

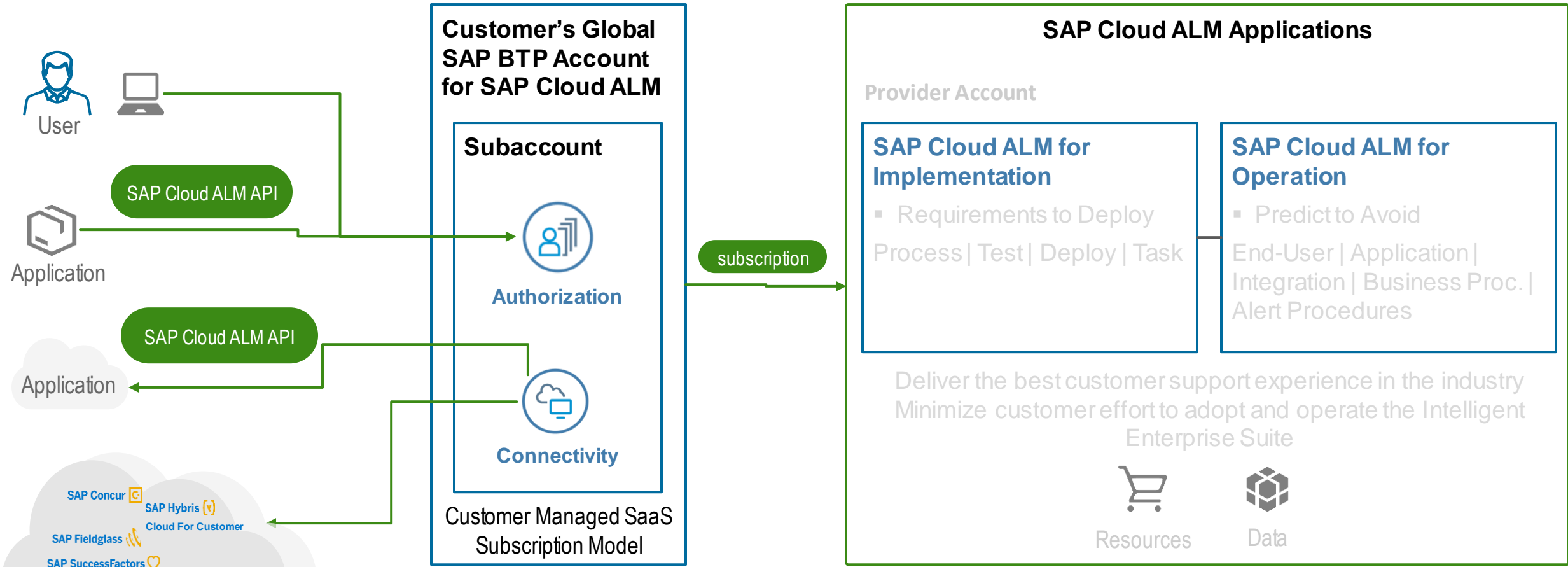


Extensibility Using APIs for SAP Cloud ALM

Q2 2022

Extensibility Using APIs for SAP Cloud ALM

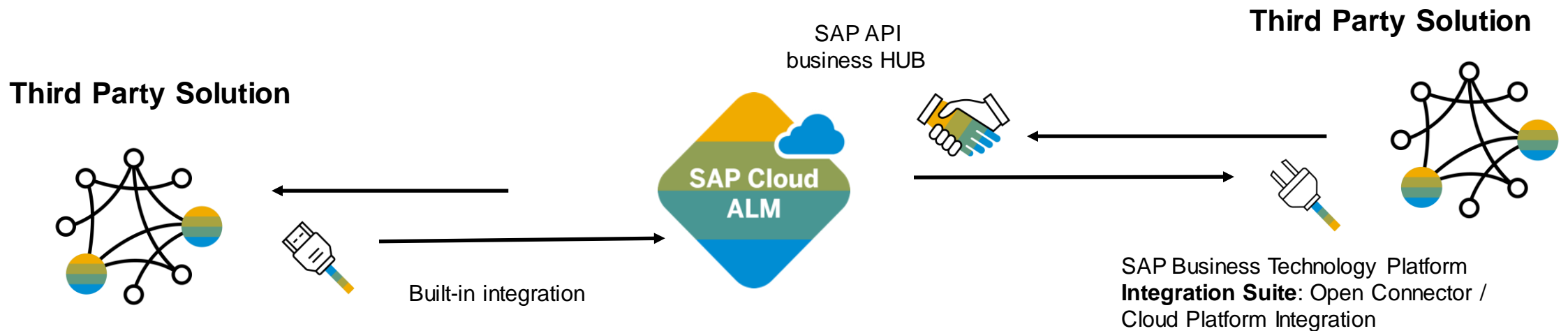
SAP Cloud ALM architecture overview



Consumer's subaccount (customer) **subscribes** to provider's application (SAP Cloud ALM), supported by **automated onboarding**

SAP Cloud ALM is deployed in provider's subaccount (resources and configurations).

