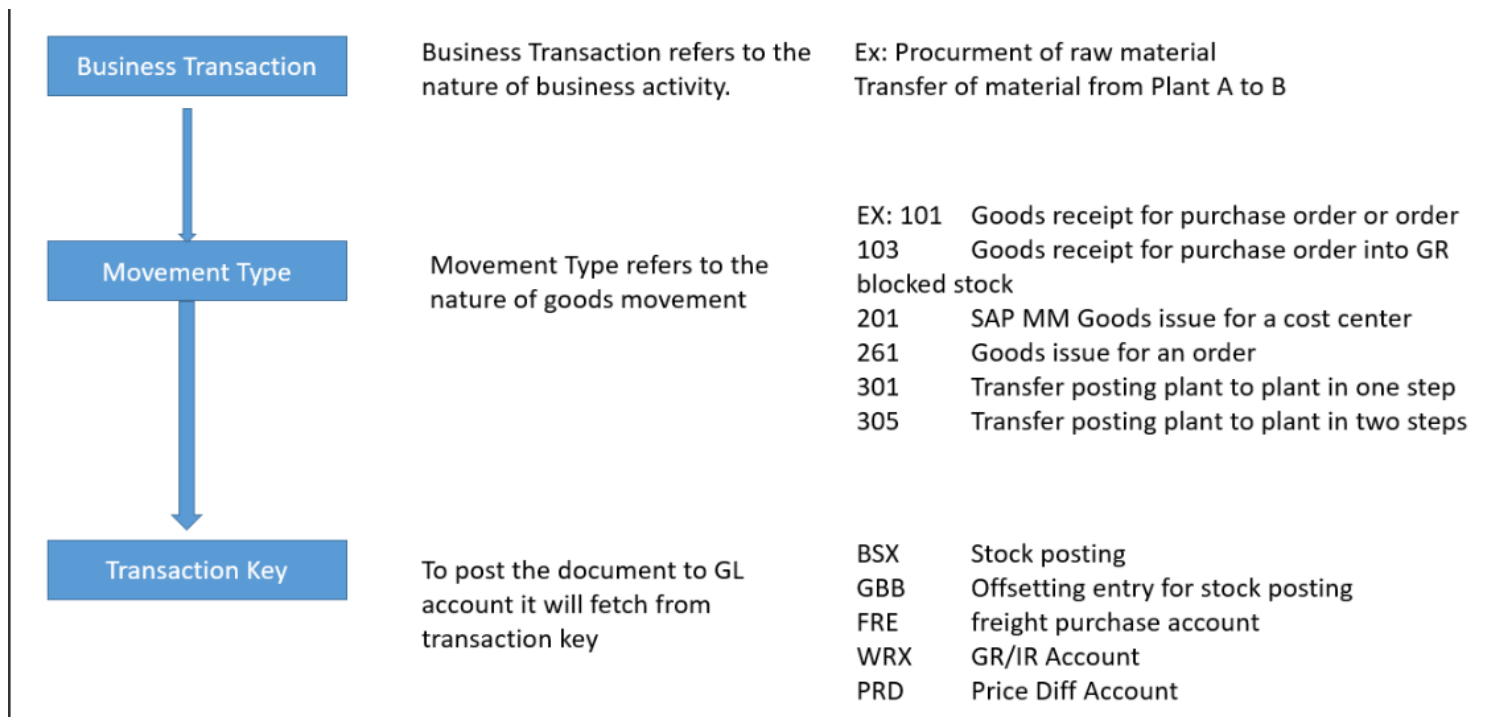# SAP FI-MM INTEGRATION

MM and FI integrate to ensure that every procurement transaction reflects in financial accounts. When a purchase order is created in SAP MM, financial postings in SAP FI are indeed triggered as a result, for example. When a purchase order is created, commitments are generated in the financial accounts, and when the goods are received, the system automatically updates the accounts payable and inventory accounts in FI.

System will identify the movement type based on business transaction.

Based on the movement type system automatically determines the transaction key and general modifier to posting the accounting documents.

System will search for combination we maintained in OBYC (valuation modifier, general modifier, valuation class and mapped GL account).

