

SAP Audit Issues

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Objective

*Provide participants with an overview of the necessary aspects needed to understand **general SAP concepts**, and obtain **usable data extractions** from SAP.*



What is SAP?



- **In German...**

Systeme, Anwendungen, Produkte in der Datenverarbeitung

- **In English...**

Systems, Applications & Products in Data Processing

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SAP and ERP



Enterprise Resource Planning (ERP)

An information system designed to integrate and automate the business functions of medium and large companies

Purchasing
Manufacturing
Distribution
Personnel
Financials

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ERP Major Players



- **SAP**
- **Oracle / Peoplesoft**
- **J.D. Edwards**
- **SSA (BAAN/Marcam)**
- **JBA**
- **Lawson / Intenia**
- **QAD**

Learn the Lingo



- DOC Type
- DOC Number
- Goods Issue (GI)
- Goods Receipt GR)
- GRIR Account
- Intermediate Document (Idoc)
- Work Breakdown Structure (WBS)
- Assets Under Construction (AUC)

Learn the Lingo (cont'd)



- Stores Inventory
- Advanced Business Application Program (ABAP)
- Audit Information System (AIS)

SAP R/3 Overview



- System Architecture
- Business Process Overview
- System Modules
- Standard Tables
- Document Structure
- ABAP Functionality
- Audit Information System (AIS) Overview

SAP Architecture



Legacy

Separate ledger for A/P transactions

Differentiate transactions by GL Account

One entry contains all relevant information

VS

SAP

All transactions are included in one ledger

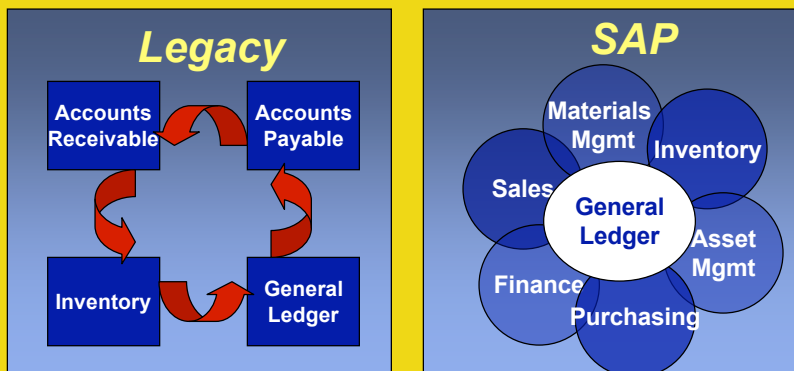
Differentiate transactions by document type

Relevant information recorded in multiple documents

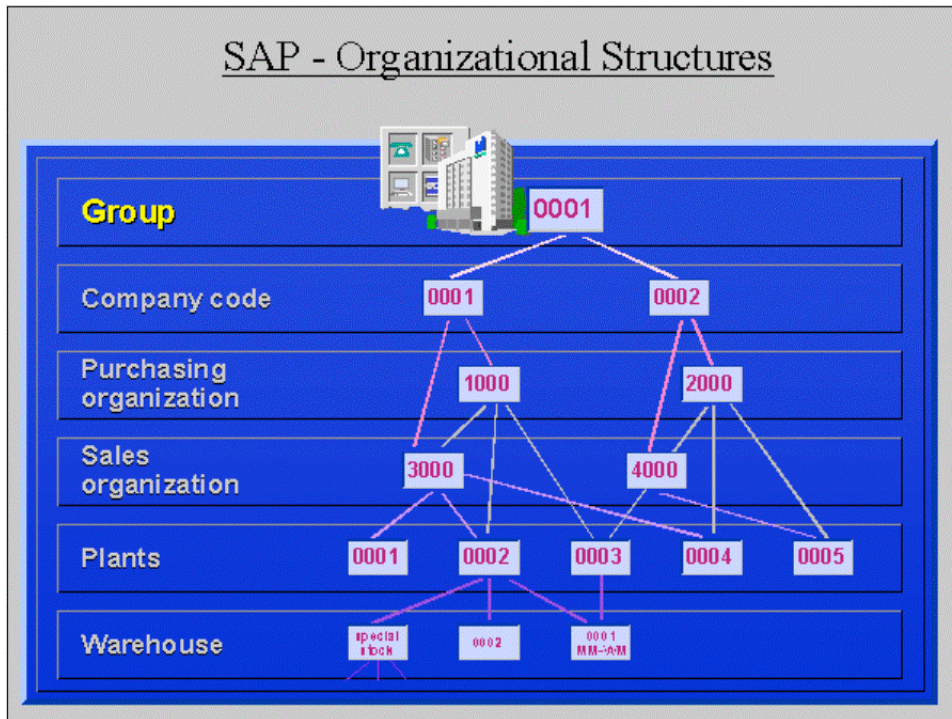
SAP Architecture (cont'd)



