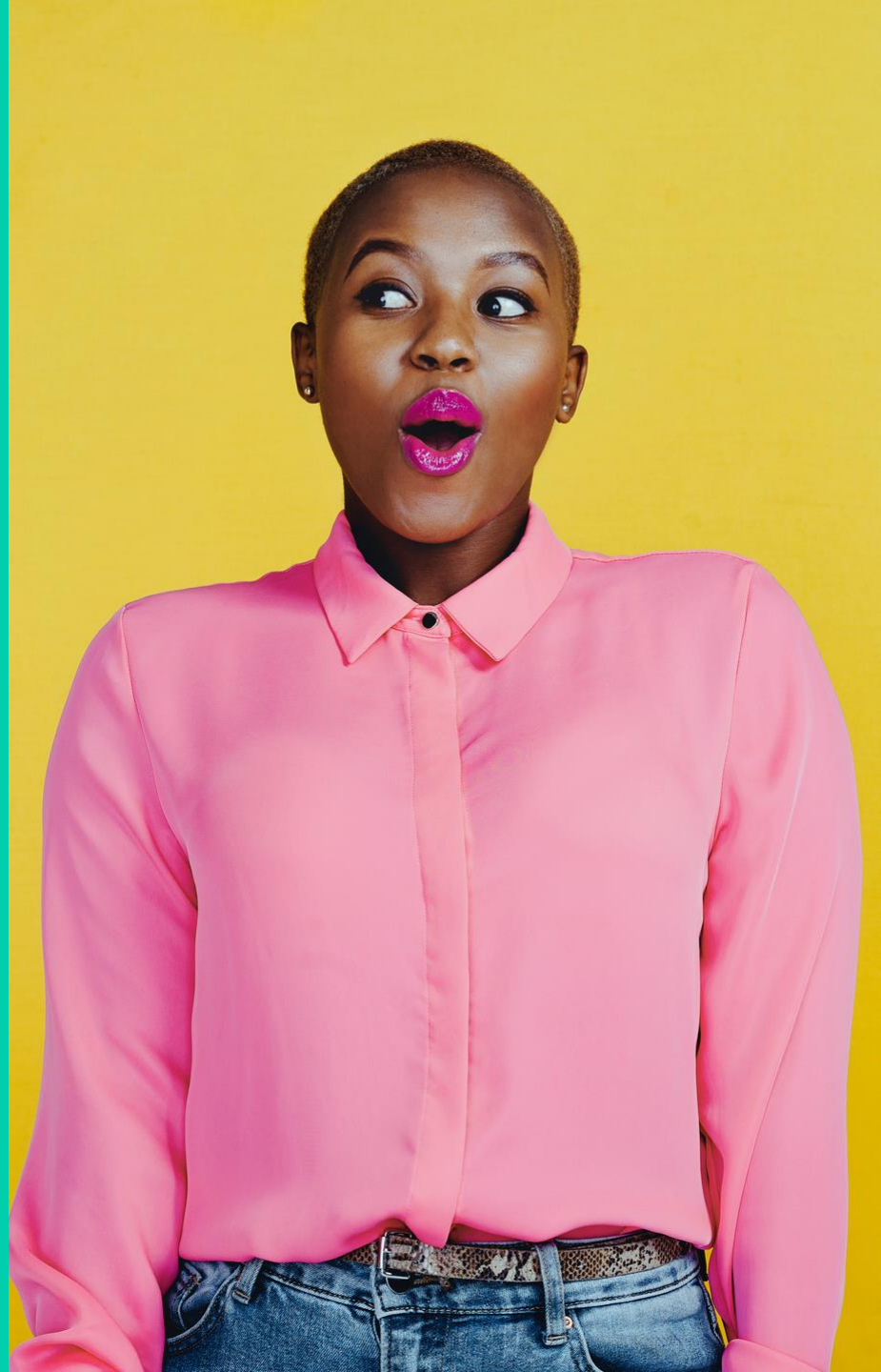
SAP Community Call for SAP Cloud ALM Experts

Customer Communications & Relations for ALM, SAP SE

March 06, 2024

Public



Agenda

Agenda for March 6, 2024

1 Welcome

2 **News in Job & Automation Monitoring**

3 We ask, you answer | Menti poll

4 Additional Information

5 You ask, we answer | Q&A

Speakers

Konstantin Werthmann

Gergely Spiry

Tim Steuer

Stefan Lahr

News in Job & Automation Monitoring

Abstract

With Job & Automation Monitoring in SAP Cloud ALM, currently it is possible to monitor SAP S/4HANA Application Jobs, SAP ABAP Jobs, SAP BW Process Chains, SAP Build Process Automation Jobs (or SAP Intelligent RPA jobs) and SAP Business Workflow.

SAP Job Scheduler Service jobs can be monitored in a custom BTP Application with some instrumentation effort as described here.

The collected job execution data is provided aggregated (hourly and lower resolution) to SAP Cloud ALM Analytics for external usage (e.g. for Grafana Consumption).

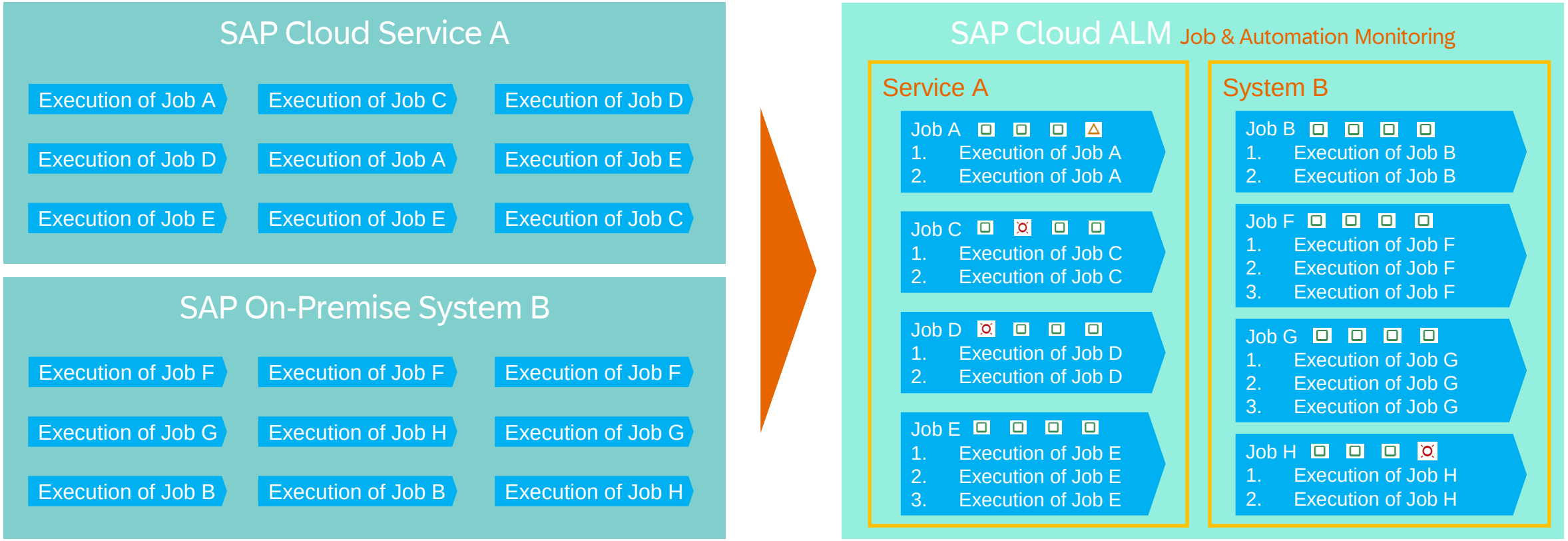
We plan to offer monitoring for further job and automation types, like SAP BTP scheduler jobs (not only in custom BTP Applications), SAP Build Process Automation Processes and SAP Digital Manufacturing Processes.

In this session, we will show the general usage of the application and how alerting can be configured.

Job & Automation Monitoring in SAP Cloud ALM:
General Concept, Scope and Prerequisite

General Concept Job & Automation Monitoring in SAP Cloud ALM

Jobs and workflows are executed in the managed cloud and on-premise services. The individual executions are captured (start, end times, and status) by the local execution infrastructures. Customers can choose to forward execution data to SAP Cloud ALM, where the individual execution data is assembled and correlated with definition data.



Scope of Job & Automation Monitoring in SAP Cloud ALM

Job & Automation Monitoring in SAP Cloud ALM currently supports monitoring of the following job types:

- SAP S/4HANA application jobs
- SAP Intelligent RPA jobs / SAP Build Process Automation Jobs
- SAP ERP Central Component - ABAP jobs
- SAP ERP Central Component - BW process chains
- SAP Business Workflow instances
- SAP Job Scheduling Service Job (of a BTP customer built application)

The following solutions are supported:

- SAP SuccessFactors Employee Central Payroll
- SAP S/4HANA Cloud
- SAP Marketing Cloud
- SAP Intelligent Robotic Process Automation / SAP Build Process Automation
- SAP Integrated Business Planning for Supply Chain
- SAP Business Suite
- SAP BTP ABAP and Cloud Foundry Environment
- S/4HANA private cloud edition, S/4HANA

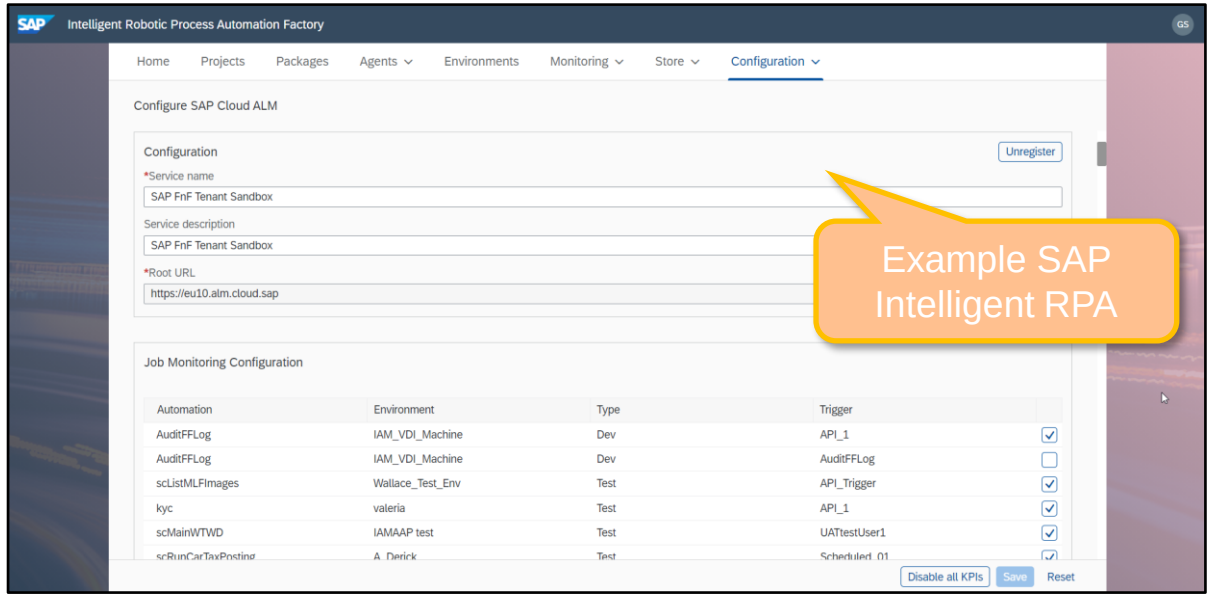
Prerequisite for Job & Automation Monitoring in SAP Cloud ALM

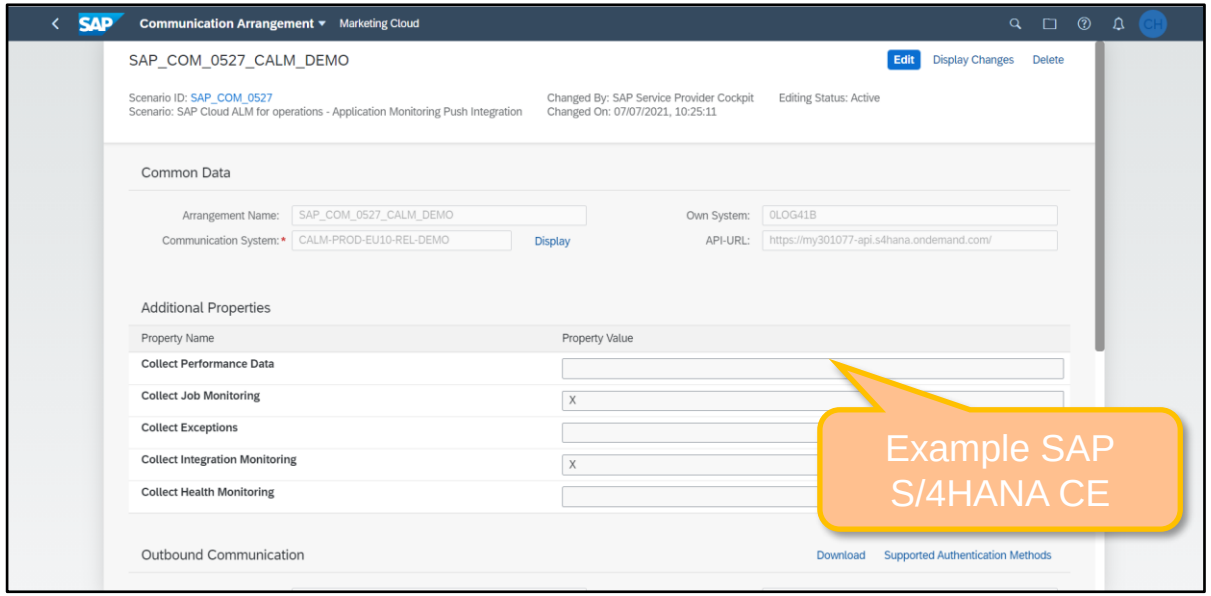
Prerequisites

- The type of the job or automation must be supported by SAP Cloud ALM
- You need to have authorization for Job & Automation Monitoring

