

# Hands-On Lab: Preparing for an Implementation, Upgrade, or Conversion to S/4HANA

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**Deloitte.**

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**2023**

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## In This Session

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- **HANDS-ON LAB including Demonstrations and Lecture**
- **Lab exercises divided into sections where you will gain practical instruction to utilize S/4HANA tools**
- **SAP tools for implementation, upgrade, and migration/conversion to SAP S/4HANA**
- **Steps for preparing for an implementation, upgrade, or conversion to S/4HANA**
- **Capabilities of Readiness Checks, BTP “Business Technology Platform” tools.**
- **Focus Build with Solution Manager used for the project.**
- **Expert instructors guide you through key processes and tasks**



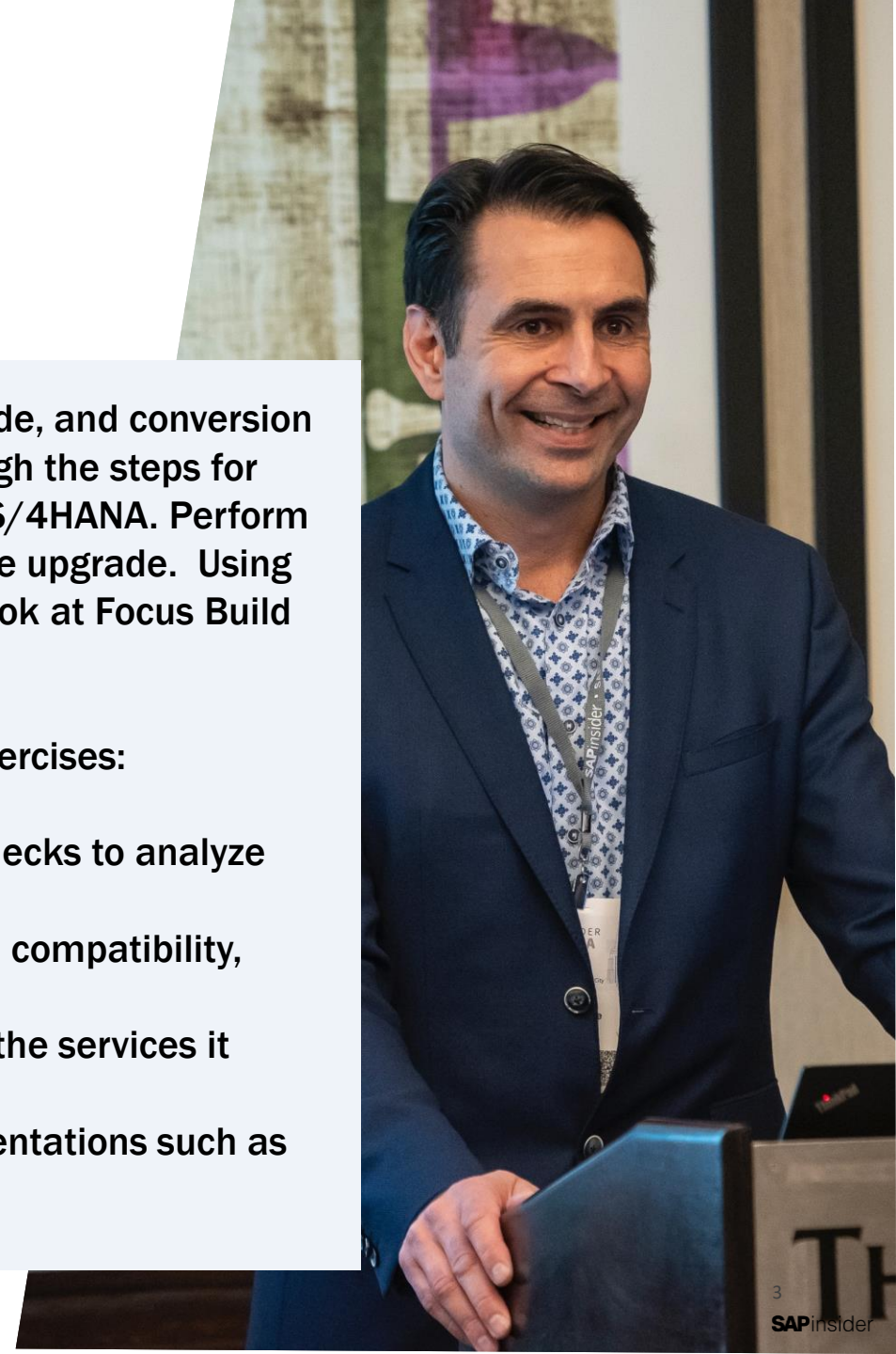
# Session Description

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This session details the SAP tools for implementation, upgrade, and conversion to SAP S/4HANA including hands on exercises. Follow through the steps for preparing for an implementation, upgrade, or conversion to S/4HANA. Perform HANA sizing analysis, critical checks in existing system before upgrade. Using capabilities of BTP “Business Technology Platform” tools. Look at Focus Build in Solution Manager used for the project.

Attendees will learn the following along with the hands-on exercises:

- Review the tools and capabilities of the SAP Readiness Checks to analyze the source system and how to view the resulting reports.
- Perform checks focusing on custom code analysis, add-on compatibility, and other important items.
- How to utilize the SAP Business Technology Platform and the services it provides.
- Review the tools available for new SAP S4/HANA implementations such as SAP Focus Build.



# What We'll Cover

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**Overview Section**

**Lab Section 1 – New Implementations:**

**Fiori Implementation and Rapid Activation**

**Data Migration Using Fiori App**

**Focus Build and Best Practices**

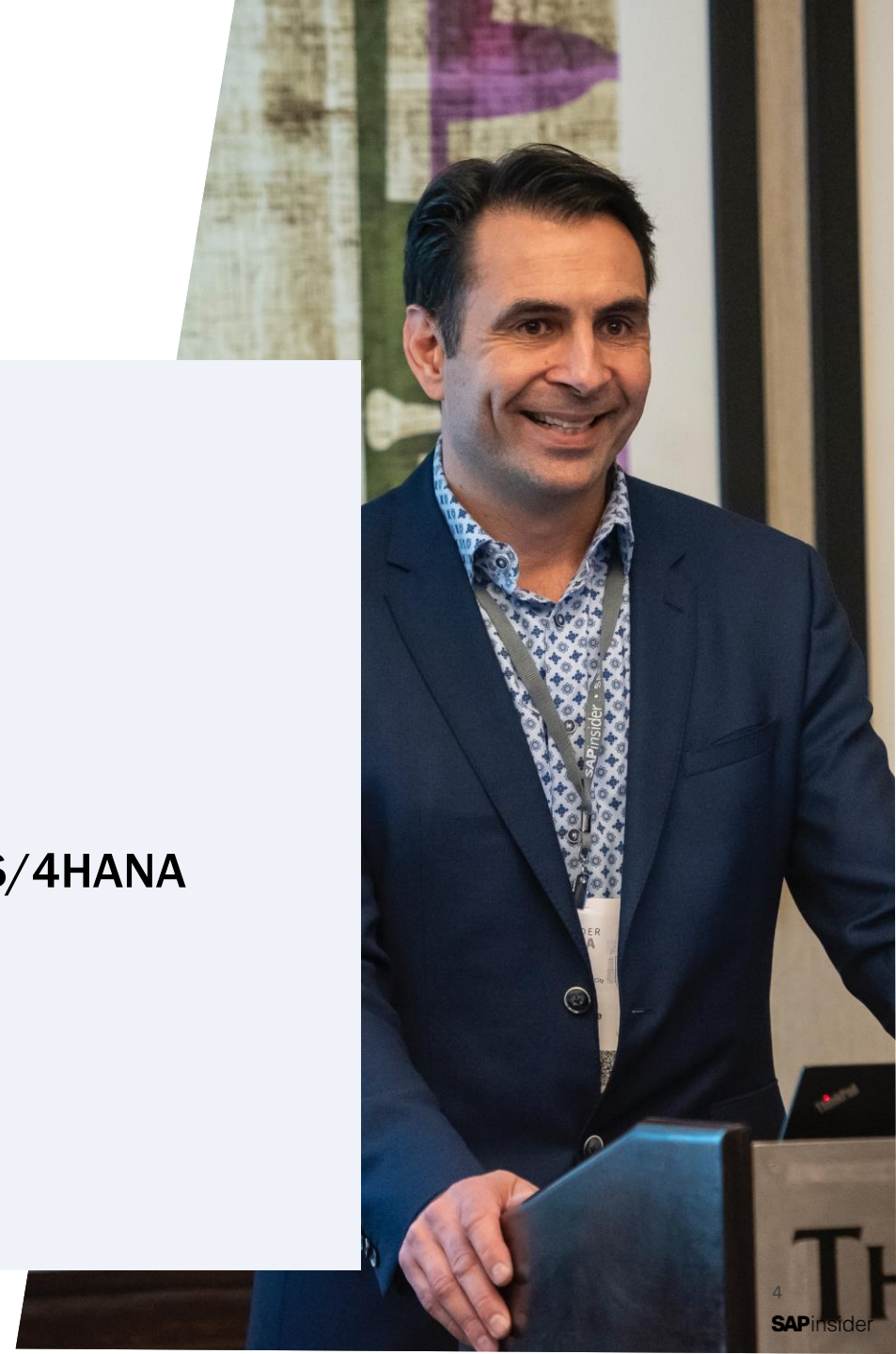
**Lab Section 2 – Upgrades:**

**Readiness and Simplification Checks**

**Business Technology Platform services for S/4HANA**

**SUM tool and DMO Options**

**Wrap-Up**



# Topic 1 - Overview and Introduction

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## Overview and Introduction

- **Deployment models for S/4HANA**
- **New Implementations of S/4HANA**
- **Upgrades of S/4HANA**

# Choice of S/4HANA Cloud (SaaS) or On-Premise (IaaS)

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- Choose between the S/4HANA Cloud and S/4HANA On-Premise versions
- Both are based on the SAP Fiori design concept which is designed to simplify and personalize the user experience
- Similar in terms of functionality, however, they differ in their implementation and handling.

## → S/4HANA Cloud versions:

- SAP S/4HANA Cloud is a Software-as-a-Service (SaaS)
- Subscription-based software use rights
- SAP manages software and the systems
- Multitenant Software-as-a-Service environment

## → SAP S/4HANA Cloud - Private Cloud

- Run on AWS, Azure, GCP, and other Cloud providers
- Perpetual or subscription-based software rights
- SAP provides hardware, operations services, and optional application
- Single-tenant environment
- RISE option from SAP

## → S/4HANA On-Premise:

- Own servers to host the applications, must own or lease the servers (traditional licensing model).
- Customer takes care of the maintenance and development of the software and manages all areas including the HANA database, data centers, and networks.
- Higher effort and labor – Customer updates support packages
- Perpetual software use rights - , SAP provides different licensing models: perpetual licenses, subscription licenses, and consumption-based term licenses.
- Customer responsible for hardware, implementation, and ongoing operations
- Licensing models - perpetual licenses, subscription licenses, and consumption-based term licenses.

# S/4HANA Versions and Release Dates

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## On-Premise or Cloud Versions

- Versioning is different - Example SAP S/4HANA Cloud 2208.1 where on-premise version is 2022 with FPS01 or FPS02

## S/4HANA CLOUD Versions

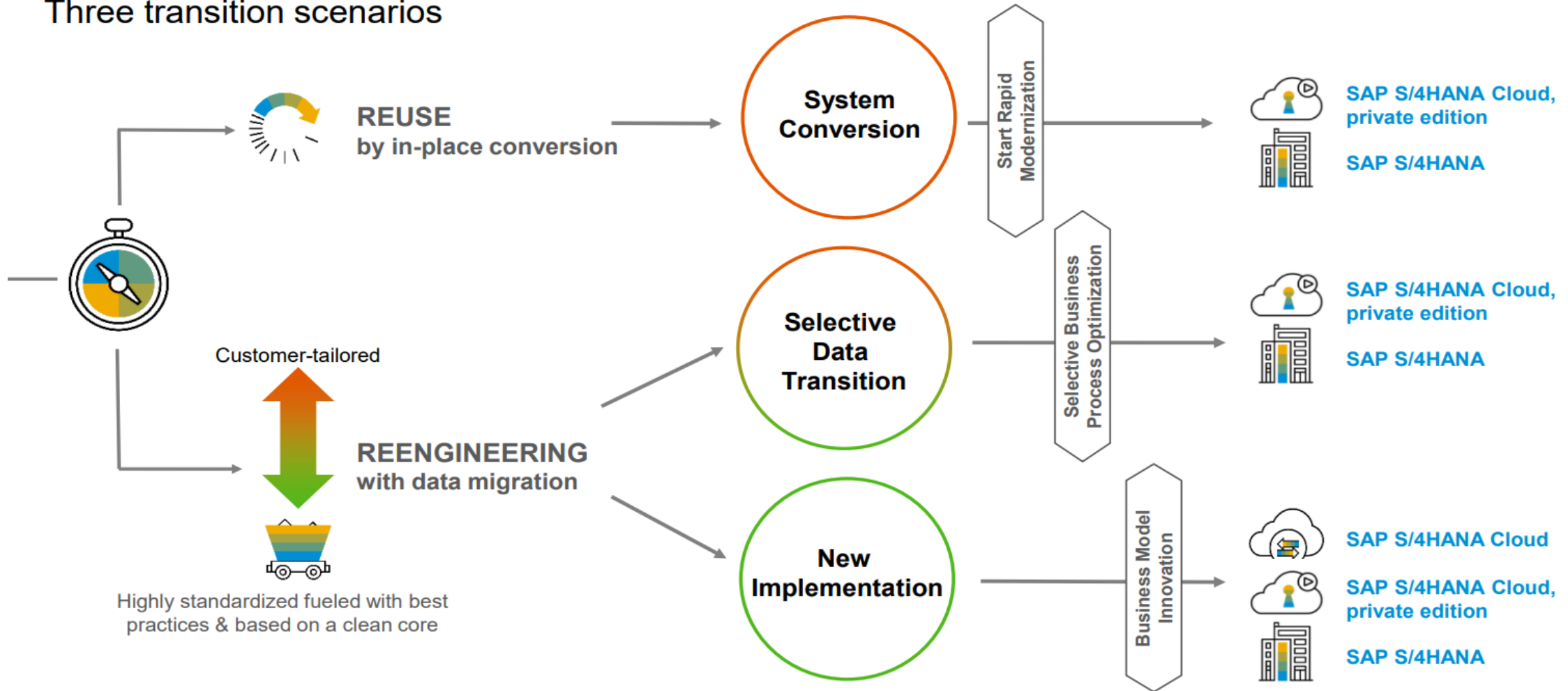
- In 2022 it will have two major releases
- Monthly releases like 2208.1 in September 2022 with new features
- Year major releases

## S/4HANA On-Premise Versions

- SAP statement → “No customer left behind”
- The 2023 release of SAP S/4HANA will mark a new chapter with next-generation technology and many alternative SAP S/4HANA capabilities for legacy compatibility scope items for SAP’s legacy software.
- Moving to a two-year release cycle starting with SAP S/4HANA 2023 (prior was every year)

# Moving to S/4HANA - Transition Scenarios

## Three transition scenarios





# New Implementation (Greenfield) for Moving to S/4HANA

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## Greenfield (new build or implementation)

- Used for new installations of SAP (not upgrading)
- It can also be used for a complete rebuild and configuration for many reasons such as:
  - Current systems have incompatible or not supported add-ons for moving to S/4HANA so new installation is required. Selective Migration is another alternative method.
  - Opportunity to completely clean up the system and start from scratch and fully leverage the new capabilities of S/4HANA.
  - Migrate in one step to a leaner and company-wide uniform system that is close to the SAP standard. Increases flexibility to move to new releases and help lower operating costs.
  - Major changes like mergers, acquisitions, system consolidations, global support reasons.