Extend, innovate and add value on top of SAP Cloud ALM



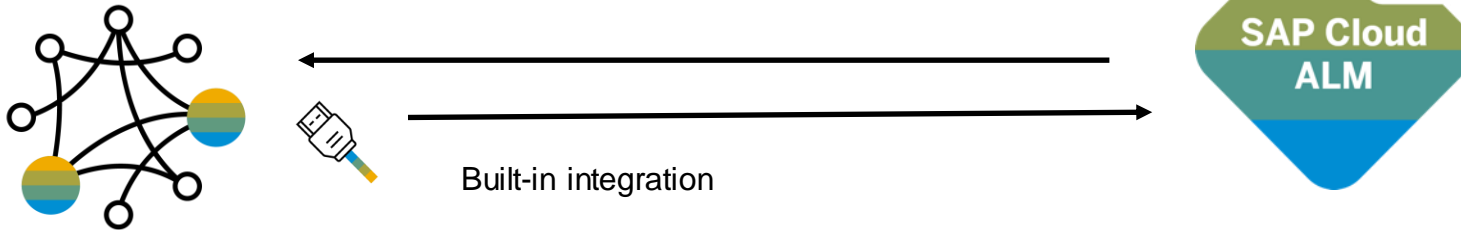
The **APIs for SAP Cloud ALM** provides “built-in” **integration ready** for selected solutions including SAP and third-party solutions.



The **APIs for SAP Cloud ALM** are designed to let customers, partners and third-party component to **extend** SAP Cloud ALM capabilities for Implementation and Operations and **innovate** on top of SAP ALM core capabilities.

Extend, innovate and add value on top of SAP Cloud ALM

Third Party Solution



The **APIs for SAP Cloud ALM** are used to provide “built-in” **integration ready** for selected solutions including SAP and third-party solutions.



Extensibility Using APIs for SAP Cloud ALM

Integration ready

* **Planned**

* **Under Evaluation**



	SAP Solutions 	Third Party Solutions 
Analytics	SAP Analytics Cloud	Grafana
Operation Automation	SAP Automation Pilot SAP Workflow Management SAP iRPA	
Event Management	SAP Solution Manager ITSM *	ServiceNow Teams Channel * Git * Jira *
Test Automation	Test automation tool for SAP S/4 HANA Cloud	Tricentis *
Task Management (Task, Defect, Requirement)		Teams Channel * Git * Jira *
In App Notification		Teams Channel *

Integration ready: Resources Change API (1/2)

The CALM **Resource Changes Service** provides **messages** that let applications watch for changes to resources: Whenever a watched resource changes, the CALM Resources Changes API notifies external application.

CALM **Resources** are **objects** managed and defined by CALM applications:

- Event Situation,
- Tasks,
- InApp Notification

CALM **Resources** are accessible via the **SAP Cloud ALM API catalog** via our **REST API**.

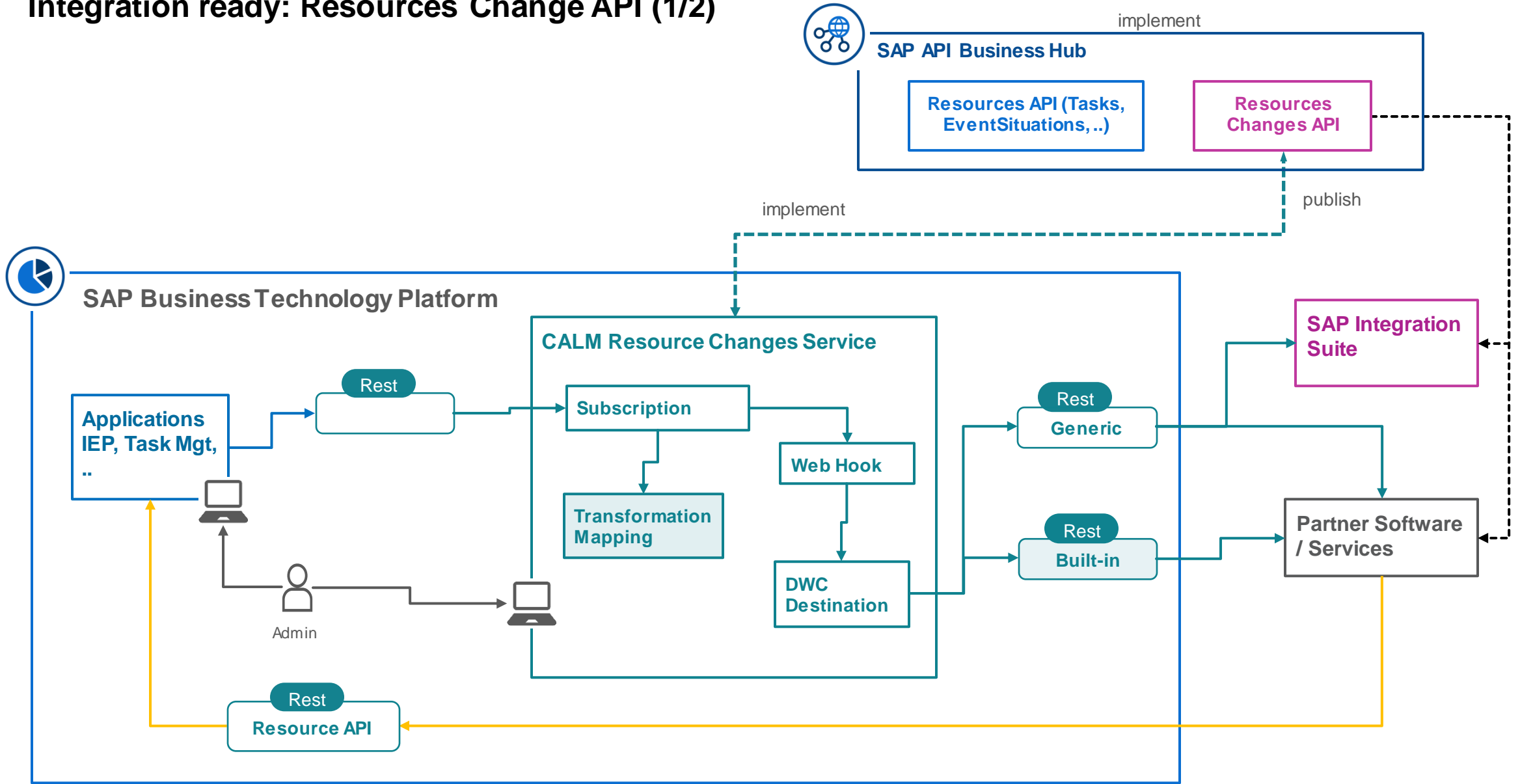
This API is implemented by Third Party components/applications who want to interact with CALM Resources.

