

The logo for SAP S/4HANA movement. It features the text "SAP S/4HANA" in yellow, "movement" in white, and a stylized arrow icon in purple and yellow to the right.

**SAP S/4HANA<sup>®</sup>**  
movement

Together, we make it happen.

# **Companions** for your SAP S/4HANA journey – the latest tools features

Update: June 2020

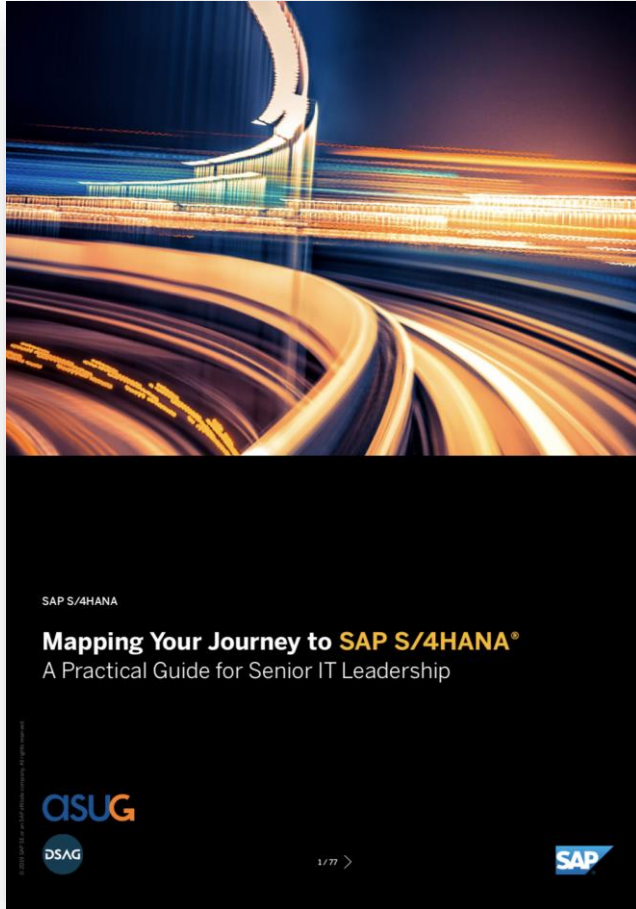
CUSTOMER

# Legal disclaimer

The information in this presentation is confidential and proprietary to SAP and may not be disclosed without the permission of SAP. This presentation is not subject to your license agreement or any other service or subscription agreement with SAP. SAP has 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's strategy and possible future developments, products, and platforms, directions, and functionality are all subject to change and may be changed by SAP 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. 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 noninfringement. This document is for informational purposes and may not be incorporated into a contract. SAP assumes no responsibility for errors or omissions in this document, except if such damages were caused by SAP's willful misconduct or gross negligence.

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, which speak only as of their dates, and they should not be relied upon in making purchasing decisions.

For all recent and planned innovations, potential data protection and privacy features include simplified deletion of personal data, reporting of personal data to an identified data subject, restricted access to personal data, masking of personal data, read access logging to special categories of personal data, change logging of personal data, and consent management mechanisms.



# Mapping your Journey to **SAP S/4HANA** – A practical guide for Senior IT Leadership

“Thank you to SAP for putting together this **must-read** document for customers exploring the migration to SAP S/4HANA.”

Geoff Scott and Chris Crone, ASUG

“**Valuable support** and practical tips for SAP customers who are dealing with extensions in their SAP S/4HANA projects.”

Ralf Peters, DSAG



# Join the SAP S/4HANA Movement

## Companions for your SAP S/4HANA journey – Tools from SAP

### For System Conversion



### For New Implementation



#### SAP Readiness Check

Assess functional & technical impact, understand the effort drivers, and plan mitigations



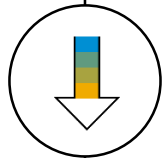
#### Check your data prior to conversion on SAP ERP

Customers & Vendors  
Finance data



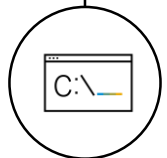
#### Custom code adaptation – ABAP Development Tools

SAP Code Inspector checks, Custom Code Migration app (also SaaS), Quick Fixes



#### Downtime-optimized conversion (doC) with Software Update Manager

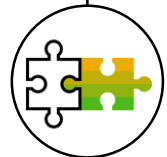
for a reduced technical downtime



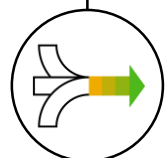
#### Other

SAP Solution Manager retrofit, ANST for automated SAP Notes detection, obsolete data handling,...

**SAP Cloud Platform Integration Advisor**  
with 10,000 new interfaces



**SAP S/4HANA migration cockpit**  
more ready-to-use business objects  
and object modeling capabilities

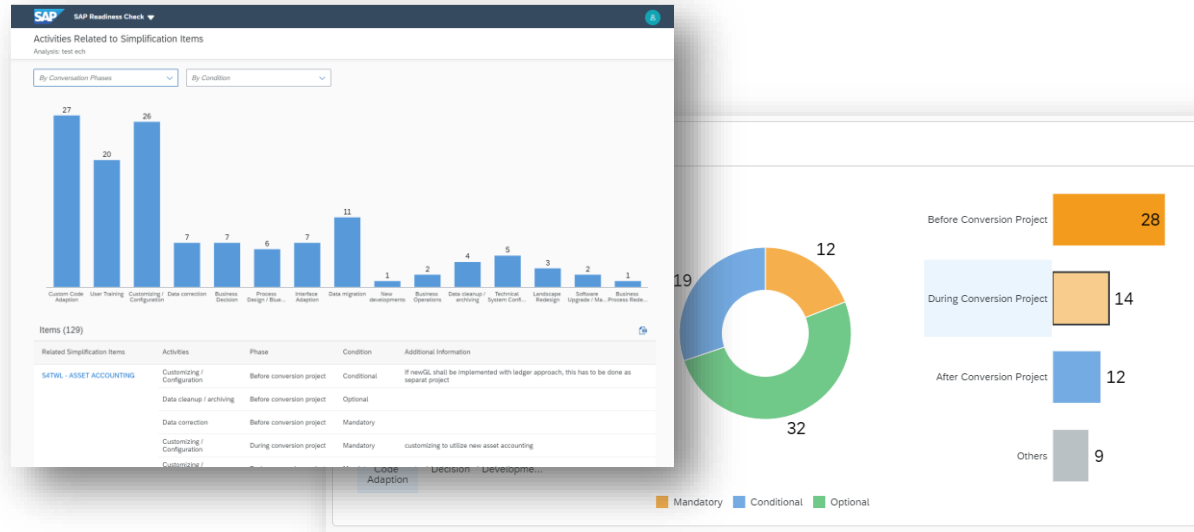


While SAP continues to improve these tools, customers should note that most of them are already **available and ready for use.**