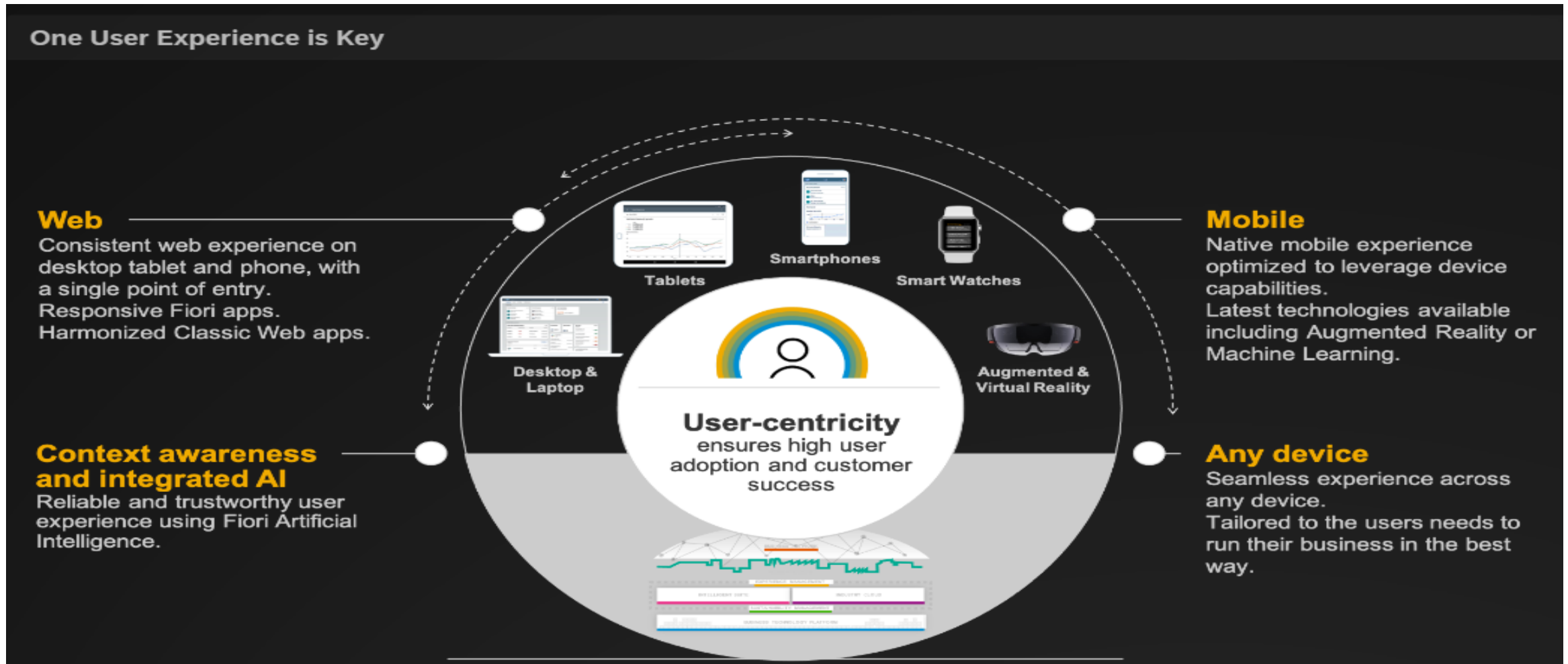
## Topic 2 - Fiori Implementation and Rapid Activation

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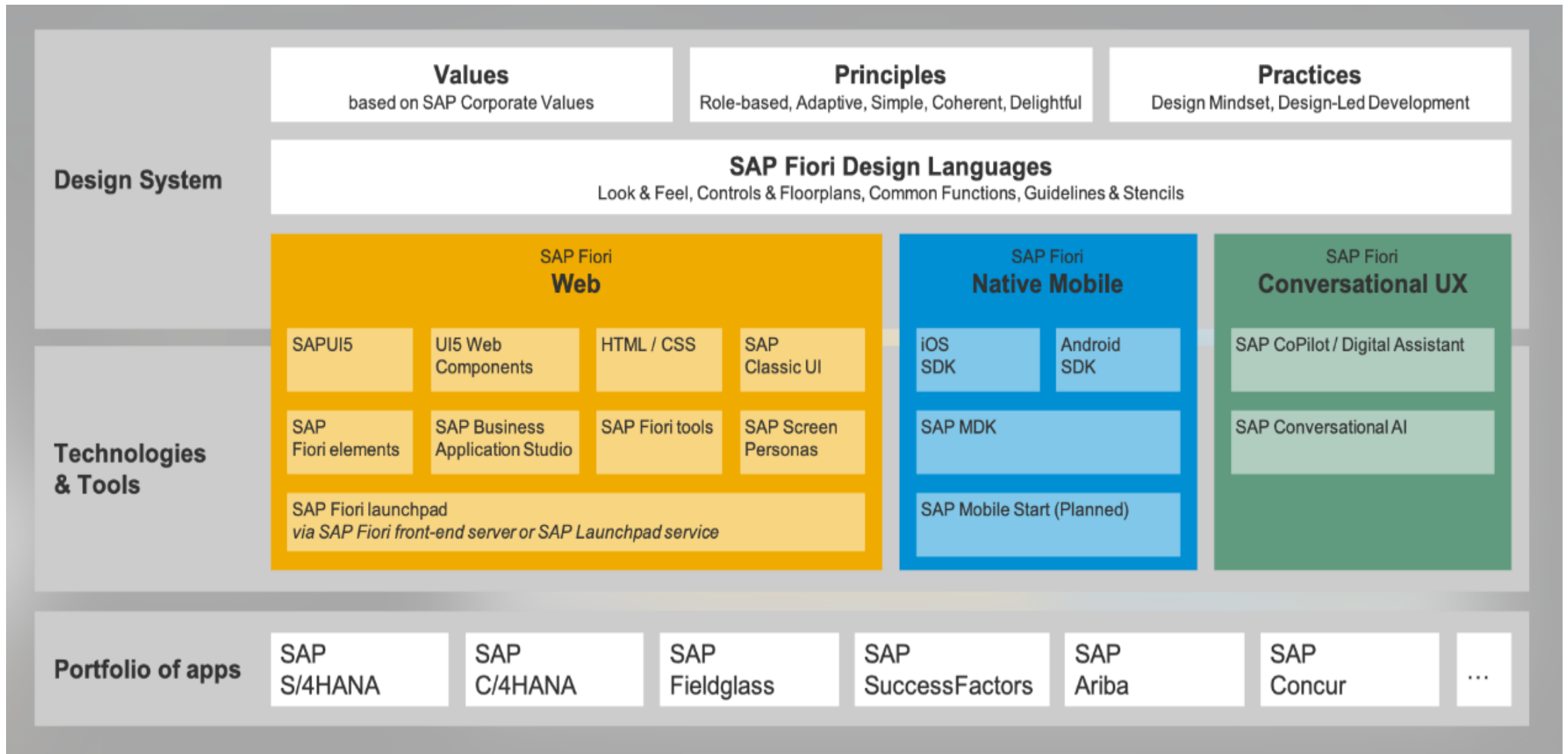
- Fiori Implementation and Rapid Activation

# Fiori for S4HANA 2022

- SAP Fiori provides an easier and more intuitive way to run SAP applications in your organization
- Consistent integrated user experience across multiple platforms and devices



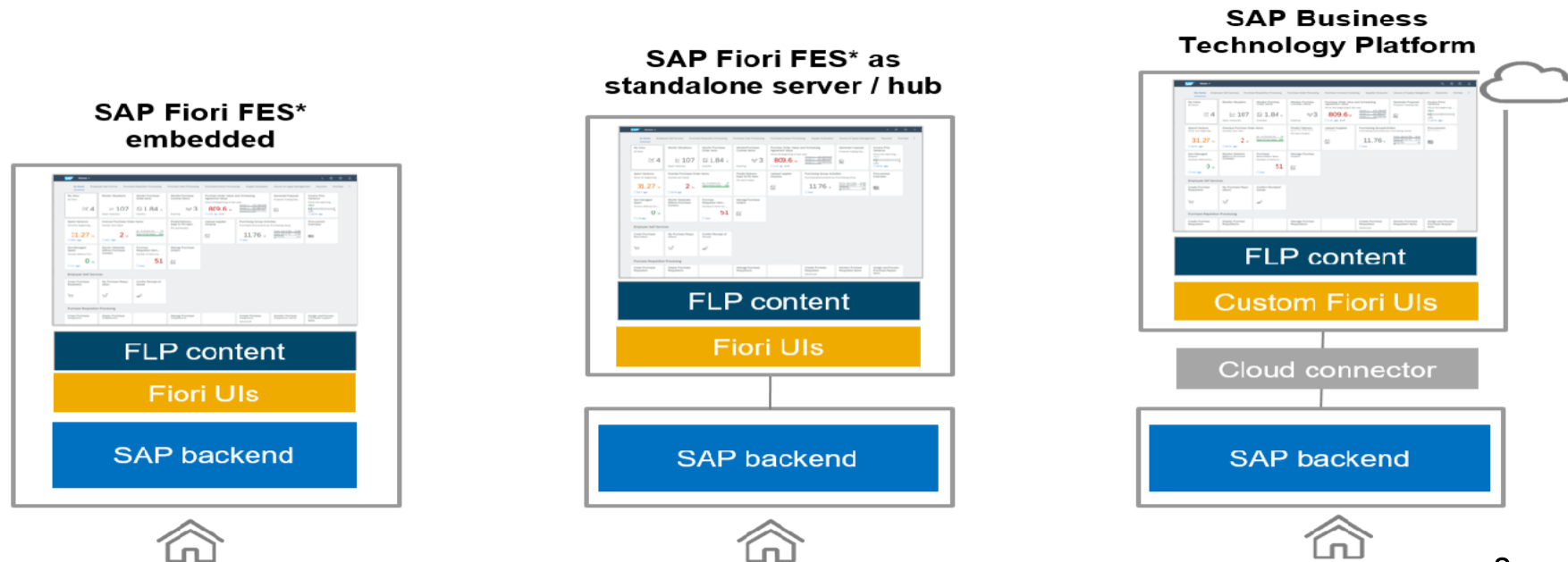
# Fiori Design Principles





# Fiori Deployment Scenarios

- Embedded SAP FES deployment (recommended approach for SAP S/4HANA)
- SAP FES as a central hub recommended approach for SAP Business Suite scenarios
- The following graph shows the main SAP Fiori deployment options with an on-premise SAP backend:-
  - On-premise: SAP Fiori front-end server embedded deployment
  - On-premise: SAP Fiori front-end server as a standalone server/hub deployment.
  - Hybrid: Launchpad and (custom) Fiori UIs running on SAP BTP (Cloud Foundry) side by side with integrated apps from your on-premise landscape.



Source: SAP

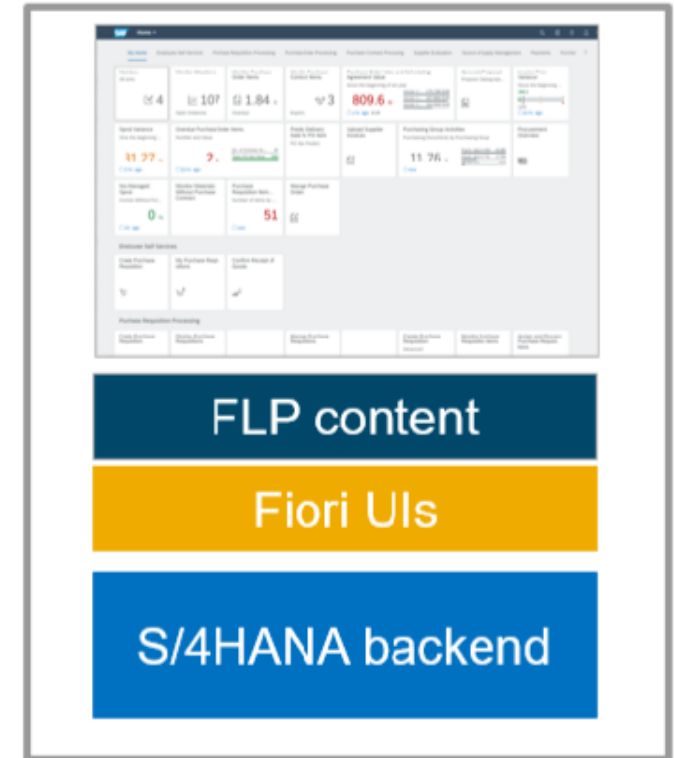
# Advantages of Rapid deployment

- SAP UI and GATEWAY Components are part of the S4HANA Build
- No Additional Infrastructure needed.
- FES ownership and product content ownership is under one responsibility
- Role and authorization maintenance is in one place
- Any changes are scoped to the local environment
- Fiori launchpad on the backend provides an optimized performance
- Availability of launchpad is linked to backend system
- Existing Landscape is re-used
- Cost effective way to test out the Fiori applications



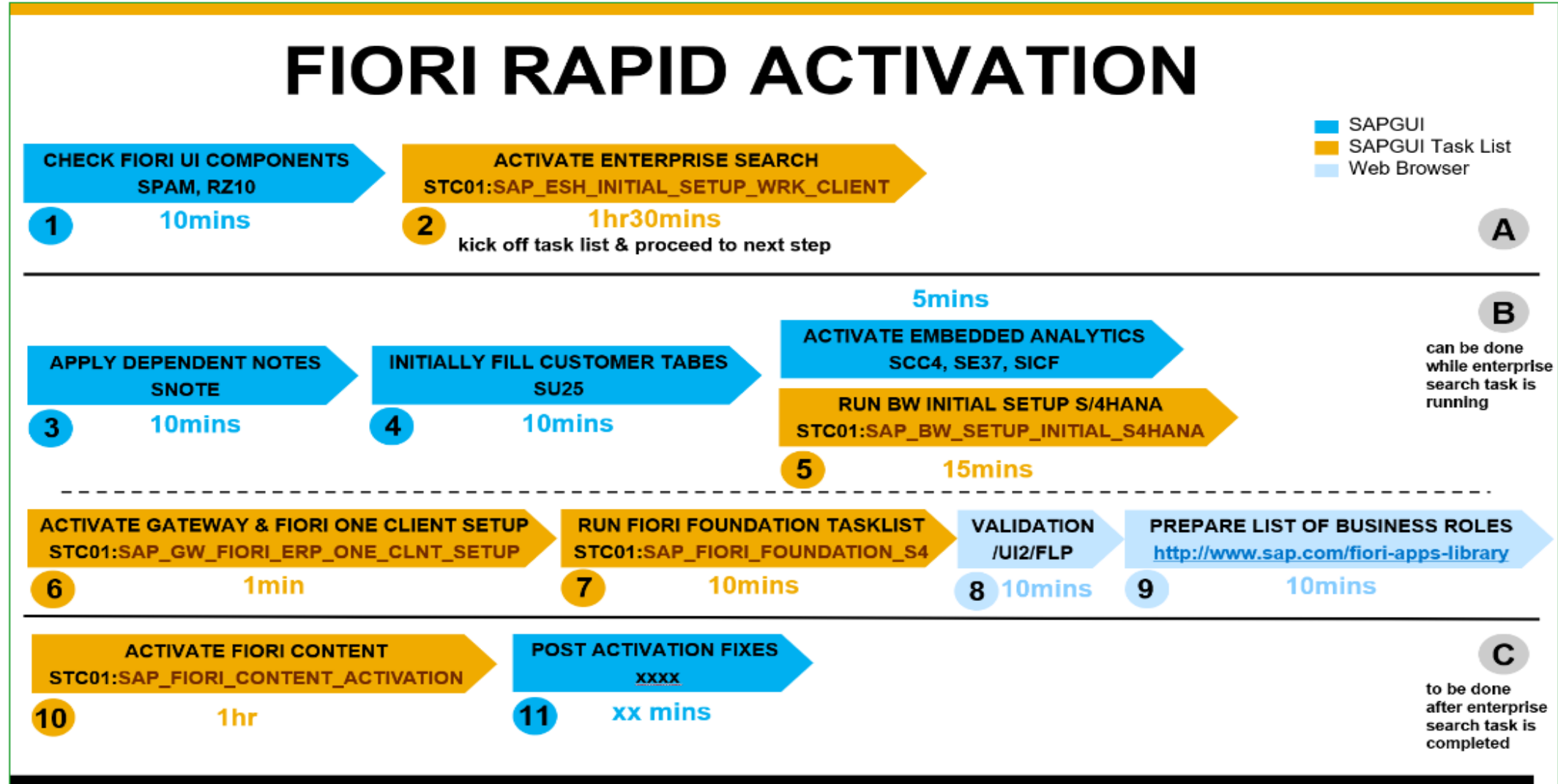
**FES embedded deployment**

## SAP Fiori for S/4HANA embedded



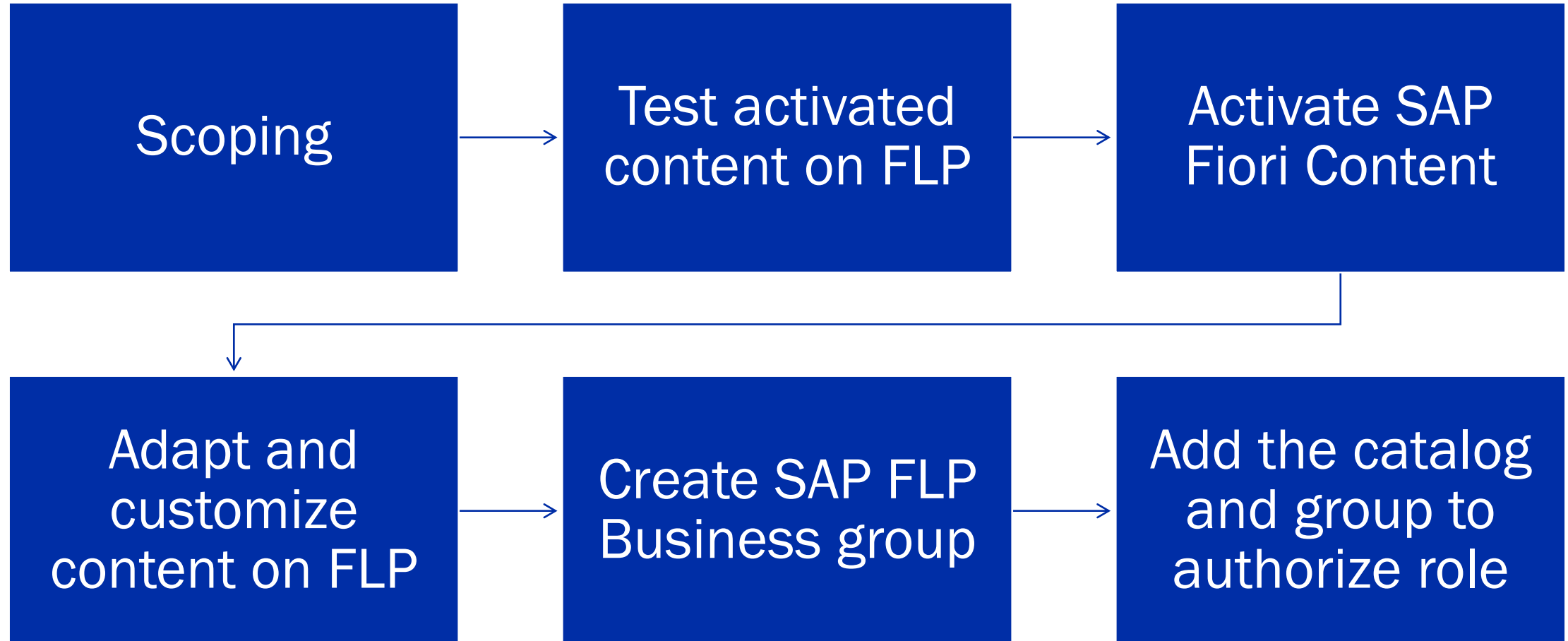
Source: SAP

# Rapid Activation Guidelines



# SAP Fiori Rapid Content Activation Process Flow

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# Demonstration

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## Demonstration of Fiori Applications

