Rapid database migration of SAP BW to SAP HANA

V4.10   Customer

SAP

Contents

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Software Products and Landscape

SAP Consulting Overview

At-a-Glance: Rapid database migration of SAP BW to SAP HANA

Ready to run, a solution with fixed scope, predefined services at a predictable price with the flexibility for future extension.

Business Requirement

What is my pain?
- The lack of reporting performance as well as high data latency
- Complex IT landscapes and high IT workload
- Changes in the BW environment that result in disruption of the BW application
- Insufficient planning and security regarding effort and timeline for a database migration
- Having no certified resources to conduct technical database migration
- Having no end-to-end solution based on individual customer needs

What are my needs?
- Deliver superior reporting performance & have real-time data access
- Simulate more and plan faster
- Ensure superior loading performance
- Provide simplified maintenance
- Ensure flexibility with modeling
- Migrate without reimplementation and without disruption of existing scenario
- Work with simplified process due to streamlining of steps
- Ensure secured planning due to fixed price and timeline for migration
- Work with an end-to-end solution based on individual customer needs

Solution

Solution description
- The rapid database migration of SAP BW to SAP HANA enables customers to replace the underlying relational database of their SAP BW system with SAP HANA

In scope
- Project setup and reporting
- Kick off workshop
- Prerequisites check
- Technical Upgrade to the latest version: SAP BW 7.40 (latest SP level)
- Migration to the SAP HANA database by heterogeneous system copy:
  - One test migration – on copy of the PRD BW system (Optional: second test migration)
  - Migration of DEV and PRD system (Optional: migration of additional system(s))
- Follow-up activities after migration
- Support for going live

Learn more

❯ Supercharge SAP BW with SAP HANA

Agenda

Supercharge SAP BW with SAP HANA

Business challenges

- The lack of reporting performance as well as high data latency
- Complex IT landscapes and high IT workload
- Changes in the BW environment that result in disruption of the BW application
- Insufficient planning and security regarding effort and timeline for a database migration
- Having no certified resources to conduct technical database migration
- Having no end-to-end solution based on individual customer needs

There is a solution

- The rapid database migration of SAP BW to SAP HANA enables customers to replace the underlying relational database of their SAP BW system with SAP HANA

Scope covered

Results of the Strategy and Technical Design for SAP NetWeaver BW powered by SAP HANA

- ❑BW version
- ❑# of objects
- ❑Size of the database
- ❑Unicode readiness
- ❑Authorizations readiness
- ❑Data flows readiness
- ❑Legacy RDBMS
- ❑Level of customization
- ❑# of SAP and non-SAP data sources
- ❑…

Based on the results of the **Strategy and Technical Design for SAP NetWeaver BW powered by SAP HANA** the customer relevant services are determined and scoped, in order to provide an end-to-end Rapid Deployment Solution. Depending on the specific services needed the Rapid Deployment Solution will be sized.

BW Database Migration*

✓ **Unicode Conversion**

✓ **BW Technical Upgrade**

BW Authorization Migration**

BW Functional Upgrade**

BW Data Volume Optimization**

Project Configuration

- ❑Project plan
- ❑Efforts
- ❑Economical estimate
- ❑Deliverables
- ❑Delivery model
- ❑Resources
- ❑Architecture
- ❑…

RDS Scope Options

Additional Services

*BW Database Migration is mandatory

**in this example BW Authorization Migration, BW Functional Upgrade and BW Data Volume Optimization are not needed

Benefits for you

Business benefits

- Deliver superior Reporting Performance
- Have real-time data access
- Simulate more and Plan Faster!
- Ensure superior Loading Performance
- Provide simplified Maintenance
- Ensure flexibility with modeling
- Migrate without reimplementation and without disruption of existing scenario
- Work with simplified process due to streamlining of steps
- Ensure secured planning due to fixed price and timeline for migration
- Work with an end-to-end solution based on individual customer needs

Measurable success

- Implementation costs
- Implementation time

What is a Rapid-Deployment Solution?

