# ABAP Test Cockpit (ATC) in the Cloud—What Is Already Possible?

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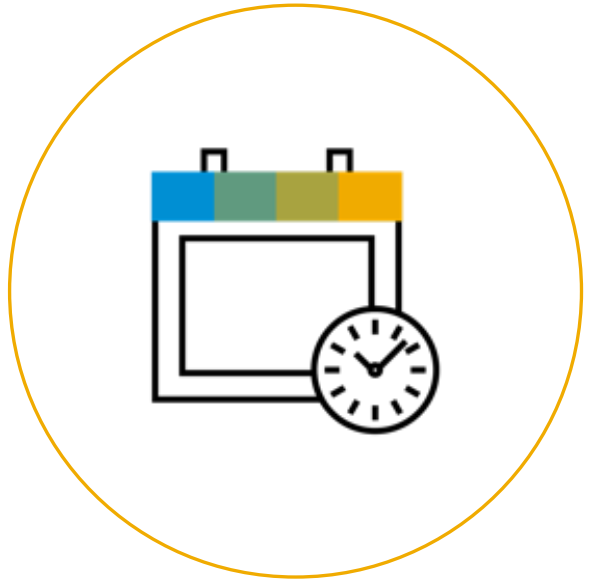
# Agenda

CI/CD tools for SAP BTP ABAP Environment

ATC in SAP BTP ABAP Environment



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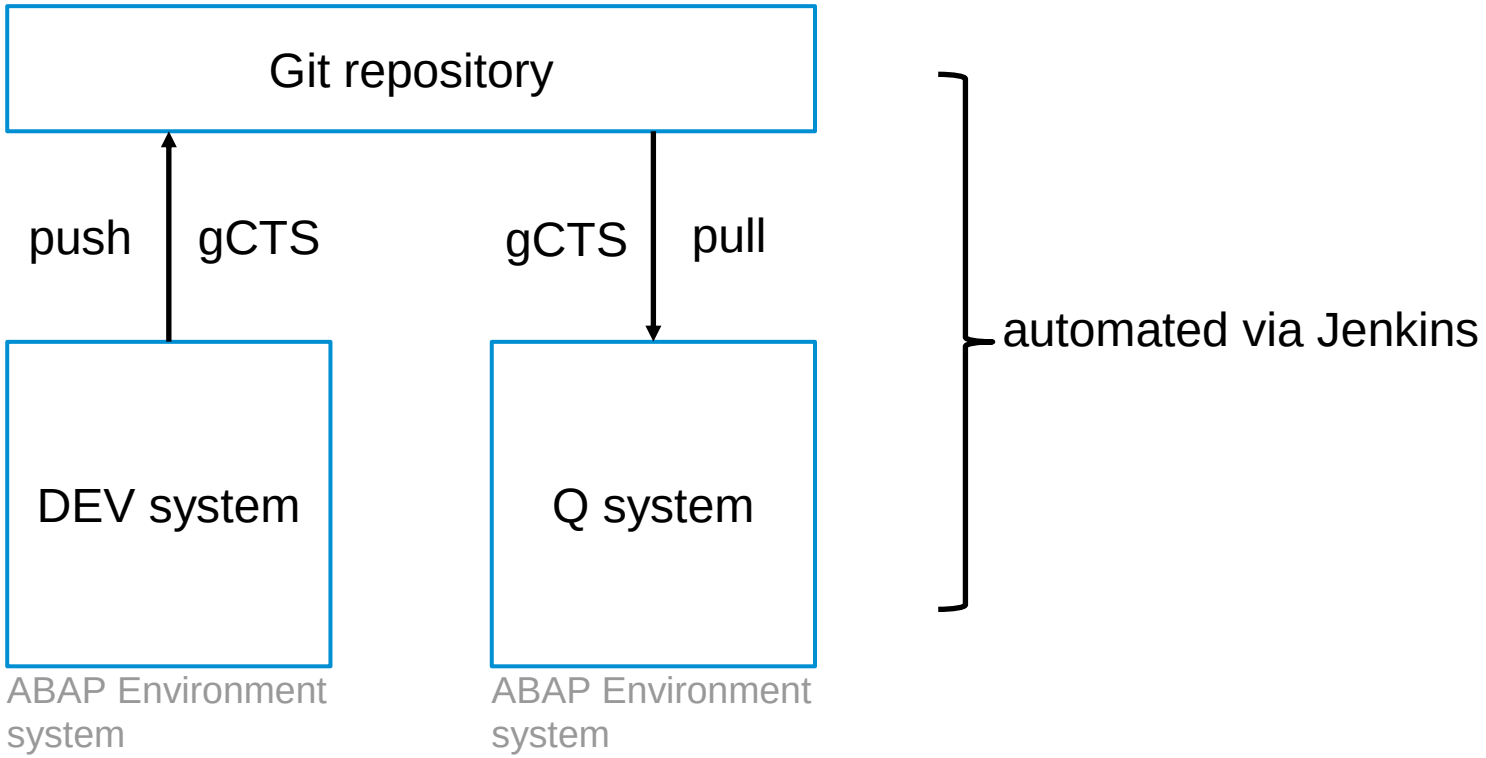
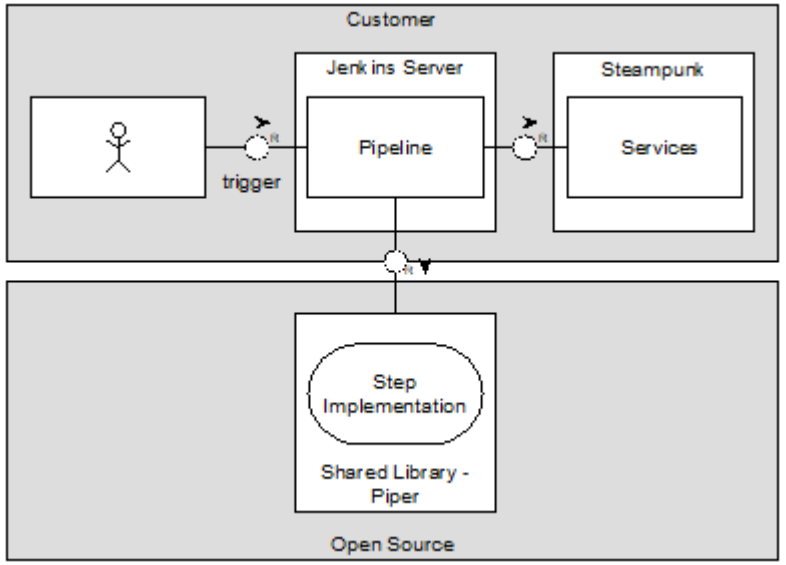
# CI/CD tools for SAP BTP ABAP Environment