- Demo Spaces and Pages – New with 2022 (Video)
- Lab book content available



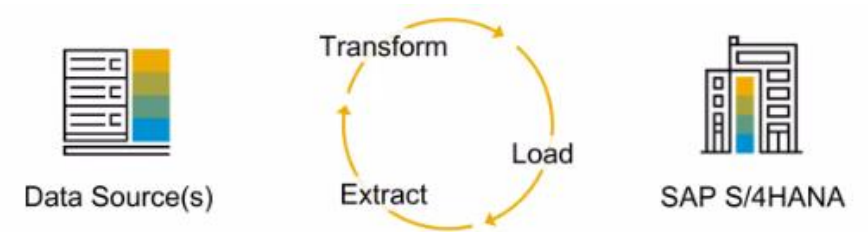
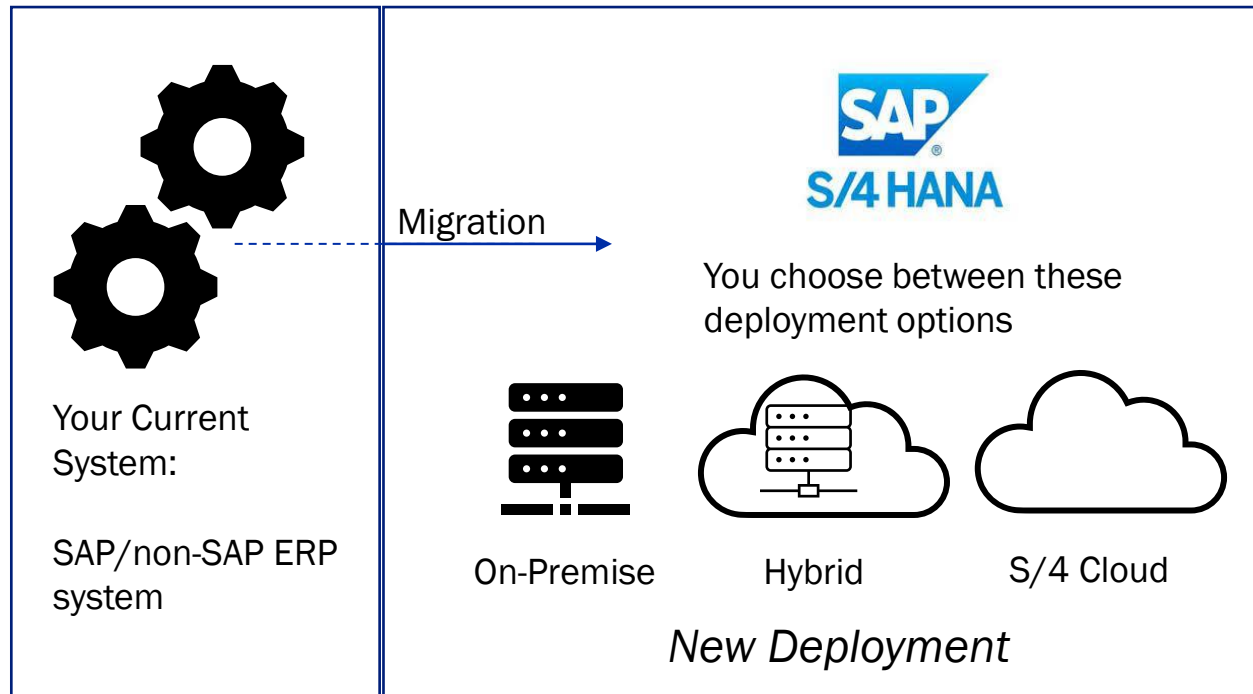
## **Topic 3 - Data Migration Using Fiori App**

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- **Data Migration to S/4HANA**
- **Includes Fiori App Demo for Data Migration**

# Your Way to SAP S/4HANA

- New “Greenfield” implementation approach to Migration the Data
- Method applies to both On-Premise or Cloud for S/4HANA



# Most Common Data Migration Tools

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SAP Data Services (SDS or BODS) and SAP Information Steward (IS)

SAP Migration Cockpit (SMC) - transaction LTMC in S/4HANA, replaces LSMW. LTMC is embedded within S/4 HANA both cloud and on-premises versions. It is positioned for use in the transformation and loading of data into S/4 HANA.

SAP Agile Data Preparation (ADP)

SAP HANA EIM Smart Data Integration (SDI) / Cloud Platform SDI / Smart Data Quality (SDQ)

Legacy Systems Migration Workbench (LSMW) – (no longer supported by SAP on S/4HANA)

Third Party Tools from Vendors - software, tools and services for selective data transition

Data Loading Tools	Common Selective Data Transformation Tools	More Data Transformation Tools
SDS/BODS/IS	SAP (DMLT)	CBS
SMC and LTMC	Syniti	Natuvion
ADP	SNP	Datavard

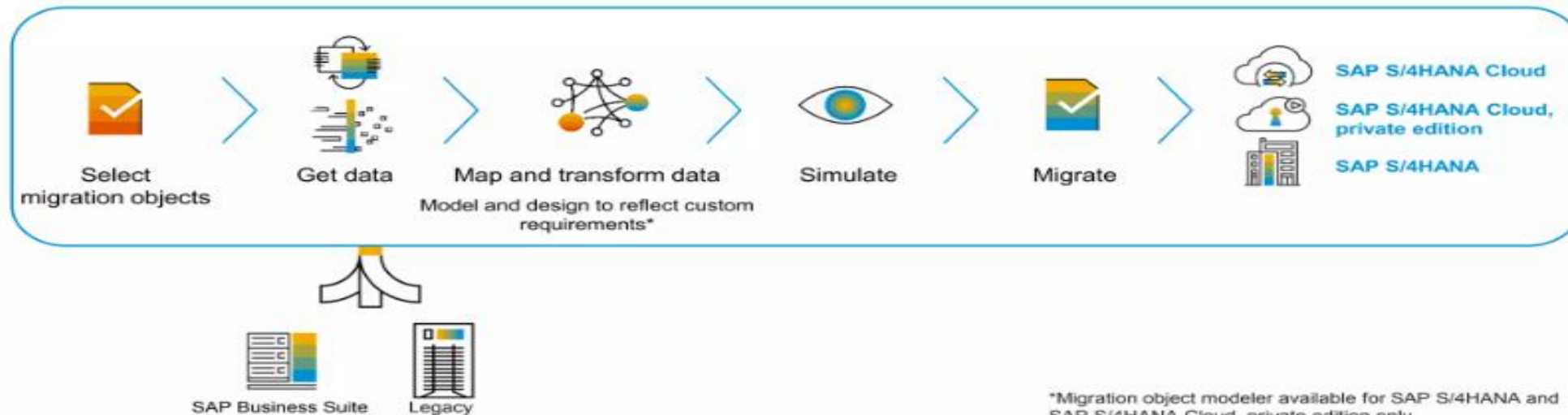


# Migrate your Data Application



- SAP introduced “migrate your data” fiori app from S/4HANA 2020 onwards to migrate business data from SAP system and non-SAP systems to S/4HANA target and monitor status .
- Provide a comprehensive migration solution with no programming required by the customer.
- Include mapped data structures between source and target system.
- Reduce test effort.
- Makes the migration solution auditable.

## Data Migration Process using the Migrate Your Data App



# Demonstration

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## Data Migration Demo

- Steps to perform Data Migration using SAP Tools
  - Migration Cockpit older transaction
  - Migration Fiori Tile
  - DMC Tool and Cockpit (Fiori app)



## Topic 4 - Focus Build and Best Practices

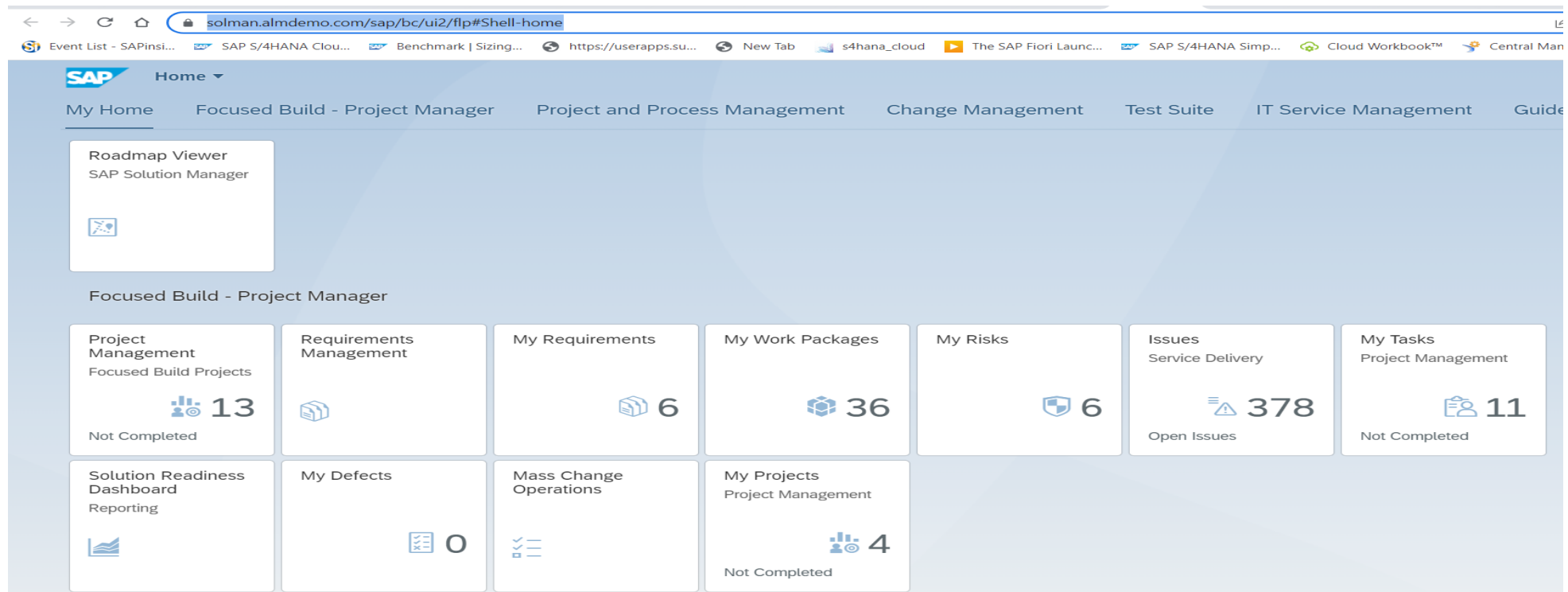
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- Focus Build and Best Practices

# Focus Build

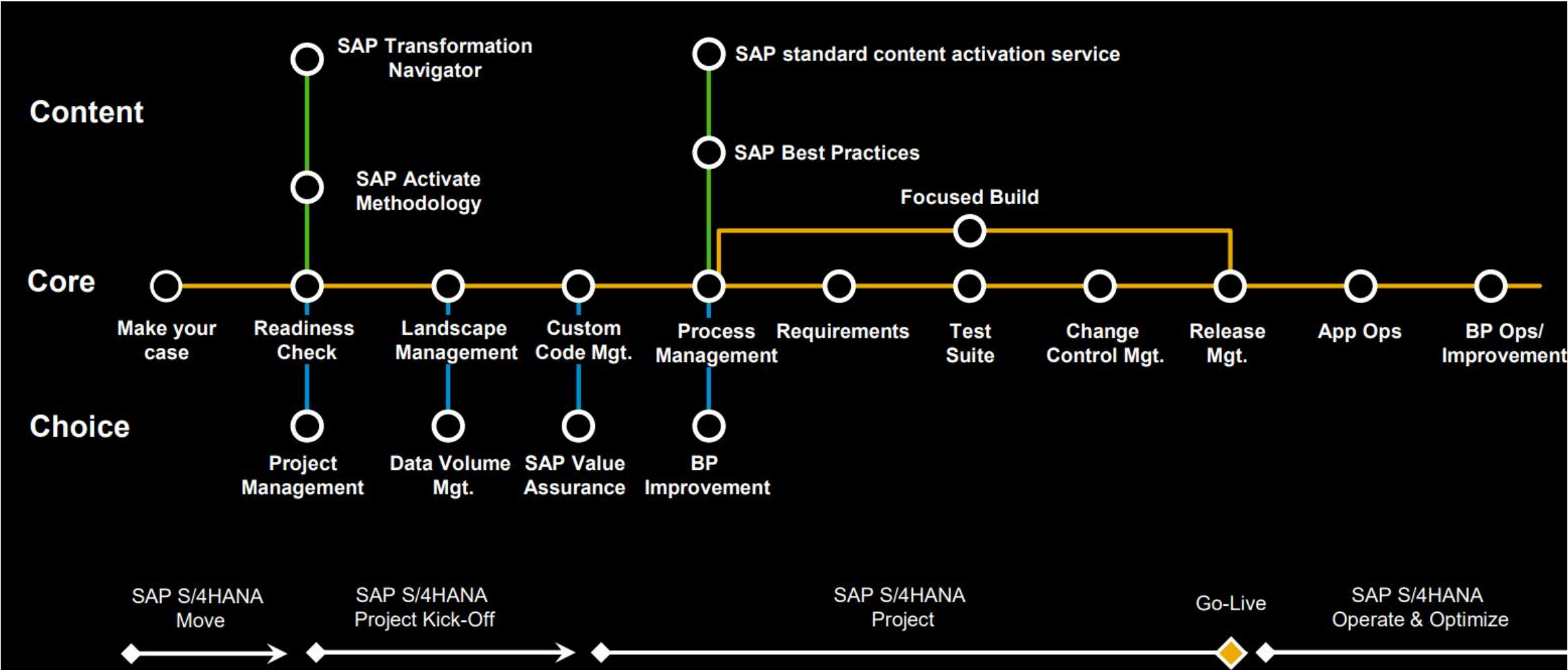
- Focused Build is a ready-to-run and integrated, tool-supported methodology to manage requirements and software development in large, agile projects.
- Focused Build is delivered as a standard solution with no additional coding or costs required
- Focused Solutions are based on SAP Solution Manager 7.2