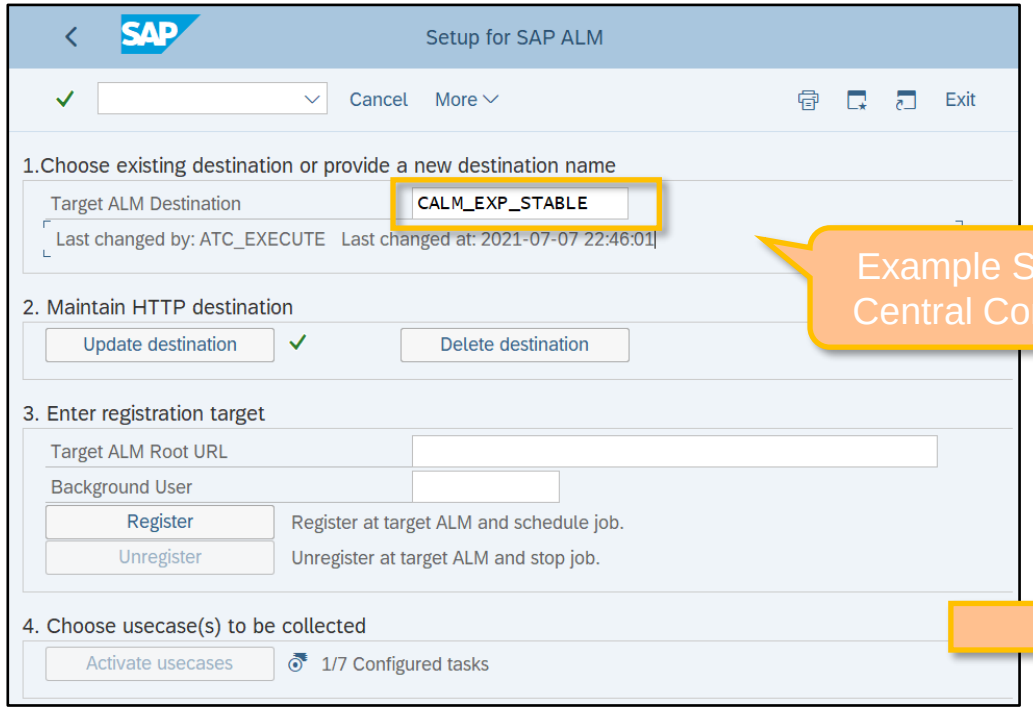
Setup

- In the sending service, data push configuration needs to be done as documented in [Expert Portal]

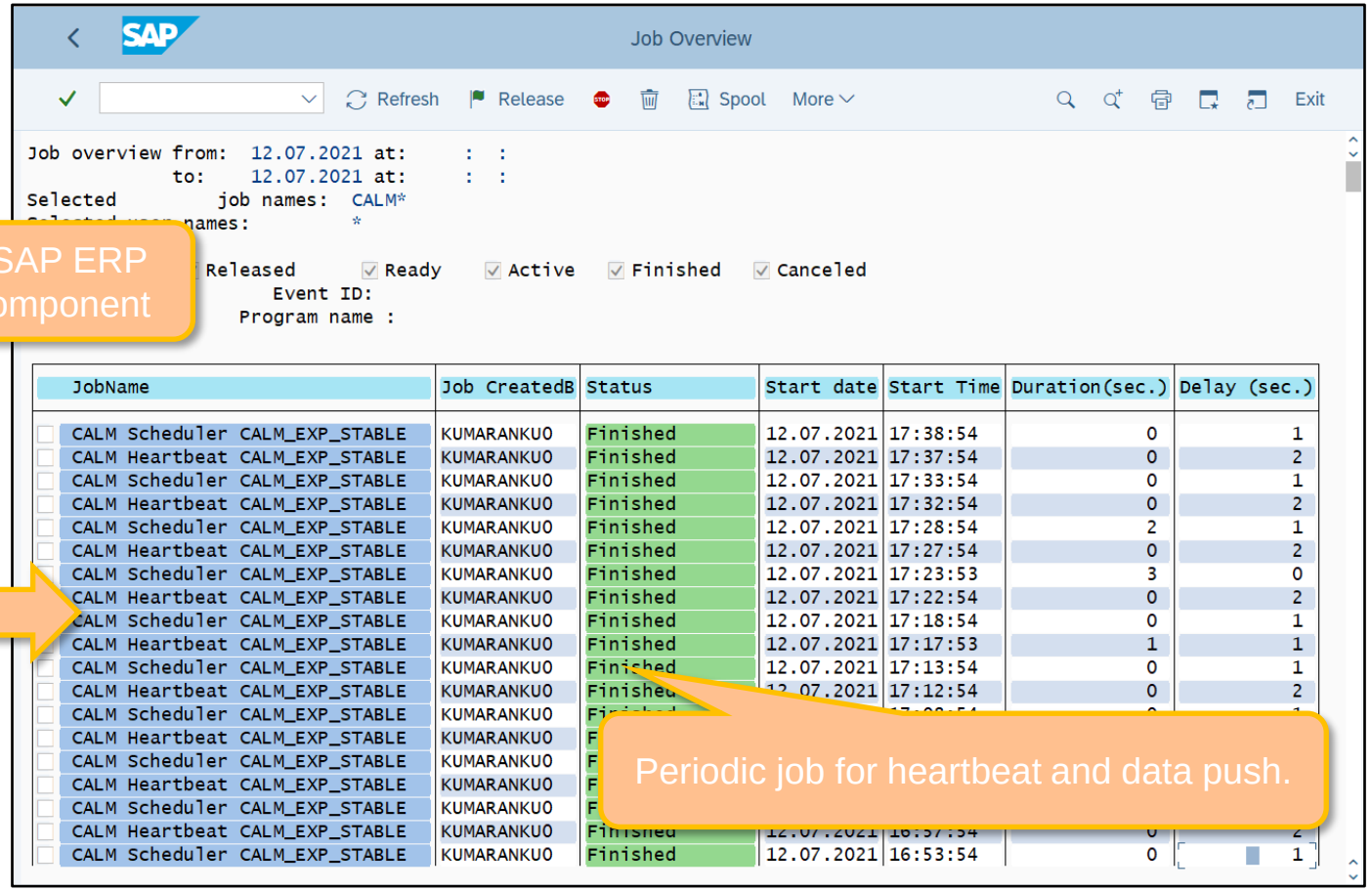




Configuration of Data Push in SAP ERP Central Component
via Report /SDF/ALM_SETUP



Example SAP ERP Central Component



Periodic job for heartbeat and data push.

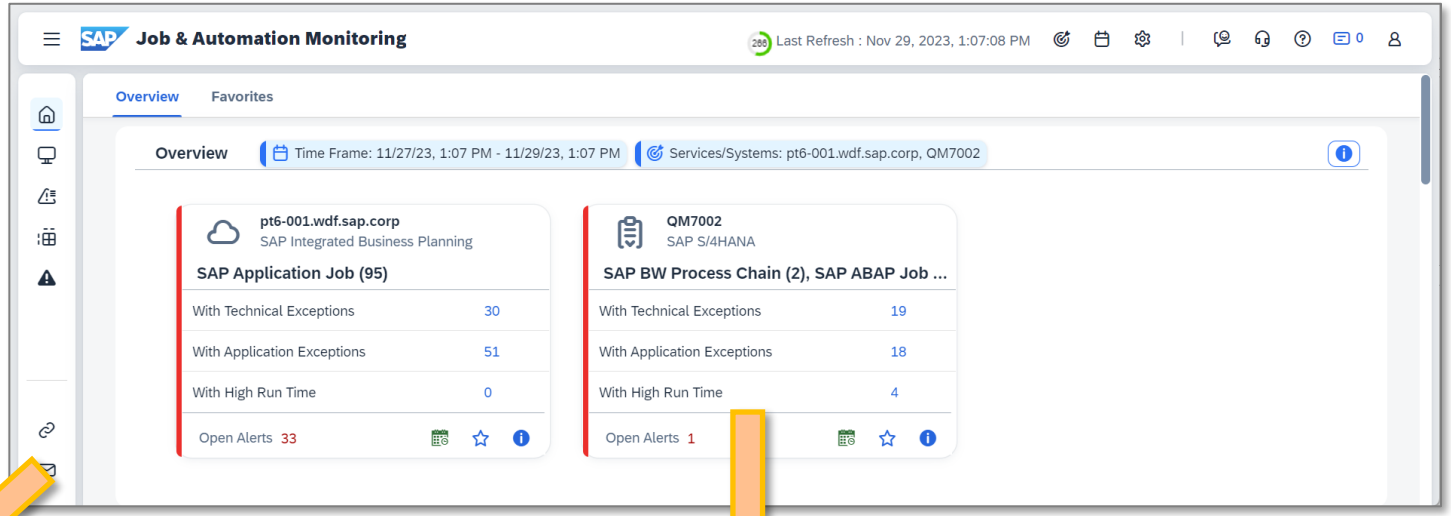
Details here:
https://support.sap.com/en/alm/sap-cloud-alm/operations/expert-portal/setup-managed-services/setup-abap.html

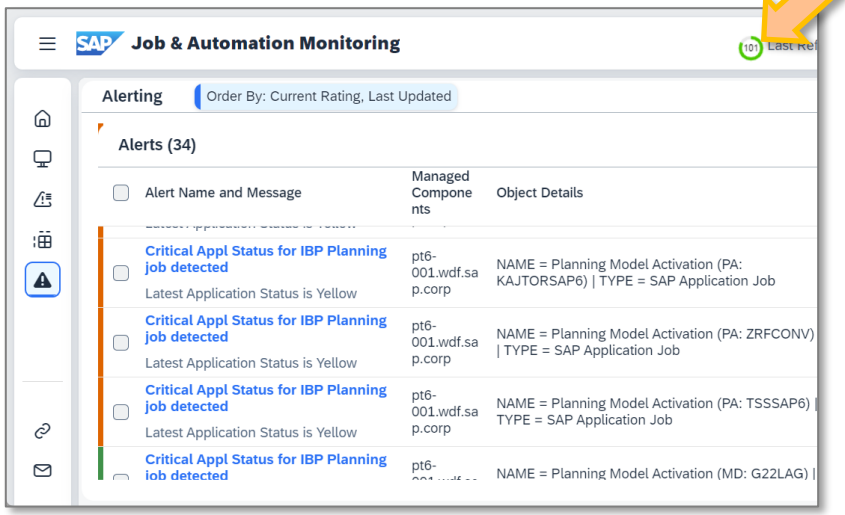
Job & Automation Monitoring in SAP Cloud ALM:
Using the Application

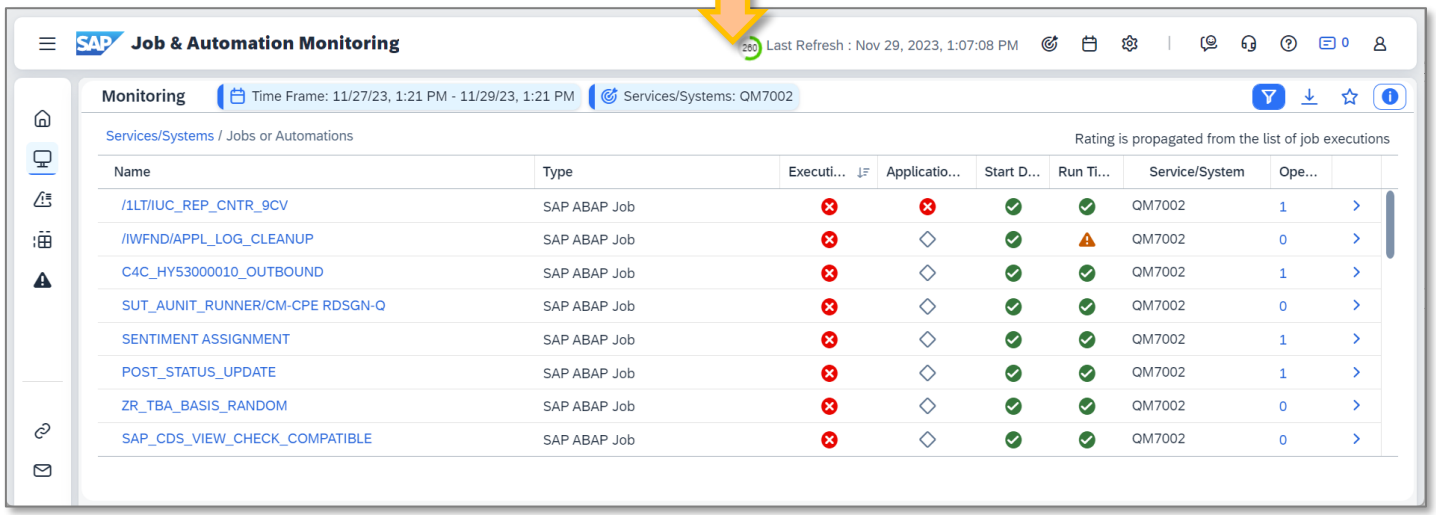
Using Job & Automation Monitoring in SAP Cloud ALM (1/9)

Get overview on overall job situation

- Overview provides information on the job and automation status of every service in your scope
- You can drill down into
  - the list of jobs
  - the list of alert situations for the service