# Piper and SAP BTP ABAP Environment (Steampunk)




Technology




Check out ABAP Environment Pipeline

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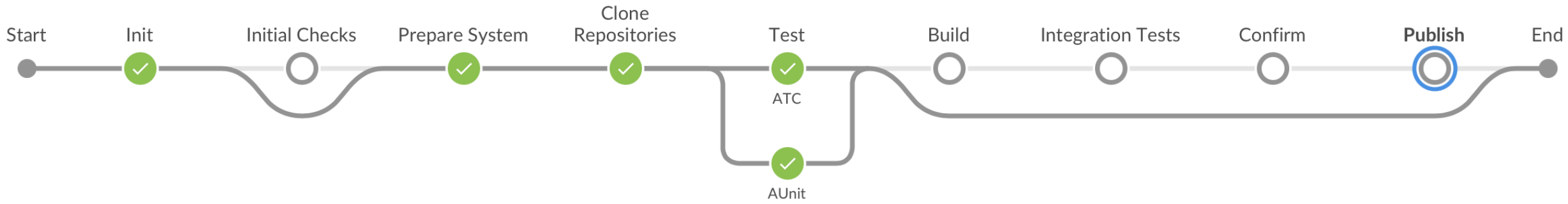
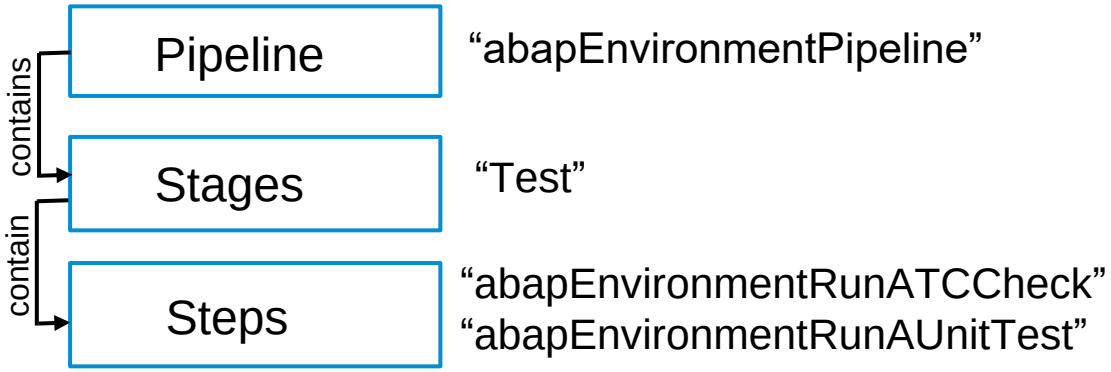
# ABAP Environment Pipeline - Introduction




## Building blocks




“abapEnvironmentPipeline”

“Test”

“abapEnvironmentRunATCCheck”
“abapEnvironmentRunAUnitTest”

## Features

- Contains several stages and supports different scenarios
- Choose a subset of stages for the required use case
- Scenarios
  - Improve the software quality through continuous checks and testing
  - For SAP Partners: Building ABAP Add-ons as a SaaS solution