<https://solman.almdemo.com/sap/bc/ui2/flp#Shell-home>

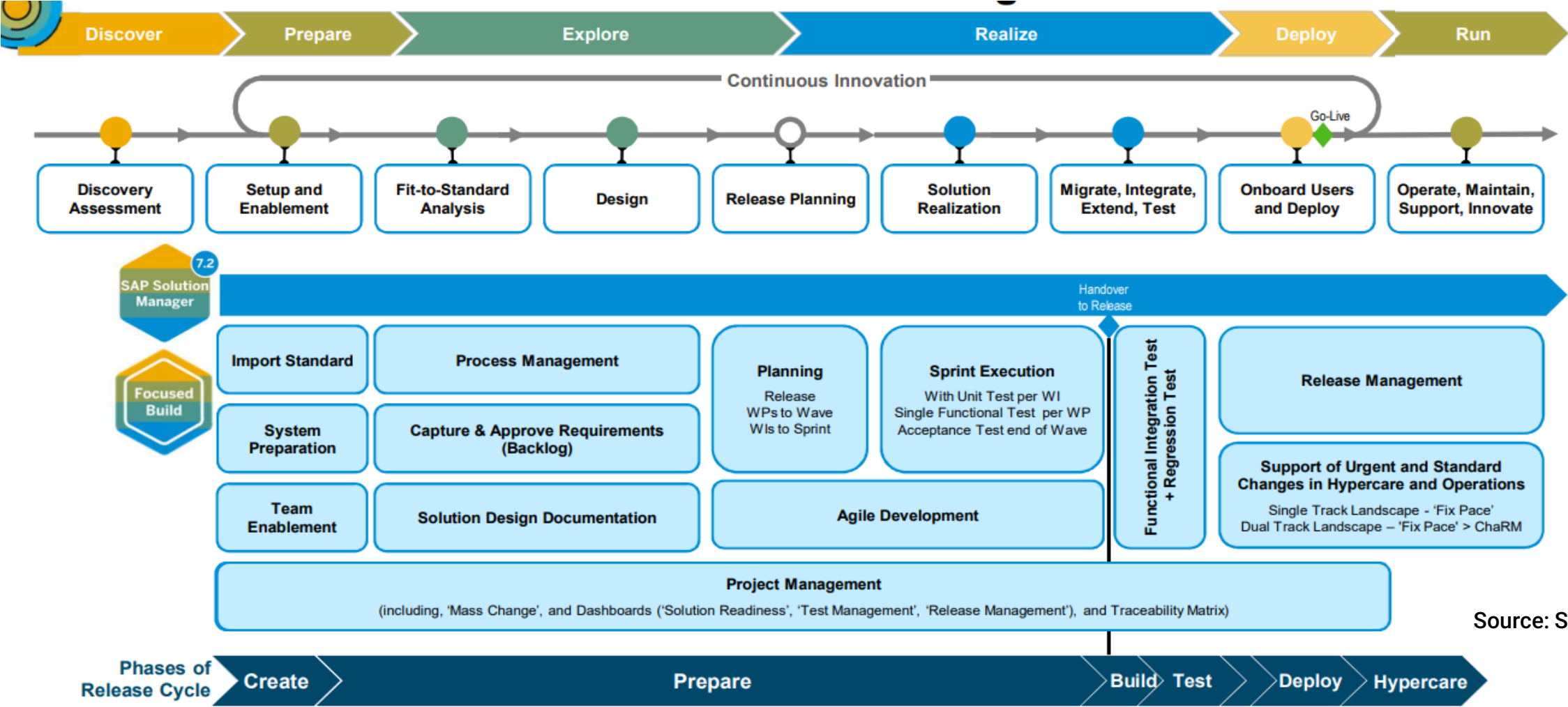




# Path to Move using Project (Focus Build)

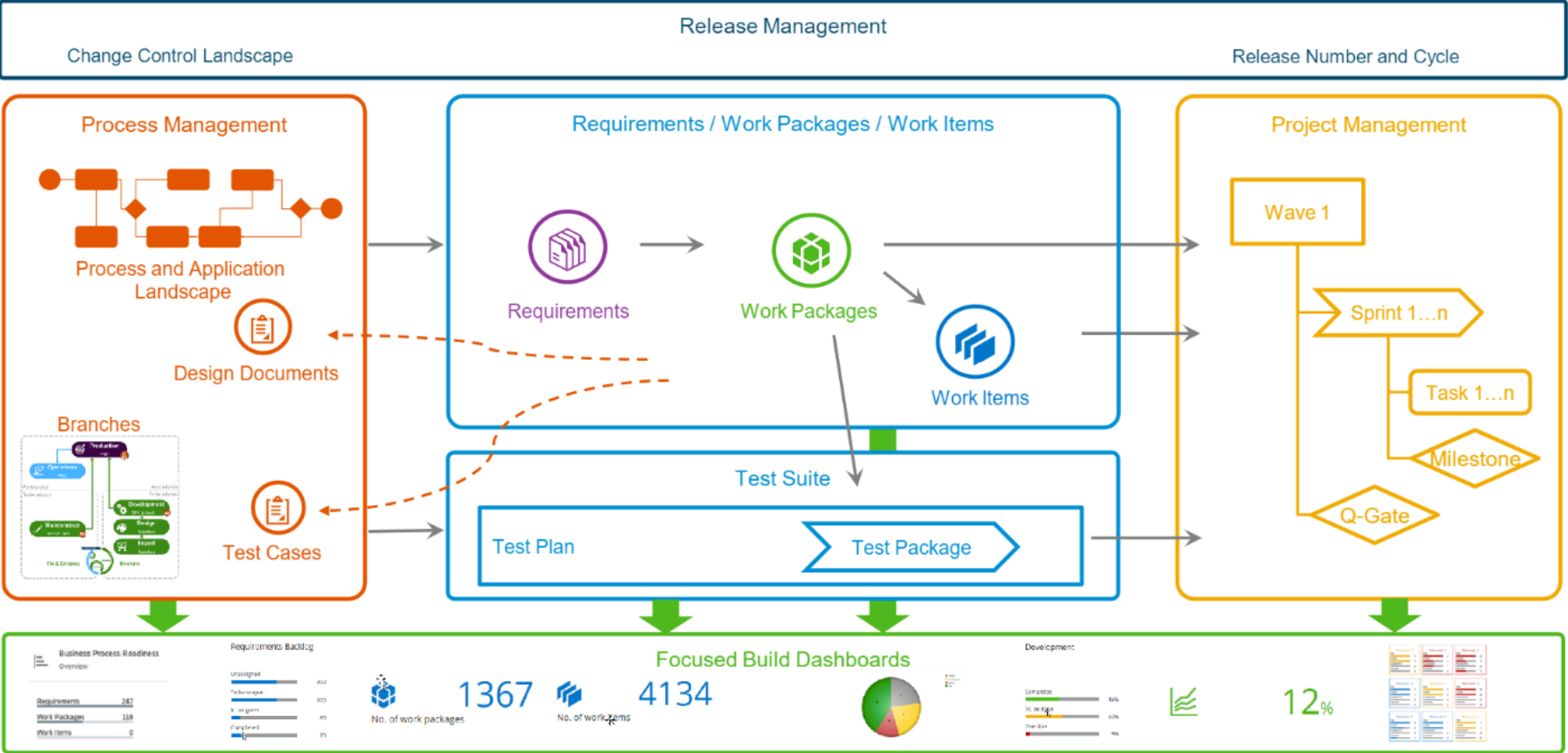


# SAP Activate and Focused Build Project Phases



Source: SAP

# Focus Build Architecture



Source: SAP

# **SAP Best Practices for S/4HANA**

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- **SAP Best Practices are tailored to accelerate and simplify the adoption of SAP S/4HANA for faster time to value**
- **Provides preconfigured content (called scope items) for core business processes with a role specific, responsive and simple user experience**
- **SAP provides a free tool “SAP Best Practices explorer” which provides the scope item details with process flow diagrams, test scripts and an overall description**
- **Best practices can be activated with or without Demo data ( includes sample customers, vendors, materials, and profit centers)**

# Best Practices – S4CONT Activation Procedure

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- Download BP-S4CONT package from marketplace as per your S4HANA version.
- Import the TR from the zip files selecting “Ignore Invalid component version”.
- Import solutions from SAP Best Practices content. Enter t-Code /N/SMB/BBI. Choose menu Solution -> Import -> Solution (XML) -> From reference content.
- Select Solution Builder Content ID BP\_OP\_ENTPR\_S4HANAXXXX\_USV9.XML( As per your version).
- Create a new entry as “Z\_My\_Solution” and copy the solution imported using the XML
- Activate the Settings for Embedded EWM Scope Items.
- Go to t-Code /n/SMB/BBI and select the Solution→ click on Implementation Assistant and Click on button Activate.

## Topic 5 - Overview and Discussion

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**Upgrade/Conversions “Brownfield” move to S/4HANA**

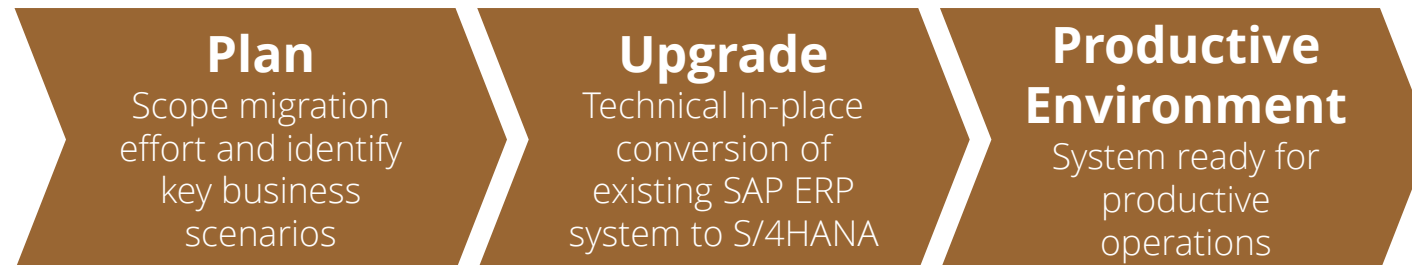


# Brownfield Upgrade Scenario for Moving to S/4HANA

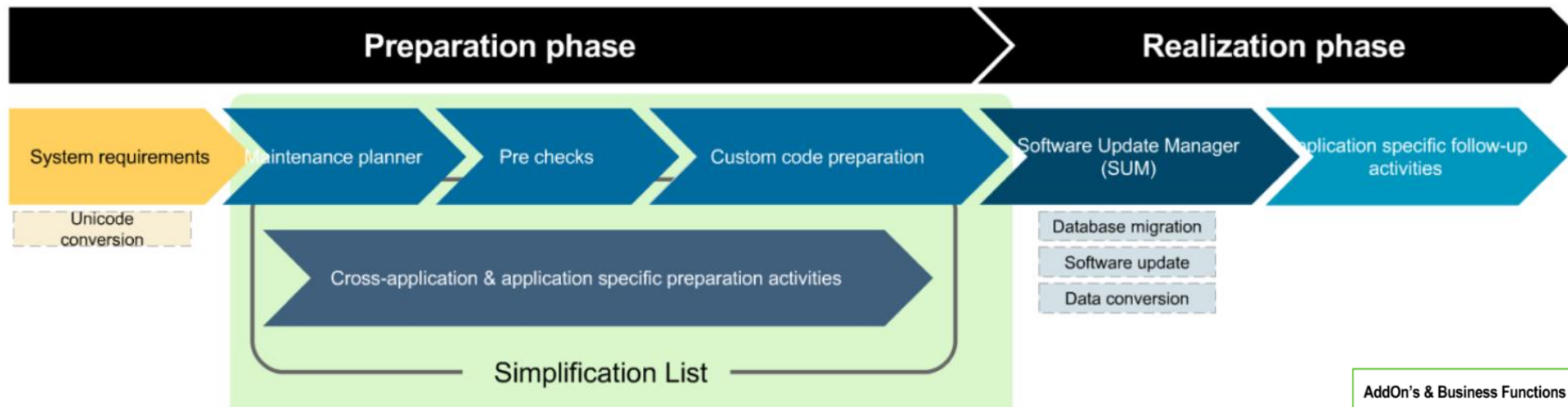
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## Brownfield (traditional upgrade)

- Convert, upgrade, and migrate from existing ERP 6.0 system (ECC) to SAP S/4HANA bringing over all existing configuration and data
- Reduced effort and duration as compared to selective transformation approach
- Reduction in complexity as there is no need to perform process redesign or transformation
- All data, including historical transaction data, is accessible in the new S/4HANA system



# System Conversion Process for Upgrade (Brownfield)



- **Simplification List is S/4 version dependent.** Describes what happens in S/4 HANA to individual transactions and solution capabilities.
- **Custom Code Check** is needed against the Simplification Database to understand the compatibility of the custom code in S/4 and if it is required in S/4 HANA version.

**Custom Code & Custom Dev**

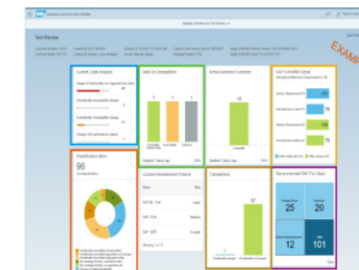
- Custom Code must be analyzed with respect to SAP S/4HANA compliance, based on the SAP S/4HANA simplification database
- SAP Readiness Check provides BOM of affected objects as well as SAP Custom Development Projects (CDP's)
- An in-depth custom code management activities to follow during project execution

**Simplification items**

- Simplification Items represent application or architecture changes in comparison to SAP ERP
- About 470 Simplification Items exist for SAP S/4HANA 1610
- They are grouped by business priority (e.g. Core Finance) and industry, respectively

**AddOn's & Business Functions**

- SAP AddOn's and Business Functions as well as 3rd party AddOn's have to be checked for their compatibility with SAP S/4HANA
- SAP software is listed and rated
- 3rd party software is listed only



**Transactions**

- SAP GUI transactions replaced or deprecated in SAP S/4HANA, such as Classic MM-PUR GUI transactions

**SAP S/4HANA Sizing**

- To prepare for SAP S/4HANA, a system sizing is the baseline for further discussions regarding the future target size
- SAP Readiness Check summarizes the technical sizing result so that customers can further engage internally, with SAP or with partners to discuss the future target system size

**Recommended SAP Fiori Apps**

- SAP Fiori apps recommended based on the transaction usage history in the evaluated system

Source: SAP

# Methods to use for Moving to S/4HANA - Selective Migration

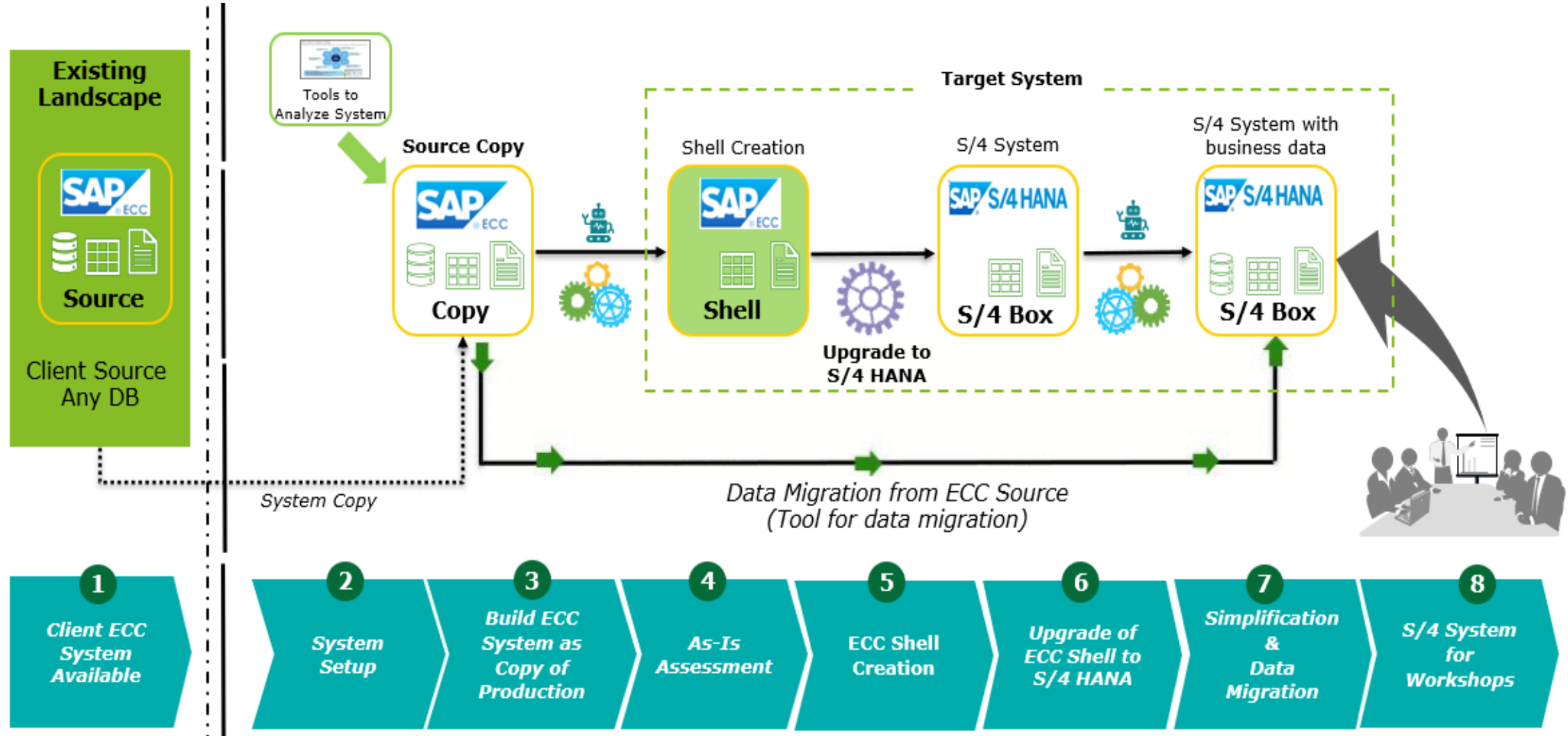
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## Selective Migration (Data is migrated selectively using tools)

- Opportunity to "carve out" data from existing system and migrate both data and application selectively to the new S/4HANA system
- Great opportunity to redesign in the new system utilizing the full capabilities of S/4HANA
- Similar to a new system implementation with master data load (must use tools to load the data)
- Existing configuration is brought over to help minimize rework of the configuration



# Selective Migration Process for Moving to S/4HANA



## TOPIC 6 - Readiness and Simplification Checks

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- **SAP Readiness Checks and Simplification Checks**

# S/4HANA Tools

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These are the tools for conversion and upgrade

[https://help.sap.com/docs/SAP\\_S4HANA\\_ON-PREMISE](https://help.sap.com/docs/SAP_S4HANA_ON-PREMISE)



## Conversion & Upgrade Assets

### [Simplification Item Catalog](#)

Search and browse the Simplification List online

### [Simplification List for SAP S/4HANA](#)

Focuses on what needs to be considered in an implementation / migration project from SAP ERP 6.X to SAP S/4HANA.

