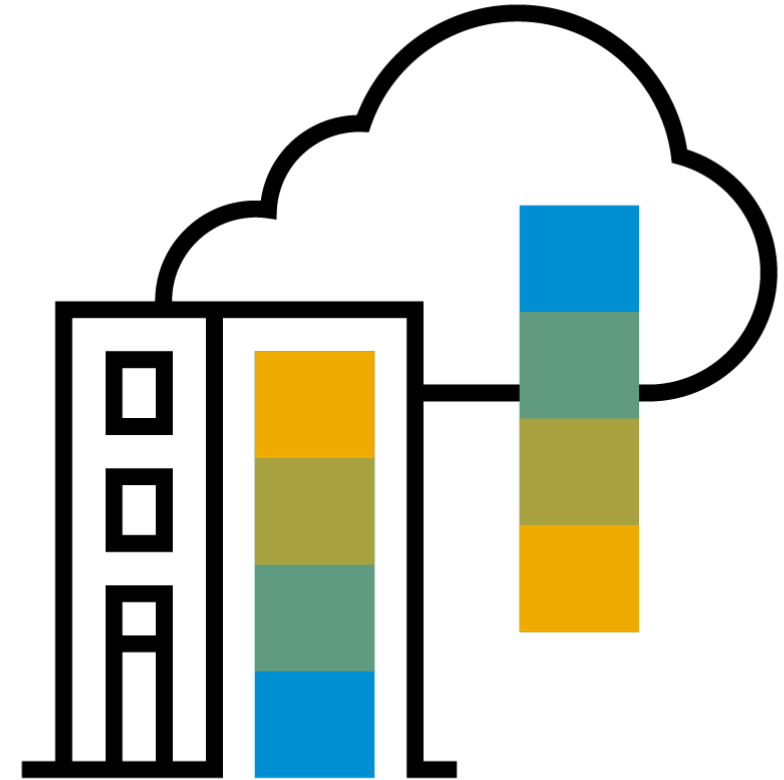


Get an Overview and Future Road Map of **SAP BTP ABAP Environment**

Florian Wahl, Product Management ABAP Platform, SAP SE
ASUG Webinar Series
January 27th 2022

PUBLIC






WHY	SAP Business Technology Platform?
WHY ABAP	in SAP Business Technology Platform?
SCENARIOS	for SAP BTP ABAP Environment
ROADMAP	for SAP BTP ABAP Environment
OUTLOOK	

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Why SAP Business Technology Platform?