The basic structure of SAP is fundamentally different from that of a legacy system.



SAP - Organizational Structures



SAP Advantages

- One central database
- Real time processing
- Allows integration of legacy systems
- Document Balancing
- Manages Work flow

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SAP Disadvantages



- Data integrity must be maintained by all users
- Numerous tables and Documents
- GRIR must be reconciled
- Audit trails can be disappear in data extractions

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SAP Business Processes



Know that over 1,200 business processes can be defined by SAP!

- ✓ Highly flexible
- ✓ Customized to fit Company
- ✓ Can Choose implementation of
 - Modules
 - Business processes
 - Import of Legacy/External Data

SAP Business Processes



...Therefore every SAP installation is different!

- ✓ Have clear understanding of business
- ✓ Processes that are effected by SAP
- ✓ Document Types Used
- ✓ Data Integrity (Is it SAP created?)
- ✓ Data Reconciliation (Tolerances)

SAP R/3 Modules



- **CO – Controlling**
 - Plants, Chart of Accounts, Customer/Vendor Masters
- **FI - Financial Accounting**
 - Financials, G/L, A/P, A/R
- **SD - Sales and Distribution (Orders, Invoicing,EDI**
 - Orders, Invoicing, EDI
- **AM - Asset Management**
 - AUC account from A/P transactions
- **MM - Materials Management**
 - Procurement for Production and Consumption
- **PS - Project System (Construction Contractors)**

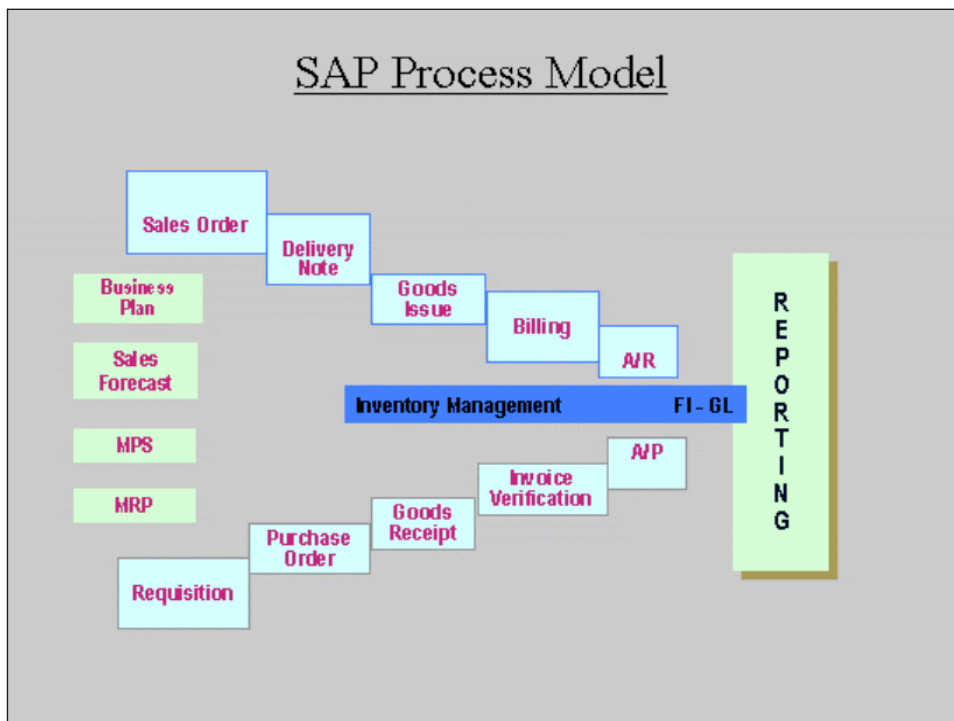
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SAP Tables-General

