

IIS265

Business Process and Integration Monitoring with SAP Cloud ALM for Operation

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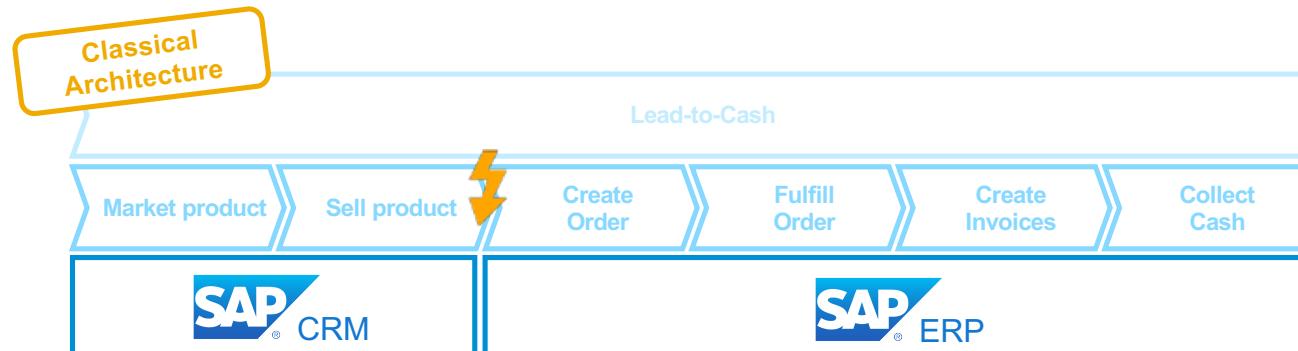
Agenda

SAP Cloud ALM for operations

Integration Monitoring

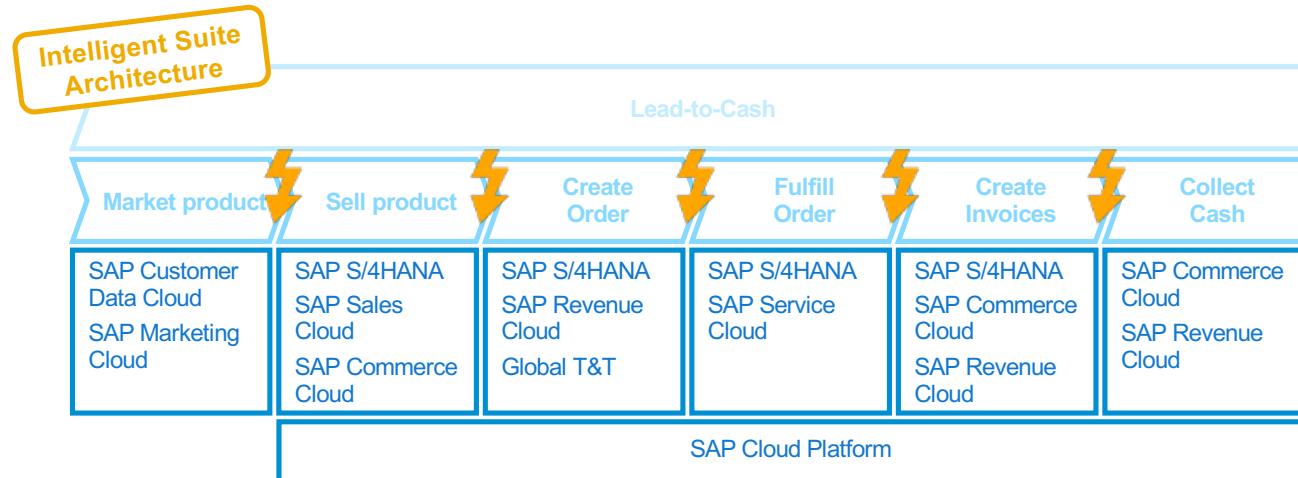
Business Process Monitoring

Why do we need a central operation platform for cloud centric landscapes?