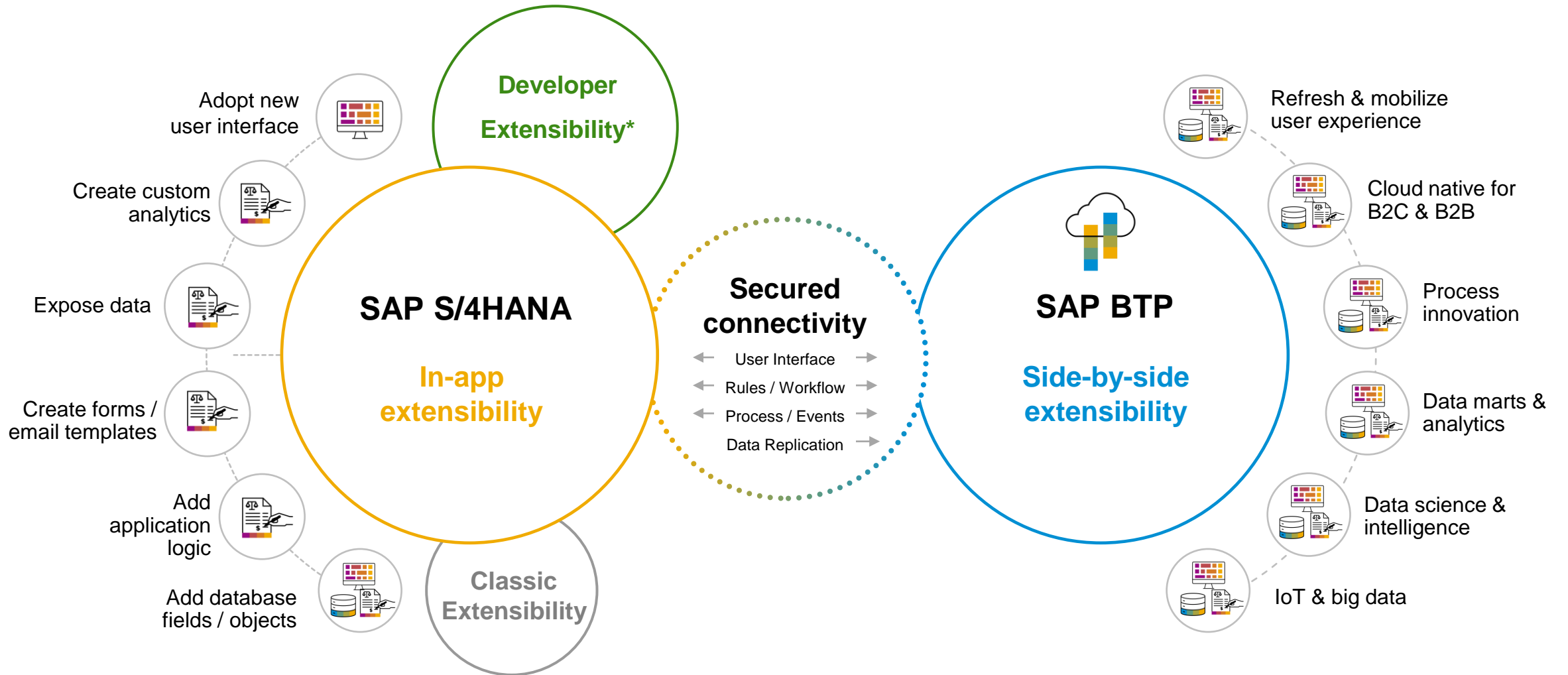
SAP S/4HANA extensibility

User Interface Layer  Application Layer  Database Layer 

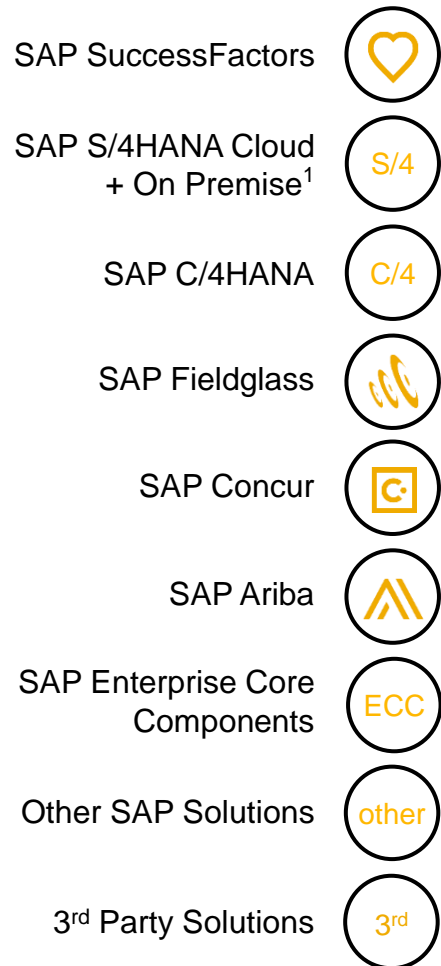
In-App Extensions



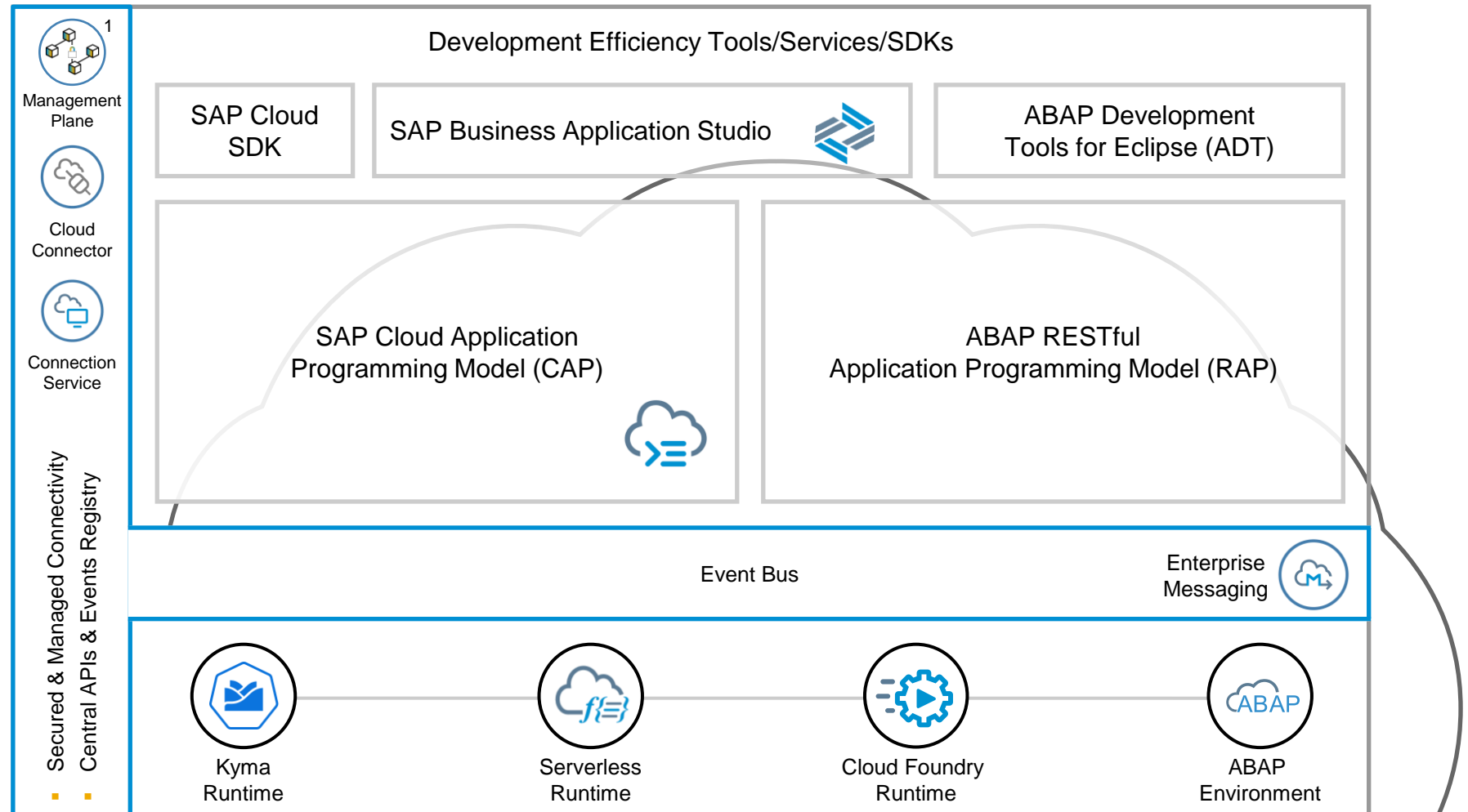
Cloud Extensions



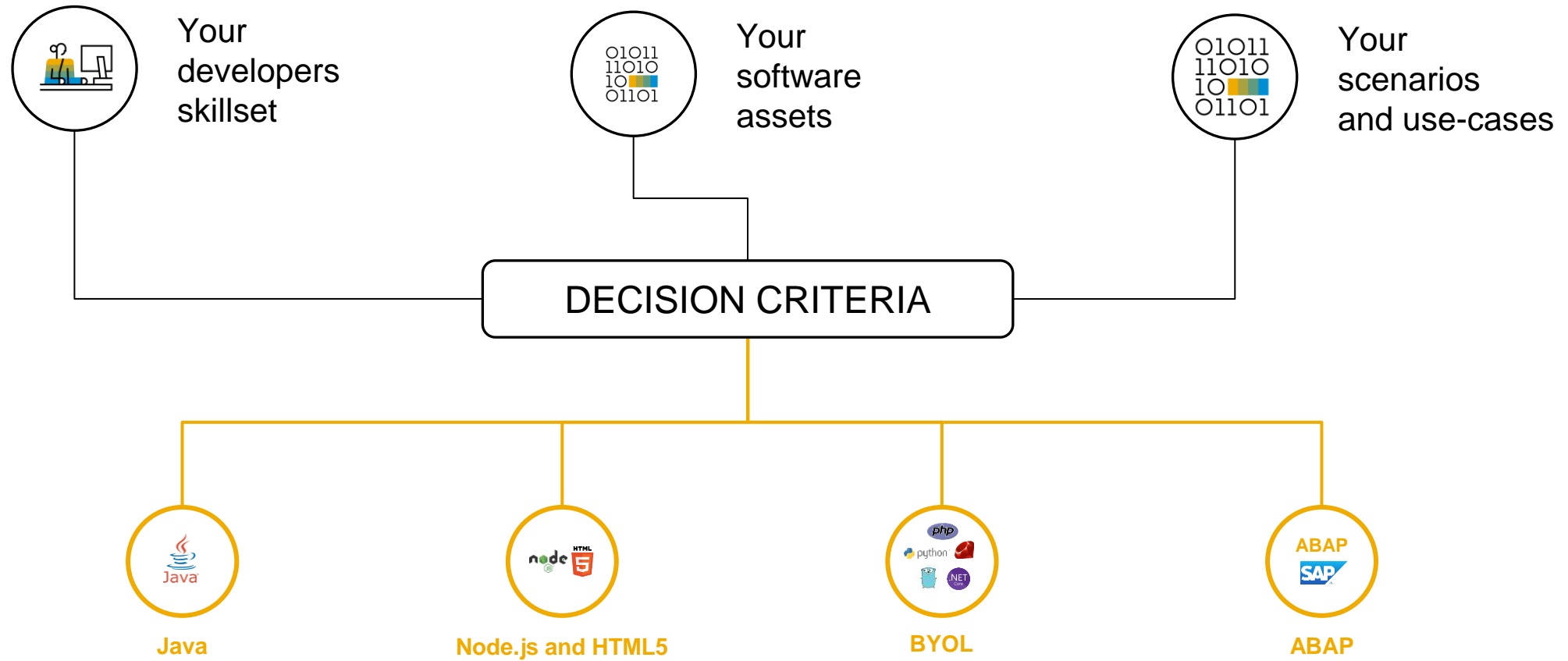
Building Extensions for the Intelligent Enterprise on SAP BTP



¹ Planned innovation



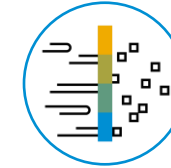
When to use what?



Why ABAP **in SAP Business Technology Platform?**

Value of SAP BTP ABAP Environment

- **Cloud ERP**
Transform your existing ABAP assets to the cloud
- **Innovation Platform**
Develop and run innovative ABAP apps on a PaaS in the Cloud
 - use always the newest version of the ABAP Platform
 - use always the newest version of SAP HANA
 - use always the newest SAP BTP services
 - Delegate the operation of the ABAP PaaS to SAP
- **Clean Core**
Decouple from your core business system
 - Delegate cloud integration scenarios to a cloud hub
 - Reduce upgrade costs with decoupled cloud extensions
 - Delegate non ERP user roles like consumer to a cloud solution