A '**built-in**' implementation of the API is provided for selected third-party services: S-NOW, Teams, ...

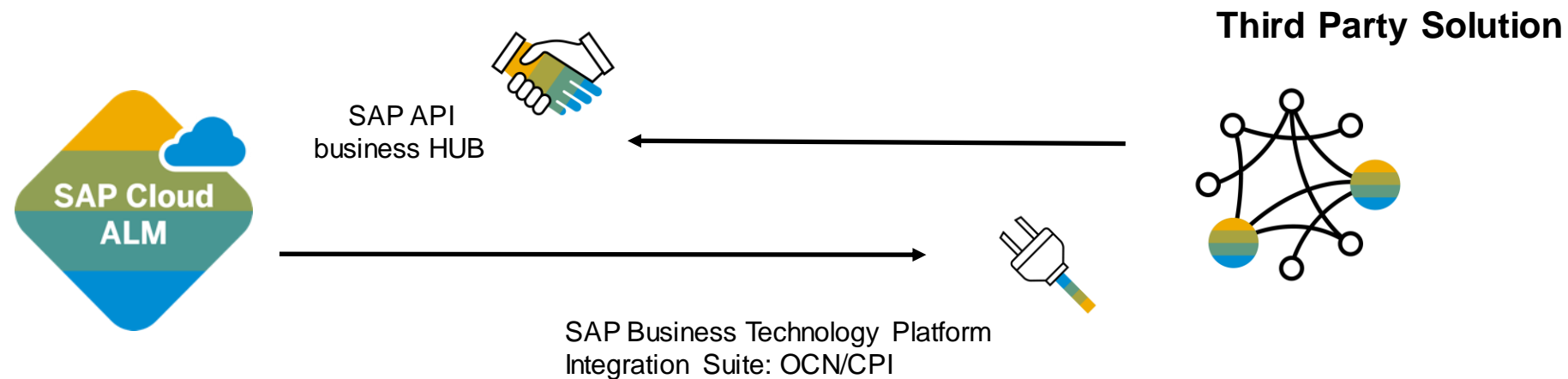
Possible use-cases are: Event Situations to Incidents, Defects to Problem, Event Situations to Messages, Tasks to Issues, ...

Extensibility Using APIs for SAP Cloud ALM

Integration ready: Resources Change API (1/2)



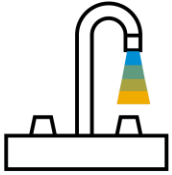
Extend, innovate and add value on top of SAP Cloud ALM



The **APIs for SAP Cloud ALM** are designed to let customers, partners and third-party component to **extend** SAP Cloud ALM capabilities for Implementation and Operations and **innovate** on top of SAP ALM core capabilities.

Extensibility Using APIs for SAP Cloud ALM

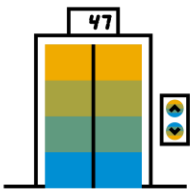
Best Practices



Consume

...benefit from a huge amount of key SAP data

3rd Party Analytics, 3rd Party APM, ...



Complement

...implement connectors and content to better support your business processes

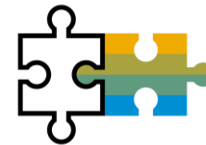
3rd Party systems connectors, pre-packaged analytics, deliver templates, ...



Integrate

...connect CALM to your existing ALM platform and tools

TMS, Jira, SNOW, test tools, custom pipeline, workflow, ...



Extend

...build new services and frontends to improve your ALM processes

AI, RPA, Bots, predictive operations, capacity planning, test optimization, ...

Extensibility Using APIs for SAP Cloud ALM

Customer/Partner User Story

Consume: benefit from a huge amount of key SAP data

As a customer/partner, I create **custom** applications for data visualization for all ALM domains (Build, Run)

- **SAP Analytics Cloud**
- **3rd Party Analytics:** Grafana, Splunk, Tableau, ..
- **3rd Party APM:** Dynatrace, AppDynamics, ..
- **3rd Party Project Management:** JIRA, ..
- ...



