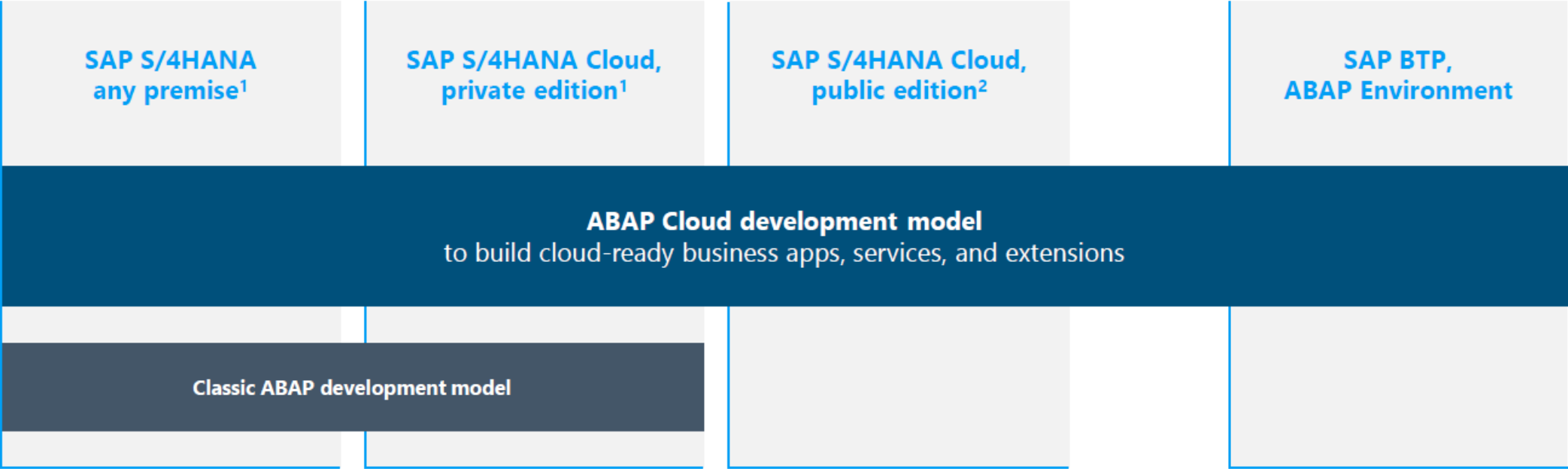


Deep Dive into RAP Developer Extensibility

Pavan Kumar Reddy

Booking.com

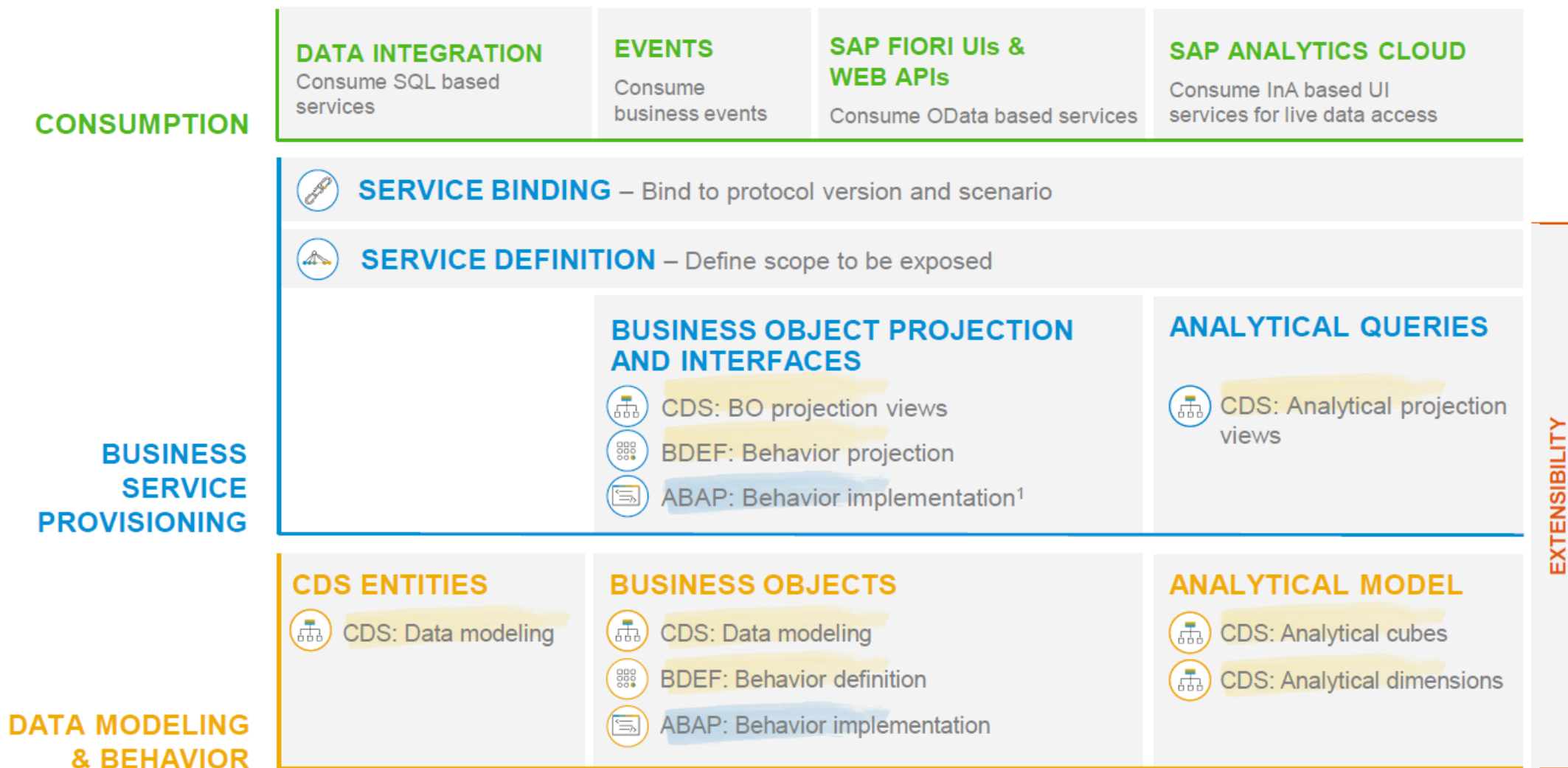
ABAP Cloud – One development model for SAP S/4HANA and SAP BTP



¹ SAP S/4HANA any premise or SAP S/4HANA Cloud, private edition release ≥ 2022

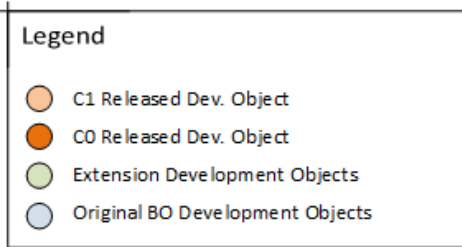
² SAP S/4HANA Cloud, public edition release ≥ 2208, 3-system landscape required