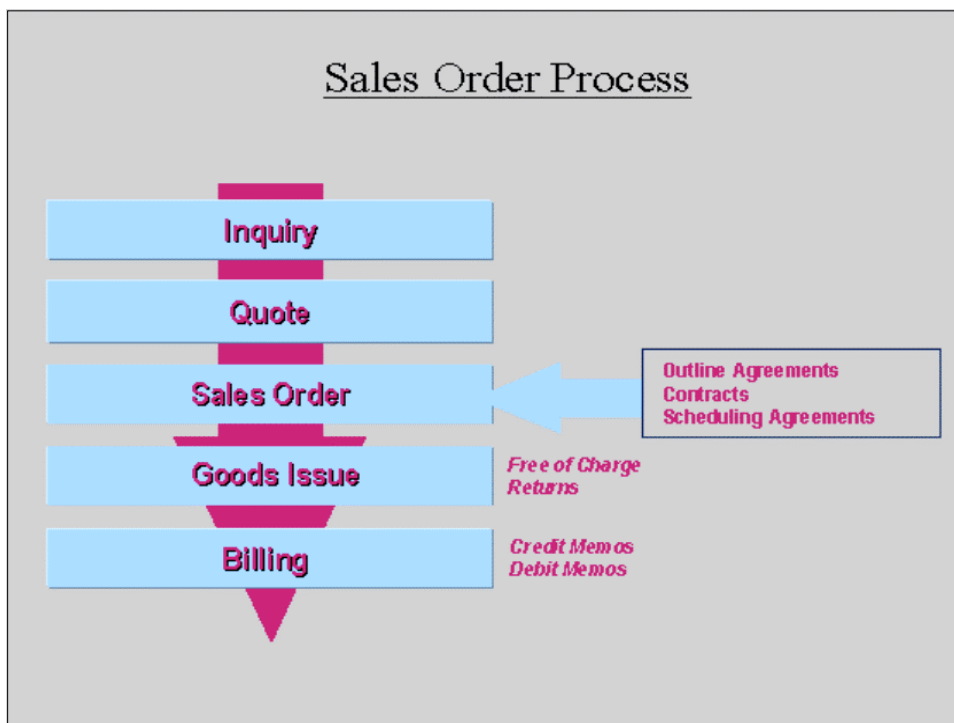


- **Master Tables**
 - Chart of Accounts
 - Customers
 - Vendors
 - Employee
- **Transactional data**
 - Sale Invoices (A/R)
 - Purchases (A/P)
 - Inventory Movements (MM)
 - Assets (AM)

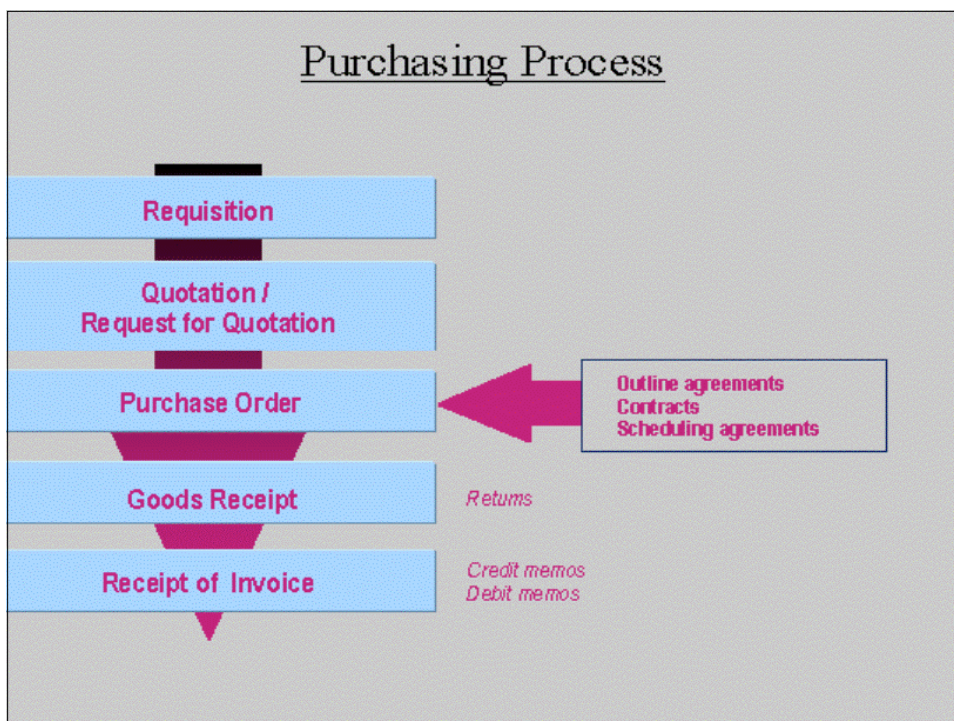
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Sales Order Process



