Basic Concepts of
SAP
for Auditors

Topics
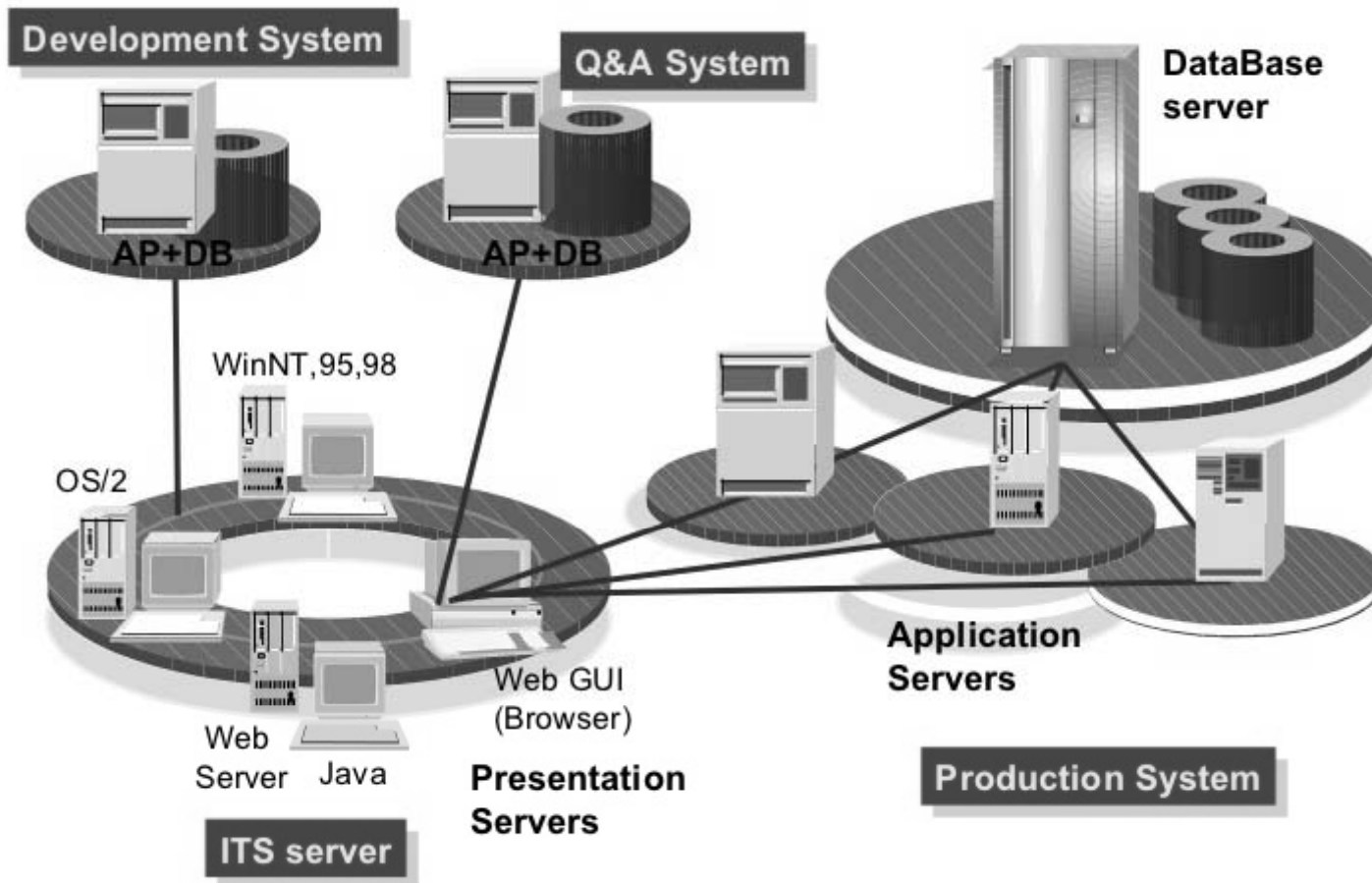
1. SAP Architectures Overview & Roles
2. Org. Structure, Modules & Configuration Flow
3. Document View and Flow
4. SAP Tables, Viewing
5. Some important tcodes
6. Other Audit perspectives -
AIS, Audit Trail, Authorisation, Security, Technical Audit, Business Blueprint, Change Management (Configuration, Patch Management and Developments), Third Party Integration

SAP Architecture Overview - Business

.

Strategic Planning	Strategic Supply Chain Design			Strategic Sourcing	
Demand Planning	Forecasting & Lifecycle Planning		Promotion Planning	Consensus Demand Planning	
Supply Planning	Safety Stock Planning	Supply Network Planning & Outsourcing	Distribution Planning	Customer Collaboration	Supplier Collaboration
Procurement	Purchase Order Processing		Receipt Confirmation	Invoice Verification	
Manufacturing	Production Planning & Detailed Scheduling			Manufacturing Execution	
Warehousing	Inbound Processing	Outbound Processing	Cross Docking	Warehousing & Storage	Physical Inventory
Order Fulfillment	Sales Order Processing		Logistics Coordination	Billing	
Transportation	Transportation Planning		Transportation Execution	Freight Costing	
Visibility	Procurement Visibility	Manufacturing Visibility	Fulfillment Visibility	Transportation Visibility	Supply Chain Analytics

