## Material Ledger is Required for SAP S/4 HANA Finance: What Does That Mean for Your Company?

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### **In This Session**

- How to prepare your system for a Material Ledger conversion.
- What questions you need to ask when considering which Material Ledger functionality will be beneficial to your organization.
- What criteria you can use to determine whether to convert to Material Ledger before or after an SAP S/4HANA conversion.
- Typical mistakes that occur with a Material Ledger implementation.
- What is the recommended point in time in the month/year to convert to Material Ledger.

### What We'll Cover

- Converting to Material Ledger in the ECC System
- Converting to Material Ledger in the SAP S/4 HANA System
- Wrap Up

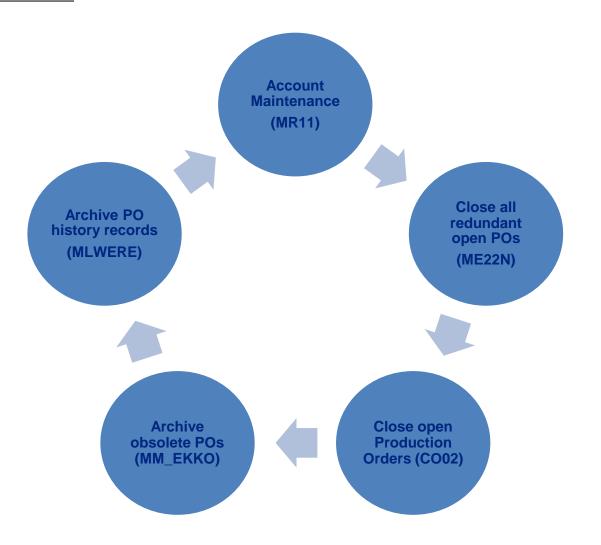


### **Converting to Material Ledger in the SAP ECC System**



- Ensure that all plants in a company code are activated for material ledger
- Between activation and production startup, no material master or inventory transactions should be made
- · 24 48 hours downtime (normally during a weekend)
- To facilitate reconciliation, all FI currencies should be enabled in material ledger

### **Reducing Existing Data Volumes**



### **Clearing PO Line Items and History**

- Purchase order histories are converted from first local currency to parallel currencies
- Note that this only takes effect if you have parallel currencies in material ledger (i.e., ML Currencies are pulled from FI, CO or entered manually)
- If you plan to use only one currency in Material Ledger, the system will still go through all your PO history, it just will not do any conversion
- · Therefore, you need to do the following (if possible) to reduce PO volumes:
  - Use transaction MR11 to perform account maintenance
  - Archive purchase order data that you no longer require (archiving object MM\_EKKO)

### **Closing Existing Production Orders**

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- Up until recently, Production Orders were not converted with a Material Ledger conversion
- With SAP Note 1801449, Production Order histories are now converted as well
- Closing Existing Production Orders will therefore reduce the runtime of the conversion program
- Even if Production Orders are not converted, it is advisable to close them because of inconsistencies with Goods Movements before and after conversion with Actual Costing

### **"Balance in Local Currency" for GL Accounts**

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- Make sure that the exchange rates between the company code, Local and Parallel currencies are updated
- Failing to do so may lead to issues with the conversion program

Type/Description Control Data	Create/bank/interest	Key word/translation	Information (C/A)	Information (CoCd)
1				
Account control in company code				
Account currency	USD U	nited States Dollar		
Only balances in local crcy				
Exchange rate difference key				
Valuation group				
Tax category	<ul> <li>Only in</li> </ul>	put tax allowed		
Posting without tax allowed				
Recon. account for acct type		•		
Alternative Account No.				
Acct Managed in Ext. System				
Inflation key				
Tolerance group				
Account Management in Company Cod	e			
Open Item Management				
✓Line item display				
Sort key	001 Posti	ng date		
Authorization Group				

### **Update Exchange Rates**

- Make sure that the exchange rates between the company code, Local and Parallel currencies are updated
- Failing to do so may lead to issues with the conversion program

Chan	hange View "Currency Exchange Rates": Overview									
6 Nev	v Entries [ 📄 🛃	<b>s b b</b>								
ExRt	ValidFrom	Indir.quot	Х	Ratio(from)	From	=	Dir.quot.	Х	Ratio (to)	То
М	03/08/2015	15.45750	x		1 MXN	=		х		1USD
М	03/01/2015	15.27120	x		1 MXN	=		x		1USD
М	02/22/2015	14.97610	x		1 MXN	=		х		1USD
М	02/15/2015	15.00610	x		1 MXN	=		х		1USD
М	02/08/2015	14.91790	х		1 MXN	=		x		1USD
М	02/01/2015	14.80680	х		1 MXN	=		х		1USD
М	01/25/2015	14.84950	х		1 MXN	=		x		1USD
М	01/18/2015	14.64070	х		1 MXN	=		x		1USD
М	01/11/2015	14.64780	х		1 MXN	=		х		1USD
М	01/04/2015	14.64090	х		1 MXN	=		x		1USD
М	12/28/2014	14.78920	х		1 MXN	=		x		1USD
М	12/21/2014	14.70970	х		1 MXN	=		x		1USD

### **MM-FI Integration OBYC**

- Make sure that there are no missing General Ledger accounts in the Account determination between FI and MM (transaction OBYC)
- For example, an account that exists for a Valuation Class that has not been used, may not have been set up