Purchasing Process



SAP Tables-Examples



➤ Sales Tables

Customer Master (KNA1)
Sales Document Header (VBAK)
Sales Document Line Items (VBAP)
Billing Header Data (VBRK)
Billing Line Items (VBRP)

➤ A/P Tables

Vendor Master (LFB1 and LFA1)
PO Order Info (EKKO and EKPO)
Goods Receipt Line Items (EKBE)
Payables G/L Line Items (BKPF and BSEG)

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Audit Challenge



Challenges in SAP that don't exist in other systems!

To overcome these challenges

- Understand SAP document types
- Specific Number Ranges apply to each
- Specific G/L Accounts mapped to each Doc Type

AP Doc Types

KA-KZ (vary by company)
KI-Interface (Legacy/P-Cards)
KN and/or RN-Non PO (aka Net Invoice)
KR and/or RE-PO issued

Audit Challenge (cont'd)



Sales Doc Types

SA-SZ*

S1-S9*

**Will vary by Sales Channel / Revenue Source*

Other Document Types (MM, Stores Inventory)

WA-Goods Issue

WE-Goods Receipt

Used for Prepaid Expense Inventory Tracking

Goods receipt document contains link to Vendor
and A/P transaction info!

R/3 Financials (Financial Accounting -FI Module)



➤ **General Ledger**

Central pool of financial data

Real-time update of subledgers and GL

➤ **Special purpose Ledger**

User created combinations of entered data

**Generate data summaries for planning, allocation,
distribution**

Cost center accounting

R/3 Financials (Financial Accounting -FI Module)



Accounts Receivable and Payable - Subledgers

- Integrates with GL**
- Sales and Distribution**
- Materials Management.**
- Vendor and Customer information**
- Payment automation (EFT and check processing)**

R/3 Financials (Financial Accounting -FI Module)



Asset Accounting Subledger - (FI-AA)

- Captures asset related transactions**
- Country-specific depreciation charts**
- Compliance with local legal requirements**

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R/3 Financials (Financial Accounting -FI Module)



Asset Accounting Subledger - (FI-AA)

Follows asset life cycle

requisition to retirement

integration with Plant Maintenance component to manage

-machinery and equipment

-leased assets and assets under construction

Provides for interactive reporting

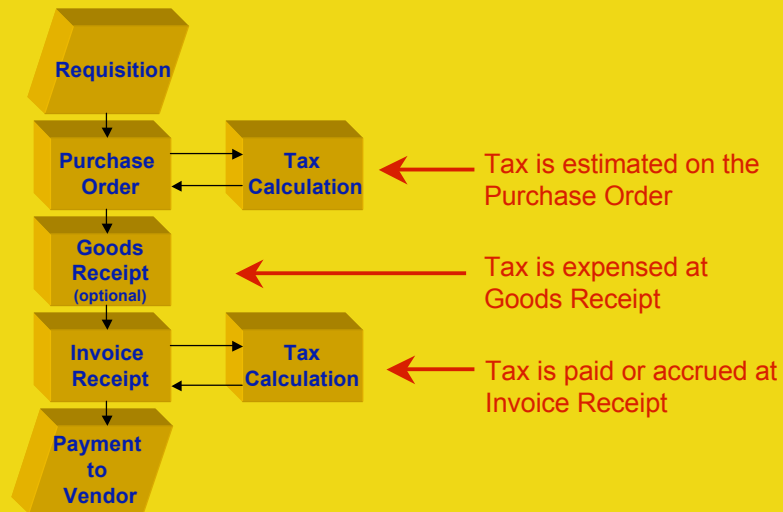
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Lessons Learned