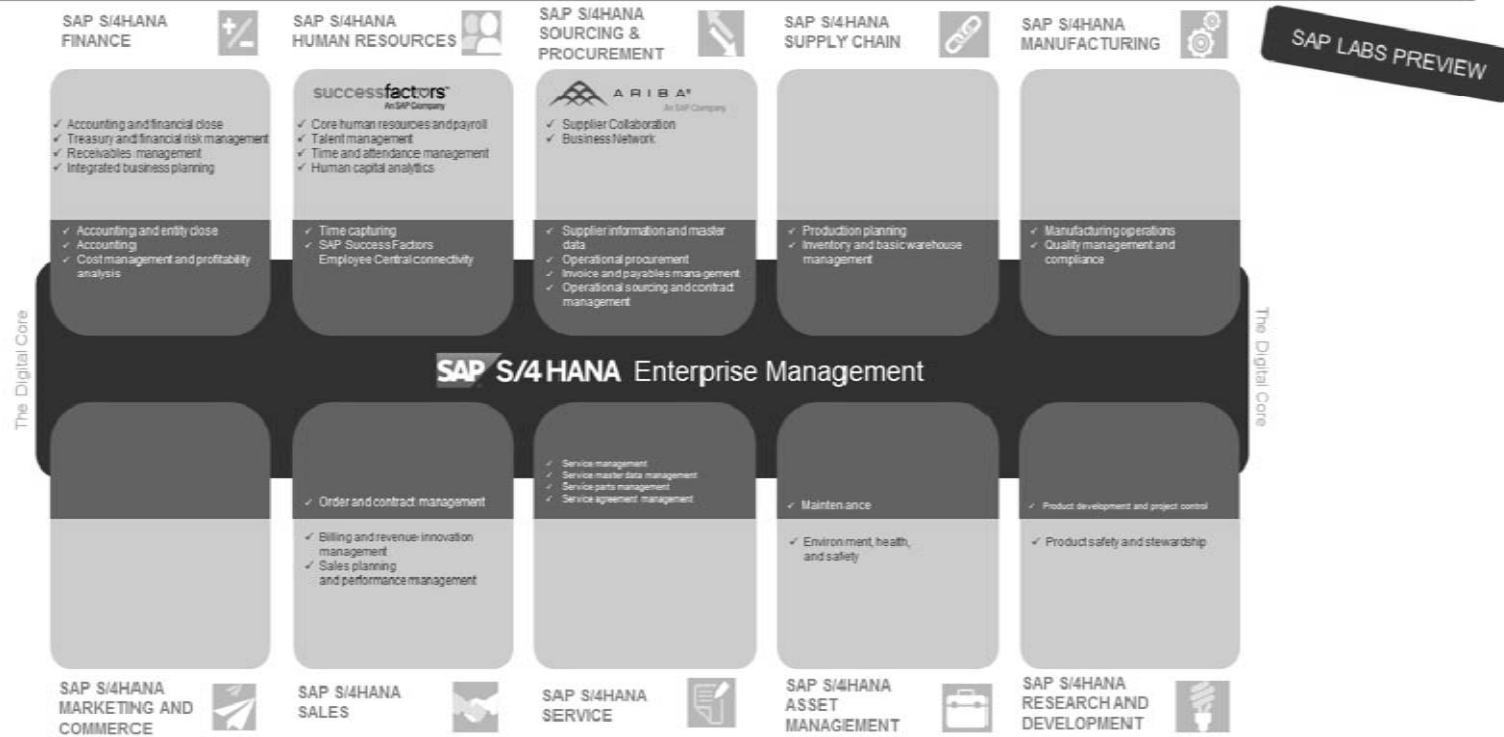# SAP Architecture Overview – R3/ECC (ABAP)

R/3 System Architecture

Development System

AP+DB

Q&A System

AP+DB

DataBase server

WinNT,95,98

OS/2

Web GUI (Browser)