Configuration Accounting Maintain : Automatic Posts - Accounts								
• • 🗅 🗖	Posting Key	Mail Procedures	Rules					
Chart of Accounts		INT Sample o	hart of accounts					
Transaction		BSX Inventor	y posting					
Account assignme	Account assignment							
Valuation modif.	Valuation class	Account						
0001	3000	300000						
0001	3001	300010						
0001	3030	303000						
0001	3031	303500						
0001	3040	304000						
0001	3050	305000						
0001	3100	792000						
0001	7900	790000						
0001	7920	792000						

### **MM-FI Balance Reconciliation**

Before running the Material Ledger conversion program, make sure that the Inventory balances in FI and MM are reconciled by using transaction MB5L (or program RM07MMFI)

List of Stock Values: Balances			
🚱 🔁 🗓			
Database Selections			
Material		to	
Company Code	1000	to	
Valuation Area		to	
Valuation Type		to	
Valuation Class		to	
G/L Account		to	
Period			
Select Balance, Current Period			
OSelect Balance, Previous Perio			
Oselect Balance, Previous Year			
Scope of List			
✓ Totals Only			
Negative Stocks			
Materials with Zero Stock			
Valuation Area Level Only			
Extended Check			
Display Indiv. Matl Lines			
Display Options			
Layout			

### **MM-FI Balance Reconciliation**

## If you have the New G/L you can use transaction FAGL\_MM\_RECON to display the reconciliation between MM and the General Ledger



Balance Reconciliation Between General Ledger and Materials Management

🖞 🛜 🌾 🛯 🧏 🚹 📲 🖑 🔄 🖾 🖾 🐨 🕸 🛛 🖓 🔠 🖽 🖽 🖽 🖽 🖓 🖉 🖓 Material Details 🛛 🛽 Balance Display: General Ledger

### Balance Reconciliation Between General Ledger and Materials Management

Company Code: 1000 Fiscal Year: 2012 Posting Period (MM): 12 General Ledger: 0L

·							
	Profit Center	Segment	Crcy type	Currency	Σ Material Stock	Σ GL Balance	Σ Difference
131000 🗗		BP01_C	10	USD	0.00	929.96	929.96-
	100	BP01_C	10	USD	0.00	13,878.93-	13,878.93
	200	BP01_B	10	USD	1,736.38	1,736.38	0.00
	200	BP01_C	10	USD	0.00	57,597.60-	57,597.60
	300	BP01_C	10	USD	7,132.11	<u>6,447.91-</u>	13,580.02
	MISCUS	BP01_A	10	USD	0.00	3,357,486.66	3,357,486.66-
	UNDEFINED		10	USD	5,495,421.06	1,801,811.15	3,693,609.91
	UNDEFINED	BP01_C	10	USD	0.00	420,249.84	420,249.84-
131000 📇					5,504,289.55	5,504,289.55	- 0.00
133000		BP01_C	10	USD	0.00	0.15	0.15-
	100	BP01_A	10	USD	215,538.15	87,517.92	128,020.23
	100	BP01_C	10	USD	0.00	804.09-	804.09
	200	BP01_B	10	USD	1,025.46	30,060.26	29,034.80-
	300	BP01_C	10	USD	3,409,222.84	857,822.87	2,551,399.97
	100US	BP01_A	10	USD	0.00	128,020.22	128,020.22-
	200US	BP01_B	10	USD	0.00	124,519.28	124,519.28-
	300US	BP01_C	10	USD	0.00	2,397,845.89	2,397,845.89-
	MISCUS	BP01_A	10	USD	0.00	10,594.29	10,594.29-
	UNDEFINED		10	USD	10,920.52	1,130.18	9,790.34

### **Convert Existing Data into the Material Ledger**

Once the Material Ledger configuration has been done, the transaction CKMSTART will need to be run, and this will do the following:

- Convert Material Master
- Convert PO History into Parallel
   Currencies
- Activate Actual Cost Component Split (if needed)

Production Startup of Mat.	Ledger			
🚱 Selection Options   🔁 🚺				
Plant	1000	to	<b>(</b>	
Parameters				
Exchange Rate Type				
Processing Options				
<ul> <li>✓ Background Processing</li> <li>✓ Test run</li> </ul>				
Parallel Processing				
Server Group Package Size	1,00	0		
PO history				
<ul> <li>Master data + PO hist.(normal)</li> <li>Master Data Only (Step 1)</li> <li>PO History Only (Step 2)</li> </ul>				
Purchasing Document		to	<b></b>	

### Material Ledger Table Replication in ECC

Material Valuation Tables	Material Ledger Tables				
<ul> <li>MBEW - Material Valuation</li> <li>OBEW - Valuated Stock with</li> <li>Subcontractor</li> <li>EBEW - Sales Order Stock Valuation</li> <li>QBEW - Project Stock Valuation</li> </ul>	<ul> <li>CKMLHD - Material Ledger: Header Record</li> <li>CKMLPP - Material Ledger Period Totals Records Quantity</li> <li>CKMLPR - Material Ledger: Prices</li> <li>CKMLCR - Material Ledger: Period Totals Records Values</li> </ul>				
Purchase Order History Tables	Material Ledger Tables				
	MLWERE - Conversion Table between Purchasing and Material Ledger MLBE - Material Ledger FS Item Table for GR/IR relevant transaction MLBECR - Material Ledger Currency Table for GR/IR relevant transact.				

