

IIS265

Business Process and Integration Monitoring with SAP Cloud ALM for Operation

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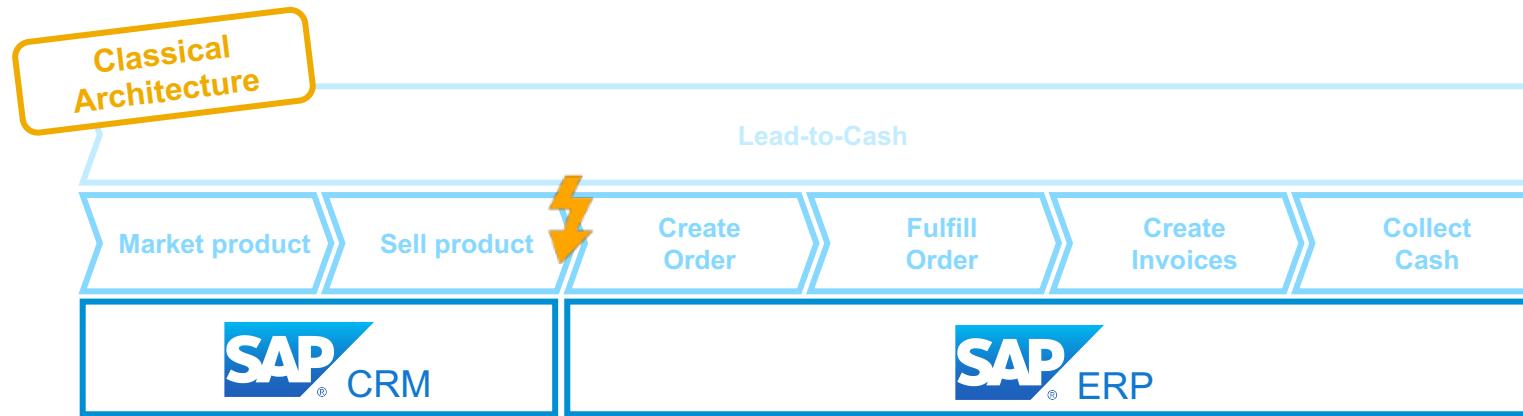
Agenda

SAP Cloud ALM for operations

Integration Monitoring

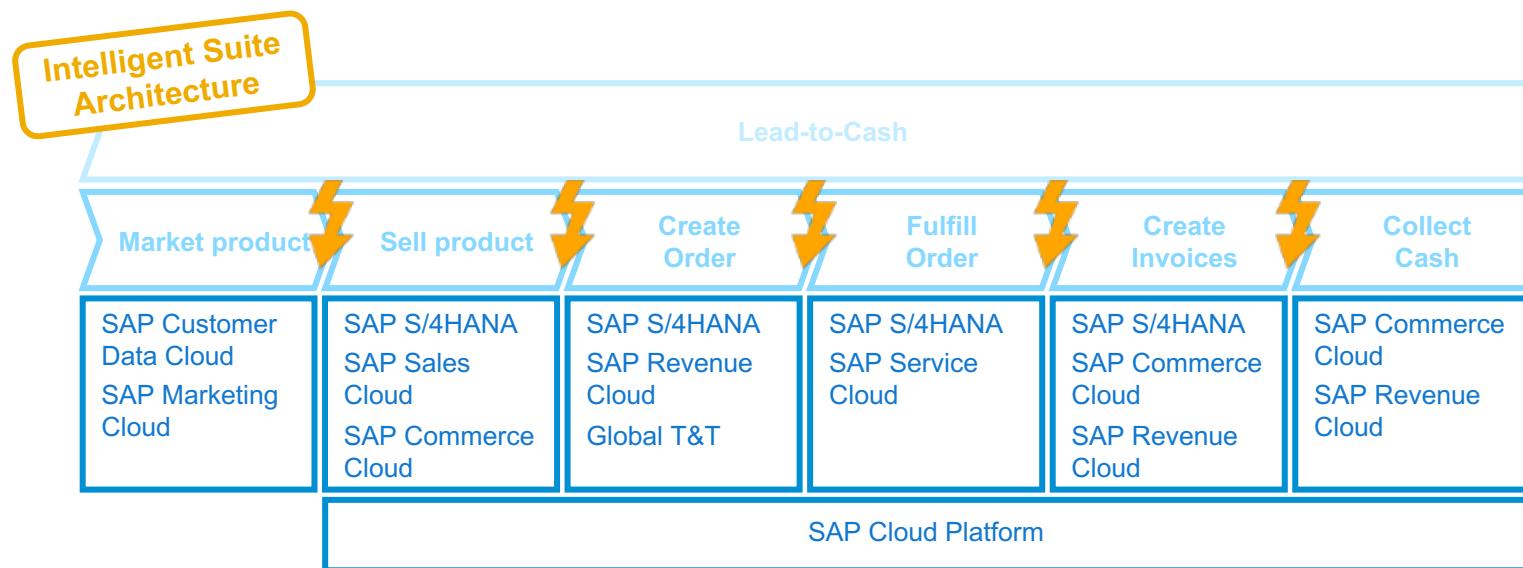
Business Process Monitoring

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



- Fully integrated ALM suite for **on-prem-centric medium and larger customers**
- Customers, who are **satisfied with the currently provided functional scope**

