



SAP

SCM

tutorialspoint

S I M P L Y E A S Y L E A R N I N G

www.tutorialspoint.com



<https://www.facebook.com/tutorialspointindia>



<https://twitter.com/tutorialspoint>

About the Tutorial

SAP Supply Chain Management is one of the key modules in SAP ERP and controls Production Planning, business forecasting and demand planning. It helps the organization to manage their supply chain process in a dynamic environment. SAP SCM is a complete software to cover key processes such as supply chain networking, supply chain planning and coordination, and supply chain execution.

Audience

This tutorial is meant for Project leaders, project team members, SAP consultants, sales consultant, and those related to the departments of planning and material management.

Prerequisites

Before you start proceeding with this tutorial, we are assuming you have familiarity, prior experience, and knowledge of the domain of supply chain management. However, it is sufficient if you are aware of the basics of computer applications and SAP tools.

Copyright & Disclaimer

© Copyright 2018 by Tutorials Point (I) Pvt. Ltd.

All the content and graphics published in this e-book are the property of Tutorials Point (I) Pvt. Ltd. The user of this e-book is prohibited to reuse, retain, copy, distribute, or republish any contents or a part of contents of this e-book in any manner without written consent of the publisher.

We strive to update the contents of our website and tutorials as timely and as precisely as possible, however, the contents may contain inaccuracies or errors. Tutorials Point (I) Pvt. Ltd. provides no guarantee regarding the accuracy, timeliness or completeness of our website or its contents including this tutorial. If you discover any errors on our website or in this tutorial, please notify us at contact@tutorialspoint.com

Table of Contents

About the Tutorial	i
Audience.....	i
Prerequisites.....	i
Copyright & Disclaimer	i
Table of Contents	ii
1. SAP SCM – Overview.....	1
2. SAP SCM – Components.....	2
3. SAP SCM – Benefits.....	4
4. SAP SCM – Demand Management	5
Planning Strategies	5
5. SAP SCM – Creating PIR.....	7
Change and Delete PIR	8
6. SAP SCM – Material Requirement Planning	10
MRP Parameters.....	10
Running MRP for all Products.....	11
MRP Evaluation – Stock / Requirement List	15
SAP PP – MRP List	16
7. SAP SCM – Planned Order Creation.....	17
8. SAP SCM – Production Order Creation	22
9. SAP SCM – Goods Issue	25
Goods Issue Reversal	26
10. SAP SCM – Production Order Confirmation.....	28
11. SAP SCM – Production Order Cancellation	30
12. SAP SCM – Integration	31
13. SAP SCM – Integration Models.....	32
Activation and Deactivation of Integration Model	34
14. SAP SCM – Master Data	37
Bills of Material (BOM)	37
Material Master	38
Work Center	39
Routing	40
15. SAP SCM – Resources.....	42
Resource Types.....	42
Create and Change Resources	43

16. SAP SCM – Production Data Structures	44
Production Data Structure in SAP APO	45
Production Data Structure in ERP	46
17. SAP SCM – Transfer Changed Master Data	49
18. SAP SCM – Transfer Changed BOMs	51
19. SAP SCM – Model and Versions	53
Creating Model	54
Delete Model/Planning Version	57
20. SAP SCM – Applications	60
21. SAP SCM – Advanced Planning and Optimization APO	61
Supply Chain Monitoring	61
22. SAP SCM – Extended Warehouse	63
Communication Method	63
SAP EWM – Menu Structure	64
23. SAP SCM – Transportation Management	67
Custom Settings in APO	69
24. SAP SCM – Supply Network Collaboration	71
25. SAP SCM – Forecasting & Replenishment	73
SAP F&R Administration	73
26. SAP SCM – Consultant Responsibilities	75

