

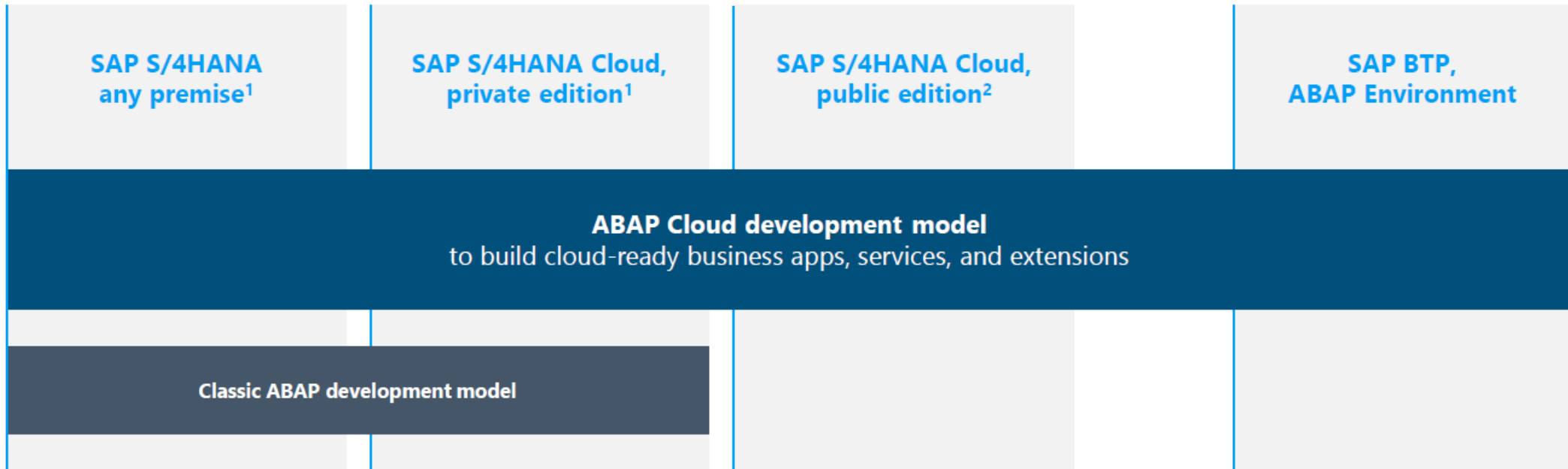
Enable OData Streams in RAP

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Booking.com

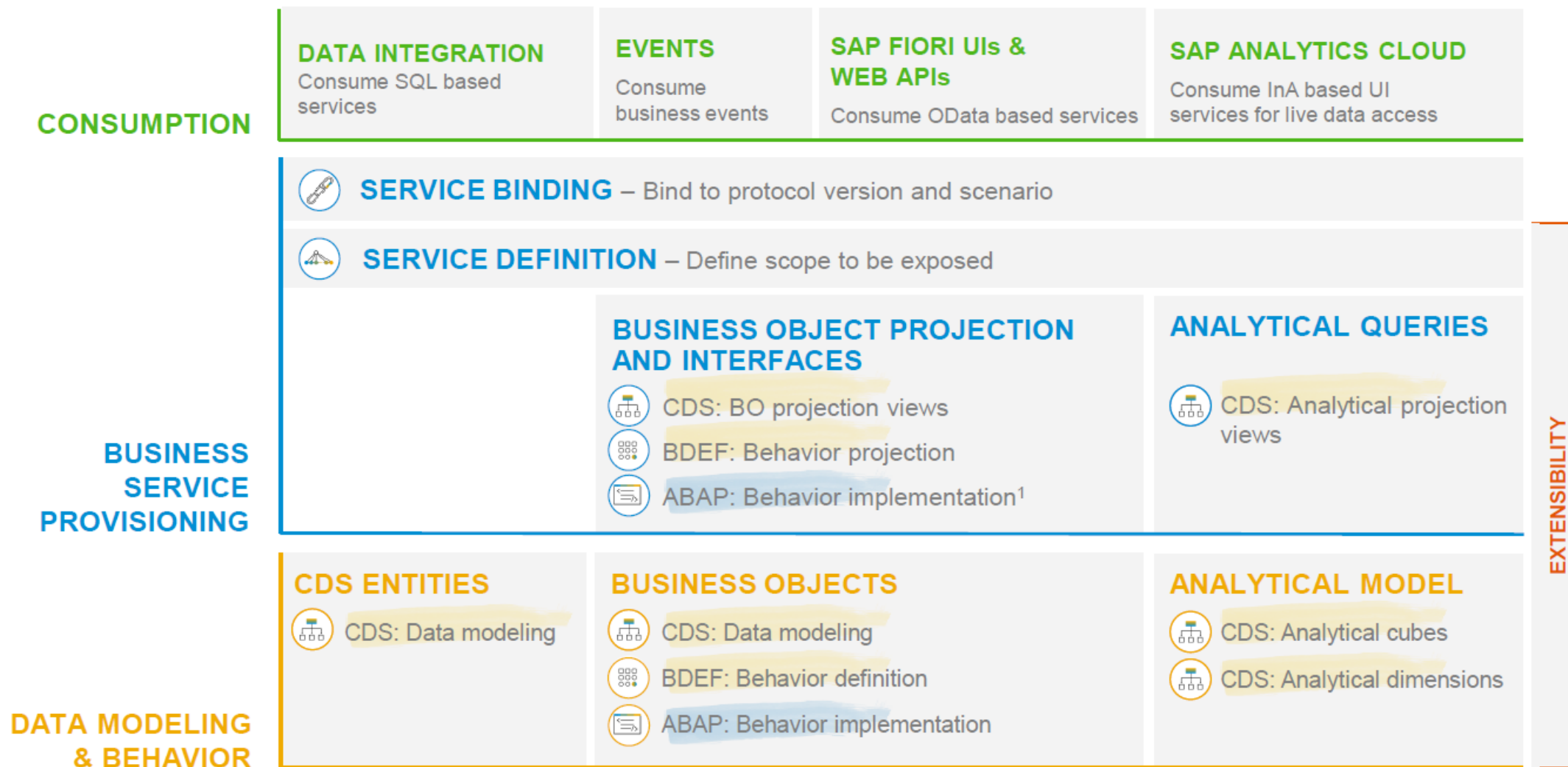
ABAP Cloud – One development model for SAP S/4HANA and SAP BTP