Business Transaction	Business Transaction refers to the nature of business activity.	Ex: Procurment of raw material Transfer of material from Plant A to B
Movement Type	Movement Type refers to the nature of goods movement	EX: 101 Goods receipt for purchase order or order 103 Goods receipt for purchase order into GR blocked stock 201 SAP MM Goods issue for a cost center 261 Goods issue for an order 301 Transfer posting plant to plant in one step 305 Transfer posting plant to plant in two steps
Transaction Key	To post the document to GL account it will fetch from transaction key	BSX Stock posting GBB Offsetting entry for stock posting FRE freight purchase account WRX GR/IR Account PRD Price Diff Account

SAP FI-MM Integration Configuration steps

Define Plant

- A 'Plant' is an operating area or a branch or a location within a company. Each 'Plant' is assigned to a single 'company code'. A 'company code' can have several 'Plants'
- IMG Path: Enterprise Structure -Definition – Logistics general – Define, copy, delete, check plant

Plant	01M1
Name 1	MK14 Plant
Name 2	

Detailed information	
Language Key	EN English
House number/street	
PO Box	
Postal Code	
City	
Country Key	US United States
Region	

Define 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.

- IMG Path: Enterprise Structure -Definition – Materials Management – Maintain Storage Location
- Tcode: OX09

Dialog Structure
- ▼ 🗀 Storage Locations
  - · 🗀 Addresses of storage
- · 🗀 Business Systems for ME

Plant	01M1

SLoc	Description
RM	Raw Material
SFG	Semi FG
FG	Finished Goods

Maintain Purchase Organization

The purchasing organization is the highest level of aggregation (after the organizational unit "client") for purchasing statistics.

IMG Path: Enterprise Structure – Definition – Materials Management – Maintain Purchasing Organization

Purch. Orga...	Purch. Org. Descr.
01CH	Charlotte Pur Org
01KS	Kansas city Pur Org

Assign Plant to Company Code

A Plant needs to be assigned to one of the Company Codes, the relation is always one to one i.e. **One Plant can be assigned to only one company code**

However, before plant is assign to company code, we have to define Valuation Level. Materials are valued at valuation level.

Define Valuation Level: OX14

Valuation level

◉ Valuation area is a plant

○ Valuation level is company code

Assign Plant to Company Code

Path: Enterprise Structure -Assignment – Logistics general – Assign Plant to Company Code

CoCd	Plnt	Name of Plant	Company Name
MK14	01M1	MK14 Plant	AUM Tech Solutions

Assignment Plant - Company Code

Assign Purchase Organization to Company code

IMG Path: Enterprise Structure – Assignment – Material Management – Assign purchasing organization to company code

Assign Purchasing Organization -> Company Code

POrg	Description	CoCd	Company Name
01CH	Charlotte Pur Org	MK14	AUM Tech Solutions
01KS	Kansas city Pur Org	MK14	M Tech Solutions

Assign Purchase Org to Plant

IMG Path: Enterprise Structure -Assignment – Logistics general – Assign purchasing organization to Plant

	POrg	Description	Plnt	Name 1
Assign Purchasing Organization to Plant				
	01CH	Charlotte Pur Org	01M1	MK14 Plant
	01KS	Kansas city Pur Org	01M1	MK14 Plant

Purchasing Groups

Path: SPRO – Material Management – Purchasing – Create Purchasing Group

A Purchasing group refers to a people or a group of people who are dealing with specific material or a group of material

Purchasing Groups

	Purc...	Desc. Pur. Grp	Tel.No. Pur.Grp	Fax number
☐	MK1	MK14 Purchase grou		

Define Attributes for Material Type

Material Type is a Logical grouping of materials that are similar in characteristics. Any material master record created in SAP ERP must be assigned to a material type.