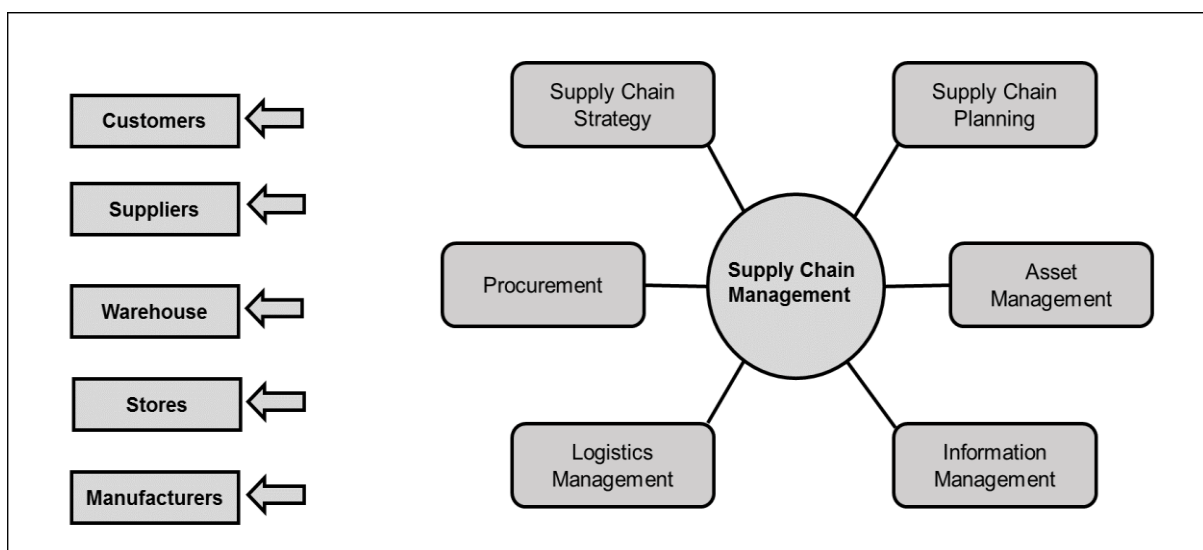
1. SAP SCM – Overview

SAP Supply Chain Management is one of the key modules in SAP ERP and controls Production Planning, business forecasting and demand planning.

The key features of SAP SCM are-

- It helps the organization to manage their supply chain process in a dynamic environment.
- SAP SCM process helps suppliers, customers, manufacturers, business partners and retailers connect with each other to manage supply chain process effectively and efficiently.
- It helps organizations to accelerate and optimize end-to-end procure-to-pay process.
- SCM products from SAP allows an organization to integrate their processes and enforce contract compliance for supply-side and supplier-side requirements throughout using supply chain processes in distributed environment.
- SAP SCM is a complete software to cover the key processes- Supply Chain networking, supply chain planning and coordination, and supply chain execution.
- It includes different planning applications related to Advanced Planning and Optimization APO, and for the integration with other SAP execution applications.
- The primary applications are SAP General Areas, SAP Supply Network Collaboration SNC, SAP Extended Warehouse Management EWM, Advanced Planning and Optimization (APO), Forecasting and Replenishment FRE and SAP Transportation Management TM.

In the image shown below, you can see SAP Supply Chain Management and its integration with other R/3 modules to manage supply chain process.



2. SAP SCM – Components

SAP Supply Chain Management allows organizations to perform effective planning and execution of logistics within supply network and to perform workflow management.

You can see the key steps in managing Supply network in an organization. Each step consists of defined set of activities and hence helping customers, suppliers, and retailers connect with each other to provide an effective supply-chain-management solution.