### [SAP Readiness Check](#)

Analyzes your SAP ERP 6.0 system and highlights important aspects of the conversion to SAP S/4HANA, such as identification of relevant simplification items, high-level custom code analysis, add-on compatibility, sizing, and more. (The tool is not relevant for the upgrade from one SAP S/4HANA release to the next.)

### [Custom Code Migration Guide for SAP S/4HANA 2022](#)

Provides instructions on how to adapt custom code in the context of a system conversion to SAP S/4HANA.

### [Custom Code Management \(CCM\) During an SAP S/4HANA Conversion Project](#)

Best practices for CCM during the conversion of a single SAP ERP system to an SAP S/4HANA system.

### [Data Volume Management \(DVM\) During an SAP S/4HANA Conversion Project](#)

Best practices for DVM During the conversion of a single SAP ERP system with a medium sized database to an SAP S/4HANA system.

### [Introduction of SAP Fiori during an SAP S/4HANA Conversion](#)

Best practices for SAP Fiori introduction during the conversion of a single SAP ERP system to an SAP S/4HANA system.



# SAP Readiness Checks

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SAP Readiness checks tool build a platform to analyze the source system and viewing the resulting reports files.

SAP Readiness Check for SAP S/4HANA provides a pre-conversion overview, useful for identifying current system landscape preparation steps, well in advance of SAP S/4HANA system conversion project start date.

The following checks are available in SAP Readiness Check for SAP S/4HANA and ECC upgrades:

- ✓ Simplification Items
- ✓ Recommended SAP Fiori Apps
- ✓ Integration
- ✓ Custom Code Analysis
- ✓ SAP Innovative Business Solutions
- ✓ Add-On Compatibility

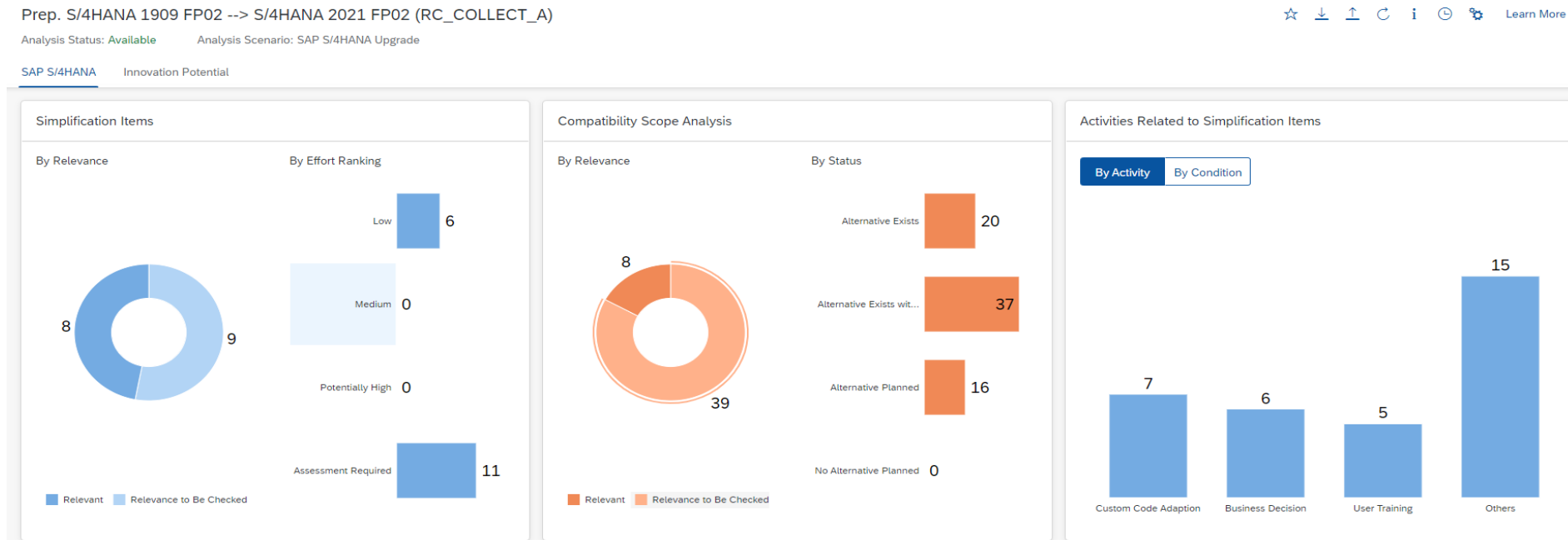
# Readiness Checks Data Collector

- There are SAP Readiness Data Collector report for ECC and S/4 HANA systems which pulls the readiness analysis.

ECC Report: RC\_COLLECT\_ANALYSIS\_DATA

S/4 HANA Report: /SDF/RC\_START\_CHECK

- Readiness test results for S/4 HANA 1909 to S/4 HANA 2021 below:

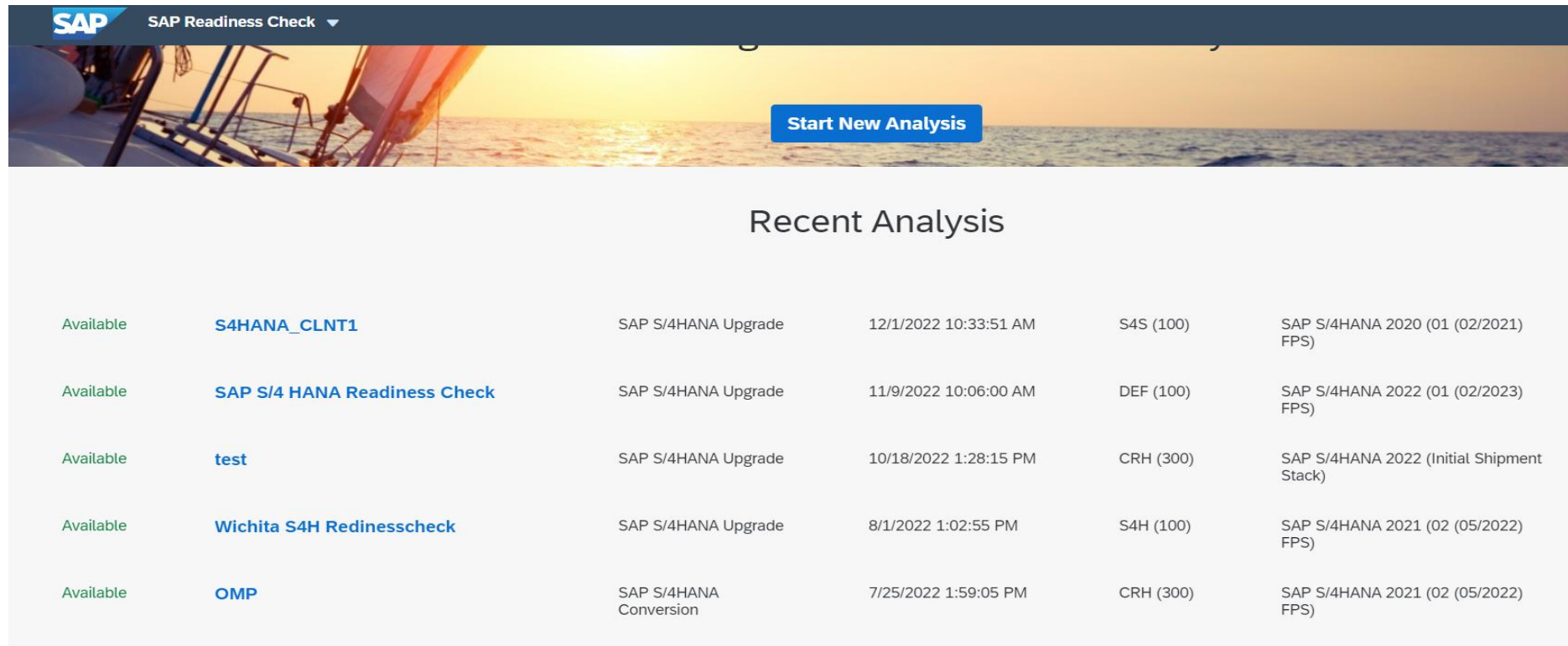


# SAP Readiness Checks

**STEP 1** – Run the collection for the readiness checks on the source system (ECC), execute the program RC\_COLLECT\_ANALYSIS\_DATA via transaction SA38.

**STEP 2** – Download the collected data and upload into the Readiness Check Analysis site → link to <https://rc.cfapps.eu10.hana.ondemand.com>

**STEP 3** – Perform the analysis and review the reports. Reference the SAP documentation for more details.

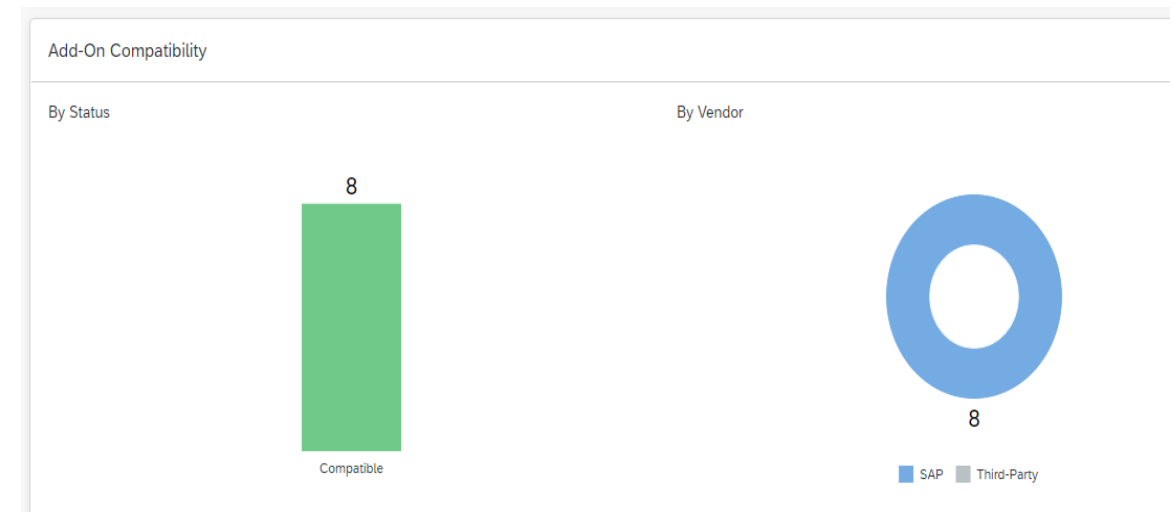
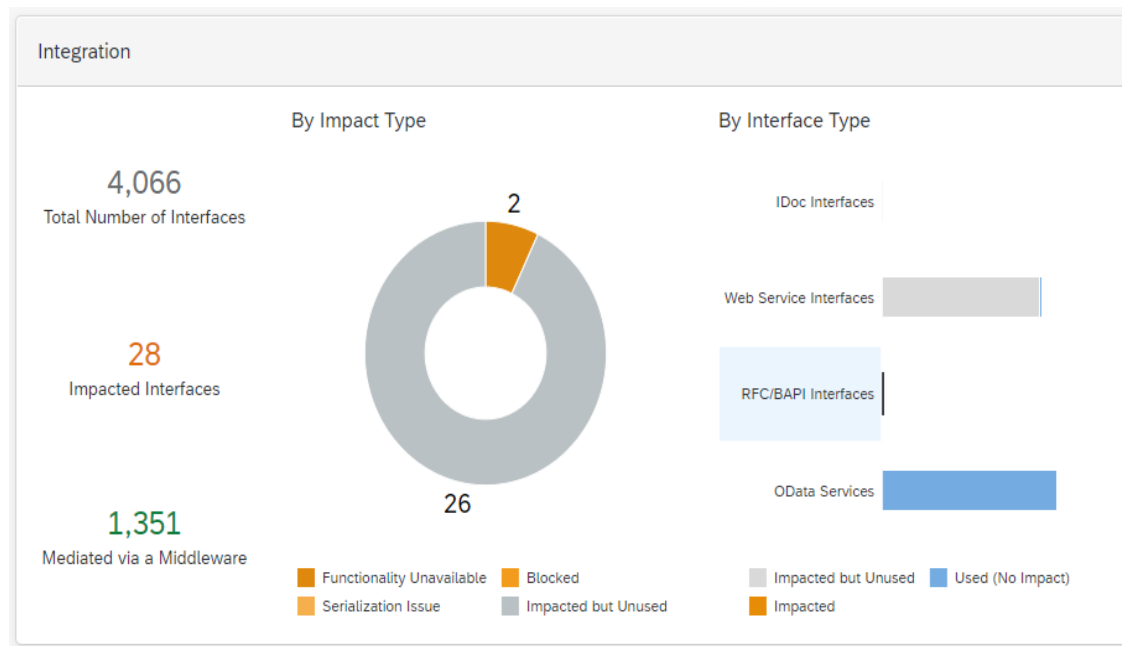


Available	<a href="#">S4HANA_CLNT1</a>	SAP S/4HANA Upgrade	12/1/2022 10:33:51 AM	S4S (100)	SAP S/4HANA 2020 (01 (02/2021) FPS)
Available	<a href="#">SAP S/4 HANA Readiness Check</a>	SAP S/4HANA Upgrade	11/9/2022 10:06:00 AM	DEF (100)	SAP S/4HANA 2022 (01 (02/2023) FPS)
Available	<a href="#">test</a>	SAP S/4HANA Upgrade	10/18/2022 1:28:15 PM	CRH (300)	SAP S/4HANA 2022 (Initial Shipment Stack)
Available	<a href="#">Wichita S4H Redinesscheck</a>	SAP S/4HANA Upgrade	8/1/2022 1:02:55 PM	S4H (100)	SAP S/4HANA 2021 (02 (05/2022) FPS)
Available	<a href="#">OMP</a>	SAP S/4HANA Conversion	7/25/2022 1:59:05 PM	CRH (300)	SAP S/4HANA 2021 (02 (05/2022) FPS)