- ❖ PO Purchases vs. Non PO
- ❖ GRIR Transactions
- ❖ Assets under Construction
- ❖ Multi Location Purchases
- ❖ MM Docs (Stores Accounts)
- ❖ P-cards
- ❖ EDI
- ❖ ERS (Evaluated Receipt Settlement)

Purchase Order Invoices



Purchase Order Invoice Example 1 Use Tax Accrued (No tax on vendor invoice)



Goods Receipt

678910	Supplies	\$10.83
210090	GR/IR Clearing	(\$10.83)

Invoice Receipt

210090	GR/IR Clearing	\$10.83
323456	Vendor ABC Company	(\$10.00)
193010	Use Tax Accrual	(\$.63)
193010	Use Tax Accrual	(\$.10)
193010	Use Tax Accrual	(\$.10)

Purchase Order Invoice Example 2
 Tax Paid to Vendor (Amounts include estimated tax)



Goods Receipt

678910	Supplies	\$10.83	
210090	GR/IR Clearing		(\$10.83)

Invoice Receipt

210090	GR/IR Clearing	\$10.83	
323456	Vendor ABC Company		(\$10.83)

Purchase Order Invoice Example 3
 Price Variance



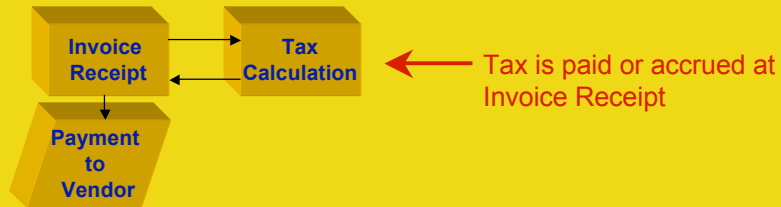
Goods Receipt

678910	Supplies	\$10.83	
210090	GR/IR Clearing		\$10.83)

Invoice Receipt

210090	GR/IR Clearing	\$10.83	
323456	Vendor ABC Company		(\$11.00)
193010	Use Tax Accrual		(\$.69)
193010	Use Tax Accrual		(\$.11)
193010	Use Tax Accrual		(\$.11)
190023	Price Variance	\$1.08	

Non-Purchase Order Invoice



Tax Paid to Vendor (Amounts include estimated tax)

Invoice

678910	Supplies	\$10.83	
323456	Vendor ABC Company		(\$10.83)

Non-Purchase Order Invoice Example 2

Use Tax Accrued (No tax on vendor invoice)

Invoice

678910	Supplies	\$10.83	
323456	Vendor ABC Company		(\$10.00)
193010	Use Tax Accrual		(\$.63)
193010	Use Tax Accrual		(\$.10)
193010	Use Tax Accrual		(\$.10)

ABAP/4



- **4 GL ABAP**
- **ABAP Repository Information system**
- **Data Modeler**
- **ABAP Dictionary**
- **Screen Painter/Menu Painter**
- **Program Editor**
- **Debugger**
- **Computer Aided test tool**
- **Performance Monitor**
- **Function Library**
- **Business Objects**
- **Team Development**
- **Standardized Interfaces**
- **Report Builder**

Business Audit



- **Balance Sheet**
- **P&L**
- **Accounts**
- **Vouchers**
- **SD,FI, MM, PP, HR , CO**

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Methods for Data Evaluation



- **ABAP (standard reports)**
- **Query (individual inquires)**
- **All downloadable**
 - Unconverted text
 - Excel
 - Word (Rich Text)
 - HTML
 - Print Files