SAP Rapid Deployment solutions
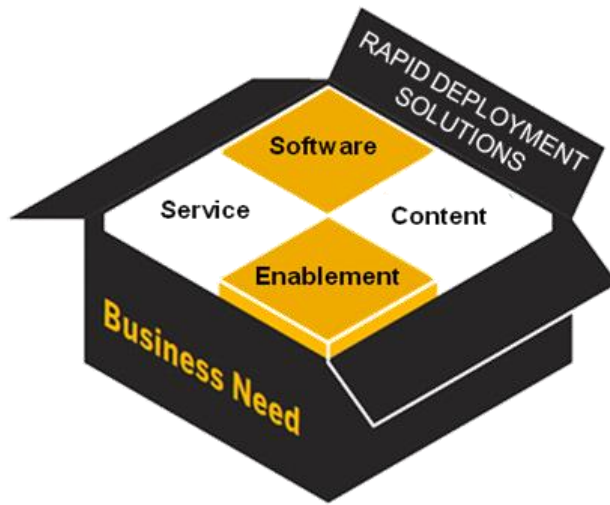
Solution deployed in weeks

Fast

- **Quickly address specific needs**

- **Fast time-to-value** with seamless rapid deployment tools, embedded best practices

- **Delivered by SAP or Partner**

Simple

- **Clearly priced services** and project timeframes – ensures a predictable outcome

- **Modular, yet integrated** solutions – ensures long-term landscape integrity

- **Support across all environments** (on premise, mobile and cloud) - leveraging the cloud to accelerate projects and deployment

Agenda
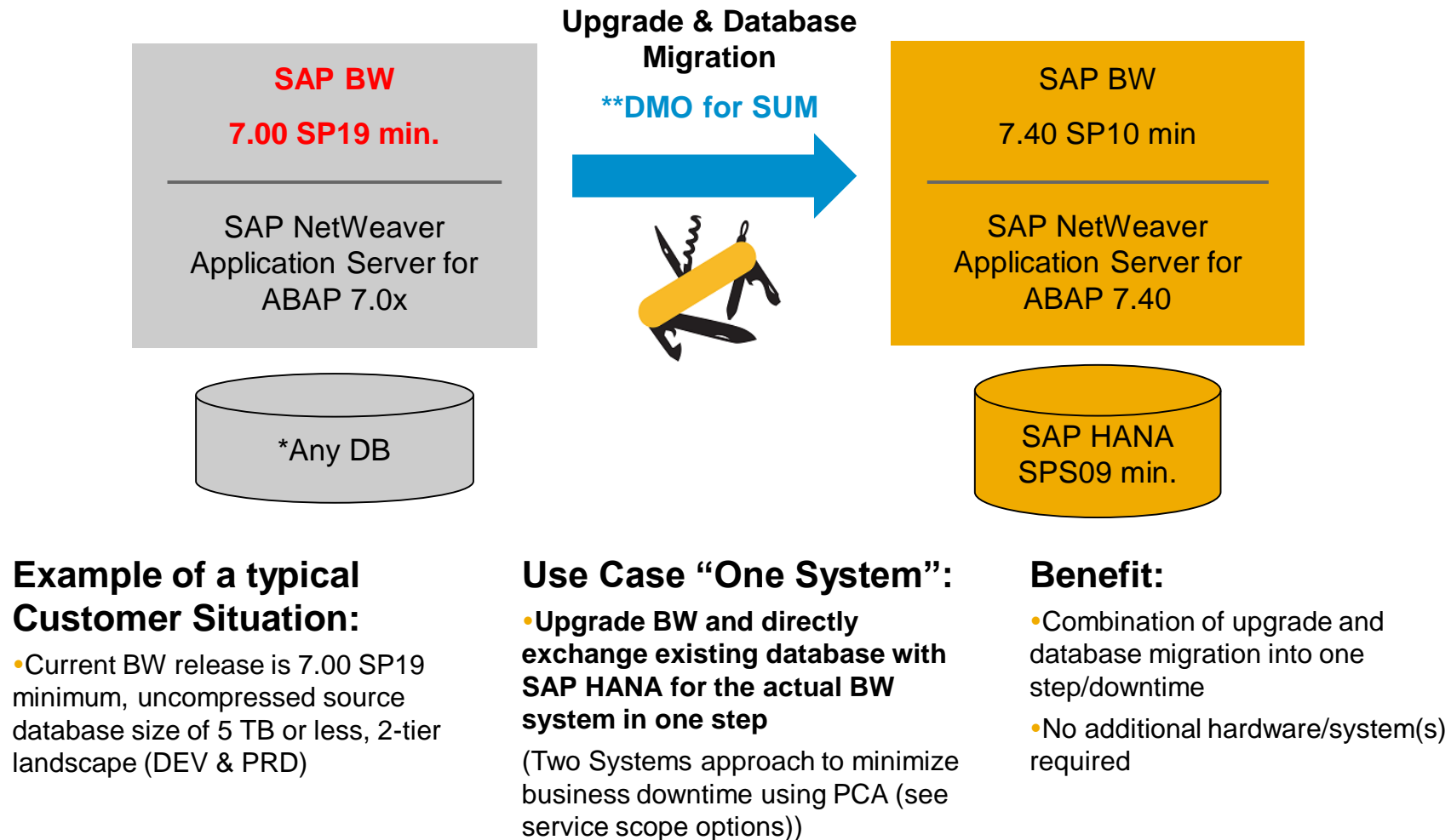
Rapid database migration of SAP NetWeaver BW to SAP HANA:
Scope and benefits

