SAP Cloud ALM for Operations –
What’s New in August 2020

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Agenda

Strategic ALM Platforms

SAP Cloud ALM for Operations - Overview

Cross Use Case Services - What’s new with 2008

Business Process Monitoring - What’s new with 2008

Integration Monitoring - What’s new with 2008

Job Monitoring – What’s new with 2008

Roadmap & Outlook
Strategic ALM Platforms
Different strategic operations platforms for different target groups

SAP Solution Manager available for hybrid customer solutions

Focused Run available for hybrid customer solutions

SAP Cloud ALM available for hybrid customer solutions

Three strategic platforms to match customer reality!
SAP Cloud ALM – **Ideal solution for cloud-centric customers**

**For the intelligent enterprise**
- For cloud-centric customers
- Manages cloud and hybrid solutions
- Supports all components of the Intelligent Enterprise

**In the public cloud**
- Rethought, newly designed, and built on modern cloud technology
- Immediate consumption, always up-to-date
- Cost-efficient for customers

Fair Usage rights included with SAP Enterprise Support, cloud editions
SAP Cloud ALM supports the entire lifecycle of all SAP Cloud solutions

SAP Cloud ALM

Operation: Detect -> Diagnose -> Correct -> Automate

Implementation: Demand -> Build -> Test -> Deploy

SAP® Cloud Platform
Platform services and Data management

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SAP Cloud ALM for Operations – Planned functional scope

Cross use case services
- Alert Management
- Operation Automation
- Intelligent Event Processing
- Business Service Management
- Analytics & Intelligence

Use case services
- Integration Monitoring
- Real User Monitoring
- Business Process Improvement
- Synthetic User Monitoring
- Configuration Monitoring
- Business Process Monitoring
- Job Monitoring
- Health Monitoring
- Consistency Check
- Root Cause Analysis

Re-use services
- Exception Monitoring
- Performance Monitoring

Infrastructure services
- Landscape Management
- Notification Management
- Pull based Data Collection
- Push based Data Collection

Available with SAP Cloud ALM in August 2020
Cross Use Case Services
Cross Use Case Service – Intelligent Event Processing

**Central management** and **control** on automatic and manual activities performed for Cloud ALM Operations Events

**Features:**
- Rule based assignment of processing activities based on Event attributes
- Automatic execution of processing activities when events occur
- Central logging of all manually or automatically executed activities for a specific event
- Central storage of relationship between Cloud ALM operations event (e.g. alert) and 3rd party entities (e.g. Workflow Instance Ids, Ticket numbers)
- De-coupling of Event definition (assignment of alerting threshold to monitoring objects) and Event processing (assignment of automatic notification options, ticket generation settings or operation flows to alerts)

**Current Scope:**
- Support for Integration Monitoring Alerts with attributes filter on Alert Name and Alert Context
- Support for regular expressions for filter definitions
- Rule trigger in case of start of new alert
- Support for notification of e-mail recipients as action
- Support of multiple active rules for one event
- Action log for sent out mail recipients as well as triggered external SCP Workflows
- Storage of relationship between Integration Monitoring Alerts and SCP Workflow Instances
Business Process Monitoring
Scope of Business Process Monitoring

- Offer transparency into end-to-end processes based on predefined business process KPIs
- Provide out-of-the box real-time monitoring across the entire Intelligent Suite
- Reduce implementation effort by auto-discovery of relevant business process KPIs
- Receive automatic alerts and provide automated corrective actions
- Predict business process anomalies before business is impacted
- Enrich operational business process information with application monitoring information
- Process information will be retrieved from SAP Cloud ALM for Implementation
- Provide basis to improve business processes e.g. cleaning-up backlog or inconsistent situations
- Continuous development of further business process KPIs based on APIs provided by SAP Cloud LOB’s
This app allows you to perform the following activities:

- Monitor the health of your business processes in real time with the help of roughly 60 predefined business process key performance indicators (KPIs) for S/4HANA Cloud, essentials edition.
- Detect anomalies during process execution and access information about business documents for each of your processes, for example, for reporting purposes or root cause analyses.
- Pre-defined process content, key performance indicators (KPIs) in conjunction with auto-configuration for reduced configuration effort.
Business Process Monitoring – Value Help in Global Filter Bar

New features are:

- Filter criteria can be maintained using the **auto-completion** within the filter bar.

