

SUM: the tool for **System Conversion to SAP S/4HANA**

Knowledge for you

Boris Rubarth, SAP SE, Software Logistics

February 2018

PUBLIC

Knowledge Transfer Sessions on Software Update Manager (SUM)

- ✓ (delivered*) **"Software Update Manager: Overview and Scenarios"**
- (delivered*) **"SUM: downtime optimizations like nZDM, ZDO in detail"**
- (delivered*) **"Database migration as part of SUM: DMO overview and tuning"**
- **Today** **"SUM: the tool for System Conversion to SAP S/4HANA"**

* See <https://webinars.sap.com/sap-user-groups-k4u/en/CrossTop>

Disclaimer

This presentation outlines our general product direction and should not be relied on in making a purchase decision. This presentation is not subject to your license agreement or any other agreement with SAP. SAP has no obligation to pursue any course of business outlined in this presentation or to develop or release any functionality mentioned in this presentation. This presentation and SAP's strategy and possible future developments are subject to change and may be changed by SAP at any time for any reason without notice. This document is provided without a warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. SAP assumes no responsibility for errors or omissions in this document, except if such damages were caused by SAP intentionally or grossly negligent.

Agenda SUM for System Conversion

What is System Conversion?

- What use cases? Which kind of systems?

How does it work?

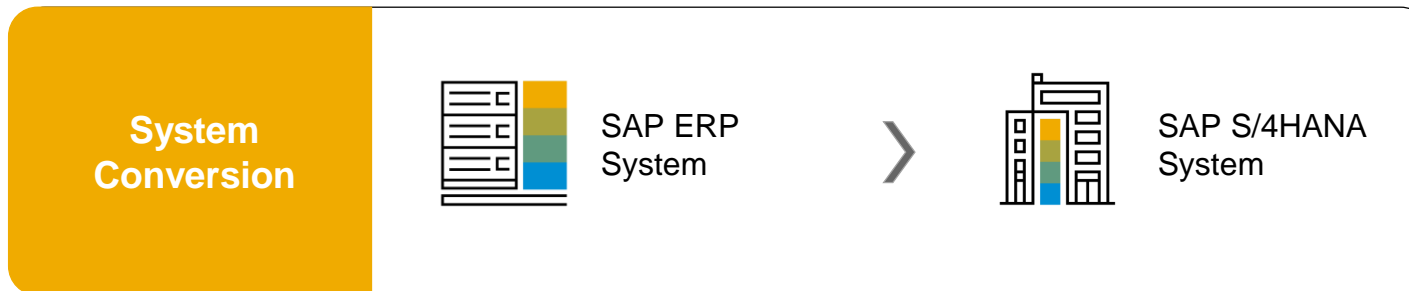
- Procedure details

What is the role of SUM?

- Aspects for technical conversion procedure

System Conversion: approach for a transition to SAP S/4HANA

- **System Conversion** is one approach to transition an SAP ERP System to SAP S/4HANA
- **Software Update Manager (SUM)** is the tool for the *technical* conversion execution
- **“Conversion”**:
 - SAP S/4HANA is a new product family
 - Technical process requires additional conversion tasks (compared to an upgrade)



Transition to SAP S/4HANA

Three different approaches to move to SAP S/4HANA

System Conversion



SAP ERP System



On-Premise

Bring your business processes to the new platform

- A complete technical in-place conversion of an existing SAP Business Suite ERP system to SAP S/4HANA.
- Adopt new innovations at your speed

New Implementation



SAP ERP or 3rd-party System



On-Premise

SAP S/4HANA Cloud

New implementation / re-implementation

Reengineering and process simplification based on latest innovations

- Implement innovative business processes with best-practice content on a new platform
- Perform initial data load
- Retire old landscape

Landscape Transformation



SAP ERP System Region A



SAP ERP System Region B



SAP ERP System Region C



On-Premise

SAP S/4HANA

Value driven data migration to the new platform

e.g. consolidation of current SAP Business Suite landscape into one global SAP S/4HANA system or selective data migration based on legal entities