# Conversions

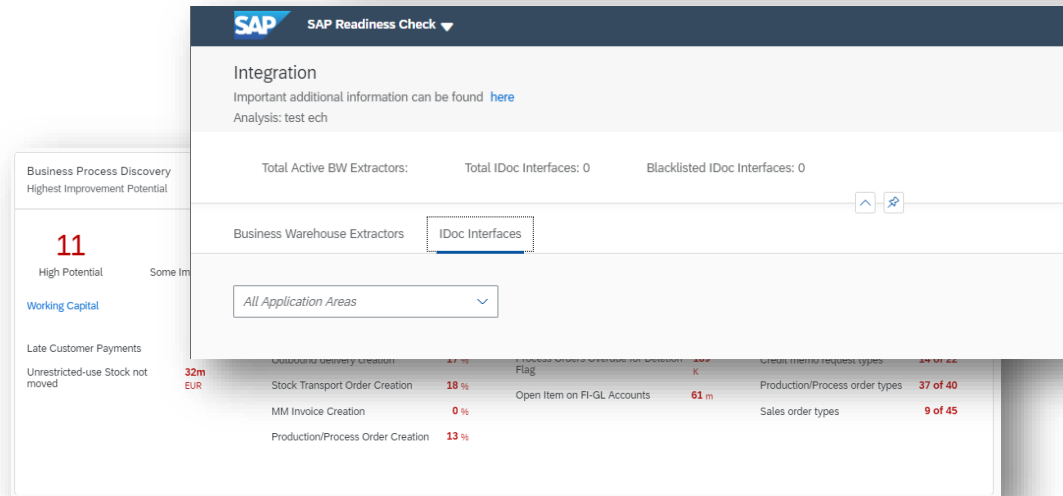


# SAP S/4HANA Readiness Check | Version 2.0 highlights



- **Effort Ranking**
- **Activities for** simplification items & work breakdown by project phase
- **Interface analysis** replaces a tedious manual analysis of IDOC interfaces in a system.
- **Business Partner** – # of data quality issues in customers and vendors, effort drivers for implementation.

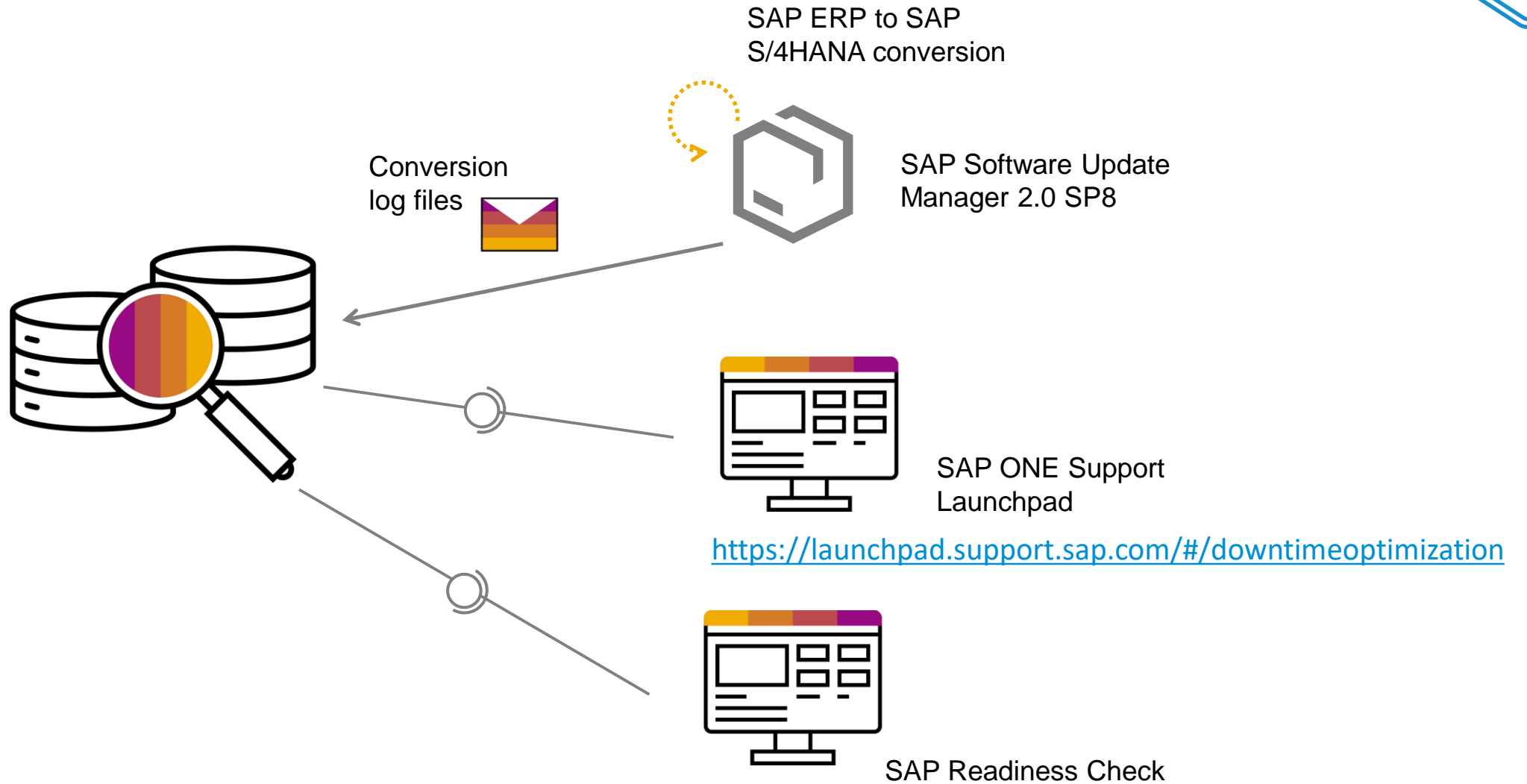
...AND MORE!