The rapid database migration of SAP BW to SAP HANA enables customers to replace the actual underlying relational database of their SAP BW system with SAP HANA as a database. This rapid deployment solution supports the migration of an existing SAP Business Warehouse installation to the SAP HANA database system without disruption of the existing Business Warehouse content and it provides an end-to-end solution to meet all necessary prerequisites. This new implementation approach provided with SAP's rapid deployment solutions which leverage out-of-the-box accelerators and predefined scope to help accelerate your adoption of SAP HANA to supercharge your SAP BW. The simplified process eliminates any migration guesswork and uncertainties regarding realization timeline, due to automation of steps as well as planning security due to standardization of the approach.

- Deliver superior reporting performance
- Have real-time data access
- Simulate more and plan faster
- Ensure superior loading performance
- Provide simplified maintenance
- Ensure flexibility with modeling
- Migrate without reimplementation and without disruption of existing scenario
- Work with simplified process due to streamlining of steps
- Ensure secured planning due to fixed price and timeline for migration
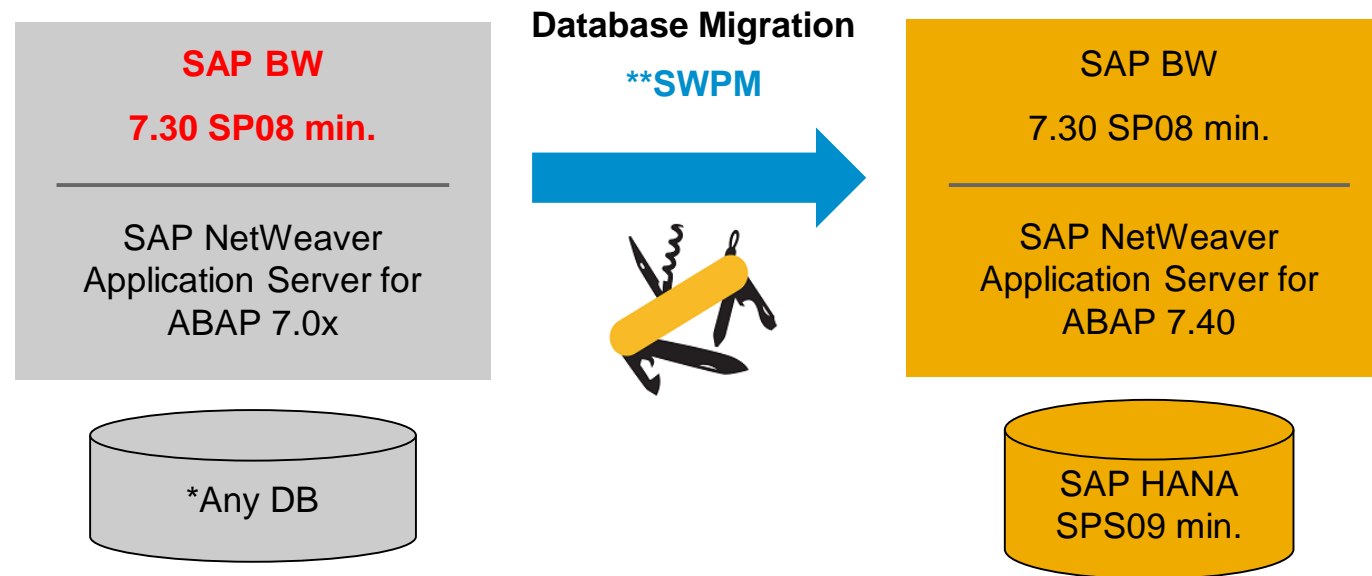- Work with an end-to-end solution based on individual customer needs

