



Materials Management Knowledge Transfer Session MATERIAL PLANNER

June 10, 2009

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Agenda

- ④ Review of Session 3 Knowledge Check - Inventory
- ④ Key Terms
- ④ Role and Responsibility
- ④ Inventory Replenishment Overview
- ④ Materials Requirement Planning Process Flow
- ④ Materials Requirement Planning Parameters
- ④ Next Steps
- ④ Questions



Review of Knowledge Transfer General Session 3

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Key Terms

SAP Term	Description
Inventory	Materials that are managed on a Quantity and price basis or quantity only in storerooms. They can be Valuated or Non Valuated.
Material Master Record	Uniquely defines a material in SAP. As a general rule, a material master record must exist for each material managed in a company. This record is stored under a system generated 6-digit material number. The material master will house basic data about materials that are purchased, or inventoried in the State

Key Terms cont.

SAP Term	Description
Material Number	A 6-digit system assigned number that uniquely identifies a material in SAP.
Material Group	Key that is used to group together materials with similar attributes.
Materials Requirement Planning (MRP)	A term for procedures in requirements planning that take into account current inventory levels, projected demand (reservations), and planned replenishment (i.e. existing purchase requisitions and purchase orders.) The primary use of MRP will be reorder point planning.

Key Terms cont.

SAP Term	Description
MRP Controller	MRP Controller identifier is used to identify which materials an Inventory Planner must review.
Lot Sizing	MRP lot size parameters will determine the quantity of the inventory replenishment when it comes time to reorder. (e.g. order up to maximum stock)
Minimum Lot Size	Optional field in setting up MRP parameters. If the material has a contract quantity minimum, the minimum lot size should equal the contract quantity minimum.

Key Terms cont.

SAP Term	Description
Maximum Stock Level	Quantity of the material in this plant/storage location that may not be exceeded.
Reorder Point	If the stock falls below this quantity, the system flags the material to be included in the next MRP run.

Key Terms cont.

SAP Term	Description
Planned Delivery Time	Number of days required to procure the material.
Procurement Type	Plant level setting that determines whether a material is produced in-house, procured externally, or both.
Special Procurement Key	A special indicator which allows you to specify products supplied from another plant location.

Key Terms cont.

SAP Term	Description
Moving Average Price	The moving average price is calculated by dividing the value of the material by the quantity of the material in stock. It is recalculated automatically by the system after each goods receipt.
Standard Price	The standard price is set in the system and does not fluctuate at time of goods receipt. When a material is receipted any variance to the STD price gets posted to a variance account. This is typically used for finished goods and not supplies.



Roles and Responsibilities

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Roles and Responsibilities

☉ Central Material Master Data Team

- State Level Role
- Responsible for setting and maintaining Material Master policy and standards for the state
- Responsible for conversion of Material Master Records from legacy systems to SCEIS
- Responsible for new Material Master Record creation

Roles and Responsibilities

Agency Material Master Liaison

- Agency Level Roles
- Create and maintain agency-specific Material Master Data Records
- Process requests to CMMDT for new/changed Material Master Data Records
- Coordinate changes to SCEIS ECC system and legacy systems Material Master Data Records

Roles and Responsibilities

Material Planner

- Creates reservations
- Executes Materials Requirements Planning (MRP) runs
- Reviews and makes changes to MRP parameters
- Converts planned orders to replenishment requisitions
- Acts as a liaison with procurement staff



Inventory Replenishment Overview

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Inventory Replenishment Overview

🌀 MRP (Materials Replenishment Process)

- Main method of Inventory Replenishment
- MRP reorder parameters will be set for designated materials in each plant
- In some areas MRP will be run at Storage Location level
 - **Note:** Not all inventory materials will be replenished via MRP

Inventory Replenishment Overview cont.

- ④ MRP considers:
 - Stock on Hand
 - Reorder points
 - Maximum stock level
 - Open purchase requisitions
 - Open reservations
 - Open purchase orders

Inventory Replenishment Overview

cont.

- MRP can be run in a batch job overnight to generate planned orders or online as required

(Note: If you are a large plant you should submit this as a batch job)

- MRP can be run for a single material, group of materials or entire plant
- MRP can either produce planned orders that are converted to requisitions, or produce requisitions directly