### **Convert Existing Data into the Material Ledger**

Once the conversion is done, the Material Master changes are:

- Multiple tabs in Accounting 1 view for different periods
- "ML Active" Indicator is set
- Price Determination field is populated
- Multiple Currencies/Valuation for Standard Cost

Period 002/20	Period 001/2018	Period 012/2017	Future costing run	Current costing run	Prev. cstng
General Valuation Dat	a				
Total Stock		700	Base Unit	PC Piece	
Division			Valuation Cat.		
Valuation Class	7920		Valuated Un		
VC: Sale Ord. Stk			ML Act.	🗐 🦉 Mat. Pi	rice Analysis
Project Stock VC			Price Determ.	3 Single-/Multilev	vel
Prices and values					
Currency	EUR		USD	USD	
	Company co	de currency	Group currency, grou	p valu Group curre	ncy, profit cen
Standard Price		150.00	100.00		100.00
	1		1	1	
Price Unit					

Reconcile first local currency to parallel currencies and display inconsistencies

Material inventory values are translated on a key date from local to parallel currencies

Transaction CKMADJUST is used to reconcile inventory values in parallel currencies to the G/L

This transaction can be run even after inventory movements have been made

### **Reconciliation of Inventory Balances cont.**

- If you plan to have parallel currencies in Material Ledger, the conversion program reconciles the first local currency to the second and third local currencies
- Transaction CKMADJUST (or FAGL\_ML\_ADJUST if you have New G/L) is used to reconcile these Currency Types

Reconciliation of Material Subl	edger and General Ledger
🚱 🔁	
Company Code	1000
Parameters	
Account:Stock Corr.	899999
Processing Options	
<ul> <li>✓ Background Processing</li> <li>✓ Test run</li> </ul>	
Ignore Business Area	

### **Change Price Indicator in the Material Master**

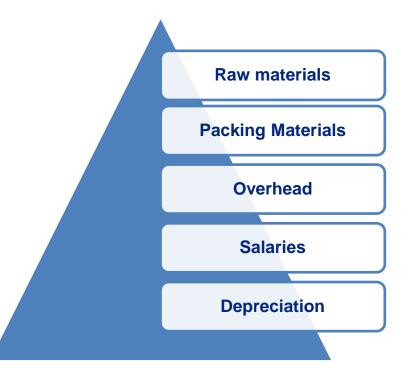
If you plan to use Actual Costing, you will need to change the Price Determination from "2" to "3" by running transaction CKMM

Ð			
Material		to	
Plant	1000	to	
Valuation Type		to	
Sales Document		to	
Item (SD)		to	
WBS Element		to	
Material Type Material Group Valuation Class Valuation Category Price Control	S	to to to to	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Restrict Material Stock Stock Material			
Special Stock	$\odot$		
Program Definitions			
Old Price Determination	2		
New Price Determination	3		
New Price Control	S		

### **Actual Cost Components**

Cost components break down the cost estimate into various factors

- Initialized by executing program MLCCS\_STARTUP in transaction SE38
- All materials with price determination "3" get an initial cost component split by standard price



# Converting to Material Ledger in the SAP S/4HANA System



- Migration of the Material Ledger is required in the following scenarios: Migration from SAP ERP to SAP S/4HANA 1610 or higher Migration from SAP Simple Finance to SAP S/4HANA 1610 or higher
- You always need to migrate the Material Ledger, even if you were not using the Material Ledger in the source system
- You always need to migrate the Material Ledger, even if you were not using it in the source system
- Actual Costing is still optional!!

### **SAP S/4HANA Currencies**

### SAP ERP

□ 3 local currencies in FI (including New GL)

2 currencies in CO

□ 3 currencies in Material Ledger

FI (BSEG)	local Crcy	2nd local Crcy	3rd local Crcy
CO (COEP)	local (оы) Crcy	CO Area Crcy	
ML	local Crcy	2nd ML Crcy	3rd ML Crcy



### SAP S/4HANA Finance

ledger-dependent

□ Local currency: ACDOCA field name = HSL, currency type 10

- □ Global currency: ACDOCA field name = KSL, currency type of controlling area
- □ Freely Defined Currencies 1 8
  - You can configure any currency type.
  - There is no dependency on the currency types of the leading ledger.
  - ACDOCA fieldnames OSL, VSL, BSL, CSL, DSL, ESL, FSL, GSL

□ If you activate parallel valuations with transfer prices, then additional rules / constraints apply.

### **SAP S/4HANA Currency Types/Valuation Views**

- Up to 8 additional Currency Types can be assigned to Company Codes
- Currency/Valuation Profile can be setup for Group and/or Profit Center Valuation

Dialog Structure			Ledger: OL Ledger 0	L							
Currency Types											
🗀 Global Currency Conversion Settin											
Currency Conversion Settings for C	s for C Company Code Settings for the Ledger										
∼ 🗀 Ledger		CoCd	Company Name	Local Curr. Type	Global Curr. Type	FreeDef Crcy 1	FreeDef Crcy 2	FreeDef Crcy 3	FreeDef Crcy 4		
$\sim$ 🕁 Company Code Settings for the		1710	Company Code 1710	10	30	31	32	11	12		
C Accounting Principles for Led			Company Code 1710	10	30	31	32	11	12		

- If you had Group/Profit Center Valuation in ECC, the relevant currency type(s) will automatically transfer to S/4HANA
- You cannot introduce Group/Profit Center Valuation with a Brownfield implementation!