[Check out version 2.0](#)

# Putting conversion runtime statistics to work

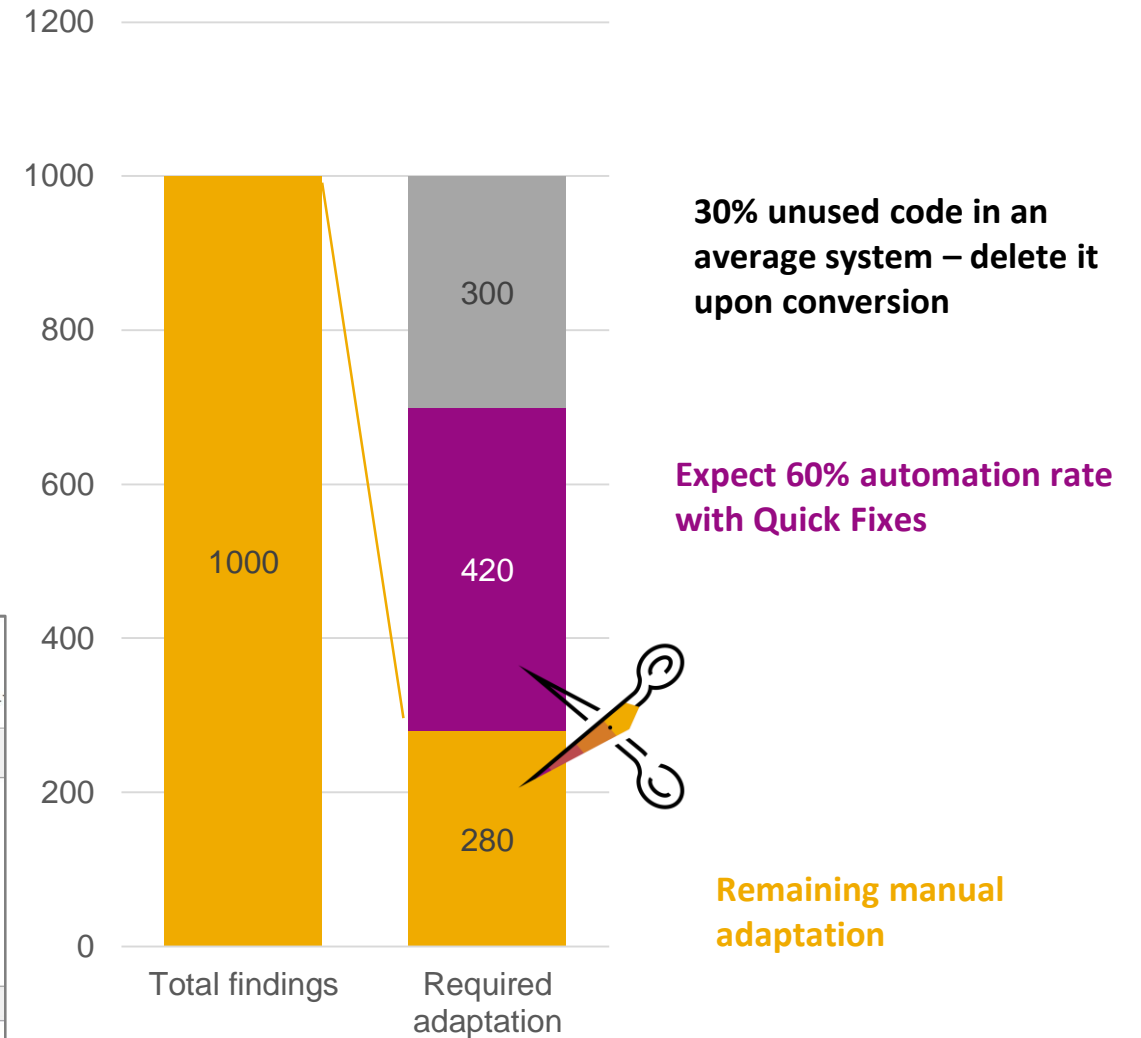
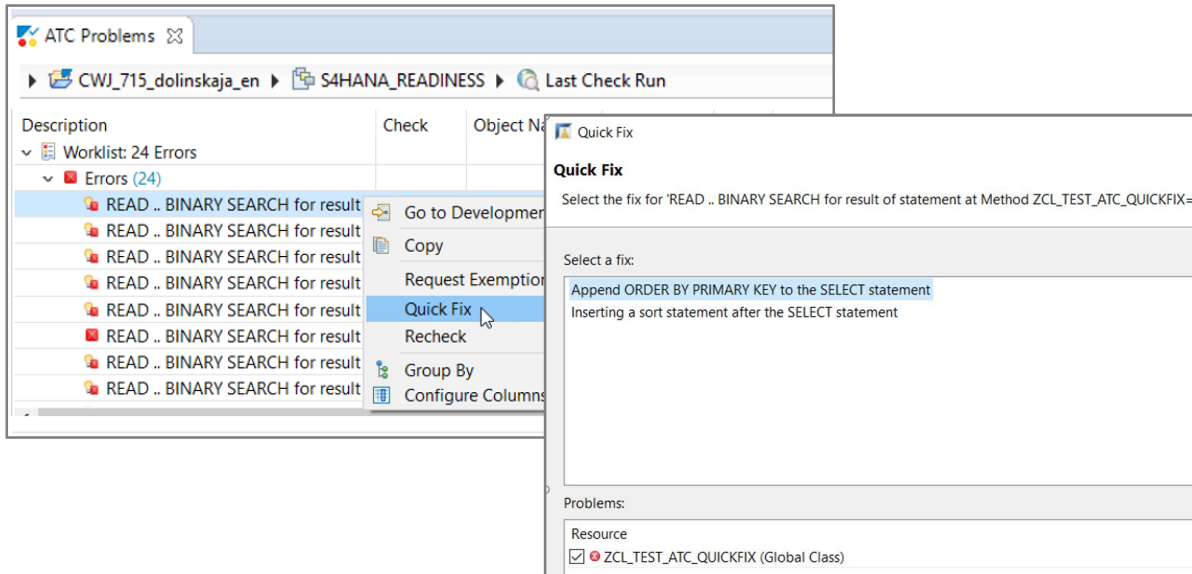
LAB PREVIEW