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A.I.S. Audit Information System



- **System Audit**
 - System functions**
- **Business Audit**
 - Accounts**
 - Financial Statements**
 - Assets**
 - Liabilities**
 - P & L**

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A.I.S. Audit Information System



➤ Focus on GL (FI Module - Business Audit)

Complete record of business transactions

Individual transactions accessible any time

Balance sheet/profit and loss data

International capability

Customizable views of data

Auditor's Environment

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ACL SAP CSP



Master Document Query to ACL

(contains 76 fields (record length 577))

BKPF = Header info

BSEG = Detail info

<u>Table_Field</u>	<u>Description</u>
BKPF_BUKRS	<i>Company code</i>
BKPF_BLART	<i>Document type</i>
BKPF_MONAT	<i>Fiscal Period</i>
BSEG_SAKNR	<i>G/L account number</i>
BSEG_BUXEI	<i>Line item number</i>
BSEG_KOSTL	<i>Cost center</i>
BSEG_SGTXT	<i>Item text</i>

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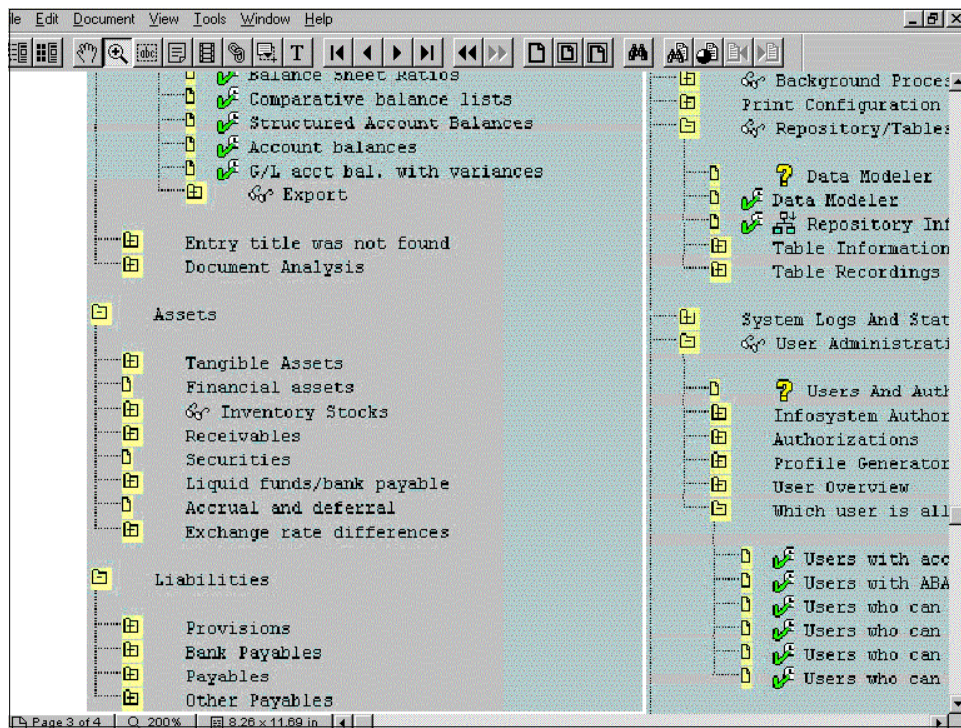
ACL SAP CSP



- **Complementary Service Partner**
- **SAP/AIS Conversion Utility**

Automatic ACL Document population and file mapping

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Other AIS Audit Software Tools



External Analysis Tools

- **IDEA**

Balance Sheet Evaluation

- BPA Baetge

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Web Hot Links



- www.sapfans.com
- www.sap.com
- www.mysap.com
- www.asug.com*
- www.erpfans.com
- www.acl.com

*membership fee may be required

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Training



- **ACL Services**
www.acl.com
- **MIS Institute**
www.misti.com
- **SAP**
www.sap.com

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A.I.S Limitations



- **Needs to be turned on**
- **Standard Views/Reports**
- **Limited Online-Transaction Inquiry**
- **Can't access Historical Data**
- **Potential large volume of transactions**
- **Developed primarily for financial audit**