Currency Type	Description
10	Company Code Currency/Legal Valuation
11	Company Code Currency/Group Valuation
12	Company Code Currency/Profit Center Valuation
30	Group Currency/Legal Valuation
31	Group Currency/Group Valuation
32	Group Currency/Profit Center Valuation

### What are the new Material Ledger tables?

- Material Ledger Master data is created for all valuation areas/materials (CKMLHD, CKMLPP, CKMLCR)
- MATDOC combines MSEG, MKPF, plus information from MARC, MARD, MCHB, MKOL, etc.
- MBEW, EBEW, QBEW, OBEW, MBEWH EBEWH, QBEWH, OBEWH values and quantity migrated to ACDOCA, meaning one single source of data.
- MLDOC = MLHD, MLIT, MLPP, MLPPF, MLCR, MLCRF, CKMLPP, CKMLCR, MLCD, CKMLMV003, CKMLMV004, CKMLPPWIP etc.
- MLDOCCCS = MLKEPH, CKMLKEPH, (CKMLPRKEKO)
- · MLDOC\_EXTRACT
- MLDOCCCS\_EXTRACT (cost component split report)
- · CKLMLCR still source for Standard Price, Periodic Unit Price and Price Control
- CKMLPRKEKO and CKMLPRKEPH still valid for cost component split
- MLRUNLIST replaces CKMLMV011

### **Technical Changes in Material Ledger**

- Core information is Now retrieved from ACDOCA.
  - V-2 Materials
- Custom ML Type must Now be defined as No default is available. Type 0000 is Not supported anymore.

ML type 0000 referencing FI or CO is not allowed

 The main reason is that you can assign > 3 currencies to a company code and ML still has limit of 3.

Change View "Define indi	vidual charac	cteristics": Overview
🦻 New Entries 📑 🗐 💽 🕵 🔂		
Dialog Structure    Define material ledger type	Mat. Ledger Type	ESXX
	Crcy type	Short Descript.
	10	Company code currency
	32	Group currency, profit center valuation
	40	Hard currency

### Is Actual Costing Mandatory in SAP S/4HANA?

- Material Ledger is mandatory in SAP S/4HANA
- Actual costing is not mandatory



### Is Actual Costing Mandatory in SAP S/4HANA?

- Actual costing
  - Not mandatory
  - CKM3 is available with limited functionality
  - Not actual cost component split

Chan	ge View "Activate actual	costing": O	verview		
p 🖒					
Activa	te actual costing				
PInt	Name 1	Act. Costing	ActAct	CreditCCt	
1010	Werk 1 - DE T				
1110	Plant 1 GB				
1210	Plant 1 FR				
1310	Plant 1 CN				
1510	Plant 1 JP				
1710	Plant 1 US	<b>√</b>	2		
	ol	_			

Material P	Price Analysis
🗿 🗆 🏷 🔤	
Material	M2-TG-A14 Dike Cover
Plant	1010 Werk 1 - DE Not Active
Valuation Type	NOT ACTIVE
🛅 Sales Order S	tock/Project Stock
Period/Year	7 2017 🚺 Period Status 🚺 Period Opened
Curr./Valuation	Company code currency
View	Price History
🛅 Prices and Inv	ventory Values
	H (R ) Z , % , C (C , C , C , C , C
Transaction (	Object Unit ChgTotInv. Value Ch. Price Mov. P. TotalSto. Total Value New Pric
Period Opening	PC 0 0,00 0,00 1 662.000 70.448.000,0 106,42
Material Price	e Analysis
S 🗆 🍃 🛅 🕯	📓 🔨 🗏 Costing Cockpit – Set Costing Run
Material	TG226 Cross Racer 3.0
Plant	1710 Plant 1 US Active
Valuation Type	
💾 Sales Order Stock	/Project Stock
Period/Year	6 2017 📕 🕨 Period Status 🚳 🚺 Not Relevant for Settlement
Curr./Valuation	Company code currency USD
Value	Actual Value   Actual Value Actual Value
View	Price Determination Structure   Main Cost Component Split
Prices and Invento	nry Values

Show WIP Reduction

0,00 0,00

0,00 0,00

0,00 0,00

ExRateDiff ActualVal. Price

0,00

0,00

0,00

😵 🚖 🛯 📮 🚛 🔎 🕄 Choose Detail 🖁 Display Actual BOM 🖉 Messages for Material

0 PC

0 PC

0 PC

• 📫 Beginning Inventory

Ending Inventory

D E Cumulative Inventory

Quantity ValQtyUnit PrelimVal PriceDiff

0,00

0,00 0,00

0,00

0,00 0,00

### **Activating Actual Costing Retroactively**

To activate actual costing after moving to SAP S/4HANA:

- > Activate Actual Costing for the relevant plant(s)
- Execute program FCML4H\_STARTUP

