CNA216 – A Technical Deep Dive into the
ABAP RESTful Programming Model

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Speakers 2018

SAP TechEd Las Vegas
October 2–5, 2018

Marcel Hermanns

SAP TechEd Barcelona
October 23–25, 2018

Marcel Hermanns

SAP TechEd Bangalore
November 28–30, 2018
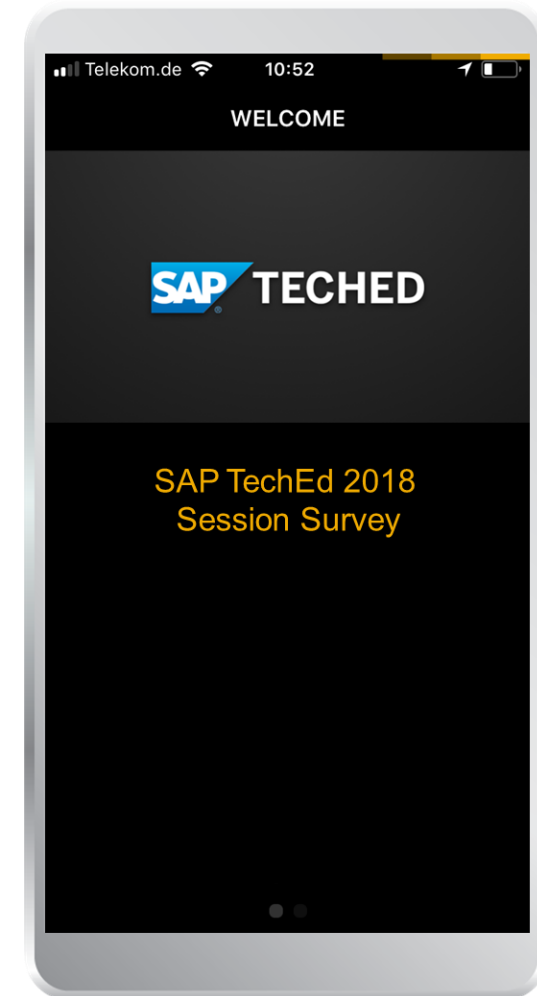
Gopalakrishnan Ramachandran

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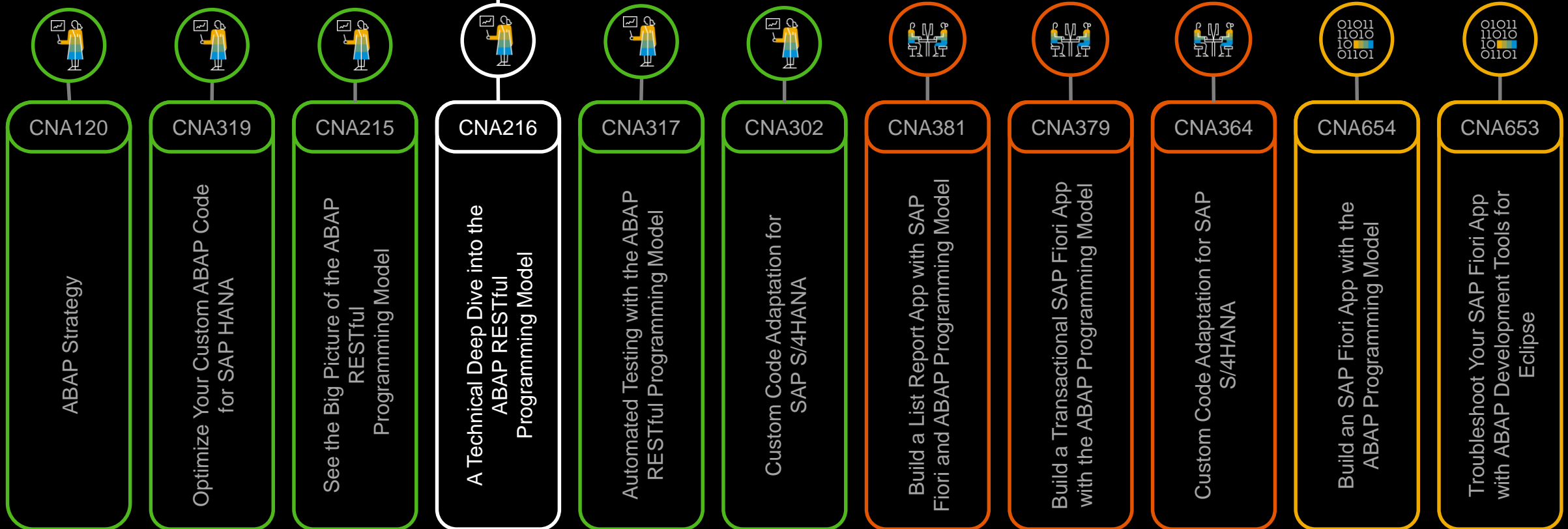
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HOW TO MOVE YOUR ABAP SKILLS TO THE CLOUD AND SAP HANA