TRANSFORMATION
TO CLOUD



MARKET
OPPORTUNITIES
FOR PARTNERS

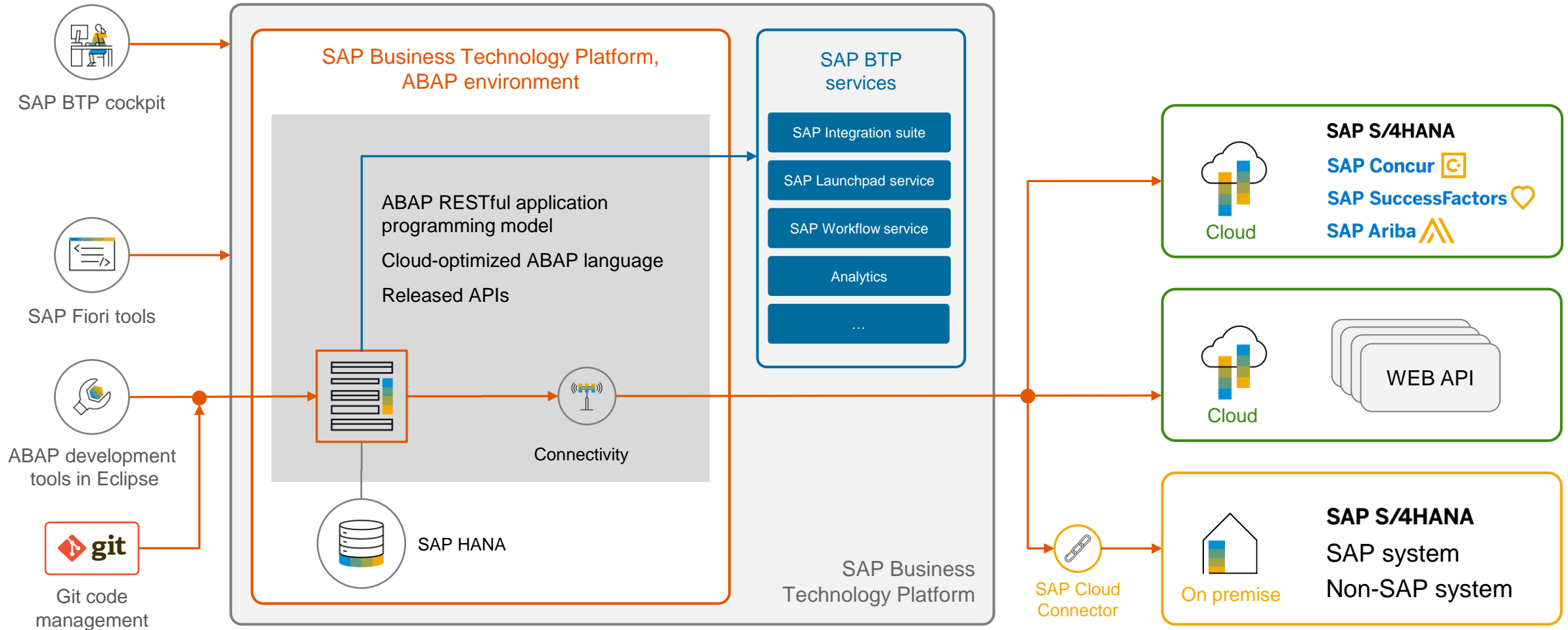


AGILE INNOVATION ON NEWEST
TECHNOLOGY POWERED BY
SAP HANA

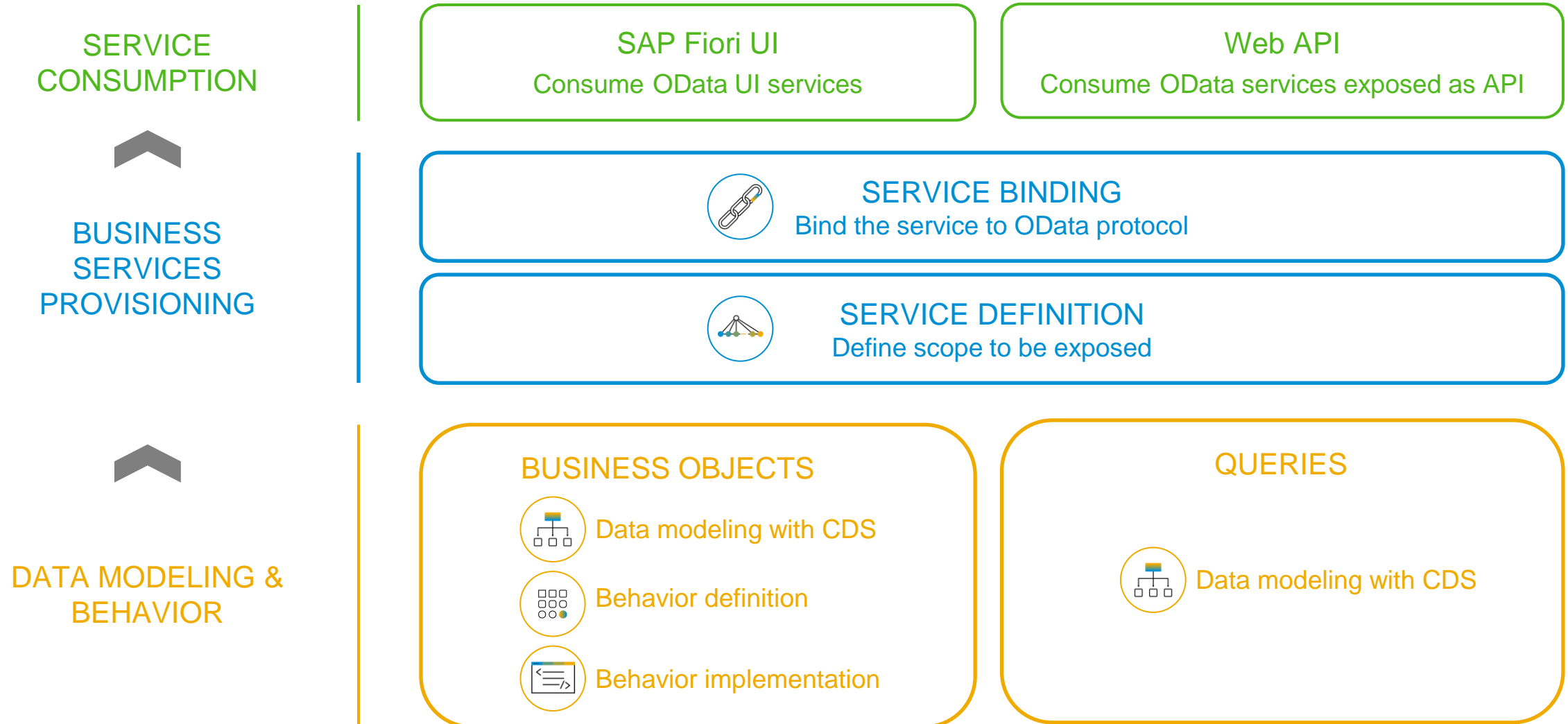


DELEGATE INFRASTRUCTURE
AND
SYSTEM OPERATIONS

Vital parts of SAP Business Technology Platform (BTP), ABAP environment



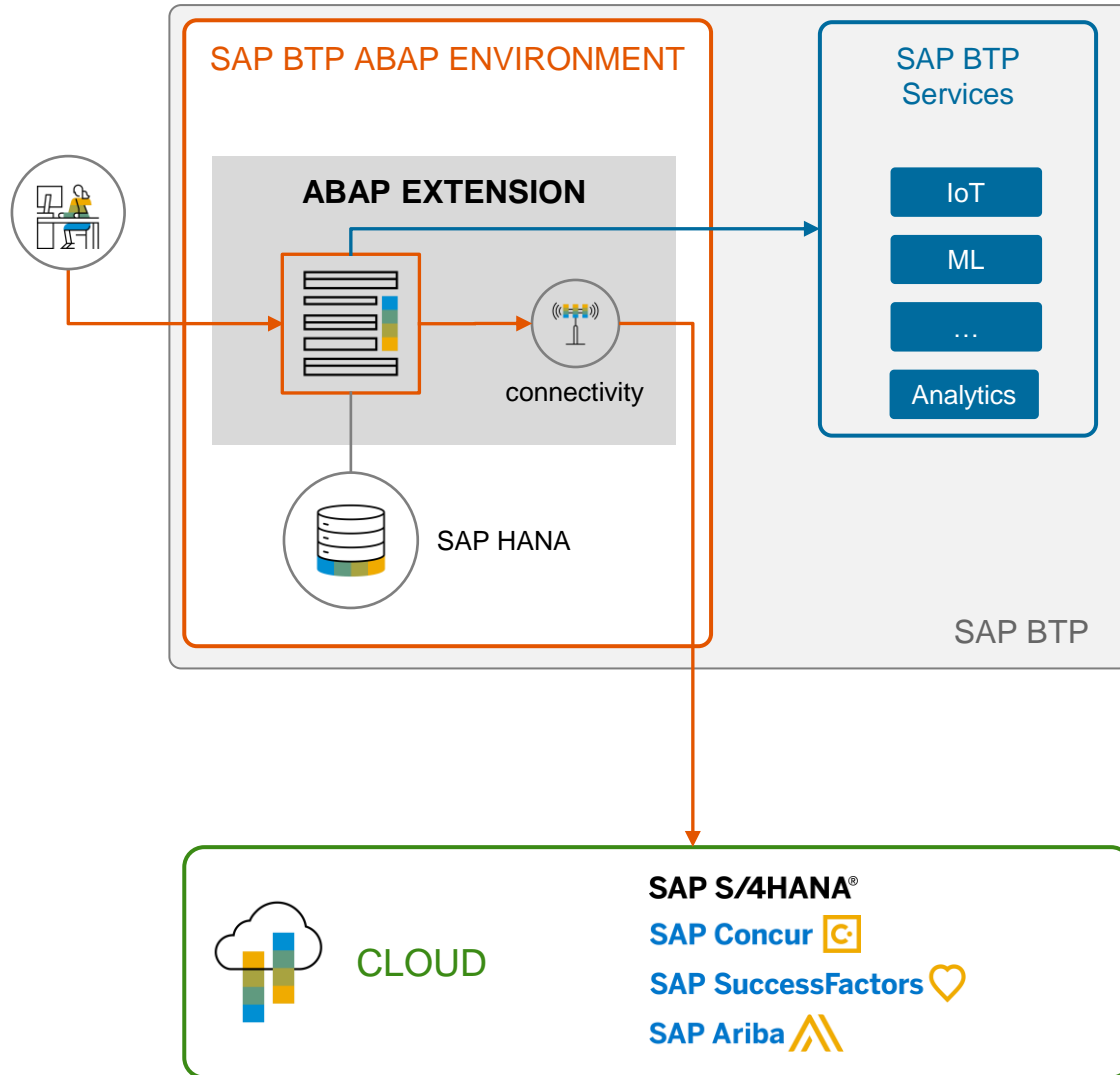
ABAP RESTful Application Programming Model