With **SAP's Intelligent Suite** traditional SAP landscapes are transforming:

- Transform from a **monolithic to a multi-system & multi-service landscape**
- **Increased complexity to find and analyze issues** on business process, integration, user, and application/cloud service/system level
- Increased demands for **end-to-end monitoring** of business processes, integration, and users



Requested is transparency:

- To find and analyze anomalies and exceptions during business process execution → **Business Process Monitoring**
- To correct message flows and integration related exceptions → **Integration Monitoring**
- To diagnose performance of user scenarios → **Synthetic & Real User Monitoring**
- To understand healthiness of applications, cloud services, and systems → **Application Monitoring & Health Monitoring**

Different strategic operations platforms for different target groups

SAP Solution Manager



SAP Focused Run



SAP Cloud ALM



- Fully integrated ALM suite for **on-prem-centric medium and larger customers**
- Customers, who are **satisfied with the currently provided functional scope**
- Operations platform for **service providers and high end hybrid customers**
- Customers with advanced needs, which go **beyond SAP Solution Manager and SAP Cloud ALM**
- Fully integrated ALM suite for **cloud-centric small, medium and larger customers**
- Customers, who are requesting **standardized cloud based operation platform**

SAP Cloud ALM for Operations – Value Proposition

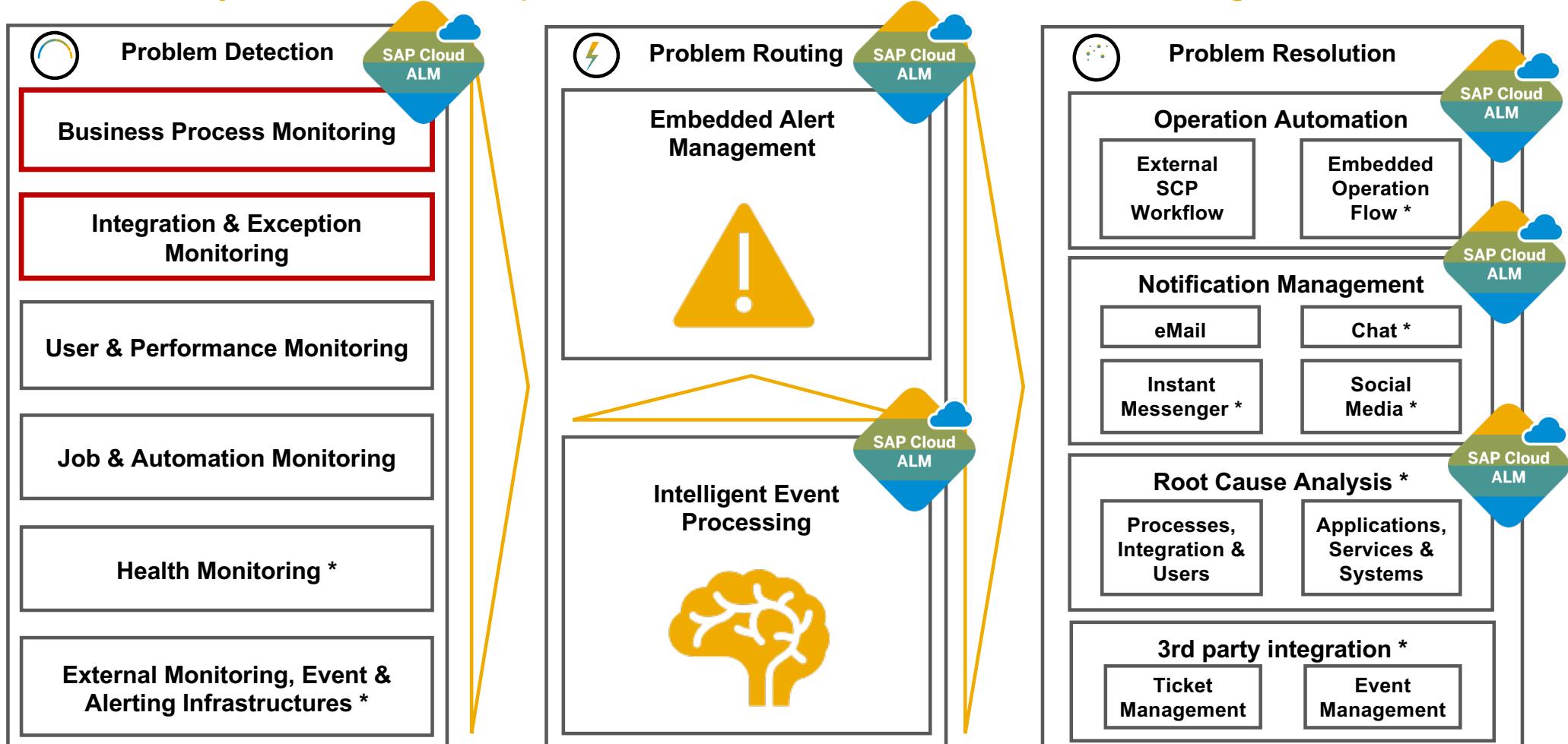
Ensure business continuity in your SAP landscape by monitoring and alerting - Increase operation efficiency by automating operational tasks - Avoid anomalies by proactive problem prediction