- Filter criteria can be selected via a **pop-up or drop-down**

- Filter criteria can easily be **removed** from the filter bar.
Business Process Monitoring – Inactive KPI Favorites

New features are:

• In case a KPI added as favorite gets deactivated the subtitle is changed to “Inactive” and navigation to detailed level is deactivated
Business Process Monitoring – KPI Management

New features are:

- Overview of active and inactive KPIs in the **KPI Management** section of the configuration

- **Overview page** of all KPIs with filter, search option, and last configuration change time

- **Single KPI page** with further KPI details and the option to manually activate or deactivate data collection per KPI (administrator only)
Demo – Business Process Monitoring
Business Process Monitoring – Alerting

New features:

- In the KPI Management for each KPI various alert definitions can be maintained
- Alerts will be consumed in the Alert Inbox in Business Process Monitoring
Business Process Monitoring – Charting

On the **KPI detail** view the data is visualizing as charts the date to help the user interpreting the line item data easily.

Three chart types are offered:

- Line Chart
- Bar Chart Horizontal and Vertical
Integration Monitoring
Scope of Integration Monitoring

- Ensures **reliable data exchange processes** at application level in cloud-only and hybrid scenarios.
- Provides **end-to-end monitoring** across SAP cloud services and applications based on SAP Passport mechanism.
- Closes gap between **business and IT** during issue resolution process (technical issue vs. business issue).
Integration Monitoring - Capabilities

**Alerting**
Inform integration scenario owner about critical issues during data exchange. Get an overview on scenario related alerts. Use forward navigation to analyze the alerts in the Alert Inbox.

**Tracking**
Search and track single messages based on specific business context attributes like Order Number or Campaign ID.

**Monitoring**
Get a detailed status overview per cloud service or application on incoming/outgoing messages for different interfaces

**Analytics**
Get an overview on historical data for the different integration types to identify trends and compare different time periods.
Integration Monitoring – Key Features Delivered in 2005

This app enables you to perform the following activities:

- Get an overview on scenario related alerts with the Alert Inbox.
- Get a detailed status overview per cloud service or application on incoming/outgoing messages for different interfaces.
- Search and track single messages based on specific business context attributes like Order Number or Campaign ID.
Integration Monitoring – Filtering and Sorting in Message View Tables

New features are:

• Filter criteria can be maintained by using the **filter or sorting icon** within header bar

• Filter criteria can be selected via a **drop-down lists** the sorting can be adjusted by using any **sorting property** and an order

• Filter criteria can easily be **removed** from the filter bar by pressing the **clear** button
New features are:

- **New visualization** of cloud services including average duration time and total count of messages as well as a **status bar**

- **Related message** are visualized in a **table**

- **Message details** are now available as **cards** and in a more **structured way**

- Carousel on **application data** cards

- **Error messages** in a separate tab “Logs”
Demo – Integration Monitoring
Integration Monitoring – Data Quality Icon

New features:

• A **traffic light** is now showing an indication on the **data quality**
• You can quickly see the **data collection status**
Job Monitoring
Scope of Job Monitoring

Offer transparency on the end-to-end status of automation processes regarding:

- **Execution status**, i.e. did the job finish successfully
- **Application status**, i.e. did the job process application data without exceptions
- **Start delay**, i.e. did the job start on time
- **Run time**, i.e. did the job run with usual run time

- Provide **out-of-the box real-time monitoring** across the entire Intelligent Suite and determine exception situations using historical information.
- No implementation effort for basic monitoring by getting all jobs executions pushed

Planned:

- Receive **alerts and notifications** in case of job failures
- **Predict automation process anomalies** before business is impacted
- **Continuous integration of job types** via the generic job data push interface, that can feed data from SAP Cloud LoB’s job execution infrastructures into the SAP Cloud ALM’s Job Monitoring infrastructure

Starting with S4HANA CE Application Jobs. Further Job types coming soon.
Key personas and use cases of Job Monitoring

I need to monitor my E2E Process:
Beside monitoring the data processing by my E2E process, I need to understand if all automated actions for the execution of my E2E process perform as they should, i.e.
• understand job executions failures, delays and run time issues
• receive automatic alerts in case of exceptions or performance issues, that endanger process availability (i.e. to finish on time successfully)

For issue resolution and prevention, I need to
• deep-dive into the individual job execution in the managed service to analyze root causes
• understand past, current and predicted automation process performance

I need to monitor operations of my solutions:
As part of monitoring the technical infrastructure, I need to understand if all automated actions for general service availability perform as they should, i.e.
• understand job executions failures, delays and run time issues
• receive automatic alerts in case of exceptions or performance issues, that endanger service availability