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

Working with Large Objects

Large objects are modeled by means of the following fields:

- ❑ Attachment
- ❑ Mimetype
- ❑ Filename

```
@Semantics.largeObject:  
{ mimeType: 'MimeType',  
  fileName: 'Filename',  
  contentDispositionPreference: #INLINE }  
Agency.attachment as Attachment,  
  
@Semantics.mimeType: true  
Agency.mime_type as MimeType,  
  
Agency.filename as Filename
```

XCO library

The XCO (“Extension Components”) library XLSX offers a set of standard abstractions and APIs to programmatically work with XLSX workbooks and their worksheets.

The XCO XLSX module exposes three external APIs:

- ❑ **XCO_CP_XLSX**: Access to general abstractions used throughout the XCO XLSX.
- ❑ **XCO_CP_XLSX_SELECTION**: Access to selection pattern builders used to build selection patterns.
- ❑ **XCO_CP_XLSX_READ_ACCESS**: Access to abstractions used when reading the content of an XLSX worksheet.

OData Streams Use Cases

- ❑ Working with Large Objects
- ❑ Upload Functionality using Custom Action
- ❑ Download Functionality using Custom Action
- ❑ Use XCO library to read and write XLSX Content


Working with Large Objects

Draft ▼



File Information

PO Information

Attachment:
— 



Upload
Attachment

PO Information Standard ▼

[Download PO Data](#) [Create](#) [Delete](#)     ▼

<input type="checkbox"/>	User Name	Entry Number	PO Number	PO Item	Entry Name	Valid From	Valid To	Quantity	Final Entry	
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No items available.

[Save](#) [Discard Draft](#)

Upload Functionality using Custom Action

EditDelete

Ctrl+E

Responsible PersonLast Action OnProcessing Status

CB9980001708Nov 26, 2024, 8:57:13AMFile Processed



File InformationPO Information

Attachment:

PO_Data_Upload.xlsx

PO Data Uploaded

PO Information (23)Standard

Download PO Data

<input type="checkbox"/>	User Name	Entry Number	PO Number	PO Item	Entry Name	Valid From	Valid To	Quantity	Final Entry	Error Message	
<input type="checkbox"/>	CB9980001708	1000000001	9000000001	10	External1	Jan 1, 2024	Dec 31, 2024	10.000		PO number Invalid	>
<input type="checkbox"/>	CB9980001708	1000000002	9000000002	20	External2	Jan 1, 2024	Dec 31, 2024	20.000	X	External2 already used	>
<input type="checkbox"/>	CB9980001708	1000000003	9000000003	30	External3	Jan 1, 2023	Dec 31, 2024	30.000	X		>
<input type="checkbox"/>	CB9980001708	1000000004	9000000004	31	External4	Jan 2, 2023	Jan 1, 2025	31.000	X		>
<input type="checkbox"/>	CB9980001708	1000000005	9000000005	32	External5	Jan 3, 2023	Jan 2, 2025	32.000	X		>
<input type="checkbox"/>	CB9980001708	1000000006	9000000006	33	External6	Jan 4, 2023	Jan 3, 2025	33.000		PO number Invalid	>
<input type="checkbox"/>	CB9980001708	1000000007	9000000007	34	External7	Jan 5, 2023	Jan 4, 2025	34.000		PO number Invalid	>
<input type="checkbox"/>	CB9980001708	1000000008	9000000008	35	External8	Jan 6, 2023	Jan 5, 2025	35.000		PO number Invalid	>
<input type="checkbox"/>	CB9980001708	1000000009	9000000009	36	External9	Jan 7, 2023	Jan 6, 2025	36.000		PO number Invalid	>
<input type="checkbox"/>	CB9980001708	1000000010	9000000010	37	External10	Jan 8, 2023	Jan 7, 2025	37.000		PO number Invalid	>

