

Day 2 Operations

SAP Cloud ALM for SAP BTP

LIVE SESSION



Mastering Day 2 Operations in SAP BTP

A guide for architects,
developers, and
administrators



Agenda

1

SAP Cloud ALM

Overview

OpenTelemetry@SAP

SAP Cloud ALM

Support for  BTP

2

Outlook

**Clean Core and RISE
Dashboard** in Context
of Operations

3

Further Information

Q&A

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SAP Cloud ALM Overview



Customers Need End-to-End Observability Across ... SAP Cloud ALM for Operations



Cloud and On-premise

How do I monitor my customer solution with BTP center stage?

SAP and Non-SAP

How do I observe and triage?

Customer, Partner and SAP Operations

How to foster collaboration between all involved parties?

All Monitoring Use Cases

How do I monitor business processes, integration, end user experience, exceptions, automation & health?

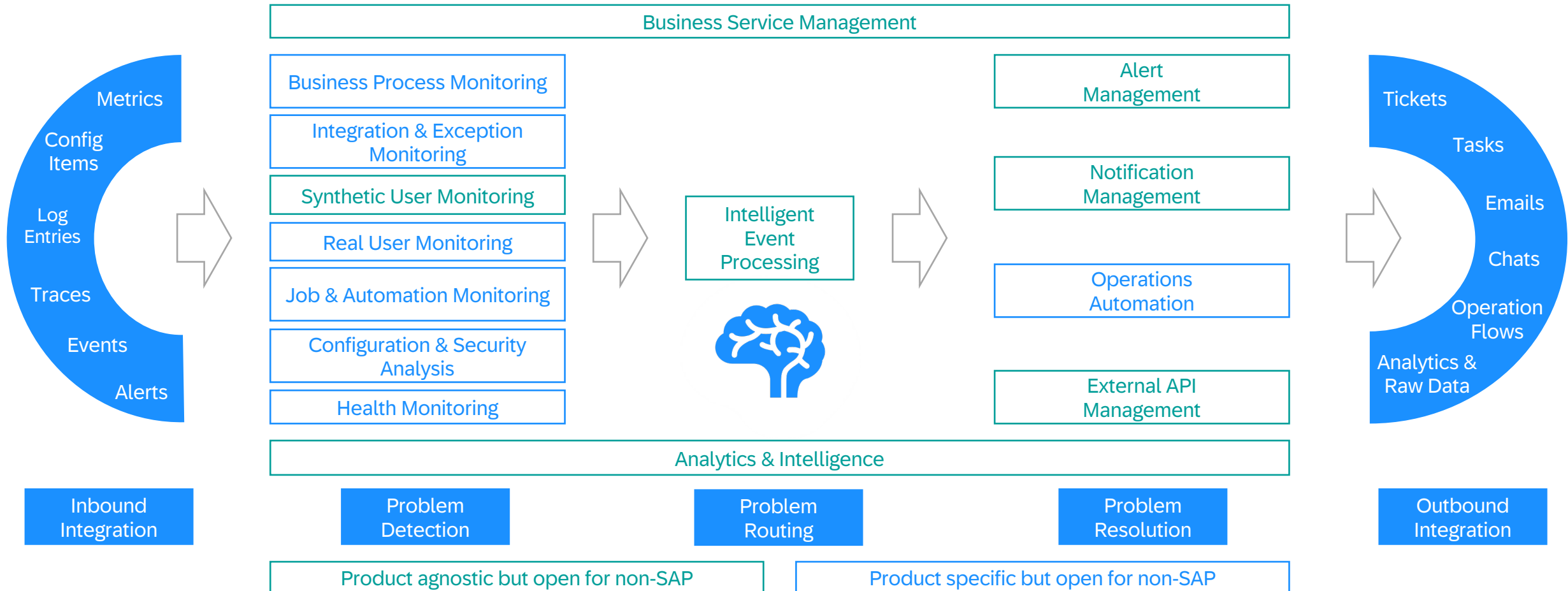
Quick Problem Resolution

How do I quickly resolve any occurred issue?

SAP Cloud ALM for Operations – For SAP and Non-SAP

GROW WITH SAP

RISE WITH SAP



SAP Cloud ALM for Operations

By the Numbers



Live Customers in SAP
Cloud ALM for Operations



Notifications and **Incidents**
created in 2024

- Incidents within Incident Management System
- E-Mail
- Chat Notification



Health Monitoring Metrics
collected per month in 2024



90+

SAP Products supported by SAP Cloud ALM for Operations

and constantly expanding

[Detailed list available via SAP Cloud ALM for Operations Expert Portal](#)

SAP Cloud ALM Overview - OpenTelemetry@SAP



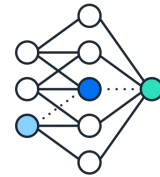
OpenTelemetry – What is it?

Created in 2019, OpenTelemetry (OTeL) defines a single set of APIs and libraries to simplify the collection and transfer of telemetry data.



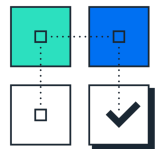
Open Standard:

- Unified standard for creating and ingesting telemetry data.



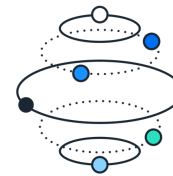
Consistency:

- Consistent collection mechanism and format for metrics, events, logging, and tracing.



Observability integration:

- Centralized and flexible observability solution to integrate different monitoring tools across cloud and applications.



Broad Support

- Capture relevant traces and metrics with specific integrations for popular frameworks and languages.



Ease of Use

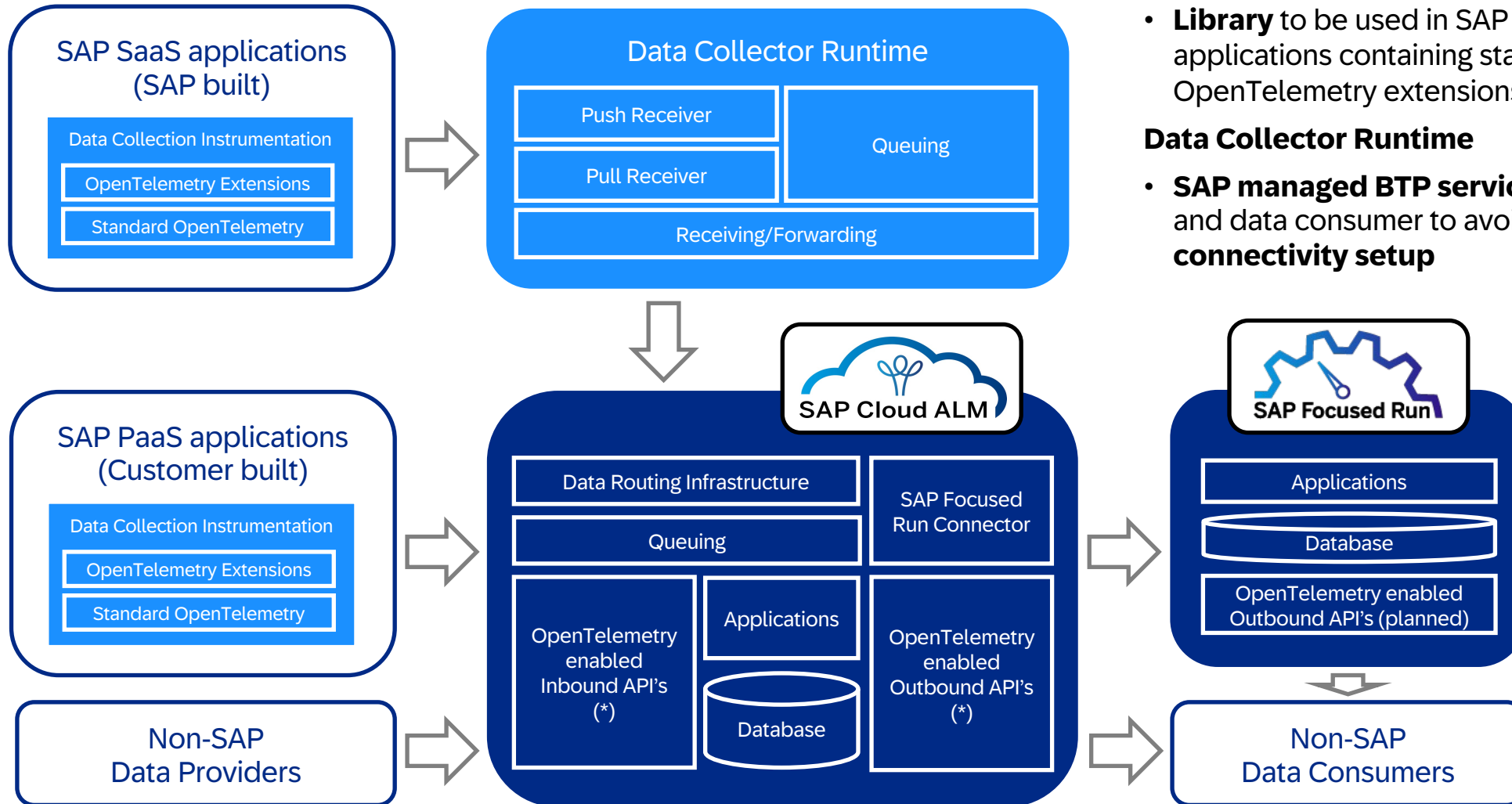
- Automatic instrumentation agents to collect without requiring any code changes.



Flexibility

- Send observability data to any backend with no specific vendor requirements.

OpenTelemetry @ SAP – Customer Facing Observability



Data Collection Instrumentation

- **Library** to be used in SAP SaaS and SAP PaaS applications containing standard OpenTelemetry, OpenTelemetry extensions and utility functionality

Data Collector Runtime

- **SAP managed BTP service** to decouple data provider and data consumer to avoid **customer managed connectivity setup**

- **OpenTelemetry enabled Inbound API's** to integrate non-SAP data providers
- **OpenTelemetry enabled Outbound API's** to integrate non-SAP data consumers
- **SAP Focused Run Connector** to forward data to SAP Focused Run

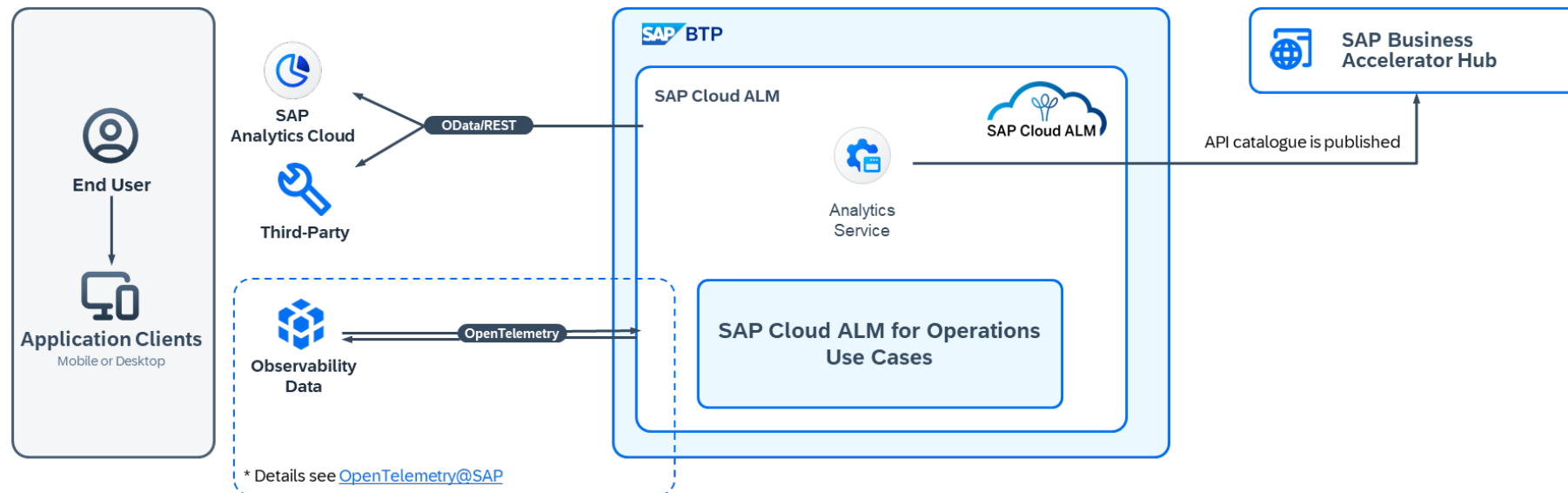
(*) Availability see roadmap

SAP Cloud ALM APIs for Operations

SAP Cloud ALM for operations is supporting these types of APIs:

- SAP Cloud ALM Analytics API
- SAP Cloud ALM RAW Data APIs
- SAP Cloud ALM Landscape API
- Transactional APIs (SAP Cloud ALM Event APIs)
- Integration Scenarios

SAP Cloud ALM Analytics API



Available and Planned OpenTelemetry Signal API's for non-SAP components

Use Case	Analytics	OTeL Metrics		OTeL Logs		OTeL Traces	
	Outbound	Outbound	Inbound	Outbound	Inbound	Outbound	Inbound
Business Process Monitoring	2023	-	-	-	2025	-	-
Integration Monitoring	2023	2023	-	2024	2024	-	-
Exception Monitoring	2023	2023	-	2023	2023	-	-
Real User Monitoring	2023	2023	-	-	-	2024	2024
Synthetic User Monitoring	2023	2023	-	-	-	-	2024
Job & Automation Monitoring	2023	2023	-	2025	2025	-	-
Configuration & Security Analysis	2023	-	-	-	-	-	-
Health Monitoring	2023	2023	2023	-	-	-	-
Business Service Management	2024	2023	-	2024	-	-	-
Intelligent Event Processing	2023	2023	-	2024	-	-	-