- SAP Cloud ALM empowers customers to **understand healthiness of SAP business solutions**:
 - Provides **full stack monitoring and alerting** covering business processes, integration, users, applications, and healthiness of cloud services and systems
 - Allows to conduct **root cause analysis** on technical as well as on business process level
 - Acts as **collaboration platform between LOB and IT**
- SAP Cloud ALM enables customer to increase operation efficiency by **automating corrective actions as well as regular operation tasks**
- SAP Cloud ALM helps to **predict anomalies in business process and application operation** by event correlation and learning out of the collected data (AIOPs)
- SAP Cloud ALM provides **transparency regarding availability of business services** including business downtimes, business events and business SLA's



Problem Management covered by SAP Cloud ALM

Detect, analyze and resolve problems based on full stack monitoring



Agenda

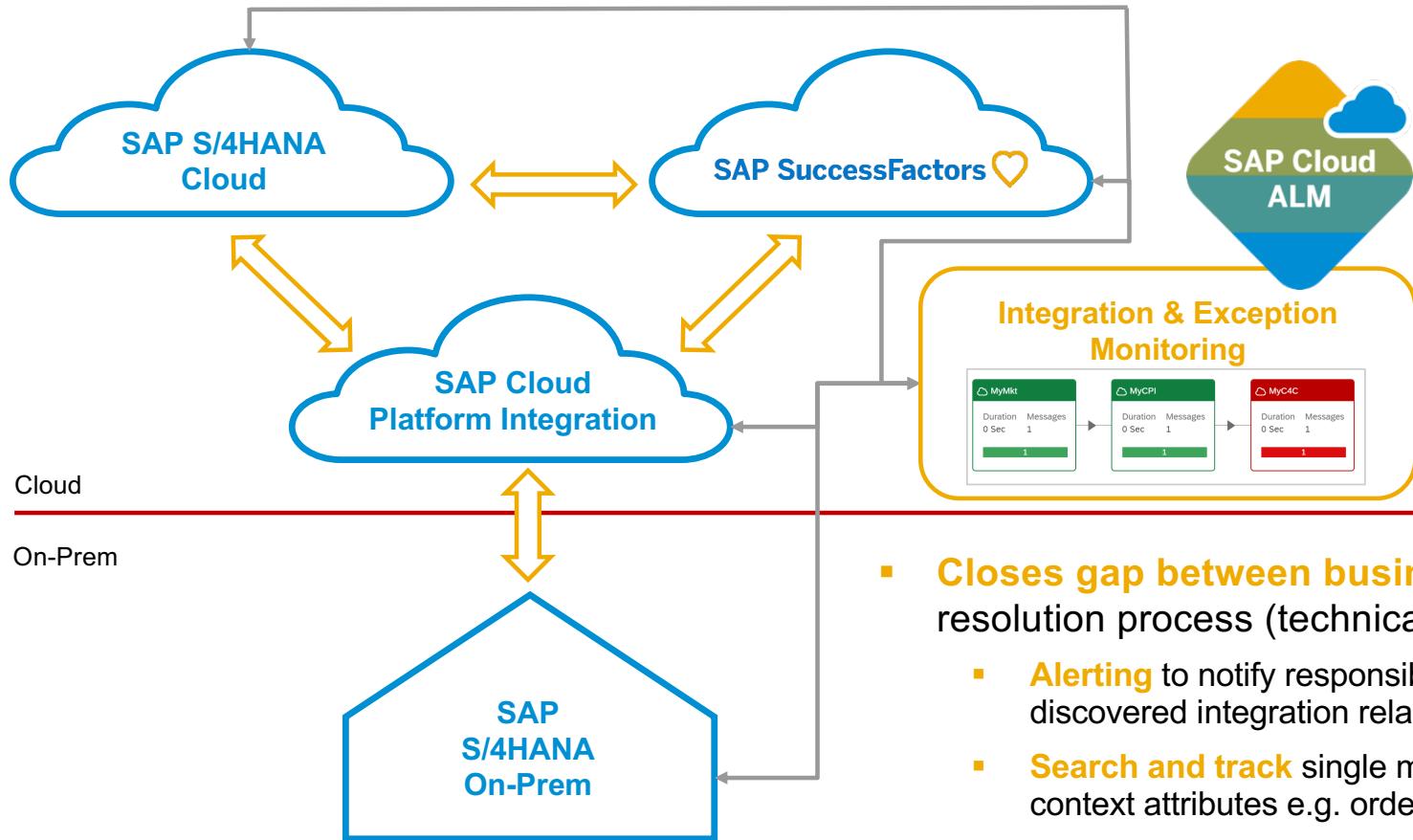
SAP Cloud ALM for operations

Integration Monitoring

Business Process Monitoring

Integration & Exception Monitoring

Ensures reliable data exchange between cloud services and on-prem 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**
- Support of **peer-to-peer interfaces** as well as **orchestrated integration**
- **Closes gap between business and IT** during problem resolution process (technical issue vs. business issue) by:
 - **Alerting** to notify responsible persons in business and IT about discovered integration related problems
 - **Search and track** single messages based on exposed business context attributes e.g. order numbers
 - **Operation automation** to trigger operation flows context sensitively for automated correction of problems

Integration & Exception Monitoring – Roadmap