Check out:
CI/CD Tools for SAP BTP ABAP Environment
SAP BTP ABAP Environment Pipeline: Introducing ABAP Unit

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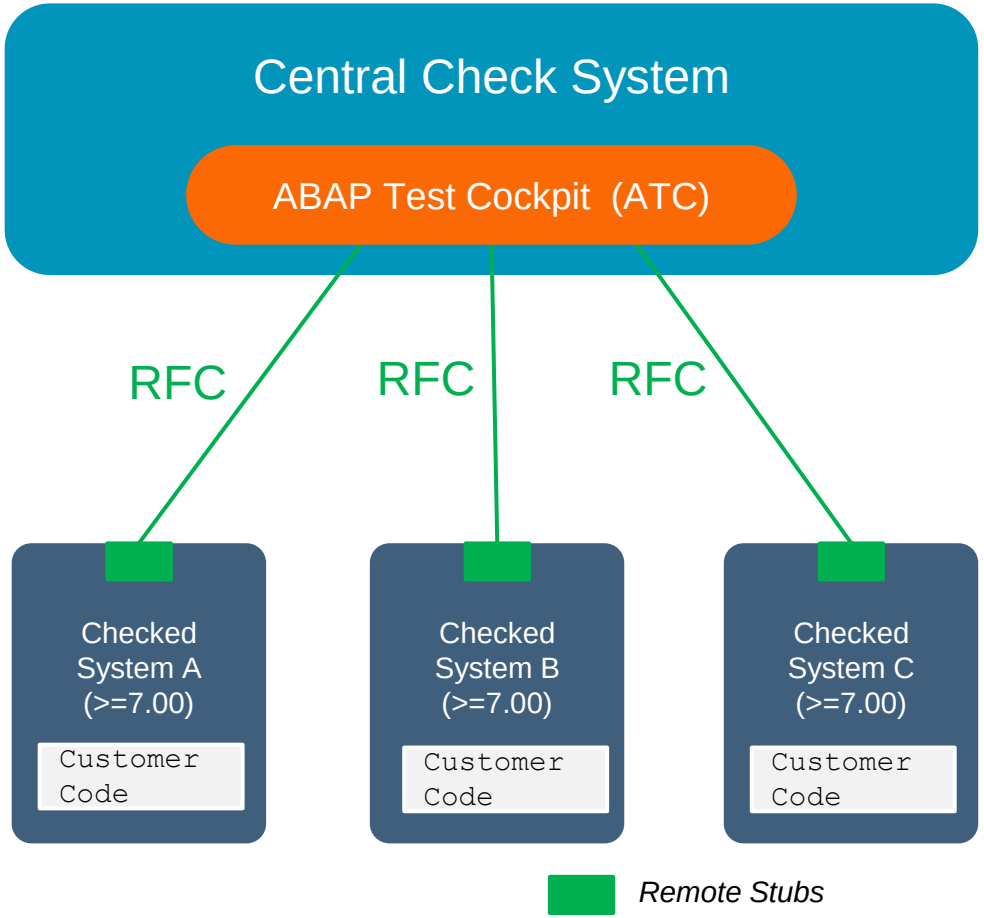
# ATC in SAP BTP ABAP Environment

# Remote ATC for custom code analysis of on-premise landscapes

- **CENTRAL ATC SYSTEM** executes check logic
- **REMOTE** stubs return a model from custom code
- **RESULT** is analyzed in central system
- **INTEGRATED** in development environment (developer scenario)
- **MOST CUSTOM CODE** is supported
  (incl. modifications and enhancements)
- **SUPPRESS** false-positive findings with pseudo-comments
- **ROBUST** process for managing exemptions
- **BASELINE** concept to exclude legacy findings
- **EXTENSIBLE** infrastructure for customer specific checks
- **INTEGRATED** in SAP Solution Manager tools
  (CCLM, ChaRM, Retrofit)
- **ESSENTIAL** for custom code migration
  to SAP S/4HANA and SAP BTP




Check out Remote code analysis with ATC

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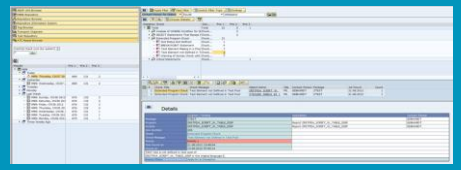
# Move central ATC system to the Cloud

on premise

Central Check System



ABAP Test Cockpit (ATC)