Available

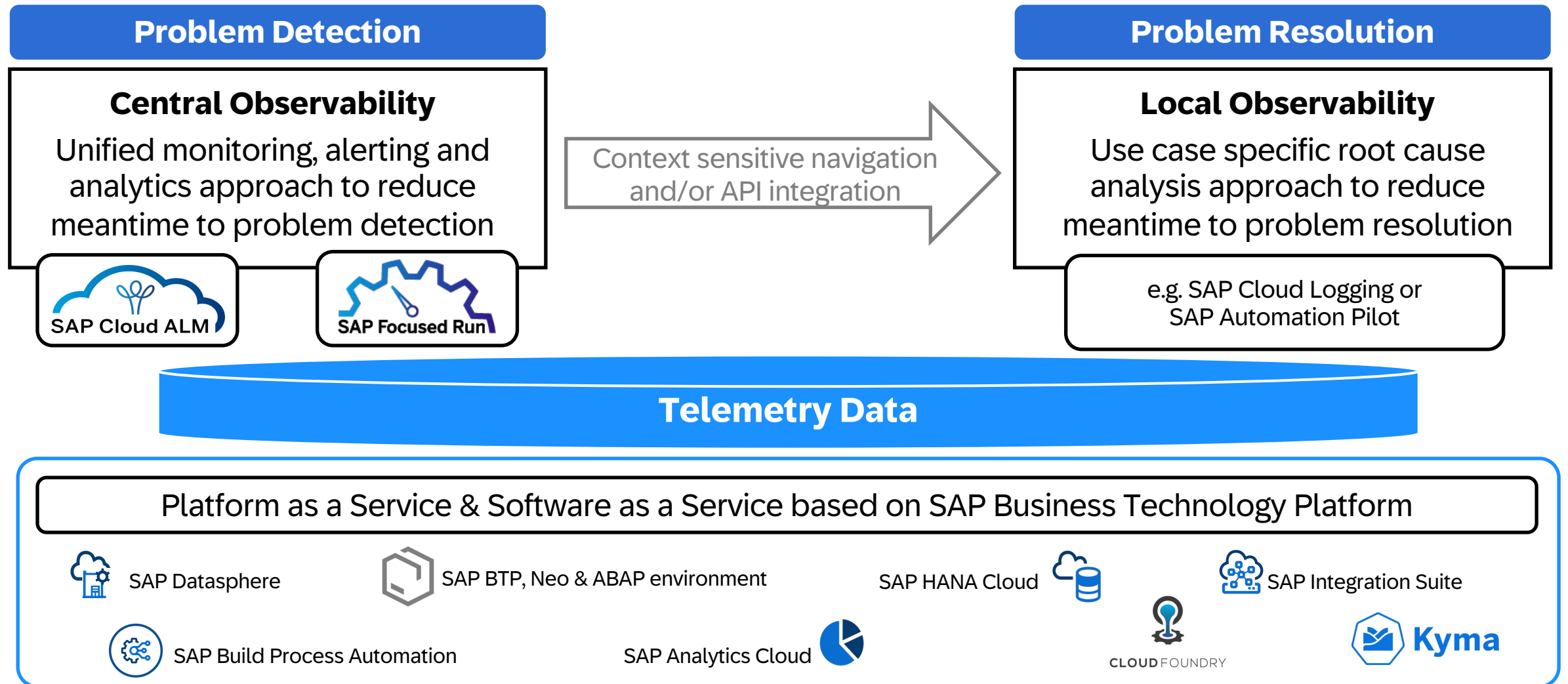
Planned

SAP Cloud ALM Overview – SAP Cloud ALM Support for BTP



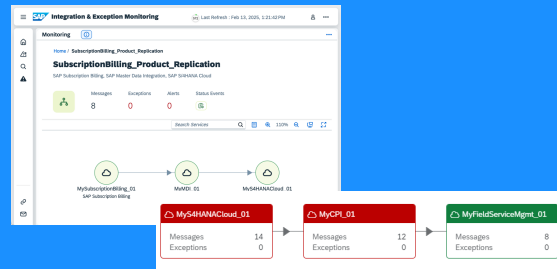
Problem Detection & Problem Resolution for SAP Business Technology Platform

Reduce mean time to detect and resolve problems

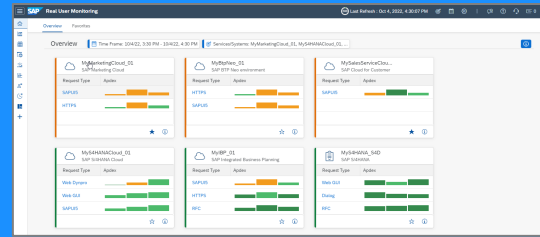


SAP Cloud ALM for Operations Demo

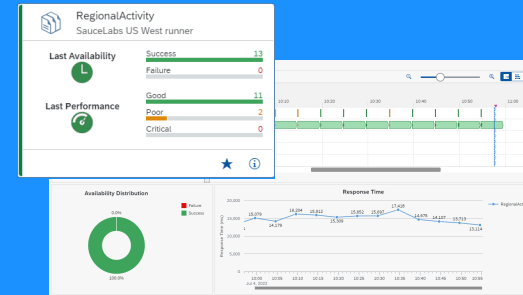
Integration & Exception Monitoring



Real User Monitoring



Synthetic User Monitoring



Job & Automation Monitoring

Name	Job Type	Execution	Application	Status	Run Time	Rating
OC20M OVERLOAD BOOK CREATE	SAP ABAP Job	Success	MySAPANA_SAP	Success	00:00:00	Open
Process Data Products	SAP Application Job	Success	MySAPANA_SAP	Success	00:00:00	Open
Clear Internal Marketing Service Content Data	SAP Application Job	Success	MySAPANA_SAP	Success	00:00:00	Open
ZINLHSD2_APL_APL_DESL_X003	SAP ABAP Job	Success	MySAPANA_SAP	Success	00:00:00	Open
Master Data Update	SAP Application Job	Success	MySAPANA_SAP	Success	00:00:00	Open
Network Installation - Active (Active Network)	SAP Integration Job	Success	MySAPANA_SAP	Success	00:00:00	Open
PTCL_CPL_APL_01	SAP ABAP Job	Success	MySAPANA_SAP	Success	00:00:00	Open
SAP_BC_CPL_VMS_SMTPL_00	SAP ABAP Job	Success	MySAPANA_SAP	Success	00:00:00	Open
Planning Mean Activation (NO ADDRESS/UNIC)	SAP Application Job	Success	MySAPANA_SAP	Success	00:00:00	Open
PTCL_CPL_PROCESS	SAP ABAP Job	Success	MySAPANA_SAP	Success	00:00:00	Open
PTCL_CPL_PROCESS	SAP ABAP Job	Success	MySAPANA_SAP	Success	00:00:00	Open

Configuration & Security Analysis

System	System	System	System	System
MySAPANA_01	MySAPANA_01	MySAPANA_01	MySAPANA_01	MySAPANA_01
MySAPANA_SAP	MySAPANA_SAP	MySAPANA_SAP	MySAPANA_SAP	MySAPANA_SAP
MySAPANA_S4D	MySAPANA_S4D	MySAPANA_S4D	MySAPANA_S4D	MySAPANA_S4D

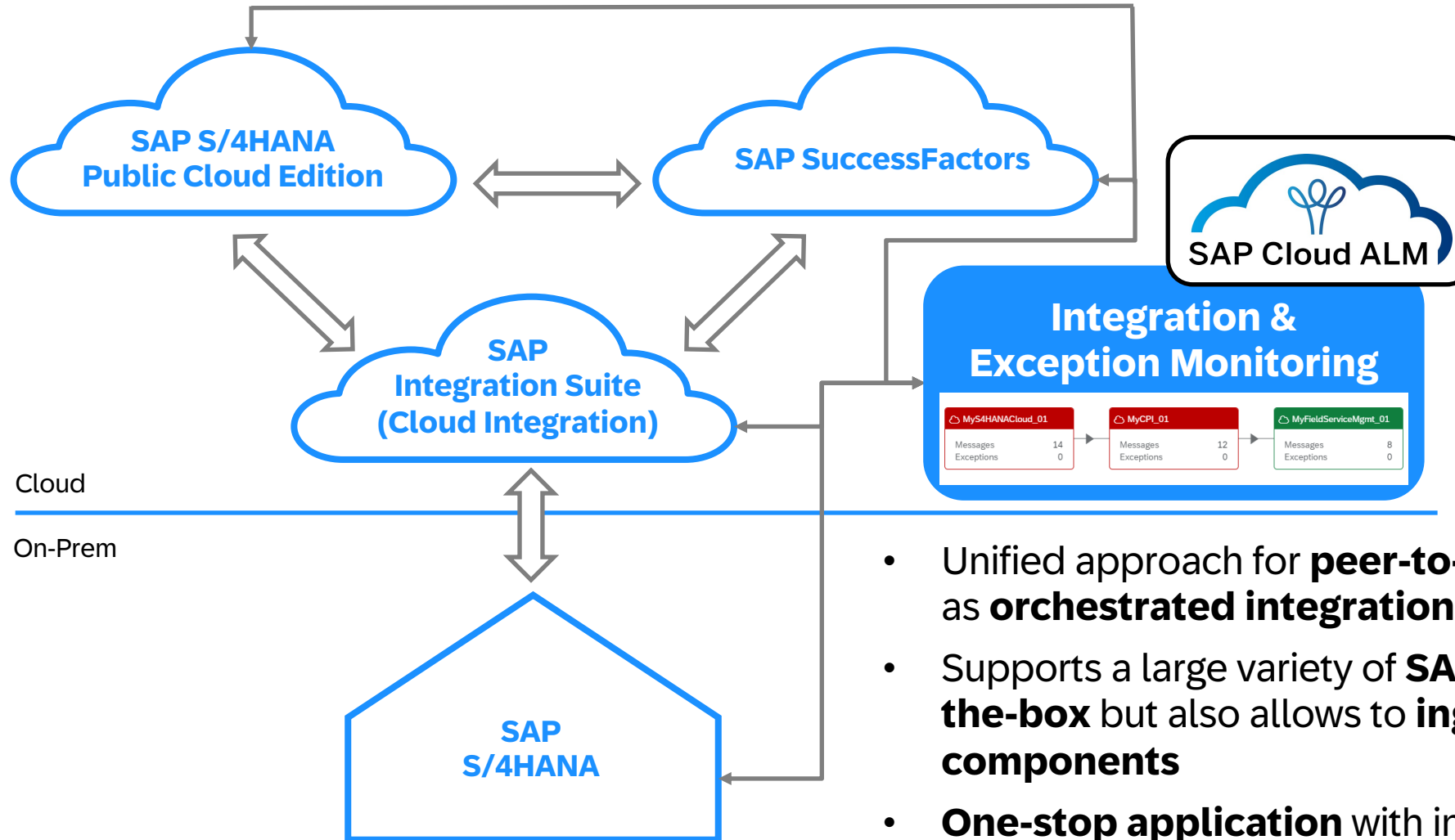
Health Monitoring

Name	Type	Alerts	Health	Message
MyCPL_01	SAP Integration Suite (Cloud Integration)	2	74%	(Critical) 48 metrics in status: Critical: 4, Warning: 3, Okay: 4
MySAPANA_01	SAP BTP Non-environment	0	100%	(Warning) 25 metrics in status: Critical: 1, Warning: 0, Okay: 54
MySAPANA_01	SAP Intelligent Robot-Process Automation	0	100%	(Okay) 12 metrics in status: Critical: 0, Warning: 0, Okay: 12
MySAPANA_01	SAP Cloud ALM	0	100%	(Okay) 21 metrics in status: Critical: 0, Warning: 0, Okay: 21
MySAPANA_01	SAP HANA Cloud	0	100%	(Okay) 41 metrics in status: Critical: 0, Warning: 0, Okay: 41
MySAPANA_01	SAP BTP ABAP Environment	0	100%	(Okay) 42 metrics in status: Critical: 0, Warning: 0, Okay: 42



Integration & Exception Monitoring

Ensure Reliable Data Exchange between Cloud Services and Systems



- **End-to-End monitoring** by correlating single messages to **end-to-end message flows** across cloud services and systems
- Monitoring of **integration related exceptions**

- Unified approach for **peer-to-peer interfaces** as well as **orchestrated integration**
- Supports a large variety of **SAP components out-of-the-box** but also allows to **ingest data for non-SAP components**
- **One-stop application** with integrated monitoring, alerting, analysis, and search-and-track functionality

Integration Monitoring for SAP BTP

SAP Integration Suite Cloud Integration

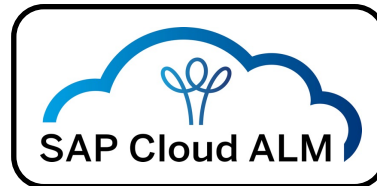
- Monitoring of messages technically correlated to e2e message flows
- Find more details [here](#)

SAP Mobile Services

- Monitoring of message send through SAP Mobile Services
- Find more details [here](#)

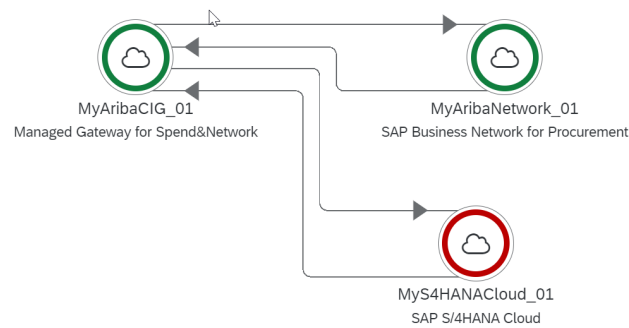
SAP Event Broker for SAP cloud applications

- Monitoring of events processed via SAP Event Broker
- Find more details [here](#)



Integration Monitoring

- Unified monitoring of integration artefacts
- Correlation of e2e message flows



SAP Master Data Integration

- Monitoring of business objects handled by master data integration
- Find more details [here](#)

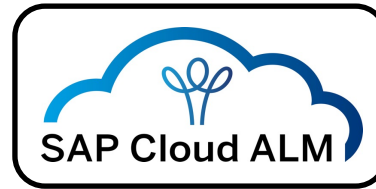
SAP Master Data Governance cloud edition

- Monitoring of AIF messages sent to SAP Master Data Governance
- Find more details [here](#)

SAP Data Intelligence

- Monitoring of messages sent from and to SAP Data Intelligence
- Find more details [here](#)