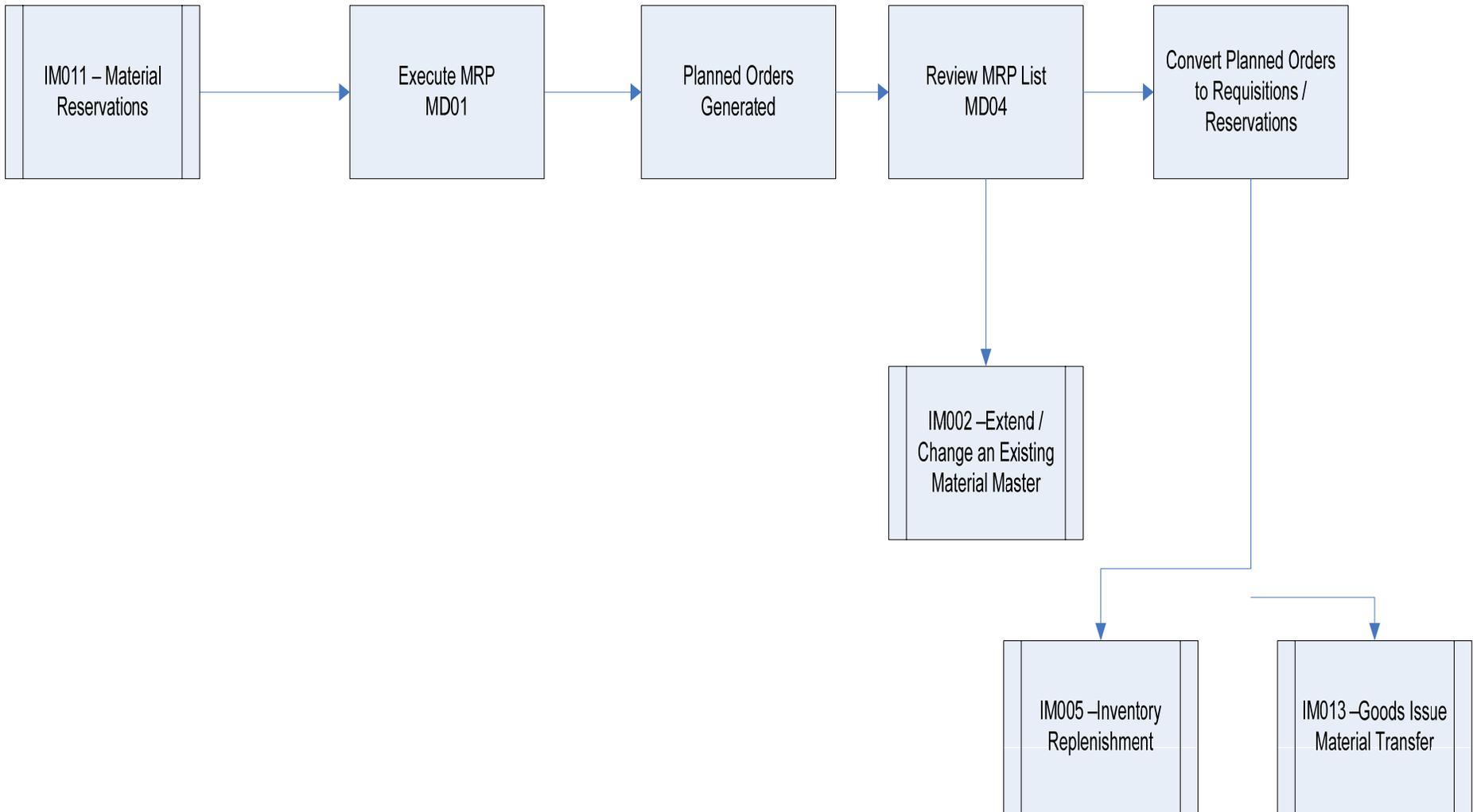


MRP Process Flow

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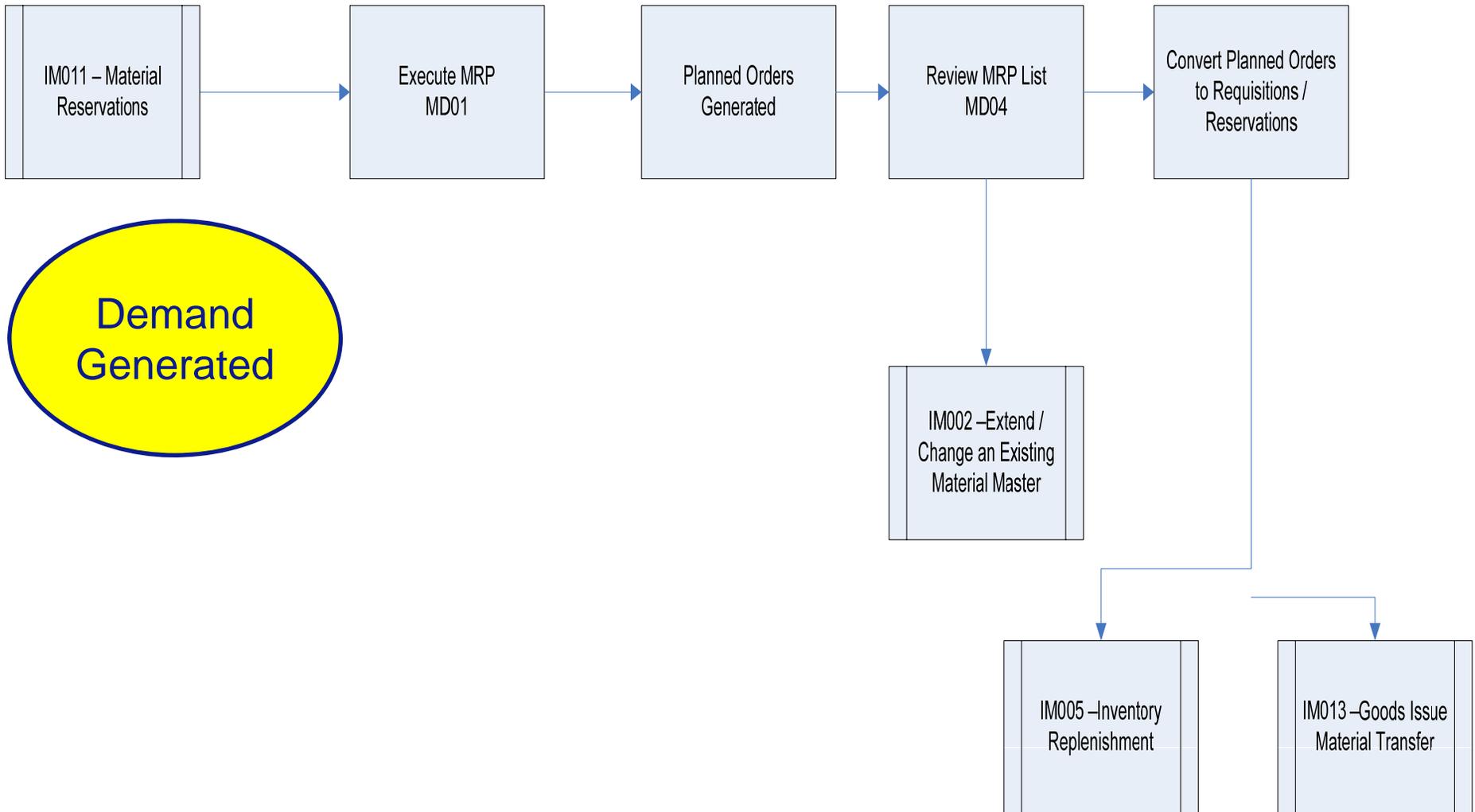
MRP Process Flow