Complement: implement connectors and content to better support your business processes

As a **partner**, I deliver content/services in the **SAP Store** for:

- **SAP UI5/Fiori** custom applications,
- **SAP Analytics Cloud** pre-packaged analytics,
- **Advanced SAP BTP** application from project management (Scrum-Board, Kanban, Project Tracker, ..),
- **Custom process/solution modeling, BPMN library, ..**
- **Custom project/methodology templates,**
- **SAP CPI** package (3rd Party systems connectors, complex integration scenario, ...),
-

Integrate: connect CALM to your existing ALM platform and tools

As a partner/customer, I integrate CALM into other **ALM components** to improve ALM processes:

- **Test Management:** Tricentis, Microfocus, Selenium, ..
- **Project/Task Management:** Jira, GitHub, ..
- **Incident Management:** ServiceNow, Zendesk, ..
- **CI/CD:** Jenkins, Bamboo, GitLab,
- **Collaboration:** Teams, Slack, ..
- **Operation/Workflow Automation:** Automic, Redwood, ..
- ...

Extend: build new services and frontends to improve ALM processes

As a **partner**, I deliver **advanced innovative** applications and services in the following domains:

- **Artificial Intelligence:** predictive operations, capacity planning, test optimization, preventive support, ..
- **Robotic Process Automation:** request authorizations, trigger testing, automatic incident management, optimize systems monitoring, detect security attack, perform backups, ...
- **Chatbot:** advanced support, Service desk operations, ..
- ...

Extensibility Using APIs for SAP Cloud ALM

APIs Catalog

SAP Cloud ALM API
for **Operations**

SAP Cloud ALM API
for **Implementation**



Process Scope

- Exchange process scopes, activate custom process



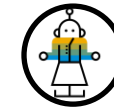
Alerts

- Update alert situations



Task/Requirement/Defect

- Exchange project/task/requirement information



Automation

- Integrate automation tool



Test Management

- Synchronize Test components



Test Automation

- Trigger automatic test, Retrieve results



CI / CD

- Trigger deployment, Retrieve deployment results



Release Management

- Manage Features and Transports

API hub



Metrics

- Read, push Metrics



Business Service Events

- Synchronize systems/cloud services events (downtime, degradation, ..)



Landscape



Analytics

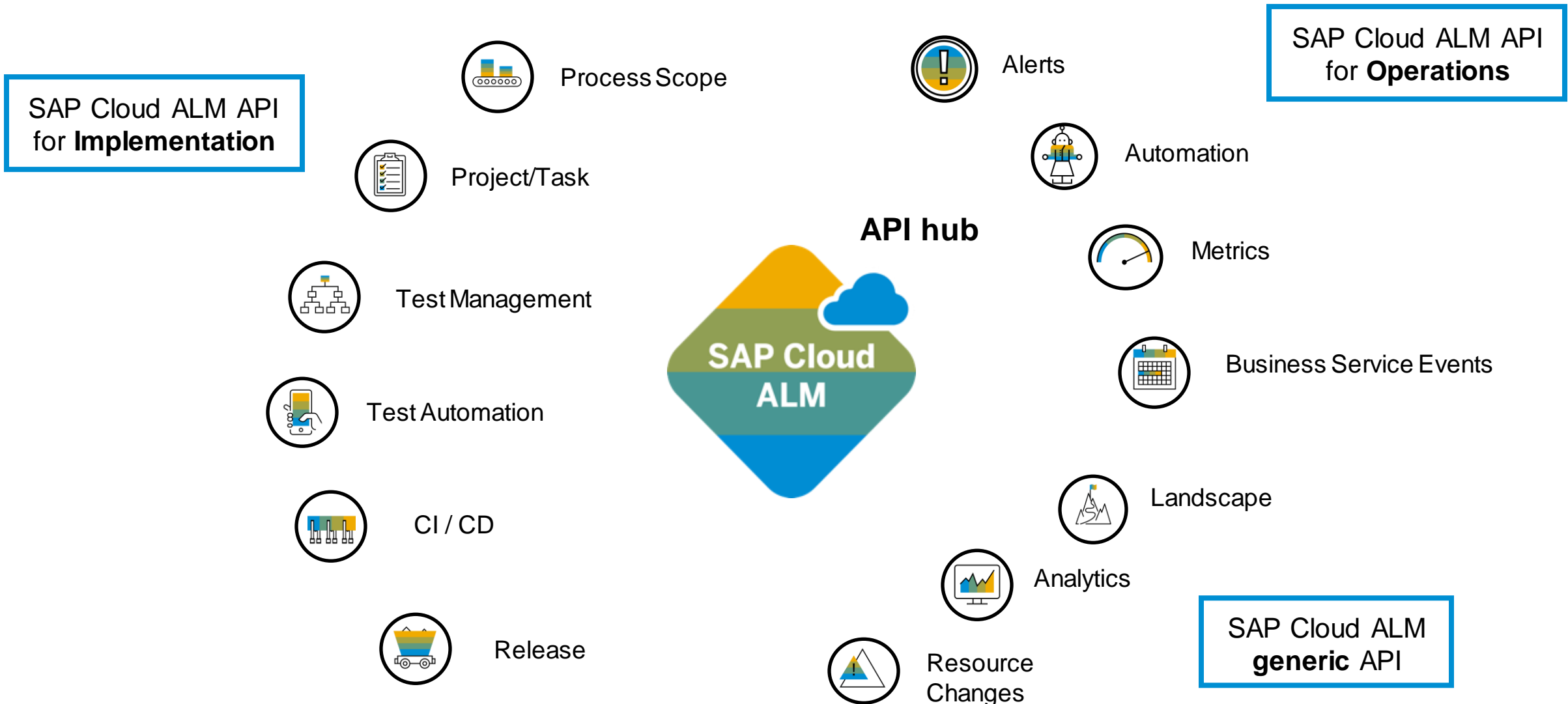


Resource Changes

SAP Cloud ALM
generic API

Extensibility Using APIs for SAP Cloud ALM

APIs Catalog



Extensibility Using APIs for SAP Cloud ALM

APIs Catalog

Current



REST API

SAP Cloud ALM Analytics

The SAP Cloud ALM Analytics API is used to unify access to all analytics data produced by SAP Cloud ALM.

