

SAP MM- Implementation Project

Company Profile

Tata Motors Ltd. is registered company as per Companies Act, 2013 in India. It has two manufacturing unit. Car is manufacture in Gurgaon plant. Bus and Truck is manufactured in Jamshedpur. One purchasing organization does the procurement of material, services and asset for both plant and company code. Separate purchasing group is maintained for Gurgaon and Jamshedpur plant. Some material is imported from outside India.

Tata Motors sales its products through Dealer ship in Indian domestic market. It also exports its products outside India.

SAP MM Project Profile

Industry Sector-Automobile

Project Client-Tata Motors Ltd.

SAP System Environment- SAP ERP ECC 6.0 (EHP6)

SAP MM Business Blueprint

1. SAP Landscape
2. Organization Structure
3. Vendor Master Data
4. Material Master Data
5. FI Module Settings
6. CO Module Settings
7. MM Module Settings
8. Stock Update
9. Pricing Procedure for Procurement of Material
10. P2P Business Process
11. External Service Management

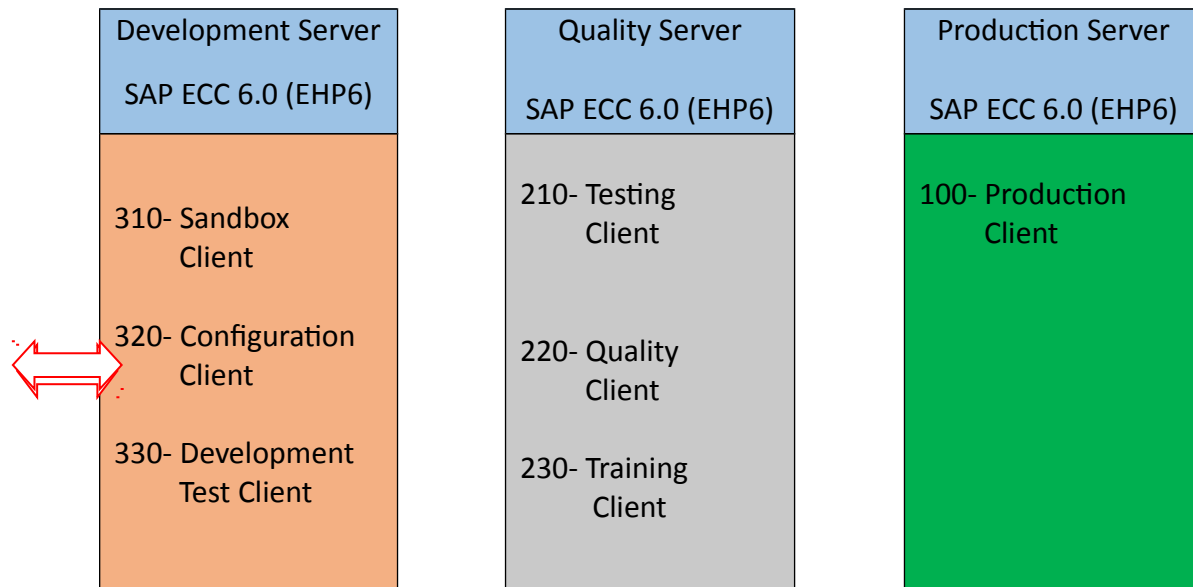
12. Material Requirement Planning (MRP)

13. Stock Transfer

14. MM Master Data

1. SAP Landscape

- SAP Landscape is the SAP System environment where SAP project is implemented. **SAP BASIS Consultant** prepares the landscape like Development Server, Quality Server and Production Server. SAP system clients are created for different purposes.
- SAP Server- SAP Software Version (ECC 6.0 (EHP6))
- SAP Client- 310, 320, 330...210,220,230...100 (Particular SAP System)



Transport Request

- **Customizing Request** (Client specific Data)
- **Workbench Request** (Cross Client Data)
- Data is transferred from one client to another client. This process is called transportation and is conducted by SAP BASIS Consultant.

SCC4 (T. Code) - Check SAP System Clients and Client Role

Table View Edit Goto Selection Utilities System Help

Display View "Clients": Overview

Client	Name	City	Crcy	Changed on
000	SAP AG	Waldorf	DEM	15.03.2006
001	Delivery	Waldorf	EUR	03.07.2012
066	early Watch	Waldorf	EUR	28.04.2004
130	TEST	DELHI		03.03.2019
155		Delhi		27.10.2017
200		delhi		10.06.2018
255		hhhsfgh	AED	29.10.2017
800	IDES-ALE: Central FI Syst	Frankfurt - Deutschland	EUR	06.08.2009
809	Financials	Frankfurt - Deutschland	EUR	30.10.2009
810	IDES-ALE: Sales System	Barcelona - Spanien	DEM	23.03.2001
811	IDES-ALE: Production	Porto - Portugal	EUR	17.09.2004
812	Logistics	Dallas, USA	DEM	30.09.2009
900	hts-vp	new delhi	USD	23.10.2016

Position... Entry 1 of 13

Activate Windows
Go to Settings to activate Windows.