For issue resolution and prevention, I need to
• deep-dive into the individual job execution in the managed service to analyze root causes
• understand past, current and predicted automation process performance
Key personas and use cases of Job Monitoring

- **Process Manager (Lead-to-Cash)**
  - Global / Local Process Manager (LoB Management / LoB Operation)

- **Application Owner (IT)**
  - Global / Local Application Owner (IT Operation)

### Service A
- Job A
- Job C

### Service B
- Job B

### Service A
- Job D
- Job E

### Service B
- Job F
- Job G
- Job H

On time? In time? Successful?
Key personas and use cases of Job Monitoring

**Process Manager (Lead-to-Cash)**

- Global / Local Process Manager (LoB Management / LoB Operation)

**Application Owner (IT)**

- Global / Local Application Owner (IT Operation)

**Job Monitor in native applications**

**Service A**
- Execution of Job A
- Execution of Job D
- Execution of Job E
- Execution of Job C
- Execution of Job A
- Execution of Job E
- Execution of Job D
- Execution of Job E
- Execution of Job C

**Service B**
- Execution of Job F
- Execution of Job G
- Execution of Job B
- Execution of Job F
- Execution of Job G
- Execution of Job B
- Execution of Job F
- Execution of Job G

Are my jobs on time, in time and successful?
Introduction into Basic Concept (1/4)

Propagation of job executions to job definition

✓ Default propagation: Rating of job is rating of last execution of job

Planned:

✓ Allow to manual define the number of instances to be considered (e.g. “best of last n” and “worst of last n”)

✓ Rate red if job behaves exceptional (i.e. indicate job as red, if the “failure rate” is unusually high)

Job Monitor in Cloud ALM

Service A

Job A
1. Execution of Job A
2. Execution of Job A

Job C
1. Execution of Job C
2. Execution of Job C

Job D
1. Execution of Job D
2. Execution of Job D

Job E
1. Execution of Job E
2. Execution of Job E
3. Execution of Job E

Service B

Job B
1. Execution of Job B
2. Execution of Job B

Job F
1. Execution of Job F
2. Execution of Job F
3. Execution of Job F

Job G
1. Execution of Job G
2. Execution of Job G
3. Execution of Job G

Job H
1. Execution of Job H
2. Execution of Job H
Introduction into Basic Concept (2/4)

Metrics

✓ **Execution Status**: Shows, if job finish successfully

✓ **Application Status**: Shows, if there are critical messages in the application log of the job

✓ **Start Delay**: Shows, if job started on time

✓ **Run Time**: Shows, if job run time is normal

Job Monitor in Cloud ALM

**Service A**

- **Job A**: Shows execution status
  1. Execution of Job A
  2. Execution of Job A

- **Job C**: Shows execution status
  1. Execution of Job C
  2. Execution of Job C

- **Job D**: Shows execution status
  1. Execution of Job D
  2. Execution of Job D

- **Job E**: Shows execution status
  1. Execution of Job E
  2. Execution of Job E
  3. Execution of Job E

**Service B**

- **Job B**: Shows execution status
  1. Execution of Job B
  2. Execution of Job B

- **Job F**: Shows execution status
  1. Execution of Job F
  2. Execution of Job F
  3. Execution of Job F

- **Job G**: Shows execution status
  1. Execution of Job G
  2. Execution of Job G
  3. Execution of Job G

- **Job H**: Shows execution status
  1. Execution of Job H
  2. Execution of Job H
Introduction into Basic Concept (3/4)

Root Cause Analysis

✓ Direct Navigation to Job execution details in remote cloud service

Planned:

✓ Trend Reporting on different aspects like run time, failure rate

✓ Deviation Reporting (Z-Scores) on different aspects like run time, failure rate

Job Monitor in Cloud ALM

Are my jobs on time, in time and successful?

Service A

Job A  
1. Execution of Job A  
2. Execution of Job A

Job B  
1. Execution of Job B  
2. Execution of Job B

Job C  
1. Execution of Job C  
2. Execution of Job C

Job D  
1. Execution of Job D  
2. Execution of Job D  
3. Execution of Job D

Job E  
1. Execution of Job E  
2. Execution of Job E  
3. Execution of Job E

Job F  
1. Execution of Job F  
2. Execution of Job F

Job G  
1. Execution of Job G  
2. Execution of Job G  
3. Execution of Job G

Service B

Job B  
1. Execution of Job B  
2. Execution of Job B

Job F  
1. Execution of Job F

Job H  
1. Execution of Job H  
2. Execution of Job H

Scores: Persist Scores - Daily

Job Template: Scores: Persist Scores
Description: Scores: Persist Scores - Daily

Number of Steps: 2
Introduction into Basic Concept (4/4)