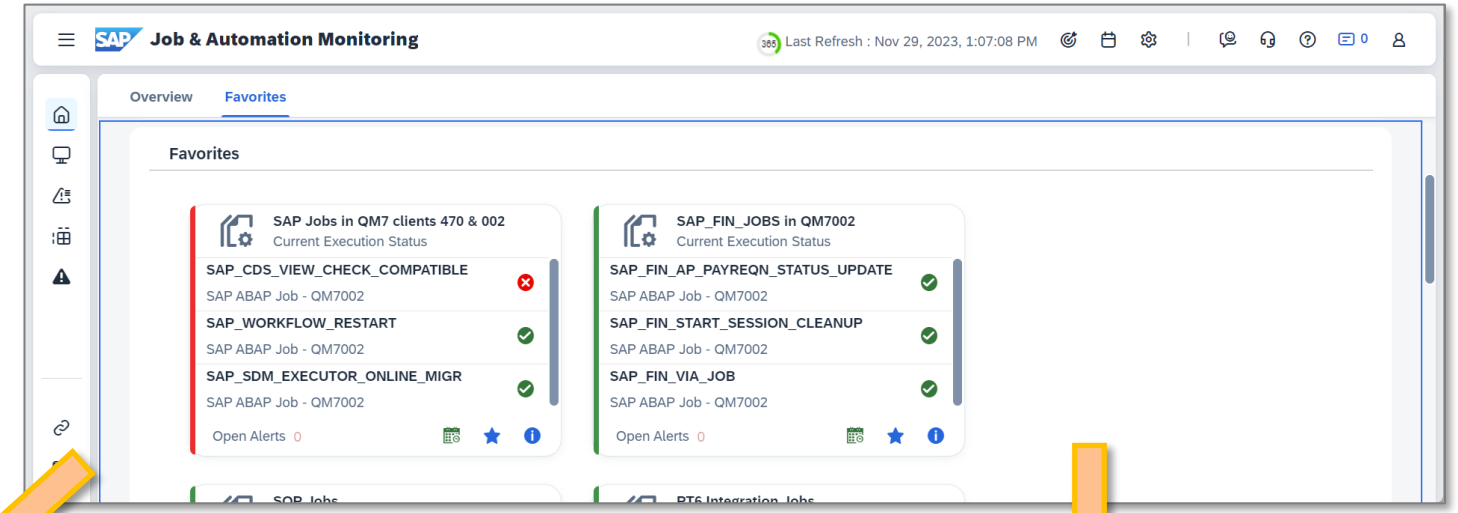


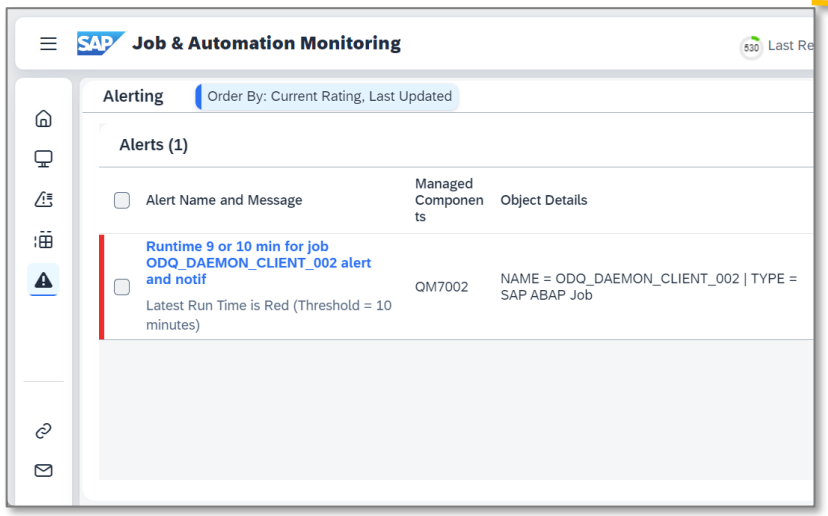


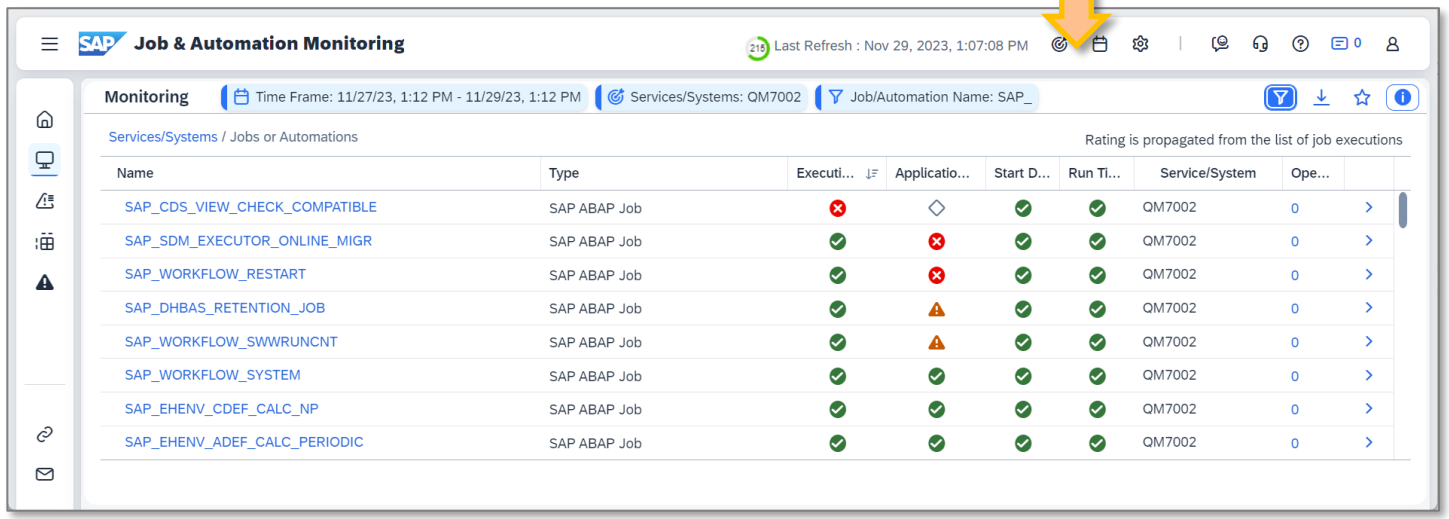
Using Job & Automation Monitoring in SAP Cloud ALM (2/9)

Get overview on specified jobs situation

- Via Favorites you can get summary information on jobs and automations that you have specified
- You can drill down into
  - the list of jobs
  - the list of alert situations for the jobs



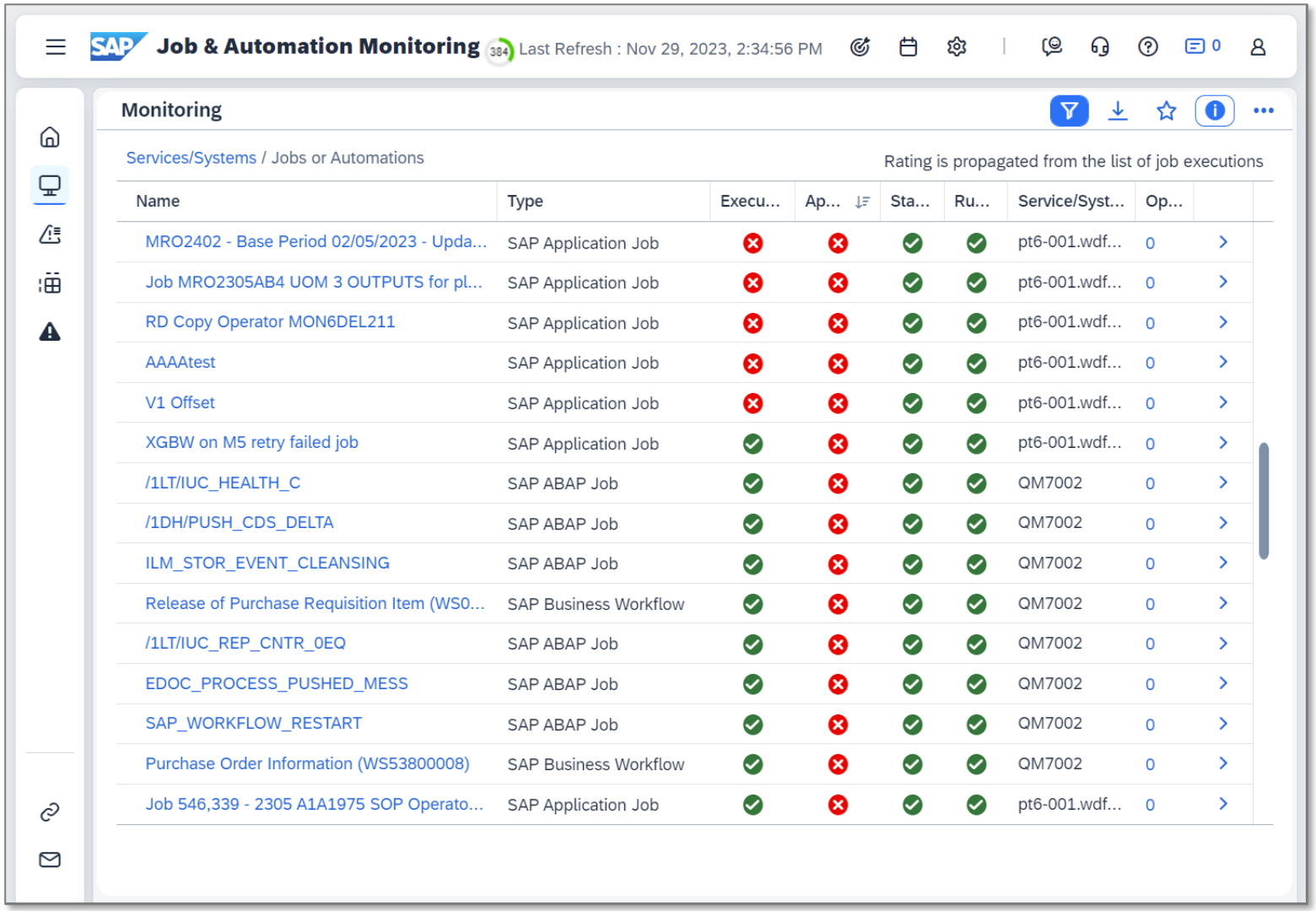




Using Job & Automation Monitoring in SAP Cloud ALM (3/9)

Get status of jobs for services in scope

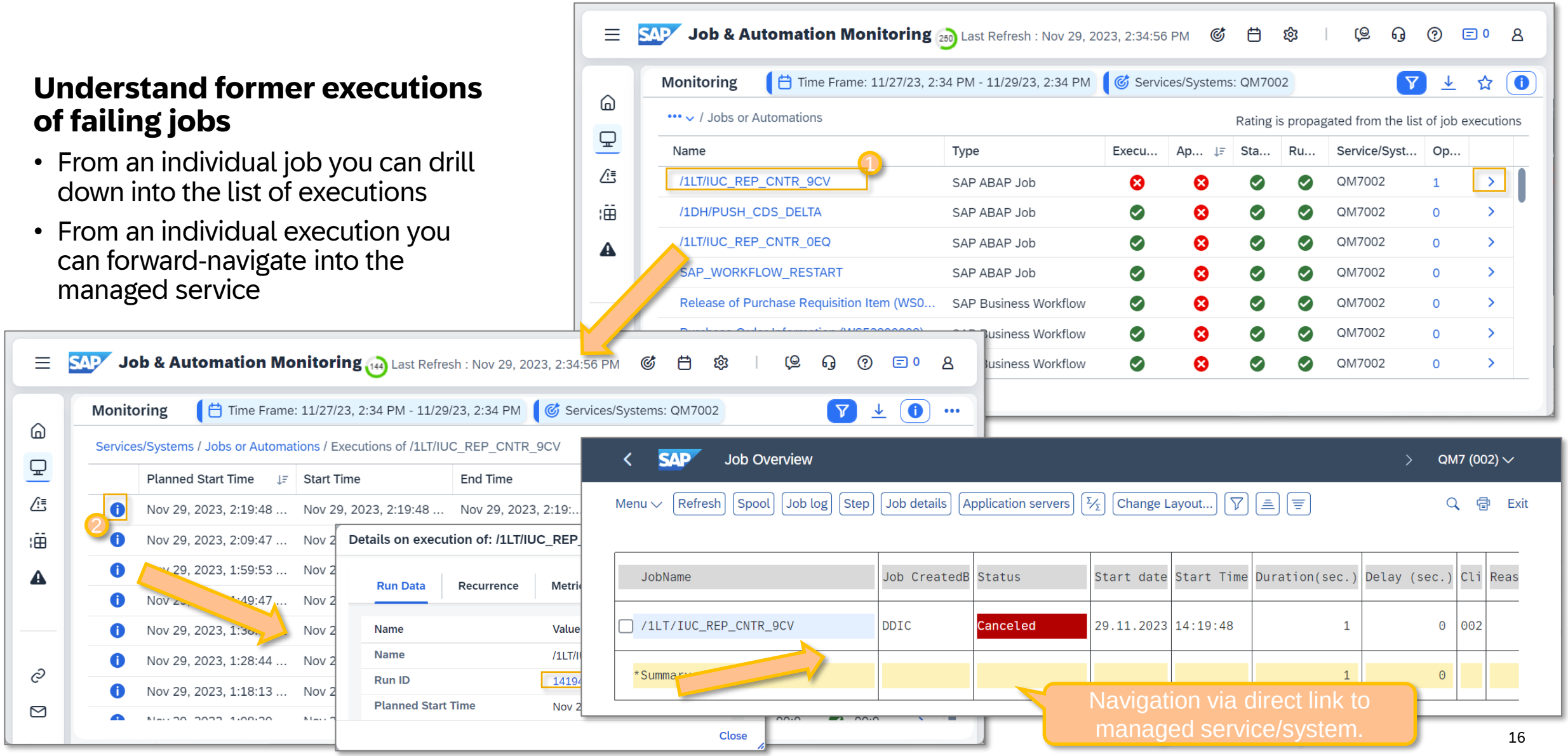
- Monitoring provides information on the job and automation situation for the services in scope
- Job executions are grouped and every job is rated based on its latest execution regarding
  - Execution Status
  - Application Status
  - Start Delay
  - Run Time
- The list of jobs is sorted by default on Execution Status
- For every job
  - it is indicated, if there is an open alert
  - You can drill down into the related executions