Web Server Java

Presentation Servers

ITS server
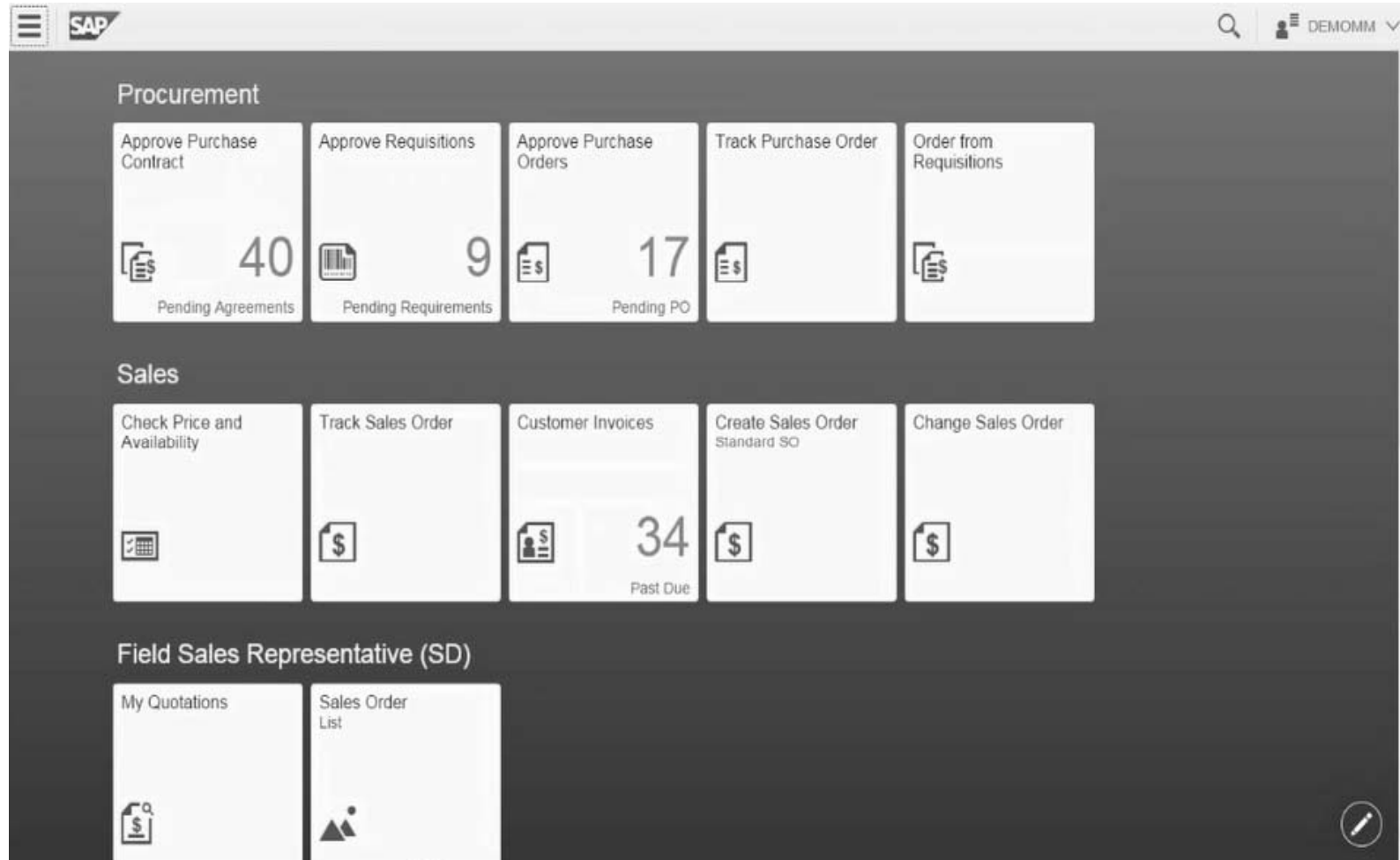
Application Servers

Production System

SAP Architecture Overview - HANA

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SAP S/4HANA, Enterprise Management
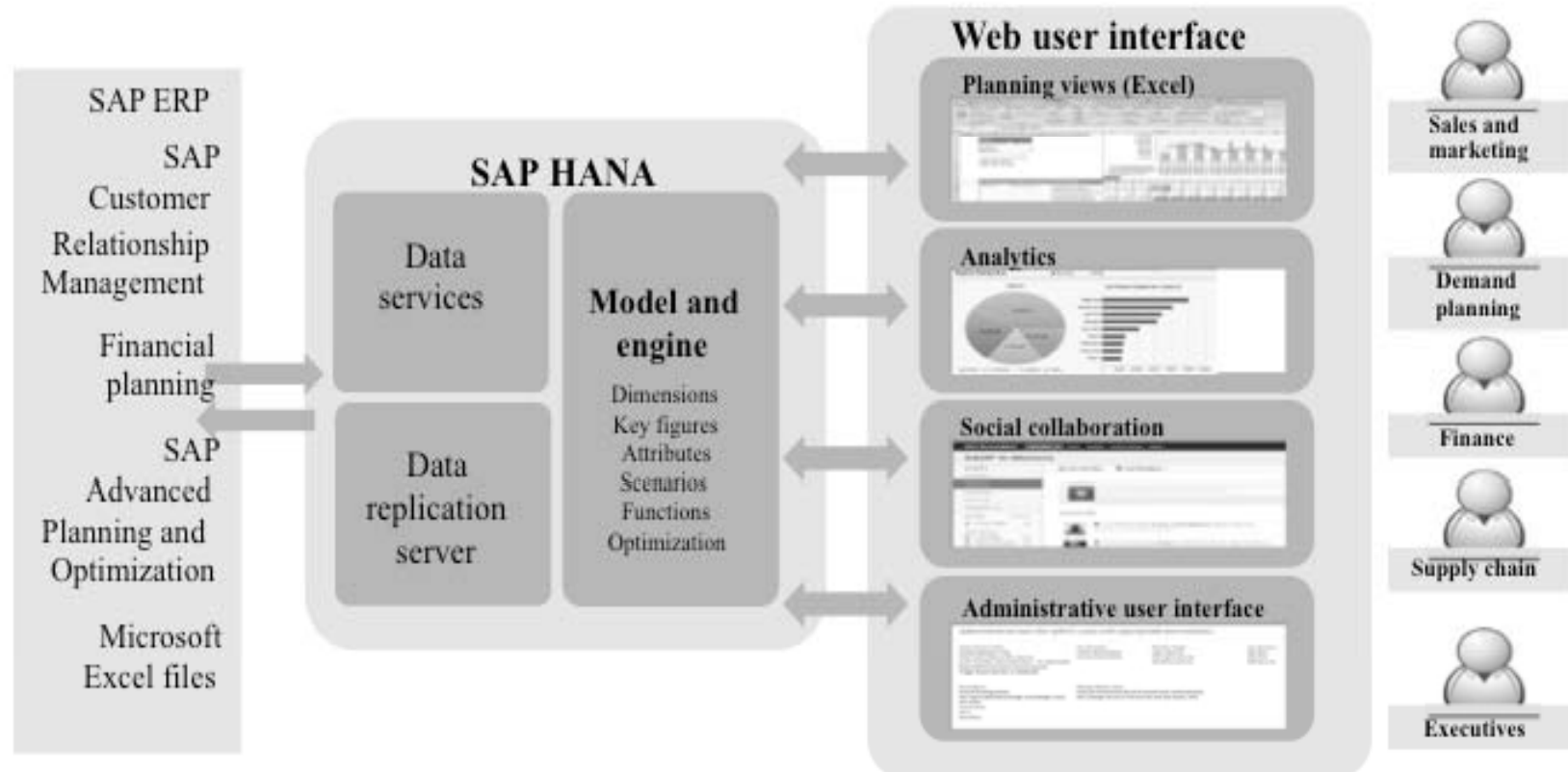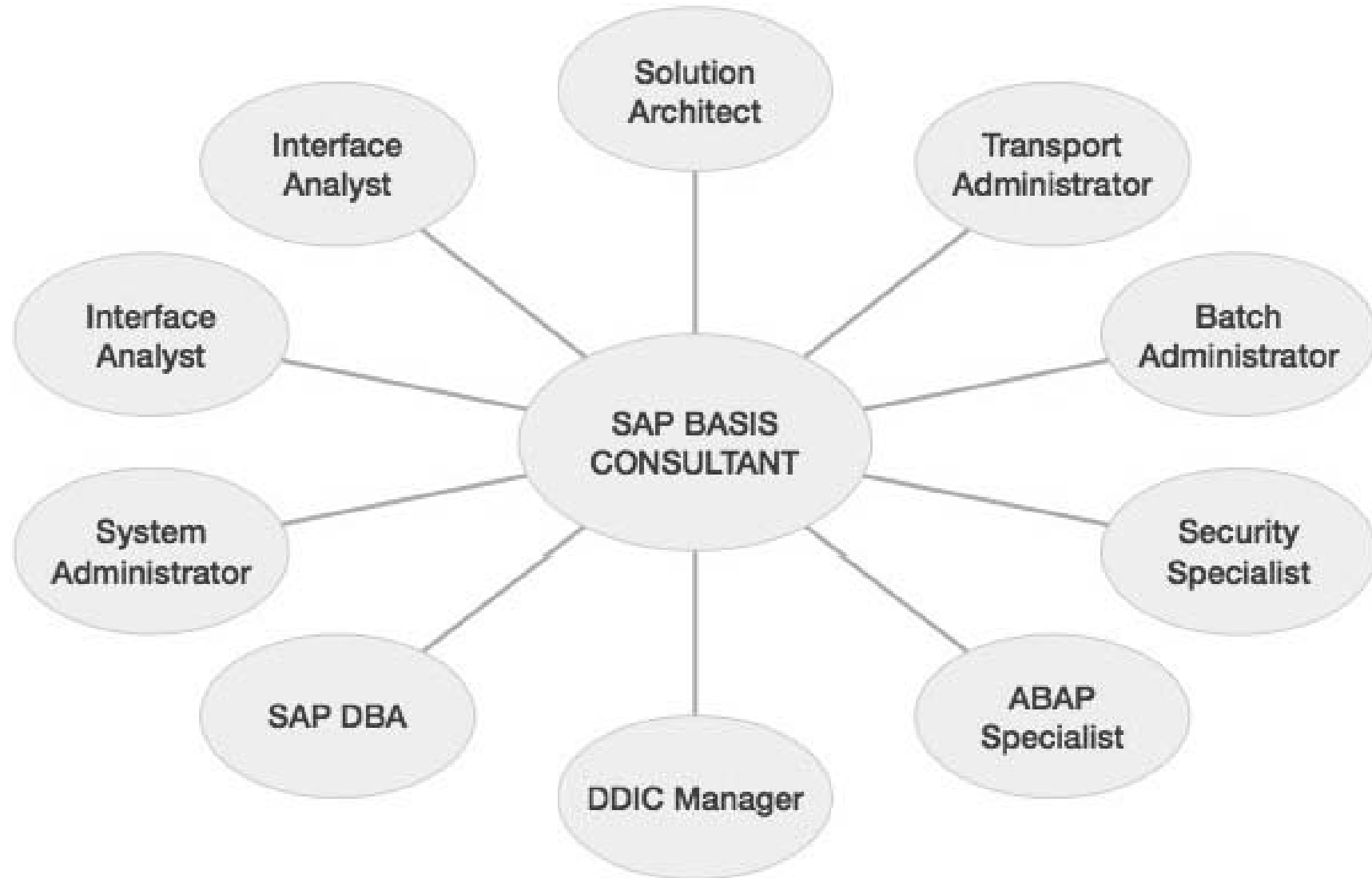Detailed business scope of the 1511 update

SAP Architecture Overview - HANA

SAP Architecture Overview - HANA

SAP Sales and Operation Planning: solution overview

SAP ERP

SAP Customer Relationship Management

Financial planning

SAP Advanced Planning and Optimization

Microsoft Excel files

SAP HANA

Data services

Model and engine
- Dimensions
- Key figures
- Attributes
- Scenarios
- Functions
- Optimization

Data replication server

Web user interface

Planning views (Excel)

Analytics

Social collaboration

Administrative user interface

Sales and marketing

Demand planning

Finance

Supply chain

Executives

Confidential

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SAP Consultants Role - Technical

SAP Consultants Role - Functional

Role of a SAP Functional Consultant

- A functional consultant evaluates the demands in talking with the customer's representatives, transforms the essence into an abstract and algorithmic business model. Hence, he identifies the use cases and transforms them into logical and technical views.
- Then the main task starts: customizing the respective business area and making sure the system reacts in the manner according to the constraints of the requested use case.
- The consultant documents the settings and prepares proper guidelines that allow other consultants to do further changes or repairs with due efforts.
- The consultant takes care that proper training is given to the users and that the system is usable, performing appropriately and the business flow is complete and correct.
- During go live he assists the technical staff by testing the behavior of the system.
- After go live he guarantees that the procedures remain usable and consistent in real live situation and proposes enhancements.
- The main duty of a consultant is to transfer external know-how to the client. It is not manpower that counts but intelligence, understanding of processes, a feeling for defects and general a common sense.