Exception Monitoring for SAP BTP



SAP Analytics Cloud

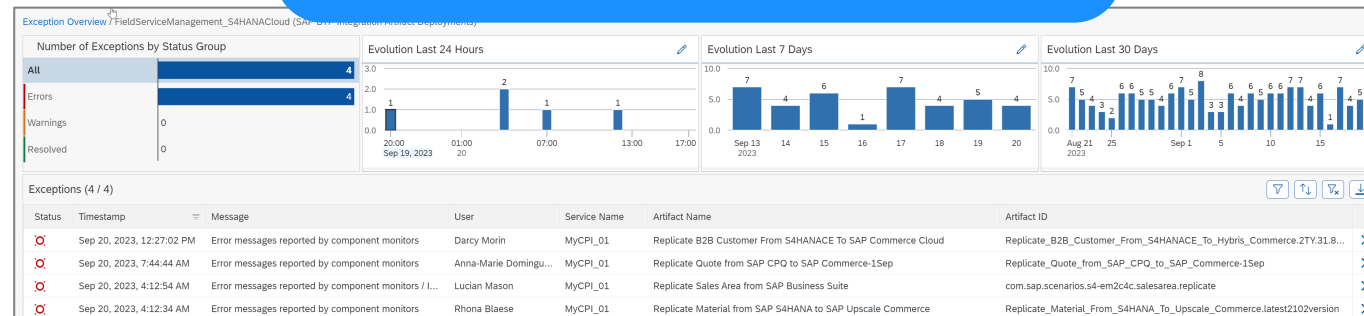
- Monitoring of exceptions in activity log, which tracks user activities
- Find more details [here](#)

Exception Monitoring

- Unified monitoring of exceptions
- Visualization of exception details

SAP Integration Suite Cloud Integration

- Monitoring of exceptions related to integration content
- Find more details [here](#)



SAP BTP, Neo environment (custom built applications)

- Monitoring of exceptions in custom built java applications
- Find more details [here](#)

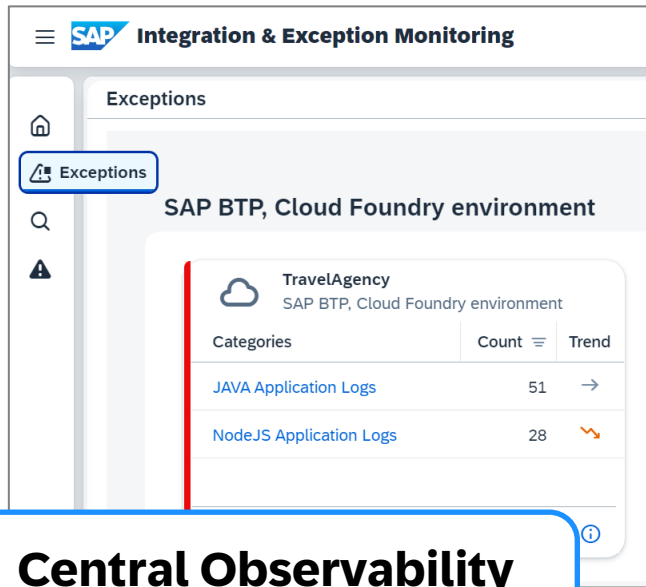
SAP BTP, CF / Kyma env. (custom built applications)

- Monitoring of exceptions in custom built java and node.js applications (OTEL)
- Find more details [here](#)

SAP BTP, ABAP environment (custom built applications)

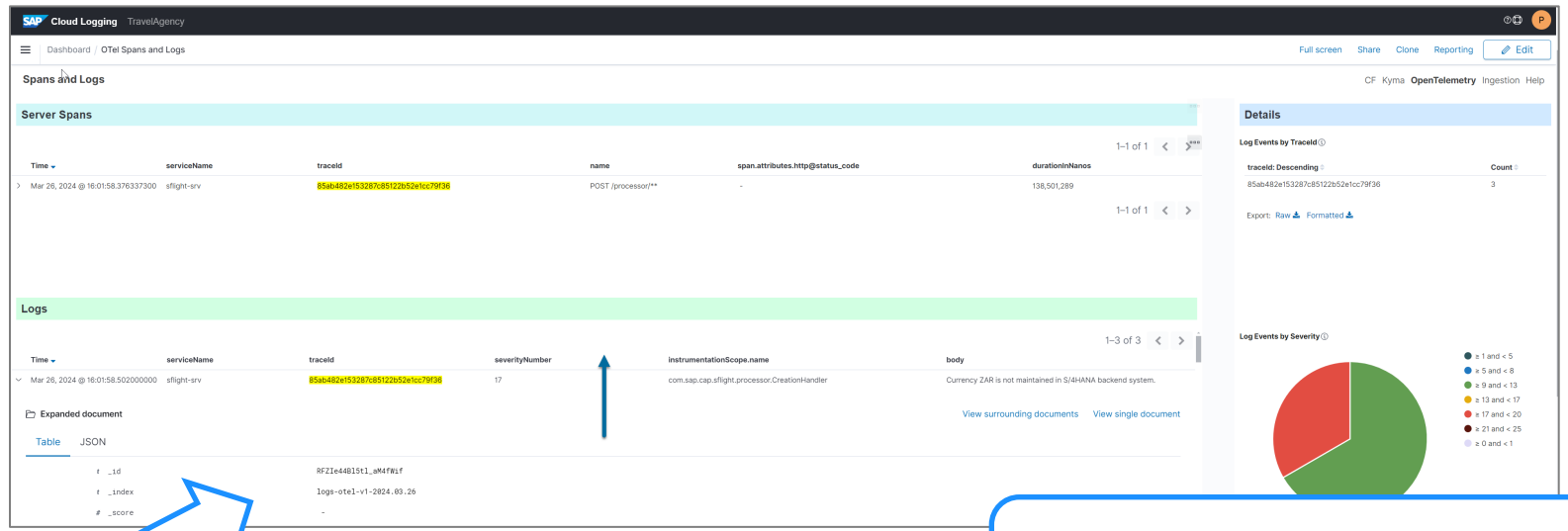
- Monitoring of exceptions in custom built ABAP applications
- Find more details [here](#)

Exception Monitoring for custom applications built on SAP BTP



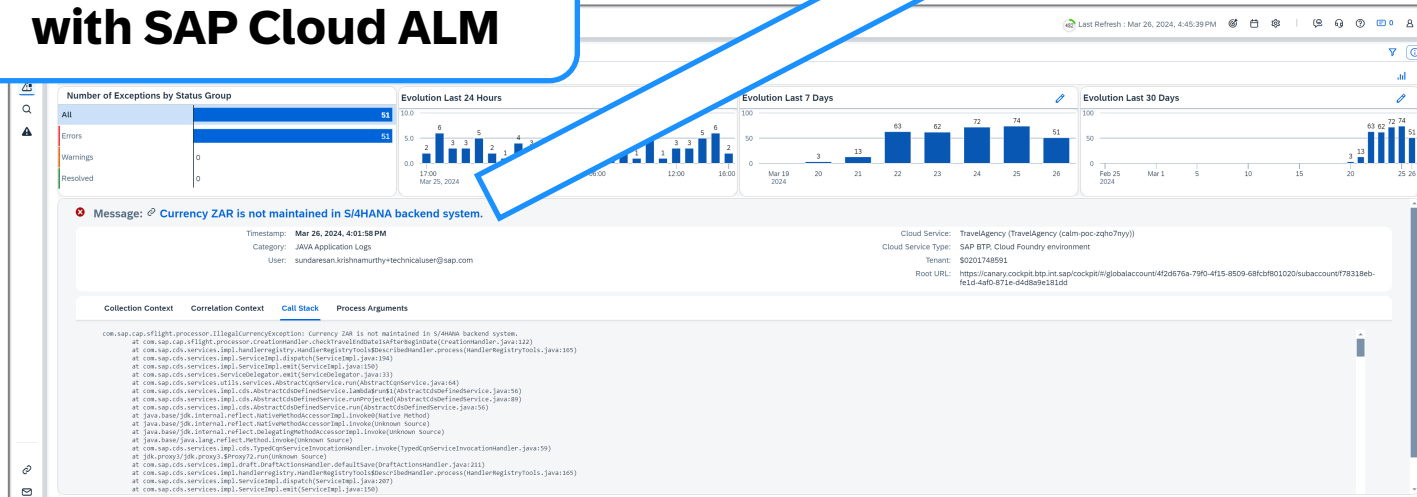
The screenshot shows the SAP Integration & Exception Monitoring interface. The main heading is 'Exceptions' for a 'TravelAgency' in a 'SAP BTP, Cloud Foundry environment'. A table lists categories and their counts: 'JAVA Application Logs' with a count of 51 and a right-pointing arrow, and 'NodeJS Application Logs' with a count of 28 and a downward-pointing arrow. A red vertical bar is visible on the left side of the table.

Central Observability with SAP Cloud ALM



The screenshot shows the SAP Cloud Logging interface for 'TravelAgency'. It displays 'Server Spans' and 'Logs' for a specific trace ID. The 'Logs' section shows a log entry with a severity number of 17 and a body message: 'Currency ZAR is not maintained in S/4-HANA backend system.' A blue arrow points to the severity number. On the right, there is a 'Details' panel with a 'Log Events by TraceId' section and a 'Log Events by Severity' pie chart.

Local Observability with SAP Cloud Logging

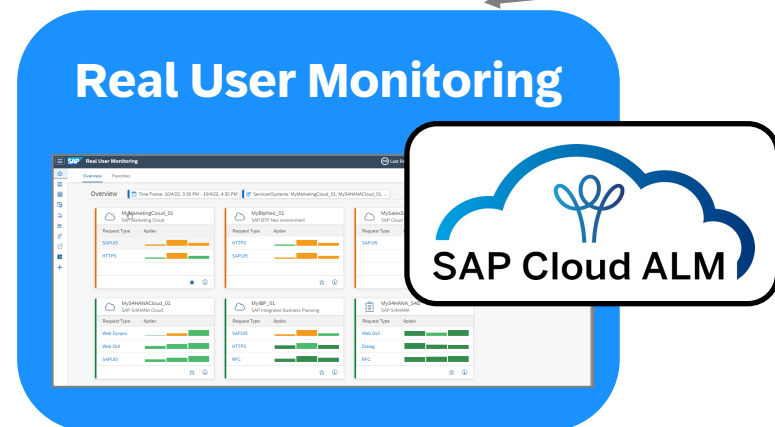
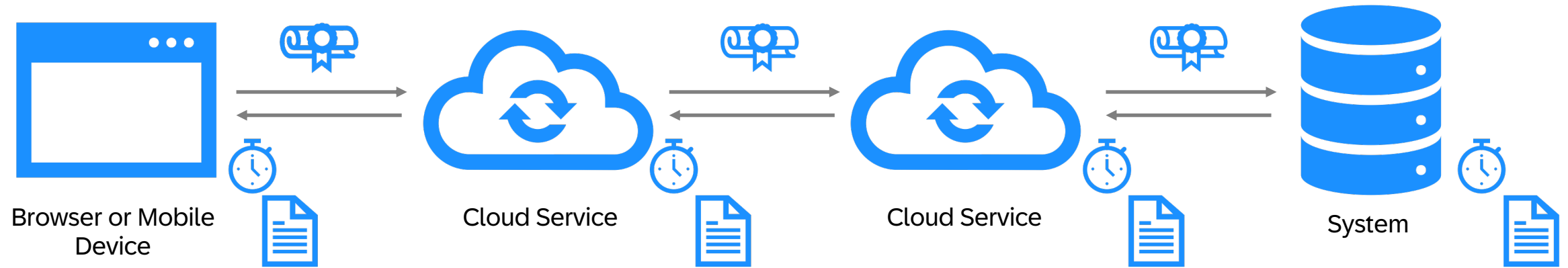


The screenshot shows a dashboard with 'Number of Exceptions by Status Group' (All, Errors, Warnings, Resolved) and 'Evolution' charts for the last 24 hours, 7 days, and 30 days. A message is displayed: 'Currency ZAR is not maintained in S/4-HANA backend system.' Below the message is a 'Call Stack' section showing a detailed stack trace for the exception.

- Context-sensitive navigation from Exception Monitoring in SAP Cloud ALM to SAP Cloud Logging
- Log entries are retrieved by Open Telemetry based on auto instrumentation and forwarded to both tools

Real User Monitoring

Allow to Understand Performance and Utilization from End User Perspective



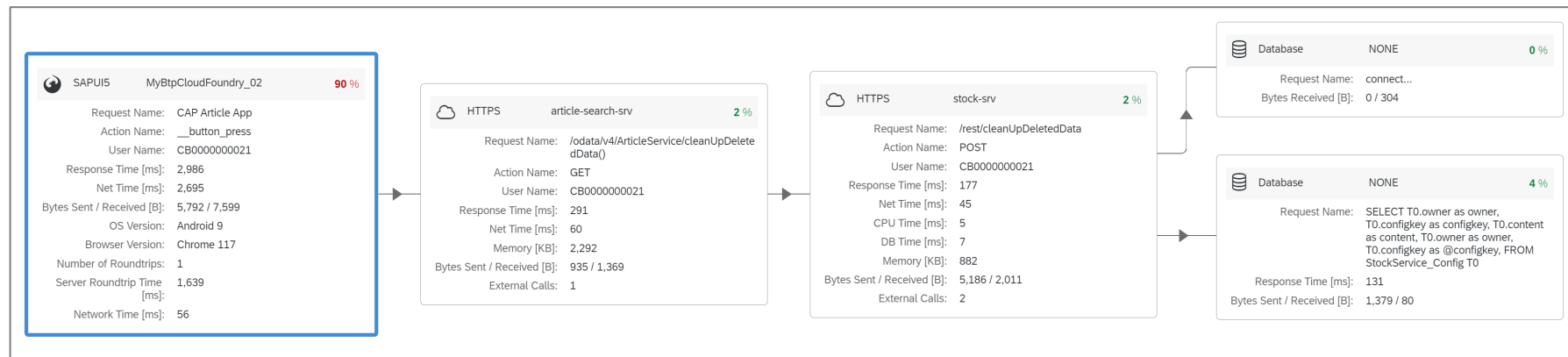
- Provides transparency regarding **performance and errors as experienced by end users** as well as **utilization of business functionality**
- Measurement at frontend and server side **to identify actual root cause of performance and functional problems**
- Allows to **correlate monitoring data** measured at frontend, cloud service and/or system side to **end-to-end user request flows**