SAP Focused Run



- Operations platform for **service providers and high end hybrid customers**
- Customers with advanced needs, which go **beyond SAP Solution Manager and SAP Cloud ALM**

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

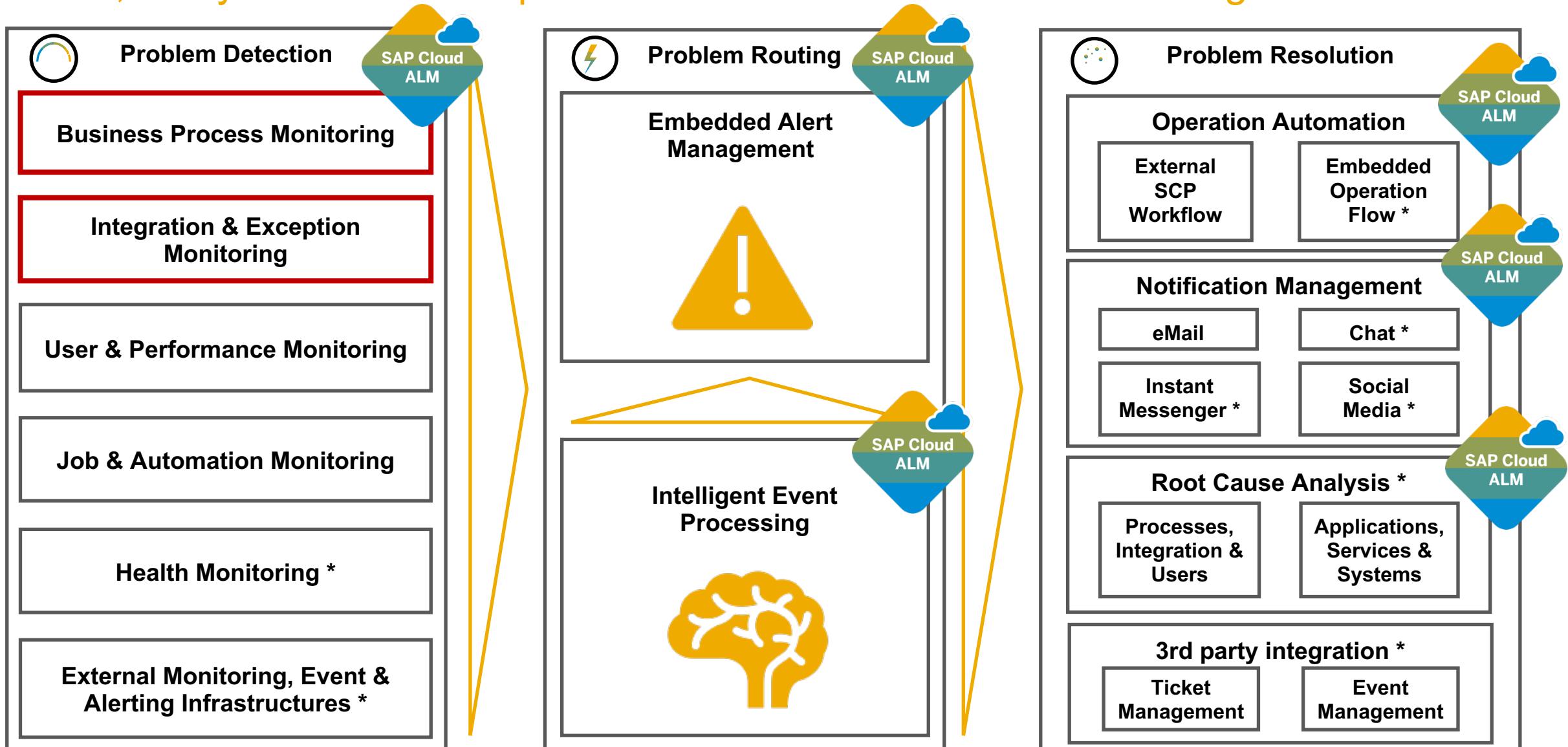
Ensure business continuity in your SAP landscape by monitoring and alerting - Increase operation efficiency by automating operational tasks - Avoid anomalies by proactive problem prediction