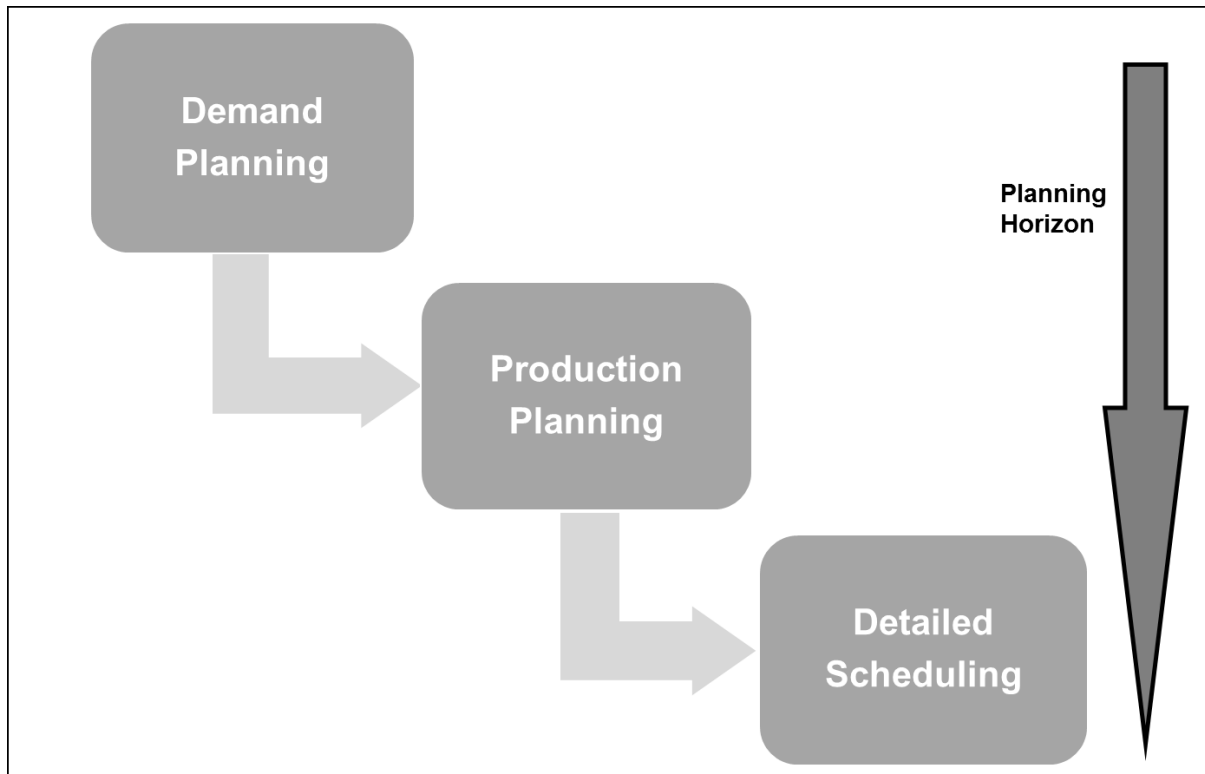
SAP SCM consists of the following components-

- **SC Collaboration:** This is used to help in making collaborative forecasts and agreements.
- **SC Planning:** This is used to generate the operational plans as per current and relevant data in the system.
- **SC coordination:** This component in Supply Chain is used to coordinate the exchange of data and information between different business units.
- **SC Execution:** This is used to ensure that you execute the supply chain plans in the best possible manner to get the desired result.

As per functionality, you can divide SCM/APO into three parts-

- **Forecasting:** To perform demand planning and forecasting, you can link to Customer Relationship Management CRM to get data related to customer campaigns, etc.
- **Supply Network Planning (SNP):** To view organization as a network of locations and to check stock projections and stock keeping criteria. Calculations in SNP drive dependent requirements down to supplying locations production and receiving stores.
- **Production Planning and Detailed Scheduling:** This is to check the dependent requirements from locations within the supply network, passed down from SNP.

This is linked with Material Requirement Planning (MRP) in Production Planning, which determines the inbound material required to complete a production order.



3. SAP SCM – Benefits

Using Supply Chain Management in SAP, an organization can achieve the following benefits in a distributed environment-

- Reduce accounts receivable collections with better visibility into the AR process, aging, and extension of credit and consequently, help to reduce the day's sales outstanding.
- Effectively manage forecasting and handling sudden changes in demand and supply process.
- Effectively use Net Fixed assets NFA like plants and equipment.
- To meet customer demands, you can smartly plan and manage Supply Chain Management process in an organization.
- Proper inventory optimization, order fulfillment, and shipping of the goods.
- Distribution of the key information to all the stakeholders spread across the network.
- Improve communication and collaboration between different business lines to manage demand and supply process in an organization.
- Improve production efficiency and reduction in production quality issues and hence reduce cost of goods sold.
- To reduce transportation duties and taxes, and increase rebates and incentives. It also helps to reduce transportation errors.

4. SAP SCM – Demand Management

Demand management is used to forecast, manage, and plan the demands of goods and has defined set of processes and capabilities to produce goods.

The key features of Demand Management are-

- This component is used to improve the demand planning by utilizing promotions.
- Based on historical sales data, you can handle demand for every store, product from different customers and hence you can see customer responses as per change in pricing policies, and profit for a particular product in the organization.
- You use demand models to predict consumers' reaction with price change. As per organization goals like- increase profit, revenue, etc. you can define selling strategies for the products.

In SAP PP system, demand management is performed by Planned Independent requirement PIR. Planned Independent Requirement provides input for production planning. A PIR contains one planned quantity of product and one date for material or a Planned quantity is split over a span of time period.

To set your PIR version active use value 00 to specify requirement would be considered in material requirement planning. To maintain number of versions of planned independent requirement, you can set some numbers to active and others to inactive.

PIRs define the planning strategy in material master, which determines planning methods- make to order and make to stock.