The SAP S/4HANA family and conversion paths

SAP Business Suite

(e.g. BS7i2013)



SAP ERP System
(on AnyDB)

or



SAP ERP System
(on SAP HANA)

SAP S/4HANA family



SAP S/4HANA Cloud



SAP Simple Finance 1503
SAP S/4HANA Finance 1605

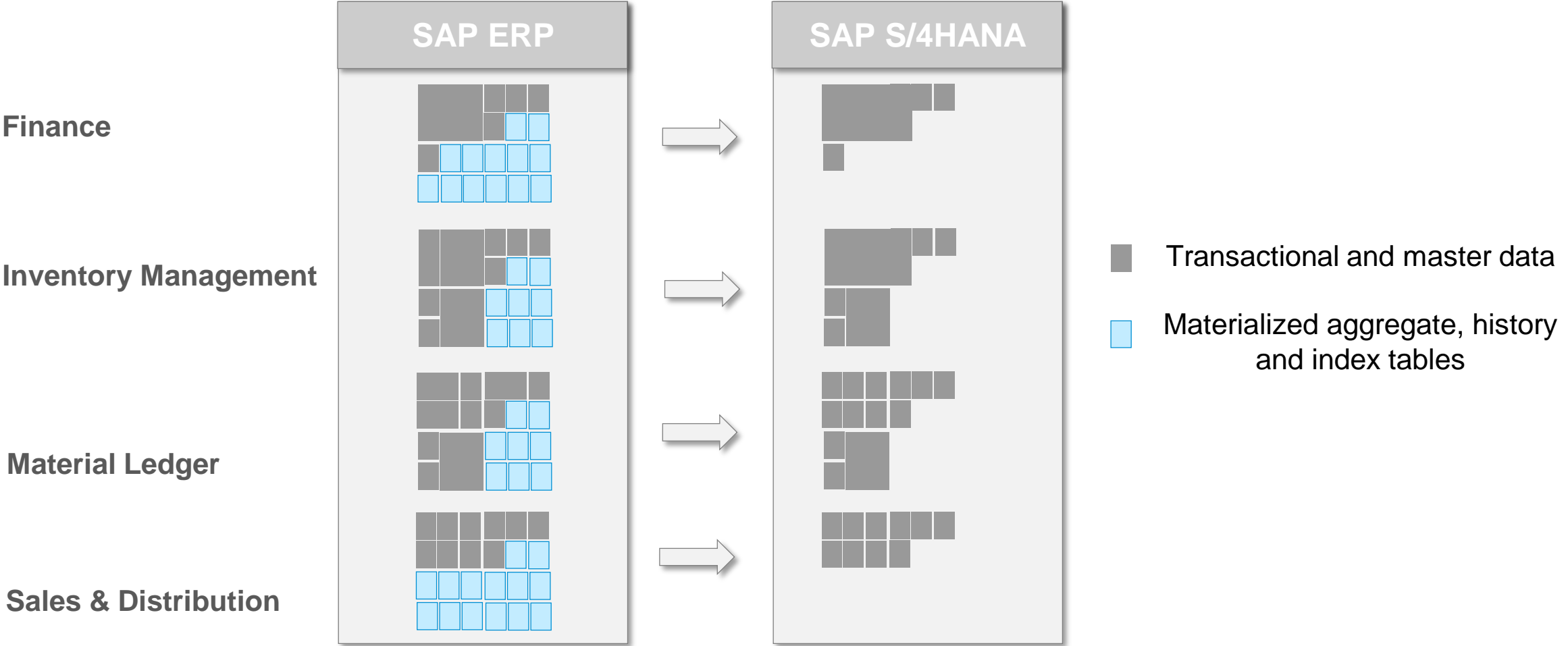


SAP S/4HANA
1511 | 1610 | 1709



SAP S/4HANA

Simplified data model



SAP S/4HANA

System Conversion – Transition Paths Overview



The transition to SAP S/4HANA does **not** require the source system to be already on SAP HANA Database

System Conversion Paths (basically)
From SAP Business Suite
(ERP6.0, EHP xx, Any DB or SAP HANA DB)
to SAP S/4HANA 1709 SPS00

Note 1: For older SAP Business Suite releases or systems on Non-Unicode an additional step to SAP ERP 6.0 EHPxx is required.