MRP Basics

-
- Transaction Code: MD01 (MRP Run)
 - Purpose of Transaction:
 - To identify suggested replenishment needs for inventoried materials in order to improve operating efficiency as well as minimize material shortages and overstock situations

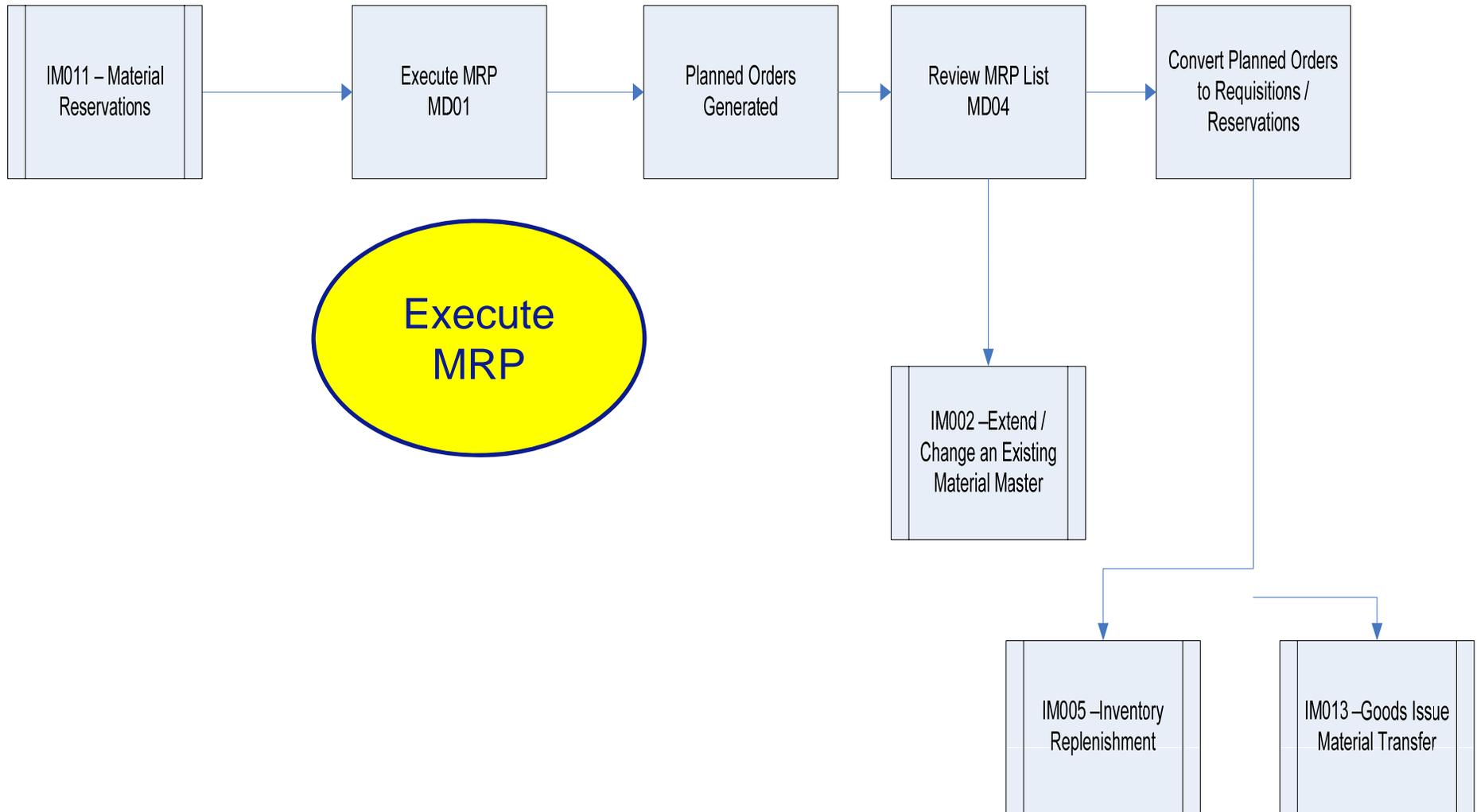
MRP Process Flow



Demand Generated

-
- ④ Demand is placed on inventory via:
 - Sales Orders – Reservations created automatically
 - Manually created reservations