Real User Monitoring for SAP BTP



Real User Monitoring

- Unified monitoring of end users from performance, functional and utilization perspective
- Correlation of e2e user requests flow based on single request data



SAP BTP, Neo environment (custom built applications)

- Monitoring of user experience in custom built java applications
- Find more details [here](#)

SAP BTP, CF / Kyma env. (custom built applications)

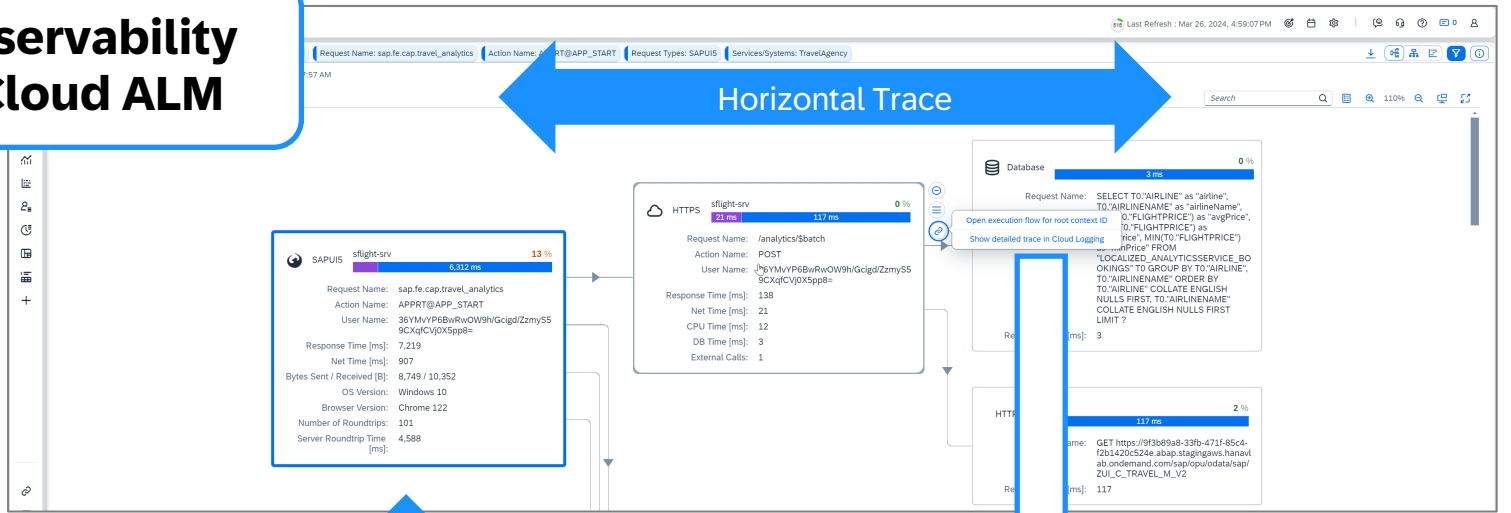
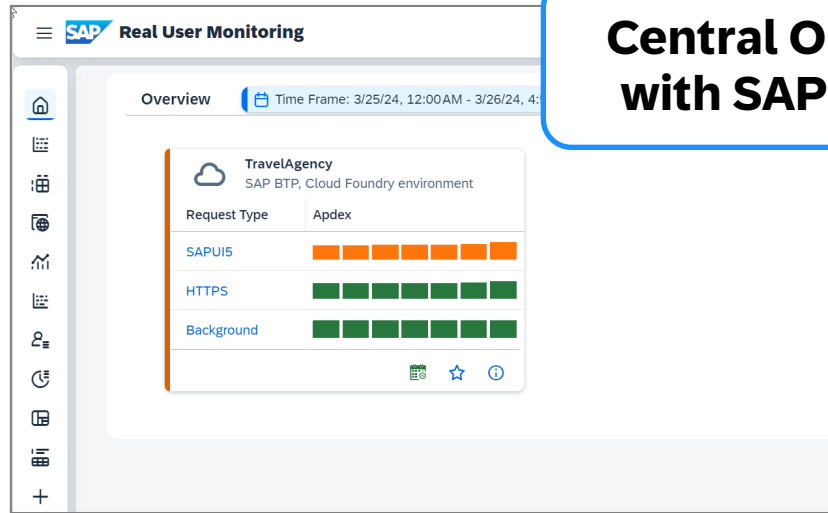
- Monitoring of user experience in custom built java and node.js applications (OTEL)
- Find more details [here](#)

SAP BTP, ABAP environment (custom built applications)

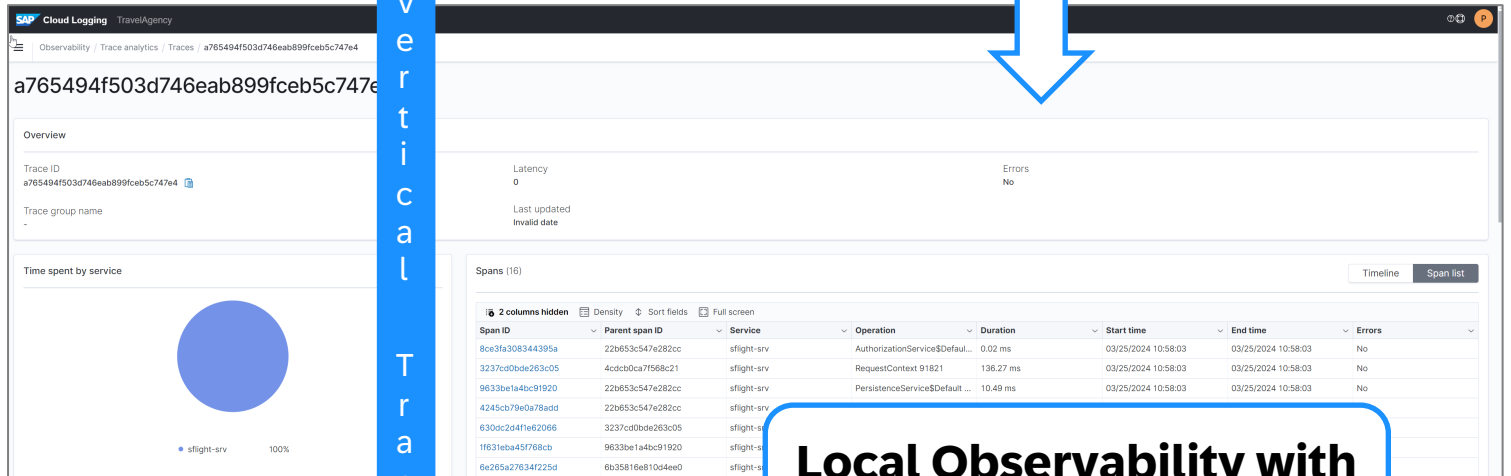
- Monitoring of user experience in custom built ABAP applications
- Find more details [here](#)

Real User Monitoring for custom applications built on SAP BTP

Central Observability with SAP Cloud ALM



- Context-sensitive navigation from Real User Monitoring in SAP Cloud ALM to SAP Cloud Logging
- Traces are retrieved by Open Telemetry based on auto instrumentation and forwarded to both tools

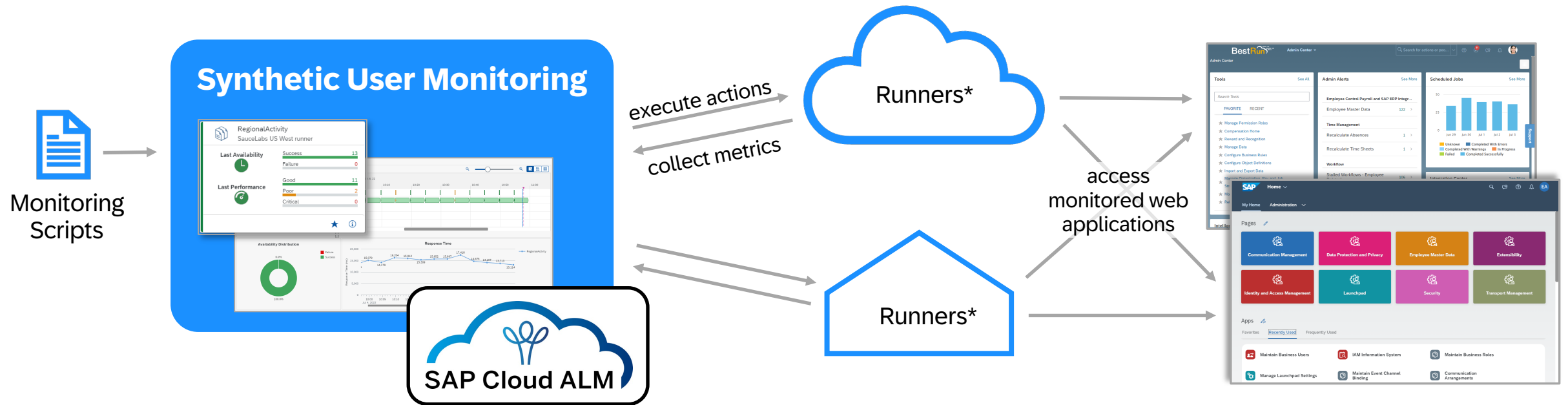


Local Observability with SAP Cloud Logging

Remark: SAP Cloud Logging Service isn't part of SAP Cloud ALM subscription

Synthetic User Monitoring

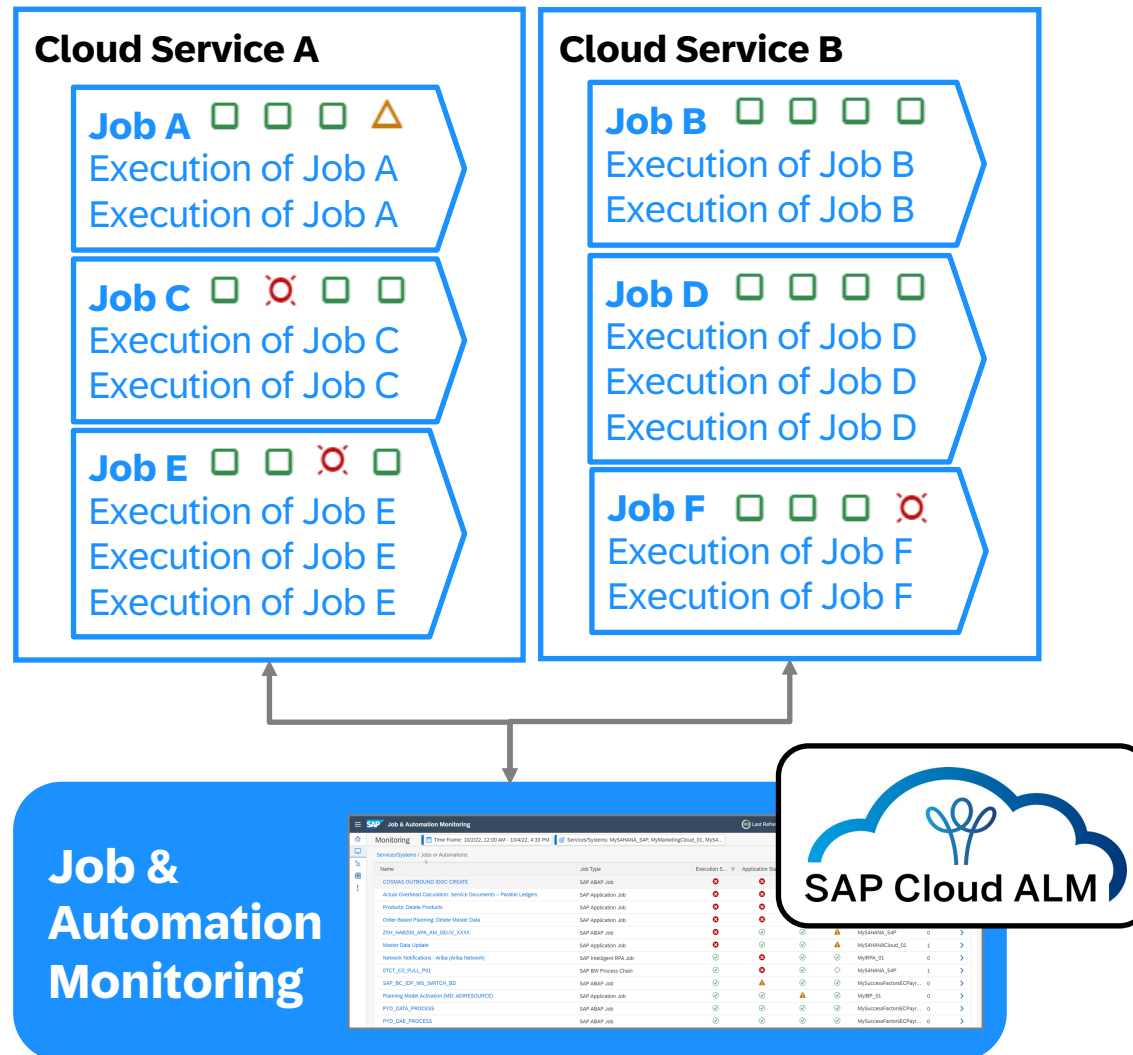
Monitor Performance and Availability of Web Applications from User Perspective



- Monitoring based on custom **Selenium based scripts** → Supports most of the web applications
- Regularly executed on **Selenium remote webdriver infrastructures**
- **Proactive problems detection:** 24x7 monitoring enables detection of performance and availability issues before end users are impacted → Runs **independently on real user activities**
- **Comparable measurements:** Monitoring relies on identical **user scenarios regularly executed** → Allows to monitor the **evolution of the performance and availability** based on comparable metrics

Job & Automation Monitoring

Provide Transparency Regarding Job Executions & Automated Activities



- **Monitoring** ensures **efficient execution of jobs and tasks**:

- by monitoring **executions status, application status, start delay and response time** for jobs and tasks

- by providing **details at job on task execution level** to enable root cause analysis

- by **reducing configuration efforts** by making use of historical execution information

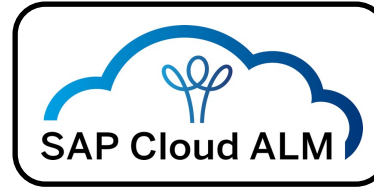
- **Embedded Alerting** enables notification of business and IT users on job & task related disruptions and exceptions

- **Embedded Analytics** allows to analyze root causes and trends based on historical data

Job & Automation Monitoring for SAP BTP

SAP Intelligent RPA

- Monitoring of jobs scheduled in SAP Intelligent RPA
- Find more details [here](#)



Job & Automation Monitoring

Unified monitoring of jobs and automation tasks

SAP Build Process Automation

- Monitoring of jobs scheduled in SAP Build Process Automation
- Find more details [here](#)

The screenshot shows the SAP Job & Automation Monitoring interface. The top navigation bar includes the SAP logo, the title "Job & Automation Monitoring", and a "Last Refresh" timestamp of "Sep 20, 2023, 5:50:29 PM". Below the navigation bar, there are filters for "Time Frame" (9/18/23, 5:50 PM - 9/20/23, 5:50 PM) and "Services/Systems" (MyBtpCloudFoundry_01). The main content area displays a table of jobs with the following columns: Name, Type, Execution Status, Application Status, Start Delay, Run Time, Service/System, and Open Alerts. The table contains three rows of data.