May 2020	August 2020	Q4 2020*	Q1 2021*
Capabilities <ul style="list-style-type: none">▪ Monitoring of Message Flows and Exceptions, Tracking of Business Documents, and Embedded Alerting	Capabilities <ul style="list-style-type: none">▪ Push support for Exception Monitoring	Content – Integration Monitoring <ul style="list-style-type: none">▪ SAP S/4HANA Cloud, es▪ SAP Cloud for Customer▪ SAP CPI Content – Exception Monitoring <ul style="list-style-type: none">▪ SAP S/4HANA Cloud DRF + Asset Central▪ SAP CPI Deployment Failures▪ SAP Cloud Platform (Neo) Java Application Log Errors Alert Notifications▪ SAP Cloud Platform (CF) Alert Notifications▪ SAP SuccessFactors Execution Manager (Integration, Scheduled Jobs)	Content – Integration Monitoring <ul style="list-style-type: none">▪ SAP Marketing Cloud▪ SAP Concur (Add-On S/4HANA Cloud, es)▪ SAP SuccessFactors EC (Bank Master, Legal Entity) Content – Exception Monitoring <ul style="list-style-type: none">▪ Extensibility Transport Management (for S/4 HANA Cloud Essentials, S/4 HANA One Cloud, SAP Marketing Cloud, IBP)
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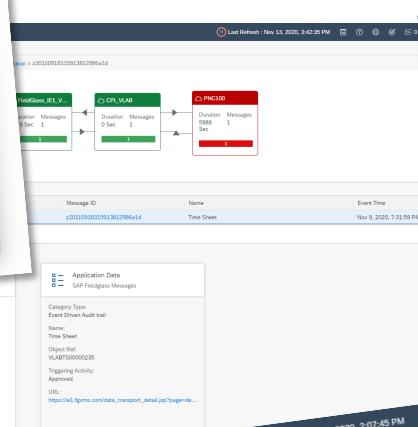
*This is the current state of planning and may be changed by SAP at any time.

Hands-On Part 1: Learning experience for Integration Monitoring

How to deal with the several aspects (Monitoring, Tracking, Scenario and Alerting)

Monitoring

The screenshot shows a monitoring dashboard for SAP S/4HANA Cloud. It includes a summary table with counts for AIF Messages, Concur Objects, and Total. Below is a chart titled 'Number of Exceptions per Category (3)' with categories 0, 1, 2, 3, and 4. A detailed event view for 'my303028.s4hana.ondemand.com' is shown, including a flow diagram with nodes like 'CPI_VAB' and 'PNC20', and a table with columns: Message ID, Name, and Event Time.