Note 2: System has to be an AS ABAP-only system. Dual-stack systems (AS ABAP and AS Java combined in one system) are not supported for the conversion. If your system is as dual-stack system, you have to split it before doing the conversion.

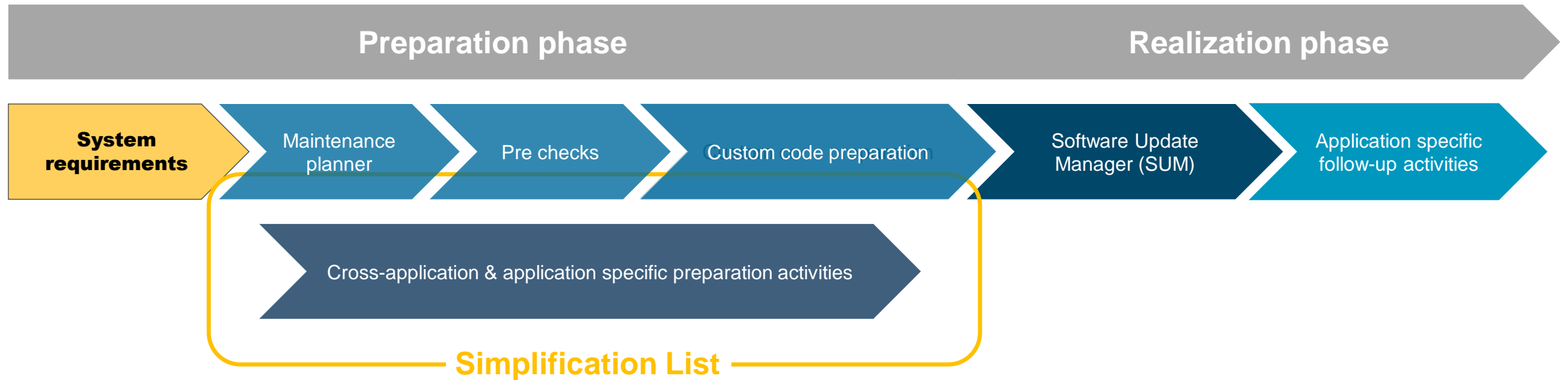
Note 3: SAP Suite on HANA customers who are planning a system conversion to SAP S/4HANA 1709 should first update the database from SAP HANA 1.0 to SAP HANA 2.0 and then do the system conversion (either in the same or a separate downtime).



Conversion requirements incl. min./max. SP-level on source system:
[2482453 - SAP S/4HANA 1709: Release Information Note](#)
[2346431 - SAP S/4HANA 1610: Release Information Note](#)

SAP S/4HANA system conversion

Overview technical process steps



Agenda SUM for System Conversion

What is System Conversion?

- What use cases? Which kind of systems?

How does it work?

- Procedure details

What is the role of SUM?

- Aspects for technical conversion procedure

SAP S/4HANA System Conversion Tools



- **System Requirements**
Source: ABAP only, Unicode, SAP ERP 6.0, on any database type
- **Maintenance Planner**
Checking source system (e.g. Add-Ons), planning conversion (software archives & stack.xml)
- **Simplification Item Checks**
Checking business prerequisites (e.g. Business Partner implementation)
- **Custom Code preparation**
Checking and adapting Custom Code for compatibility with new data model
- **Technical Conversion (SUM)**
Apply new software, execute conversion into new data model
- **Post-Activities**
Implement Fiori Apps

Agenda SUM for System Conversion

What is System Conversion?

- What use cases? Which kind of systems?

How does it work?