MRP Process Flow

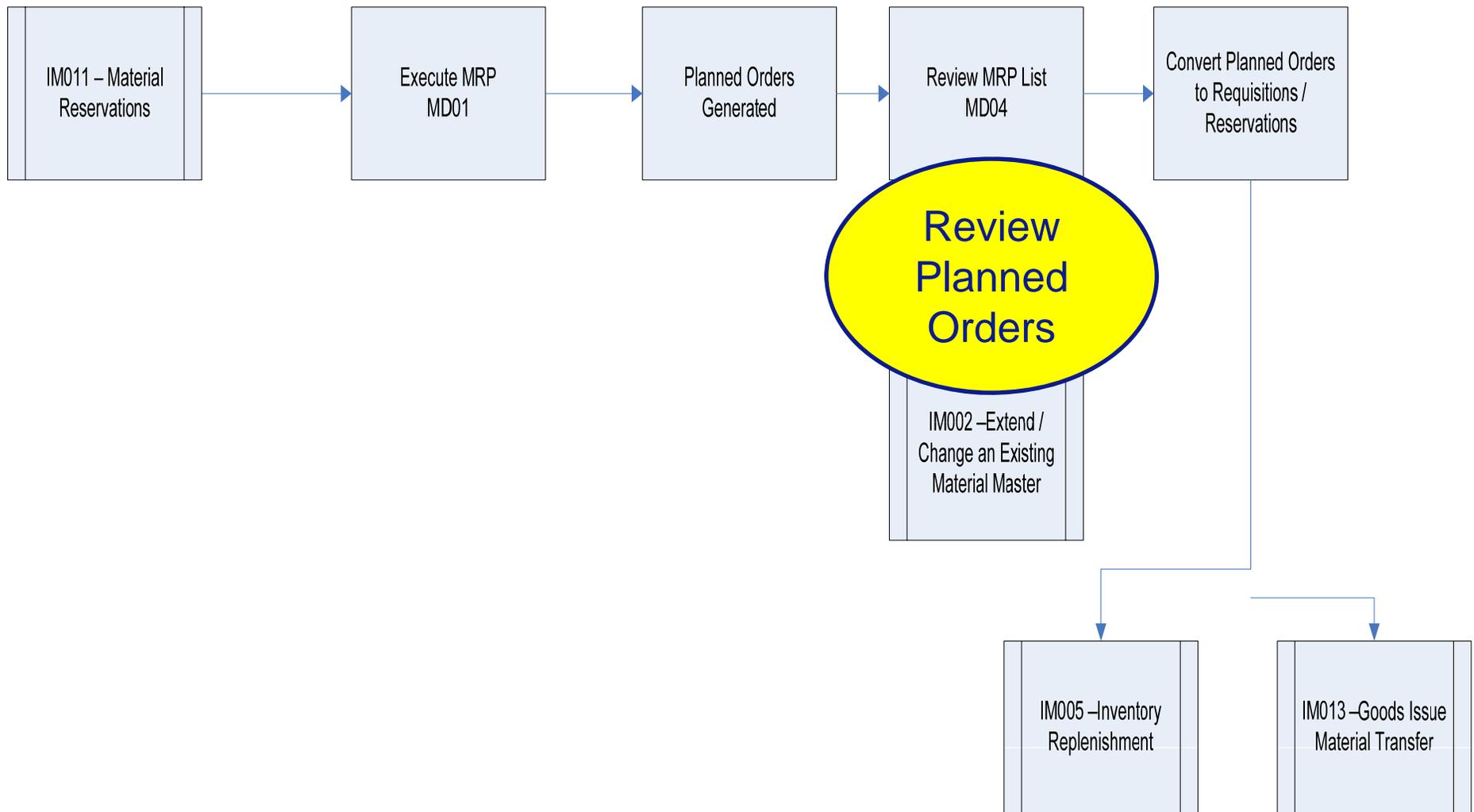


Execute MRP

-
- ④ Conducted at plant or storage location level
 - Considers stock levels
 - Reorder points
 - Open purchase requisitions
 - Open purchase orders and reservations

 - ④ Set up to run automatically on a nightly basis
 - Planned Orders will be generated
 - Can be run manually
 - Can be run for specific material