IMG Path: Logistics – General – Material Master – Basic Settings- Material Types- Define Attributes of Material Types

Transaction Code: OMS2

Material Type	Description
ROH	Raw Material
FERT	FG Type
HALB	Semi FG type

Dialog Structure	Material Type	ROH	Raw material-ROH		
▼ 🗀 Material types	General data				
· 🗀 Quantity/value updat	Field reference	ROH	X-plant matl status		☐
	SRef: material type	ROH	Item category group		☐
	Authorization group		☑ With Qty Structure		
	☑ External no. assignment w/o check		☐ Initial Status		

Maintain Posting Period

This activity is done for making a Company Code relevant for Materials Management and to define the starting posting period

IMG Path: Logistics – General -Material Master – Basic Settings- Maintain Company Codes for Materials Management

Transaction Code: OMSY

CoCd	Company Name	Year	Pe	FYr	M.	FYr	L..	ABp	DBp
MK11	MK ENTERPRISES	2016	6	2016	5	2015	12	✓	☐
MK12	MK12 ENTERPRISE..				0		0	☐	☐
MK13	MK singapore				0		0	☐	☐
MK14	AUM Tech Solutio…	2019	5	2019	4	2018	12	✓	☐

Creation of Plant Parameters

Transaction code: OMI8

Copy from plant 1000 to our plant 01M1

Maintain Plant Parameters

Plant   01M1   MK14 Plant

Environment			Planning Run		
Number Ranges	Maintained		External Procurement	Maintained	
			Rescheduling	Maintained	
Master Data					
MRP Controllers	To maint.		Planning Horizon	Maintained	
Special Procurement	Maintained		Available Stocks	Maintained	
Floats	Maintained		Error Handling	Maintained	

Default values of Tax code for Invoice Verification

Path: SPRO -Materials Management – Logistic Invoice verification – Incoming Invoice – Maintain Default Tax code

Company Code	MK14	AUM Tech Solutions

Defaults, domestic

Tax code	V0	0 % INPUT TAX

Default value unplanned delivery costs

Tax code	V0	0 % INPUT TAX

GR Tolerance Group

In this step, we set the tolerance limits for goods receipts. When processing a goods receipt, the system checks each item to determine whether the goods receipt varies from the purchase order or the material master data. The different types of variances are defined by tolerance keys. For each tolerance key, tolerance limits can be set per

company code.

Path: SPRO -Material Management – Inventory Management – Good Receipt – Set Tolerance

Copy Tolerance B1, B2 and VP from company code 1000 to MK14

Change View "Tolerance Limits": Details

Copy Tolerance limit PE, SE from company code 1000 to MK14

Tolerance key	SE	Max. cash disc. deduction (purchasing)
Company Code	MK14	AUM Tech Solutions
Amounts in	USD	American Dollar

Lower Limit

Percentage

⦿ Do not check

◯ Check limit

Tolerance limit % [   ]

Set Tolerance limit for Price Variance

When processing a purchase order, the system checks whether the effective price of a PO item shows variances compared with the valuation price stored in the material master record. In addition, it checks whether the specified cash discount value is admissible.

Variances are allowed within the tolerance limits. If a variance exceeds a tolerance limit, the system issues a warning or error message. In SAP, the types of variance are represented by the tolerance keys.

Path: SPRO –Material Management – Purchasing – PO – Set Tolerance limit for price variance

Set Tolerance limit for price difference between Invoice and Purchase order

IMG Path: Material Management – Logistic Invoice verification – Invoice block – Set Tolerance

Copy price variance PP and VP from company code 1000 to MK14

Tolerance key	VP	Moving average price variance
Company Code	MK14	AUM Tech Solutions
Amounts in	USD	American Dollar

Lower Limit

Percentage
- ⦿ Do not check
- ◯ Check limit
  - Tolerance limit %

Define Automatic Status Change

Transaction Code: OMRV

Invoice verified in the background. If found correct, status automatically set to completed

CoCd	Company Name	Set correct invoic...	
MK14	AUM Tech Solutions	✓	

Define Valuation Control

It defines if the valuation areas will be grouped by activating the valuation grouping code. In the standard SAP R/3 System, the valuation grouping code is set to active as default setting.