# Custom Code | Automated custom code adaptation with Quick Fixes

## Automatic custom code adaptation with Quick Fixes

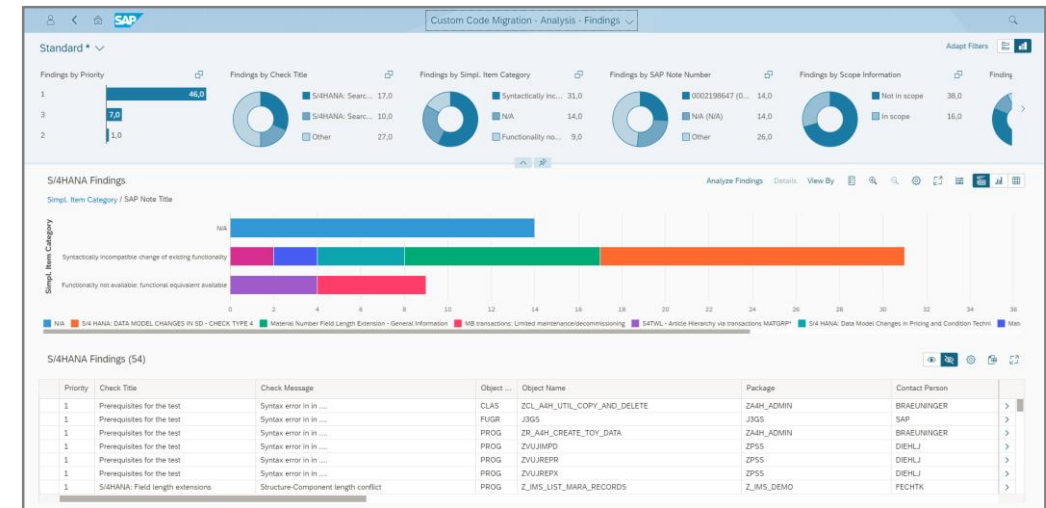
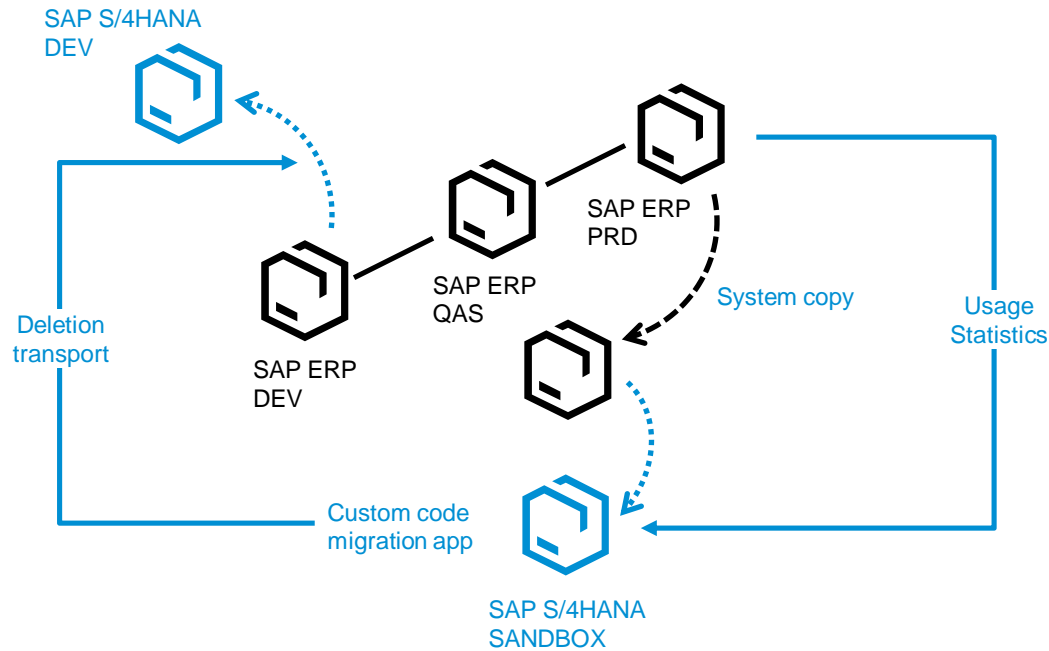
- 1809: **ORDER BY, MATNR**
- 1809 FPS2: **BSEG, VBTP, VBFA, VBUP/VBUK, KONV, ...**





# Custom Code | Integrated removal of unused custom code

In an average SAP ERP system, 30-60% of custom code is never used. Deleting it can significantly reduce the effort for code adaptation. Deletion is now part of the conversion with Software Update Manager.



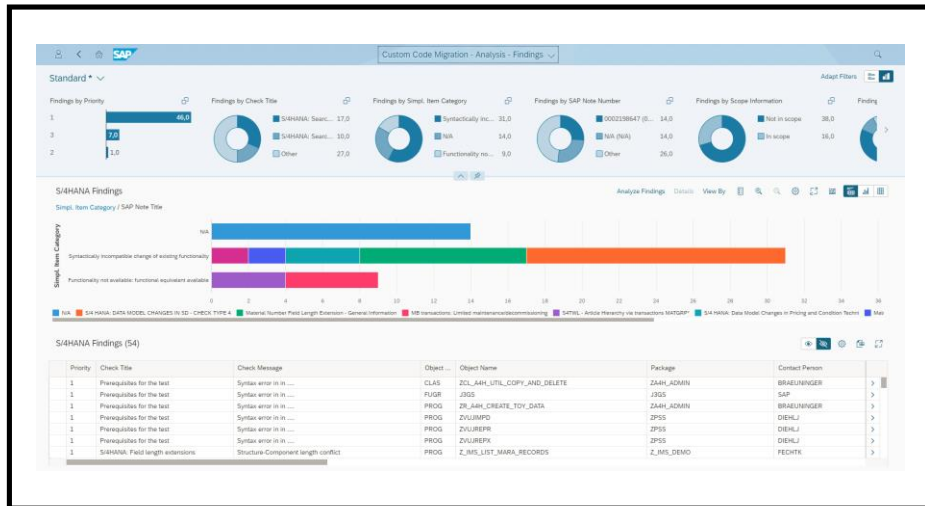
## Custom Code Migration Fiori App

- Consumes runtime code usage statistics from ABAP Call Monitor
- Prepares a deletion transport
- Provides analytics for remaining required custom code adjustments

# Custom Code | Custom Code Migration App going SaaS

Custom Code Migration App in SAP Cloud Platform – since August 2019

- Perform SAP S/4HANA custom code analysis for your on-premise SAP ERP systems remotely from the Cloud
- Common advantages of SaaS offerings
- Guaranteed the latest custom code checks offered by SAP