SAP Org. Structure
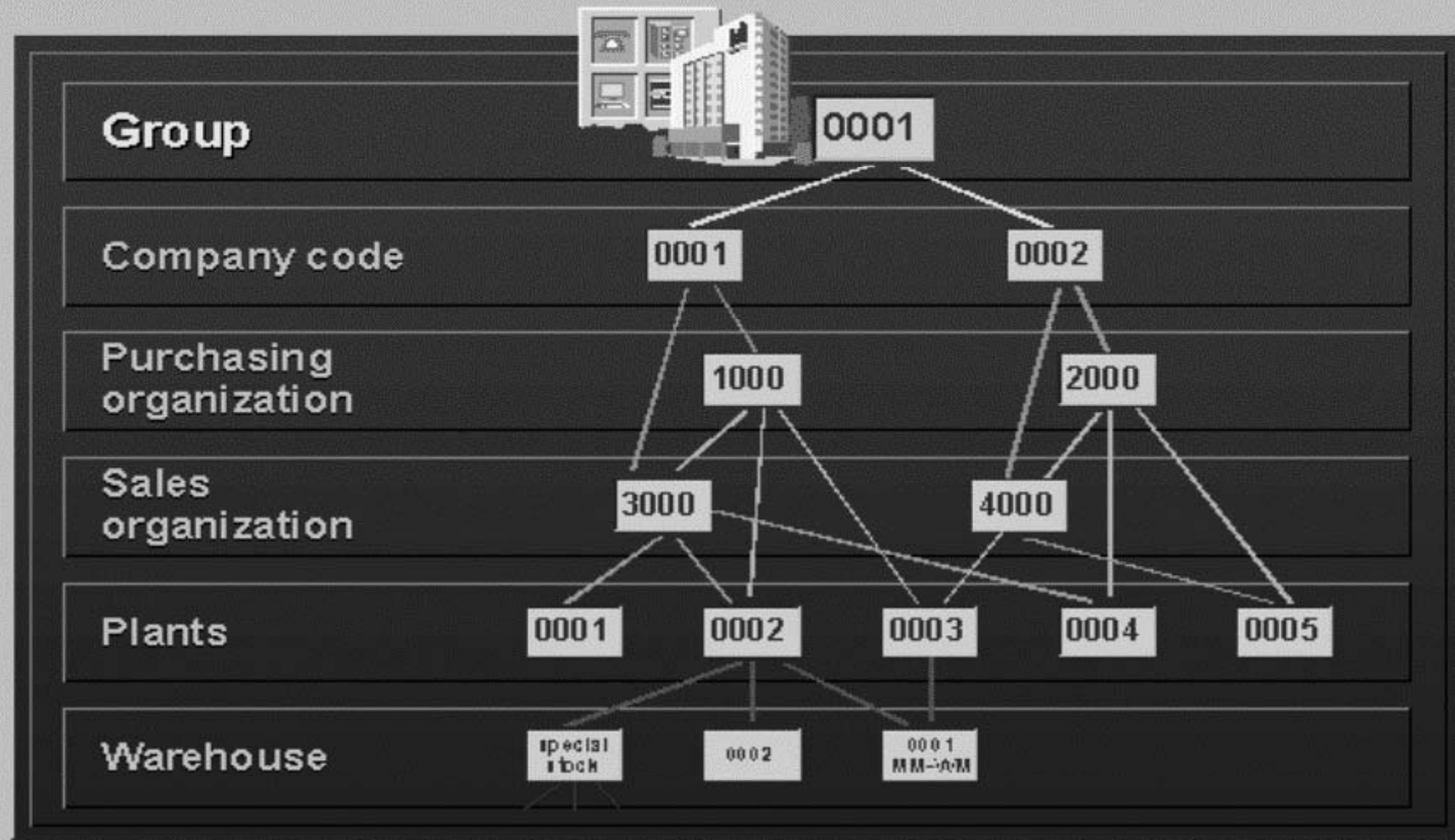
Modules and Functions

➢CO – Controlling

-Company Structure, Profit Centre, Cost Centre

➢FI - Financial Accounting

-Financials, Chart of Accounts, G/L, A/P, A/R

➢SD - Sales and Distribution

-Orders Processing

➢AM - Asset Management

-AUC account from A/P transactions

➢MM - Materials Management

-Plants, Procurement, Inventory and material movements

➢PP – Production Planning and Execution

- Production, BOM, Routing, Consumption

➢QM – Quality Management

- Inspection Plan, Characteristics

➢PS   - Project System (Construction Contractors)

➢Project Management

Document Types and some terminolgies

- DOC Type

- DOC Number

- Header and Line Item

- Goods Issue (GI)

- Goods Receipt GR)

- GRIR Account

- Clearing

- Master Data- Material, Customer, Vendor, GL, BOM,Routing…

- Advance Business Programming (ABAP)

- BASIS

- Transaction Codes - TCODES

- Tables

Document Types

Document Types in SAP.pdf

Configuration and Flow - SPRO

Configuration and Flow - SPRO

Table View   Edit   Goto   Selection   Utilities(M)   System   Help

Change View "Maintain Sales Order Types": Details

New Entries

Sales Document Type	ZDOM Domestic Sales Order		
SD document categ.	C	Sales document block	
Indicator			

Number systems

No.range int.assgt.	28	Item no.increment	10
No. range ext. assg.	02	Sub-item increment	10

General control

Reference mandatory		Material entry type	
Check division	2	☐ Item division	
Probability	100	☑ Read info record	
Check credit limit	D	Check purch.order no	
Credit group	01	☐ Enter PO number	
Output application	V1	Commitment date	