Double click on Client – 800

Table View Edit Goto Selection Utilities System Help

Display View "Clients": Details

Client: 800 IDES-ALE: Central FI Syst

City: Frankfurt - Deutschland Last Changed By: RENDES

Logical system: T90CLINT090 Date: 06.08.2009

Std currency: EUR

Client role: Customizing

Changes and Transports for Client-Specific Objects

☐ Changes without automatic recording

☒ Automatic recording of changes

☐ No changes allowed

☐ Changes w/o automatic recording, no transports allowed

Cross-Client Object Changes

Changes to Repository and cross-client Customizing allowed

Client Copy and Comparison Tool Protection

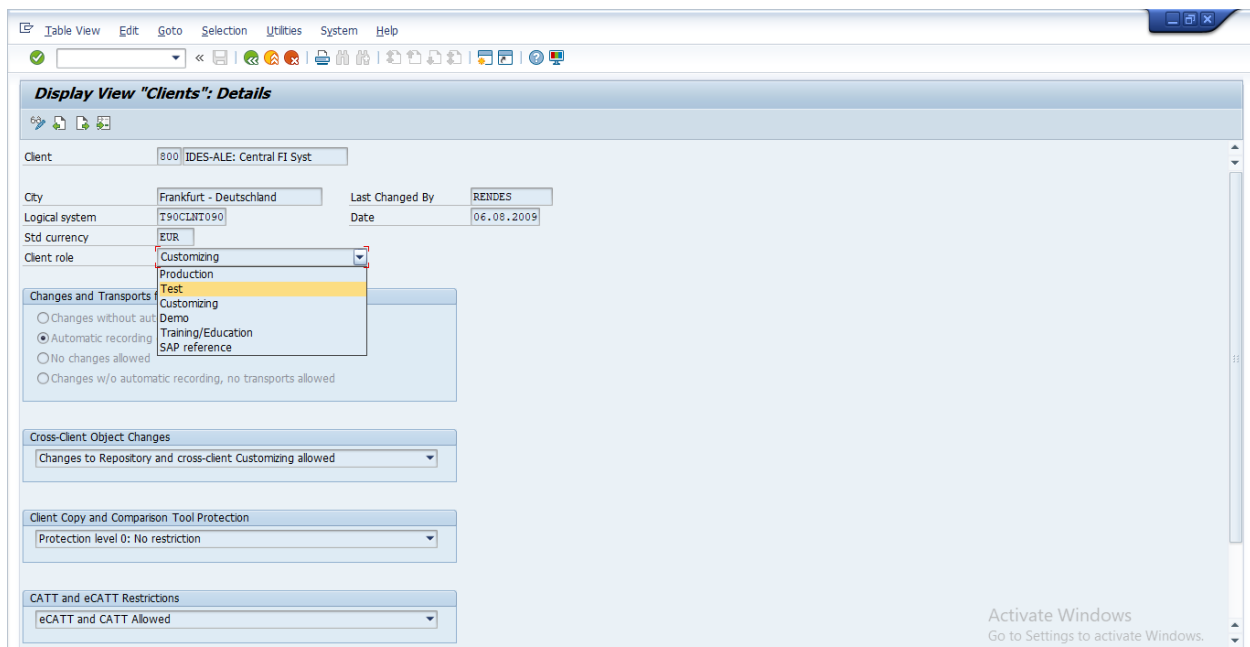
Protection level 0: No restriction

CATT and eCATT Restrictions

eCATT and CATT Allowed

Activate Windows
Go to Settings to activate Windows.

Click on Client Role



Note:

Client roles

- ❖ Customizing Client
- ❖ Testing Client
- ❖ Production Client

SAP Project Clients

310- Sandbox Client

Provided to SAP Consultants to test and practice business scenarios. This client is used for self-practice by SAP Consultants.

320- Configuration Client

Configuration is done as per **business blueprint**. Project is developed in this client. Base configuration (Enterprise Structure) and final configuration is done in this client. This client is also called as **Golden Client**.