SAP CLOUD  
PLATFORM, ABAP  
Environment

SAP Cloud  
Connector

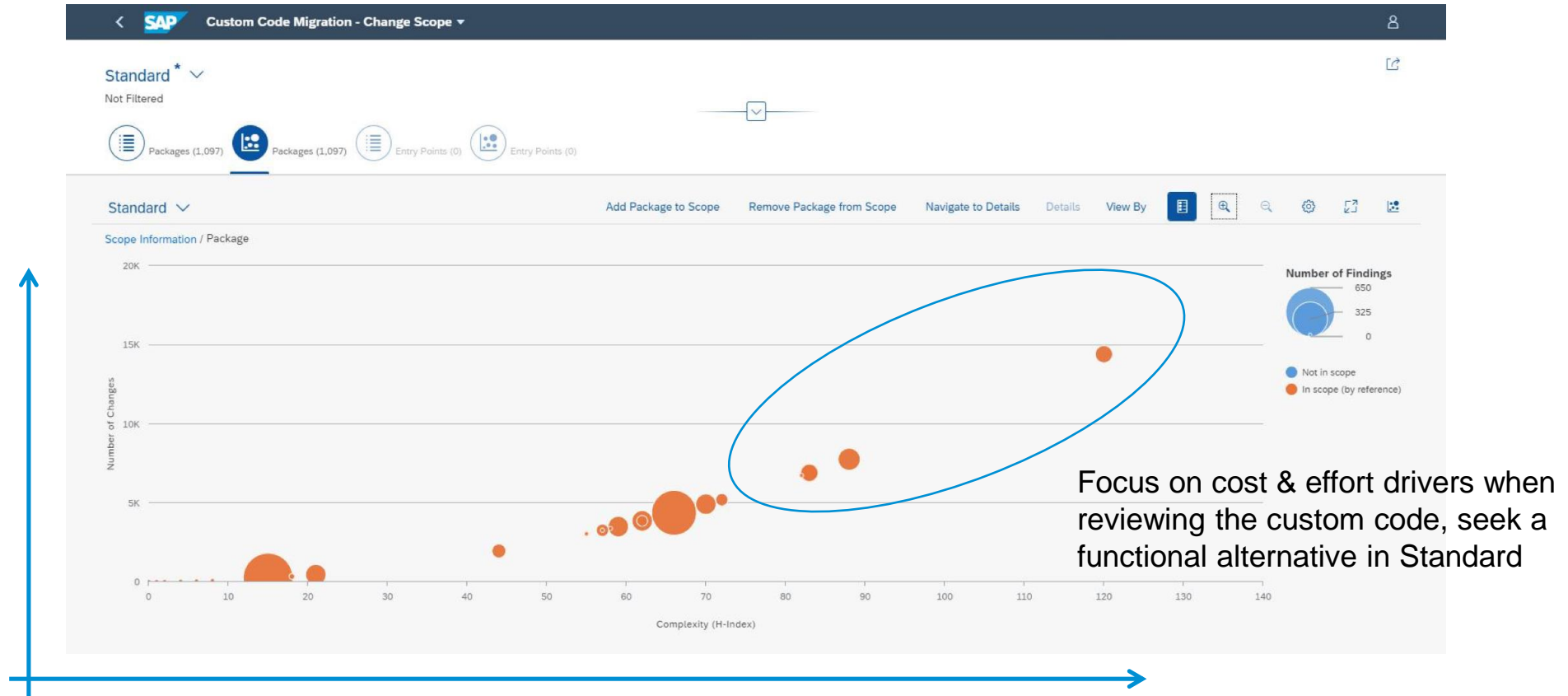
SAP ECC, SAP NetWeaver  
AS ABAP or SAP S/4HANA



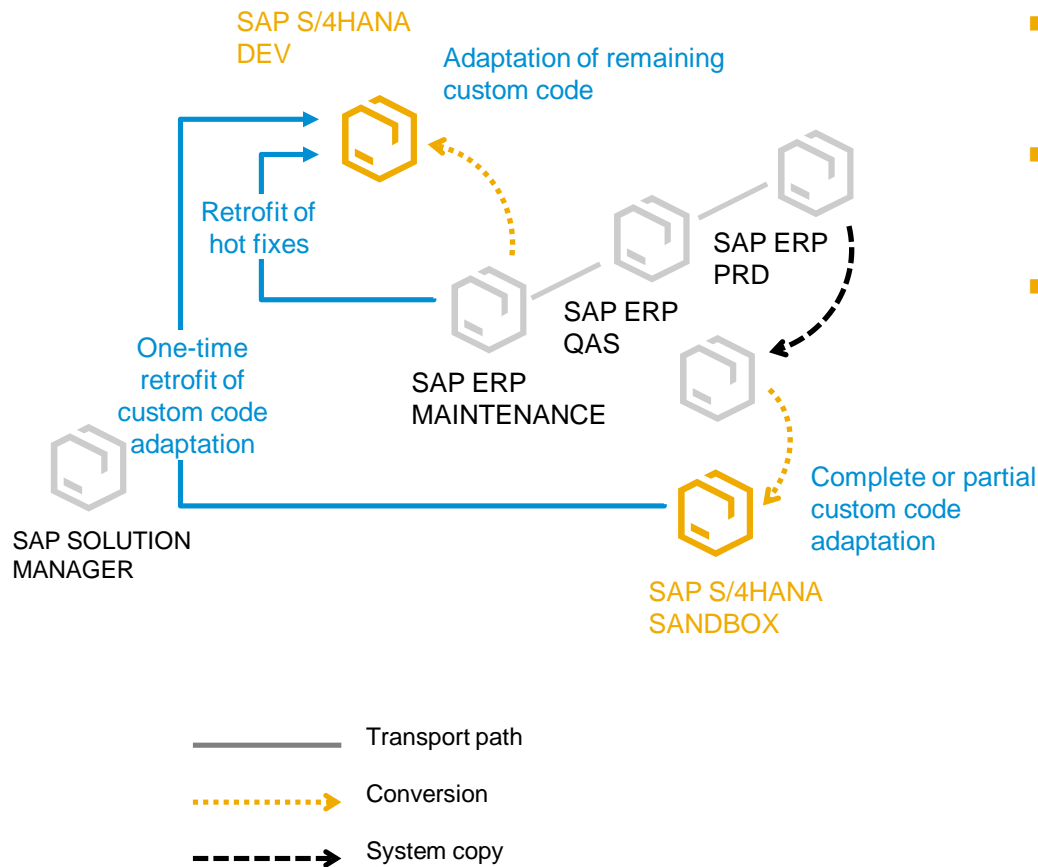
<https://www.sapstore.com/solutions/40191/SAP-Cloud-Platform%2C-ABAP-environment>