Active



REST API

SAP Cloud ALM Projects

Allows to get or create projects in project management.

Active



REST API

SAP Cloud ALM Tasks

Allows to get, create, modify or delete tasks in tasks management.

Active



REST API

SAP Cloud ALM Test Automation

Allows cloud-based test automation providers to integrate with SAP Cloud ALM

Active

Planned



REST API

SAP Cloud ALM Event Situation

This API is used to update Event Situation linked to an external application. It allows to change the status or to add an addition comment to an existing Alert Situation

In Progress



REST API

SAP Cloud ALM Process Scope

The Process Scope API allows to get information and manipulate the SAP Cloud ALM solution process scope.

Planned Q3/Q4



REST API

SAP Cloud ALM Test Cases

The SAP Cloud ALM Test Cases API is used to manage and manipulate test cases.

Planned Q4



REST API

SAP Cloud ALM Business Services Events

Get events on Business Services like planned maintenances, disruption or downtimes for your cloud services and technical systems..

In Progress



REST API

SAP Cloud ALM Resource Changes

Let applications watch for changes to SAP Cloud ALM REST resources by notifying external application.

In Progress



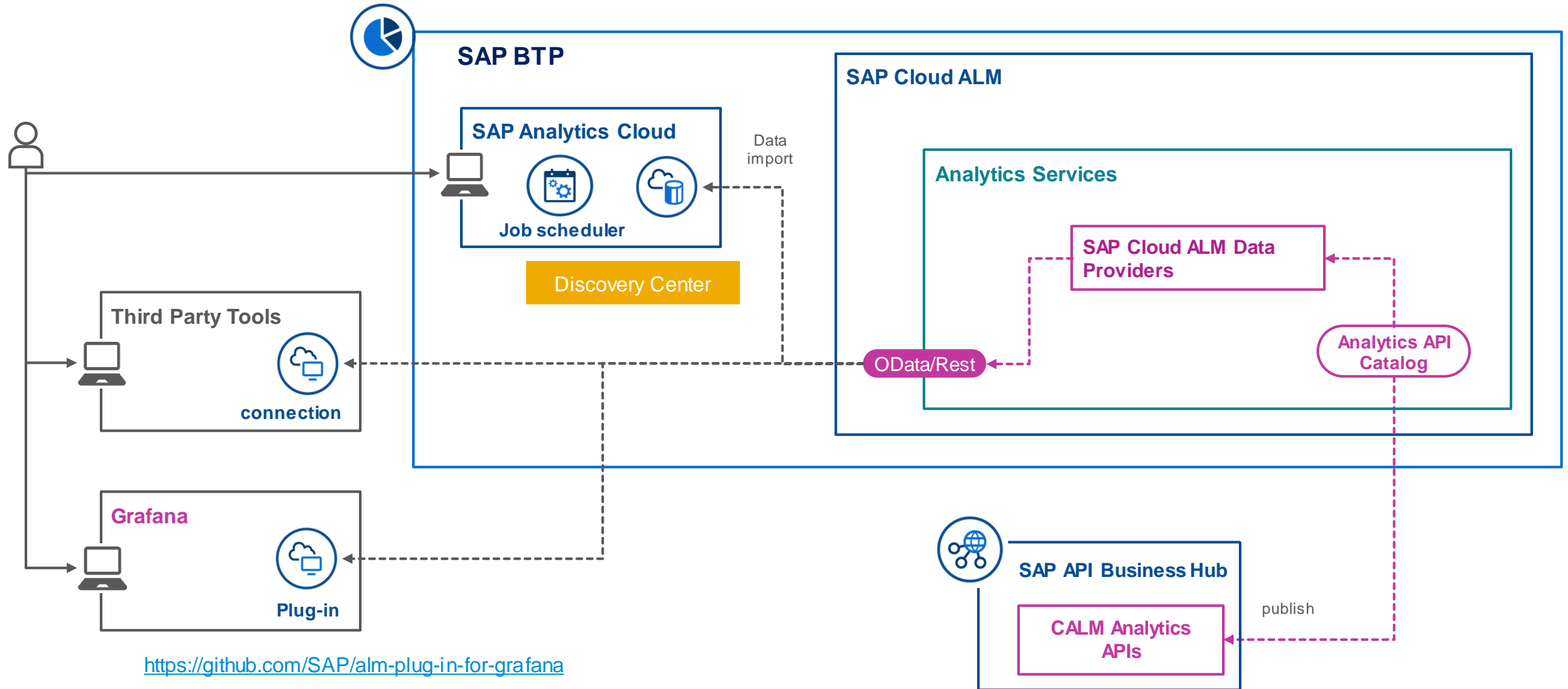
REST API

SAP Cloud ALM Custom Process

The Custom Process API allows to upload, manipulate, activate SAP Cloud ALM custom solution processes..