330- Development Test Client

Testing is performed by **SAP consultants** who develop the project. Unit testing and Integration testing is done as per **business process master list (BPML)**.

210- Testing Client

Testing Sheet is prepared and testing is conducted by **core team member/module lead** (employee of company). Testing is the process of post transaction and check reports.

220- Quality Client

All business process is shown to company and **User Accepting Test (UAT)** is taken by SAP Consultants from company. UAT is the process of taking approval of business process from the company.

230- Training Client

End user training is conducted as per training document. Training document is prepared as per role assignment and **job profile** of employees.

100- Production Client

Project is Go Live on production client. Actual business is run on this client. All employee's login into this client by unique user id and password and record day-to-day business transactions.

2 Organization Structure

- Definition
- Assignment
- Check Organization Structure (T. Code EC01)

SAP FI					SAP SD				
Company	TG1500	Tata Group			Sales Organization	S015	Gurgoan		
Company Code	1501	Tata Motors Ltd.				S016	Jamshedpur		
Business Area	B501	Gurgoan							
	B502	Jamshedpur			Distribution Channel	C1	Dealer		
						C2	Showroom		
Credit control Area	CA15	Credit Control Area India							
					SAP MM				
SAP Logistic General (MM/PP)					Purchasing Organization	PO15	Gurgoan		
Plant	1511	Gurgoan			Purchasing Organization	PO16	Jamshedpur		
	1512	Jamshedpur							
Division	D1	Car							
	D2	Bus							
	D3	Truck							

Definition of Organization Structure in SAP

1. Company

- Company is an organization unit in SAP System and is defined for group reporting.
- Company is defined to prepare **consolidated balance sheet** and **profit & Loss account** at Corporate Group level.
- Multiple company code can be assigned to a company.

2. Company Code

- Company code is an organization in SAP system. Company code is a separate legal entity. To define company code is mandatory.
- Company code is assigned to Company, Controlling Area and Credit Control Area
- Plant, Purchasing Organization, Sales Organization, Personnel Area is assigned to Company Code.
- Accounting entries are posted to company code level and financial statements are prepared.

1. Balance Sheet

2. Profit & Loss Account

3. Business Area

- Business Area is defined for **internal reporting**. Separate balance sheet and profit and loss can be prepared for each business area.
- Business Area is defined but not assigned to Company Code
- Accounting entries are posted to business area from company code.

4. Credit Control Area

- Credit control area is an organization unit in SAP system. It is used to set **credit limit** of customers in case of **credit sales**.
- Company Code is assigned to credit control area
- Credit Control Area is assigned to **Sales Area**
- $\text{Credit Limit} = \text{Open sales Order} + \text{Open Delivery (Goods Issue)} + \text{Open Billing}$

5. Controlling Area

- Controlling Area is defined to implement SAP CO module.
- Cost Element, Cost Center, Internal Order, Profit Center is created at Controlling Area level.
- Product Costing is done at Controlling Area level.
- Company code is assigned to Controlling Area
- Controlling Area is Assigned to Operating Concern

6. Plant

- The [plant](#) is an operating area or branch within a company code form where production activities done or services are provided.
- The plant is integrated in the organizational structure as follows:
- The plant is assigned to a single [company code](#). A company code can have several plants.

- Several [storage locations](#) in which material stocks are managed can belong to a plant.
- A single [business area](#) is assigned to a plant and to a [division](#).
- A plant can be assigned to several combinations of [sales organization](#) and [distribution channel](#).
- A plant can have several shipping points. A shipping point can be assigned to several plants.

7. Division

- The division is one of the organizational units in Sales & Distribution and is also required for business area account assignment for logistics transactions in Financial Accounting.
- The [business area](#) for the material is determined via the plant and the division defined in the material master record.
- Allocate a division to one or more [sales organizations](#).
- Allocate a division to one or more [distribution channels](#).
- Allocate a business area to a division from a plant. This way, business area account assignment can be carried out for transactions in Materials Management.
- A material is always assigned to one division only. You specify the division on the first sales & distribution screen in the material master record.

8. Sales Organization

- An organizational unit in Logistics that structures the company according to its sales requirements.
- A sales organization is responsible for selling materials and services.
- Legally, a sales organization is included in exactly one [company code](#).
- You can assign one or more [plants](#) to one sales organization.

9. Distribution Channel

- You allocate a distribution channel to one or more [sales organizations](#).