1 unit runtime (16GB) + 4 units persistence (4x16GB)

# Custom Code | Looking for back-to-standard? Start with the cost drivers & seek a functional alternative



# Custom Code | Using SAP Solution Manager Retrofit in Conversions



- SAP's general recommendation for conversions: 1) sandbox copy of the production SAP ERP 2) production track.
- Rationale: include custom code fixing, deliver to business fully functional system as a preview
- Retrofit – a reliable companion in complex landscapes for almost a decade.
  - Neither need a development freeze, nor double work.
  - All custom code adaptation performed in the sandbox is retrofitted into the newly converted development system.
  - Suitable for systems with large amounts of custom code and an intense ongoing custom development.
  - Requires SAP Solution Manager 7.2 SP8 or higher

# Downtime Optimized Conversion | with Software Update Manager

AVAILABLE UPON  
REQUEST



< 5TB



6 ... 20TB or  
> 1bln Finance records



> 20TB or  
combined with Unicode  
conversion, DC move etc.

## Standard Conversion

- Software Update Manager (SUM)

## New: Downtime Optimized Conversion

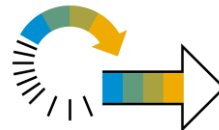
- SUM + optimizing downtime through conversion of selected data during uptime & parallel processing
- Currently **available upon request**
- SAP Note 2293733 for prerequisites and restrictions
- Email to [SAP\\_S4HANA\\_DOC@sap.com](mailto:SAP_S4HANA_DOC@sap.com) for project requests

## Near-Zero-Downtime Technology

- SAP DBS Service
- Available for 1610, 1709, 1809

*Live example*

SAP ECC 6.0 EHP0, all  
languages, Oracle **17.7 TB**



SAP S/4HANA 1709  
**5 TB** HANA 2.0

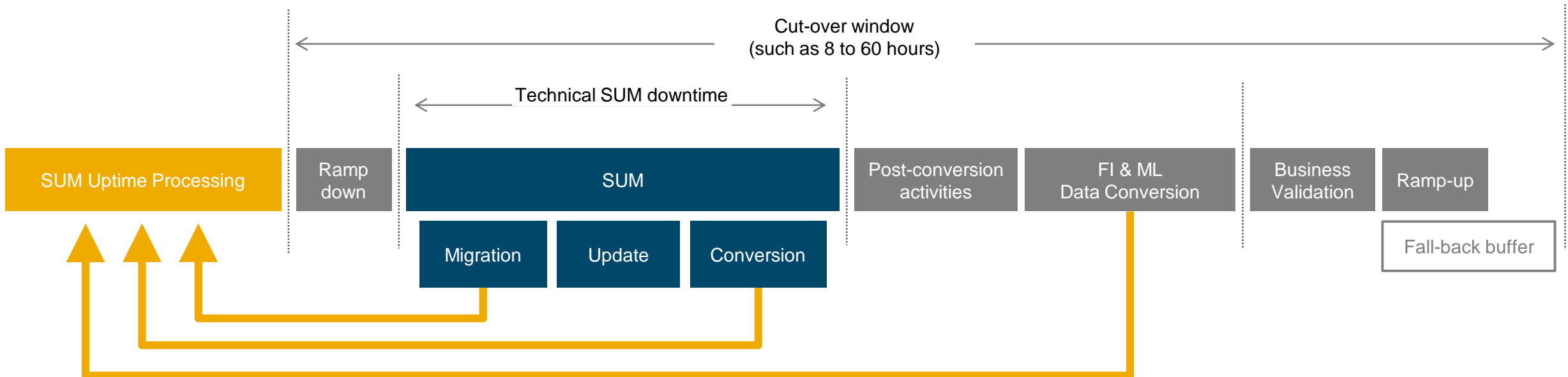
Total conversion runtime: **111 h**

SUM technical downtime **24h 20'** (incl. FI conversion)

# Downtime Optimized Conversion | with Software Update Manager (SUM)

Reducing technical downtime by partially moving activities to uptime processing of SUM

- Table conversion (FIN, MM-ML, MM-IM)
- Field conversion (KONV, VBFA tables)
- Migration of selected big application tables (w/o conversion)
- Delta replay mechanism ensures that any uptime changes are considered





# Finance Migration | Helping to check you finance data prior to conversion

## HOW TO FIND

[2755360](#) – Reconciliation prior to S/4HANA Conversion:

- Perform data consistency checks for FI-GL **on any DB**
- Plan data clean-up prior to conversion

## HOW TO RESOLVE

[2714344](#) – Financial data migration to SAP S/4HANA:

Most frequent Error Messages – Information and Recommendations

**Reconciliation prior to Conversion to S/4HANA: Display Issues**

Documents

Company Code  to

Document Number  to

Fiscal Year  to

Run

☒ Show Issues found by last Run

☐ Show Issues found by all Runs

☐ Show Issues found by Run

Run Id

Message

Message Number  to

☐ Show all Issues of Documents

Further Restrictions

Maximal Number of Issues

☒ Show Details



**Reconciliation prior to Conversion to S/4HANA: Display Issues**

Run Id	CoCode	DocumentNo	Year	Item	DocumentNo	Lntm	G/L Acc	Message Class	Number	Type	Message Text
50038	0001	100007941	2000	2			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	4			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	6			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	8			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	10			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	12			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	14			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	16			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	18			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	20			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	22			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	24			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	26			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	28			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	30			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007941	2000	32			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007964	2000	3			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007964	2000	4			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007964	2000	7			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007964	2000	8			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007964	2000	11			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007964	2000	12			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007964	2000	15			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007964	2000	16			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007964	2000	19			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070
50038	0001	100007964	2000	20			841070	FIN_FB_RECON	577	E	Open item flag in SKB1 differs from open item flag in BSEG 0000841070

## Business Partner | Helping to prepare your customer / vendor data for conversion

- Master data consistency check report - check customer & vendor data prior to conversion, understand the data quality issues
  - Functional checks on Tax Code, Postal Code, Email, Bank Data, Tax Jurisdiction Code, Address data, Transportation Zone etc.
- Suppressing checks on individual data fields – useful in test or sandbox conversion
- CVI\_COCKPIT - a guided implementation wizard for seamless BP synchronization + TCI notes wizard (simplifies manual installation of 100+ Notes)
  - Read [the blog](#)
- OSS Note [2743494](#), [2832085](#)