RFC

SAP S/4HANA

SAP ERP

SAP NetWeaver

ON PREMISE

SAP CLOUD CONNECTOR

SAP BTP

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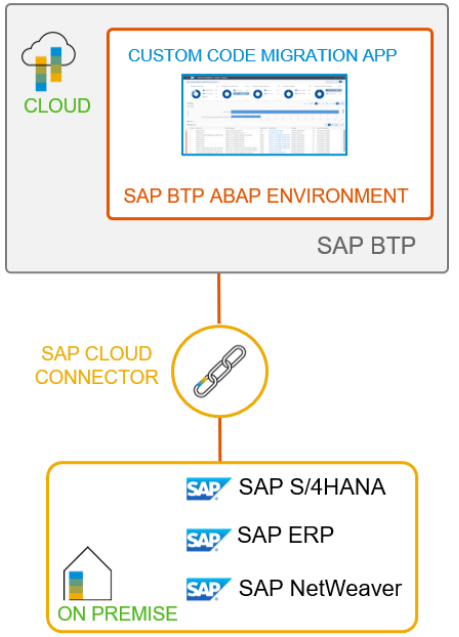
# Custom code analysis in SAP BTP ABAP Environment with Custom Code Migration app

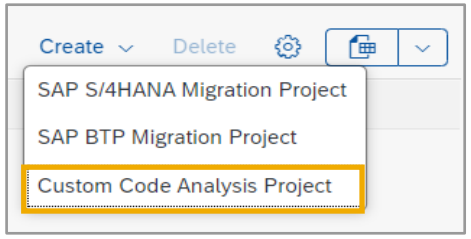
## OVERVIEW

- Technically based on remote ABAP Test Cockpit (ATC) infrastructure
- Automated setup in SAP BTP ABAP Environment (also available as free tier model for SAP BTP)
- Custom code analysis for classic ATC use cases, SAP S/4HANA and SAP BTP migration
- Upload of collected usage data possible
- Comprehensive compact and visual filters to customize analysis results view
- Detailed analysis of a custom code finding incl. direct navigation to source code
- Burndown chart - analysis results distribution over time
- Evaluation of custom code for semi-automated adaptation (Quick Fixes in ADT in Eclipse)