Scenarios for SAP BTP ABAP Environment

Extension scenario 1: Cloud ERP

Extend SAP S/4HANA Cloud or other SAP cloud offerings with cloud extensions

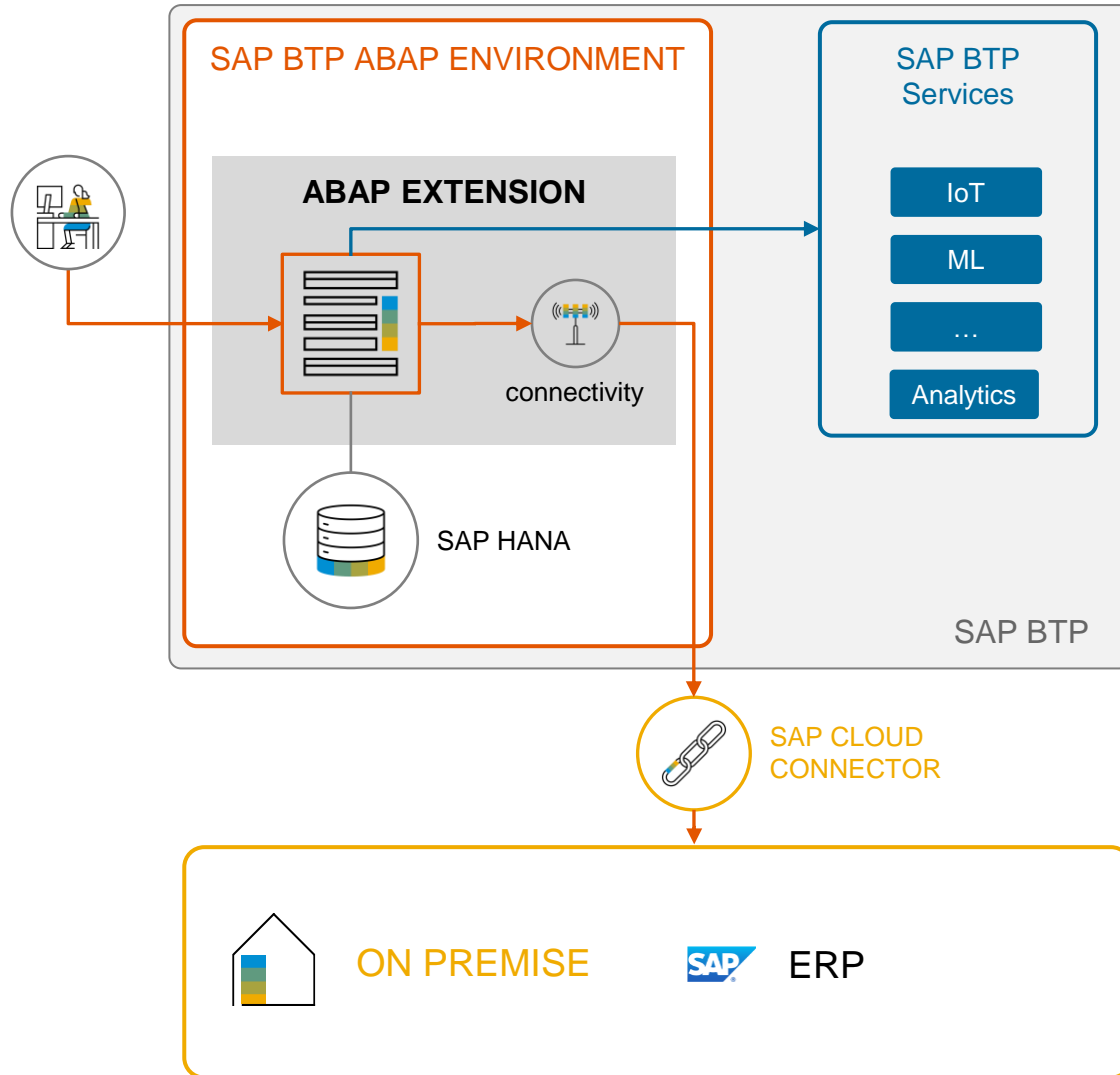


Use SAP BTP ABAP Environment to extend SAP S/4HANA Cloud or other SAP cloud solutions

- ▶ SAP Cloud solutions like SAP S/4HANA Cloud provide in-app extensibility to extend SAP apps and processes, but there is no support for classic custom ABAP development on top of SAP S/4HANA Cloud
- ▶ SAP BTP is the foundation to develop and run custom cloud extensions and the ABAP environment shall be used for ABAP based cloud extensions