Transaction code: OMWM

IMG Path: Materials Management -> Valuation and Account Assignment -> Account Determination -> Account Determination without Wizard-> Define Valuation Control

Valuation Control

Valuation grouping code

⊙ Valuation grouping code active

Group Together Valuation area plant

Path: Material Management – Valuation and Account Assignment – Account Determination – Account Determination without wizard – Group together valuation area

Transaction Code: OMWD

In the standard SAP system, valuation is predefined at plant level. All plants are grouped together via valuation grouping code 0001. Assign SAP define valuation grouping 0001 to Plant 01M1

Change View "Acct Determination for Val. Areas": Overview

Val. Area	CoCode	Company Name	Chrt/Accts	Val.Grpg Code
01M1	MK14	AUM Tech Solutions	MKUS	0001

Define Valuation Classes

IMG Path: Materials Management -> Valuation and Account Assignment -> Account Determination -> Account Determination without Wizard->Define Valuation Classes.

Transaction Code: OMSK

Process the objects in the specified sequence

Account category reference

Valuation Class

Material type/account category reference

Valuation Class / Acct Cat Reference	Description
Valuation Class	A grouping of Material
Account Category Reference	Grouping of Valuation Classes
Material Type	Logical Grouping of material with similar characteristic
Material Type and Account Category Reference assignment	Material Types are assigned to Account category Reference. This links Material types to valuation class and to GL accounts to which posting should happen

Account Category Reference

Account Category Reference	
ARef	Description
01RM	Acct Cat RM MK14
01SF	Acct Cat SF MK14
01FG	Acct Cat FG MK14

Valuation Class

Transaction Code: OMSK

Valuation Classes			
ValCl	ARef	Description	Description
01RM	01RM	Raw Material MK14	Acct Cat RM MK14
01SF	01SF	SF MK14	Acct Cat SF MK14
01FG	01FG	FG MK14	Acct Cat FG MK14

Material Type and Account Category Reference

Transaction Code: OMSK

Change View "Account Category Reference/Material Type": Overview

Account Category Reference/Material Type				
MTyp	Material type descr.	ARef	Description	
01RM	RM-MK14	01RM	Acct Cat RM MK14	
01SF	SF MK14	01SF	Acct Cat SF MK14	
02FG	MK14 FG	01FG	Acct Cat FG MK14	

Change Movement Type

In this step we define or change Movement Types

When we enter a goods movement, we must always enter the movement type. The movement type has important control functions in Inventory Management. It is essential for

- Updating the quantity fields
- Updating the stock and consumption accounts
- Printing goods receipt/issue slips

IMG Path: Materials Management -Inventory Management and Physical Inventory – Movement Types – Copy, Change Movement Types

Transaction Code: OMJJ

We will use the default SAP movement types.

Movement Type	Allowed Transaction
101	Goods Receipt
261	GI for order

Creation of Various GL accounts for FI-MM Integration

Transaction Code: FS00

Description	GL Acct	Type	Line Itm.	Sort Key	FSG	Post Auto
RM Local	200108	BS/Cr. Liabilities	X	012	G006	X
GRIR Clearing Acct	100510	BS/Cr. Liabilities	X	012	G045	X
PO and Invoice Price Diff Acct	400203	PL/Mnf. Exp	X	001	G003	X
RM Consumption Local	400000	PL	X	001	G003	X
RM Consumption Import	400001	PL	X	001	G003	X
Tax Payable	100511	BS	X	001	G001	–

Configure Automatic Account Posting: FI-MM Integration

Transaction Code: OBYC

Transaction Key	Description	Valuation Class	Gen MODIF	GL Acct
BSX	Inventory Posting	01RM		200108
WRX	GRIR Clearing Account	01RM		100510
PRD	Price Diff Account	01RM		400203
GBB	Offsetting Entry for Inventory Posting	01RM	VBR	400001
BSX	Inventory Posting	01FG		200109

BSX

Configuration Accounting Maintain : Automa

Group	RMK	Materials Management postings (MI

Procedures

Description	Transac...	Account determ.
Rev.from agency bus.	AG1	☑
Sales fr.agency bus.	AG2	☑
Exp.from agency bus.	AG3	☑
Expense/revenue from consign.mat.consu.	AKO	☑
Expense/revenue from stock transfer	AUM	☑
Subsequent settlement of provisions	BO1	☑
Subsequent settlement of revenues	BO2	☑
Provision differences	BO3	☑
Inventory posting	BSD	☑
Change in stock account	BSV	☑
Inventory posting	BSX	☑