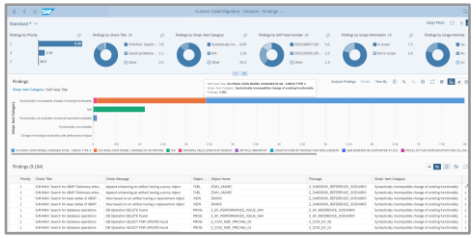

## HIGH LEVEL FEATURES:

### USE CASES

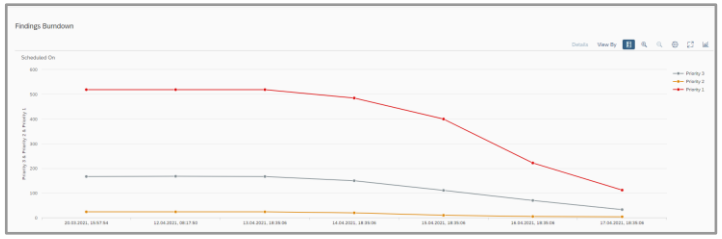



### SCOPING

### ANALYSIS



### BURNDOWN CHART



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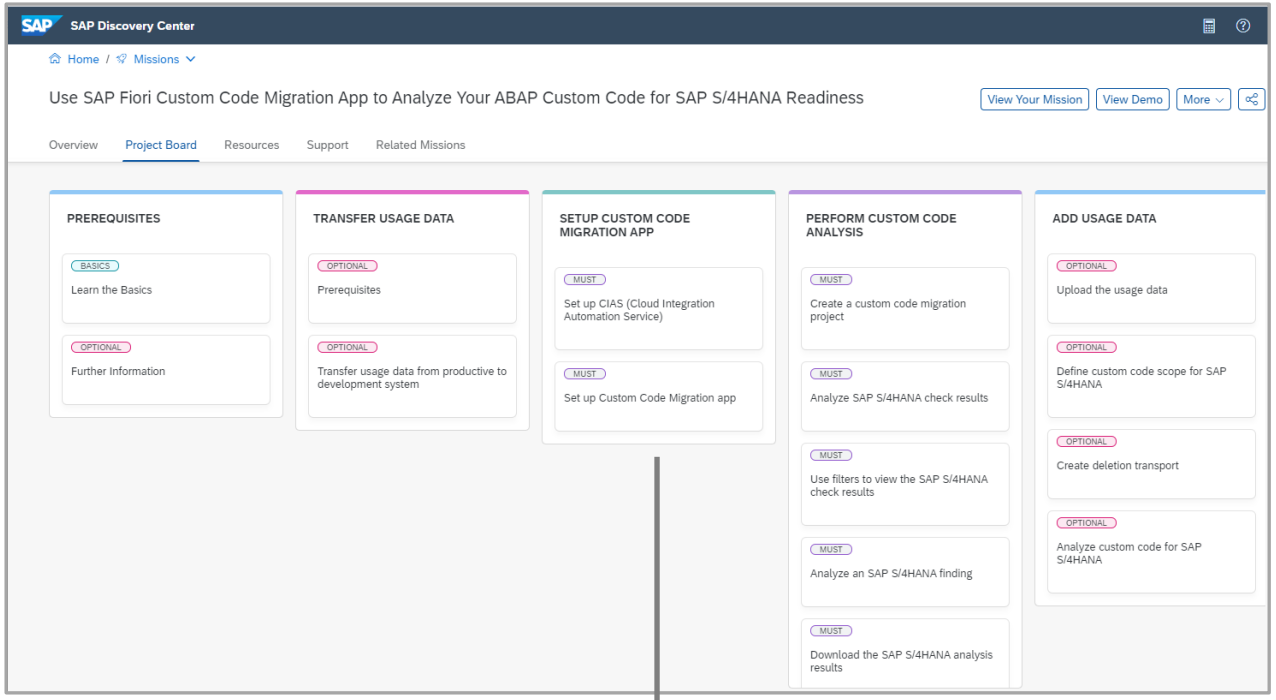
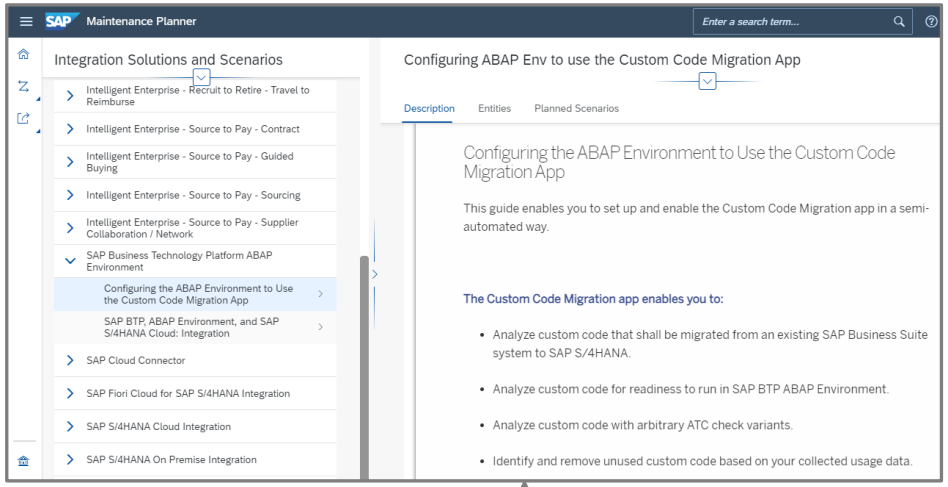
# Custom Code Migration app – Get Started

**SAP Discovery Center Mission** [Use SAP Fiori Custom Code Migration app to analyze your ABAP custom code for SAP S/4HANA]

- Custom Code Migration app in SAP BTP ABAP Environment
- Automated setup and configuration with CIAS guided workflow
- Step-by-step guided custom code analysis




## CIAS Workflow for Custom Code Migration app

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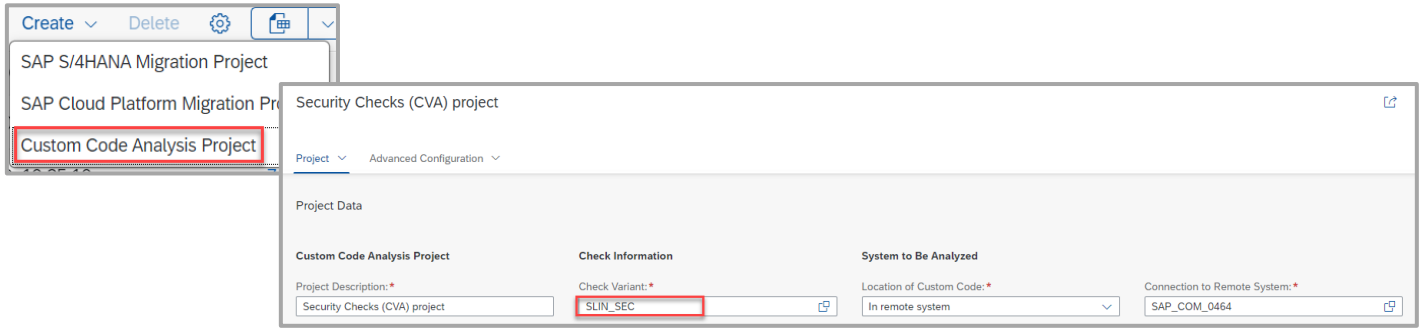
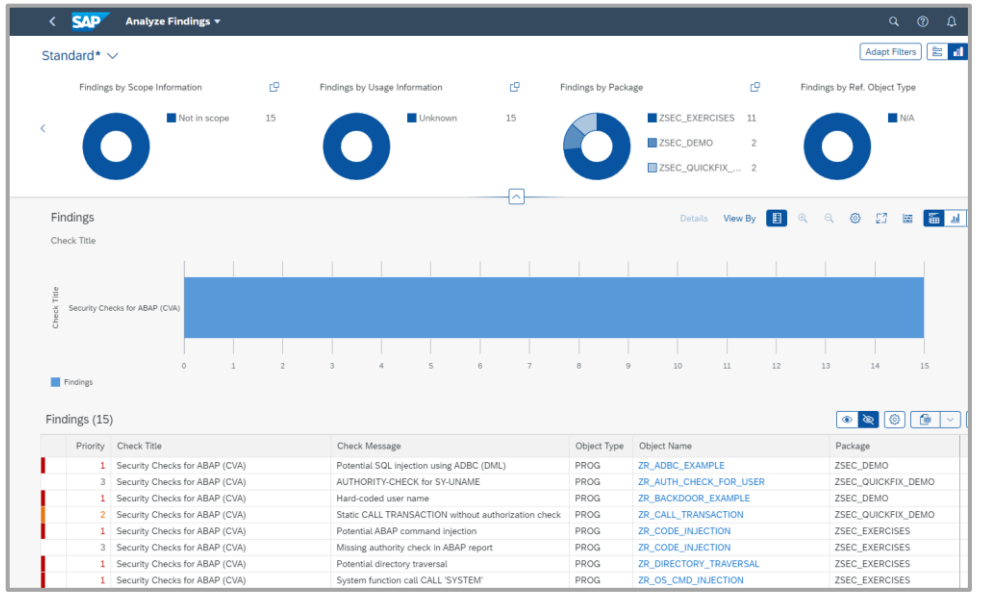
# Code Vulnerability Analyzer (CVA) in SAP BTP ABAP Environment