Name	Type	Execution Status	Application Status	Start Delay	Run Time	Service/System	Open Alerts
Products_DeleteProducts	SAP Job Scheduling Service Job	✘	✘	✔	✔	MyBtpCloudFoundry_01	2
Products_UpdateProducts	SAP Job Scheduling Service Job	✘	✘	✔	✔	MyBtpCloudFoundry_01	2
Products_CreateProducts	SAP Job Scheduling Service Job	✔	✔	✔	✔	MyBtpCloudFoundry_01	2

SAP BTP, CF / Kyma env. (custom built applications)

- Monitoring of jobs scheduled with SAP Job Scheduling Service
- Find more details [here](#)

SAP BTP, ABAP environment (custom built applications)

- Monitoring of application jobs used in custom built ABAP applications
- Find more details [here](#)

Configuration & Security Analysis

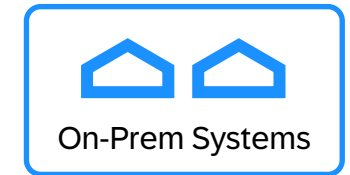
Validate Configuration Items and Software Levels Automatically and Regularly

Existing functionality

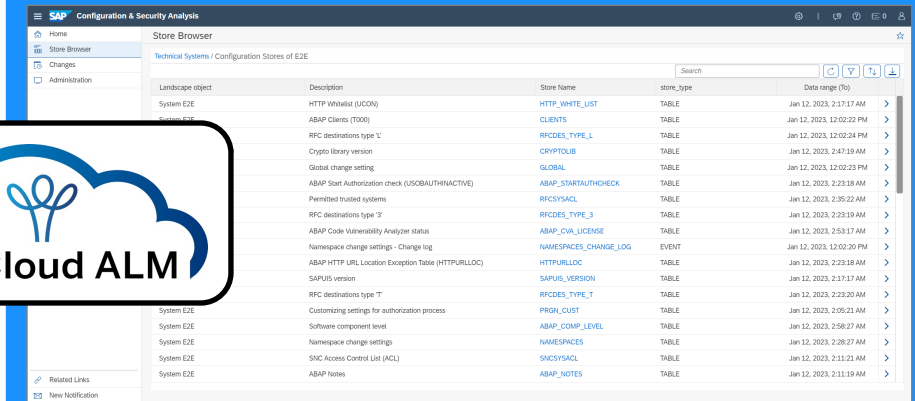
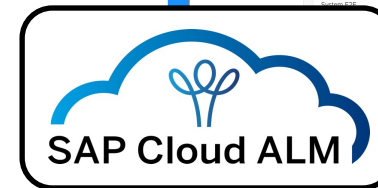
- **Regular collection of configuration items and software levels** into the configuration stores of the Configuration Change Database
- **Store browser** as user interface to **visualize content of configuration stores**
- **Change analysis** for selected scope and timeframe
- **Search capability** for pattern-based browsing into configuration items of selected scope

Planned functionality

- **Configuration validation** to compare TO-BE with AS-IS situation
- **Embedded alerting** to notify on critical issues
- **Embedded analytics** to analyze trends and root causes for discovered problems



Configuration & Security Analysis



Landscape object	Description	Store Name	store_type	Data range (To)
System EZE	HTTP Whitelist (LUCON)	HTTP_WHITE_LIST	TABLE	Jan 12, 2023, 2:17:17 AM
System EZE	ABAP Clients (T000)	CLIENTS	TABLE	Jan 12, 2023, 12:02:22 PM
System EZE	RFC destinations type 'L'	RFCDDEST_TYPE_L	TABLE	Jan 12, 2023, 12:02:24 PM
System EZE	Crypto library version	CRYPTOLIB	TABLE	Jan 12, 2023, 2:47:19 AM
System EZE	Global change setting	GLOBAL	TABLE	Jan 12, 2023, 12:02:23 PM
System EZE	ABAP Start Authorization check (USOBAUTHNACTIVE)	ABAP_STARTAUTHCHECK	TABLE	Jan 12, 2023, 2:23:18 AM
System EZE	Permitted trusted systems	RFCDVSACL	TABLE	Jan 12, 2023, 2:35:22 AM
System EZE	RFC destinations type '3'	RFCDDEST_TYPE_3	TABLE	Jan 12, 2023, 2:53:17 AM
System EZE	ABAP Code Vulnerability Analyzer status	ABAP_CVA_LICENSE	TABLE	Jan 12, 2023, 2:23:18 AM
System EZE	Namespace change settings - Change log	NAMESPACES_CHANGE_LOG	EVENT	Jan 12, 2023, 12:02:20 PM
System EZE	ABAP HTTP URL Location Exception Table (HTTPLURLOC)	HTTPLURLOC	TABLE	Jan 12, 2023, 2:23:18 AM
System EZE	SAPUI5 version	SAPUI5_VERSION	TABLE	Jan 12, 2023, 2:17:17 AM
System EZE	RFC destinations type 'T'	RFCDDEST_TYPE_T	TABLE	Jan 12, 2023, 2:23:20 AM
System EZE	Customizing settings for authorization process	PRGN_CUST	TABLE	Jan 12, 2023, 2:05:21 AM
System EZE	Software component level	ABAP_COMP_LEVEL	TABLE	Jan 12, 2023, 2:58:27 AM
System EZE	Namespace change settings	NAMESPACES	TABLE	Jan 12, 2023, 2:28:27 AM
System EZE	SNC Access Control List (ACL)	SNCVSACL	TABLE	Jan 12, 2023, 2:11:21 AM
System EZE	ABAP Notes	ABAP_NOTES	TABLE	Jan 12, 2023, 2:11:19 AM

Configuration Change Database

Configuration & Security Analysis for SAP BTP



Configuration & Security Analysis

- Regular collection and centralized storage of configuration items and software levels
- Store browser, change analysis and search functionality for mass volume processing

Credential Store

- Monitoring of security relevant configuration items including recommendations from SAP
- Find more details [here](#)

Landscape object	Description	Store Name	IF	Store Type	Data range (To)	
SYSTEM_APP Administration Console	System Application Configuration	IAS_SYS_APP_CONFIG		TABLE	Dec 18, 2023, 4:02:00 AM	>
SYSTEM_APP User Profile	System Application Configuration	IAS_SYS_APP_CONFIG		TABLE	Dec 18, 2023, 4:02:00 AM	>
System IdentityAuthentication02	Landscape Information	IAS_LANDSCAPE_INFO		TABLE	Dec 18, 2023, 4:02:00 AM	>
System IdentityAuthentication02	Identity Authentication Configuration	IAS_CONFIG		TABLE	Dec 18, 2023, 4:02:00 AM	>
CHARGED_APP test	Charged Application Configuration	IAS_CHARGED_APP_CONFIG		TABLE	Dec 18, 2023, 4:02:00 AM	>
CHARGED_APP BTP_App2	Charged Application Configuration	IAS_CHARGED_APP_CONFIG		TABLE	Dec 18, 2023, 4:02:00 AM	>
BUNDLED_APP GBaaS	Bundled Application Configuration	IAS_BUNDLED_APP_CONFIG		TABLE	Dec 18, 2023, 4:02:00 AM	>
BUNDLED_APP BTP_App1	Bundled Application Configuration	IAS_BUNDLED_APP_CONFIG		TABLE	Dec 18, 2023, 4:02:00 AM	>
BUNDLED_APP OpenID	Bundled Application Configuration	IAS_BUNDLED_APP_CONFIG		TABLE	Dec 18, 2023, 4:02:00 AM	>

Identity Authentication

- Monitoring of security relevant configuration items including recommendations from SAP
- Find more details [here](#)

Mobile Service

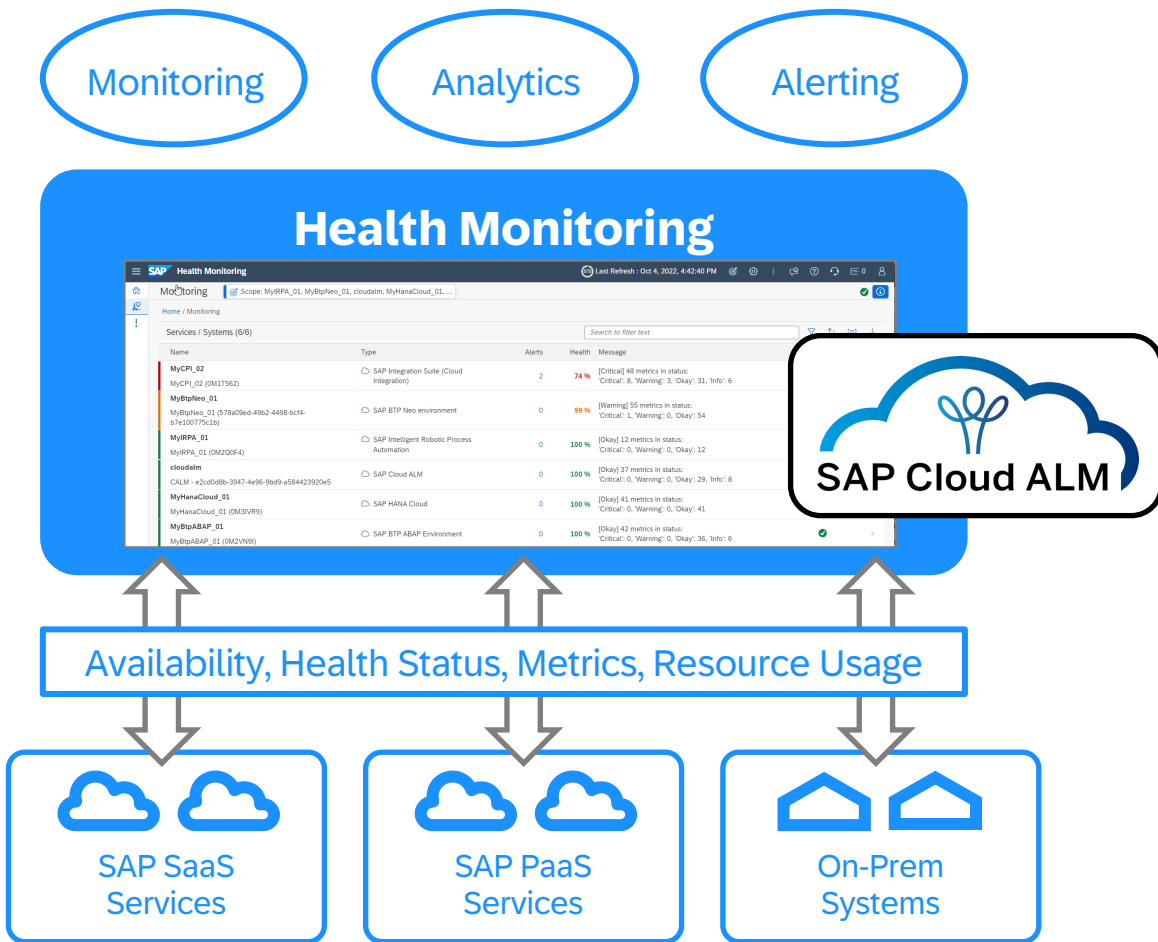
- Monitoring of security relevant configuration items including recommendations from SAP
- Find more details [here](#)

Destination Service

- Monitoring of security relevant configuration items including recommendations from SAP
- Find more details [here](#)

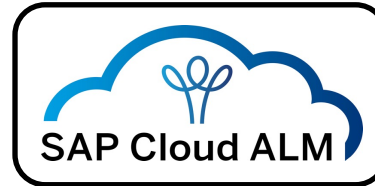
Health Monitoring

Check Application Health of Cloud Services and Systems



- **Monitoring of technical KPI's** for services and systems:
 - By executing **application health checks for SAP SaaS services**
 - By delivering **metrics for customer applications** built at SAP Business Technology Platform (SAP PaaS Services)
 - By providing metrics for **light-weight system monitoring** for SAP ABAP and associated system types e.g. SAP Cloud Connector
- Provides **embedded alerting** including the capability to **trigger notifications and corrective actions**
- Allows **embedded analytics** to **analyze trends and root causes** for discovered problems

Health Monitoring for SAP BTP



SAP Integration Suite

Monitoring of technical KPI's in [Cloud Integration](#) and [API Mgmt.](#)

SAP HANA Cloud

Monitoring of technical KPI's for [SAP HANA Cloud](#)

SAP Cloud Connector

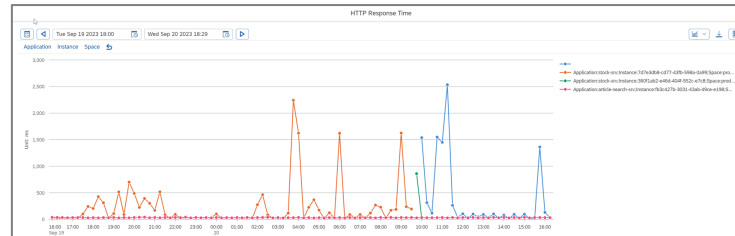
Monitoring of technical KPI's for [SAP Cloud Connector](#)