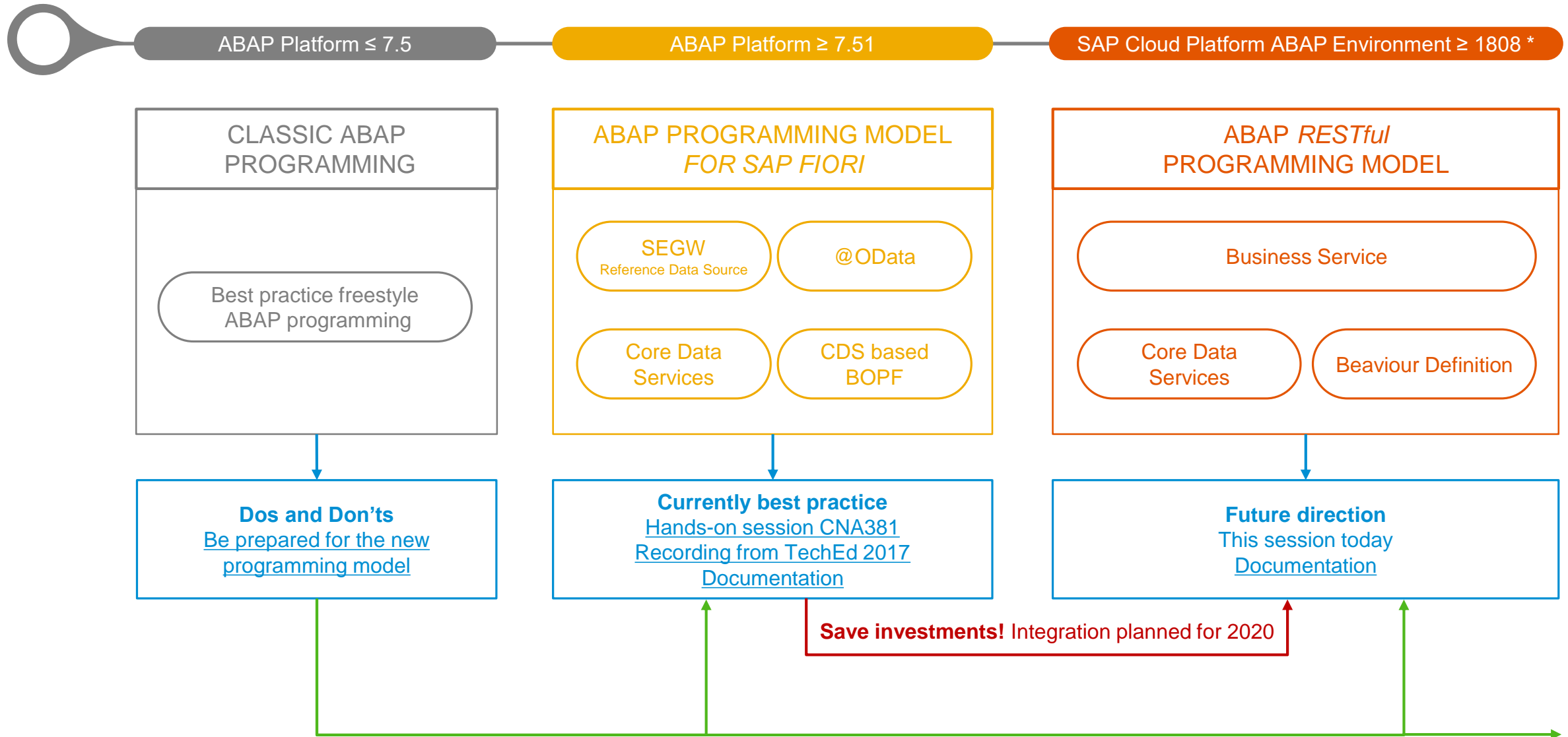**CNA216** — Optimize Your Custom ABAP Code for SAP HANA