In Make-to-Stock environment, PIRs are used where stock is built based on the forecast and not on sales order.

Planning Strategies

Planning strategies are divided into two categories-

Make to Stock Planning strategy (MTS)

This is planning strategy where stock is produced without sales order. It is used to meet the customer demands in future.

When you use **Planning strategy 10**, only PIR quantity is considered for MRP run and sales order are completely ignored. In this PIR requirement type LSF is reduced when you deliver stock to customer.

When you use Planning strategy 40, for MRP run maximum of 2 PIR and Sales order can be considered and PIR is reduced when enter the Sales order. PIR requirement type is VSF in this case.

Make to Order Planning strategy (MTO)

In this planning strategy, finished products are not produced until you receive sales order from a customer. For MRP run, you only consider Sales order.

In MTO strategy, you only produce sales order stock and products are delivered as per sales orders from specific customer.

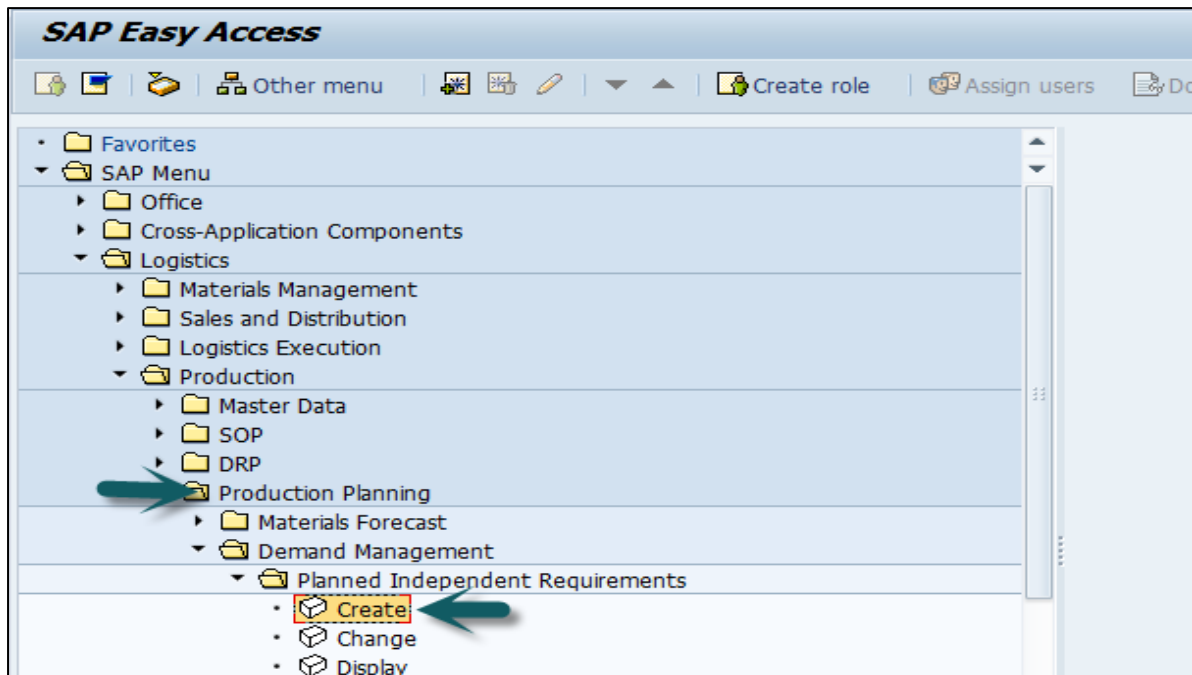
You use Planning strategy 20 for make to order MTO process and planning strategy 25 is used to produce product variants when there is request for variant products from customer.

5. SAP SCM – Creating PIR

In this chapter, we will learn how to create, change, or delete PIRs.

To create PIR, follow the given steps-

Step 1: Use T-code MD61 or go to Logistics -> Production -> Production Planning-> Demand Management -> Planned Independent Requirements -> Create



Step 2: In the next window, enter the following details-

- Enter the single material for which demand needs to be created.
- Enter MRP area and Plant Code.
- Enter **version as 00**, which shows the active version and requirements would be considered in MRP run.
- Enter the Planning horizon dates for which demand needs to be created.
- Enter planning period as month M and click the tick mark given above.