- You allocate one or more [plants](#) to a distribution channel.
- Within a distribution channel, you can define your own master data for customers or materials as well as your own conditions and pricing.
- You can create master data for a representative distribution channel which is then also used in other distribution channels. To do this, you have to additionally create the allocation of the representative distribution channel to the other distribution channels.
- For a distribution channel, you can determine your own sales document types.
- You can determine sales offices for a distribution channel.
- All items of a sales document belong to a distribution channel. The entire sales document is therefore entered for a distribution channel.
- The items of a delivery can belong to different distribution channels.
- All items of a billing document belong to a distribution channel.

10. Storage Location

- A [storage location](#) is the place where stock is physically kept within a plant.
- There may be one or more storage locations within a plant.
- A storage location has a description and at least one address.
- It is possible to store material data specific to a storage location.
- Stocks are managed only on a quantity basis and not on a value basis at storage location level.
- Physical inventories are carried out at storage location level.
- A storage location can be assigned to a [warehouse number](#) in the [Warehouse Management System](#). You can assign more than one storage location to the same warehouse number within a plant.
- Storage locations are always created for a plant.

11. Purchasing Organization

- From the Materials Management and Purchasing view, the [purchasing organization](#) is responsible for all purchasing activities (including the processing of requests for quotations and purchase orders, for example).

- A purchasing organization can be assigned to several company codes. (= Corporate-group-wide purchasing).
- A purchasing organization can be assigned to one [company code](#). (= Company-specific purchasing).
- A purchasing organization can also exist without being assigned to a company code.
- Since each plant must be assigned to a company code, the latter can be determined via the plant at the time of each procurement transaction even if the procuring purchasing organization has not been assigned to a company code.
- A purchasing organization must be assigned to one or more [plants](#). (= Plant-specific purchasing).
- A purchasing organization can be linked to one or more other purchasing organizations. [Assign Purchasing Organization to Reference Purchasing Organization](#).
- A purchasing organization can be divided into several **purchasing groups** that are responsible for different operational areas.
- Each purchasing organization has its own [info records](#) and [conditions](#) for pricing.
- Each purchasing organization has its own vendor master data.
- Each purchasing organization evaluates its own vendors using MM Vendor Evaluation.
- Authorizations for processing purchasing transactions can be assigned to each purchasing organization.
- All items of an external purchasing document, that is, request for quotation, purchase order, contract, or scheduling agreement, belong to a purchasing organization.

12. Purchasing Groups

- A key for a buyer or group of buyers responsible for certain purchasing activities.
- The purchasing group is Internally responsible for the procurement of a material or a class of materials
- The principal channel for a company's dealings with its vendors

13. Sales Areas

- You can create a sales area for any combination of [sales organization](#), [distribution channel](#) and [division](#).
- Customer Master Data is connected with Sales Areas

2. Vendor Master Data

A. Reconciliation Account (SAP FI Consultant)

1. Reconciliation Account is a GL Account and used to reconcile vendor transactions. **Manual posting is not possible.**
2. Post accounting entries automatically by sub-ledger account i.e. Vendor Account.
3. Different Reconciliation Account is defined for vendor account group domestic, foreign, service and one-time vendors.

B. Vendor Account Group

Vendor Account Group is defined at **client level** to create vendor master data for company code. Vendor account group provides default values to create vendor.

1. Field Settings (Suppress, Required Entry, Optional Entry and Display)
2. Number ranges (Maximum 10 Digit Vendor Account Number (Internal or External))

ID	Name	No. Ranges	Reconciliation Account (GL Account) SAP FI
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1501	Domestic Vendors	31000-31999	160000
1502	Foreign Vendors	32000-32999	161000
1503	One-time Vendors	33000-33999	160010
1504	Service Vendors	34000-34999	160000
1505	Employee Vendors	35000-35999	160000

C. Vendor Partner Functions

- PO Vendor
- Goods Supplier
- Invoice Vendor
- Vendor Payment

D. Schema Group

- Schema Group for Purchasing Organization
- Schema Group for Vendor

E. Create Vendor Master Data

- XK01 – Create
- XK02 – Change
- XK03 – Display
- XK04 - Changes
- XK05 – Block
- XK06 - Flag for Deletion
- XK07 - Account Group Change
- XK99 - Mass Maintenance...