- Procedure details

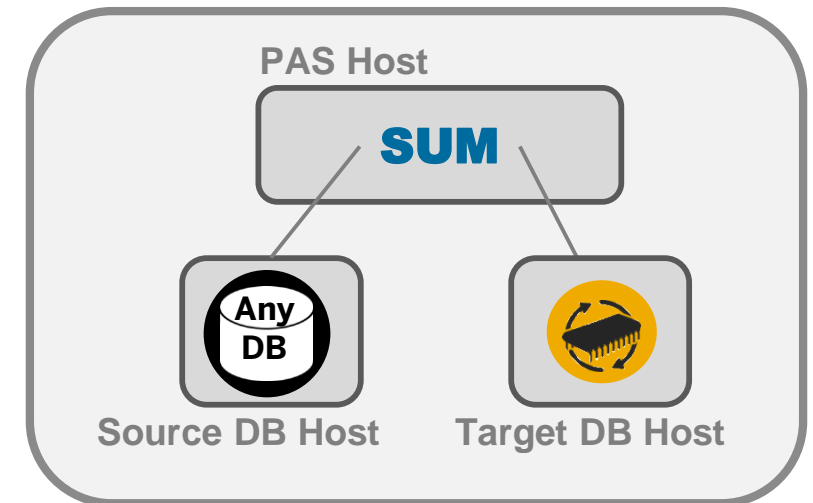
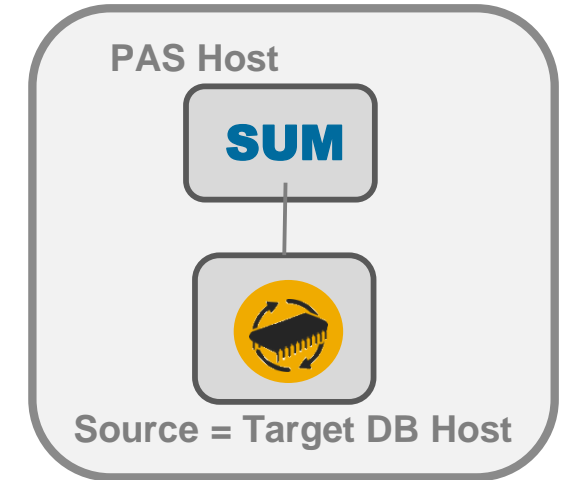
What is the role of SUM?

- Aspects for technical conversion procedure

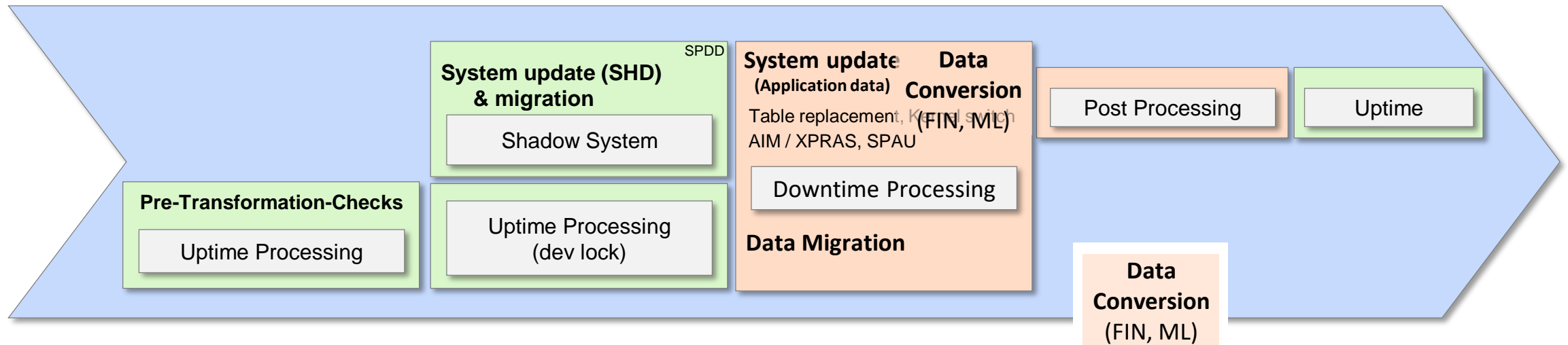
SAP S/4HANA

System conversion: technical Conversion by Software Update Manager (SUM)