# Viewing the Reports from the Readiness Checks

Reports are grouped by area

Drill down is possible by clicking on items and more details will display



<https://rc.cfapps.eu10.hana.ondemand.com/comsaprcweb/index.html>

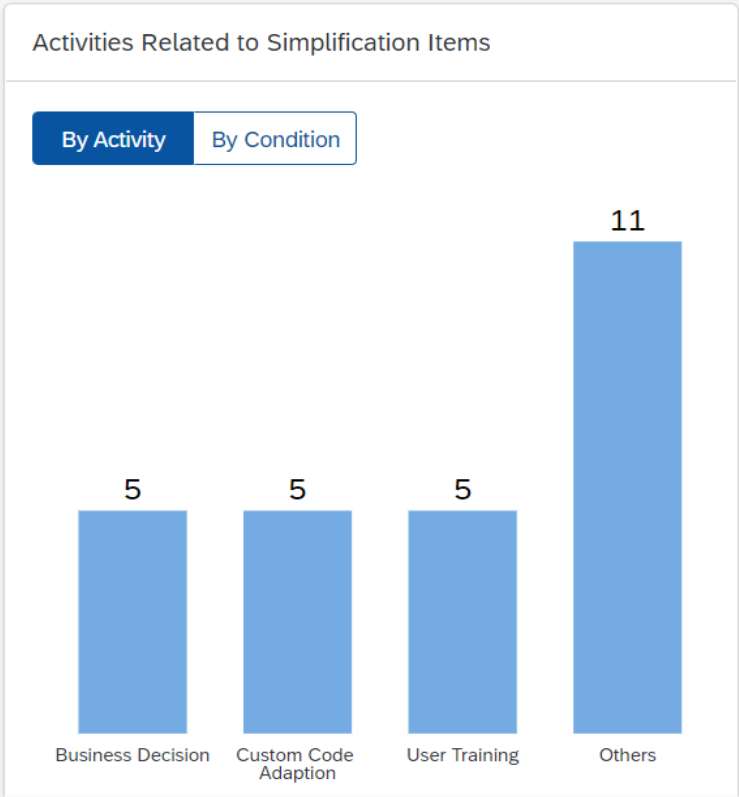
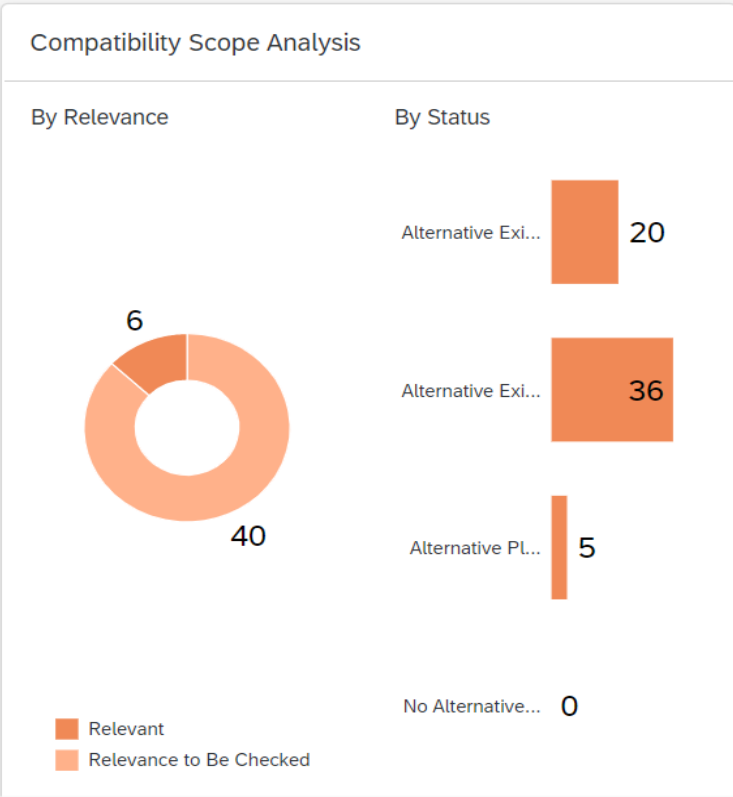
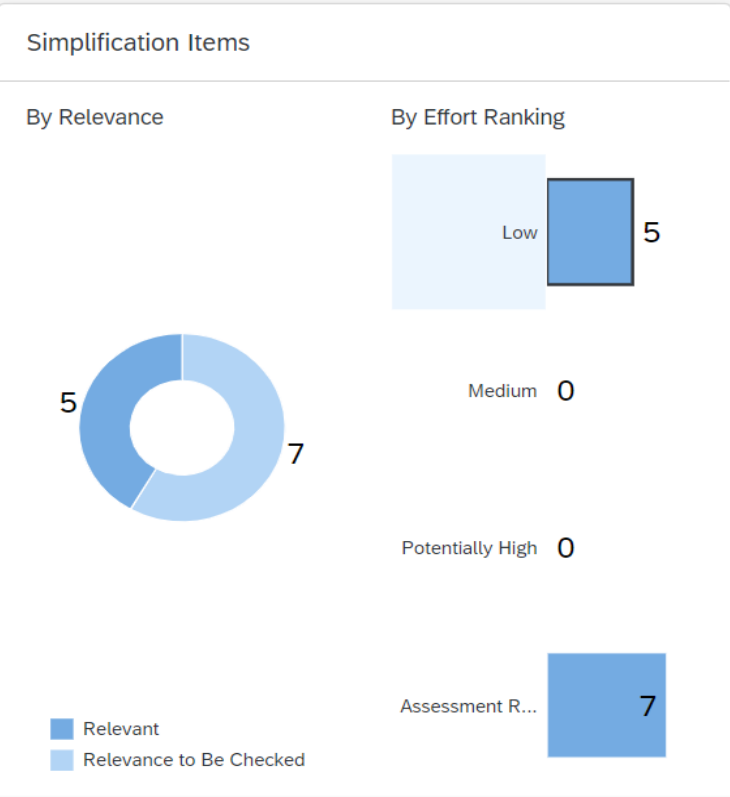
# Readiness and Simplification Checks

## Wichita S4H Redinesscheck

Analysis Status: Available      Analysis Scenario: SAP S/4HANA Upgrade

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[SAP S/4HANA](#)   [Innovation Potential](#)



# Demonstration

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## Readiness and Simplification Demo

- Steps on how to run the readiness checks in ECC or S/4HANA systems
- Downloading the results files for use in the SAP Readiness Checks Support Portal



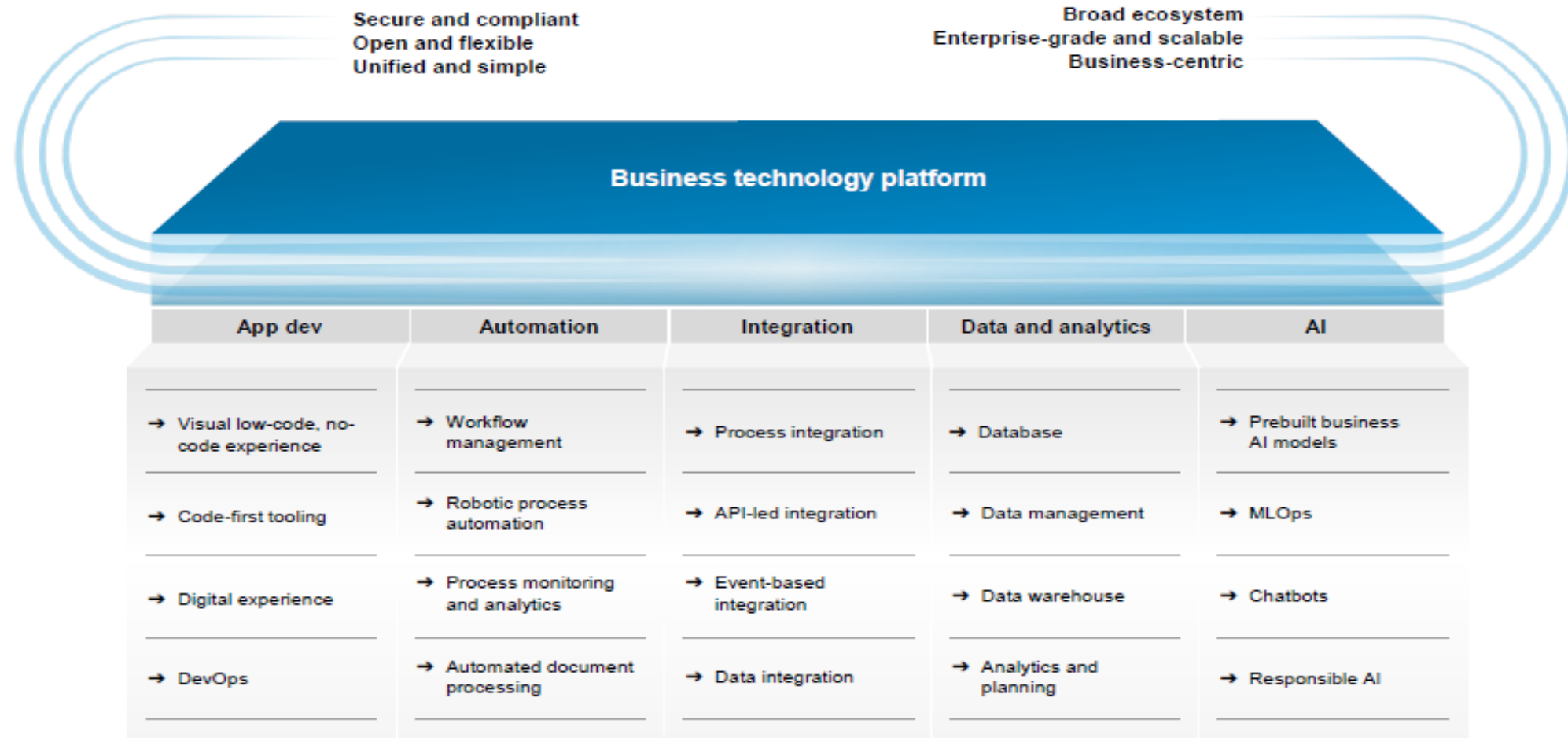


## TOPIC 7 - Using BTP Tools for Moving to S/4HANA

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- Can be used for Implementation or Upgrade
- SAP Business Technology Platform services for S/4HANA

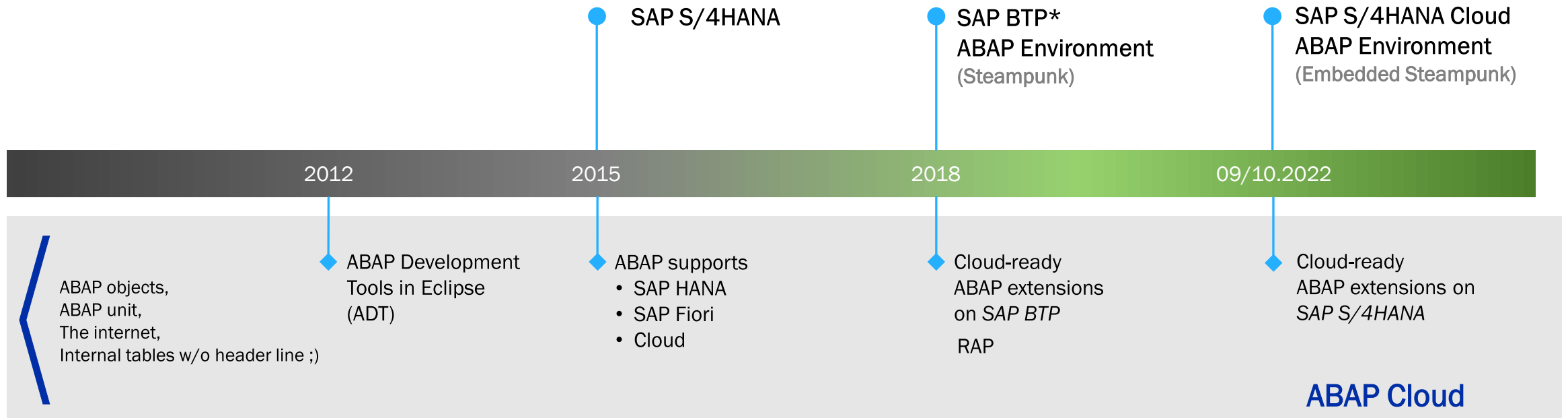
# SAP BTP – Cloud capabilities



Source: SAP

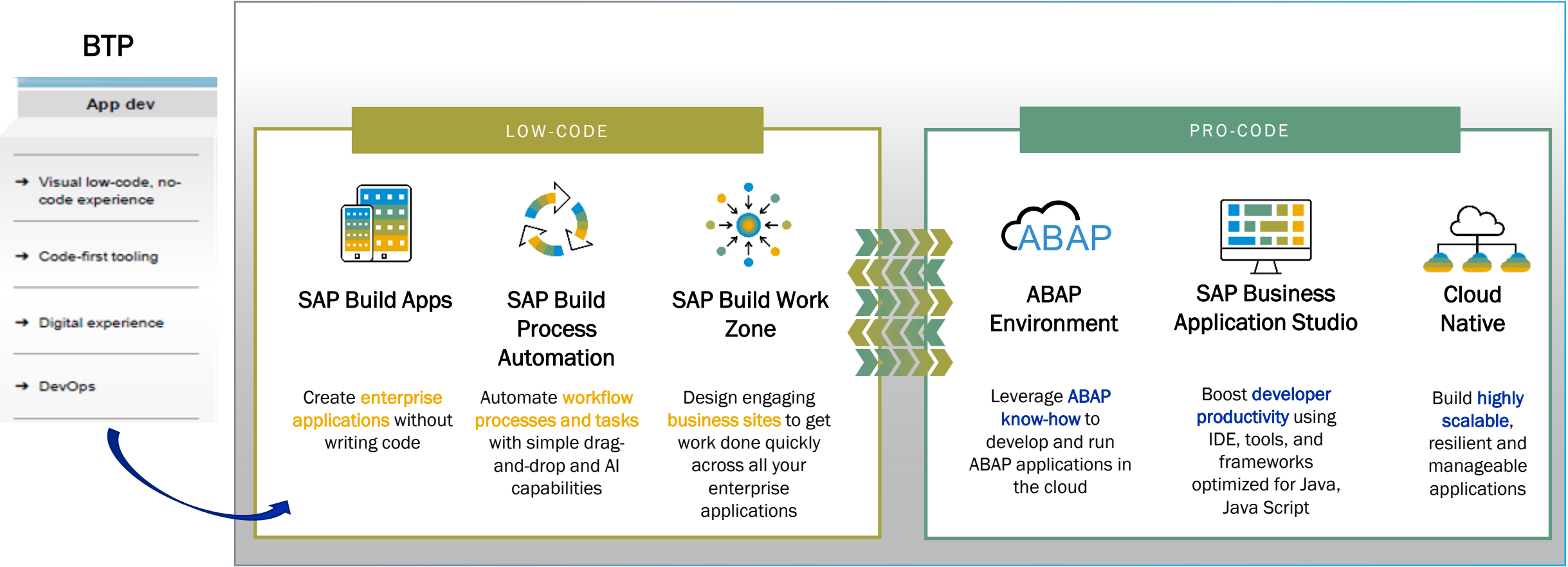
# Evolution towards ABAP Cloud

- The evolution towards ABAP Cloud is the ABAP development model to build cloud-ready business apps, services and extensions
- Comes with SAP BTP and SAP S/4HANA
- Works with public or private cloud, and even on-premise



Source: SAP

# Developer Tools - Low-code and Pro-code



Source: SAP

# Custom Code Conversion Overview

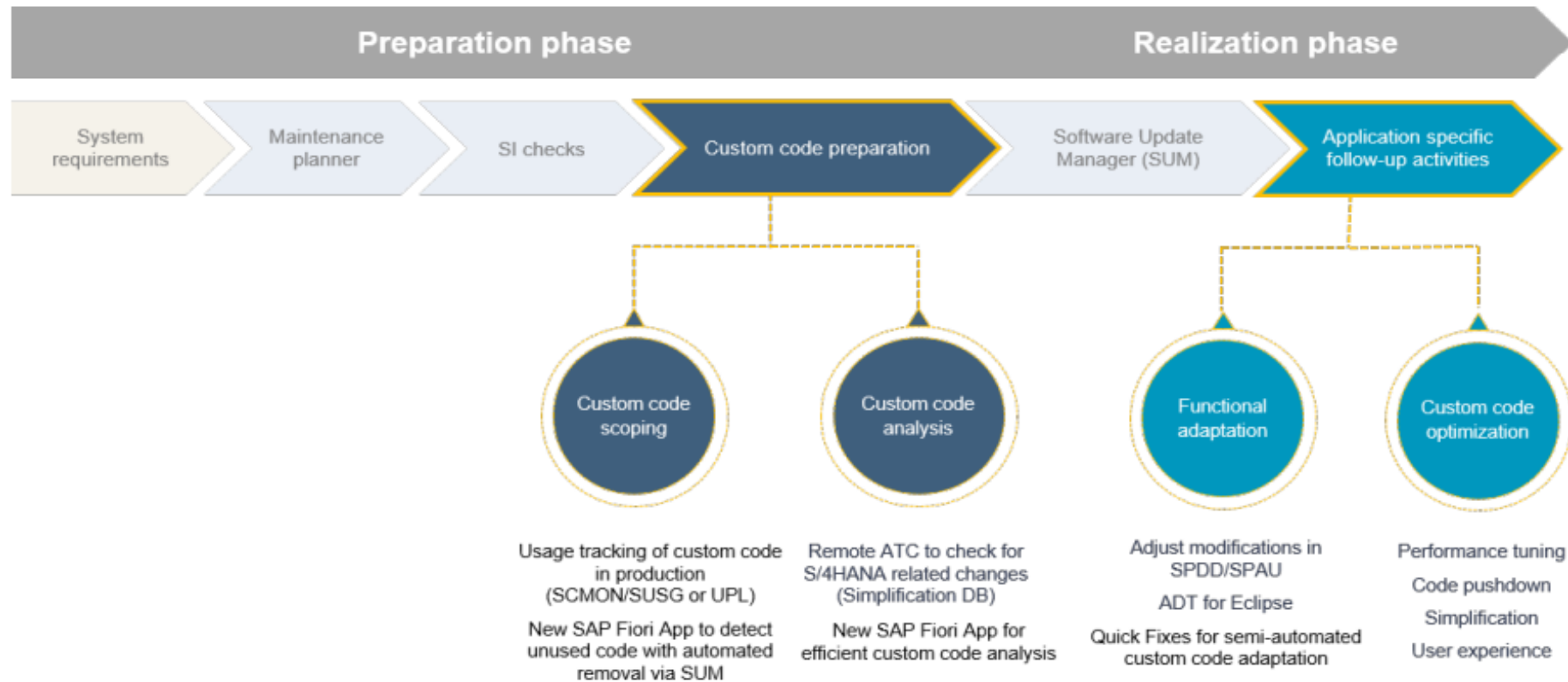
- Custom Code must be adapted before upgrading. Use the Custom Code Migration app. Refer to the custom code conversion guide.
- Run the SAP S/4HANA checks to analyze which custom code needs to be adapted to get information about the findings for the development objects that need to be adapted.
- Run the SAP S/4HANA checks based on the ABAP Test Cockpit (ATC).