SAP BTP, Neo environment (custom built applications)

Monitoring of technical KPI's in [custom built java applications](#)

Health Monitoring

Monitoring of technical KPI's for BTP SaaS and PaaS



SAP BTP, CF / Kyma env. (custom built applications)

Monitoring of technical KPI's in [custom built java and node.js applications](#)

SAP Datasphere

Monitoring of technical KPI's for [SAP Datasphere](#)

SAP Build Process Automation

Monitoring of technical KPI's for [SAP Build Process Automation](#)

SAP Intelligent RPA

Monitoring of technical KPI's for [SAP Intelligent RPA](#)

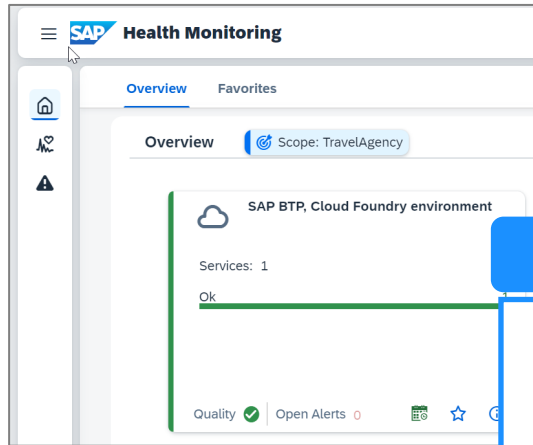
SAP Cloud ALM

Monitoring of technical KPI's for [SAP Cloud ALM](#)

SAP BTP, ABAP environment (custom built applications)

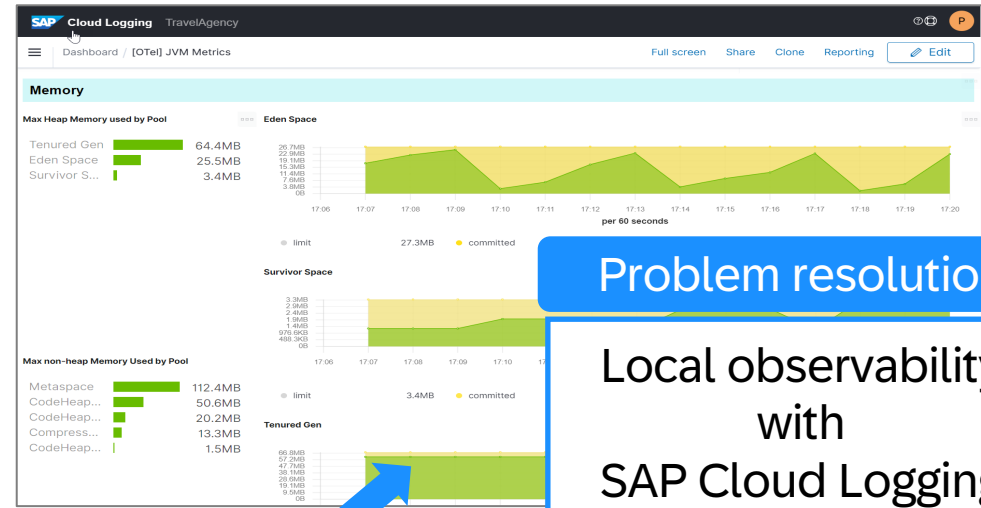

Monitoring of technical KPI's in [custom built ABAP applications](#)

Health Monitoring for custom applications built on SAP BTP



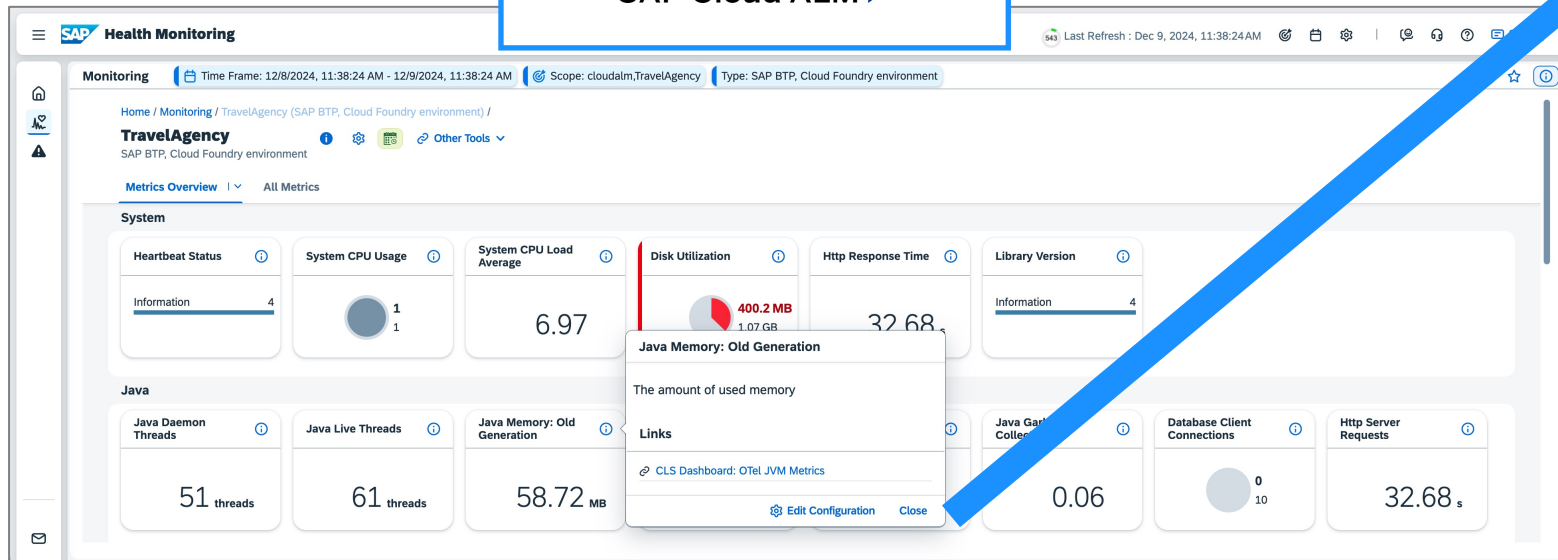
Problem detection

Central observability



Problem resolution

Local observability with SAP Cloud Logging



Monitoring | Time Frame: 12/8/2024, 11:38:24 AM - 12/9/2024, 11:38:24 AM | Scope: cloudalm,TravelAgency | Type: SAP BTP, Cloud Foundry environment

TravelAgency | SAP BTP, Cloud Foundry environment

Metrics Overview | All Metrics

System

- Heartbeat Status: Information 4
- System CPU Usage: 1
- System CPU Load Average: 6.97
- Disk Utilization: 400.2 MB / 1.07 GB
- Http Response Time: 32.68 s
- Library Version: Information 4

Java

- Java Daemon Threads: 51 threads
- Java Live Threads: 61 threads
- Java Memory: Old Generation: 58.72 MB
- Java Garbage Collection: 0.06
- Database Client Connections: 0 / 10
- Http Server Requests: 32.68 s

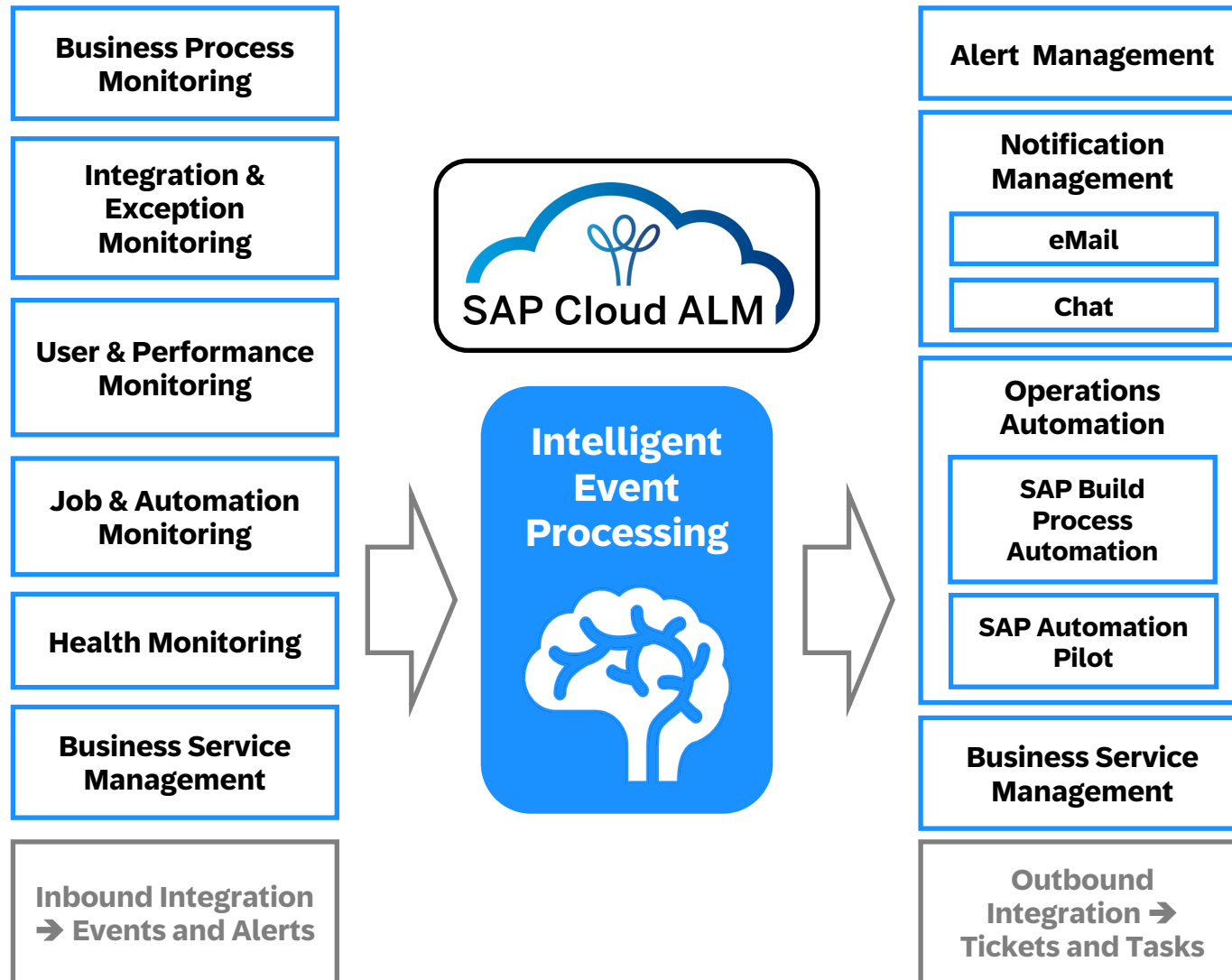
Java Memory: Old Generation tooltip:
The amount of used memory
Links: CLS Dashboard: OTEL JVM Metrics

- Context-sensitive navigation from Health Monitoring in SAP Cloud ALM to SAP Cloud Logging
- Metrics are retrieved by Open Telemetry based on auto instrumentation and forwarded to both tools

Remark: SAP Cloud Logging Service isn't part of SAP Cloud ALM subscription

Intelligent Event Processing / Alert Management / Notification Management

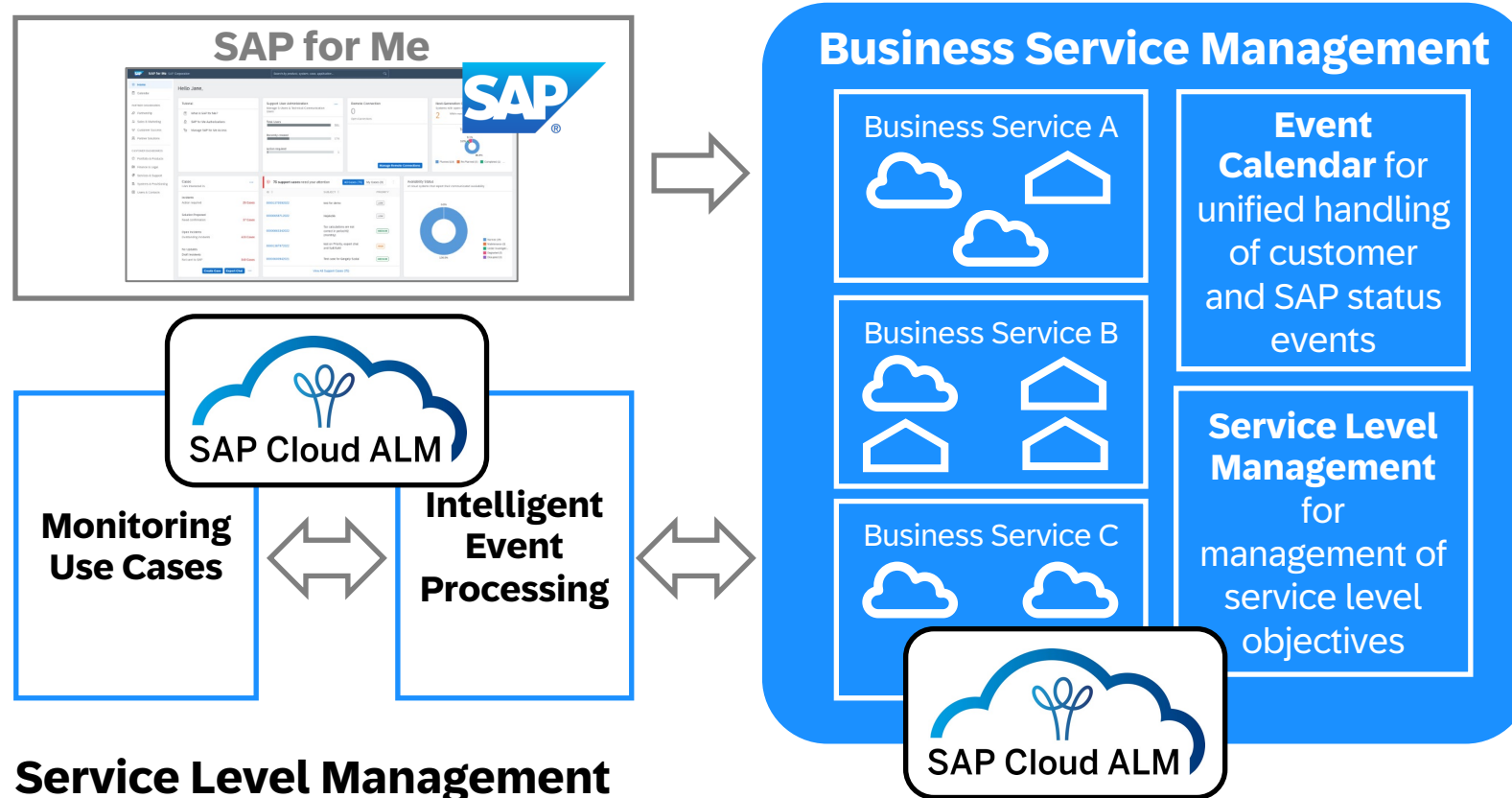
Process Events from Different Sources and Initiate Follow-Up Activities