- Technical Conversion executed by Software Update Manager (SUM) 2.0
- Conversion tasks for SUM:
 - **Database migration**
Provide SAP HANA database (if required)
 - **Software update**
Provide new applications and new tables
 - **Data conversion**
Conversion of table content to new data model



Technical Conversion – SUM Standard approach (high level)



Best Practices for Data Conversion

Things you should know about the data conversion:

- data conversion is performed by several ABAP reports
 - some of these reports will run in parallel processes
 - SAP is continuously improving those reports to increase performance and to reduce the runtime.
-
- **Make sure your system has at least:**
 - minimum of 20 dialog processes (some reports can use 30 at max, others have no limitation)
 - minimum of 16 batch processes
-
- For more details see:
SAP Note: 2351294 - SAP S/4HANA conversion: optimize parallel execution of conversion reports

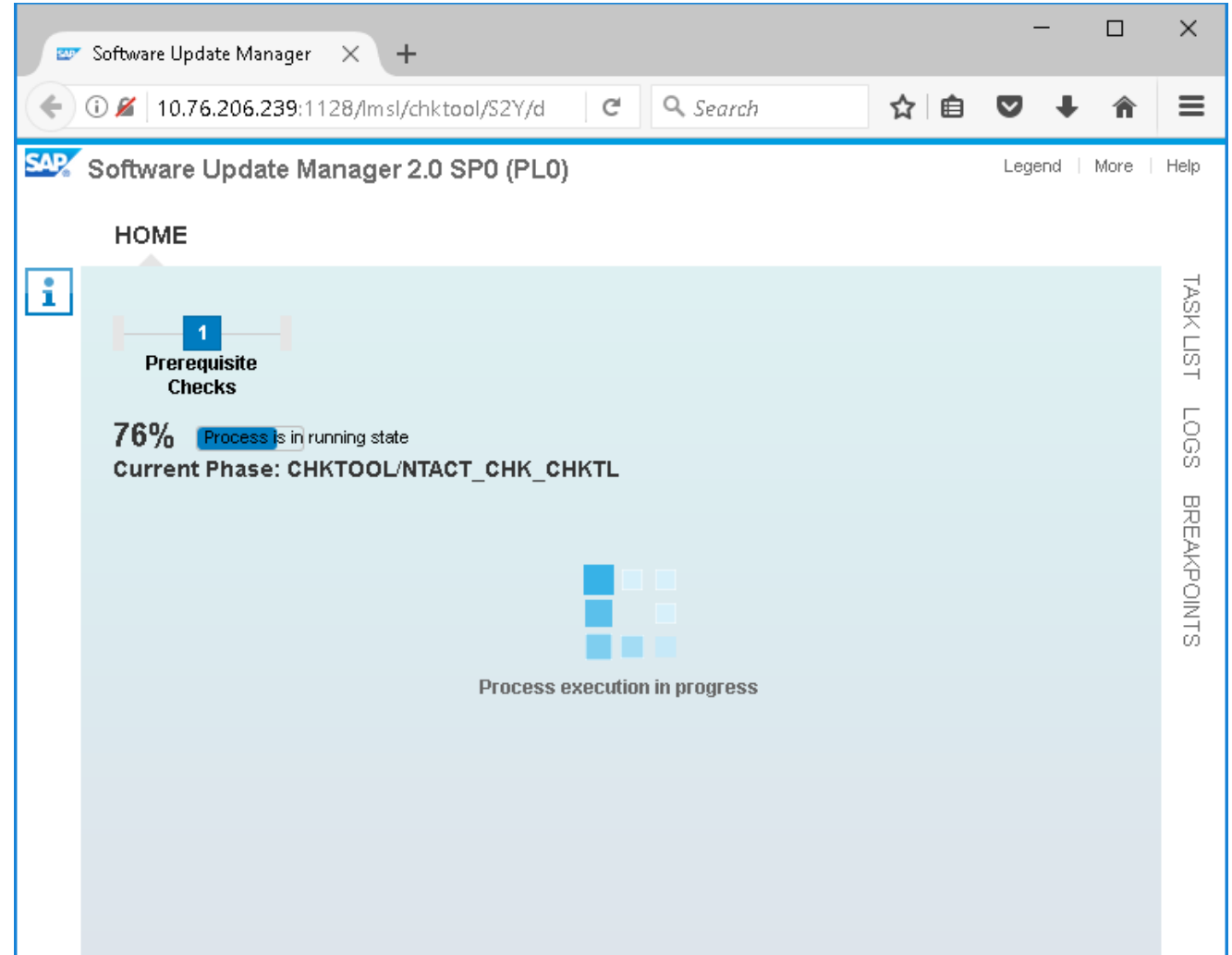
SUM Prerequisite Check provided with SUM 2.0