Extension scenario 2: Innovation Platform

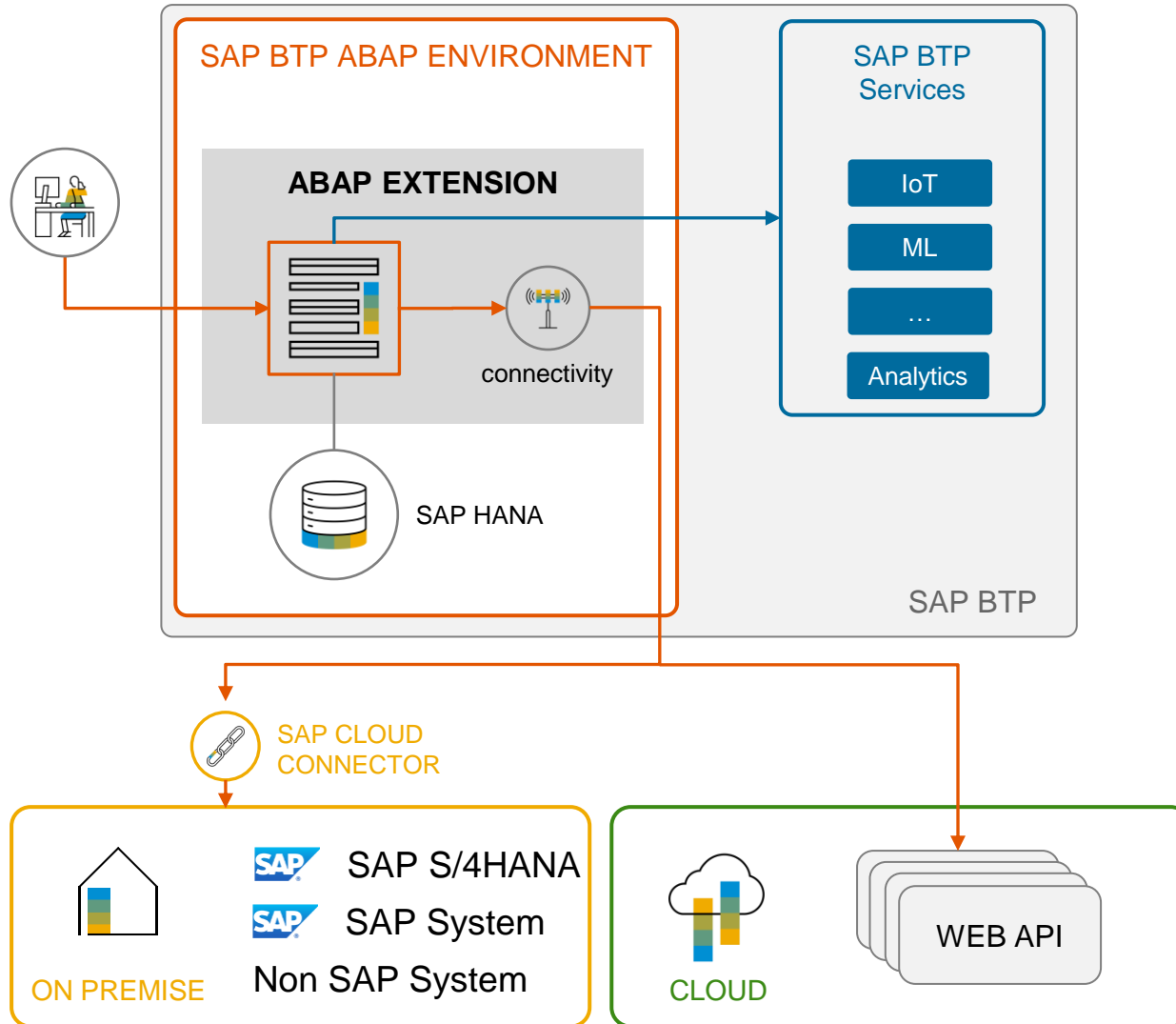
Develop and run innovative ABAP apps on a PaaS in the Cloud



- ▶ Benefit from the newest ABAP Platform and SAP HANA database technologies independent from your existing on-premise system landscape
- ▶ Build your Fiori apps with the new future proof ABAP RESTful Application Programming Model
- ▶ Utilize SAP BTP services like IoT, machine learning etc. in your cloud extension
- ▶ Delegate operation of the ABAP PaaS and new technologies to SAP

Extension scenario 3: Hub-like usage

Decouple ABAP implementations from your core business systems



- EXTERNAL USER GROUP
Make your cloud app available to a broader audience that does not have access to your core business systems (e.g. consumer apps)
- INTEGRATION HUB
Integrate in your cloud extension multiple cloud/on-premise systems with SAP/non-SAP cloud services
- DATA INTEGRATION
Collect data from multiple sources in your cloud extension for further processing and analysis
- DECOUPLED EXTENSION
Cloud extensions use only well defined (remote) APIs of the Business system. This reduces the risk and effort for business system upgrades.

Transformation approach for existing extensions and custom code



Objectives

- Decouple extensions and custom code from application layer
- Provide end-user UIs as SAP Fiori UIs
- Use only released SAP objects
- Use only ABAP language scope for cloud



Tool Support

- Starting on-premise to check readiness for SAP BTP ABAP Environment:
 - ABAP Test Cockpit (ATC) check variant
 - Custom Code Migration app (SAP S/4HANA or ABAP environment only)
- Continuing in SAP BTP ABAP Environment: Quick fixes for certain code replacements in ABAP Development Tools in Eclipse (ADT)

Roadmap for SAP BTP ABAP Environment

Roadmap

SAP Road Map Explorer

Products Processes Industries My Road Maps Disclaimer

SAP BTP, ABAP... x 5 Road Map Items x

Products Industries Focus Topics Q3 2021 - Q2 2022 Save

Q3 2021 2 Road Map Items

SAP BTP, ABAP environment 2108

Application Runtimes and Development Environments

Extensibility for multitenancy

Extensibility for multitenancy includes these functions:

- User interface adaptation
- Field extensibility
- Custom business logic

SAP BTP, ABAP environment 2108

SAP BTP, ABAP environment

Side-by-Side Extensibility

Improvements for the programming model, tools, and reuse services

- ABAP RESTful application programming model:
 - Multi-line line editing with SAP Fiori elements
- ABAP development tools:
 - Ability to show all versions of a development object
- Full use of SAP HANA capabilities:
 - SQL service
- Continuous integration and delivery (CI/CD):
 - REST APIs for ABAP unit
- Extensibility for multitenancy:
 - User interface adaptation
 - Field extensibility
 - Custom business logic
- Partner and SaaS enablement:

Q4 2021 1 Road Map Item

SAP BTP, ABAP environment 2111

Side-by-Side Extensibility

Additional features for infrastructure, integration, and the programming model

- ABAP RESTful application programming model
 - ABAP RESTful application programming model generator ("SM30"-like generation of SAP Fiori apps)
 - Late numbering for managed BOs (with or without draft)
- Integration and security
 - SAP Fiori app for security audit log
- Reuse services
 - SAP Fiori app for application job templates
 - Integration option for forms processing
- CI/CD
 - Trigger ABAP unit through pipelines
- Infrastructure
 - Monitoring: Add SQL statements statistics to workload analysis

SAP BTP, ABAP environment 2111

SAP BTP, ABAP environment

Q1 2022 **CURRENT** 1 Road Map Item

Future Release

Side-by-Side Extensibility

New infrastructure and integration capabilities, plus improved security, reuse services, CI/CD, and partner enablement

- Infrastructure:
 - Free tier model
 - Reduced minimum size of SAP HANA memory: 30 GB
- Reuse services:
 - Business configuration (BC) app for the factory calendar
- Partner enablement (landscape portal):
 - Ability to register the system before upgrade
 - Updating of registered namespaces

SAP BTP, ABAP environment

Q2 2022 1 Road Map Item

Future Release

Application Runtimes and Development Environments

New infrastructure, integration, and reuse capabilities

- Infrastructure
 - Migration from CF/Bosh to k8s
 - Migration from SAP HANA services to SAP HANA Cloud
 - Support of Azure data center in Amsterdam
 - Configure all SAP-delivered tables as NSE storage
 - Static scaling (increase) of memory size for SAP HANA
 - Support of memory sizes up to 4 TB for SAP HANA
- ABAP RESTful application programming model
 - OData stream support (media entities)
- Integration and security
 - HTTP service: abapGit support
 - Partner-managed communication scenarios
 - Transport of business roles (configuration)
- Reuse services
 - Application jobs: schedule jobs for other business user through an API
 - Application log: abapGit support
- CI/CD
 - ATC: enablement for abapGit
 - Bring your own Git, including file formats from code reviews

SAP BTP, ABAP environment

 Visit [SAP Roadmap Explorer](#)

Learn more

[ABAP Environment in SAP Discovery Center](#)

[SAP Roadmap Explorer](#)

[Trial Announcement](#)

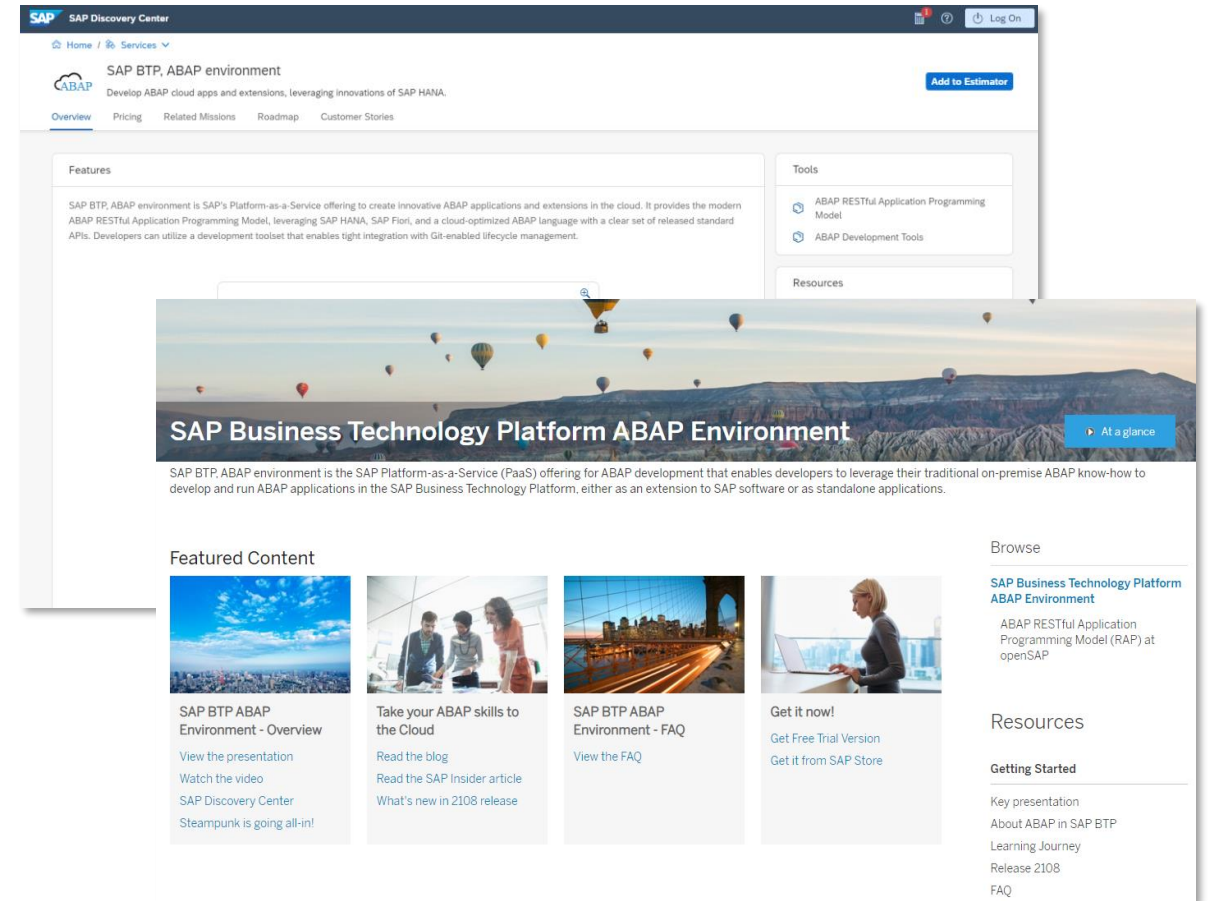
[Product Expert Page](#)