# S/4MOVE Business Partner CVI – Development Roadmap (2019-2020)



**Delivered**

## **ECC EHP8 SP12 (Q1 2019)**

- **Master Data Consistency Check Report**
  - Enables customer to analyze the issues in the customer / vendor data upfront of real synchronization process
- **Field checks suppression**
  - Enables faster load synchronization by suppressing known inconsistencies in non-productive systems



**Delivered**

## **ECC EHP8 SP13 (Q3 2019)**

- **New CVI Cockpit**
  - Bring the multitude of discrete CVI process components under one standard guided Cockpit
  - Integrates all the steps during a conversion and serves as a guided implementation wizard for conversion
- **Collective Notes based on TCI**
  - Simplified installation of 150+ pre-requisite notes required before starting conversion project



**Delivered**

## **ECC EHP8 SP14 (Q1 2020)**

- **Master Data Consistency (New features)**
  - Enhanced Master data consistency check report with inline bulk correction / update capability
- **CVI Customizing Checks Automation**
  - Improvised version of the former CVI\_UPGRADE\_CHECK\_RESOLVE with a very simplified user experience
- **BP/CVI integration with Readiness Check dashboard**
  - Get an overview of data volume and effort drivers for BP conversion at the very outset

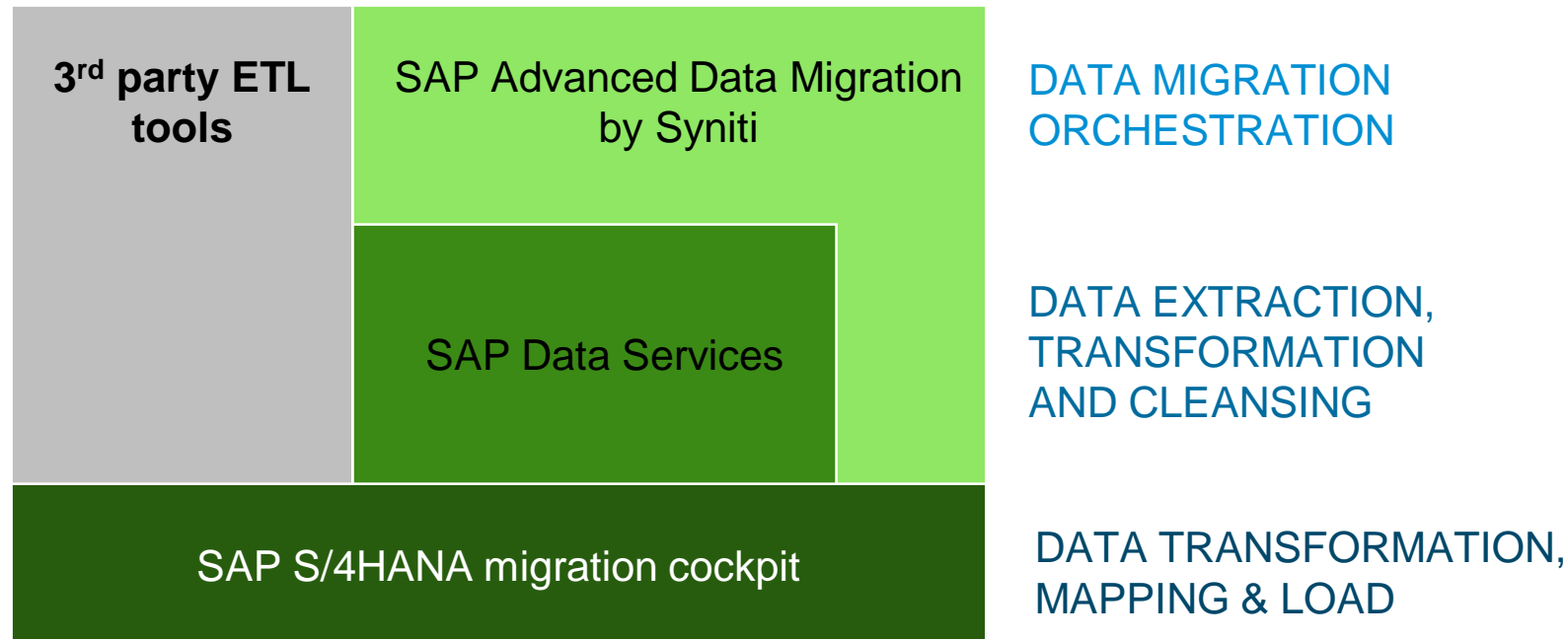
# New Implementations

# Data Migration | SAP's tools for data migration in SAP S/4HANA projects

SAP's recommended tool for data load in new implementations is the SAP S/4HANA migration cockpit

You may want to employ complementary tools depending on the following factors:

- Number and variety of data sources
- Required data transformations and business rules
- Amount of data construction required
- Data quality
- Project team size and the resulting intensity of collaboration



# Data Migration | SAP S/4HANA Migration Cockpit – traditional capabilities

## Data Provisioning

## Process & Content

## Data Load

Template File Upload



Staging \*)



Migration Objects   Notifications   Settings

Filter: All   Open   Activate   Deactivate

Status	Status Text	Name	Documentation	Dependent Migration Object
Started	Started	GI open item	Show	
Started	Started	General task list	Show	
Started	Started	Inspection method	Show	QM catalog code group/code

SAP Migration of Customers (FILE2S4): Step 3 (Simulate Import)

< Previous Next > Finish Cancel Refresh Repeat Simulation

1 Validate Data   2 Convert Values   3 Simulate Import   4 Execute Import

The simulation checks the consistency of the source files. Review the log details and correct inconsistent values found in the source files.

Source Files

File Name	Description	Size	Last changed by	Last changed on
20160601_CUSTOMER_data_demo...		1.93 KB	_SAPD028842	06/01/2016 14:08

Notifications from Simulation

Priority: Warning

Description	Priority	Created on
Test migration Z_CUSTOMER_056: no extended validations, no updates in receiver system	Warning	06/01/2016...
Customer KH0002 is from an EU country, enter a VAT registration number	Warning	06/01/2016...