< SAP	Set ML Actual Costing as Productive (retroactively)	< SAP	Set ML Actual Costing as Productive (retroactively)
✓ ☐ Save as Variant More ∨		[] @ = = γ Σ	閱 😥 🖾 箇 More ∨
Selection		Ty Message Class Nu Message Text	
Valuation area: CA51	to:	I         FINS_ML_MIG         21 Processing of valuation a           I         FINS_ML_MIG         84 Total 1 plant(s) found and	
Processing Options			
Test:		Activate actual costing	
Package Size:	400	Plnt Name 1	Act. Costing
		CA51 Toronto Plant	$\checkmark$
Server Group:			
Maximum Number of Tasks: 10			

### **Additional Features with SAP S/4HANA**

CKMLCP

- Same transaction for actual closing and AVR, instead of CKMLCP and CKMLCPAVR
- New process called preparation
- Single Level Price Determination, Multilevel Price Determination, Revaluation of Consumption and WIP Revaluation have been replaced by the new step settlement

🔄 Create ML Costing Run / Run Reference
Costing run 1710 1710
Period 6 2017
Actual Costing Run
OAVR with Run Reference
Classic AVR (No Parallel COGM)
ORun Reference for Single Period Run
ORun Reference for Year-To-Date Run
ORun Reference for Rolling Run

eriod 6 2017 pplication Actual Costing General Data Processing Flow step Authorizn Parameters Execute Log Mat St., Successful Erro., Still open Act Stat Successful Erro., Still open Selection Preparation → → ↔ ↔ 135 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Processing         Flow step       Authorizn       Parameters       Execute       Log       Mat St       Successful       Erro       Still open       Act Stat       Successful       Erro       Still open         Selection       Image: Comparation       Image: Comparation <thimage: comparation<="" th="">       Image: Compa</thimage:>
Processing         Flow step       Authorizn       Parameters       Execute       Log       Mat St       Successful       Erro       Still open       Act Stat       Successful       Erro       Still open         Selection       Image: Comparation       Image: Comparation <thimage: comparation<="" th="">       Image: Compa</thimage:>
Flow step       Authorizn       Parameters       Execute       Log       Mat St.       Successful       Erro       Still open       Act Stat       Successful       Erro       Still open         Selection       Image: Constraint of the state
Selection         Image: Constraint of the selection         Image: Constraint of
Preparation 🔐 👦 🤂 🛒 🖉 0 135 0 0 0 0
Settlement 🔐 →□> 🕒 ◇ 0 0 135 0 0 0
Post Closing ▶□▶ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
Mark Prices >=> C 0 0 0 0 0 0 0

### Additional Features with SAP S/4HANA cont.

- CKMLCP
  - Selection (program FCML4H\_SELECTION)
  - Preparation (program FCML4H\_PREPROCESSOR)
  - Settlement (program FCML4H\_SETTLEMENot)
  - Post Closing (program FCML4H\_POST\_CLOSING)
- Does not distinguish anymore between single and multilevel price difference in accounting
  - $\cdot\,\mathsf{PRV}$  and KDV are obsolete
  - AUI must be without valuation class
  - •New Key PRL

Fi 🦻 🛅									
ng run 🛛 🕅 🛛 🕅 🛛	2017 5 0	42017							
d d	1 2017								
eneral Data Create Cost Estimate									
Flow step	Authorizn	Parameters	Execute	Log	Status	Successful	Errors	Still open	
election		) CDF	Ð			816	0	0	
Determine Sequence		+CH	Ð			816	0	0	
ingle-Level Pr. Determination	n î	+CD+	Ð			816	0	0	
Multilevel Pr. Determination	n î	+CH	Ð			1	0	0	
Revaluation of Consumption		(C)	Ð			816	0	0	
WIP Revaluation		+CF	Ð			816	0	0	
Post Closing	n î	+CD+	Ð		•	0	0	816	
Mark Material Prices		+CD+				0	0	0	
Job Overview	Schedule M	anager			Activity	Types	1	Status Data	From 26.05.2017 1

osting run		1710	1710								
eriod		6 201	7								
pplication		Actual Co	sting		•						
Processing					<b>a (</b> 1	-	eu 11		a (1	-	<b>C</b> 11
Flow step	Authorizn	Parameters	Execute L	on Mat St	Successful	Frro	Still open	Act Stat	Successful	Frro	Still open
Selection				3 0	135	0	0		0	0	0
Preparation	ß			3 🗶	0	135	0		0	0	0
Settlement	ſ		Ð	♦	0	0	135		0	0	0
Post Closing	) 🐣		Ð	♦	0	0	135		0	0	0
Mark Prices			Ð		0	0	0		0	0	0

### **Preparations and Migration of Customizing for General Ledger**

There are two Data Preparation activities that need to be completed before you start the process for converting to Material Ledger The first is the "Preparations and Migration of Customizing for General Ledger"