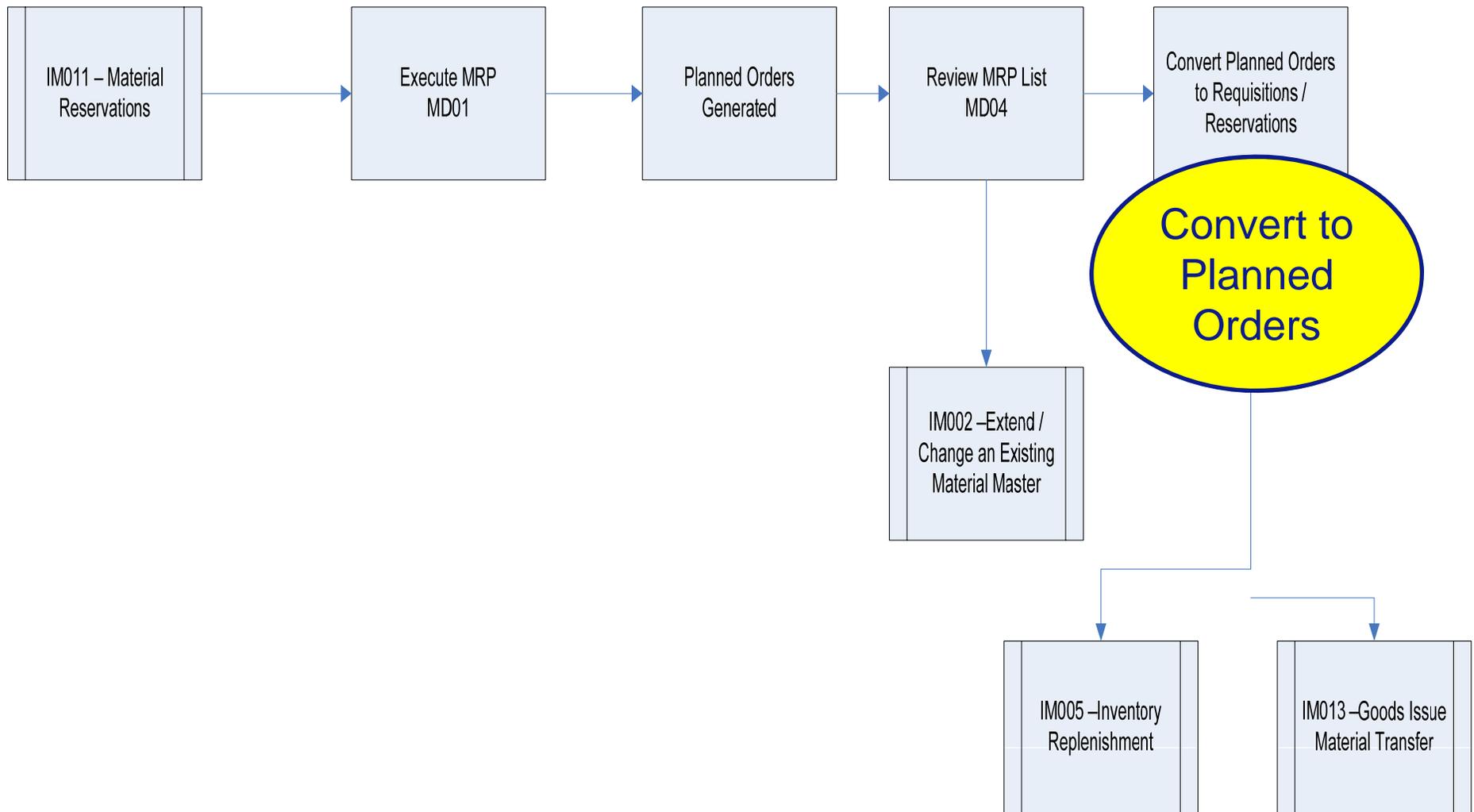
MRP Process Flow



Review Planned Orders

-
- MRP Controller is used to identify which materials a Material Planner must review
 - Material Planner reviews the list of planned orders generated
 - Should planned orders be converted to purchase requisitions?
 - Should planned order be deleted or changed before converting to a purchase requisition?
 - Is replenishment required?
 - Is suggested quantity needed?

MRP Process Flow



Convert to Purchase Requisitions

- ④ Material Planner converts the planned orders to purchase requisitions
- ④ Purchase requisition follows the process for inventory replenishment or goods transfer



Materials Requirement Planning Parameters

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MRP Parameters

- Review periodically to ensure they are relevant to current business needs

- Review / change when a planned order has been deleted or changed

- Material Planner may need to change MRP parameters due to:
 - Seasonal Usage
 - Transition to a Different Material
 - Increase in Use of Material

MRP Parameters cont.

Transaction Code: MM02

Purpose of Transaction:

- To maintain MRP parameters in the Material Master record

MRP Views

Transaction Code: MM02

View: MRP1 Plant

- Change reorder point
- Change maximum stock level
- Minimum lot size (If contract minimum quantity changes)
- Change MRP Controller



Material Master Views

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Views: MRP 1

Purchase order text MRP 1 MRP 2 MRP 3 MRP 4 PL...