- **Central intelligence** for **efficient event routing** between internal and external producers and consumers
- **Unified event processing** based on rules for **automatically as well as manually triggered events**
- Enables **centralized event handling** via event log viewer as well as **alert handling** via use case specific alert inbox
- **Foundation for intelligent correlation of events** e.g. correlation of manually generated notifications with automatically generated alerts

Business Service Management

Expose IT Related Information to be Understood by Business Users



Event Calendar

- Business service as **collection of services and systems**
- Import of **SAP initiated status** (maintenance, disruptions, degradation, communication events) including **outbound API**
- Maintenance and execution of **customer initiated status**
- **Forwarding of status events** from Business Service Management towards monitoring use cases
- **Calculation of status events** by monitoring use cases and **forwarding to Business Service Management** (planned)

Service Level Management

- Definition of **service level objectives** at business service level
- Automatic and continuous **calculation of service level** and consolidation to business services level
- **Embedded service level reporting** including drill down

Business Service Management for SAP BTP

Business Service Management

- SAP BTP SaaS and PaaS services can be summarized to business services in SAP Cloud ALM
- SAP initiated maintenance, disruptions, degradations, and communication events as available in SAP for Me are exposed to customers and can be used for customer specific service level management

The screenshot displays the SAP Business Service Management interface. The top section shows the 'Event Calendar' for 'SAP BTP Development' with a view for '2 Weeks' from July 26, 2021, to August 8, 2021. The calendar shows a maintenance event on Monday, August 2, 2021. Below the calendar are three panels showing 'Event Details(1/9)' for the event 'Nightly Deployment'.

Event Information:

- Name: Nightly Deployment
- Type: Maintenance
- Source: Customer
- Start Time: Jul 4, 2021, 10:00:00 PM
- End Time: Jul 4, 2021, 11:00:00 PM
- Duration: 1 Hour
- Created By: mathias.bley@sap.com
- Created At: Jun 28, 2021, 12:54:38 PM
- Status: Closed
- Recurrence: Yes
- Description: Apply the latest changes to the DEV environment

Action Log:

- 6/28/21 at 12:54 PM: mathias.bley@sap.com New Maintenance. Apply the latest changes to the DEV environment.
- 7/4/21 at 9:59 PM: SAP Status Update. The event status has been set to "In Process".
- 7/4/21 at 9:59 PM: SAP Start. Started: A maintenance event has started for the business service "SAP BTP Development".
- 7/4/21 at 10:59 PM: SAP Status Update. The event status has been set to "Closed".
- 7/4/21 at 10:59 PM: SAP Completed. Completed: A maintenance event has been completed for the business service "SAP BTP Development".

Service Information:

Service Name	Service Type
SAP BTP Development	Business Service

Additional details for the service:

- Service Name: SAP BTP Development
- Description: BTP tenants which are used for custom development
- Use Case: BSM
- Service Source: API
- Number of Cloud Services: 3

Remark: Generic functionality which is available for all SAP BTP SaaS and PaaS services.

Clean Core and RISE Dashboard in Context of Operations

Outlook



SAP Cloud ALM supporting Clean Core



SAP Cloud ALM provides the environment to manage your clean core projects along SAP Activate and the 5 dimensions together with analytics and Traceability dashboards to track adherence to clean core criteria

1 Processes

- Consumption of SAP Best Practice Content
- Execute Fit-to-standard Workshops
- Requirements management
- Design custom processes
- **Business Process Monitoring**
- **Job and Automation Monitoring**
- SAP Readiness Check to remediate simplification items

2 Extensibility

- Manage development (ABAP & BTP)
- Manual & Automated testing (with Tricentis Test Automation)
- Agile Build
- **Drive business continuity of extensions**
- SAP Readiness Check to remediate custom code

3 Data

- **Integration and exception monitoring**
- SAP Readiness Check to resolve data quality issues

4 Integration

- Integration Documentation
- Manage CPI deployments
- **Integration and exception monitoring**

5 Operations

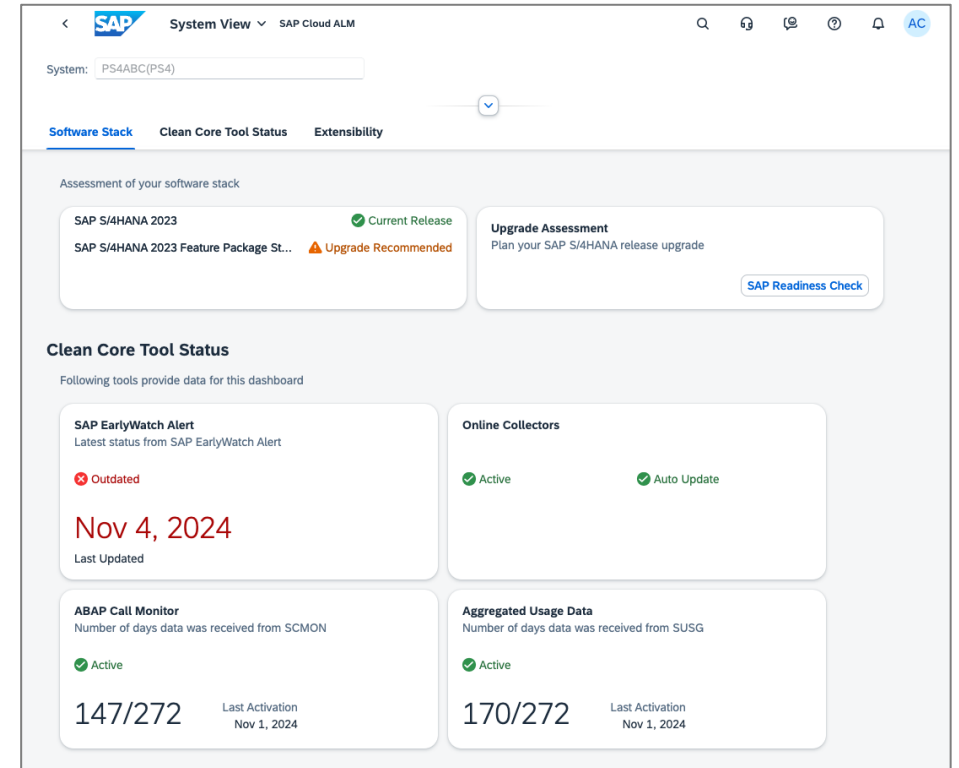
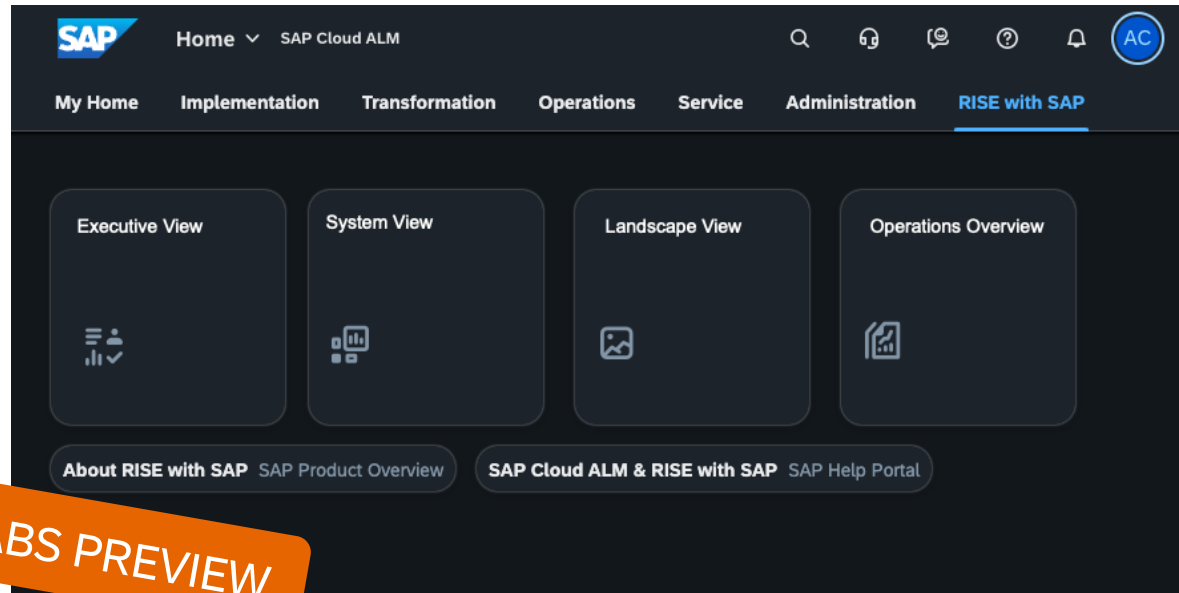
- **Holistic and secure application and business process operations**
- **Integration in IT-SM processes**
- Automated regression testing
- Release Management
- SAP Readiness Check for SAP S/4HANA upgrades

This is the current state of planning and may be changed by SAP at any time.

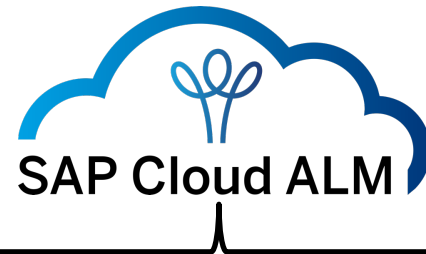
Outlook: RISE with SAP Dashboards

RISE with SAP Methodology Dashboards

System View



SAP Cloud ALM supporting Clean Core



SAP Cloud ALM provides the environment to manage your clean core projects along SAP Activate and the 5 dimensions together with analytics and Traceability dashboards to track adherence to clean core criteria

1 Processes

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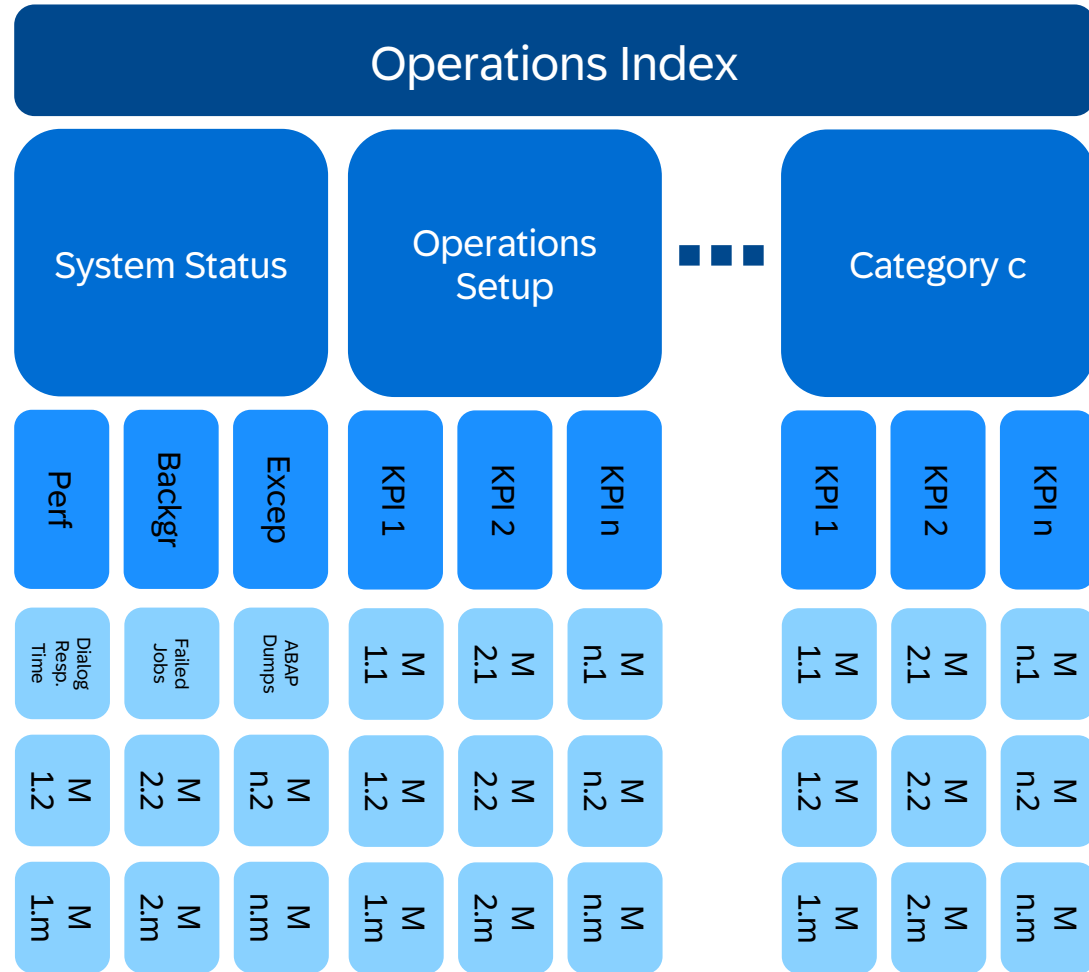
5 Operations

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- Release Management
- SAP Readiness Check for SAP S/4HANA upgrades