CNA120	CNA319	CNA215	CNA216	CNA317	CNA302	CNA381	CNA379	CNA364	CNA654	CNA653
ABAP Strategy	Optimize Your Custom ABAP Code for SAP HANA	See the Big Picture of the ABAP RESTful Programming Model	A Technical Deep Dive into the ABAP RESTful Programming Model	Automated Testing with the ABAP RESTful Programming Model	Custom Code Adaptation for SAP S/4HANA	Build a List Report App with SAP Fiori and ABAP Programming Model	Build a Transactional SAP Fiori App with the ABAP Programming Model	Custom Code Adaptation for SAP S/4HANA	Build an SAP Fiori App with the ABAP Programming Model	Troubleshoot Your SAP Fiori App with ABAP Development Tools for Eclipse

1 hour lecture   2 hours hands-on workshop   1 hour codejam

Evolution of the ABAP programming model

ABAP Platform ≤ 7.5	ABAP Platform ≥ 7.51	SAP Cloud Platform ABAP Environment ≥ 1808 *

CLASSIC ABAP PROGRAMMING

Best practice freestyle ABAP programming

ABAP PROGRAMMING MODEL FOR SAP FIORI

SEGW
Reference Data Source

@OData

Core Data Services

CDS based BOPF

ABAP RESTful PROGRAMMING MODEL

Business Service

Core Data Services

Beaviour Definition

Dos and Don'ts
Be prepared for the new programming model

Currently best practice
Hands-on session CNA381
Recording from TechEd 2017
Documentation

Future direction
This session today
Documentation

Save investments! Integration planned for 2020

ABAP Development: Must learn topics

SERVICE CONSUMPTION

SAP Fiori UI	A2X
Consume OData UI services	Consume OData A2X services

BUSINESS SERVICES PROVISIONING

SERVICE BINDING
Bind the service to OData protocol

SERVICE DEFINITION
Define scope to be exposed

DATA MODELING & BEHAVIOR

BUSINESS OBJECTS

- Data modeling with CDS
- Behavior definition
- Behaviour implementation

QUERIES

- Data modeling with CDS

Agenda

Creating a Business Object

Implementing a Business Service for Fiori apps

Optional: Remote access of A2X services
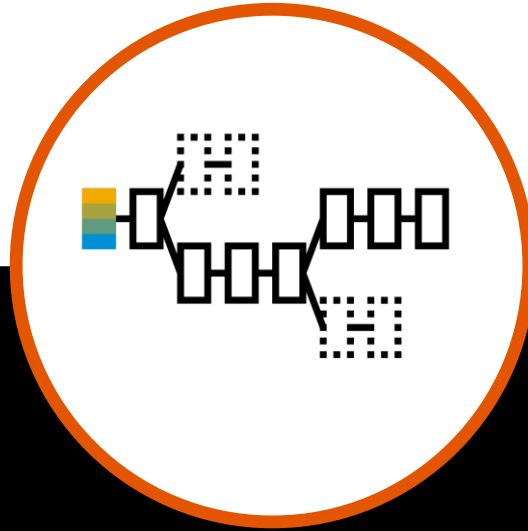
WHAT IS A
BUSINESS OBJECT?

What is a business object (BO)?