RAP – The big picture



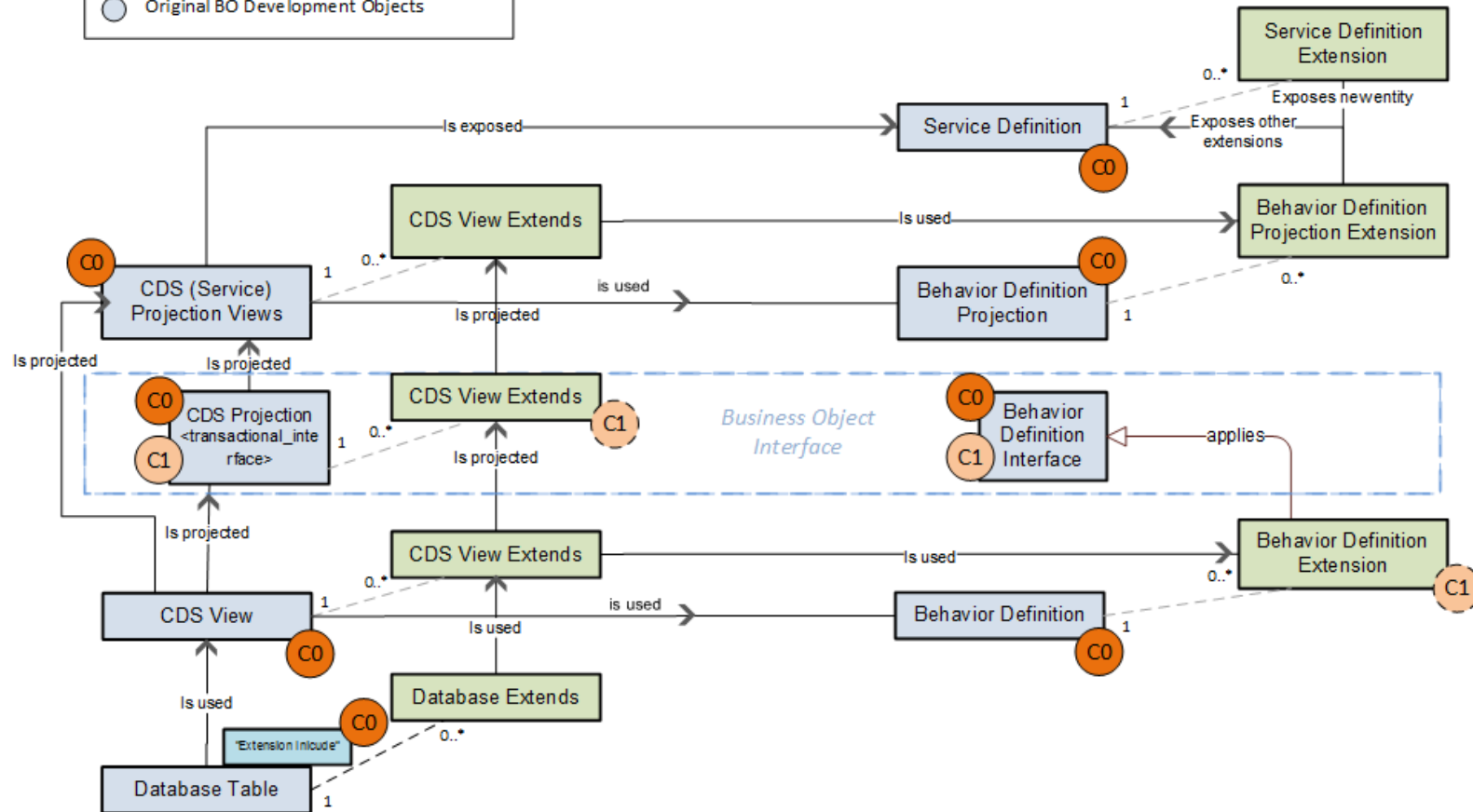
EXTENSIBILITY

Extensibility Architecture Overview



C0 - Ensures Stability at extension points and to allow extensibility

C1 - Stable Public Interface for use in extensions



Extensibility Use Cases

- ❑ Data Model Extension
- ❑ Behavior and Field-Related Behavior Extensions.
- ❑ Node Extensibility

SAP Business Accelerator Hub – RAP BO Interface



Business Object Interface

Sort by: A-Z ▾  

Procurement Project

With this business object, you can plan the production of a product and the demand per plant



Procurement Project Standard RAP Application



Procurement Project

Procurement of Goods

1

[Edit](#) [Delete](#) [Activate](#)  
[Ctrl+E](#)