Tracking

The tracking interface displays a message log for supplier number '0010300080'. It lists a single message entry: 'AD0A37FC821411CBBC59EAA5507F2B25' with category 'WS-runtime', service name 'my303028.s4hana.ondemand.com', and event time 'Nov 9, 2020, 8:00:51 AM'.

Scenario

The configuration interface for scenarios shows a table of services and their monitoring and alerting status. Services listed include 'my303028.s4hana.ondemand.com', 'H2RCPI', 'BPHTORRETDEV', and 'SAP SuccessFactors HX...'. The table includes columns for Service Name, Service Type, Monitoring, Alerting, Last Changed By, and Last Changed At.

Alerting

The alerting interface lists two alerts: 'Erroneous CPI Messages Detected' and 'Erroneous Messages(AIF) Detected'. It provides details for each alert, including processor information and last update times.

How To Log-On

1. Check your room number at the top of the window



2. Replace the number in the tenant URL with the room number:

[https://teched-calm-
01.eu10.alm.cloud.sap/launchpad#Shell-
home](https://teched-calm-01.eu10.alm.cloud.sap/launchpad#Shell-home)

Exception for Breakout Room 40!

- Tenant URL: [https://teched-calm-
00.eu10.alm.cloud.sap/launchpad#Shell-home](https://teched-calm-00.eu10.alm.cloud.sap/launchpad#Shell-home)
- User ID: teched-00
- Password: Teched-00

3. On log on screen type in your user ID and password:

- User ID: teched-<room number>
- Password: Teched-<room number>

A screenshot of a web-based log-on form titled "Log On". The form includes fields for "E-Mail or User Name" containing "teched-01", "Password" (empty), and a "Remember me" checkbox. Below the form is a link "Forgot password?". Two yellow callout boxes highlight the "teched-01" entry in the user name field and the "Teched-01" entry in the password field.

4. Use Question Room (Room 41) to address your questions and get assistance.



Hands-On

Part 1 – Integration Monitoring

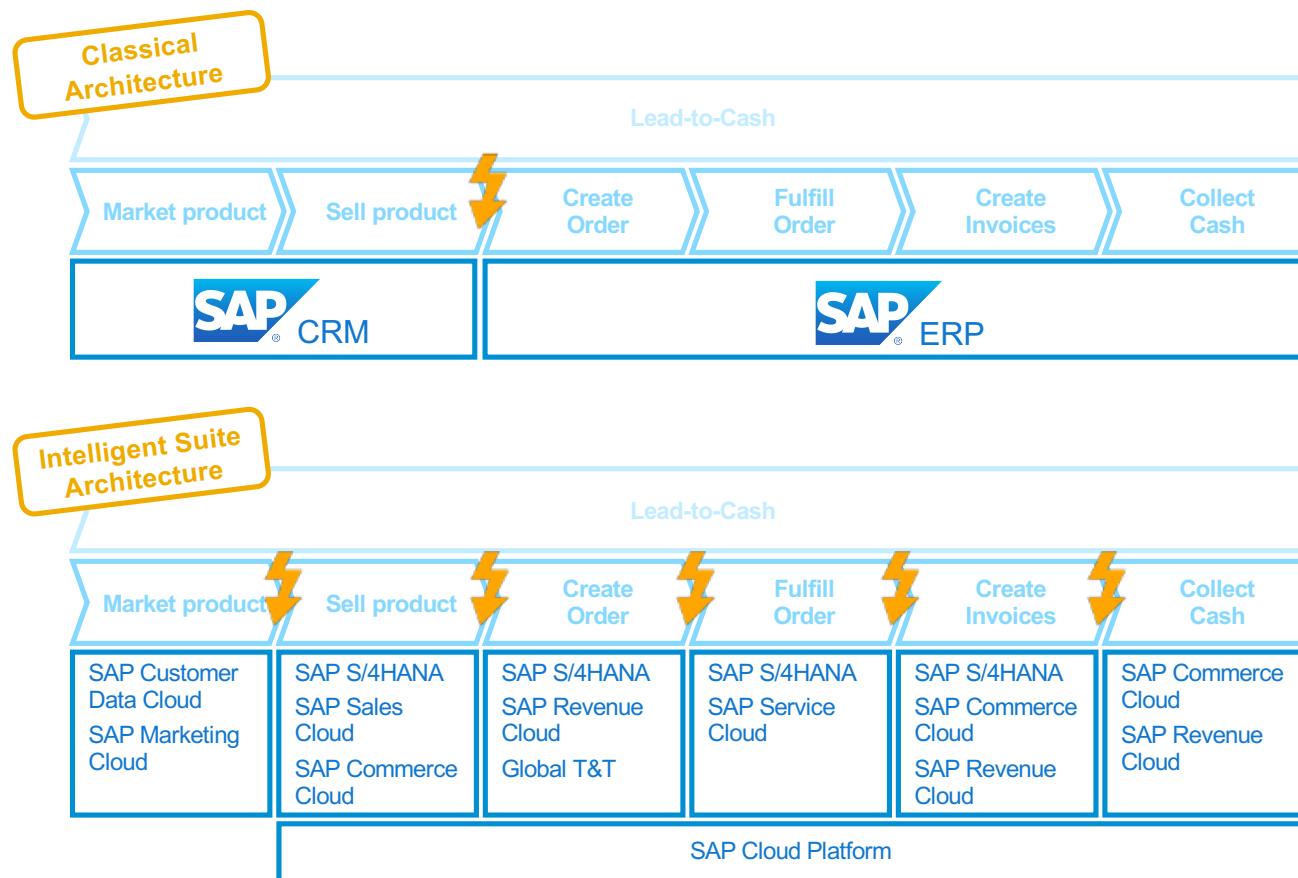
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SAP Cloud ALM for operations