- CVA in SAP BTP ABAP Environment is free of license fee
- CVA use case is available in Custom Code Migration app
- Create “Custom Code Analysis Project” and use SLIN_SEC check variant

## Run CVA checks




## CVA analysis results

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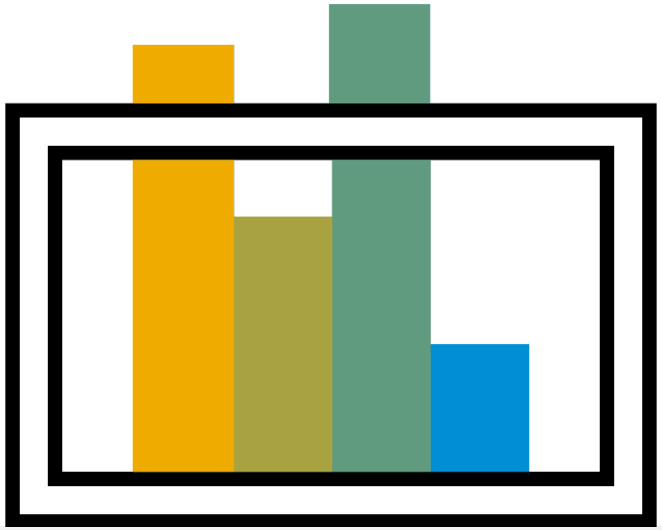
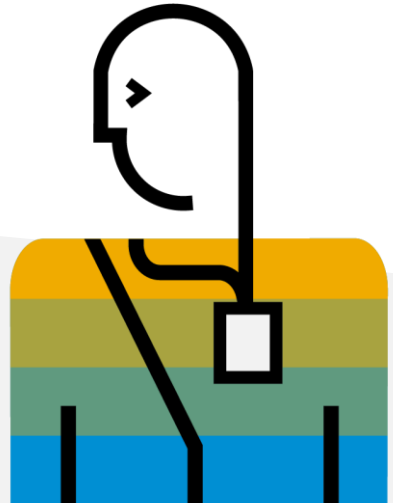
# Demo

Code Vulnerability Analyzer (CVA) in the cloud



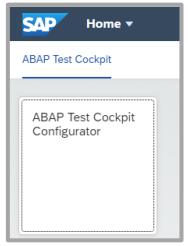


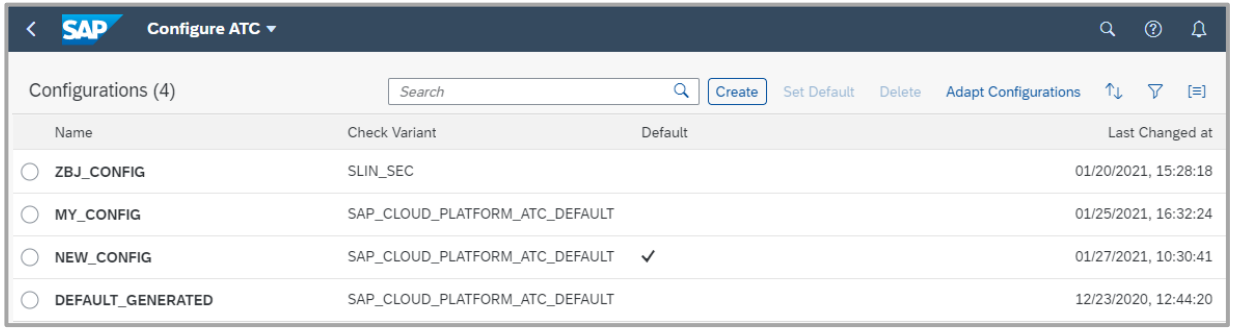
# Configure ATC in SAP BTP ABAP Environment (1)

