Overview of migration options for ABAP-based SAP systems to SAP HANA

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Migration options

Overview

Option 1: New installation
- You install new system on SAP HANA
- Either without changing existing solutions (greenfield)
- Or for transforming existing solution to SAP HANA by performing (selective) data migration

Option 2: Classical migration
- To bring original system on release supported by SAP HANA, you perform update/upgrade (if required)
- Then, you classically migrate your traditional database to SAP HANA

Option 3: One-step upgrade and migration with DMO
- You use database migration option (DMO) that combines upgrade and database migration in one step
- One process, one tool, one downtime
Migration options & tools

New installation for transformation

Overview

- Address changes to existing solution landscape by transformation with SAP Landscape Transformation software with reduced effort to build targeted landscape (such as via shell creation with carve-out options + system consolidation)
- Complemented by transformation services (such as Data Management Services or System Landscape Optimization consulting services)

Benefits

- Provides opportunity to correct design issues
  - System consolidation
  - Harmonize data as part of the migration (chart of account, master data)
- Leveraged flexibility by offering selective migration
  - Migrate only specific data without business disruption (such as of last two years)
  - Combine data cleansing – leave unused master data behind
  - Smoothly introduce new business processes (for example, new general ledger)
- Minimized downtime service available

Challenges

- Increased effort to deploy (addressed by services)

For more information:
- See SAP Service Marketplace at: http://service.sap.com/sapLT
- Contact: slo.consulting@sap.com – subject: HANA
Migration options

 Classical migration: overview

Overview

- You perform upgrade (if required) + heterogeneous system copy with classical migration tools

Benefits

- Results in nearly identical system
- Minimal impact on functional teams
- Separation of concerns

Challenges

- Typically requires extended downtime (depending on DB size) and several downtime windows (depending on scope)
- With inclusion of upgrade, fallback to original state only possible via restore
Migration options

Classical migration: phases

1. Prepare
   - Split dual-stack
   - Convert to Unicode

2. Update/Upgrade
   - Plan maintenance
   - Perform maintenance

3. Migrate
   - Migrate to SAP HANA
   - Post-activities

For more information, see SAP Service Marketplace at: http://scn.sap.com/docs/DOC-49744
Involved migration tools

3 One-step upgrade and migration with DMO: overview

**Database Migration Option (DMO) of Software Update Manager (SUM)**

**Prepare** ▶️ **Update/Upgrade** ▶️ **Migrate**

**Overview**
- Relevant steps in one tool and one process, “big bang” approach

**Benefits**
- Manual effort and error-proneness reduced
- Lower prerequisites for SAP and DB start releases
- Only intermediate fallback effort, as original database could be reactivated
- Downtime optimized (depending on scenario)
- Only one downtime phase
Migration options

3. One-step upgrade and migration with DMO – phases during the procedure

1. Upgrade “Prepare”
2. Execute Upgrade (until downtime phase)
3. Switch database connection
4. Migrate application data (incl. data conversion)
5. Finalize upgrade
6. Start SAP HANA-based system

Setup SAP HANA specifics (client, schema …)

For more information, see SAP Service Marketplace at:
http://scn.sap.com/docs/DOC-49580
Choosing the right option
Standard recommendation

General Recommendation
- DMO
  is the standard procedure for migrations to SAP HANA – profit from a simplified migration to SAP HANA with minimized overall project costs!

Reasonable Alternative
- Classical migration
  If DMO does not fit your requirements, consider to use classical migration with software provisioning manager (continuously improved for this migration use case)

Possible Exception
- New installation for transformation
  In addition, there are further migration procedures for special use cases, such as system consolidation or carve-out with SLO Shell Creation

For more information, see end-to-end implementation guides available at:
- [http://help.sap.com/nw74/#section7](http://help.sap.com/nw74/#section7) (SAP NetWeaver ABAP 7.4)
- [http://help.sap.com/nw731bwhana#section2](http://help.sap.com/nw731bwhana#section2) (SAP NetWeaver BW)
Migration service offerings
SAP Rapid Deployment solutions and SAP Active Global Support offerings

SAP Rapid Deployment Solutions
A complete solution
Fast
- Quickly address specific needs
- Gain fast time to value with seamless rapid-deployment tools, embedded best practices
- Speed end-user adoption with guides and educational materials
Simple
- Clearly priced services and project time frames – help ensure a predictable outcome
- Modular yet integrated solutions – help ensure long-term landscape integrity
- Support across all environments (on-premise, mobile, and cloud) – leveraging the cloud to accelerate projects and deployment
Deployed in weeks

For more information, see SAP Service Marketplace at: http://service.sap.com/rds

SAP Active Global Support
Holistic approach based on proven best practices

- Project Management
  Define, drive and control milestones and Q-gates
- Architecture & Infrastructure
  Define infrastructure and landscape architecture to fulfill requirements of migration as well as operation after Go-Live
- Migration Tasks
  Ensure that migration tasks are executed along proven plan and approach and based on best practices for procedures and configurations
- Performance & Scalability
  Ensure performance, throughput, scalability, availability. Define technical architecture and infrastructure
- Operational Readiness
  Ensure that procedures, tools and skills are adequate to run new solution safely and efficiently

One end-to-end methodology – implemented in SAP Solution Manager

For more information, approach your local AGS contact person
Summary

1. Database Migration Option has become the standard SAP HANA migration option – one tool for an optimized migration procedure to SAP HANA

2. In case of special requirements (for example, in terms of landscape transformation), SAP offers additional options to come to SAP HANA

3. Service offerings allow a rapid and risk-mitigated migration to SAP HANA
Thank you

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