Integration Monitoring

Business Process Monitoring

Customer Solution Landscape is transforming



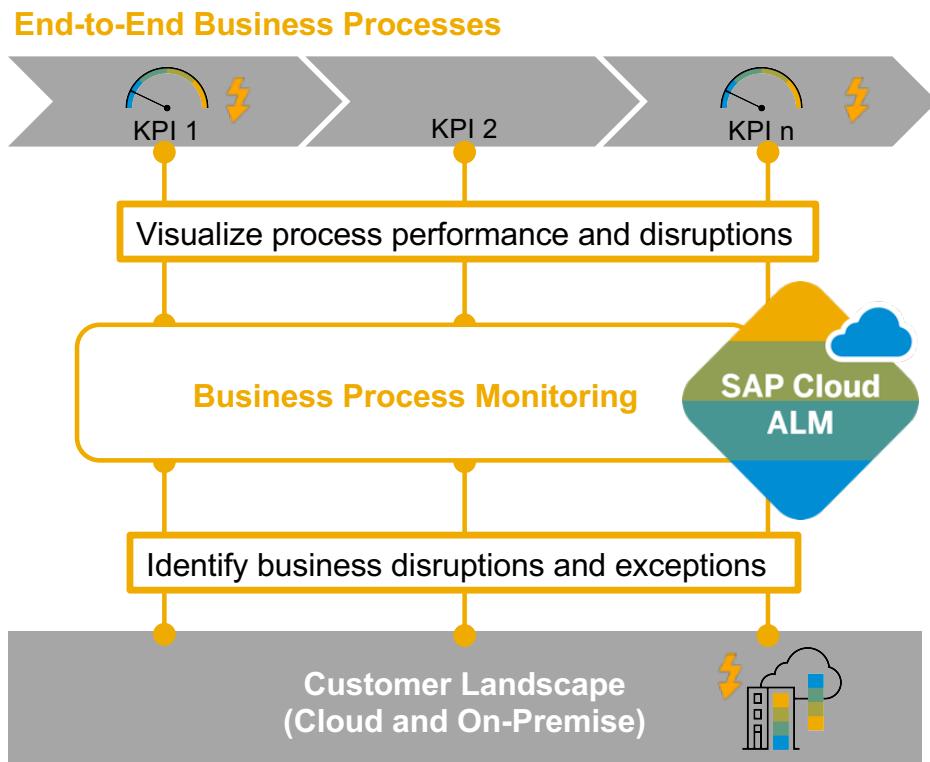
Customer Solution Landscape is **subject to transformation:**

- Transform from a **monolithic to a multi-system & multi-service landscape**
- **Increase in end-to-end monitoring complexity**
- Process variance are covered by **system variances**

Transparency on the end-to-end business processes of the Intelligent Suite is required:

- **Measure the performance** of end-to-end business process
- **Detect anomalies and exceptions** during process execution

Why do we need central Business Process Monitoring?