Source: SAP

# Custom Code Conversion Phases

## Custom Code Preparation Overview






Overview of the conversion process that is divided into the preparation phase and the realization phase

Source: SAP

# Custom Code Conversion Analysis Options

## Custom Code Analysis Options:

1. With Remote ATC with SAPGUI
2. Fiori Custom Code Migration App
3. **SAP BTP ABAP Environment - BTP can be used for Code Transformation if using Brownfield**

	 <b>Remote ATC with SAP GUI</b>	 <b>SAP Fiori Custom Code Migration App</b>	 <b>SAP Fiori Custom Code Migration App in SAP BTP ABAP Environment</b>
Required system	Central ATC check system (SAP_BASIS 7.52)	Central ATC check system (SAP S/4HANA >=1809)	SAP BTP ABAP Environment
System location	in customer landscape	in customer landscape	cloud
Remote connectivity	via RFC	via RFC	via RFC and SAP Cloud Connector
Technical configuration	manual	manual	with CIAS
Analyze Cloud findings	✓	✓ (only >= SAP S/4HANA 1909)	✓
Analyze SAP S/4HANA findings	✓	✓	✓
Simplification information in ATC result	✓	✓	✓
Filter results by scope and Quick Fix availability	✗	✓	✓
Define custom code migration scope based on usage data	✗	✓	✓
Remove unused code during system conversion via SUM	✗	✓	✓

Source: SAP



# Clean ERP Setting the Stage

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## **Opportunities:**

- Decoupling of code from core
- Reduce the number of technical development objects
- Limit enhancements by utilizing extensions
- Convert integrations to APIs / services
- Leverage the latest innovative solutions available on Business Technology Platform

## **What it is ?**

- Reducing technical debt on core
- Building custom developments outside of core (on Platform)
- Leverage side-by-side extensibilities and whitelisted APIs to make code upgrade independent

## **What it is Not?**

- Core can be with zero custom object
- Data must reside on cloud
- Eliminates need for governance
- Eliminates development effort

# 3-Tier Extensibility Model for SAP S/4HANA

## Both Private Cloud and On-Premise

### TIER 1 – Cloud extensibility model

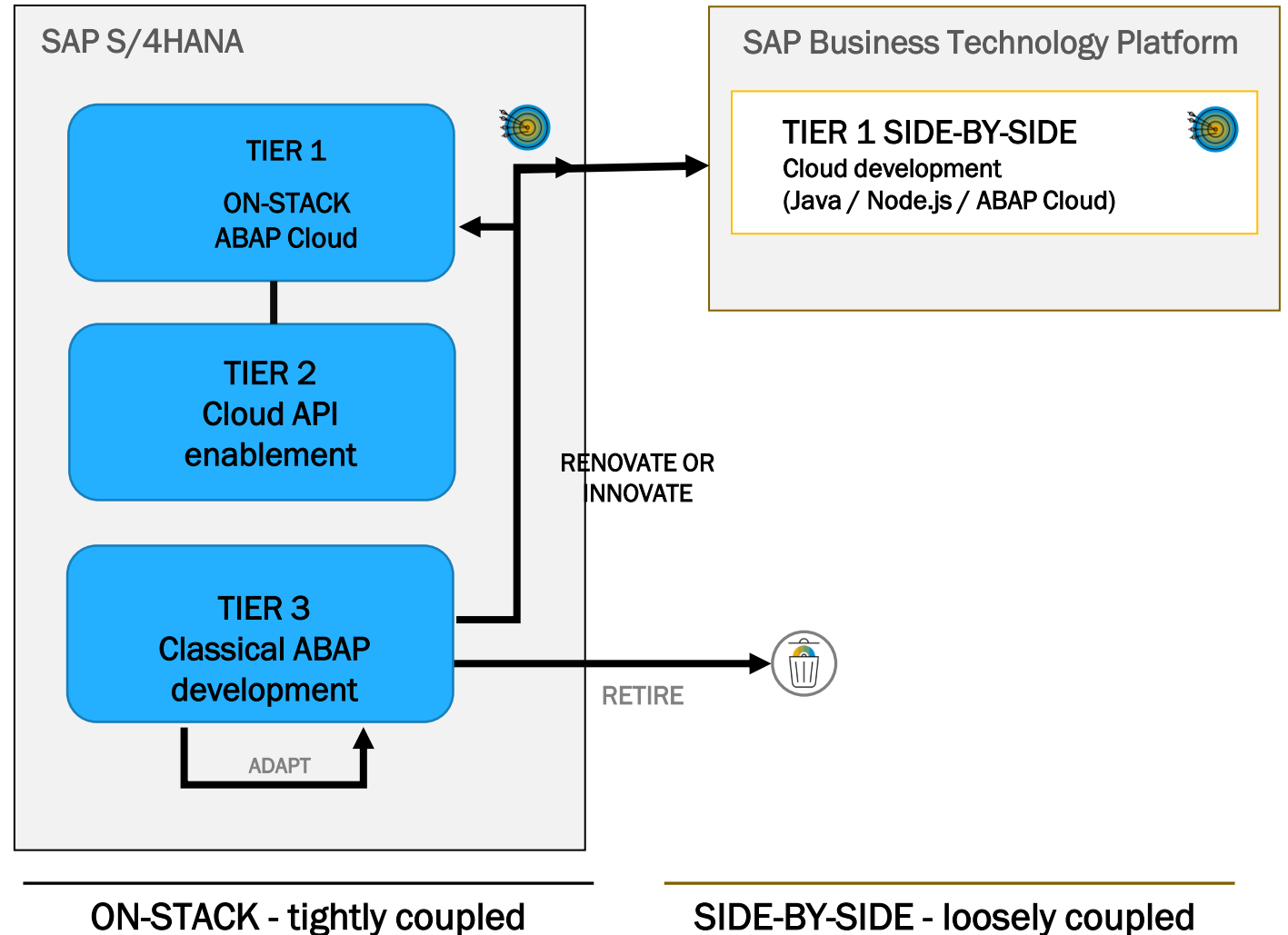
- Cloud-ready and upgrade-stable development of new applications and extensions. ABAP Cloud is mandatory – no classic ABAP in tier 1.
- Same development model as used in SAP S/4HANA Cloud, public edition
- Default for new extensions and custom apps

### TIER 2 – Cloud API enablement

- Extends and enables tier 1 for private cloud and on-premise
- Mitigates missing public SAP APIs or extension points:
- Develop custom wrapper objects for not released SAP objects to be used in tier 1
- Retire wrapper once a released SAP API is available

### TIER 3 – Classic ABAP extensions

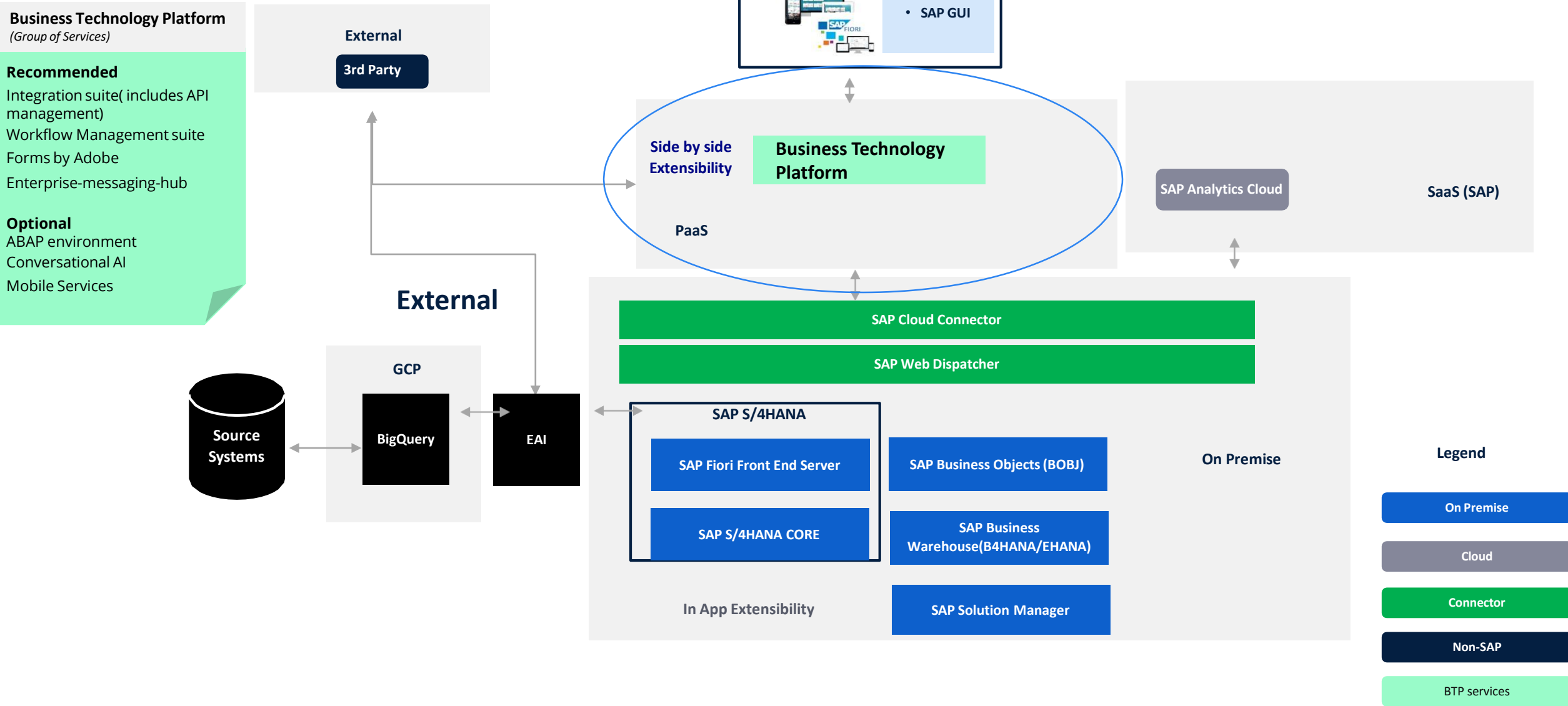
- Legacy/existing custom ABAP code or new on-stack extensions code that cannot follow the rules of tier 1 and 2
- Avoid and reduce the content in tier 3



# Programming Options

	Classic	In App Extensibility	Side by Side Extensibility
Programing Model	Fiori, ABAP UI (Web Dynpro & FPM), HANA	Fiori flexibility, Custom fields, Business logic, Reusable elements and Custom CDS views, RESTful ABAP Programming Model (RAP)	UI5/ Fiori, Java, JavaScript (node.js), HANA, Restricted ABAP, Cloud Application Programming Model (CAP), Restful ABAP Programming Model (RAP)
Tools	Web IDE/Eclipse, ABAP Workbench, Eclipse(HANA Tools)	Web IDE/Business Application Studio (BAS), Eclipse, Fiori Key User Tools (apps)	Eclipse/Web IDE/Business Application Studio (BAS), S/4HANA Cloud SDK, HANA Studio, Restricted ABAP Environment
Pros	<ul style="list-style-type: none"> <li>▪ Easy to develop</li> <li>▪ No cloud subscription required</li> <li>▪ No additional programming language/platform required</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cloud subscription is not necessary</li> <li>▪ Upgrade friendly</li> <li>▪ SAP Whitelisted APIs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Technical debt is reduced</li> <li>▪ Web API's(Including SAP SaaS products)</li> </ul>
Cons	<ul style="list-style-type: none"> <li>▪ Upgrade complexity</li> <li>▪ Technical debt overhead</li> <li>▪ No technical restrictions for modifying standard APIs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Limited options to enhance the objects</li> </ul>	<ul style="list-style-type: none"> <li>▪ Additional license cost for development tools and cloud services</li> <li>▪ Need expertise on additional programming languages like node.js and java</li> </ul>

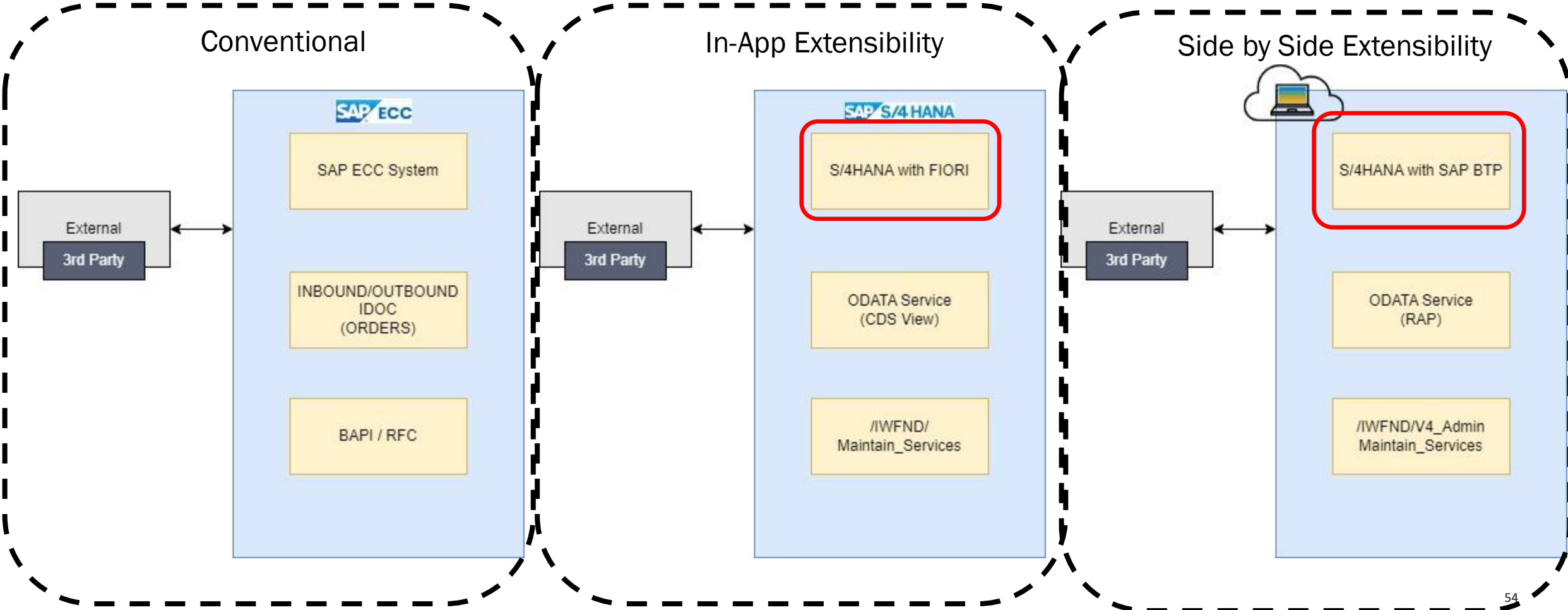
# Simplified Technical Architecture



# Clean Core Demo - In-App Extensibility

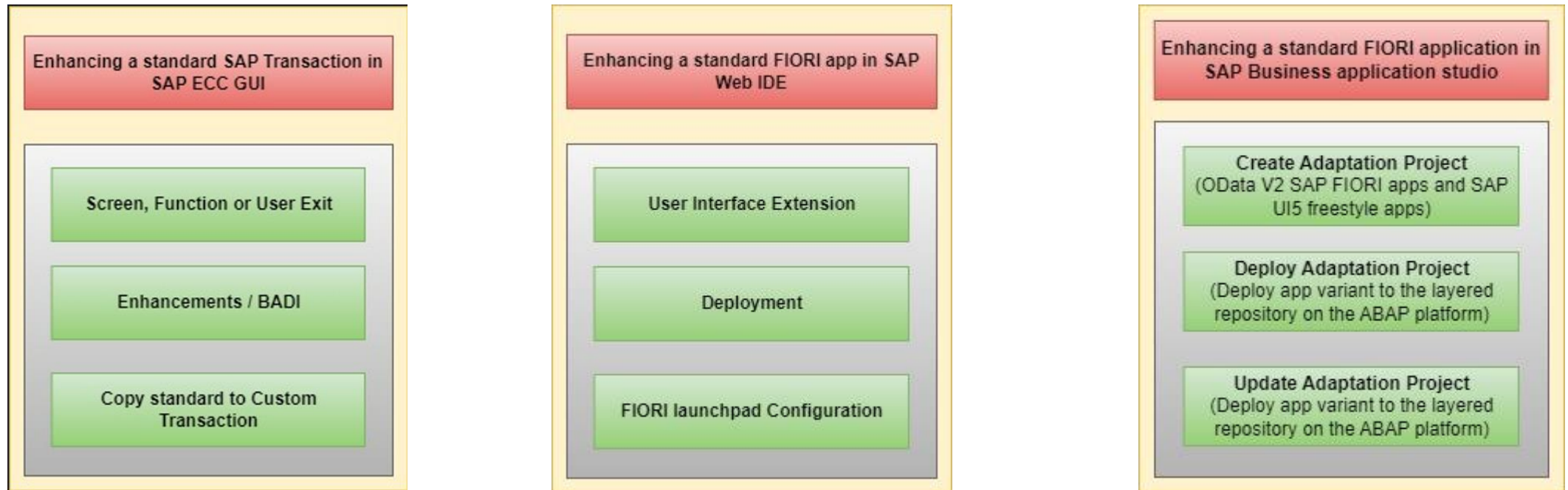
Use case - Extract purchase order related data from third-party system to SAP application