Scenario 1: Upgrade and Database Migration

SAP BW

7.00 SP19 min.

SAP NetWeaver
Application Server for
ABAP 7.0x

Upgrade & Database Migration

**DMO for SUM

SAP BW

7.40 SP10 min

SAP NetWeaver
Application Server for
ABAP 7.40

*Any DB

SAP HANA
SPS09 min.

Example of a typical Customer Situation:

• Current BW release is 7.00 SP19 minimum, uncompressed source database size of 5 TB or less, 2-tier landscape (DEV & PRD)

Use Case "One System":

• **Upgrade BW and directly exchange existing database with SAP HANA for the actual BW system in one step**

(Two Systems approach to minimize business downtime using PCA (see service scope options))

Benefit:

• Combination of upgrade and database migration into one step/downtime

• No additional hardware/system(s) required

* Release restrictions may apply
**DMO for SUM: Database Migration Option for Software Update Manager

Scenario 2: Database Migration

SAP BW

7.30 SP08 min.

SAP NetWeaver Application Server for ABAP 7.0x

*Any DB

Database Migration

**SWPM

SAP BW

7.30 SP08 min.

SAP NetWeaver Application Server for ABAP 7.40

SAP HANA SPS09 min.

Example of a typical Customer Situation:

- Current BW release is 7.30 SP08 minimum, uncompressed source database size of 5 TB or less, 2-tier landscape (DEV & PRD)
- **Same as Scenario 1 but without Upgrade**