Material 

Plant

General Data

Base Unit of Measure	<input type="text"/>	MRP group	<input type="text"/>
Purchasing Group	<input type="text"/>	ABC Indicator	<input type="text"/>
Plant-sp.matl status	<input type="text"/>	Valid from	<input type="text"/>

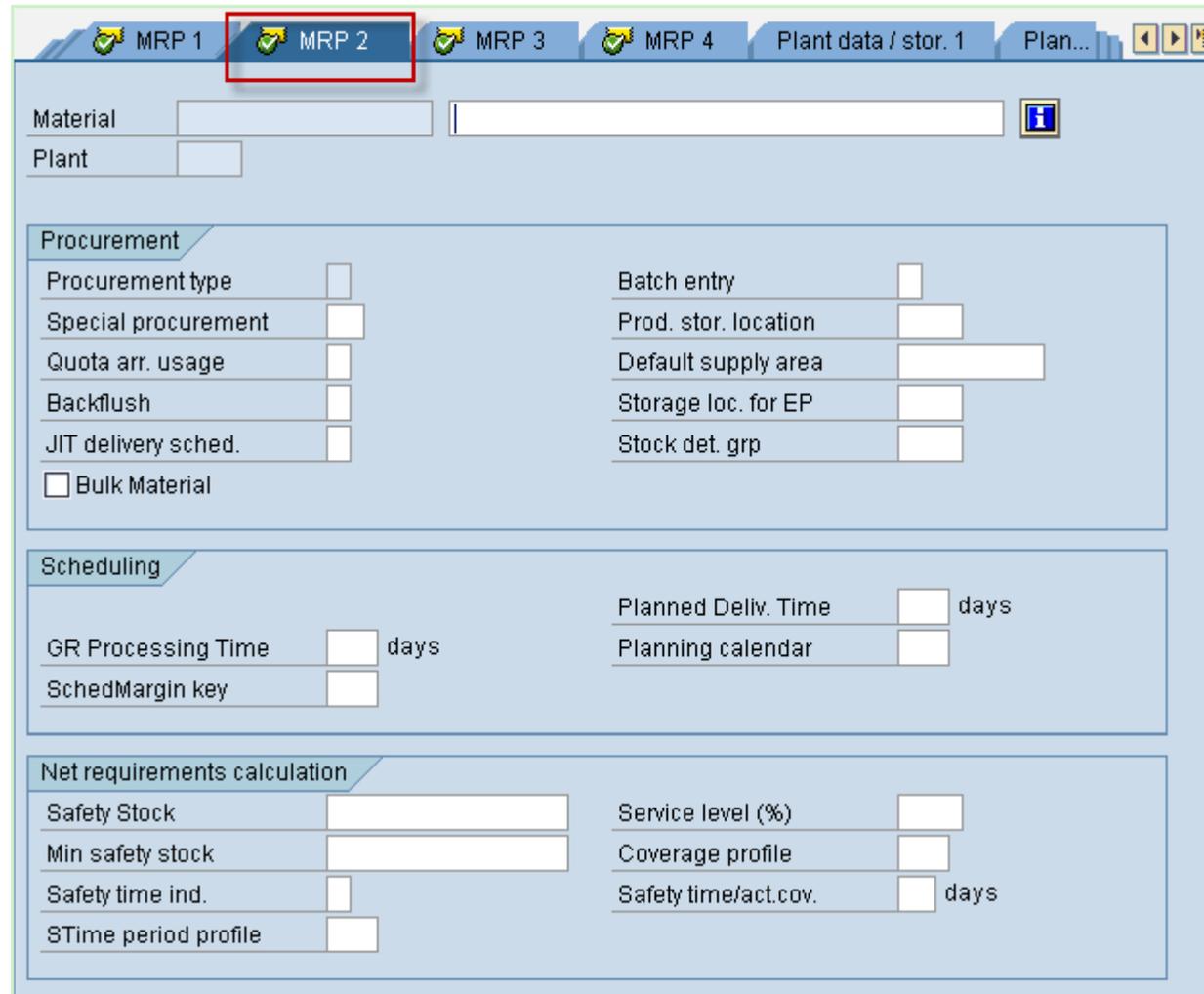
MRP procedure

MRP Type	<input type="text"/>	Planning time fence	<input type="text"/>
Reorder Point	<input type="text"/>	MRP Controller	<input type="text"/>
Planning cycle	<input type="text"/>		

Lot size data

Lot size	<input type="text"/>	Maximum Lot Size	<input type="text"/>
Minimum Lot Size	<input type="text"/>	Maximum stock level	<input type="text"/>
Fixed lot size	<input type="text"/>	Storage costs ind.	<input type="text"/>
Ordering costs	<input type="text"/>	Takt time	<input type="text"/>
Assembly scrap (%)	<input type="text"/>	Rounding value	<input type="text"/>
Rounding Profile	<input type="text"/>		
Unit of Measure Grp	<input type="text"/>		