Infrastructure

✓ Based on “normalized job executions data model”

✓ Job data can be pushed with the defined format from any SAP cloud product

Planned

✓ Extension of the push interface to receive job hierarchy information
# Job Monitoring - Usage Scenario

## SAP Cloud ALM for Job Monitoring

### Scores: Persist Scores - Daily

<table>
<thead>
<tr>
<th>Service</th>
<th>Service Type</th>
<th>Jobs</th>
<th>Execution Status</th>
<th>Application Status</th>
<th>Start Delay</th>
<th>Run Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC01S</td>
<td>SAP S/4HANA Cloud</td>
<td>12</td>
<td>3</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETK03</td>
<td>SAP S/4HANA Cloud</td>
<td>32</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CN300</td>
<td>SAP S/4HANA Cloud</td>
<td>12</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cloud, essentials edition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Job Details

**Scores: Persist Scores - Daily**

**Description:**
Scores: Persist Scores - Daily

**Job Template:**
Scores: Persist Scores

**Rating of job:**
Rating of job is the rating of the latest execution of the job.

### Navigation Link to Job in remote Cloud Service

- Execution of job: Scores: Persist Scores - Daily in system HC01S
- Execution Schedule:
  - Aug 11, 2020, 06:00:00 AM
  - Aug, 20, 2020, 06:00:00 AM
  - Aug 9, 2020, 06:00:00 AM
  - Aug 8, 2020, 06:00:00 AM
- Execution Status:
  - Succeeded
  - Succeeded
  - Succeeded
  - Succeeded
- Application Status:
  - In progress
  - In progress
  - In progress
  - In progress
- Start Delay:
  - 00:00:00
  - 00:00:00
  - 00:00:00
  - 00:00:00
- Run Time:
  - 00:00:00
  - 00:00:00
  - 00:00:00
  - 00:00:00

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Demo – Job Monitoring
Roadmap & Outlook
SAP Cloud ALM for Operations

Roadmap

Feb 2020

- Beta Release – Cloud Native Architecture
- Integration Monitoring
  - Monitoring of end-to-end message flows
  - Searching & Tracking for single message artefacts
  - Flexible Alerting based on different grouping criteria
  - Embedded Exception Monitoring
- Alert Management for with unified alert store and use case specific access to alerts / alert inbox
- Landscape Management for cloud services

May 2020

- Release to customer – Early Adopter Care
- Business Process Monitoring
  - Monitoring of Business Process KPI’s with context information
  - Drill down in single business documents
- Notification Management to enable centralized communication
- Integration of external SCP workflow in alert management to enable Operation Automation
- Landscape Management for on-premise systems

Aug 2020

- First versions of Real User Monitoring & Job Monitoring
- Business Process Monitoring
  - Alerting integration
  - Dashboard integration
  - Detailed authorization management
- Real User Monitoring
  - Monitoring of end-to-end end user requests
  - Embedded Performance Monitoring
- Job Monitoring for cloud based jobs
- Intelligent Event Processing integrated with alert management for problem resolution

Nov 2020

- First versions BP Analytics, Health Monitoring & BSM
- Integration Monitoring
  - Intelligent house-keeping
  - Aggregation & Analytics
- Business Process Analytics as part of Business Process Improvement functionality
- Health Monitoring for cloud
  - Embedded Operation Automation
- Business Service Management integrated with Health Monitoring & Cloud Availability Center

Supported Content

- S/4HANA Cloud, C4 C4C & CPI for INTMON and EXMON
- C4 Marketing, Concur & SF for INTMON and EXMON
- S/4HANA Cloud for BPMON
- Ariba & Fieldglass for INTMON and EXMON
- S/4HANA OP for BPMON
- S/4HANA Cloud & C4 Marketing for PERFMON, RUM & JOBMON
- S/4HANA OP & Business Suite for INTMON and EXMON
- SF & Business Suite for BPMON
- S/4HANA OP & Business Suite for PERFMON, RUM & JOBMON

This is the current state of planning and may be changed by SAP at any time.
Further Information
Early Adopter Care process and timelines

Go to the SAP Cloud ALM Customer Influence Portal

- Review prerequisites
- Select the “Register as customer” link
- Complete the SAP Cloud ALM Online Scoping form

Once your form is received the SAP Cloud ALM team will review and advise on next steps.
Thank you.