[Learning Journey](#)

[Getting Started Tutorials](#)

[Technical Product Documentation](#)

[Release Notes](#)

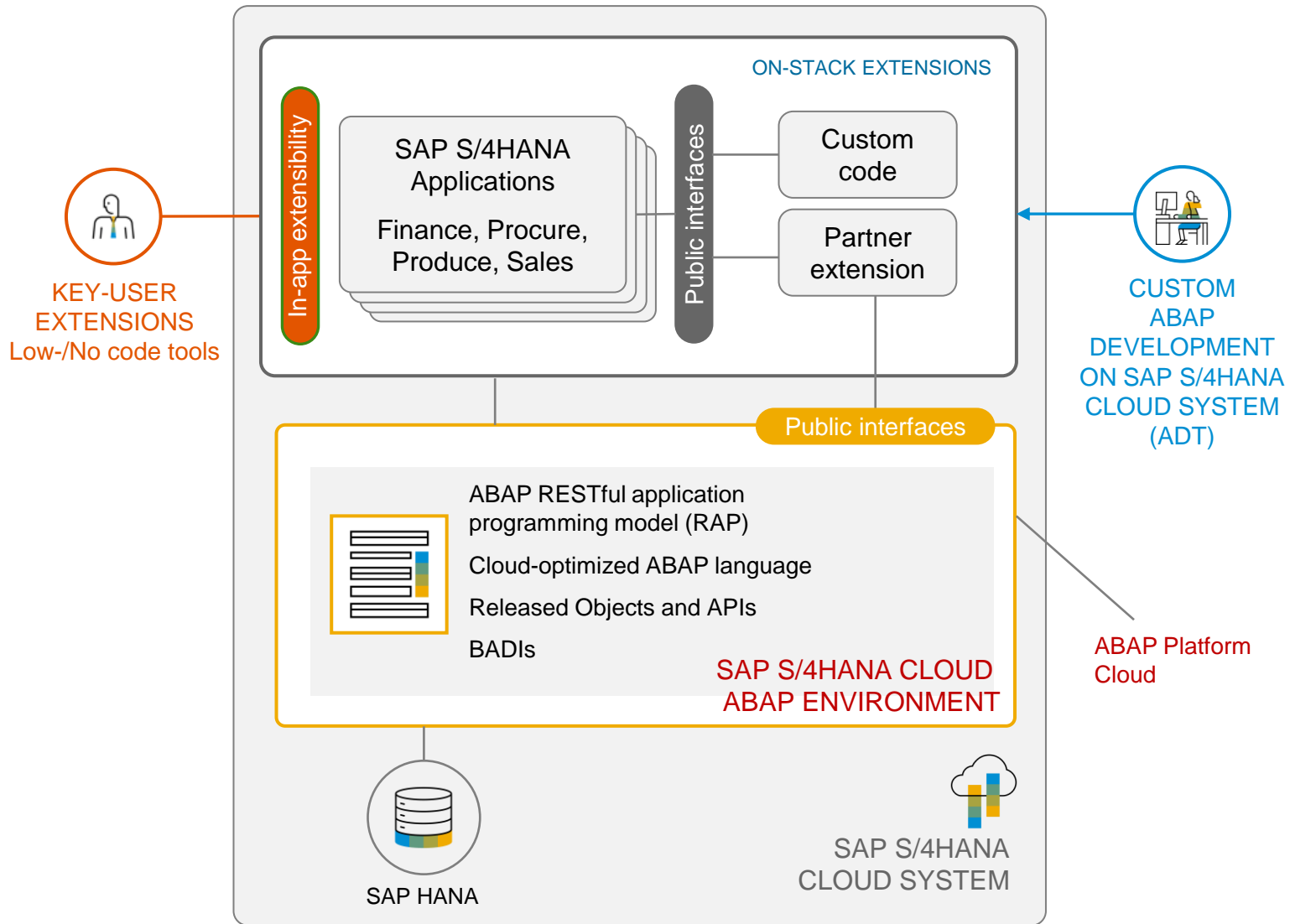


Live Demo



Outlook

Introduction of SAP S/4HANA Cloud ABAP Environment*



**ENABLE CUSTOM ABAP DEVELOPMENT
DIRECTLY ON SAP S/4HANA CLOUD STACK**

MODERN ABAP DEVELOPMENT

**SAP, customers and partners use the same
development model**

High developer productivity

ABAP RESTful application programming model

- Development of SAP HANA-optimized apps and services
- Eclipse-based ABAP development tools

SAP Fiori tools for UI Development

Proven Lifecycle Management

RULES OF THE GAME

- Clear separation between SAP solutions and extensions
- Only stable and reliable public interfaces and released objects from both ABAP platform and SAP S/4HANA Cloud applications can be used
- No modifications

Summary of Extensibility Options for SAP S/4HANA Cloud

*on roadmap

	Custom development integrated in SAP S/4HANA Cloud		Custom development on SAP Business Technology Platform
	Key User Extensibility	Developer Extensibility*	Side-by-Side Extension
Scenario	Smaller low-/no-code extensions of SAP solutions	Tightly coupled more complex extensions and apps	Loosely coupled extensions and apps
Target environment	Fully integrated in SAP S/4HANA Cloud stack		SAP Business Technology Platform
Use cases	UI field layout, custom forms and templates Custom analytics via CDS views Custom Business Objects Custom business logic using Cloud BADIs	ABAP based ... custom app development extensions of SAP S/4HANA Cloud solutions partner extensions	Custom or multitenant applications ABAP and non-ABAP (Java, Node.js,) development SaaS solutions developed by partners Apps for separate target groups
Persona	Key user	ABAP developer	Developer
Benefits	Fully managed and integrated in SAP S/4HANA Cloud No or only very basic development skills required	Development of extensions inside the SAP S/4HANA Cloud system No remote access and data replication Use and extend released SAP S/4HANA Cloud objects	Decoupled extensions independent of SAP S/4HANA Cloud operation and lifecycle management Direct consumption of SAP BTP services

Thank you.

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