Legacy Data Migration to SAP ECC
A Practitioner’s Methodology

Code: 4103

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Agenda

- Key Learning Points
- Session Overview
- SAP Best Practices for Data Migration package
- Key Challenges in Data Migration
- Business Objects Data Services usage in Data Migration project
- Beyond Data Migration – What next?
- Q & A
Key Learning Points

- Learn how SAP Business Objects Data Services suite can be used as a platform to conduct end-to-end master data migration, from source extraction to target insertion into SAP ECC
- Learn how to manage data exceptions during the migration process caused by transformation of legacy data and reject records in the target system
- Learn how to leverage SAP Business Objects Data Services workflows to extend the data migration methodology to other data domains
Session Overview

This presentation will discuss the benefits of:

- Key process steps in a data migration using SAP Best Practices for Data Migration such as, data profiling, source to target SAP mapping validations, exception handling, cleansing and de-duplication of master data

- Obtaining a single cleansed and unified source of master information

- How SAP Business Objects Data Services can be used as the platform to conduct end-to-end vendor master migration, from source extraction to target insertion into SAP ECC

- How to leverage SAP Business Objects Data Services workflows to extend the data migration methodology to other data domains
SAP Best Practices
for
Data Migration package
Employ a Proven Data Migration Methodology

A methodology that is proven in the marketplace against numerous system deployments.

Aligned against the ASAP Roadmap for ease of coordination with system infrastructure projects

- Removes the mystery of migration steps
- Provides a framework for project scoping and planning
- Reduces project cycle time
- Reduces project risk, and increases predictability
- Steers inexperienced staff away from pitfalls
- Builds data integrity of the migrated data

Source: © SAP 2008
Data Migration Approach - Whiteboard

Legacy Data Environment

Data Staging and Test Environment

- Flat Files/Excel
- Databases
- Applications

Staging Area

- Extract & Profile
- Cleanse
- Transform
- Validate & Load
- Reconciliation

- Name Parsing
- Address Parsing & Correction
- Material/Product Parsing
- Matching
- Transform Data into SAP structure
- Business Validation Rules
- Automatic SAP Config Validation
- Pre-Built load routines for SAP Objects

Loading

- Performance Analysis
- Dashboards and Business Reporting

Target Environment

- Transparency, Communication and Governance,
- Performance Analysis
- Dashboards and Business Reporting

Source: © SAP 2008
There may be 300 attributes around customer

- 30 in one legacy app, 40 in another, etc…

Data templates to manage Customer data holistically is a best practice

Based on SAP® Business Objects™ Data Services, SAP’s Best Practices for Data Migration Pre-built mapping templates help accelerate the field and data mappings, involving the business users early in the project.

Source: © SAP 2008
Leverage Pre-configured AIO Workflows

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- Data Migration projects can have ~75% of the data objects started with prebuilt templates.
- Acceleration of field mapping, transform creation, and parameter setting reduces cycle time, increases job predictability, and streamlines the path to greater data integrity.

Using pre-built templates designed for SAP data objects results in a potential savings of 20-50% in time, and mitigation of Cost and Time over-run risk.

Source: © SAP 2008
Key Challenges in Data Migration project
Key Challenges - Costs and Time Over Runs

Traditional Steps:

- Extract & provision data
- Transformation
- Upload

Analysts

“More than 80% of data migration projects run over time and/or over budget. Cost overruns average 30%. Time overruns average 41%.”

Bloor, 2007

“80% of organizations… will underestimate the costs related to the data acquisition tasks by an average of 50 percent”

Gartner

Why?

- Data migration projects are poorly scoped and estimated. How often are they done?!
- Staffs lack expertise to plan a seasoned approach to data migration
- Business users are not rigorously interviewed for business rules and validation logic
- Latent data quality problems hold hidden surprises
- Go Lives are planned as a “one big upload”
- Cross-object dependencies are not discovered until late in the process

Source: © SAP 2008
Key Challenges - Data Issues are Identified Too Late in the Project

More than 75% of respondents experienced data management issues late in the project lifecycle.

Business Objects Data Services usage in Data Migration project
Key steps in Data Migration

Step-1: Extract and Profile data
Step-1a: Extract data

Data is extracted from multiple sources and is moved to a staging area for reference towards further data migration steps.
Data is profiled to help identify existing data quality issues in the source legacy, especially in terms of different patterns of phone number formats, inconsistent usage of data standards, duplicates in field values, etc.

Profiling of data helps gauge the potential cleansing effort required downstream.
Key steps in Data Migration

Step-2: Transform data
Step – 2a: Cleanse data

Address related data fields like Street, City, State, Zip can be cleansed against USPS or similar standard postal regulatory repositories.
Step – 2b: Cleanse data (continued...)
Step – 2c: Consolidate data (Identify duplicates and rationalize records)

Duplicates Identification is best performed “AFTER” cleansing and standardization of data.
Source data is mapped to corresponding target SAP ECC table structures, based on Data Mapping Templates. Transformed data is finally created in LSMW upload ready format.
Iterative Data Cleansing and Transformation

Real Experience. Real Advantage.

What Field Changes Remain?
What Errors Remain?

Realization

Evaluate Data
Collect Rules
Load Rules
Build Data Flows
Transform
Assess Results

Review Cycle Results and prepare for go/no go decision

Attained Target Quality Level: Zero Defects

Plan and adjust for next cycle

Final Preparation

Matching and consolidation of customer & vendor data is one example of iterative cleansing

J Edward
J Edwards Jr.
John Edwards
Johnathon Edwards
Johnathon Thomas Edwards
Key steps in Data Migration

Step-3: Validate data
Step 3: Validate data

- Extract reference data, configuration parameters, and linkage rules from the target and source systems.

- Use the configuration data to test and validate each ETL job run and TDC operation, BEFORE you load the data.
Key steps in Data Migration

Step-4: Execute Trial Data Loads
Execute Rigorous Trial Data Conversions (TDCs)

- Conduct a trial data load of Master, Transactional, and Historical data in sequence into a test/dev repository.
- Discovers load issues early and validates cross-object business rules and dependency checks.
- Eliminates Go Live surprises so the Go Live is a non-event.
Key steps in Data Migration

Step-5: Profile data from the target system
**Step-5: Data Profiling of Target**

Helps verify data quality and integrity of uploaded data in the target system.

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Beyond Data Migration – What Next?

- Conduct periodic profiling of data and institute data quality monitoring process

- Explore and Implement Enterprise Data Governance Program to enable real time cleansing of data at the point of entry

- Treat “Data” as an “Asset”, and propagate awareness of data quality culture across your organization
Thank you for participating.

Please remember to complete and return your evaluation form following this session.

For ongoing education in this area of focus, visit www.asug.com.

SESSION CODE:
4103