SAP Cloud ALM supporting Clean Core

5

Operations



Index

Category Score

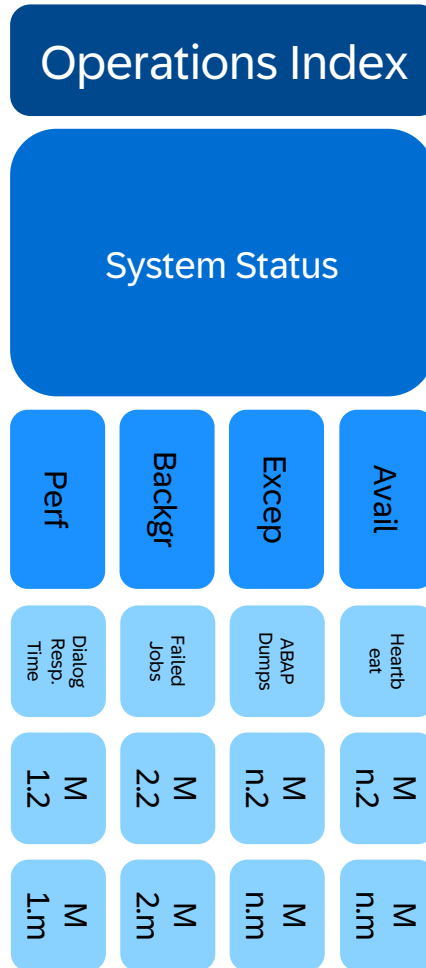
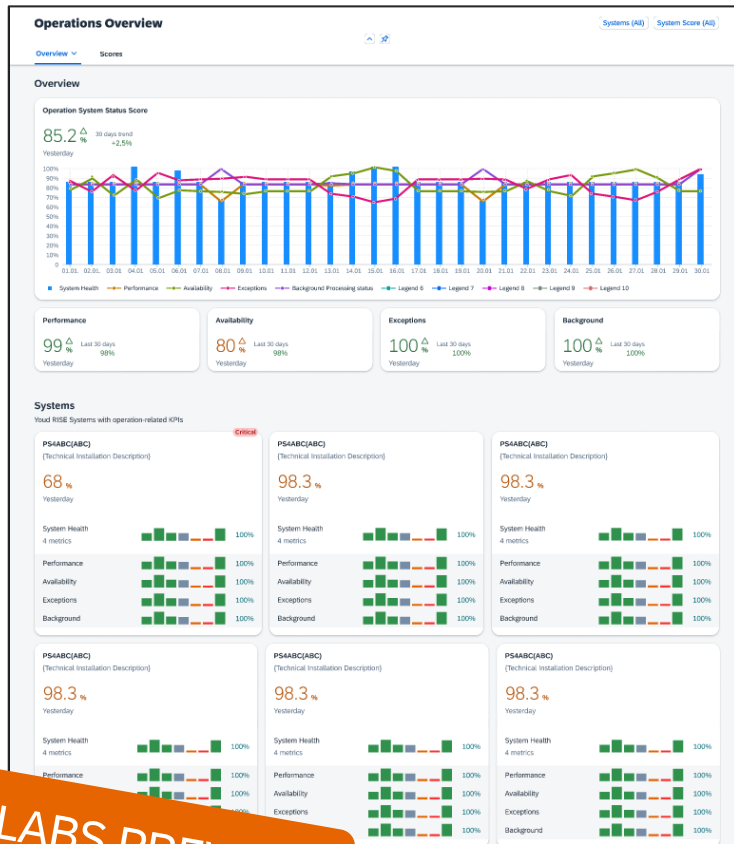
KPI Objectives

Metrics

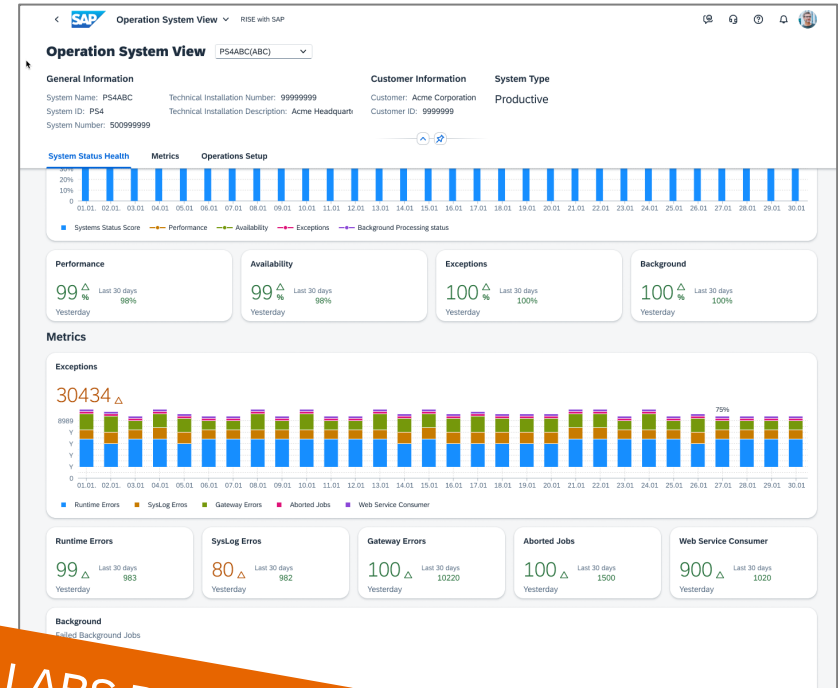
This is the current state of planning and may be changed by SAP at any time.

SAP Cloud ALM supporting Clean Core

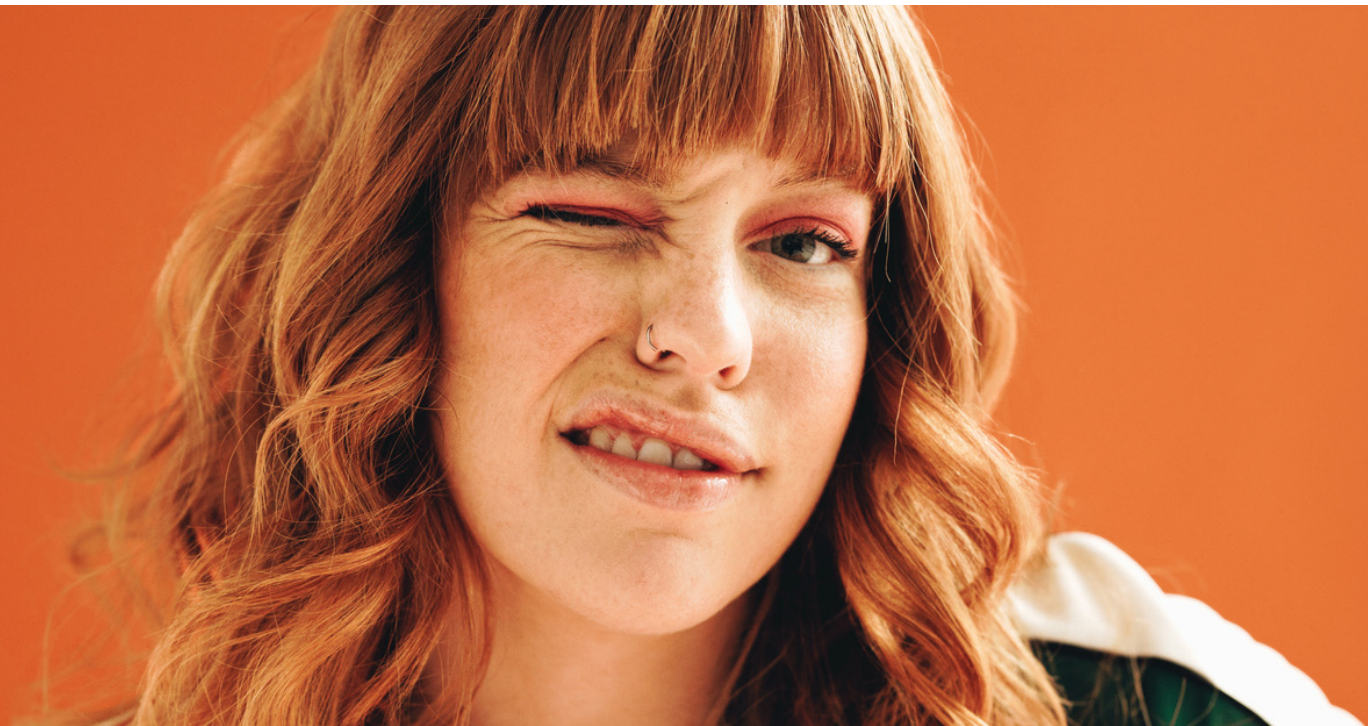
Operations Overview



System Details Overview



Further Information & Q&A



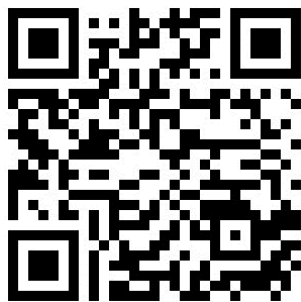
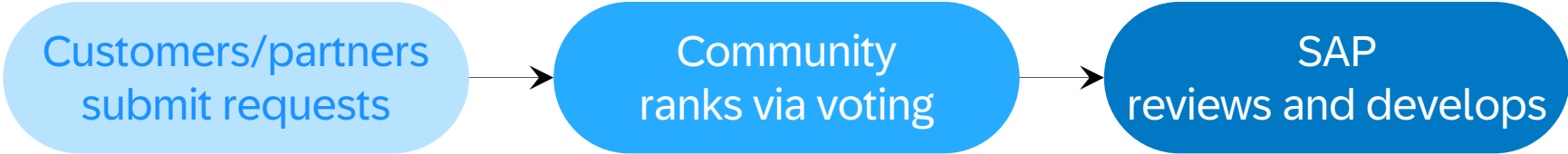
SAP Cloud ALM – Content Roadmap for SAP BTP

	Currently available		Planned	
Integration Monitoring	SAP IS - Cloud Integration SAP Master Data Integration SAP Event Broker SAP Task Center Service	SAP Master Data Governance Cloud edition SAP Mobile Services SAP Data Intelligence	SAP IS - Edge Integration Cell SAP IS - SAP Event Mesh SAP IS - Advanced Event Mesh SAP IS - API Management	SAP Build Process Automation
Exception Monitoring	SAP Analytics Cloud SAP IS - Cloud Integration SAP BTP, ABAP, NEO - PaaS	SAP BTP, CF & Kyma - PaaS Integration with SAP Cloud Logging	SAP Workzone Service SAP BTP Audit Log	
Real User Monitoring	SAP BTP, ABAP - PaaS SAP BTP, NEO - PaaS SAP BTP, CF & Kyma - PaaS	Integration with SAP Cloud Logging SAP Build Workzone Service	SAP Analytics Cloud	SAP Build Apps SAP Build Code
Job & Automation Monitoring	SAP BTP, ABAP - PaaS SAP BTP, CF & Kyma - PaaS SAP BTP, Identity Provisioning	SAP Build Process Automation SAP Intelligent Robotic Process Automation	SAP DataSphere SAP Analytics Cloud	Deeper integration with SAP Job Scheduling Service
Configuration & Security Analysis	SAP BTP, Credential Store SAP BTP, Identity Authentic. SAP BTP, Identity Provisioning	SAP BTP, Mobile Service SAP BTP, Destination Service	SAP BTP, Custom Domain Service SAP HANA Cloud SAP DataSphere	
Health Monitoring	SAP BTP, ABAP, NEO - PaaS SAP BTP, CF & Kyma - PaaS SAP Build Process Automation (Jobs) SAP Cloud Connector	SAP Datasphere SAP Intelligent RPA SAP IS - CI & APIM SAP HANA Cloud & BTP Neo DB Integration with SAP Cloud Logging	SAP IS - Edge Integration Cell SAP IS - Event Mesh SAP IS - Advanced Event Mesh	Platform metrics for CF/Kyma SAP Analytics Cloud

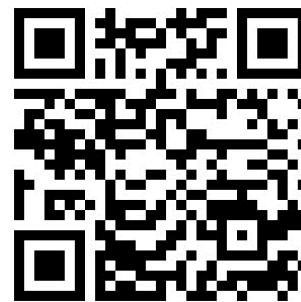


I need more capabilities in SAP Cloud ALM. 

SAP Continuous Influence for SAP Cloud ALM



[Implementation](#)



[Operations](#)



[Service](#)

Mastering Day 2 Operations in SAP BTP



- *Feb-25:* [SAP Cloud ALM](#) for SAP BTP
- *Mar-11:* [Terraform](#) provider for SAP BTP – Real world setup scenario
- *Mar-20:* Survive brownfield Terraform projects with Terraform Exporter for SAP BTP
- *Mar-27:* Observe your SAP BTP apps at depth via [SAP Cloud Logging](#)
- *Apr-03:* SAP BTP [Ops Automation](#) with SAP Cloud ALM
- *Apr-10:* Exploring SAP Automation Pilot: Kickstart your ops automation
- *Apr-15:* Enhanced remediation actions for your SAP HANA Cloud with SAP Automation Pilot
- *Apr-23:* Inspiring technical ops automations with SAP Automation Pilot
- *Jun-12:* SAP BTP [HA/DR](#): Overview and Roadmap
- *Jun-17:* Best practices to enable [Identify and Access Management](#)
- *Jun-26:* Secure configuration for your SAP BTP services: An overview of [SAP Security Recommendations](#)

Additional Information

SAP Cloud ALM for Operations Home Page:

<https://support.sap.com/en/alm/sap-cloud-alm/operations.html>

SAP Cloud ALM for Operations Expert Portal:

<https://support.sap.com/en/alm/sap-cloud-alm/operations/expert-portal.html>

SAP Cloud ALM Online Help:

<https://help.sap.com/docs/cloud-alm>

SAP Cloud ALM for Operations Online Training:

[Operating with SAP Cloud ALM](#)

Latest Slide Deck

[Operations for SAP BTP with SAP Cloud ALM \(PDF\)](#)

Discover Center – Mission

[Implement Observability in a Full-Stack CAP Application Following SAP BTP Developer’s Guide](#)

SAP BTP Developer Guidelines

<https://github.com/SAP-samples/btp-developer-guide-cap/tree/main/documentation/observability>

CAP SFLIGHT App

<https://github.com/SAP-samples/cap-sflight>



Thank you.

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SAP Cloud ALM Mailing list
cloudalm@sap.com

 **Bring out your best.**