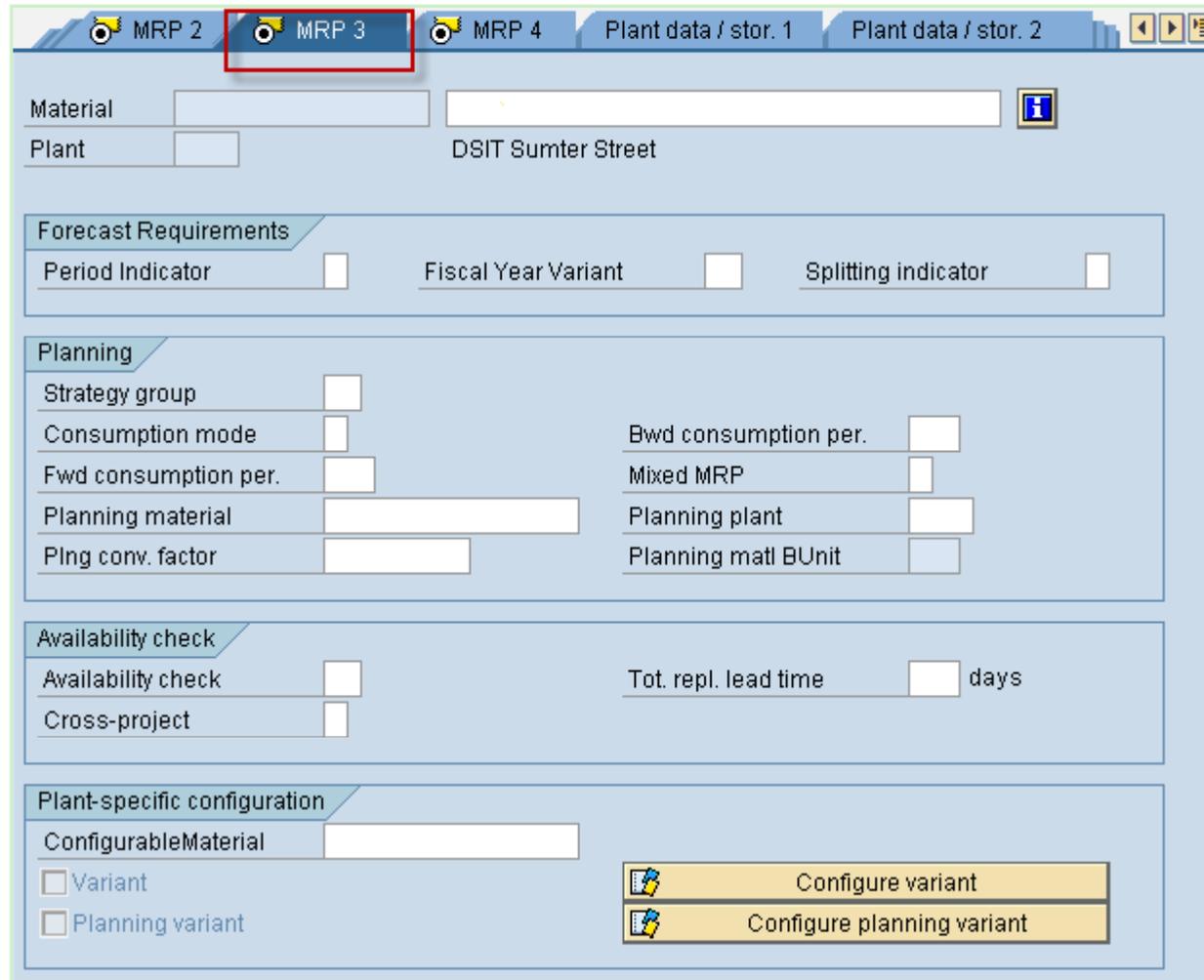
Views: MRP 2



The screenshot shows the SAP MRP 2 view interface. At the top, there are tabs for MRP 1, MRP 2 (highlighted with a red box), MRP 3, MRP 4, Plant data / stor. 1, and Plan... Below the tabs are input fields for Material and Plant. The main area is divided into three sections: Procurement, Scheduling, and Net requirements calculation. Each section contains various parameters with checkboxes or input fields.

Section	Parameter	Value/Type
Procurement	Procurement type	<input type="checkbox"/>
	Special procurement	<input type="checkbox"/>
	Quota arr. usage	<input type="checkbox"/>
	Backflush	<input type="checkbox"/>
	JIT delivery sched.	<input type="checkbox"/>
	Bulk Material	<input type="checkbox"/>
	Batch entry	<input type="checkbox"/>
	Prod. stor. location	<input type="checkbox"/>
Scheduling	GR Processing Time	<input type="checkbox"/> days
	SchedMargin key	<input type="checkbox"/>
	Planned Deliv. Time	<input type="checkbox"/> days
Net requirements calculation	Safety Stock	<input type="checkbox"/>
	Min safety stock	<input type="checkbox"/>
	Safety time ind.	<input type="checkbox"/>
	STime period profile	<input type="checkbox"/>
	Service level (%)	<input type="checkbox"/>

Views: MRP 3



The screenshot shows the SAP MRP 3 view interface. At the top, there are tabs for MRP 2, MRP 3 (highlighted with a red box), MRP 4, Plant data / stor. 1, and Plant data / stor. 2. Below the tabs, there are input fields for Material and Plant, with the plant name 'DSIT Sumter Street' displayed. The interface is divided into several sections: Forecast Requirements, Planning, Availability check, and Plant-specific configuration. Each section contains various checkboxes and input fields for configuring the MRP view.