Create Planned Independent Requirements: Initial Screen

User Parameters

Planned independent requirements for

Material 1847

Product group

Reqmts Plan

MRP Area 5000

Plant 5000

Define version

Version 00 Requirements plan

Planning horizon

From 01.04.2016 To 30.10.2016 Planning period M Month

Step 3: Enter **Version 00**. By default, active check box is flagged. It shows it is an active requirement and would be considered in the MRP run. Enter the requirement quantity in monthly buckets.

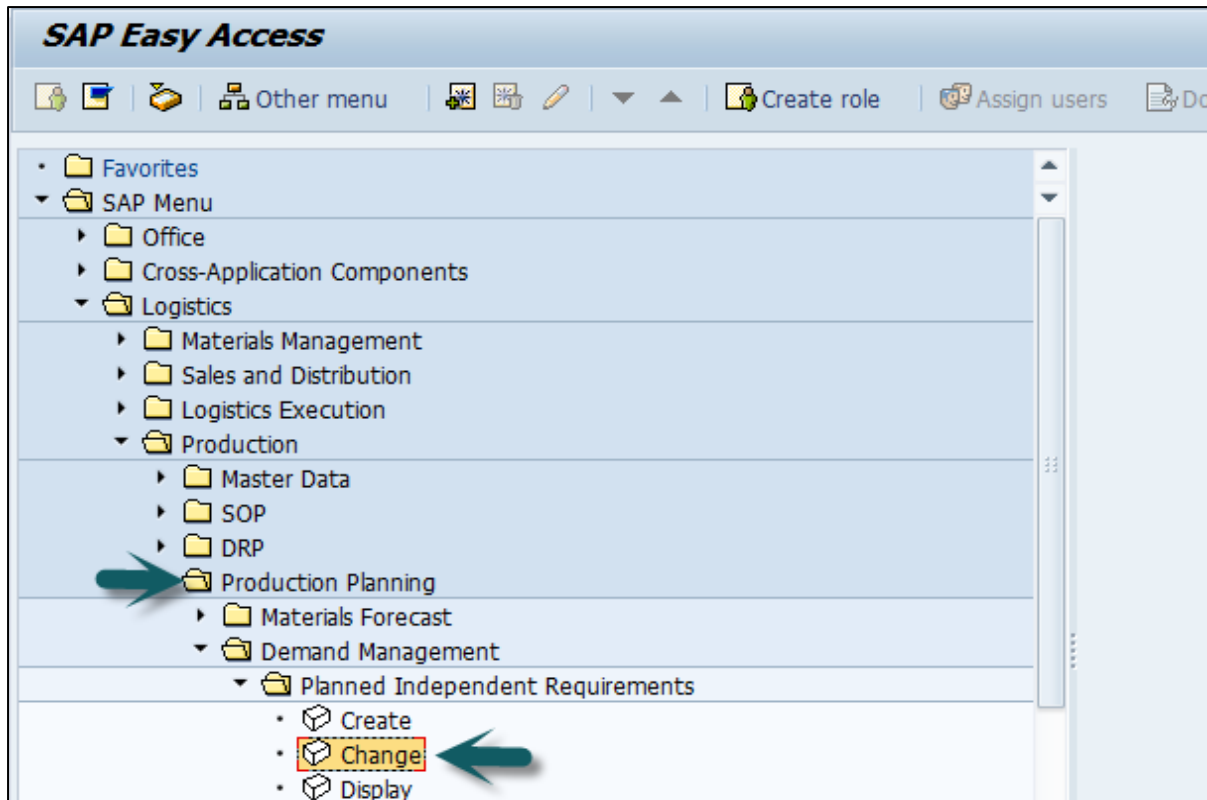
Material	Plant	V	A	BU	M 01 2016	M 04 16	M 07 16
s20461	TSMU	00	<input checked="" type="checkbox"/>		10	15	20
t-trans1	TSMU	00	<input checked="" type="checkbox"/>		5	10	20

Click the save icon to save the PIR.

Change and Delete PIR

To delete a PIR, select the row in above screen and click the Delete button.

Step 1: To change PIR, use T-code: MD62 or go to Logistics -> Production -> Production Planning -> Demand Management -> Planned Independent Requirements -> Change



Step 2: Enter the following details-

- Enter parent material for which PIR needs to be changed.
- Enter Plant Code.
- Enter version as 00.
- Input the planning horizon dates with planning period as month M.

In the next window make changes to the requirement quantity and click the Save button to enter the changes.

End of ebook preview

If you liked what you saw...

Buy it from our store @ <https://store.tutorialspoint.com>