* Release restrictions may apply
** SWPM: Software Provisioning Manager
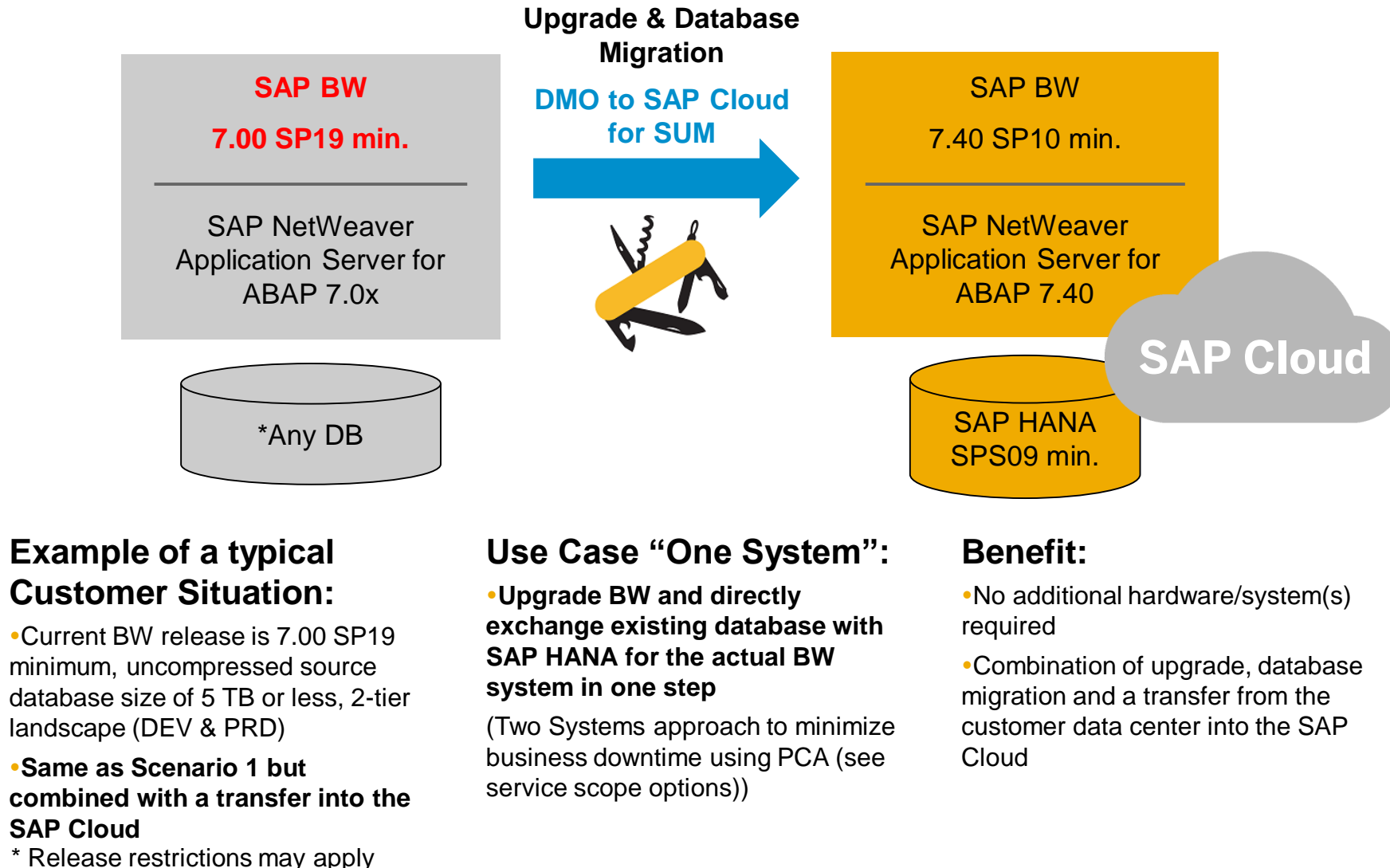
Use Case "One System":

Exchange existing database with SAP HANA for the actual

(Two Systems approach to minimize business downtime using PCA (see service scope options))

Benefit:

- Fastest/easiest scenario
- No additional hardware/system(s) required
- "Classical" approach used by consulting/customers since years

Scenario 3: Upgrade and Database Migration to SAP Cloud

Upgrade & Database Migration

SAP BW

7.00 SP19 min.

SAP NetWeaver
Application Server for
ABAP 7.0x

DMO to SAP Cloud for SUM

SAP BW

7.40 SP10 min.

SAP NetWeaver
Application Server for
ABAP 7.40

SAP Cloud

*Any DB

SAP HANA
SPS09 min.

Example of a typical Customer Situation:

- Current BW release is 7.00 SP19 minimum, uncompressed source database size of 5 TB or less, 2-tier landscape (DEV & PRD)

- **Same as Scenario 1 but combined with a transfer into the SAP Cloud**
* Release restrictions may apply

Use Case "One System":

- **Upgrade BW and directly exchange existing database with SAP HANA for the actual BW system in one step**

(Two Systems approach to minimize business downtime using PCA (see service scope options))

Benefit:

- No additional hardware/system(s) required

- Combination of upgrade, database migration and a transfer from the customer data center into the SAP Cloud

Service scope options

A service scope option is a combination of scope that can be removed to reduce the service price of the rapid-deployment solution.