Transaction flow

Screen sequence grp.	AU	Sales Order	Display Range	UALL
Incompl.proced.	11	Standard Order	FCode for overv.scr.	UER1
Transaction group	0	Sales order	Quotation messages	
Doc. pric. procedure	A		Outline agrmt mess.	
Status profile	SALES_OR		Message: Mast.contr.	
Alt.sales doc. type1			ProdAttr.messages	A
Alt.sales doc. type2			☑ Incomplet.messages	
Variant				

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Configuration and Flow - SPRO

Table View   Edit   Goto   Selection   Utilities(M)   System   Help

Change View "Maintain Item Categories": Details

New Entries

Item category   ZTAN   Standard Item

Business Data

Item Type		☑ Business Item
Completion Rule		☑ Sched.Line Allowed
Special Stock		☐ Item Relev.for Dlv
Billing Relevance	A	☐ Returns
Billing Plan Type		☑ Wght/Vol.Relevant
Billing Block		☑ Credit active
Pricing	X	☑ Determine Cost
Statistical value		
Revenue Recognition		
Delmit. Start Date		

General Control

☐ Autom.batch determ.   ☐ Rounding permitted   ☐ Order qty = 1

Transaction Flow

Incompletion Proced.	20	Standard Item	Screen Seq.Grp	N
PartnerDetermProced.	N	Standard item		
TextDetermProcedure	Z1	Packing	Status Profile	
Item Cat.Stats.Group	1	Order, Debit Memo	☐ Create PO Automatic.	

Bill of Material/Configuration

Config. Strategy

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Accounting Documents – FB03

Display Document: Initial Screen

Document List   First Item   Editing Options

Keys for Entry View

Document Number

Company Code

Fiscal Year

Accounting Documents – FB03

Accounting Documents – FB03

Accounting Documents – FB03

Document   Edit   Goto   Extras   Settings   Environment   System   Help

Display Document: Data Entry View

Taxes   Display Currency   General Ledger View

Data Entry View

Document Number	1004912566	Company Code	2000	Fiscal Year	2014
Document Date	01.01.2015	Posting Date	01.01.2015	Period	10
Reference	1004912566	Cross-CC no.			
Currency	INR	Texts exist	☐	Ledger Group	

C_	Itm	PK	S	Account	Description	Amount	Curr.	Tx	Trs	Material	Profit Center
20_	1	01		31200003	Shroff Enterprises	630,711.00	INR	A			
	2	50		31122000	Sal-Dom-Dlr-FG	534,600.00-	INR	A		FG2LLLETHALLL00001	210000
	3	50		32530001	ED clctd on sal	64,152.00-	INR	A		FG2LLLETHALLL00001	210000
	4	50		32530001	ED clctd on sal	1,283.00-	INR	A		FG2LLLETHALLL00001	210000
	5	50		32530001	ED clctd on sal	642.00-	INR	A		FG2LLLETHALLL00001	210000
	6	50		16622111	VAT pybl-BP 21	30,033.85-	INR	A	JN6		
	7	50		45290010	Rndg off-Sal	0.15-	INR	A		FG2LLLETHALLL00001	210000
	8	40		45000010	Discount on sal	2,835.00	INR			FG2LLLETHALLL00001	210000
	9	50		18719005	PL-Discount	2,835.00-	INR			FG2LLLETHALLL00001	210000

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Accounting Documents – FB03

Accounting Documents – FB03

Display Document: General Ledger View

Taxes | Display Currency | Entry View

Document Display: Entry View (Ctrl+F10)

Data Entry View

Document Number	1004912566	Company Code	2000	Fiscal Year	2014
Document Date	01.01.2015	Posting Date	01.01.2015	Period	10
Reference	1004912566	Cross-CC no.			
Currency	INR	Texts exist	☐	Ledger Group	

Ledger 0L

Doc.	1004912566	FiscalYear	2014	Period	10

C	Itm	L.item	PK	S	Account	Description	Amount	Curr.	Tx	Trs	Material	Profit Center
20	1	000001	01		23203110	Dbtr-Dom	630,711.00	INR	A			210000
	2	000002	50		31122000	Sal-Dom-Dlr-FG	534,600.00-	INR	A		FG2LLLETHALLL00001	210000
	3	000003	50		32530001	ED clctd on sal	64,152.00-	INR	A		FG2LLLETHALLL00001	210000
	4	000004	50		32530001	ED clctd on sal	1,283.00-	INR	A		FG2LLLETHALLL00001	210000
	5	000005	50		32530001	ED clctd on sal	642.00-	INR	A		FG2LLLETHALLL00001	210000
	6	000006	50		16622111	VAT pybl-BP 21	30,033.85-	INR	A	JN6		210000
	7	000007	50		45290010	Rndg off-Sal	0.15-	INR	A		FG2LLLETHALLL00001	210000
	8	000008	40		45000010	Discount on sal	2,835.00	INR			FG2LLLETHALLL00001	210000
	9	000009	50		18719005	PL-Discount	2,835.00-	INR			FG2LLLETHALLL00001	210000

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Accounting Documents – FB03

Display Document: Data Entry View

Taxes | Display Currency | General Ledger View

Data Entry View

Document Number	1004912566	Company Code	2000	Fiscal Year	2014
Document Date	01.01.2015	Posting Date	01.01.2015	Period	10
Reference	1004912566	Cross-CC no.		
Currency	INR	Texts exist	☐	Ledger Group	