Using Job & Automation Monitoring in SAP Cloud ALM (4/9)

Understand former executions of failing jobs

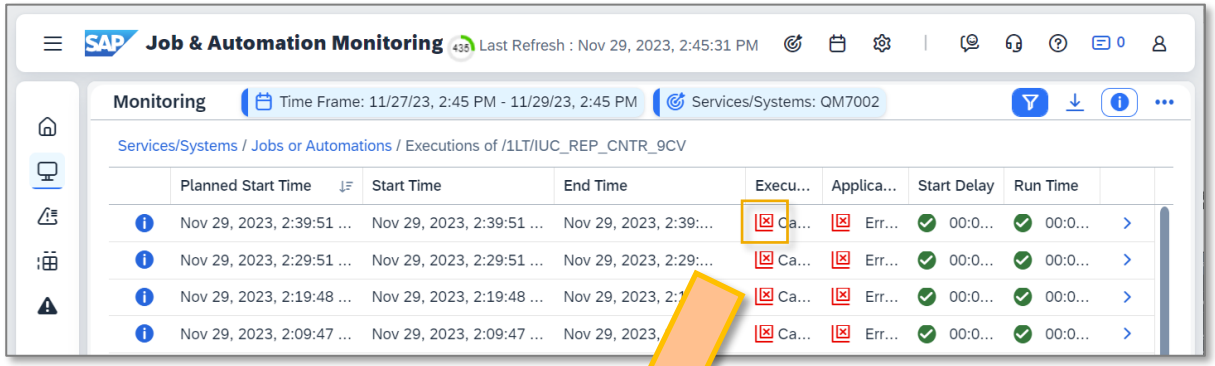
- From an individual job you can drill down into the list of executions
- From an individual execution you can forward-navigate into the managed service

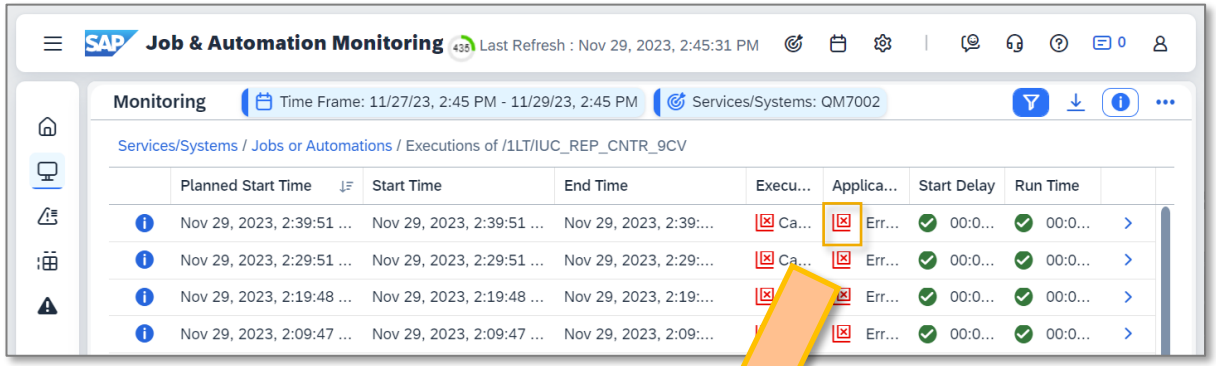


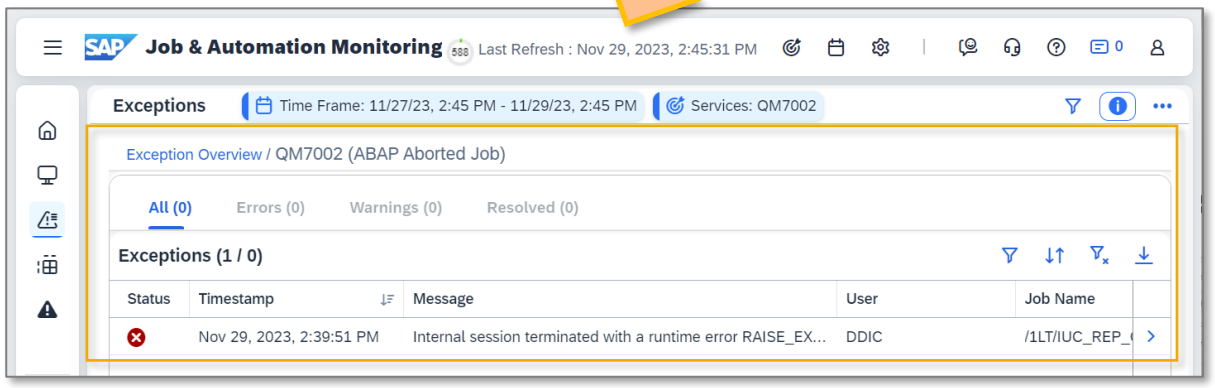
Using Job & Automation Monitoring in SAP Cloud ALM (5/9)

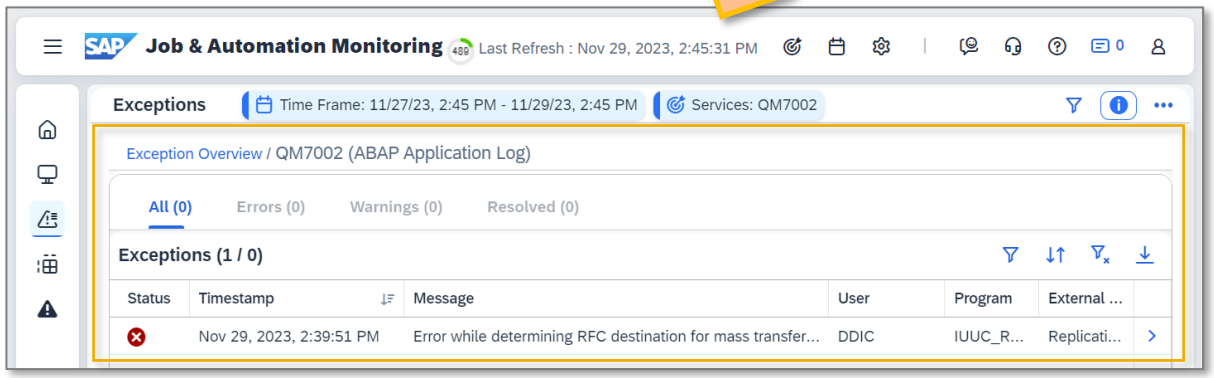
Understand exception details for ABAP jobs (from Job Log and Application Log)

- From an individual job you can drill down into the list of exceptions









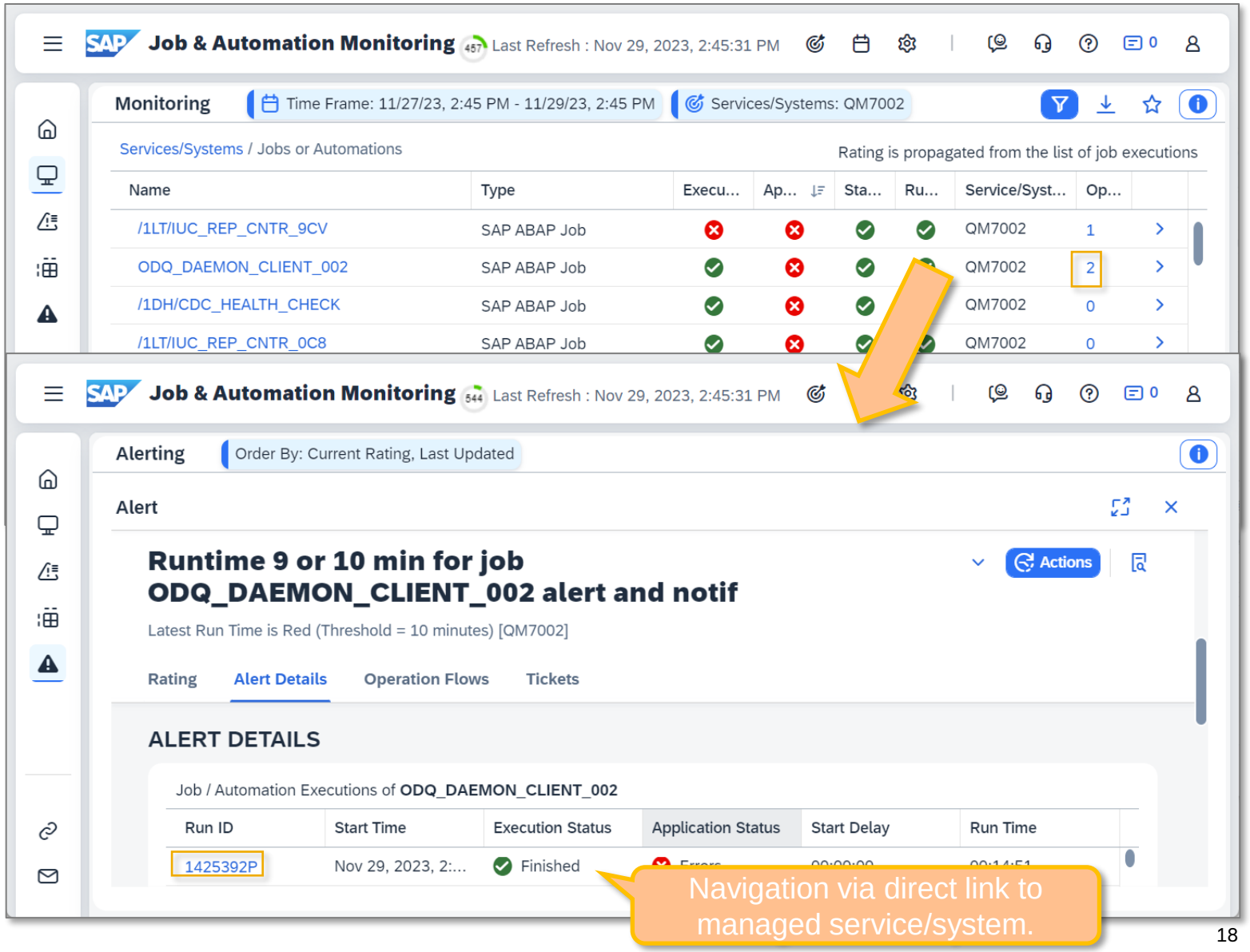
Using Job & Automation Monitoring in SAP Cloud ALM (6/9)

Get alerted on failing job executions

- Alerting is offered for all metrics:
  - Execution Status
  - Application Status
  - Start Delay
  - Run Time

- In Monitoring view
  - you can see, if there are open alerts for services or jobs
  - you can drill down to the alert into the Alerting view

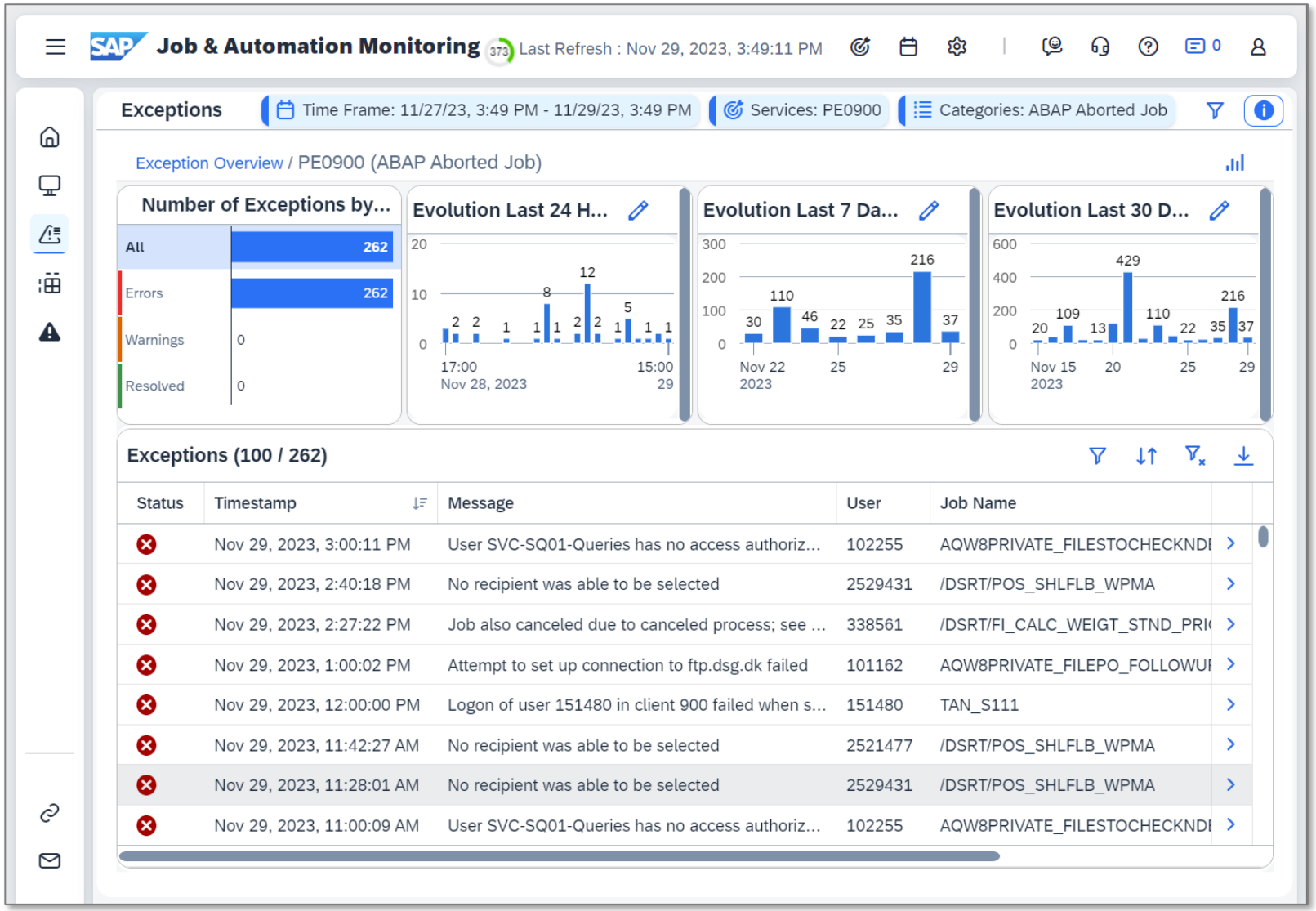
- From the alert you can forward navigate into the managed service like from the monitoring application