Planned Q3/Q4

APIs Catalog: Analytics



Extensibility Using APIs for SAP Cloud ALM

APIs Catalog: Analytics

Current

Tasks Analytics

Tasks analytics

Active

Projects Analytics

Project Analytics

Active

Test Management Analytics

Test Cases executions analytics

Active

Integration Monitoring Analytics

Integration Monitoring statistics

Active

Planned

Business Services Management Analytics

Get statistics on Business Services events.

Planned Q3

Business Process Monitoring Analytics

Business Process Monitoring statistics

Planned Q4

Health Monitoring Analytics

Health Monitoring reporting for cloud services and systems

Planned Q4

Future

Real User Monitoring Analytics

Real User Monitoring statistics

Planned

Features/Transport Analytics

Release and deployment reporting

Planned

Alerts Analytics

Alerts reporting

Planned

Jobs Monitoring Analytics

Jobs execution statistics

Planned

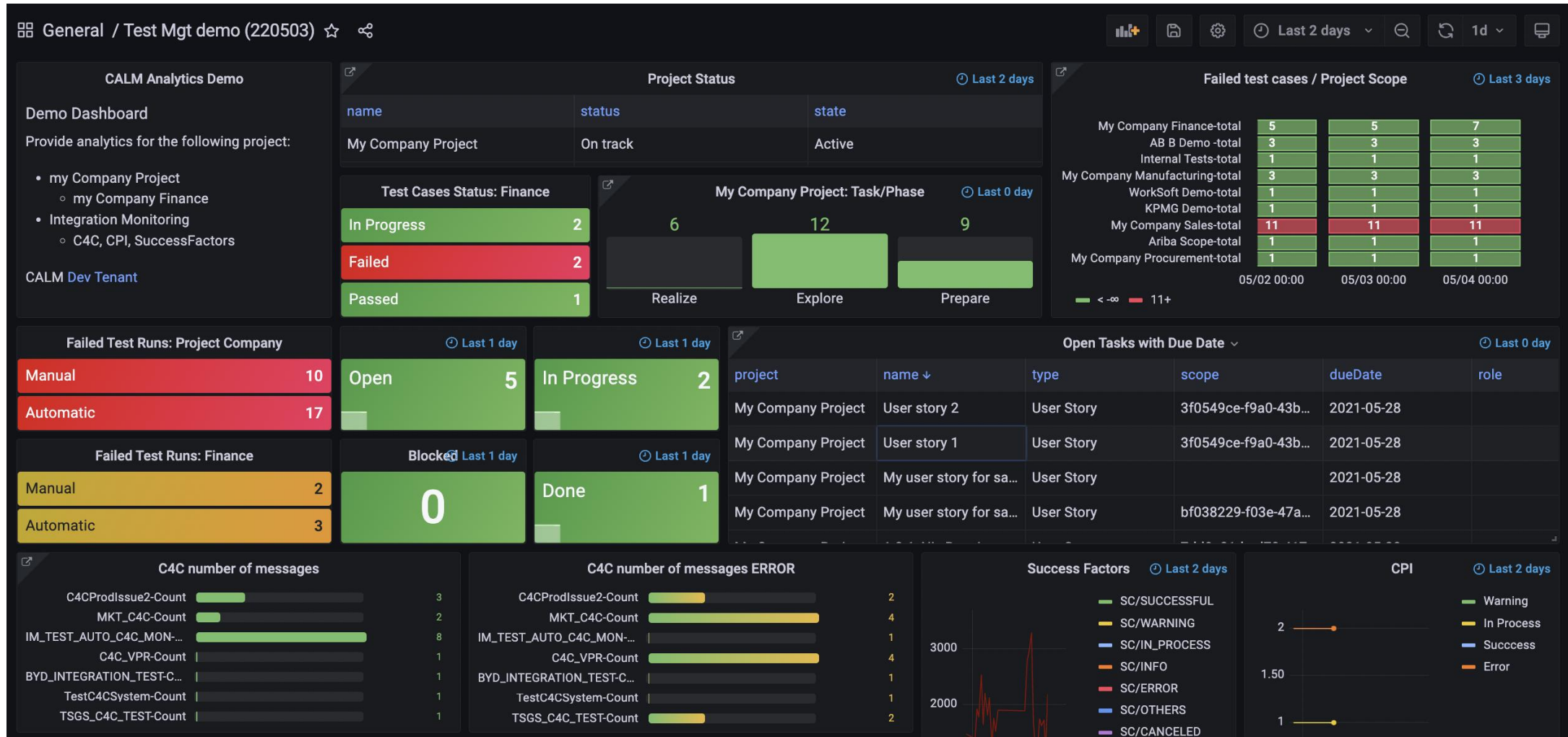
Exception Monitoring Analytics

Exception Monitoring statistics

Planned

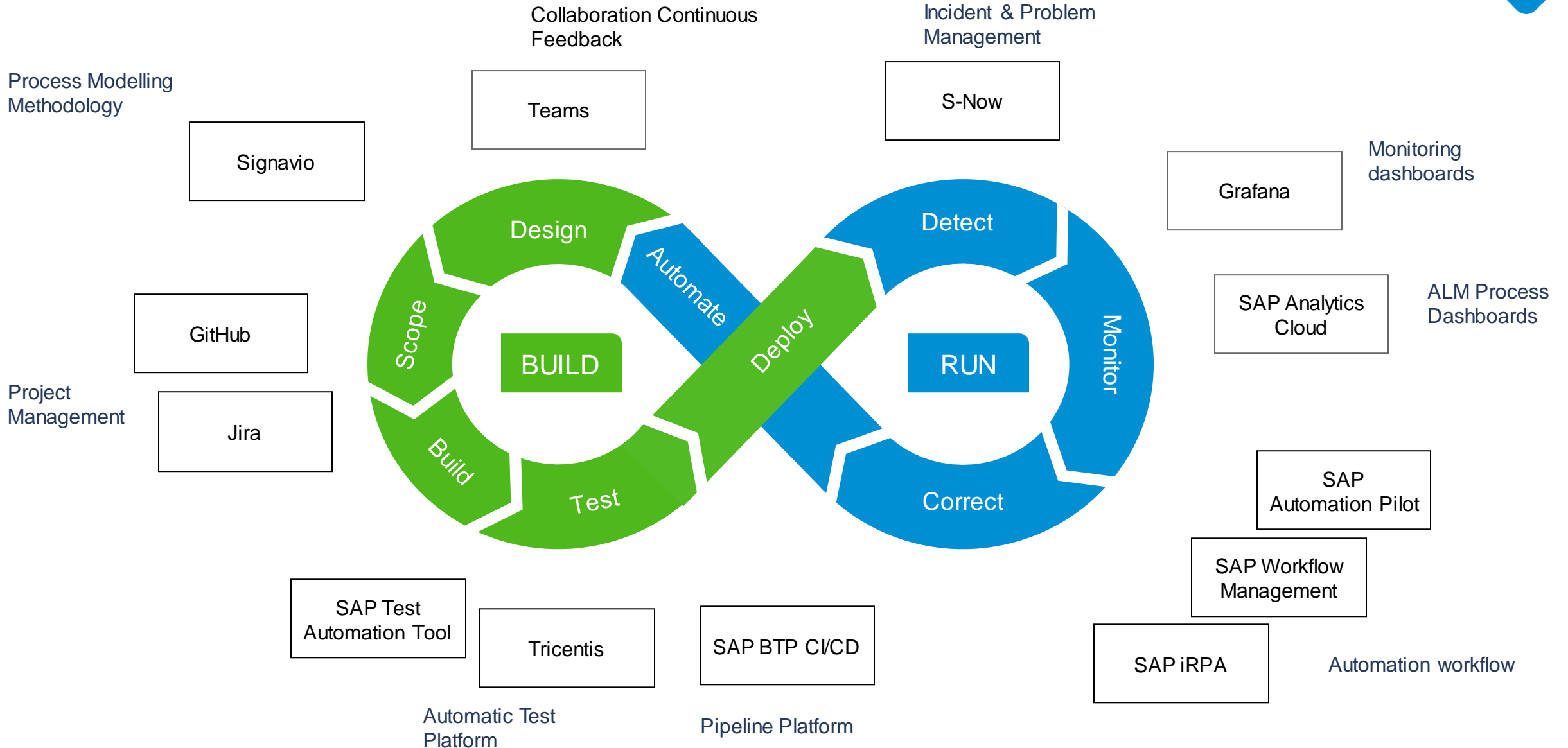
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APIs Catalog: Analytics



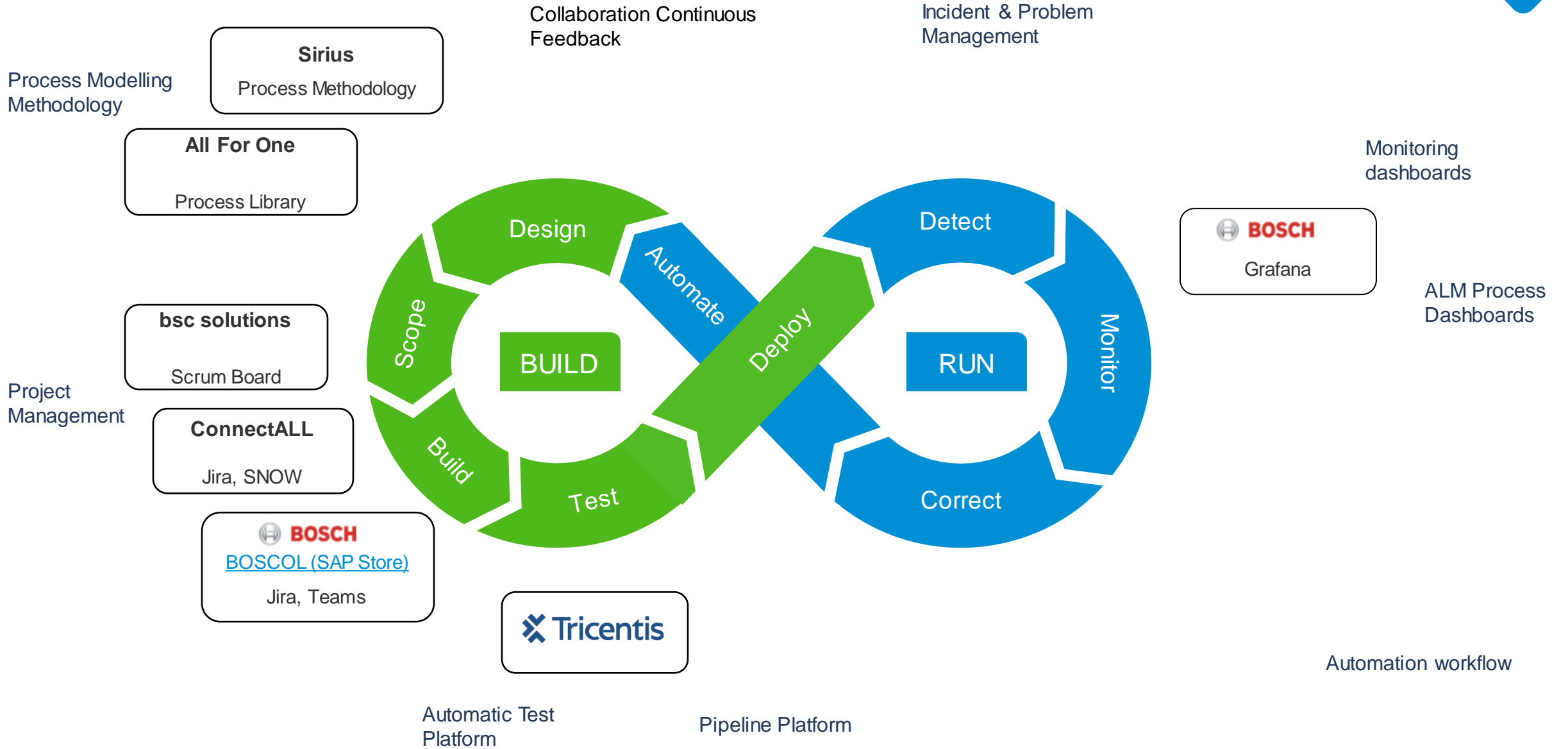
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Integrated Tools