C_	Itm	PK	S	Account	Description	Amount	Curr.	Tx	Trs	Material	Profit Center
20_	1	01		31200003	Shroff Enterprises	630,711.00	INR	A			
	2	50		31122000	Sal-Dom-Dlr-FG	534,600.00-	INR	A		FG2LLLETHALLL00001	210000
	3	50		32530001	ED clctd on sal	64,152.00-	INR	A		FG2LLLETHALLL00001	210000
	4	50		32530001	ED clctd on sal	1,283.00-	INR	A		FG2LLLETHALLL00001	210000
	5	50		32530001	ED clctd on sal	642.00-	INR	A		FG2LLLETHALLL00001	210000
	6	50		16622111	VAT pybl-BP 21	30,033.85-	INR	A	IN6		
	7	50		45290010	Rndg off-Sal	0.15-	INR	A		FG2LLLETHALLL00001	210000
	8	40		45000010	Discount on sal	2,835.00	INR			FG2LLLETHALLL00001	210000
	9	50		18719005	PL-Discount	2,835.00-	INR			FG2LLLETHALLL00001	210000

Display Document: Tax data

Document Number	1004912566		Display in	INR

Tax items

G/L	Tax amount	Base amnt	Tx	Tax ra
16622111	30,033.85-	600,677.00-	A5	5.000
	Output VAT-5%			

Total 30,033.85-

Display Currency

SAP

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SAP Tables – SE16N

Table Display Edit Goto Extras System Help

General Table Display

Background Number of Entries All Entries

Table	11KP	SD Document:Delivery Header Data
Text table		☐ No texts
Layout		
Maximum no. of hits	500	☐ Maintain entries

Where-Used List (Ctrl+F2)

Selection Criteria

Fld name	O.	Fr.Value	To value	More	Output	Technical name
Client						MANDT
Delivery	⊕			⇨	✓	VBELN
Created by	⊕			⇨	✓	ERNAM
Time	⊕			⇨	✓	ERZET
Created on	⊕			⇨	✓	ERDAT
Sales district	⊕			⇨	✓	BZIRK
Shipping Point	⊕			⇨	✓	VSTEL
Sales Org.	⊕			⇨	✓	VKORG
Delivery Type	⊕			⇨	✓	LFART
Complete dlv.	⊕			⇨	✓	AUTLF
Order Combinat.	⊕			⇨	✓	KZAZU
Planned gds mvmt	⊕			⇨	✓	WADAT
Loading Date	⊕			⇨	✓	LDDAT
TranspPlngDate	⊕			⇨	✓	TDDAT

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SAP Tables – SE16N

SAP Tables
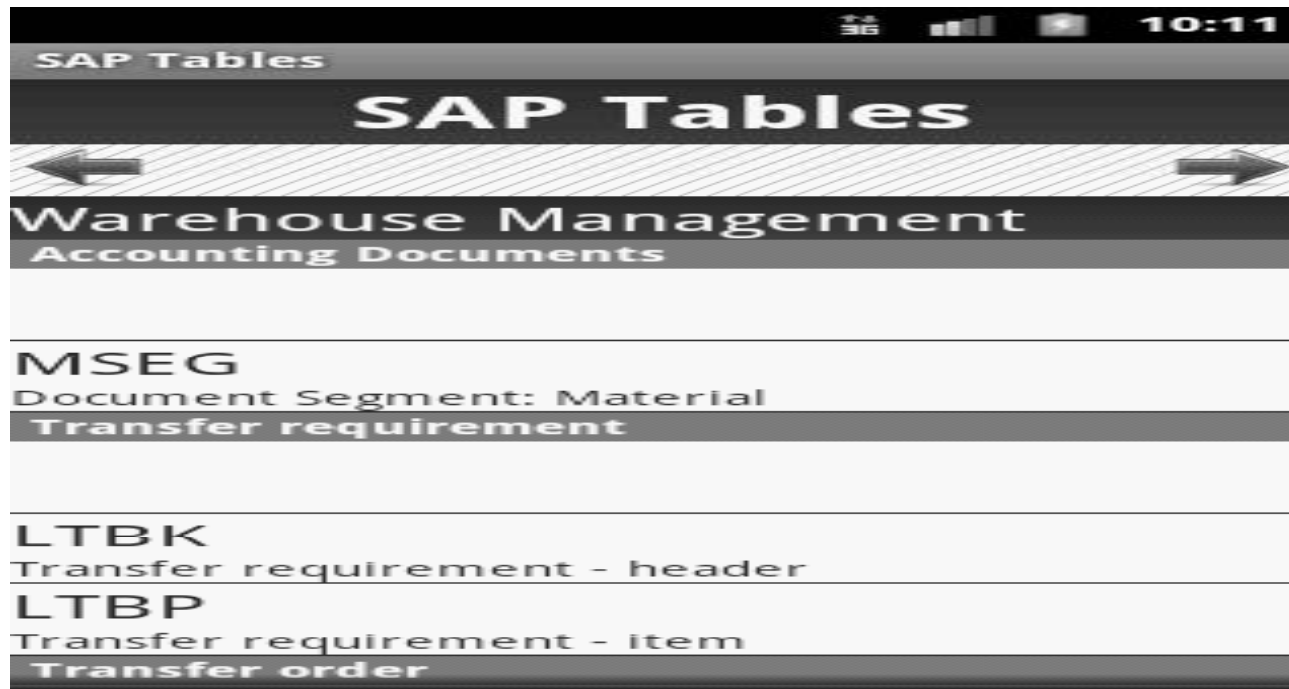
TABLES IN SAP.pdf

SAP Important Tcodes

SD –

XD01- Create Customer,
VA01- Create Sales Order,
VA05N- List Sales Order,
VL01N- Created Delivery
VF01- Created Billing
VF05N- List Billing
VFX3- Unposted Bills
VT01- Created Shipping - TM
J1IIN - Created Excise Invoice
FBL5N – Customer Ledger
MCTA - SIS: Customer Analysis - Selection
MCTC - SIS: Material Analysis - Selection
MCTE - SIS: Sales Org. Analysis - Selection
MCTK - SIS: Shipping Pt. Analysis Selection
MCV5 - Call Up Price List w.Stepped Display