## NEW SAP FIORI APP – ABAP TEST COCKPIT CONFIGURATOR

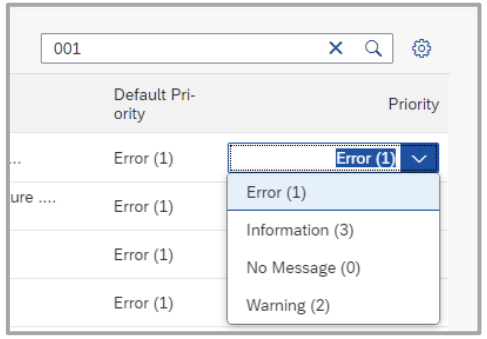
- View and maintain ATC configurations
- Create a new configuration based on an ATC check variant
- Configure ATC check priorities according to your needs
- Exclude ATC checks
- Configure transport settings

### ATC Configurator

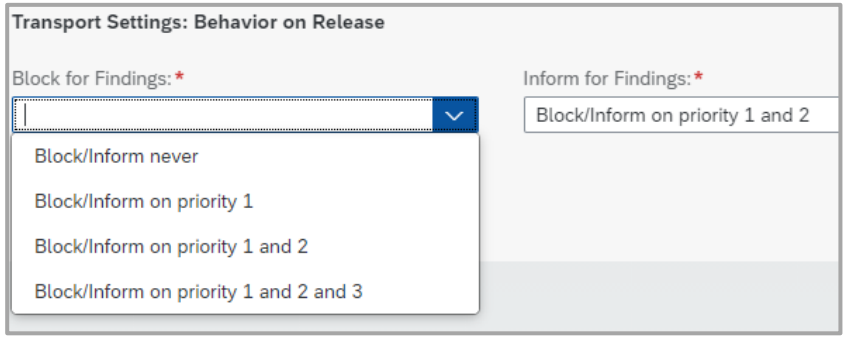



### Change ATC check priority




### Configure transport settings

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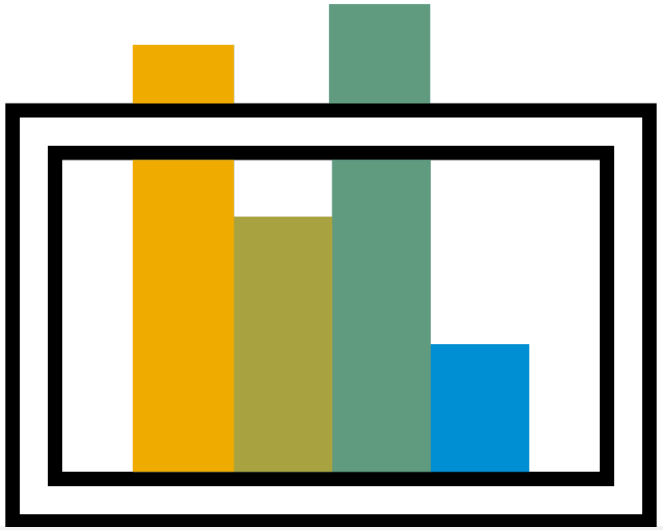
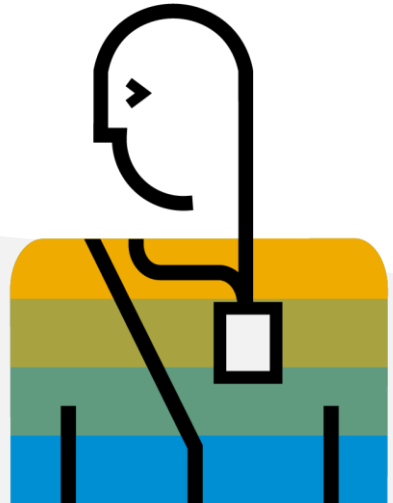
# Demo