Allows quick and non-invasive check for requirements, e.g.:

- Source OS version
- Source database version
- SPAM patch level

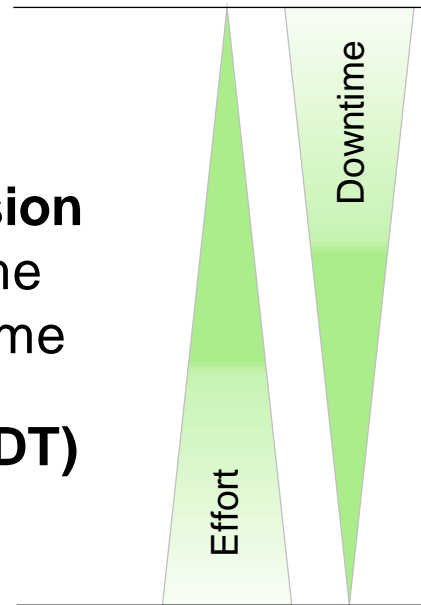
Uses different URL
(*chktool* instead of *sumabap*)

See SUM Conversion Guide, available at
<http://support.sap.com/sltoolset>



3 Approaches for System Conversion to SAP S/4HANA

- **Standard approach**
using Software update Manager (SUM)
with several optimizations
- **Downtime optimized System Conversion**
uses SUM as well, and reduces downtime
by moving data conversion partly to uptime
- **Near Zero Downtime Technology (NZDT)**
Customer specific approach
allows further reduction of downtime
based on a service project



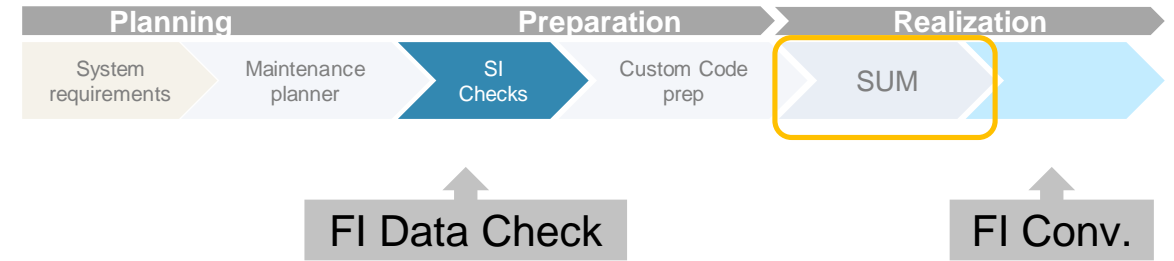
Decision about approach depends on several factors and should be taken after a **migration planning workshop** together with SAP.

Downtime-optimized Conversion:
currently only for source db non-HANA

Approach	Path:	1503	1605	1511	1610	1709
Standard		✓	✓	✓	✓	✓
Downtime Optimized		-	-	-	-	piloted
Customer Specific		✓	✓	-	✓	✓