SAP Important Tcodes

MM – Purchase & Inventory

ME51N - Create Purchase Requisition
ME21N - Create Purchase Order
ME2L - Purchase Orders by Vendor
ME2M - Purchase Orders by Material
ME2N - Purchase Orders by PO Number
ME2O - SC Stock Monitoring (Vendor)
ME11 - Create Purchasing Info Record
ME29N - Release purchase order
ME59 - Automatic Generation of POs

MIGO - Goods Movement
MB1B - Transfer Posting
MB1A - Goods Withdrawal
MB1C - Other Goods Receipts
MB5B - Stocks for Posting Date
MB51 - Material Doc. List , **MB52** - List of Warehouse Stocks on Hand
MB01 - Post Goods Receipt for PO
MB31 - Goods Receipt for Production Order
MB21 - Create Reservation
MB5L - List of Stock Values: Balances, **MB5T** - Stock in transit CC

SAP Important Tcodes

MM – Invoicing and Service

MIRO - Enter Incoming Invoice
MR21 - Price Change
MIR7 - Park Invoice
MRKO - Settle Consignment/Pipeline Liabs.
MR8M - Cancel Invoice Document
MRBR - Release Blocked Invoices
MRRL - Evaluated Receipt Settlement
MIR4 - Call MIRO - Change Status
MIRA - Fast Invoice Entry
MIR6 - Invoice Overview
MIR5 - Display List of Invoice Documents
MR22 - Material Debit/Credit

ML81N - Service Entry Sheet
AC03, AC01 - Service Master
ML81 - Maintain Service Entry Sheet
ME2S - Services per Purchase Order
ML84 - List of Service Entry Sheets

SAP Important Tcodes

MM – Production Process

CO11N - Single Screen Entry of Confirmations
COGI – Post process Faulty Goods Movements
COOISPI - Production Order Information System
CO02 - Change Production Order
CO01 - Create production order
CO15 - Enter Production order Confirmation
CO03 - Display Production Order
COHV - Mass Processing Production Orders
CO11 - Enter Time Ticket

MCRE - Material Usage Analysis: Selection
MCRX - PP-PI: Material Usage Analysis
MCRP - Matl consumptn anal.: repetitive mfg
MCP1 - SFIS: Operation Analysis Selection
MCP6 - Goods rcpt analysis: repetitive mfg
MCRI - Product Cost Analysis: Selection
MCPM - Production order anal.: Quantities
MCP7 - SFIS: Work Center Analysis Selection
MCP8 - Goods rcpt analysis: repetitive mfg
MCRO - Matl consumptn anal.: repetitive mfg

SAP Important Tcodes

FI- Process

FBL3N - G/L Account Line Items
FS00 - G/L acct master record maintenance
FBL5N - Customer Line Items
FBL1N - Vendor Line Items
FBCJ - Cash Journal
FAGLL03 - G/L Account Line Items (New)
FAGLB03 - Display Balances
FAGL_FC_VAL - Foreign Currency Valuation
FB50L - Enter G/L Account Doc for Ledger Grp
FSP0 - G/L acct master record in chrt/accts
FAGLGVTR - G/L: Balance Carried Forward
FSE2 - Change Financial Statement Version
GP12N - FI-SL: Change Plan Data
FBB1 - Post Foreign Currency Valn
FAGL3KEH - General Ledger: Default Profit Ctr

SAP Important Tcodes

FI- Asset Management Process

AFAB - Post depreciation
ASIM - Simulation of asset posting
AS91 - Create Old Asset
AS01 - Create Asset Master Record
AS02 - Change Asset Master Record
AW01N - Asset Explorer
ABUMN - Transfer within Company Code
AJAB - Year-End Closing
F-90 - Acquisition from purchase w. vendor
AJRW - Fiscal Year Change
AO90 - Account assignmt Acquisitions
ASKB - Periodic Asset Postings
AFAR - Recalculate Depreciation
ABT1N - Intercompany Asset Transfer
OASV - Enter G/L Account Postings

SAP Important Tcodes

How to Find TCODES

Other Audit Perspective
AIS

The audit information system (AIS) is an auditing tool that you can use to analyze security aspects of SAP NetWeaver Application Server (SAP NetWeaver AS) for ABAP system in detail.

AIS presents its information in the audit information structure (similar to the Implementation Guide) so that you can easily determine which activities you need to perform and which you have accomplished.

The following functions are available: Auditing procedures and documentation

Auditing evaluations

Audit data downloads

AIS is designed for business audits and systems audits. The audit information structure is designed with these types of audits in mind and we deliver predefined views based on these auditing types. You can modify these views or develop your own.

SAP also offers the Audit Information System Workplace (transaction SAIS), which provides basic auditing functions in SAP NetWeaver Application Server ABAP in a more comfortable menu structure arrangement.

Other Audit Perspective
Authorisation

Roles & Rights Audit as per SOD Matrix,

Control Audit – OtoC, PtoP, Mto I, Core Finance

Audit Log using SM20

Transaction Change – Master Data, Transaction (Environment-Changes)

Change Management Audit – Development, Configuration

Business Blueprint VS Configuration

Integration Audit – Automatic Posting

Master Data Completeness

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Thank You!