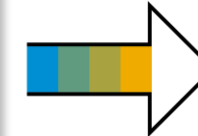
API based



Cloud



On-premise



*\*Available for on-premise as of 1709 FPS01*



# Data Migration | Migration Cockpit with SAP S/4HANA 1909

## Data Provisioning

Direct Transfer option



SAP ERP

SAP S/4HANA

## Process & Content

The screenshot shows the SAP Migration Cockpit interface for 'Finance Migration to S/4'. It displays a table of migration objects with columns for Selection, Tasks, Simulation, Migration, Migration Progress, and Action. The objects listed are Assets (Fixed Assets with Values), Bank Master, Cost Center, and Customer. The Cost Center object shows a migration progress of 24% (7,200 successful, 2,400 errors). The Customer object shows a migration progress of 60% (1,200 successful, 0 errors). The interface also includes a search bar, a 'Show All' dropdown, and a 'Task List' tab.

Migration Object	Selection	Tasks	Simulation	Migration	Migration Progress	Action
<input type="checkbox"/> Assets (Fixed Assets with Values)	Total: 3,000 Not Migrated: 0	Open: 0 Done: 21	Successful: 300 Errors: 0	Successful: 3,000 Errors: 0	100%	No Action
<input type="checkbox"/> Bank Master	Total: 0 Not Migrated: 0	Open: 26 Done: 0	Successful: 0 Errors: 0	Successful: 0 Errors: 0	Migration Not Started	Select Data
<input type="checkbox"/> Cost Center	Total: 16,569 Not Migrated: 9,369	Open: 0 Done: 22	Successful: 120 Errors: 0	Successful: 7,200 Errors: 2,400	24% (60% 18%)	Migrate
<input type="checkbox"/> Customer	Total: 12,000 Not Migrated: 12,000 2 Predecessors Objects	Open: 0 Done: 12	Successful: 1,200 Errors: 0	Successful: 0 Errors: 0	Migration Not Started	Migrate

90+

Migration Objects for SAP ERP; additional objects for SAP AFS and SAP EWM



## Data Load



API based



Cloud



On-premise



[http://help.sap.com/S4\\_OP\\_DM](http://help.sap.com/S4_OP_DM) – Help on data migration  
[http://help.sap.com/S4\\_OP\\_MO](http://help.sap.com/S4_OP_MO) – Available migration objects

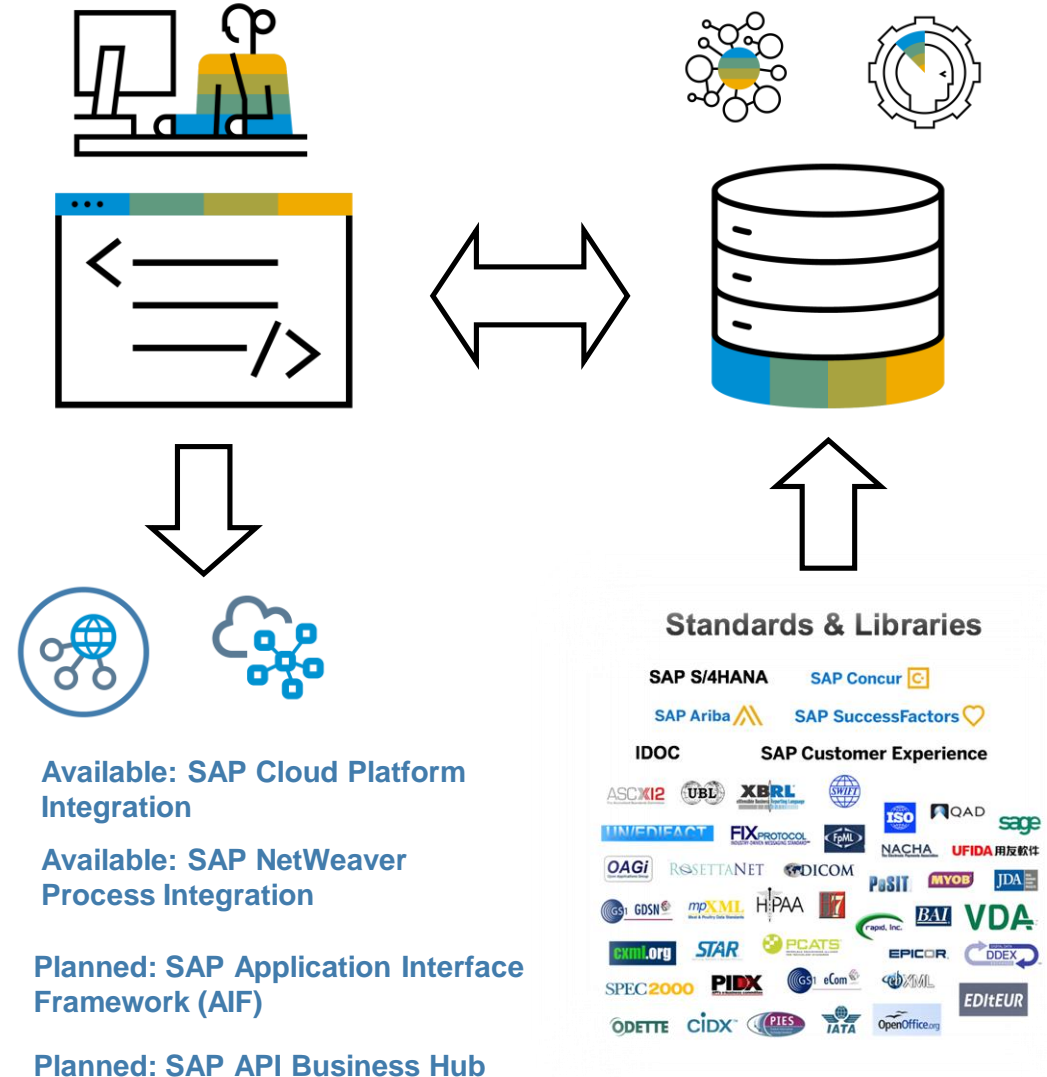
# Reduced Integration Efforts | SAP Cloud Platform Integration Advisor

Designed to **accelerate** each & every interface implementation, **learn** continuously, and aims to **reduce** efforts **by 60%** or more

- Available since February 2018
- An intelligent content management system for SAP software integration
- **Machine Learning + Crowd Sourcing**
- Contextual proposals for interface semantics & mappings – by country & industry
- Automated generation of runtime artifacts and documentation



[Integration Advisor pricing](#)  
[B2B message libraries pricing \(UN/EDIFACT, X12\)](#)



Follow all of SAP



[www.sap.com/contactsap](http://www.sap.com/contactsap)

© 2019 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/or 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 [www.sap.com/corporate-en/legal/copyright/index.epx](http://www.sap.com/corporate-en/legal/copyright/index.epx) for additional trademark information and notices.