SAP S/4HANA System Conversion

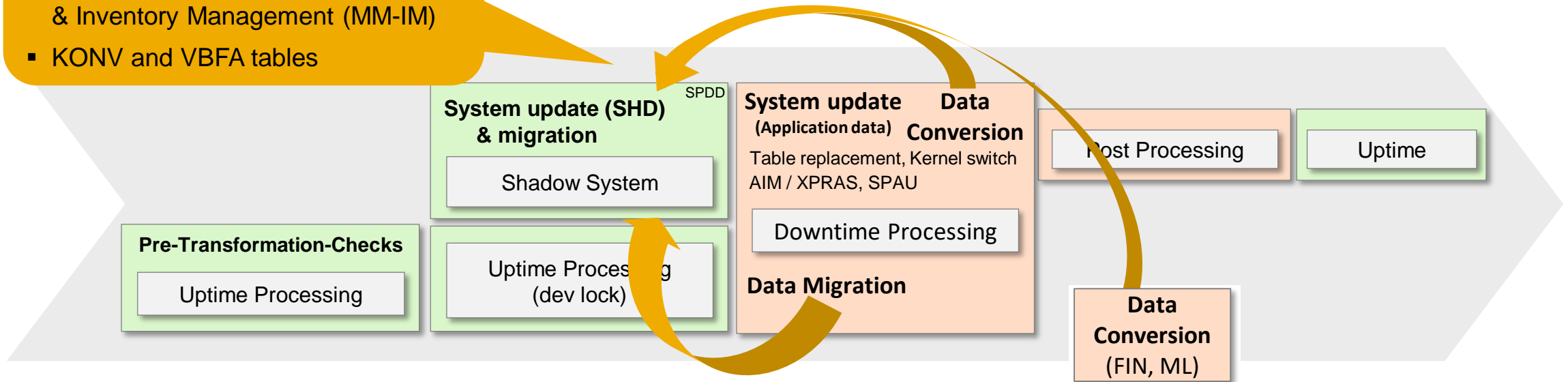
Downtime-optimized Conversion approach



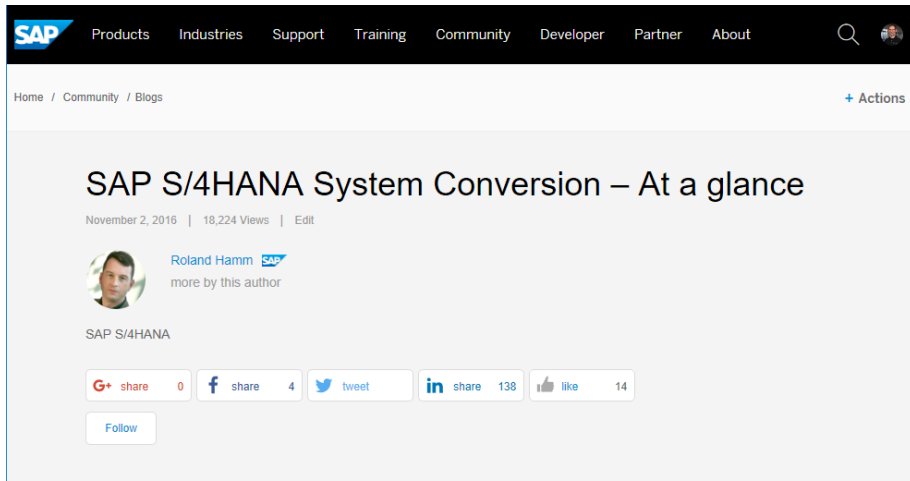
Downtime-optimized Conversion:

Conversion partially in uptime for

- FIN and Material Ledger (MM-ML) & Inventory Management (MM-IM)
- KONV and VBFA tables



Further Information for System Conversion



SAP Note 2532587
on System Conversion with SUM

SUM Conversion Guide
see support.sap.com/sltoolset

DMO with SUM 2.0 SP 01
<https://launchpad.support.sap.com/#/notes/2532577>

SAP Community blog on Conversion
<https://blogs.sap.com/2016/11/02/sap-s4hana-system-conversion-at-a-glance/>

SAP S/4HANA conversion Guide
help.sap.com/s4hana -> product documentation

Thank you.

Contact information:

Boris.Rubarth@sap.com

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

The information contained herein may be changed without prior notice. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and platforms, directions, and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, and they should not be relied upon in making purchasing decisions.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies.

See <http://global.sap.com/corporate-en/legal/copyright/index.epx> for additional trademark information and notices.