BO STRUCTURE

R →

ROOT
COMPOSITION

BO BEHAVIOUR

CUD,
Actions,
Functions,
Locks,
eTag,
Authorizations,
Feature Control,
Draft

BO RUNTIME

INTERACTION PHASE

TX buffer

SAVE SEQUENCE
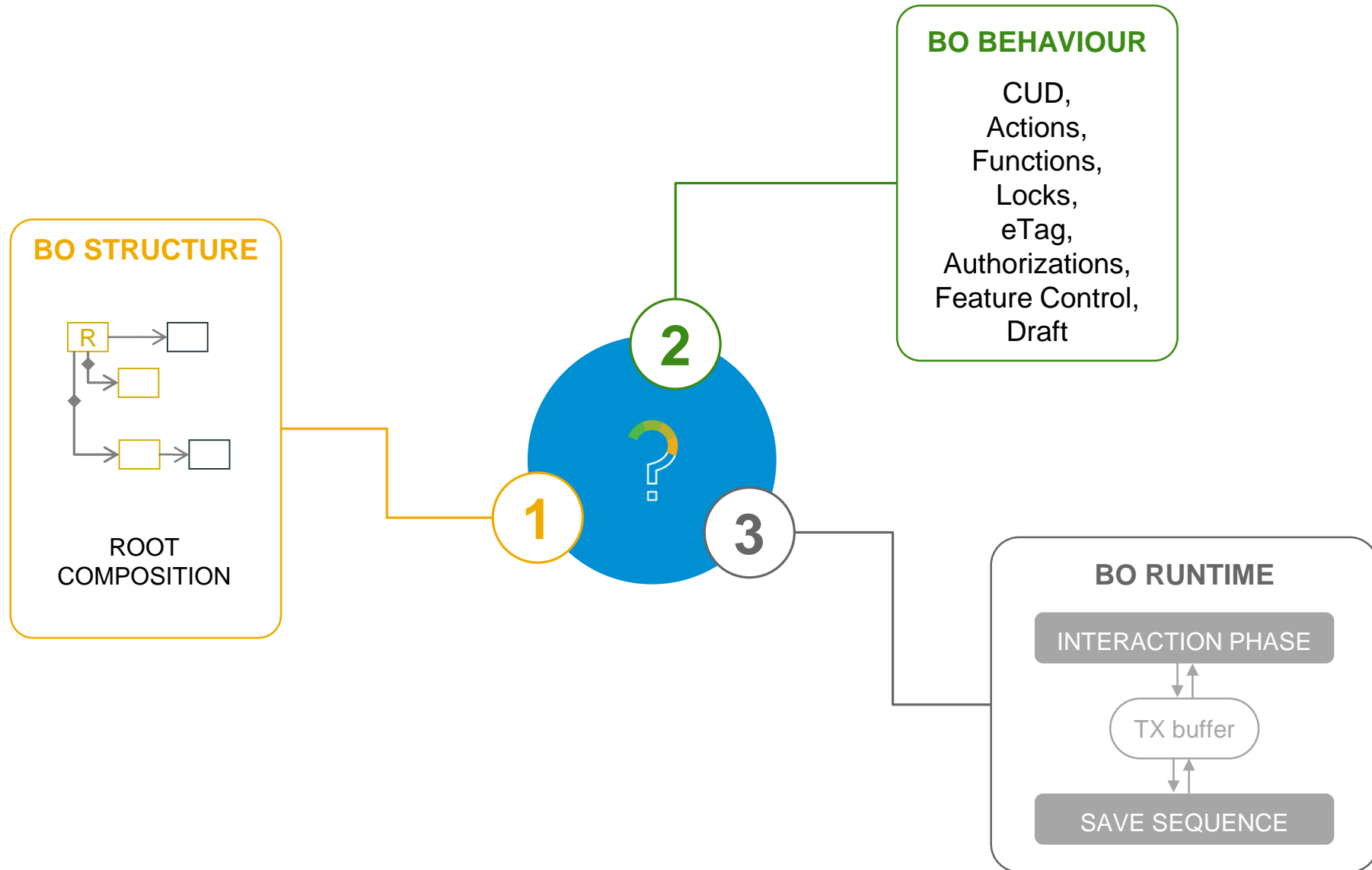
ABAP RESTful Programming Model: Development Flow
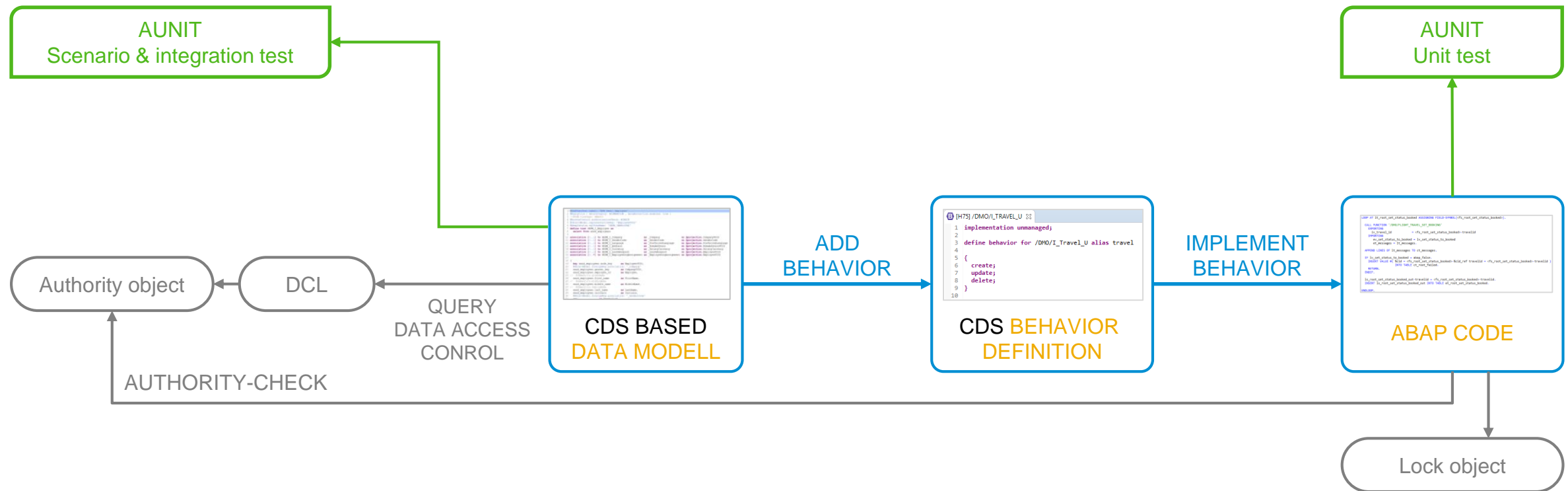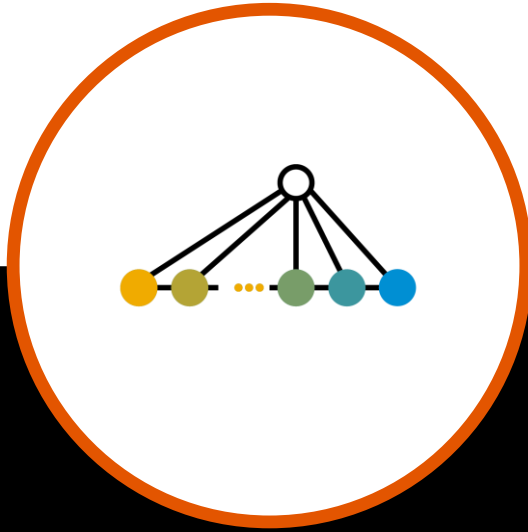
WHAT IS A
BUSINESS SERVICE?