Using Job & Automation Monitoring in SAP Cloud ALM (7/9)

Analyze Exceptions

- Analytical information is offered regarding:
  - Number of exceptions
  - Exceptions of type Error
  - Exceptions of type Warning



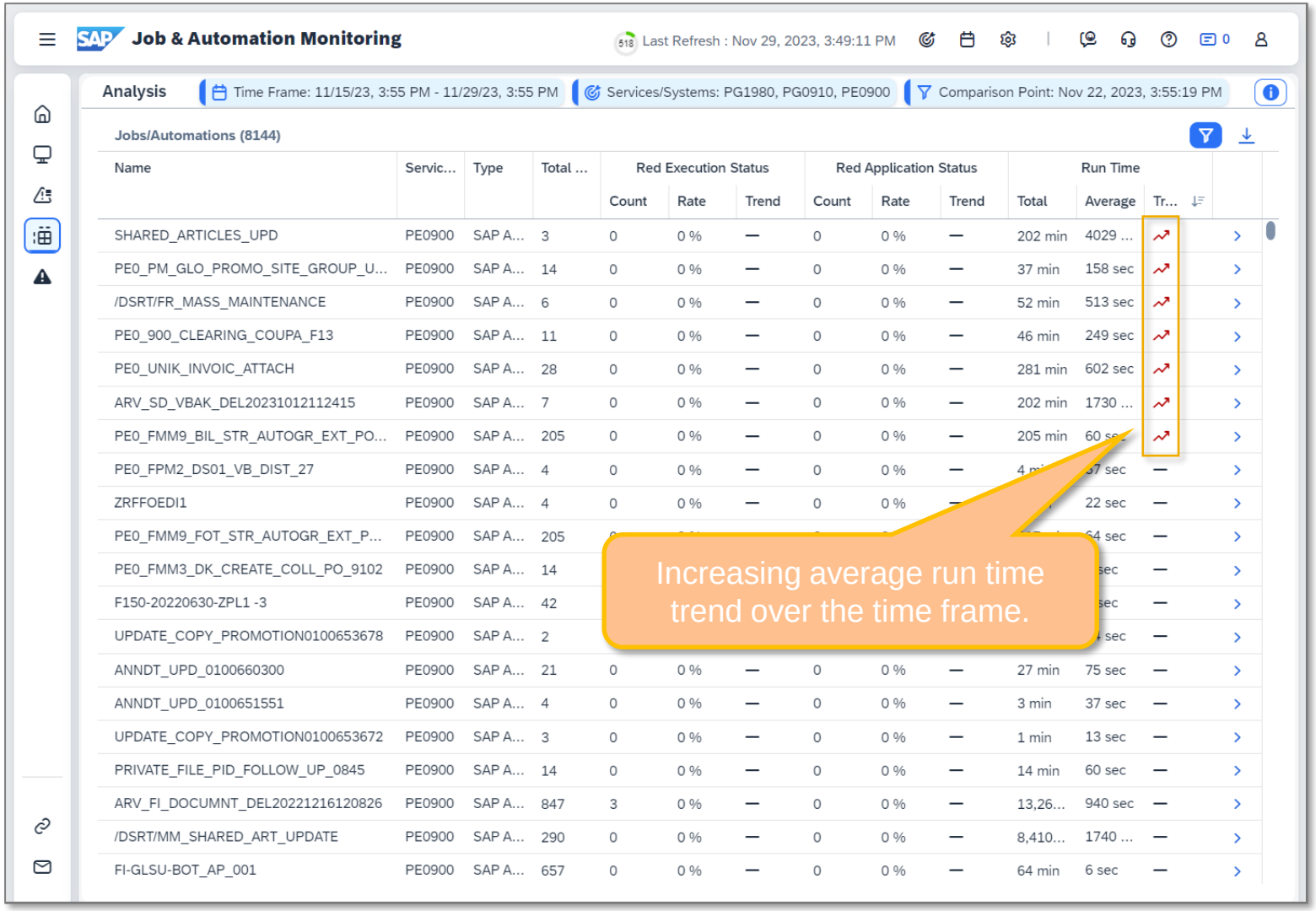
Using Job & Automation Monitoring in SAP Cloud ALM (8/9)

Analyze Runtime and Failures

- Analytical information is offered regarding:
  - Number of executions
  - Red Execution status
  - Red Application Status
  - Run Time

- In the table view you can find out which job or automation had
  - Most executions
  - Most failures
  - Highest overall run time
  - Highest average run time
  - Bad Runtime/Failure Rate trend

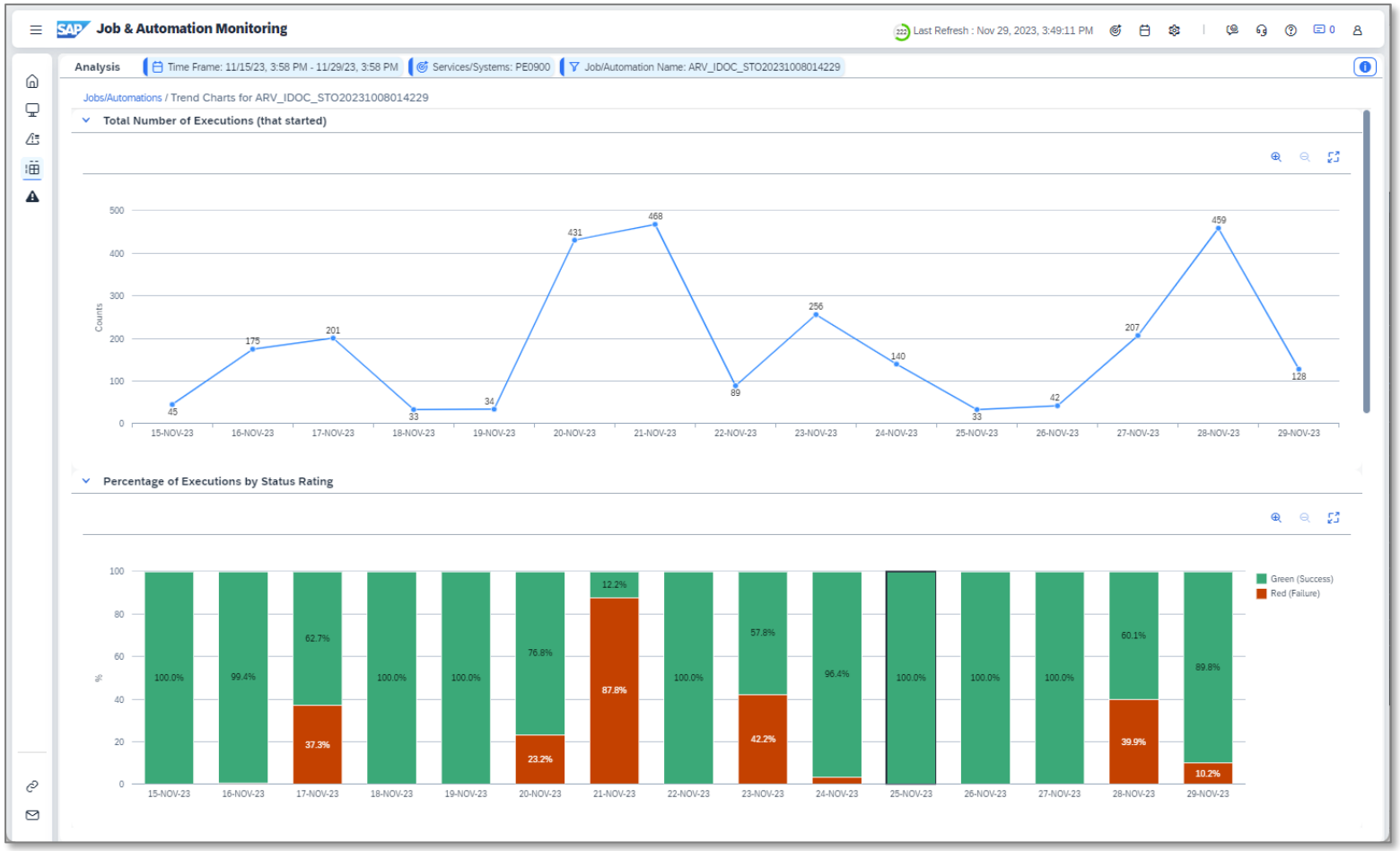
- In the table view you can filter for specific jobs and services



Using Job & Automation Monitoring in SAP Cloud ALM (9/9)

Analyze Runtime and Failure Trends

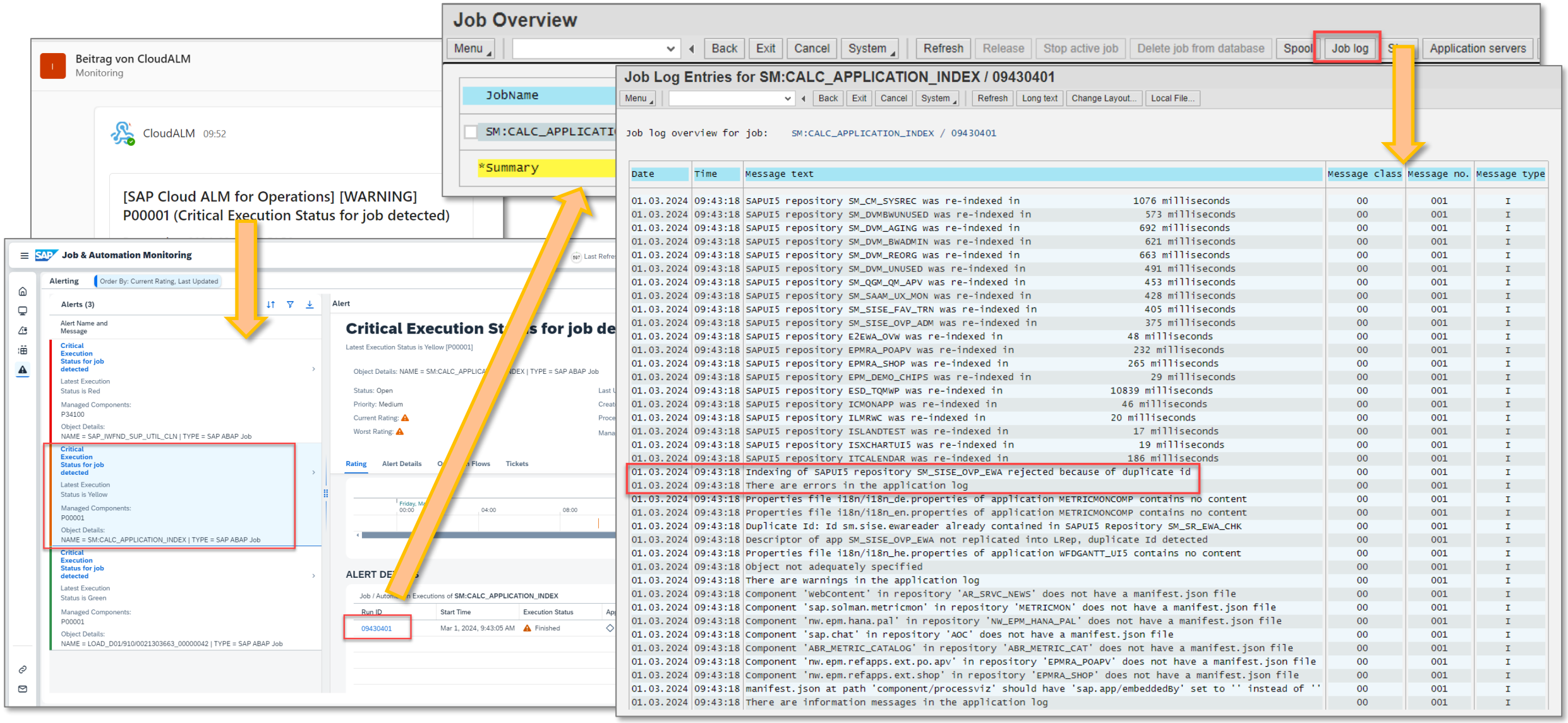
- After identifying jobs or automations which have high runtimes or failure rates or deteriorations in a given time frame you can drill down into trend reporting and see the trend on:
  - Total Number of Executions
  - Executions by Executions Status Rating
  - Total Number of Executions with Red Executions Status
  - Total Run Time of Executions
  - Average Run Time of Executions