Forecast Requirements

- Period Indicator
- Fiscal Year Variant
- Splitting indicator

Planning

- Strategy group
- Consumption mode
- Fwd consumption per.
- Planning material
- Plng conv. factor
- Bwd consumption per.
- Mixed MRP
- Planning plant
- Planning matl BUnit

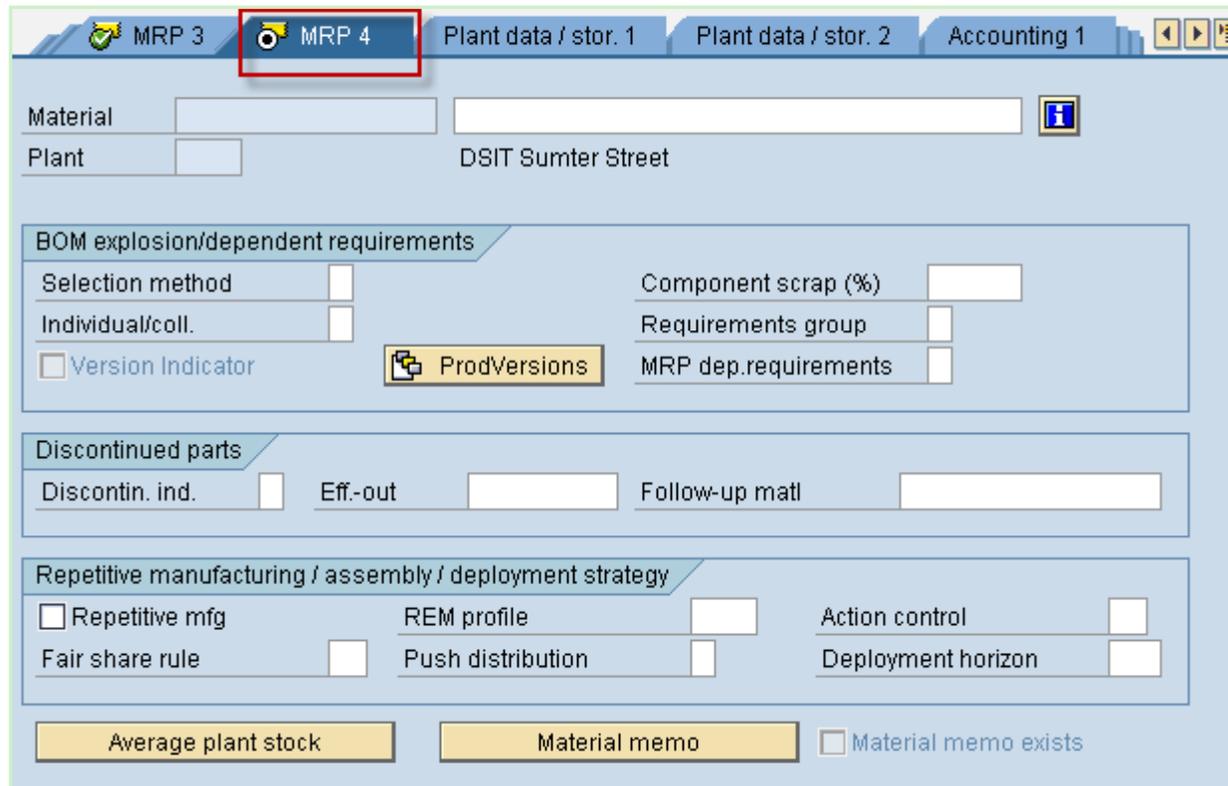
Availability check

- Availability check
- Cross-project
- Tot. repl. lead time days

Plant-specific configuration

- ConfigurableMaterial
- Variant
- Planning variant
-
-

Views: MRP 4



The screenshot shows the SAP MRP 4 view interface. At the top, there are tabs for 'MRP 3', 'MRP 4' (highlighted with a red box), 'Plant data / stor. 1', 'Plant data / stor. 2', and 'Accounting 1'. Below the tabs, there are input fields for 'Material' and 'Plant', with the plant name 'DSIT Sumter Street' displayed. The main area is divided into several sections: 'BOM explosion/dependent requirements' with fields for 'Selection method', 'Individual/coll.', 'Version Indicator', 'Component scrap (%)', 'Requirements group', and 'MRP dep.requirements'; 'Discontinued parts' with fields for 'Discontin. ind.', 'Eff.-out', and 'Follow-up matl'; and 'Repetitive manufacturing / assembly / deployment strategy' with fields for 'Repetitive mfg', 'Fair share rule', 'REM profile', 'Push distribution', 'Action control', and 'Deployment horizon'. At the bottom, there are buttons for 'Average plant stock' and 'Material memo', and a checkbox for 'Material memo exists'.

Self-Study – Materials Management

- Post-work for Material Planner Session
 - Review Material Planner Session content
 - Conduct Survey Monkey Knowledge Check for Material Planner Session
 - Review Frequently Asked Questions (FAQs)
 - Review demonstration/exercise documentation

Refer to www.sceis.sc.gov. Click on *Knowledge Transfer Program*, then *Materials Management Knowledge Transfer*

Next Steps

- **Inventory Management – Goods Receiver/Issuer**
 - June 17, 2009 at 9:00 a.m. – 11:00 a.m., SCEIS 201
- **Inventory Management – Physical Inventory**
 - June 24, 2009 at 9:00 a.m. – 11:00 a.m., SCEIS 201

Next Steps cont.

🌀 Invitation-only

- Based on Subject Matter Expert list from AST Leads
- Computer station for each participant
- Registration is required to plan and track participation
- Only registered individuals will be allowed to attend

Any Questions?



Contact us



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