<ul> <li>Preparations and Migration of Customizing</li> </ul>
· 🛃 🤤 Check Customizing Settings Prior to Migration
$\cdot$ 🗟 😳 Define Message Types for Posting Before and During Migration
$\cdot$ 🗟 😳 Set Number of Jobs for Activities in Mass Data Framework
<ul> <li>Preparations and Migration of Customizing for General Ledger</li> </ul>
· 🛃 😳 Check and Adopt Fiscal Year Variants
· 🛃 🕀 Define Currency Settings for Migration
· 🔜 🕀 Migrate General Ledger Customizing
· 🔜 🕀 Define Settings for Ledgers and Currency Types
$\cdot$ 🛃 🕀 Review the Assignment of Ledger and Company Code to AccPrinciples
· 🔜 🕀 Define Ledger for CO Version
· 🛃 😳 Define Document Types for Postings in Controlling
· 🛃 🕀 Define Document Type Mapping for CO Business Transactions
· 🔜 🕀 Check and Define Default Values for Postings in Controlling
· 🛃 😳 Define Offsetting Account Determination Type
· 🔜 😳 Define Source Ledger for Migration of Balances
$\cdot$ 🛃 🕀 Check and Define Settings for Substitution for Cost-of-Sales Accounting
· 🛃 😳 Check and Define Settings of Controlling Area
· 🛃 🕀 Execute Consistency Check of General Ledger Settings

### **Preparing Migration of Customizing for Material Ledger**

The second step is the "Preparations and Migration of Customizing for Material Ledger"

- Preparations and Migration of Customizing
- Settings Prior to Migration
- 🛃 😳 Set Number of Jobs for Activities in Mass Data Framework
- Preparations and Migration of Customizing for General Ledger
- Preparations and Migration of Customizing for Asset Accounting
- Preparations and Migration of Customizing for Controlling
  - Preparations and Migration of Customizing for Material Ledger
  - 🛃 😳 Migrate Material Ledger Customizing

Ŧ

Check Assignment of Material Ledger Types to Valuation Areas

### **Migration Step for Material Ledger**

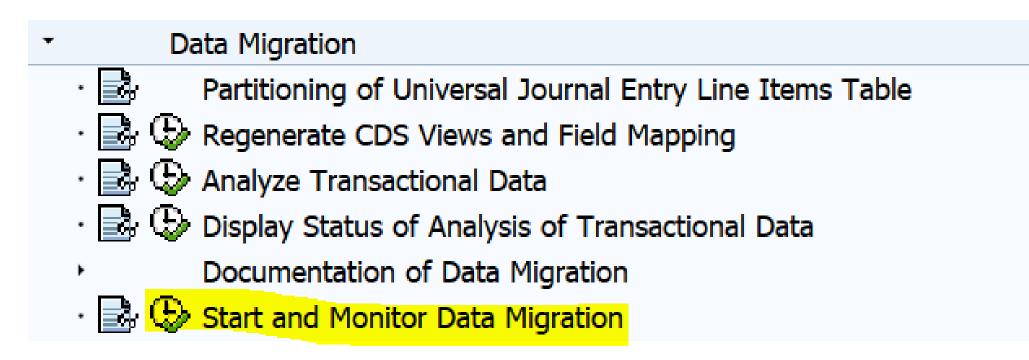
- Archive prior to migration is suggested
- Activate ML in ECC before moving to SAP S/4HANA also suggested to reduce the impact and to get knowledge of functionality before changing

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🛚 🗟 SAP Customizing Implementation Guide	
<ul> <li>SAP Commercial Project Management</li> </ul>	66
🔹 🕒 Activate Business Functions	Ty
<ul> <li>Migration to SAP S/4HANA Finance</li> </ul>	
<ul> <li>Info: Migration and Migration Paths to SAP S/4HANA Finance</li> </ul>	
<ul> <li>Preparations and Migration of Customizing</li> </ul>	
• 🗟 🕀 Check Customizing Settings Prior to Migration	
• 🗟 😳 Define Message Types for Posting Before and During Migration	
Set Number of Jobs for Activities in Mass Data Framework	
<ul> <li>Preparations and Migration of Customizing for General Ledger</li> </ul>	•
<ul> <li>Preparations and Migration of Customizing for Asset Accounting</li> </ul>	
<ul> <li>Preparations and Migration of Customizing for Asset Accounting</li> <li>Preparations and Migration of Customizing for Controlling</li> </ul>	
<ul> <li>Preparations and Migration of Customizing for Material Ledger</li> <li></li></ul>	-
• 🛃 🤀 Migrate Material Ledger Customizing	
<ul> <li>Preparations for Migration of House Bank Accounts</li> </ul>	
<ul> <li>Preparatory Activities and Migration of Customizing for Credit Management</li> </ul>	
<ul> <li>Data Migration</li> </ul>	

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Ту	Message Text
	Material Update Structure 0001 already exists and does not need to be changed
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area H10
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area H20
	ML active flag, price det. 2, ML Type 9300 and Material Update Structure 0001 will be set for for valuation area R100
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R300
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R301
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R302
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R303
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R304
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R305
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R306
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R307
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R308
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R309
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R310
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R311
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R312
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area R313
•	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area REF3
	ML active flag, price det. 2, ML Type 9000 and Material Update Structure 0001 will be set for for valuation area REF4
	Transaction-Related Closing in ML will be switched off
	Customizing request has been created and objects assigned, if maintained in transaction SCC4
	All flags have been set properly in transaction OMX1
	Transaction-Related Closing in ML switched off

## **Preparing Migration of Customizing for Material Ledger**

Once these preparation activities are completed, then you can run the steps to Start and Monitor the Data Migration



### M10: Migrate Material Ledger Master Data

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This activity populates data in the Material Ledger tables CKMLHD, CKMLPR, CKMLPP and CKMLCR in all Material Ledger currencies, from the last period of the previous year to the current period and activates Material Ledger in all Valuation Areas (Plants).