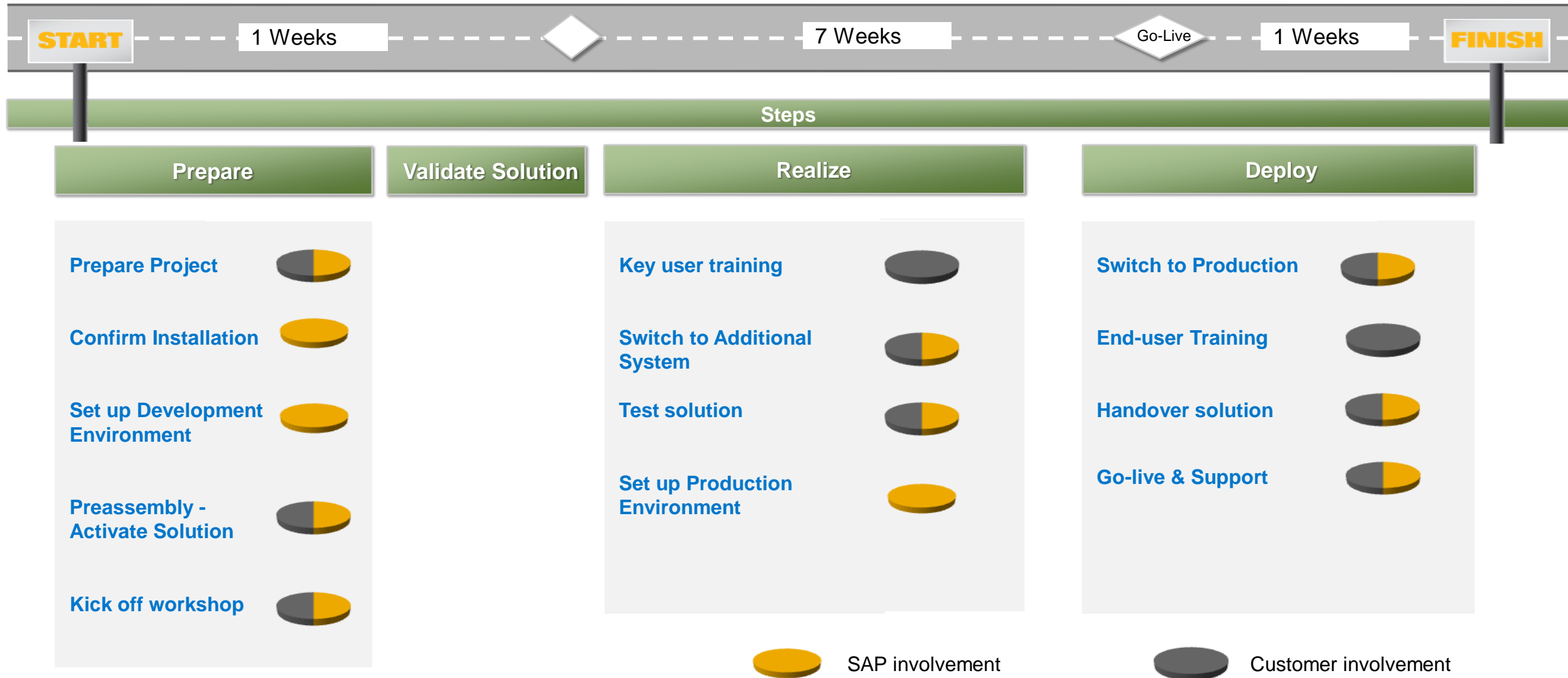| Scope options	Required	Scope items / Functionality delivered
Technical Upgrade and Database Migration	Mandatory for Scenario 1	• Technical upgrade and export of 2-tier landscape from any database and import to SAP HANA, including one test migration • Uncompressed source DB size: up to 20 TB. For systems above 10 TB an additional test migration is required
Database Migration (without Technical Upgrade)	Mandatory for Scenario 2	• Export of 2-tier landscape from any database and import to SAP HANA, includes one test migration • Uncompressed source DB size: up to 20 TB. For systems above 10 TB an additional test migration is required
Upgrade and Database Migration to SAP Cloud	Mandatory for Scenario 3	• Upgrade and database migration combined with a move into the SAP Cloud, including one test migration
Delta Queue Cloning with PCA	Optional	• PCA Configuration of Delta Queue Cloning to support the delta replication into 2 productively used systems in parallel • Used to significantly reduce business downtime during cutover
Additional System(s)	Optional	• Migration of additional system(s) on top of 2-tier (DEV and PRD) landscape • For systems above 10 TB an additional test migration is required
Unicode Conversion	Optional	• Conversion of non-Unicode SAP BW system to Unicode system (non-multiple code page systems) • Unicode Enablement (custom code adjustments) are not included

Partner's scope of service may vary.