What is a business service?

Protocol and use case

OData V2, V4

A2X or (SAP Fiori) UI

Lifecycle

Release

Versioning

Deprecation

Service Model

R

Entities to be exposed

Tool support

UI: SAP Fiori Elements preview

A2X: Documentation preview

2

3

1

4
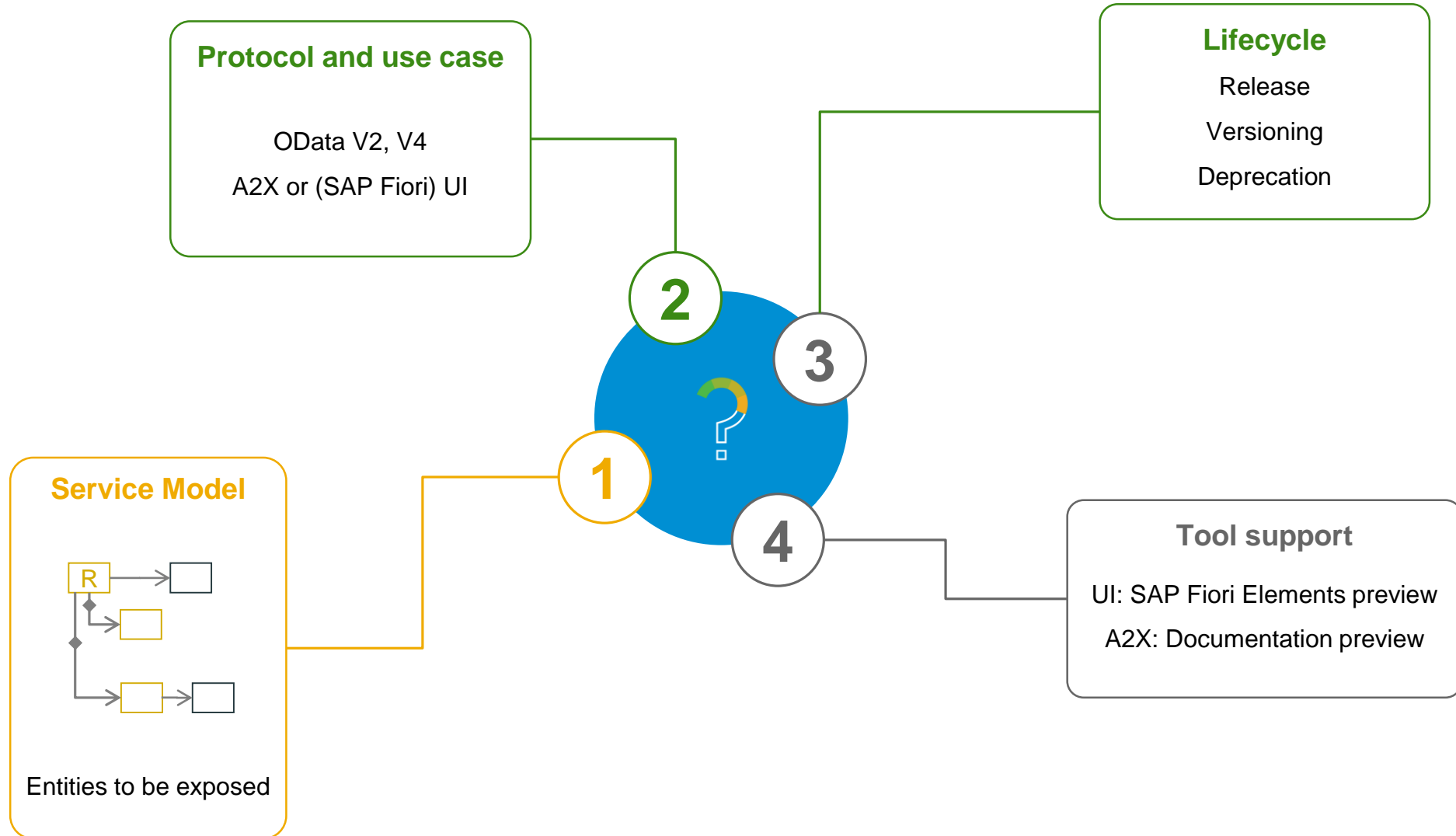
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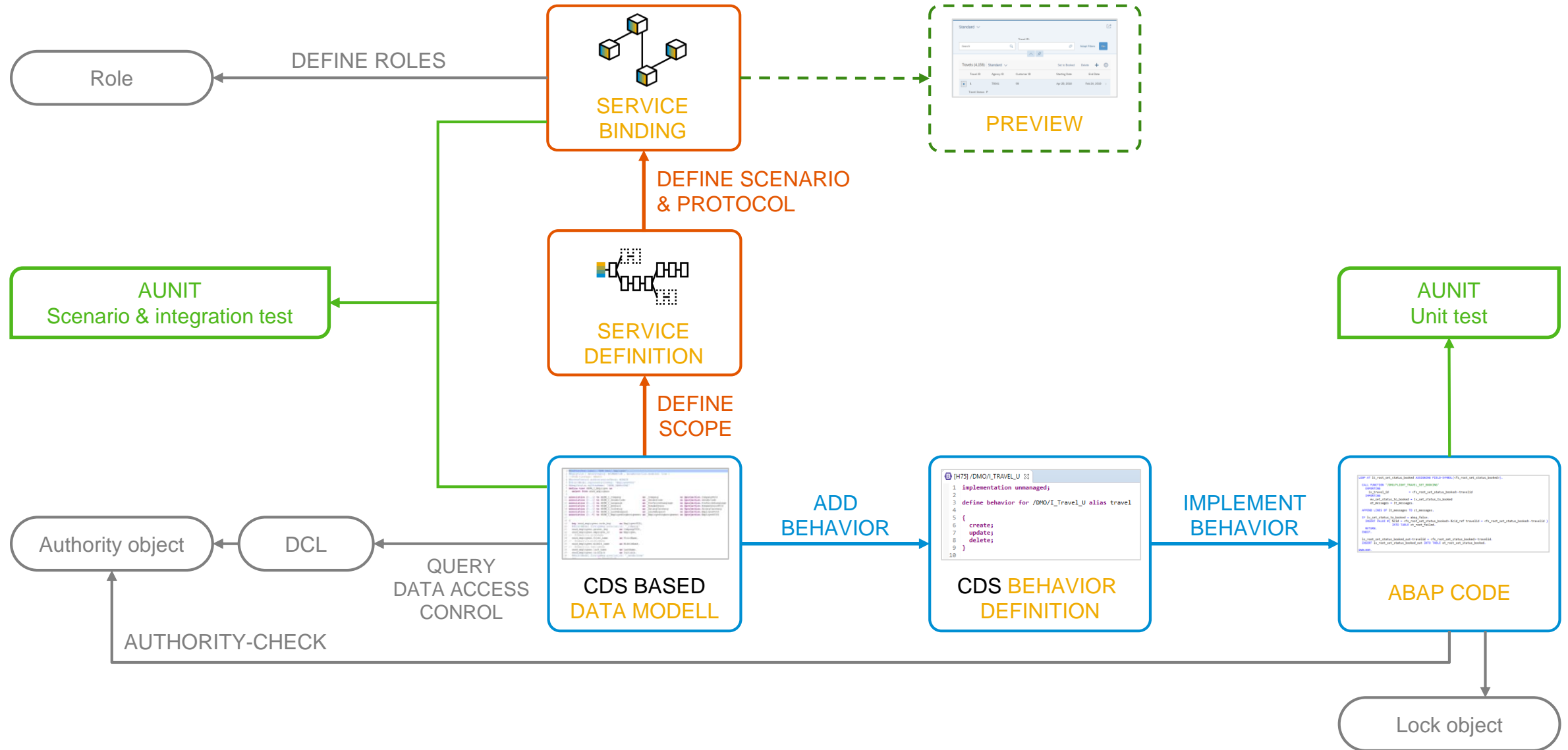
Demo