3. Material Master Data

A- Define Industry Sectors and Industry-Sector-Specific Field Selection

B- Assign Fields to Field Selection Groups

C- Define Attributes of Material Types

Std. Material Type	Project Material Type	Description
ROH	M101	Raw Material
HALB	M102	Semi-finished Goods
FERT	M103	Finished Goods
NLAG	M104	Non-Stock Items
DIEN	M105	Service
UNBW	M106	Non-Valuated Material

D- Define Number Ranges for Each Material Type

- Maximum 18 Digit Material Master Data Number (External or Internal)

E- Define Material Groups

- MG101- Raw Material
- MG102- Semi-Finished Goods
- MG103- Finished Goods
- MG104- Non-Stock Items
- MG105- Service
- MG106- Non-Valuated Material

F- Create Material

- MM01- Create Material
- MM02- Change Material

- MM03- Display Material
- MM04- Display Changes
- MM06- Flag of Deletion
- MM17- Mass Maintenance
- MMAM- Change Material Type

4. FI Module Settings

A. OBBG- Assign Tax Calculation Procedure to Country India

B. OBY6- Company Code Global Data

- Fiscal Year Variant (V3)
- Posting Period Variant -1000

C. OB52- Posting Period Variant

D. OBH2- Copy Document Number Ranges

E. FBN1- Define Document Number Ranges

F. OB08- Maintain Exchange Rate

5. CO Module Settings

A. Define Controlling Area

B. Assign Company Code to Controlling Area

C. General Controlling

- Maintain Controlling Area
- Maintain Number Ranges for Controlling Documents
- Maintain Version

D. OKKS- Set Controlling Area

E. KS01- Create Cost Center

F. KA01- Create Cost Element

6. MM Module Settings

A. Define Plant Parameters

B. Assign Valuation Grouping Code (OMWD)

C. Open Posting Period for Material (Table Entry)

- SE16N- T. Code to check Table
- Table – MARV – Material Control Record
- &SAP_EDIT- T. Code to Change Standard Table

D. Open Posting Period for Material (T. Code)

- MMRV – Check Posting Period
- MMPV – Open and Close Posting Period

E. Define Document Number Ranges for Material and Physical Inventory Documents (OMBT)

7. Stock Update

Stock Update Business Process

- 1) MB1C-Stock Upload
- 2) MM03-Display Material
- 3) MMBE-Stock Overview
- 4) MB51-Material Document list

8. Pricing Procedure for Procurement of Material

A. Maintain Condition table

B. Define Access Sequences

C. Define Conditions Types

D. Define Calculation Schemas

E. Define Schema Group

- Schema Group for Vendor
- Schema Group for Purchasing Organization
- Assignment Schema Group to Purchasing Organization

F. Define Schema Determination

G. Assign Schema Group to Vendor Account (XK02)

9. P2P Business Process

Testing of Business Process - Procurement of Stock Material

1. MM03- Display Material
2. ME51N- Create Purchase Requisition
3. ME41- Create RFQ
4. ME47- Maintain Quotation
5. ME49- Price comparison
6. ME21N- Create PO
7. MIGO – Goods Receipt
8. MIRO – Invoice Receipt
9. ME23N- Check PO History
10. FBL1N- Check Vendor Account

10. External Service Management

A. Configuration of Service Master

- Activate Tax Indicator for India
- Define Service Category
- Define Number Ranges

B. Create Service Master (AC03)

C. FI Input GST Settings

D. Define Calculation Schema for Service

- Create Condition Table

- Maintain Access Sequence
- Maintain Condition Type
- Define Calculation Schema for Service

E. Create Condition Records for Service (ML51)

F. Procurement of Service

Testing of Business Process - Procurement of Services

- ME21N – Create Service PO
- ML81N- Create Service Entry Sheet
- MIRO- Service Invoice

11. Material Requirement Planning (MRP)

A. Configuration of MRP

- Define Plant Parameter
- Define MRP Groups
- Define MRP Controller
- Check MRP Type
- MRP Area

B. MM01- Create Material with MRP Views

C. MRP Run (MD02)

- Plan Order
- Purchase Requisition

12. Stock Transfer

Business process of Stock Transfer

- MM01- Extend Material to another Plant
- MMBE – Check Stock Overview
- MB1B – Stock Transfer Posting
- MMBE- Check Stock Overview
- MB51- Check Material Document List

13. MM Master Data

- Vendor Master Data (XK01)
- Material Master Data (MM01)
- Purchasing Info Record (ME11)
- Contract (ME31K)
- Source List (ME01)

The beginning of SAP MM Project....

“Where there is will, there is way.”

Wish your successful career in SAP.



Arjun Bhandari
SAP Lead Consultant

SAP Skills & Project Experience

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SAP ERP ECC 6.0 (EHP1-EHP7) – SAP FI, CO, MM, SD

SAP S/4 HANA 1709/1810 – S/4 HANA Finance