Agenda

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Project Approach

START — 1 Weeks — ◇ — 7 Weeks — Go-Live — 1 Weeks — FINISH

Steps

Prepare

- **Prepare Project**
- **Confirm Installation**
- **Set up Development Environment**
- **Preassembly - Activate Solution**
- **Kick off workshop**

Validate Solution

Realize

- **Key user training**
- **Switch to Additional System**
- **Test solution**
- **Set up Production Environment**

Deploy

- **Switch to Production**
- **End-user Training**
- **Handover solution**
- **Go-live & Support**

● SAP involvement   ● Customer involvement

Project Team

Project Manager

Serves as a central contact person, from project initiation to go-live and support

On the SAP side, responsible for functional project management, coordination, support, and coaching of the customer's project manager, and so on

Technology Consultant

Responsible for the technical OS/DB migration, BW upgrade, technical configuration and operation of SAP HANA, know how transfer and technical testing

Application Consultant

Responsible for specific BW upgrade and migration tasks, InfoProvider conversion, know how transfer and BW specific testing

Responsibilities

What does SAP deliver?

- Project setup and reporting
- Kick off workshop
- Prerequisites check
- Technical Upgrade to the latest version: SAP BW 7.40 (latest SP level)
- Migration to the SAP HANA database by heterogeneous system copy:
  - One test migration (on copy of the PRD BW system) (Optional: additional test migration)
  - Migration of DEV and PRD system (Optional: additional system(s) migration)
- In-memory conversion of 30 InfoCubes
- Follow-up activities after migration
- Support for going live

Partner's scope of service may vary.

What do you have to do?

- Provide the IT infrastructure
- Provide fixed contact people in the business and IT departments
- Provide user and sufficient authorizations for technical consultants
- Perform all tasks listed in the prerequisite check list
- Provide technical support of the SAP Consulting team
- Provide prepared systems for the test migrations
- Perform specific administration tasks
- Acceptance testing by business key users
- Post Go-live support

Assemble to Order: Combine Services into One Project

Assemble to Order (A2O) combines multiple rapid-deployment solutions and engineered services into a single implementation project. It provides a faster lower cost alternative to the traditional design-based approach.

Rapid-deployment Solution

Rapid-deployment Solution

Engineered Service

+

Design Based Tasks for extra scope

+

Extra A2O tasks for design, integration, testing and governance.

=

Project

Provides a new way to deliver projects faster based on engineered services and implementation content

An engineered delivery model uses local, near-shore and offshore resources

Agenda

Which software is used?

SOFTWARE
- SAP NetWeaver BW 7.00 SP19 minimum, Unicode or Non-Unicode, ABAP only
- SAP Solution Manager 7.0 EHP1 SP23 or SAP Solution Manager 7.1 SP01 minimum
- Software Logistics Toolset 1.0 SP12 minimum
- SAP NetWeaver Landscape Virtualization Management 2.0 SP08 minimum
- SAP HANA Platform Edition 1.0 SPS09 minimum