ABAP Test Cockpit Configurator



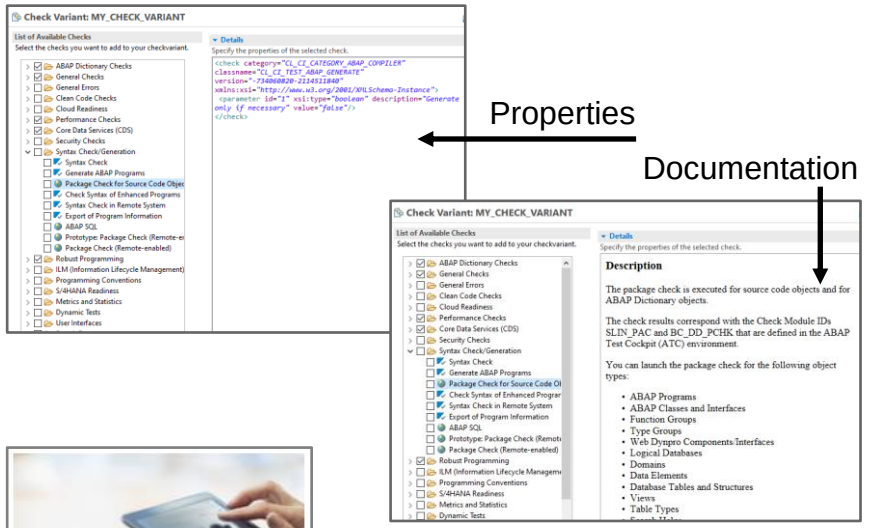


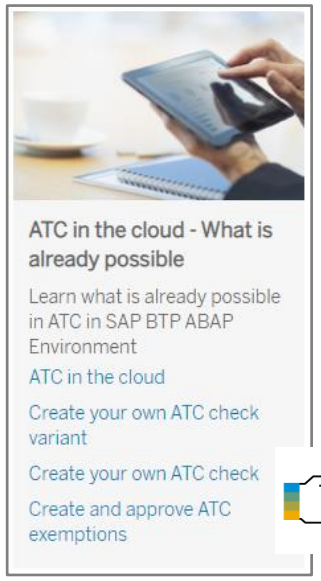
# Configure ATC in SAP BTP ABAP Environment (2)

## ATC IN ABAP DEVELOPMENT TOOLS IN ECLIPSE

- Display/Create/Edit an ATC check variant in ADT in Eclipse
- Create custom ATC checks
- Create/approve/transport ATC exemptions

### ATC check variant in ADT




Check SAP Community for
ABAP Testing and Analysis

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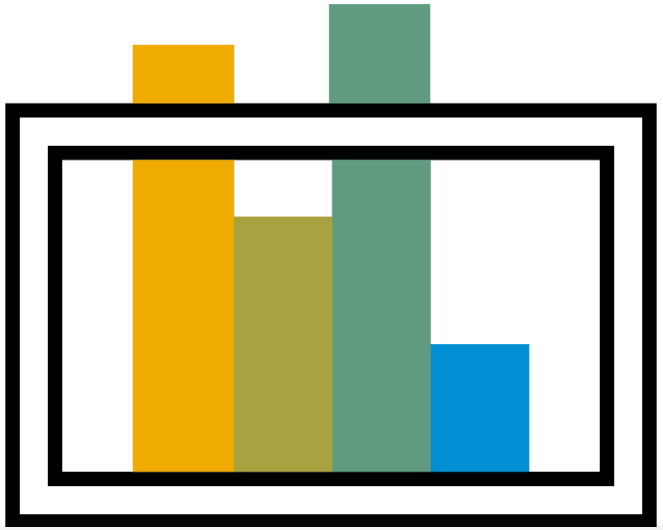
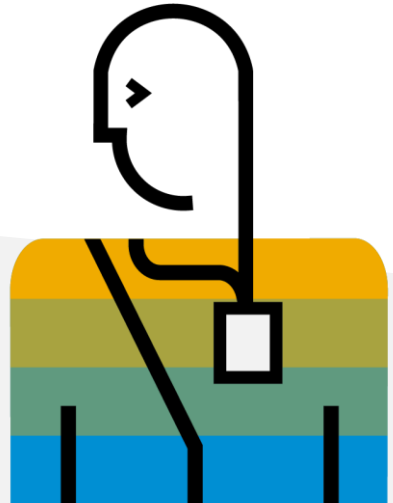
# Demo

Create and configure ATC check variants





# Custom code analysis – Status and Future Outlook

| | ATC on-premise | ATC in SAP BTP |
|---|---|---|
| Required system | ATC check system **(SAP_BASIS >=7.52)** | SAP BTP, ABAP environment |
| Application | SAPGUI-based | Custom Code Migration app |
| Remote connectivity | via RFC | via RFC and SAP Cloud Connector |
| Code Vulnerability Analyzer (CVA) security checks | additional license | free of license fee |
| Usage data consideration | ✗ | ✓ |
| Always use newest checks | ✗ | ✓ (upgrade every 3 months) |
| Findings reported in the prioritized worklist | ✓ | ✓ |
| Analysis of findings: source code navigation, documentation | ✓ | ✓ |
| Robust exemption process | ✓ | ✗ **Planned** |
| Baseline to exclude legacy findings | ✓ | ✗ **Planned** |
| Developer scenario | ✓ | ✗ **Planned** |
| Custom check variants incl. custom checks | ✓ | ✓ |
| Transport Management und CHARM integration | ✓ | ✗ **Planned** |

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