Also, all the data in the Inventory Valuation tables xBEW(H) and Material Ledger tables CKMLPP and CKMLCR (if you already use Material Ledger) are migrated into the universal journal entry tables ACDOCA and ACDOCA\_M\_EXTRACT, from the last period of the previous year to the current period.

# **Existing Tables to Be Replaced With the New Tables**

Old Table	New Table	Explanation
MLHD, MLIT, MLPP, MLPPF, MLCR, MLCRF, CKMLPP, CKMLCR, MLCD, CKMLMV003, CKMLMV004, CKMLPPWIP etc.	MLDOC & MLDOC_EXTRACT	These tables will be populated from Material Ledger transactional data updates and settlement.
MLKEPH, CKMLKEPH, (CKMLPRKEKO)	MLDOCCCS & MLDOCCCS_EXTRACT	These tables will update the cost component split in actual costing.
CKMLMV011	MLRUNLIST	This table will contain the material and activity type status from a costing run.

# **Existing Tables to Be Replaced With the New Tables cont.**

Old Table	New Table	Explanation
MKPF, MSEG		This table will hold the header and item data of a material document
MBEW, OBEW, QBEW, MBEWH, OBEWH, EBEWH	ACDOCCA	This table will contain the inventory valuation transactional data

# **Other Migration Steps**

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- M11: Migrate Material Ledger Order History:
- This activity converts all existing purchase order history tables (EKBE, EKBEH, EKBZ, EKBZH) and production order history tables (MLAUFCR and MLAUFCRH) into the Material ledger currencies.
- M20: Check Material Ledger Master Data:
  - This activity checks and verifies the migrated data by comparing values from the inventory and material ledger tables with the Universal Journal table ACDOCA.
- M21: Check ML Production Order and Purchase Order History:
- This activity verifies that all production and purchase order history records have been converted into the material ledger currencies.

# **Material Ledger Helpdesk**

- Prior to S/4HANA 1610
  - SAP Note 364368 Material Ledger help desk
  - CKMHELP
- · SAP S/4HANA 1610
  - 2433733 ML Helpdesk tool in SAP S/4HANA
  - Require password or debug access to change mode in execution
  - FCMLHELP

## Material Ledger Helpdesk cont.

ML HelpDesk Version 1.9 (R/3 Enterprise, MySAP ERP 2004/2005/2005s)	
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Material Ledger Overview	
HelpDesk for transaction data	
HelpDesk for master data	
HelpDesk for actual cost component split	OLD
HelpDesk for miscellaneous	
O HelpDesk for purchase order history	
O HelpDesk for balance sheet valuation	
HelpDesk for Alternative Valuation Run	
O HelpDesk for Distribution Of Usage Variances (DUV)	
O HelpDesk for Deleting ML Documents	
Administration	

#### HelpDesk for master data

<b></b>				
hecks and correction of master data database				
MLHELP_MLMASTER_CREATE	Create ML-header and ML-period data			
MLHELP_MBEW_CONSISTENCY	Checks Consistency Customizing-MBEW			
MLHELP_SAPRCKMU (CKMC)	Checks Consistency between Material Master and Material Ledger			
MLHELP_SET_MEINS_WAERS	Set ckmlpp-meins and ckmlcr-waers			
MLHELP_AUFK_ML_ORDER_CONNECT	Creates data records/links for order connection between ML and AUFK			
MLHELP_CHECK_MULTIPLE_CKMLHD	Remove multiple CKMLHD records of a material (and corresponding CKMLxx)			
MLHELP_REPAIR_TABLES	Repairs CKMLPR/CKMLPP/CKMLCR Material Ledger tables			
eriod status				
MLHELP_SET_PP_STATUS	Change period status			
MLHELP_SET_PP_STATUS_70	Change period status to '70'			
MLHELP_RESET_PP_STATUS	Reset period status to '10'			
lisplay of master data database				
ML_DISPLAY_TABLES	Technical view of ML master data and period totals			
ONE_MAT_MBEW_ML_COMPARISON	Comparison of material master valuation record with ML data			
ML_DISPLAY_ACTIVITY	Technical view of ML activity type/ buss. proc. master and period data			
st of data base views				
MLHELP_MLMASTER	Join: CKMLHD x CKMLPR x CKMLPP x CKMLCR			
MLHELP_ML_MBEW	Join: MBEW with CKMLHD/CKMLPP/CKMLPR/CKMLCR			
MLHELP_ML_MARA_C	Join: MARA/MARC with CKMLHD/CKMLPP/CKMLPR/CKMLCR			
MLHELP_CCS_PRICE	Join: CKMLHD/CKMLCR with CKMLPRKEKO/CKMLPRKEPH			
MLHELP_MLCD_CCS	Join: CKMLHD with MLCD/CKMLKEPH			

#### Material Ledger HelpDesk

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Mate H Ledger Overview

HelpDesk for transaction data
HelpDesk for master data
HelpDesk for actual cost component split
HelpDesk for miscellaneous
HelpDesk for Production Orders
HelpDesk for purchase order history
HelpDesk for balance sheet valuation
HelpDesk for Alternative Valuation Run
HelpDesk for Distribution Of Usage Variances (DUV)
HelpDesk for Deleting ML Documents
Administration