HARDWARE
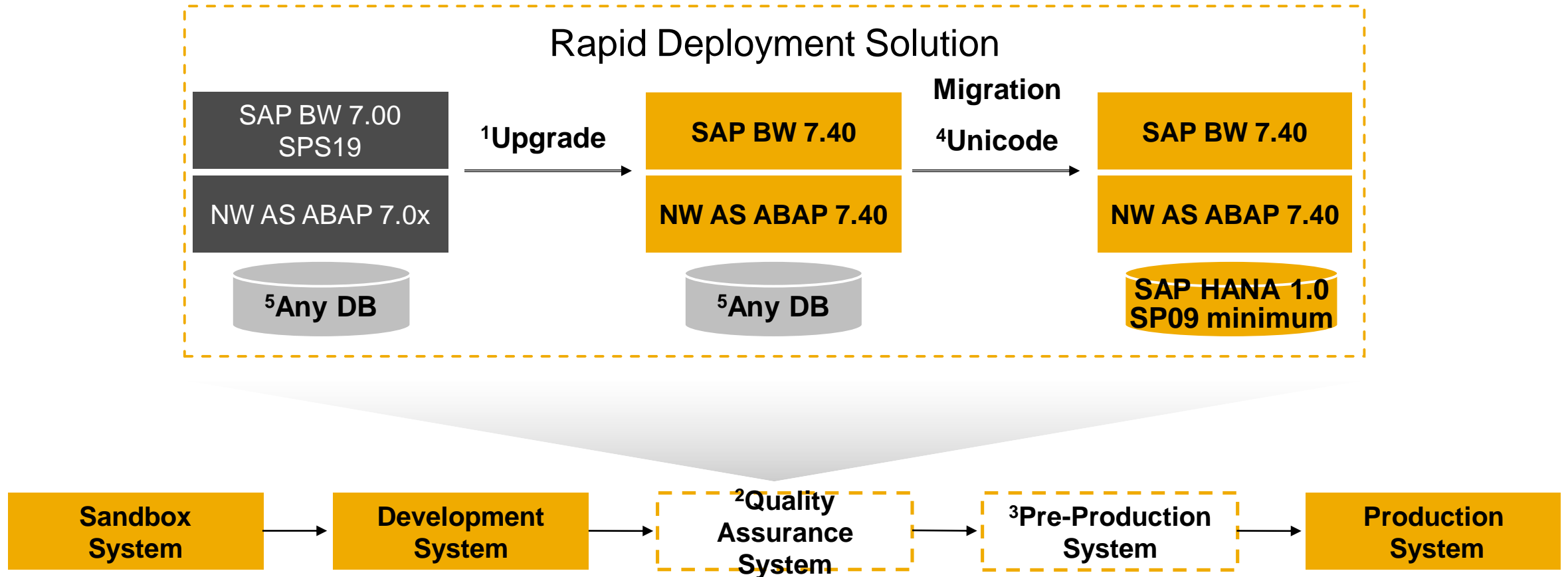- Your operating system platform must be 64-bit.

OPERATING SYSTEM
- For a comprehensive list of supported operating system releases, see the Product Availability Matrix (PAM) at: http://service.sap.com/pam

DATABASE
- Oracle 11.2 (10.2 with DMO)
- IBM DB2 LUW 10.1 (9.1 with DMO)
- MaxDB 7.9
- MS SQL server 2008
- DB2 for i61, 7.1 (not yet supported for DMO, see SAP Note 1875197)
- DB2 for z/OS V9, V10
- SAP ASE 15.7

System landscape

Rapid Deployment Solution

SAP BW 7.00 SPS19	[1]Upgrade →	SAP BW 7.40	Migration [4]Unicode →	SAP BW 7.40
NW AS ABAP 7.0x		NW AS ABAP 7.40		NW AS ABAP 7.40
[5]Any DB		[5]Any DB		SAP HANA 1.0 SP09 minimum

Sandbox System → Development System → [2]Quality Assurance System → [3]Pre-Production System → Production System

[1]Upgrade is optional
[2]QAS system is optional
[3]PRE-PROD system is optional
[4]Unicode Conversion is optional
[5]Release restrictions may apply

Agenda

ONE GLOBAL TEAM

Our consultants all over the world deliver SAP services to you, onsite as well as remote.

ALIGNMENT

We are closely aligned – ONE SAP to meet your needs best.

VAST EXPERIENCE

Nowhere else can you find that much experience on SAP solutions.

RISK MITIGATION

Following a proven delivery model ensures project success.

Thank you

Contact information:

F name MI. L name
Title
Address
Phone number

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The fastest way to run your business better