute**. In contrast to the previous run, you can now see in the *Processing Options* area that this was an update run that was *completed with no errors*.

### Processing Options

Selection Parameters	Value
Execution Type	<u>Settlement Executed</u>
Processing Mode	<u>Update run</u>
<b>Processing completed with no errors</b>	

Open the report **Actual/Plan/Variance** again by clicking on  first and then use the menu bar path **More ▶ Environment ▶ Report**.

Actual/Plan/Variance



The screenshot shows the SAP Fiori Launchpad with the report "Orders: Actual/Plan/Variance" selected. The report header includes the order number 1000040, date 10/01/2021 08:39:35, and page 2 / 2. The main table displays cost elements and their variances:

Cost Elements	Actual	Plan	Var.(Abs.)	Var. (%)
5001000 RM Consumpt Expense	48,429.50		48,429.50	
5004000 SF Consumpt Expense	22,826.00		22,826.00	
8000000 Labor	2,526.75		2,526.75	
* Costs	73,782.25		73,782.25	
7520000 Settle. Manuf Output	154.80		154.80	
* Settled Costs	154.80		154.80	
7520000 Settle. Manuf Output	73,937.05-		73,937.05-	
* Deliveries to Stock	73,937.05-		73,937.05-	
** Balance				

### Provide screenshot of above

You can see that the costs have now been settled.

**Note:** The manufacturing output settlement is higher than the consumption expenses for raw materials and semi-finished goods? Review and explain the expenses and the settlements of your production order in detail. **How is the balance derived?**

Click  to return to the SAP Fiori Launchpad.