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Alternatives



- **DART (Data Retention Tool)**

 - IRS RevProc 98-25**

 - Historical Data**

 - Processor intensive**

 - Tie back checks to GL for control**

 - Proprietary file**

 - View of DART file for extract**

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Bolt-On Products



- **Vertex & Taxware**

- **Sales and Use Tax calculation engines**

 - based on expanded jurisdictional coding**

 - both maintain an audit trail database**

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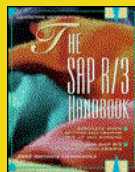
Audit Recommendations



- **Know the lingo**
- **Suggest who should be at EDP Conference**
 - Tax Manager
 - Key MIS personnel
 - ABAP programmer(s)
- **EDP Auditor Training**
 - SAP Overview
 - AIS
 - ABAP/4
 - Taxware
 - Vertex

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Reading Material



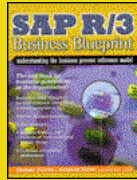
The Sap R/3 Handbook
Jose Antonio Hernandez
Format: Paperback, 1st ed., 969pp.
ISBN: 0070331219
Publisher: McGraw-Hill Companies, The
Pub. Date: January 1998 \$59.95



10 Minute Guide to SAP R/3
Simon Sharpe Deanna Wright
Format: Paperback, 192pp.
ISBN: 0789708981
Publisher: Que
Pub. Date: March 1997 \$14.99

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Reading Material (cont'd)



SAP R/3 Business Blueprint
Thomas Curran Gerhard Keller Andrew Ladd
Format: Paperback, 1st ed., 300pp.
ISBN: 0135211476
Publisher: Prentice Hall
Pub. Date: August 1997 \$49.99



Special Edition Using Sap R/3)
Jonathan Blain
Format: Hardcover, 3rd ed., 1164pp.
ISBN: 0789718219
Publisher: Que
Pub. Date: December 1998 \$75.00

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Reading Material (cont'd)



Using SAP R/3: Special Edition ASAP World Consultancy
With Gray Elkington Jonathan Blain
Format: Hardcover, 2nd ed., 1264pp.
ISBN: 0789713519 \$ 75.00



Administering Sap R/3: The Fi-Financial Accounting and CO-Controlling Modules
ASAP World Consultancy
With David Sandison Bernard Dodd
Format: Hardcover, 1st ed., 496pp.
ISBN: 0789715481
Publisher: Que
Pub. Date: March 1998
Edition Desc: 1 ED \$49.99

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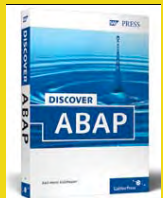
Reading Material (cont'd)

From SAP Press

http://www.sap-press.com/downloads/sap_press_catalog_2007_summer.pdf



Discover SAP
Available 10/2007
Nancy Muir, Ian Kimball
300 pages.
SAP Press: 2007 Catalog , H1989 \$ 39.95



Discover ABAP
Available 12/2007
Karl-Heinz Kunhauser
400 pages.
SAP Press: 2007 Catalog , H1993 \$ 39.95

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Reading Material (cont'd)

From SAP Press

http://www.sap-press.com/downloads/sap_press_catalog_2007_summer.pdf



SAP Business Explorer (BEx) Tools
Peter Scott
71 pages.
SAP Press: 2007 Catalog , H1989 \$ 85.00



US Tax and SAP
Michael Scott
Available 11/2007
320 pages.
SAP Press: 2007 Catalog , H1995 \$ 79.95

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Reading Material (cont'd)

From SAP Press

http://www.sap-press.com/downloads/sap_press_catalog_2007_summer.pdf



SAP ERP Financials: Configuration and Design

Naeem Arif

Available 1/2008

500 pages.

SAP Press: 2007 Catalog , H1997 \$ 79.95



SAP BW Data Retrieval / Mastering the ETL Process

Norbert Egger, Jean-Marie Fiechter, Ralf-Patrick

Sawicki, Robert Salzmann,

and Thomas Thielen

320 pages.

SAP Press: 2007 Catalog , H990 \$ 69.95

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Questions/Discussion

Thank You !

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