Status Integration Scenario

Inactive —


[General Information](#) [Plants](#)

Basic Data

Project: 1 External Project Reference: PROCUREMENT 1
Name: Procurement of Goods Company Code: SAP SE (0001)

Contact Details

Created By: Pavan Reddy Last Changed By: Pavan Reddy
Created On: Jan 31, 2024, 11:39:33 PM Last Changed On: Feb 11, 2024, 3:32:19 PM

Plants (3) | [Standard](#) 



Plant	Company Code	Connected System ID	Start of Production	End of Production	
3	0001	CSB	Jan 31, 2024	Feb 28, 2024	>
2	1710	CAB	Jan 29, 2024	Sep 27, 2024	>
1	1010	BAD	Feb 5, 2024	Feb 29, 2024	>

Procurement Project RAP Application - Custom Extensions

Procurement of Goods

1

[Edit](#) [Delete](#) [Activate](#) [Set Project Reference](#) 

Status Integration Scenario

Inactive —

[General Information](#) [Plants](#) [Task List](#)

Custom Field Extension

Custom Button Extension

Basic Data

Project:
1

Name:
Procurement of Goods

External Project Reference:
PROCUREMENT 1

Company Code:
SAP SE (0001)

External Source:
Yes

Contact Details

Created On:
—

Created By:
ADMIN

Last Changed By:
ADMIN

Last Changed On:
Feb 11, 2024, 11:54:45 AM

Plants (2) [Standard](#)

Plant	Company Code	Connected System ID	Start of Production	End of Production	
2	1710	BAD	Feb 1, 2024	Aug 20, 2024	>
1	1010	CAB	Feb 5, 2024	May 30, 2024	>

Task List

[Standard](#) 

Project Tas...	Task ID	Comment	Done	
1	1	Send quotation	Yes	>
2	2	send email	Yes	>
3	3	send email to project2	No	>

Custom Node Extension

Procurement Project RAP Application - Custom Extensions

Basic Data

Project:
1

Custom Validation

External Project Reference:
PROCUREMENT 1

External Source:

Contact Details

Created On:
-

Last Changed By:
ADMIN

Name:

Company Code:*
SAP SE (0001)

Created By:
ADMIN

Last Changed On:
Feb 11, 2024, 11:54:45 AM

Name is Mandatory

Plants (2) Standard

[Create](#) [Delete](#)

<input type="checkbox"/>	Plant	Company Code	Connected System ID	Start of Production	End of Production	
<input type="checkbox"/>	2	1710	BAD	Feb 1, 2024	Aug 20, 2024	>
<input type="checkbox"/>	1	1010	CAB	Feb 5, 2024	May 30, 2024	>

Task List

[Create](#) [Delete](#)

General Information

Name is Mandatory
Name

	Done	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	>
<input type="checkbox"/>	<input type="checkbox"/>	>

Demo

Use Case - Data Model and Node Extensions

- Extend custom field “**External Source**” with field extensions for project entity.
- Add custom node “**Task Lists**” with the help of node extensions for project entity.

Demo

Use Case - Behavior and Field-Related Behavior Extensions

- Enable dynamic feature control for custom field “**External Source**” based on standard field “**External project Reference**” for project entity
- Add new action “**Set Project Reference**” using behavior extensions for project entity.
- Add validation for field “**Name**” as Mandatory using behavior extensions for project entity.

Links

Extend

https://help.sap.com/docs/ABAP_PLATFORM_NEW/fc4c71aa50014fd1b43721701471913d/492d88ed89f640e5b18dd1c57f6817b1.html

Released APIs Contracts

https://help.sap.com/docs/abap-cloud/abap-development-tools-user-guide/use-system-internally-c1?version=sap_btp

Thank You

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Pavan Kumar Reddy

Senior S/4 HANA Developer |
Certified SAFe® 5 Scrum Maste...





Keynote: ABAP Cloud in action – Latest features and capabilities

Volker Dress