Job & Automation Monitoring in SAP Cloud ALM:
Some Example Use cases

Navigate seamlessly from MS Teams to failed execution in Managed System

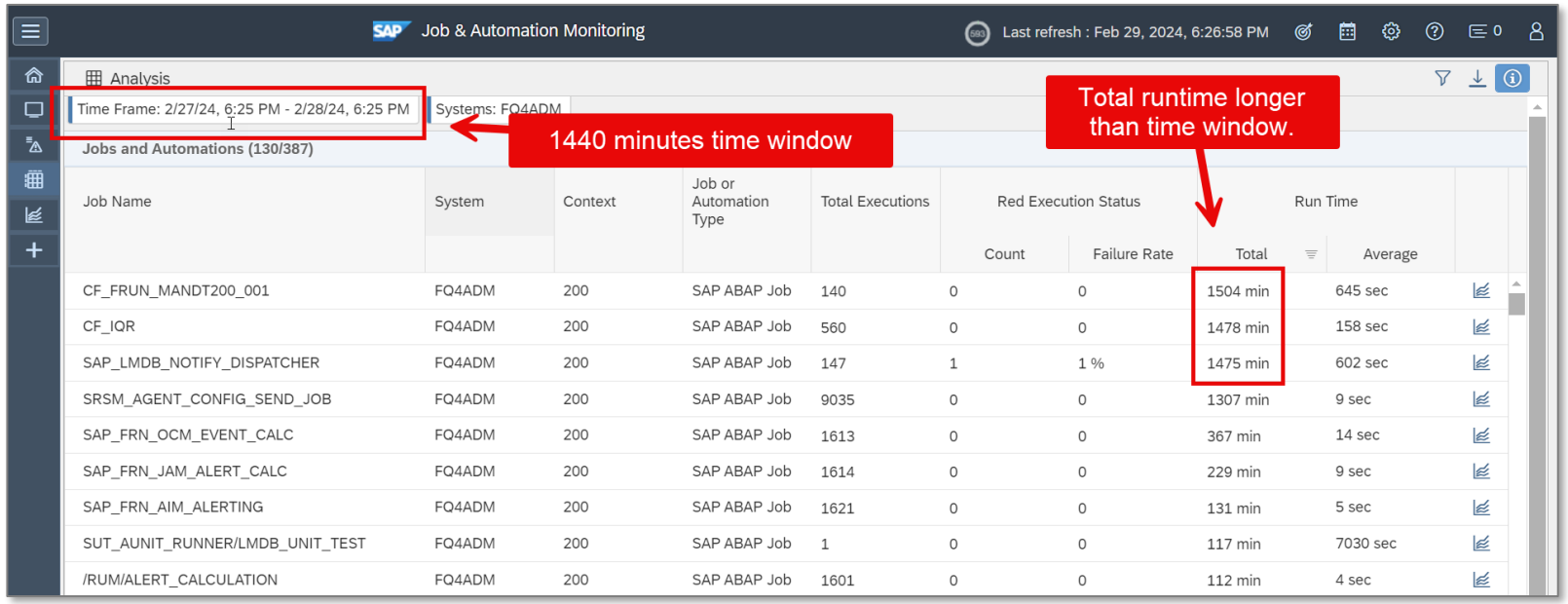
Job produced warning in Job Log and Errors in Application Log, which would have been undetected.



Date	Time	Message text	Message class	Message no.	Message type
01.03.2024	09:43:18	SAPUI5 repository SM_CM_SYSREC was re-indexed in 1076 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository SM_DVMBWUNUSED was re-indexed in 573 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository SM_DVM_AGING was re-indexed in 692 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository SM_DVM_BWADMIN was re-indexed in 621 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository SM_DVM_REORG was re-indexed in 663 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository SM_DVM_UNUSED was re-indexed in 491 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository SM_QGM_QM_APV was re-indexed in 453 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository SM_SAAM_UX_MON was re-indexed in 428 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository SM_SISE_FAV_TRN was re-indexed in 405 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository SM_SISE_OVP_ADM was re-indexed in 375 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository E2EWA_OVW was re-indexed in 48 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository EPMRA_POAPV was re-indexed in 232 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository EPMRA_SHOP was re-indexed in 265 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository EPM_DEMO_CHIPS was re-indexed in 29 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository ESD_TQMWP was re-indexed in 10839 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository ICMONAPP was re-indexed in 46 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository ILMRWC was re-indexed in 20 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository ISLANDTEST was re-indexed in 17 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository ISXCHARTUI5 was re-indexed in 19 milliseconds	00	001	I
01.03.2024	09:43:18	SAPUI5 repository ITCALENDAR was re-indexed in 186 milliseconds	00	001	I
01.03.2024	09:43:18	Indexing of SAPUI5 repository SM_SISE_OVP_EWA rejected because of duplicate id	00	001	I
01.03.2024	09:43:18	There are errors in the application log	00	001	I
01.03.2024	09:43:18	Properties file i18n/i18n_de.properties of application METRICMONCOMP contains no content	00	001	I
01.03.2024	09:43:18	Properties file i18n/i18n_en.properties of application METRICMONCOMP contains no content	00	001	I
01.03.2024	09:43:18	Duplicate Id: Id sm.sise.ewareader already contained in SAPUI5 Repository SM_SR_EWA_CHK	00	001	I
01.03.2024	09:43:18	Descriptor of app SM_SISE_OVP_EWA not replicated into LRep, duplicate Id detected	00	001	I
01.03.2024	09:43:18	Properties file i18n/i18n_he.properties of application WFDGANTT_UI5 contains no content	00	001	I
01.03.2024	09:43:18	object not adequately specified	00	001	I
01.03.2024	09:43:18	There are warnings in the application log	00	001	I
01.03.2024	09:43:18	Component 'webContent' in repository 'AR_SRVC_NEWS' does not have a manifest.json file	00	001	I
01.03.2024	09:43:18	Component 'sap.solman.metricmon' in repository 'METRICMON' does not have a manifest.json file	00	001	I
01.03.2024	09:43:18	Component 'nw.epm.hana.pal' in repository 'NW_EPM_HANA_PAL' does not have a manifest.json file	00	001	I
01.03.2024	09:43:18	Component 'sap.chat' in repository 'AOC' does not have a manifest.json file	00	001	I
01.03.2024	09:43:18	Component 'ABR_METRIC_CATALOG' in repository 'ABR_METRIC_CAT' does not have a manifest.json file	00	001	I
01.03.2024	09:43:18	Component 'nw.epm.refapps.ext.po.apv' in repository 'EPMRA_POAPV' does not have a manifest.json file	00	001	I
01.03.2024	09:43:18	Component 'nw.epm.refapps.ext.shop' in repository 'EPMRA_SHOP' does not have a manifest.json file	00	001	I
01.03.2024	09:43:18	manifest.json at path 'component/processviz' should have 'sap.app/embeddedBy' set to '' instead of ''	00	001	I
01.03.2024	09:43:18	There are information messages in the application log	00	001	I

Detect jobs that start to block work processes

If total job runtime is longer than time window selected, issues due to unwanted parallel processing might occur.



Job Name	System	Context	Job or Automation Type	Total Executions	Red Execution Status		Run Time	
					Count	Failure Rate	Total	Average
CF_FRUN_MANDT200_001	FQ4ADM	200	SAP ABAP Job	140	0	0	1504 min	645 sec
CF_IQR	FQ4ADM	200	SAP ABAP Job	560	0	0	1478 min	158 sec
SAP_LMDB_NOTIFY_DISPATCHER	FQ4ADM	200	SAP ABAP Job	147	1	1 %	1475 min	602 sec
SRSM_AGENT_CONFIG_SEND_JOB	FQ4ADM	200	SAP ABAP Job	9035	0	0	1307 min	9 sec
SAP_FRN_OCM_EVENT_CALC	FQ4ADM	200	SAP ABAP Job	1613	0	0	367 min	14 sec
SAP_FRN_JAM_ALERT_CALC	FQ4ADM	200	SAP ABAP Job	1614	0	0	229 min	9 sec
SAP_FRN_AIM_ALERTING	FQ4ADM	200	SAP ABAP Job	1621	0	0	131 min	5 sec
SUT_AUNIT_RUNNER/LMDB_UNIT_TEST	FQ4ADM	200	SAP ABAP Job	1	0	0	117 min	7030 sec
/RUM/ALERT_CALCULATION	FQ4ADM	200	SAP ABAP Job	1601	0	0	112 min	4 sec

JobName	Job CreatedB	Status	Start date	Start Time	Duration(sec.)	Delay	Cli
CF_FRUN_MANDT200_001	FRN_BTC_CSA	Finished	27.02.2024	18:25:40	2	0	200
CF_FRUN_MANDT200_001	FRN_BTC_CSA	Finished	27.02.2024	18:25:42	4.509	0	200
CF_FRUN_MANDT200_001	FRN_BTC_CSA	Finished	27.02.2024	18:25:44	2	0	200
CF_FRUN_MANDT200_001	FRN_BTC_CSA	Finished	27.02.2024	18:40:40	2	0	200
CF_FRUN_MANDT200_001	FRN_BTC_CSA	Finished	27.02.2024	18:55:40	2	0	200
CF_FRUN_MANDT200_001	FRN_BTC_CSA	Finished	27.02.2024	19:10:40	2	0	200
CF_FRUN_MANDT200_001	FRN_BTC_CSA	Finished	27.02.2024	19:25:40	2	0	200
CF_FRUN_MANDT200_001	FRN_BTC_CSA	Finished	27.02.2024	19:40:48	2	0	200
CF_FRUN_MANDT200_001	FRN_BTC_CSA	Finished	27.02.2024	19:40:50	4.493	0	200
CF_FRUN_MANDT200_001	FRN_BTC_CSA	Finished	27.02.2024	19:40:51	2	0	200
CF_FRUN_MANDT200_001	FRN_BTC_CSA	Finished	27.02.2024	19:55:41	2	1	200
CF_FRUN_MANDT200_001	FRN_BTC_CSA	Finished	27.02.2024	20:10:40	2	0	200

Layout was applied

FQ4 (2) 200

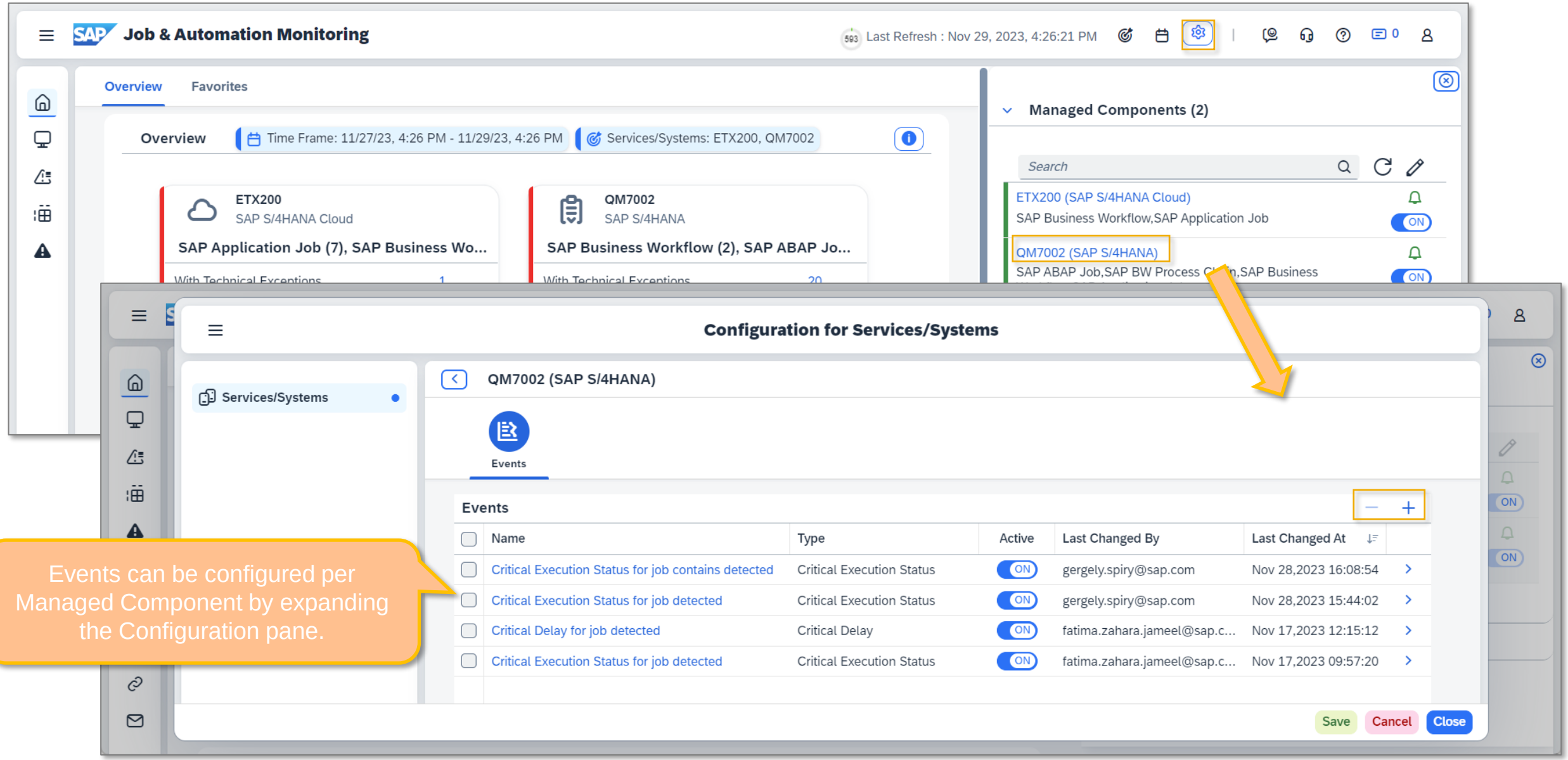
Not critical.