Demo

A background network diagram consisting of several blue circular nodes of varying sizes connected by thin blue lines. The nodes are arranged in a non-uniform pattern, with some having multiple connections and others being isolated. The overall structure suggests a complex, interconnected system or data network.

Use Case

- Working with large objects Data Modelling.
- Upload Functionality using Custom Action.

Download functionality using Custom Action

CB9980001708

Nov 26, 2024, 8:57:13 AM

File Processed

EditDelete

File Information

PO Information

Attachment:
PO_Data_Upload.xlsx

PO Information (23) Standard

User Name	Entry Number	PO Number	PO Item	Entry Name	Quantity	Final Entry	Error Message
<input type="checkbox"/> CB9980001708	1000000001	9000000001	10	External1	00		PO number Invalid
<input type="checkbox"/> CB9980001708	1000000002	9000000002	20	External2	00	X	External2 already used
<input type="checkbox"/> CB9980001708	1000000003	9000000003	30	External3	00	X	
<input type="checkbox"/> CB9980001708	1000000004	9000000004	31	External4	00	X	
<input type="checkbox"/> CB9980001708	1000000005	9000000005	32	External5	Jan 3, 2023	Jan 2, 2025	32.000 X
<input type="checkbox"/> CB9980001708	1000000006	9000000006	33	External6	Jan 4, 2023	Jan 3, 2025	33.000 PO number Invalid
<input type="checkbox"/> CB9980001708	1000000007	9000000007	34	External7	Jan 5, 2023	Jan 4, 2025	34.000 PO number Invalid
<input type="checkbox"/> CB9980001708	1000000008	9000000008	35	External8	Jan 6, 2023	Jan 5, 2025	35.000 PO number Invalid
<input type="checkbox"/> CB9980001708	1000000009	9000000009	36	External9	Jan 7, 2023	Jan 6, 2025	36.000 PO number Invalid
<input type="checkbox"/> CB9980001708	1000000010	9000000010	37	External10	Jan 8, 2023	Jan 7, 2025	37.000 PO number Invalid

Download PO Data

Valid From:
e.g. Dec 31, 2024

Final Entry:
☐

Error:
☐

Download PO DataCancel

Download PO Data

Filters for Download

Download History Application

Download History Application* ▾



Editing Status:

All ▾

User Name:

Filename:

Changed By:

Changed On:

Go

Adapt Filters (1)



Create Delete | ▾

<input type="checkbox"/>	User Name	Attachment	Changed By	Changed On	
<input type="checkbox"/>	CB087547638	PO_DOWNLOAD_FINAL.xlsx	CB9980001708	Nov 26, 2024, 9:10:13 AM	>
<input type="checkbox"/>	CB9980001708	PO_Data_Upload.xlsx	CB9980001708	Nov 26, 2024, 8:57:13 AM	>
<input type="checkbox"/>	MARKO	PO_CREATE_ERROR.xlsx	CB9980001708	Nov 26, 2024, 9:09:15 AM	>
<input type="checkbox"/>	SANDRA	PO_CREATE.xlsx	CB9980001708	Nov 26, 2024, 9:08:34 AM	>

Download History

Demo

Use Case

- Download Functionality using Custom Action.
- Use XCO library to read and write XLSX content.

Links

Working with Large Objects:

https://help.sap.com/docs/ABAP_PLATFORM_NEW/fc4c71aa50014fd1b43721701471913d/10a3eb645b83413cbbebe4fc1d879a62.html

XCO Library:

<https://help.sap.com/docs/btp/sap-business-technology-platform/xco-library>

XCO XLSX:

<https://help.sap.com/docs/btp/sap-business-technology-platform/xlsx>

Blogs:

<https://community.sap.com/t5/technology-blogs-by-members/upload-excel-using-sap-rap-only/ba-p/13666565>

<https://community.sap.com/t5/technology-blogs-by-sap/how-to-mass-upload-from-a-spreadsheet-file-into-an-sap-fiori-app-in-sap-btp/ba-p/13785946>

Thank You

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Pavan Kumar Reddy

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