Chart of Accounts	MKUS	AUM TECH US Operative Chart of Accounts
Transaction	BSX	Inventory posting

Account assignment

Valuation cla...	Account
01FG	200109
01RM	200108

WRX

Chart of Accounts	MKUS	AUM TECH US Operative
Transaction	WRX	GR/IR clearing account

Account assignment

Account
100510

GBB

Chart of Accounts	MKUS	AUM TECH US Operative Chart of Accounts
Transaction	GBB	Offsetting entry for inventory posting

Account assignment

General modification	Valuation class	Account
BSA	01FG	400203
VAX	01FG	400009

Extend Vendor Master to Purchase Organization

Transaction Code: XK01

However, before the above step Partner function must be created for Vendors

Steps	Path	Data
Define Partner Schemas	SPRO / Materials Management / Purchasing / Partner Determination / Partner Settings in Purchasing Documents / Define Partner Schemas	No Change. SAP standard
Define Settings for Vendor Master Records:	SPRO / Logistics – General / Business Partner / Vendors / Control / Define Account Groups and Field Selection (Vendor)	Partner schemas: IDE1
Assign Partner schemas to Vendor account groups	SPRO/ Mm / Purchasing / Partner determination / Partner Settings in Vendor Master Record- Assign Partner Schemas to Account Groups	Partner schemas: IDE1
Define Permissible Partner Roles per Account Group	SPRO-Materials Management-Purchasing-Partner Determination-Define Permissible Partner Roles per Account Group	

Create Material

Transaction Code: MM01

Material	MK14RM01
Industry	MECHANICAL Eng.
Material Type	RM MK14
Views	Basic, Accounting 1, 2, Costing 1,2
Plant	01M1
Storage Location	RM
Unit of Measure	Kg
Material Group	00104
Purchase Group	MK1
MRP-1	
MRP Type	ND
MRP – 2	
Proc Type	F (External)
RM Storage Loc	RM
Planned Del Time	1
Accounting -1	
Valuation Class	01RM
Price Control	V: Moving Average
Moving Price	200
Costing -1	
With Qty Structure	X
Material Origin	X

Material MK14RM01 created

Create Purchase Order

Transaction Code: ME21N

Standard PO (SAP) created under the number 4500041321

Create Good Receipt

Transaction Code: MIGO

Close previous MM Period and Open current MM period: MMPV

Close Period for Material Master Records

From company code   MK14

To company code   MK14

Enter next period (including fiscal year) or a relevant date
(but not both)

Period   6

Fiscal year   2019

    or

Date

⦿ Check and close period

◯ Check period only

◯ Close period only

Material document 5000003531 posted. Display Material Document: MB03

Display Material Document 5000003531 : Overview

Details from Item   Material   Accounting Documents...

| Posting Date | 04.06.2019 | Deliv.Note | QTY FULLY DELIVE | Name | EHPUSER478 |

Items

F	Item	Quantity	EUn	Material	Plnt	SLoc	PO	Item	S	DCI
			BUn	Material Description			Batch	R MvT	S	S
	1	10	KG	MK14RM01	01M1	RM	4500041321	10		☐
				MK14RM01				101	+	

Data Entry View

Document Number	400009	Company Code	MK14	Fiscal Year	2019
Document Date	04.06.2019	Posting Date	04.06.2019	Period	6
Reference	QTY FULLY DELIVE	Cross-Comp.No.			
Currency	USD	Texts exist	☐	Ledger Group	

Item	PostKey	Account	Description	Amount	Profit Ctr
1	89	200108	RM Local	2.000,00	
2	96	100510	GRIR Clearing Acct	2.000,00-	