- Provides **transparency on end-to-end business processes** within a **distributed and hybrid solution landscape**
- Ensures **smooth business operations** without disruptions and increases the **business process execution quality and performance**
- Monitors processes' health and **detect anomalies during process execution**
- **Alerts** users directly on process disruptions and offers **automated problem resolution**
- Standardizes content with **pre-defined process content** and **key performance indicators (KPIs)**

Business Process Monitoring – What is in for you?

- Out-of-the box real-time **collection of business process KPIs** (backlog, throughputs, lead times, ...) and associated **business process documents**
- Relevant **business process KPIs** are auto-discovered to keep effort for implementation low → **No need for modeled business processes or manual configuration** (refinement is possible based on expert configuration)
- Intuitive and **dashboard based monitoring of Business Process KPIs** including context-sensitive **drill down in business documents** (root cause analysis)
- **Embedded alerting** to inform users (LOB process owner/manager, LOB process executer) about business process anomalies and exceptions
- **Integration with Operation Automation** (planned) to trigger corrective actions at business process level e.g. manual or automated removal of credit blocks
- **Embedded analytics** to enable root cause analysis based on historical and aggregated data

Sales Document	Item	Sales Document Type	Sales Organization	Sold-to Party	Material	Net Value	Document ...	Requested Delivery
45444662	10	Standard Order (TA)	Dom. Sales Org CN (13...)	audend AG (10000004)	Paper 80g 1000 Sheets...	830	EUR	Sep 6, 2020
45444874	10	Standard Order (TA)	Dom. Sales Org CN (13...)	ecoco AG (10000006)	Paper 80g 1000 Sheets...	830	EUR	Sep 7, 2020
45457023	20	Standard Order (TA)	Dom. Sales Org CN (13...)	EcoCompany Contract ...	Printer Cartridge Magent...	2400.12	EUR	Sep 10, 2020
45461692	10	Standard Order (TA)	Dom. Sales Org CN (13...)	EcoCompany Contract ...	Paper 80g 1000 Sheets...	400.99	EUR	Sep 11, 2020
45443816	10	Standard Order (TA)	Dom. Sales Org CN (13...)	ecoco AG (10000006)	Paper 80g 1000 Sheets...	830	EUR	Sep 7, 2020
45445763	20	Standard Order (TA)	Dom. Sales Org CN (13...)	executee Ltd. (1000000...)	Printer Cartridge Magent...	2400.12	EUR	Sep 7, 2020
45461973	10	Standard Order (TA)	Dom. Sales Org JP (15...)	forl Ltd. (10000009)	Printer 6835 (PR-6835)	2400.12	EUR	Sep 10, 2020
45472205	10	Standard Order (TA)	Dom. Sales Org ID / DE	antifit I H / 10000010	Printer A825 /PD, A825L	1400	EUR	Sep 4, 2020

Key personas and use cases of Business Process Monitoring



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

I need to monitor my E2E Process:

- Monitor E2E process performance
- Understand critical business process deviations
- Receive automatic alerts in case performance thresholds are in danger or violated
- Collaborate on created and assigned tasks for critical exceptions
- Deep-dive into deviations to analyze root causes
- Understand past, current and predicted process performance along multiple dimensions



**Local / Sub
Process Manager
(LoB Operation)**

I need to monitor my operations:

- Monitor operative process performance
- See critical process deviations
- Check status of a specific document type (e.g. open sales orders)
- Receive automatic alerts in case performance thresholds are in danger or violated
- Collaborate on assigned tasks for critical exceptions



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

I need to monitor operations of my solutions:

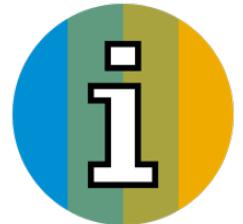
- Overview of critical technical deviations and affected processes
- Collaborate on assigned tasks for critical exceptions



Hands-On

Part 2 – Business Process Monitoring

More information



Related SAP TechEd sessions

- IIS121 Operation of Cloud-Centric Landscapes with SAP Cloud ALM for Operations
 - IIS127 Operation of Hybrid Landscapes with SAP Focused Run
-

Public SAP Web sites

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

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Thanks for attending this session.

Contact for further topic inquiries

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