Detect jobs that start to block work processes

If total job runtime is longer than time window selected, issues due to unwanted parallel processing might occur.

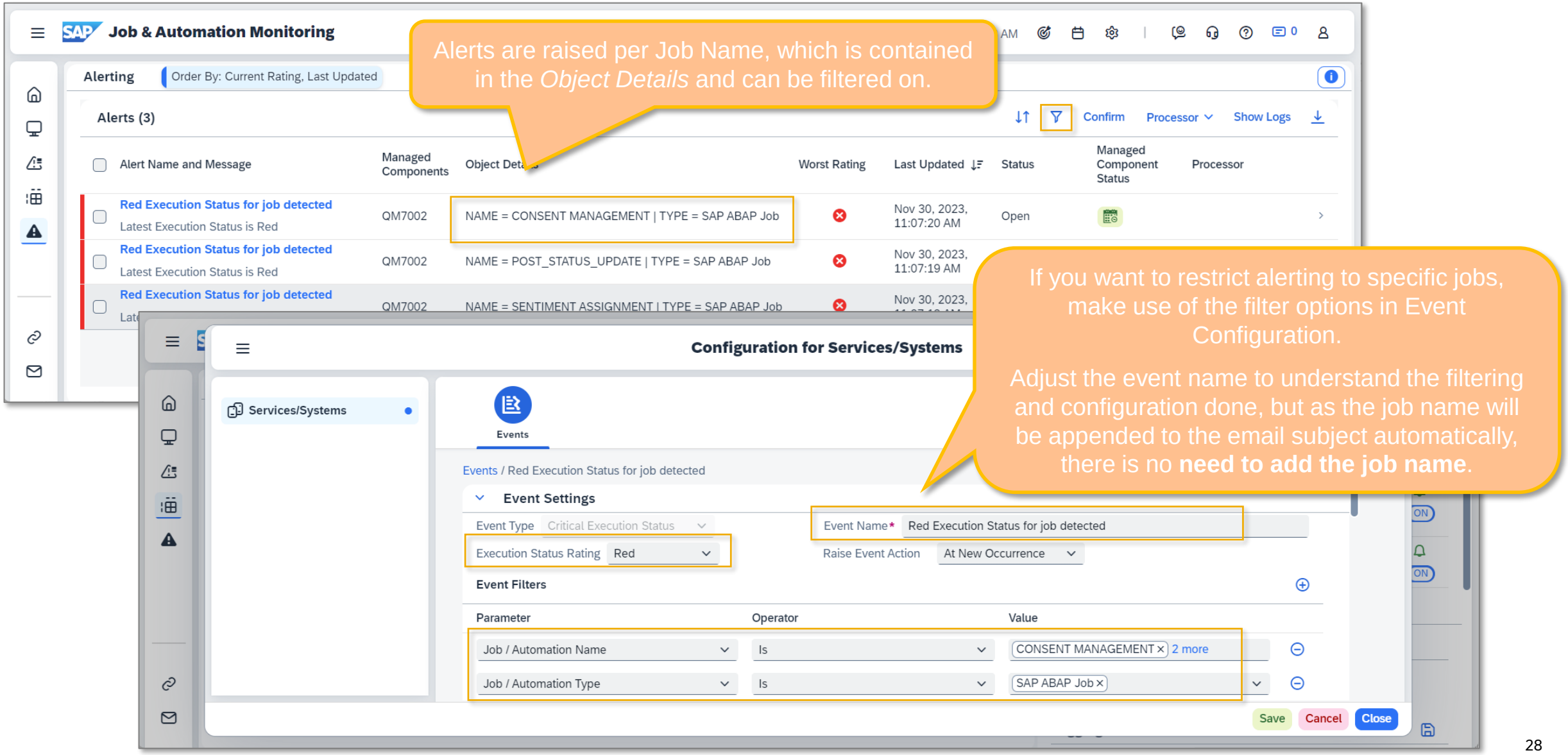
Job & Automation Monitoring in SAP Cloud ALM:
Configure Alerting

Configure Alerting in Job & Automation Monitoring

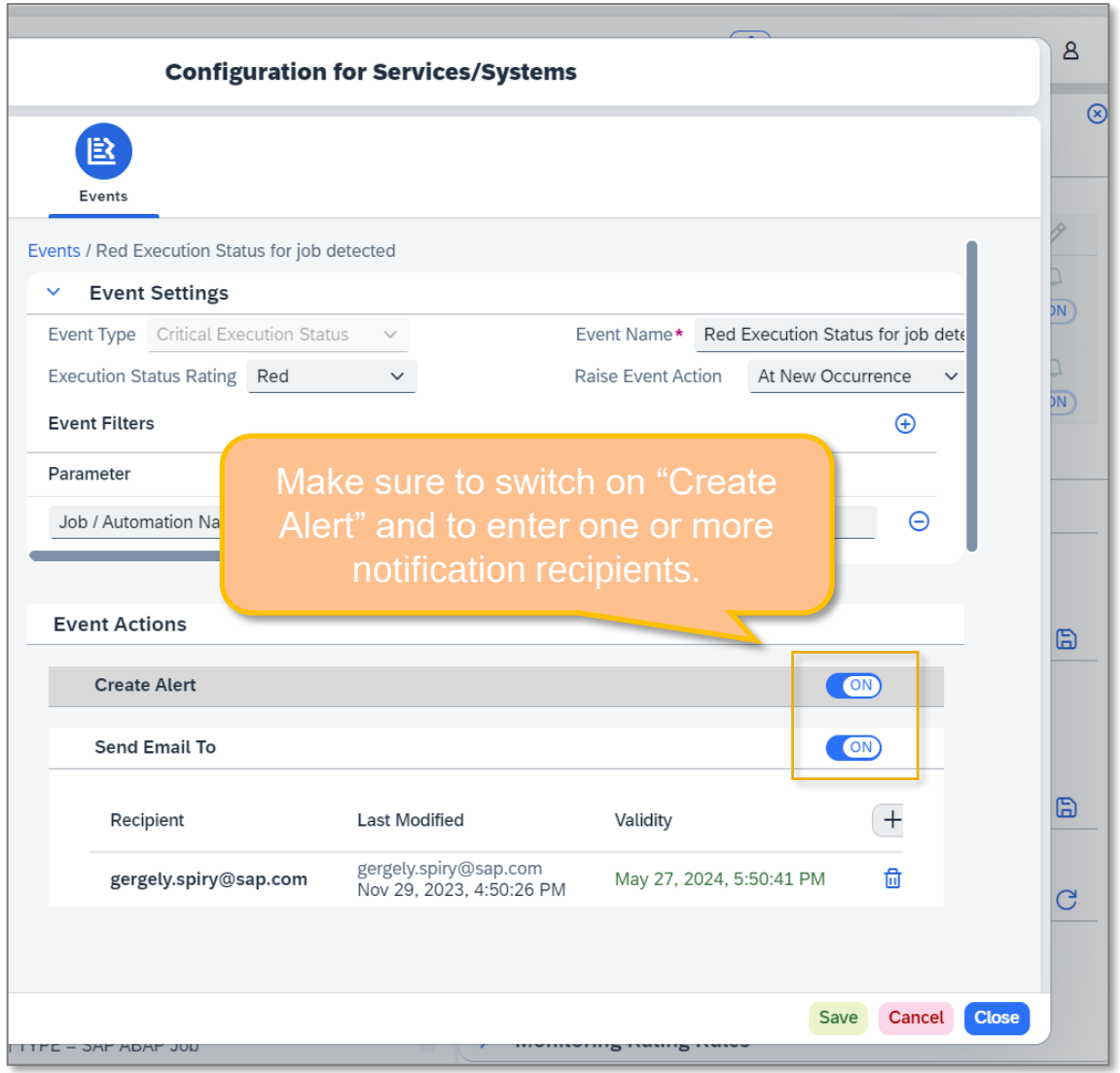


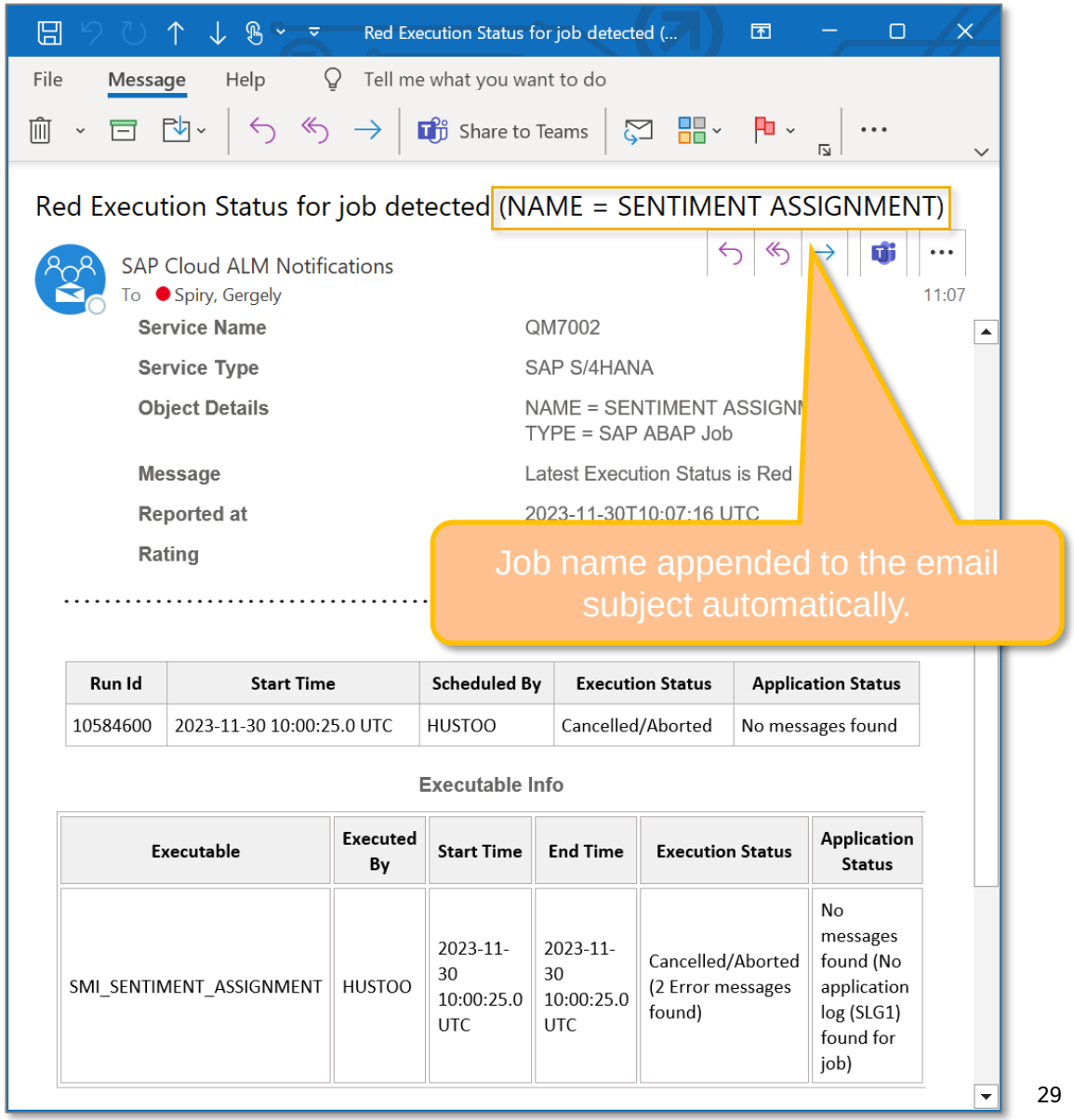
Events can be configured per Managed Component by expanding the Configuration pane.