HelpDesk for master data	
•	
checks and correction of master data database	п
FCMLHELP MLMASTER CREATE	Create ML-header and ML-period data
OFCMLHELP MBEW CONSISTENCY	Checks Consistency Customizing-MBEW
FCMLHELP SAPRCKMU (CKMC)	Checks Consistency between Material Master and Material Ledger
OFCMLHELP SET MEINS WAERS	Set ckmlpp-meins and ckmlcr-waers
OFCMLHELP AUFK ML ORDER CONNECT	Creates data records/links for order connection between ML and AUFK
FCMLHELP_CHECK_MULTIPLE_CKMLHD	Remove multiple CKMLHD records of a material (and corresponding CKMLxx)
OFCMLHELP_REPAIR_TABLES	Repairs CKMLPR/CKMLPP/CKMLCR Material Ledger tables
O FCMLHELP_SHIFT_ML_PERIOD	Shift ML period
period status	
OFCMLHELP_SET_PP_STATUS	Change period status
○ FCMLHELP_RESET_PP_STATUS	Reset period status to '10'
display of master data database	
OML_DISPLAY_TABLES	Technical view of ML master data and period totals
ONE_MAT_MBEW_ML_COMPARISON	Comparison of material master valuation record with ML data
O ML_DISPLAY_ACTIVITY	Technical view of ML activity type/ buss. proc. master and period data
list of data base views	
OFCMLHELP_MLMASTER	Join: CKMLHD x CKMLPR x CKMLPP x CKMLCR
FCMLHELP_ML_MBEW	Join: MBEW with CKMLHD/CKMLPP/CKMLPR/CKMLCR
O FCMLHELP_ML_MARA_C	Join: MARA/MARC with CKMLHD/CKMLPP/CKMLPR/CKMLCR

Taise CVMLUD/CVMLCD with CVMLDDVEVO/CVMLDDVEDU

# **Questions You Need to Ask Before Converting to Material Ledger**

- What currencies do we want to value inventory with, at a historical rate?
- Do we need to use transfer pricing and parallel valuation?
- Do we want our products to be valued at Actual Cost?
- Should we revalue our inventory at a FIFO, LIFO or some other basis?
- Should we value our inventory according to multiple GAAP approaches?
- Do we want our Cost of Sales to be valued at standard or actual cost?
- Can we reduce the impact of foreign exchange differences on our inventory values?

# **Timing Your Material Ledger Conversion**

- Look out for other projects (particularly relating to inventory) that could take place around the same time
- If you are activating Actual Costing, plan for a 3 6-month project
- If you are activating Actual Costing, it is best to do it at the beginning of the month, otherwise not all variances will be used in calculation
- Allow a couple of months to work through kinks

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If you are not planning to move to SAP S/4HANA in two or more years, and there is a business justification, then consider activating Material Ledger sooner



# **Universal Parallel Accounting**



New SAP features that allows end-to-end view of parallel accounting across different functions such as Asset Accounting, Overhead Accounting, Inventory Accounting and Product Cost Accounting.

### Functionality

- Allows separate Valuation Views (Legal and Group) per Ledger (i.e., Single Valuation Ledger approach)
- Uses same Accounting Principle for Leading Ledger (for Legal Valuation) and Parallel Ledger (in Group Valuation)
- Consolidated View (in Group Valuation) eliminates intercompany revenue and COGS as well as intercompany profit in inventory (Advanced Intercompany Sales process)

#### Limitations

- Only available for greenfield implementations
- Only available in SAP S/4HANA Cloud (from 2105) and SAP S/4HANA 2022

# Wrap Up



# Your Comprehensive Guide to the Material Ledger in SAP S/4HANA!

- ➤ Configure and run actual costing with SAP S/4HANA
- Master parallel valuation: group valuation, profit center valuation, balance sheet valuation, stock-in-transit, and more
- > Analyze your results with SAP S/4HANA reporting tools

**Purchase the print or e-book at sap-press.com/5565** Save 15% with the code **MTLED15** at checkout.

#### Material Ledger in SAP S/4HANA: Functionality and Configuration

Written by: Paul Ovigele 535 pages | 11/2022 | **E-book:** \$84.99 | **Print:** \$89.95 | **Bundle:** \$99.99





# **Where to Find More Information**

- https://www.erpfixers.com/blog-series
- ERPfixers Resources Page Various blogs and articles on SAP S/4HANA and other topics
- https://www.erpfixers.com/ask-a-fixer-webcast
- ERPfixers Webcast Page Monthly Webcasts on various SAP topics including Universal Allocation

# **Key Points to Take Home**

- All Plants in a Company Code should be activated with Material Ledger in ECC
- Reduce as much data as possible before converting to ML in ECC
- Even in SAP S/4HANA a reduction of ML data will help the Migration process
- Material Ledger is mandatory in SAP S/4HANA, Actual Costing is optional
- Material Ledger conversion is one of the Migration Steps in SAP S/4HANA



# **Thank you! Questions?**

# **Paul Ovigele**

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Please remember to complete your session evaluation.

# SAPinsider

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