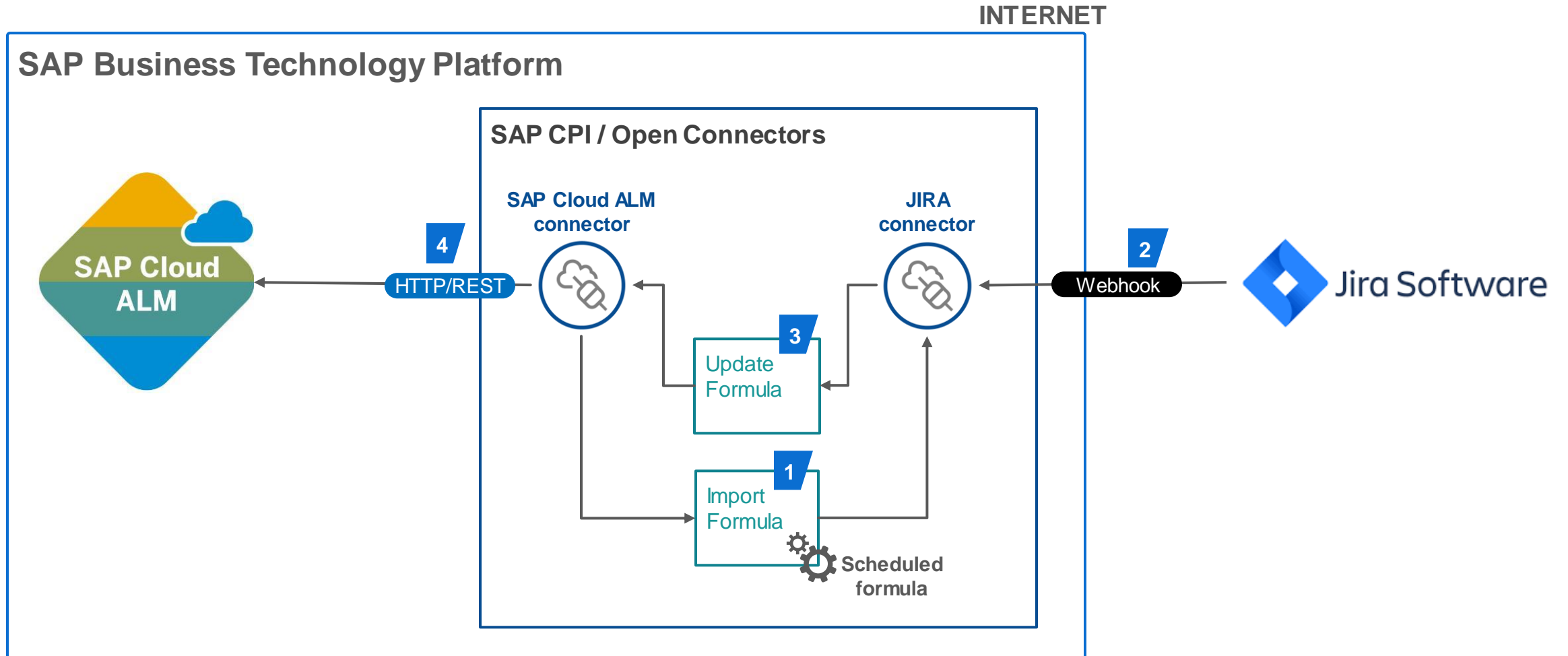
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Partners use-cases



Extensibility Using APIs for SAP Cloud ALM

Integration Picture for Project Management



Thank you.

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