Source: SAP



# Clean Core Demo – Side by Side Extensibility

Use case – Extending an SAP Fiori Application



Source: SAP

# Demonstration

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**Demonstration of BTP (Business Technology Platform) and review of services related to SAP S/4HANA upgrade and migration**

- **Leverage Integration Suite**
- **Review BTP Capabilities**



## **TOPIC 7 - Tools for Upgrade and Conversions to S/4HANA**

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**Tools for Upgrade and Conversions to S/4HANA**

**SAP SUM tool and DMO Options**

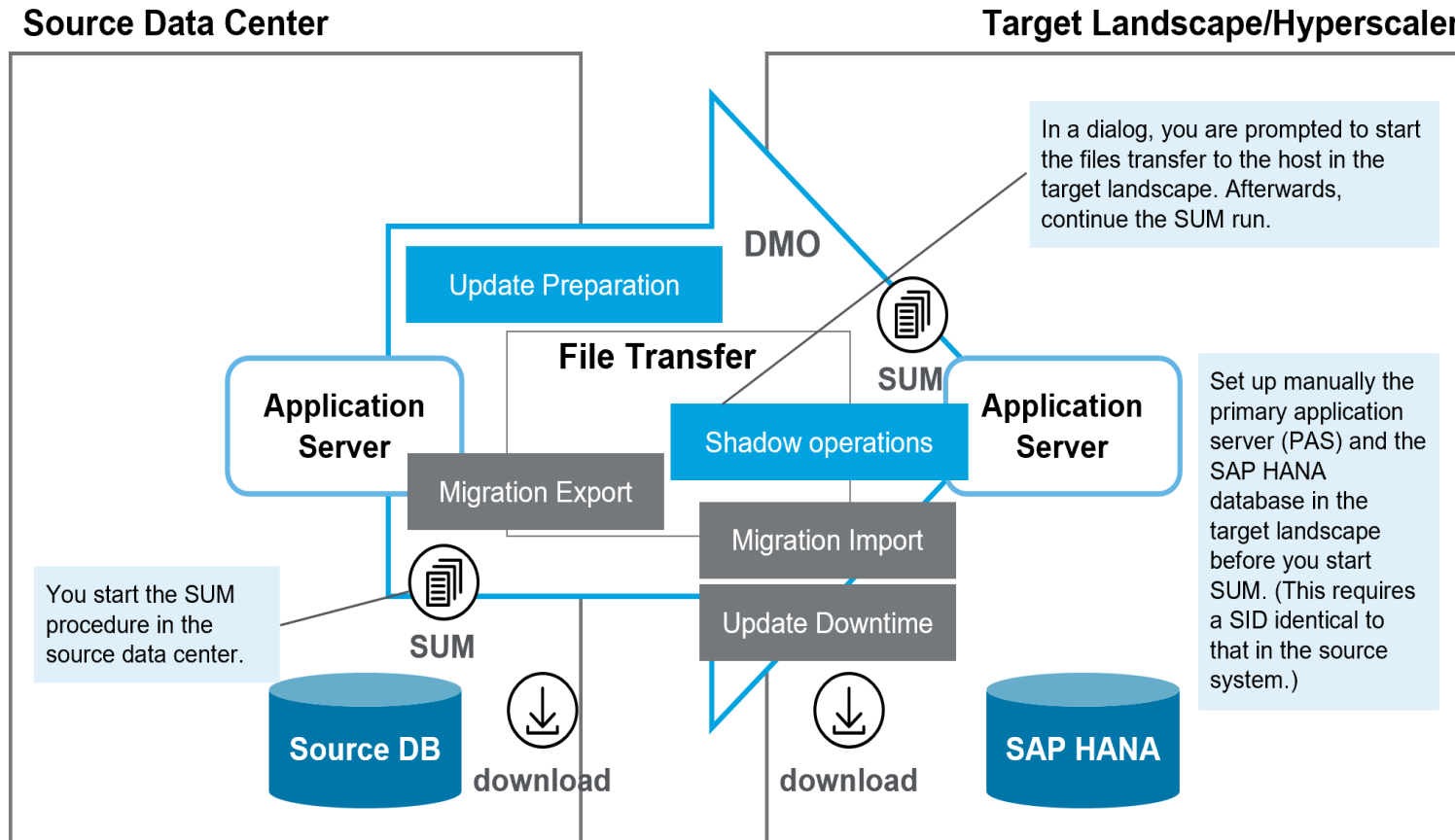


# Steps and Tools to Prepare for Upgrade to S/4HANA

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1. Review the current software releases, components, add-ins, and ECC switch framework enabled features to verify the compatibility for S/4HANA.
2. Perform a complete detailed system review for the source systems and target systems including connectivity, networking, and storage systems for space needed for the conversion process. Verify that all the hardware and baseline software requirements as published in the relevant SAP documents and SAP notes are met.
3. Simplification Item Catalog - Search and browse upgrade relevant simplification items for targeted release.
4. SAP Readiness Checks - Analyze the source system and identify simplification items, high-level custom code analysis, add-on compatibility, and other items:
  - Implement CVI to synchronize the Customer Master and Vendor Master objects with SAP Business Partner objects
  - Relevance check produces a customized list of relevant simplification items for the ECC system determined on rules maintained in the simplification item catalog
  - Consistency check to analyze the consistency of the system in preparation for the conversion or upgrade using Software Update Manager
  - Utilize the ABAP Test Cockpit (ATC)
5. Custom Code Migration Guide for adapting custom code. as part of the readiness check for the ABAP program.
6. Maintenance Planner used for software components preparation, download, and stack XML file creation
7. Software Update Manager 2.0 - SAP SUM/DMO tool to perform the software upgrade and migration

# S/4HANA Upgrade for Brownfield - SUM/DMO with Move Option



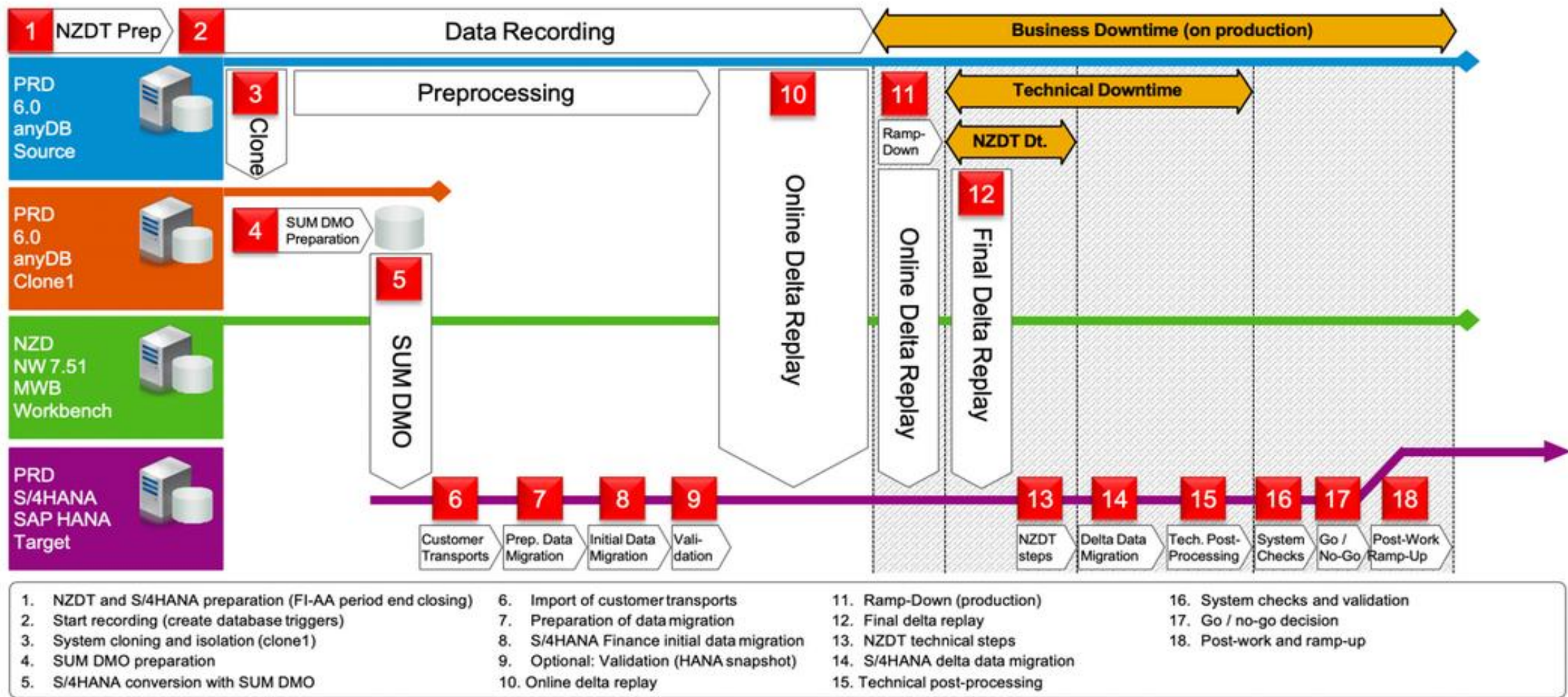
Source: SAP

The Software Update Manager offers the Database Migration Option (DMO), which is the combination of the SAP software update with the database migration. Supports changing O/S and DB types. Target is HANA 2.0.

## Steps to be followed :

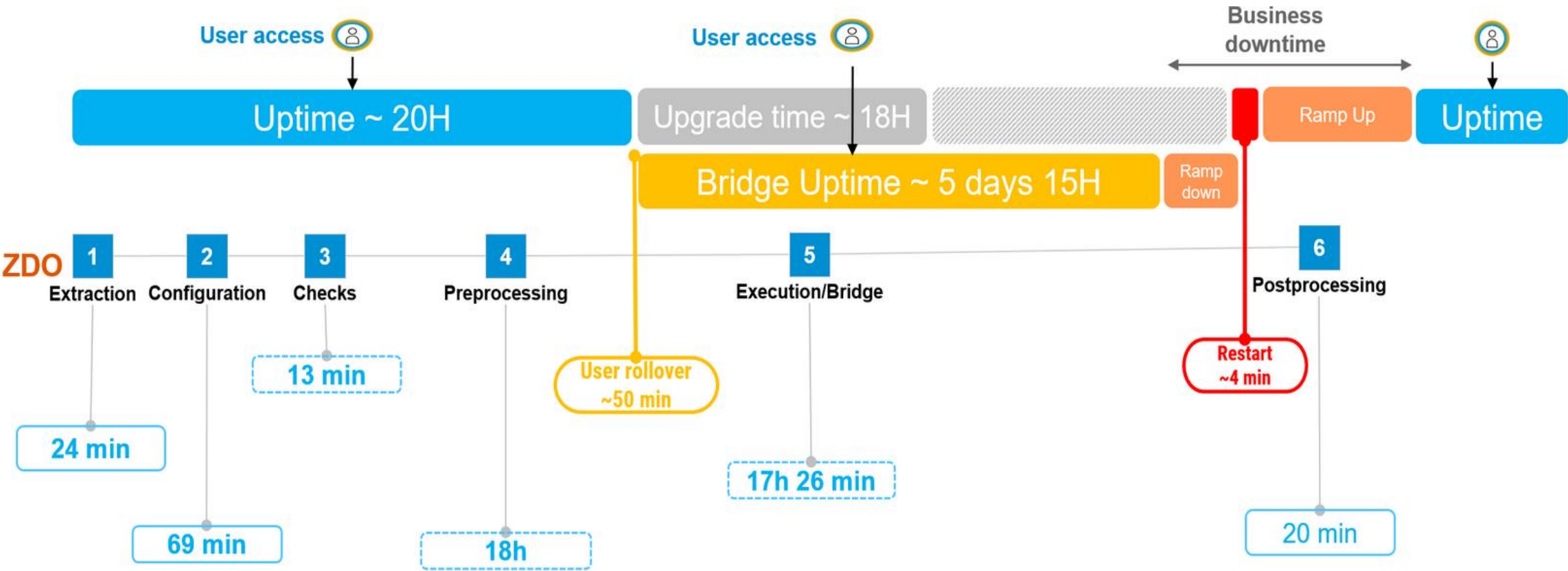
1. Start the SUM tool on PAS of the source system and executes the first part, including the export of the database content into files.
2. The SUM directory along with export files are transferred to the target system.
3. The remaining part of the procedure happens on the target system that changes in the subsequent procedure from downtime to uptime for productive use.

# NZDT - Near Zero Downtime for S/4HANA Conversion



# ZDO Method - Zero Downtime Method and Timings

Actual downtime is ~4 minutes. Ramp down and up is about 25 minutes



# Where to Find More Information

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## S4HANA Documentation:

[https://help.sap.com/docs/SAP\\_S4HANA\\_ON-PREMISE](https://help.sap.com/docs/SAP_S4HANA_ON-PREMISE)

[https://help.sap.com/docs/SAP\\_S4HANA\\_CLOUD](https://help.sap.com/docs/SAP_S4HANA_CLOUD)

## Upgrading SAP S/4HANA: Why, How, and Best Practices:

<https://assets.cdn.sap.com/sapcom/docs/2020/06/94ca0995-9d7d-0010-87a3-c30de2ffd8ff.pdf>

## Readiness Checks Blog

[SAP Readiness Check for SAP S/4HANA upgrades → SAP Blogs](#)

## BTP Main Documentation

[SAP Business Technology Platform \(SAP BTP\) → SAP Help Portal](#)

Fiori Main Documentation → [SAP Fiori → SAP Fiori Design Guidelines](#) and [SAP Fiori Launchpad → SAP Help Portal](#)

# Reference Documents (1 of 3)

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## **Transition scenarios:**

<https://blogs.sap.com/2017/07/06/how-to-find-my-path-to-sap-s4hana-understand-the-available-transition-options/>

<https://blogs.sap.com/2016/11/02/sap-s4hana-system-conversion-at-a-glance/>

## **Release and maintenance strategy for SAP S/4HANA**

[https://help.sap.com/doc/fb3ee8b026b9468890aedd443afb9aae/1511\\_000/en-US/ReleaseMainStratS4.pdf](https://help.sap.com/doc/fb3ee8b026b9468890aedd443afb9aae/1511_000/en-US/ReleaseMainStratS4.pdf)

## **Simplification list**

[https://help.sap.com/viewer/p/SAP\\_S4HANA\\_ON-PREMISE](https://help.sap.com/viewer/p/SAP_S4HANA_ON-PREMISE)

## **Simplification Item catalog**

<https://launchpad.support.sap.com/#/sic/>

## **Simplification Item checks**

<https://blogs.sap.com/2018/03/26/sap-s4hana-simplification-item-check-how-to-do-it-right>

## **Readiness check**

<https://www.sap.com/readinesscheck>

<https://rc.cfapps.eu10.hana.ondemand.com>

# Reference Documents (2 of 3)

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## **Readiness check**

<https://www.sap.com/readinesscheck>

<https://rc.cfapps.eu10.hana.ondemand.com>

## **Maintenance planner**

<http://apps.support.sap.com/sap/support/mp>

## **Custom code adaptation**

<https://blogs.sap.com/2017/02/15/sap-s4hana-system-conversion-custom-code-adaptation-process/>

## **SUM guide, DMO guide, SUM conversion guide, related SAP Notes, software download, Blogs**

<http://support.sap.com/sltoolset>

## **Conversion guide, Custom code migration guide, SI Catalog, SI List, Release Information Notes**

[https://help.sap.com/viewer/p/SAP\\_S4HANA\\_ON-PREMISE](https://help.sap.com/viewer/p/SAP_S4HANA_ON-PREMISE)

# Reference Documents (3 of 3)

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**SAP Fiori Deployment Options and System Landscape Recommendations.**

<https://www.sap.com/documents/2018/02/f0148939-f27c-0010-82c7-eda71af511fa.html>

**SAP Fiori Reference Library**

<https://fioriappslibrary.hana.ondemand.com/sap/fix/externalViewer/>

**How to extend a Fiori App in S4HANA.**

<https://me.sap.com/notes/0002480127>

**SAP note 2902673 - Rapid Activation for SAP Fiori in SAP S/4HANA**



# Wrap Up

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- Learned about the deployment models including Greenfield, Brownfield, and Selective data migration
- Step through the setup and usage of the Fiori Launchpad and Content for S/4HANA focused on rapid deployment and techniques for new capabilities with 2022 versions
- Reviewed with hands on the tools for S/4HANA, Simplification, Readiness Checks, and Data Migrations
- Understand how to leverage the “BTP” Business Technology Platform especially for Clean Core and Extensibility
- Upgrading the systems using tools and Zero downtime capabilities

# Key Points to Take Home

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- Understand the three deployment models for S/4HANA: Greenfield, Brownfield, Selective Migration
- Understanding what is new with the Fiori Launchpad and rapid deployment capabilities
- Expand your knowledge about the data migration and conversion tools for upgrading to S/4HANA
- Understand the capabilities of the SAP Readiness Checks to analyze the source system and how to view the resulting reports
- Solution Manager Focus Build tool integrated project management and best practices
- How to utilize the SAP Business Technology Platform and the services it provides, especially around extensibility
- Achieving zero downtime for upgrades to S/4HANA

# Thank you! Any Questions?

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