Configure Alerting in Job & Automation Monitoring

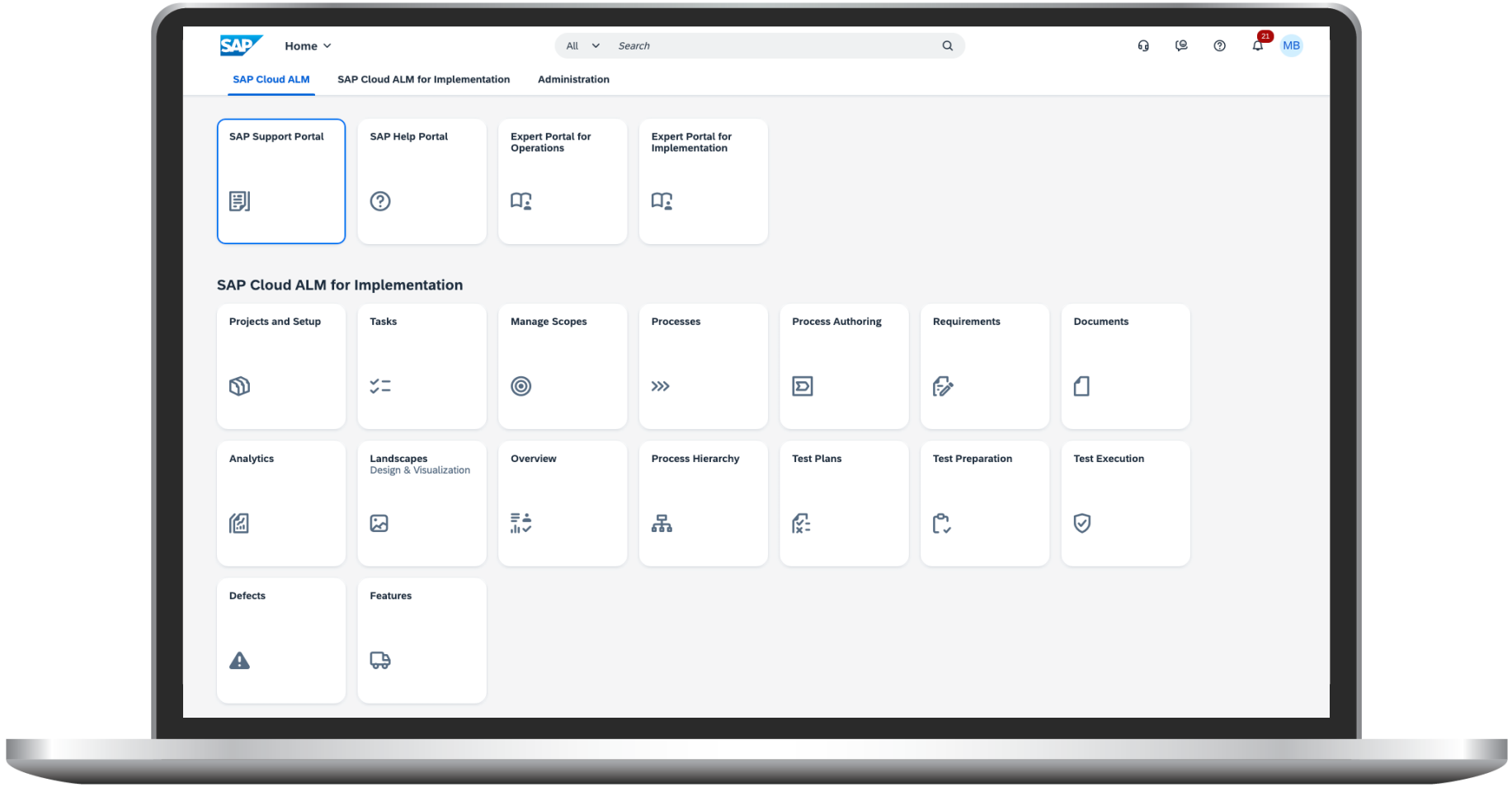


Configure Alerting in Job & Automation Monitoring





Live Demo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Test Preparation
Test Execution
Defects
Features

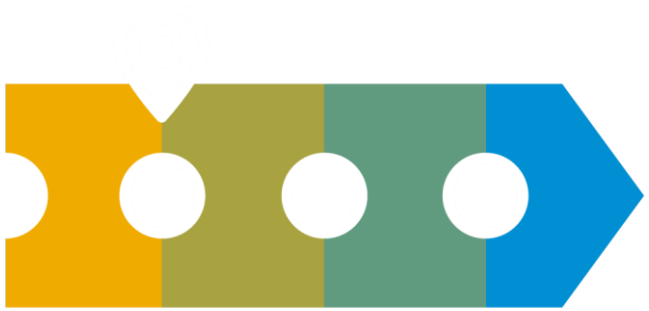
Job & Automation Monitoring
in SAP Cloud ALM

You learned:

- That the Job & Automation Monitoring helps to monitor the performance and availability of your automation processes
- The generic concept of the Job & Automation Monitoring application
- How to use Job & Automation Monitoring application
- How to use Analysis in Job & Automation Monitoring application
- How Exception Monitoring is integrated with Job & Automation Monitoring
- How to configure alerts and notifications in Job & Automation Monitoring

We now give you an outlook on the roadmap.

Availability & Roadmap



Available now (March 2024)

- Content: S/4HANA Cloud application jobs, Intelligent RPA jobs, SAP ABAP jobs (On-Premise), SAP BW Process Chains, SAP Build Process Automation Jobs, Business Workflow (in S4/HANA Cloud and On-Premise)
- Alerting and Notifications
- Job Exception Details (for SAP ABAP Jobs and SAP Intelligent RPA Jobs)
- Analytics and Trend Reporting
- SAP Cloud ALM Analytics of Job Monitoring data (e.g. for Grafana Consumption)

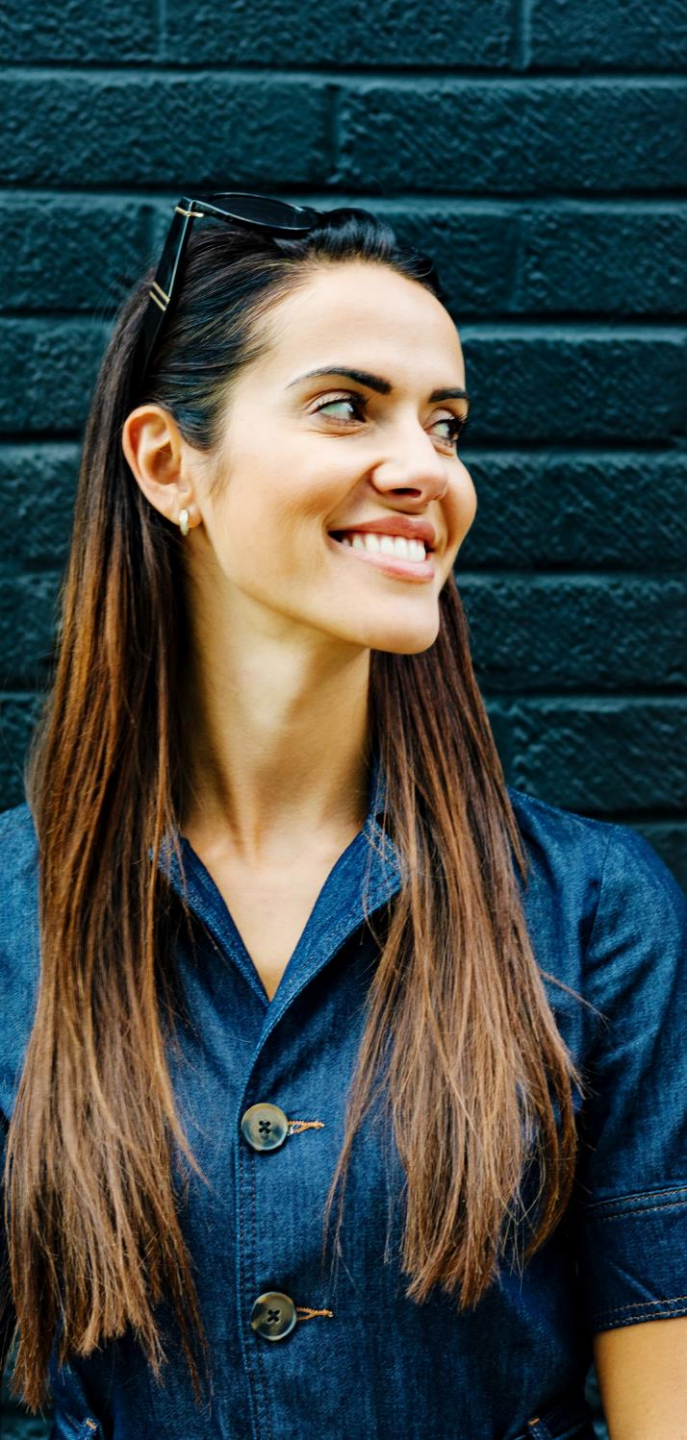
Continuous delivery of new content and functionality

In the course of 2024 we plan to offer*

- Content: Jobs of BTP applications (e.g. SAP Data Privacy Integration (cloud)), SAP Build Process Automation Processes, SAP Digital Manufacturing Processes
- Improved alerting capabilities (not only fixed thresholds)
- Improved integration with Exception Management

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

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



I need more capabilities in SAP Cloud ALM. “

SAP Continuous Influence for SAP Cloud ALM

Customers/partners submit requests → **Community** ranks via voting → **SAP** reviews and develops

Implementation

Available as of end of 2023!

Operations

Thank you.

Contact information:

Gergely Spiry
Product Owner Job & Automation Monitoring
gergely.spiry@sap.com

SAP Cloud ALM Mailing list
cloudalm@sap.com

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/viewer/product/CloudALM/2021-04-07/en-US?task=discover_task

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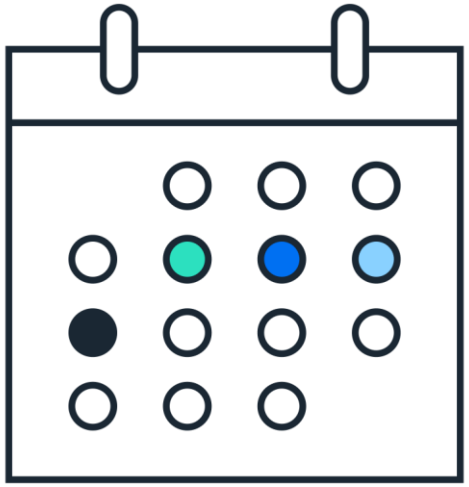
Additional Information

Upcoming ALM Events



MARCH

6-7	SAP S/4HANA Cloud & SAP Cloud ALM Partner Summit 2024 St. Leon-Rot
18-21	SAPinsider Conference Las Vegas

APRIL

24	What's New In SAP Cloud ALM for Implementation Q1/2024 Virtual
25	What's New In SAP Cloud ALM for Operations Q1/2024 Virtual

SAVE THE DATE

July 25-27	SAP ALM Summit APJ
Sept 24-27	SAP ALM Summit EMEA, Mannheim, Germany (notify me)

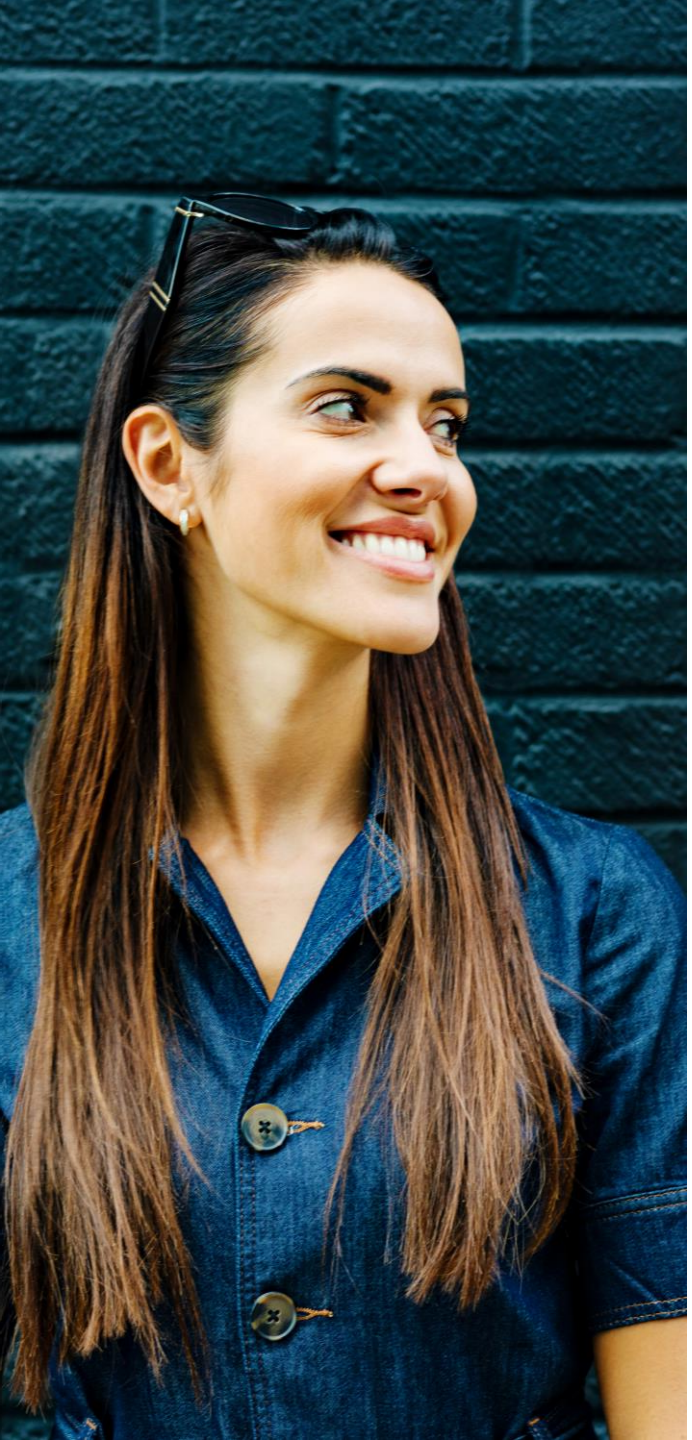
ALM Events Overview

Stay Updated: ALM Newsletter

Stay updated about the latest news in Application Lifecycle Management!

Register now for our monthly ALM newsletter here:

Register here



SAP Continuous Influence for SAP Cloud ALM

Customers/partners submit requests → **Community** ranks via voting → **SAP** reviews and develops

Implementation

Available today!

Operations

We will be back!

The next **SAP Community Call for SAP Cloud ALM Experts** will take place on

April 3rd, 4pm CET | 10am EST

The focus topic of this call will be **Implementation**

Register and / or save the date via SAP Community.

Q&A

Thank you.

Contact information:

ALM Customer Communications, SAP SE
cloudalm@sap.com

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