BO modeling,
BO implementation
BO access via EML in AUNIT
Expose Business Object as (SAP Fiori) UI service with SAP Fiori Elements Preview

ODATA CONSUMPTION

What is required for a consumption scenario?

Service Consumption Model

R →

Local representation of the external model

1

2

3

?

Service Proxy API

For OData V2,V4

Based on service consumption model

Integration into apps

CDS artifacts not SQL-managed

Data (partly) fetched from remote
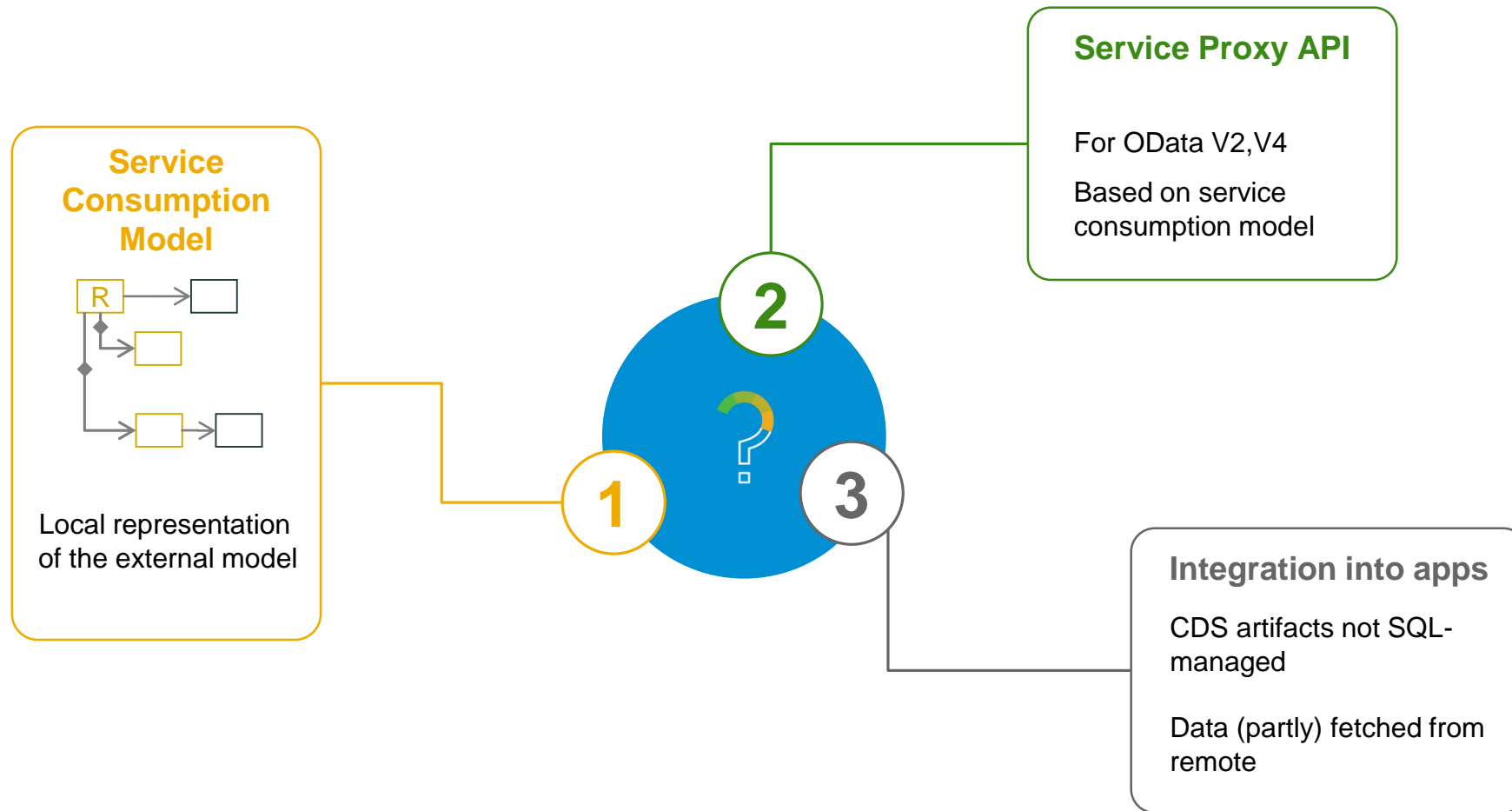
Demo

Expose Business Object as A2X service (e.g. S/4HANA)
Remote consumption from other system (e.g. SAP Cloud Platform ABAP Environment)

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Related SAP TechEd learning journeys

CNA6 – How to Move Your ABAP Skills to the Cloud and SAP HANA
CNA4 – How to get to SAP S/4HANA

Related SAP TechEd sessions

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CNA317 – Automated Testing with the ABAP RESTful Programming Model
CNA319 – Optimize your Custom ABAP Code for SAP HANA
CNA379 – Build a transactional SAP Fiori App with the ABAP Programming Model
CNA381 – Build a List Report App with SAP Fiori and the ABAP Programming Model
CNA654 – Build a SAP Fiori App with the ABAP Programming Model
CNA653 – Troubleshoot Your SAP Fiori App with ABAP Development Tools for Eclipse

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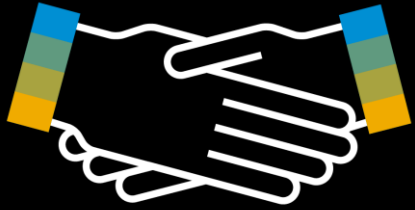
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Contact for further topic inquiries

Marcel Hermanns
marcel.hermanns@sap.com

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