Automatic Posting for Tax account

Create Tax Payable GL account

Transaction code: FS00

Transaction code: OB40

Transaction Key: MWS

| Chart of Accounts | MKUS | AUM TECH US Operative Chart of Accounts |
| Transaction | MWS | Output tax |
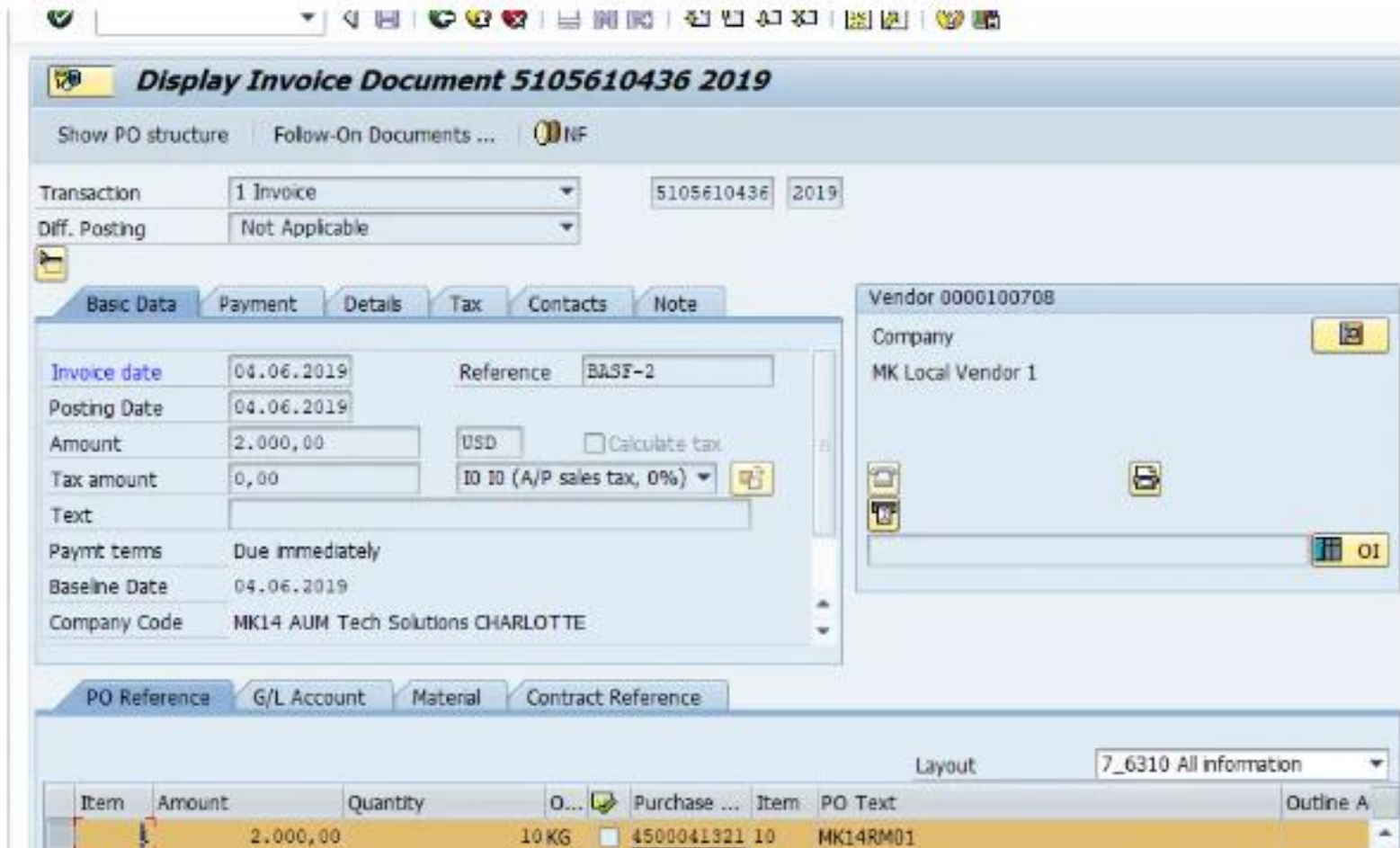
Account assignment

Account

100511

Create Purchase Order Invoice

Transaction code: MIRO