- 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

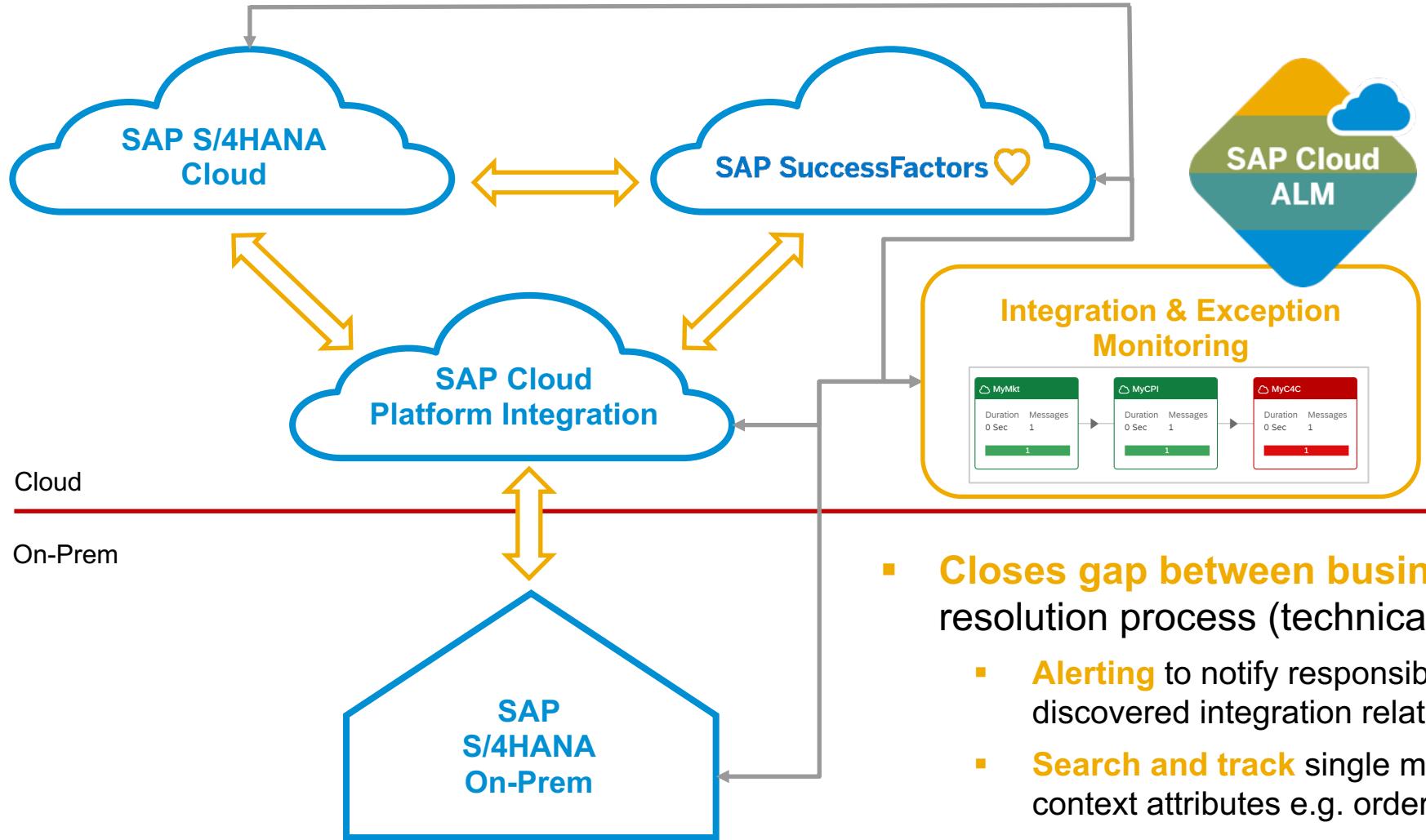
SAP Cloud ALM for operations

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)
		Content – Integration Monitoring <ul style="list-style-type: none">▪ SAP Fieldglass▪ SAP SuccessFactors EC (Cost Center, Worker)▪ SAP SuccessFactors EC Payroll▪ SAP S/4HANA On-Premise▪ SAP Business Suite▪ SAP Ariba CIG▪ SAP Master Data Integration▪ SAP Asset Central Foundation Content – Exception Monitoring <ul style="list-style-type: none">▪ SAP Marketing Cloud▪ SAP Integrated Business Planning▪ SAP Cloud Platform (CF) Application Log Errors	Content – Integration Monitoring <ul style="list-style-type: none">▪ Intelligent Housekeeping▪ Embedded Analytics▪ ... Content – Exception Monitoring <ul style="list-style-type: none">▪ SAP S/4HANA Cloud, ex▪ SAP Ariba Network▪ SAP Central Order▪ SAP Field Service Management

*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)

The image displays four overlapping screenshots of the SAP Integration Monitoring interface, each highlighting a different aspect of monitoring:

- Monitoring:** Shows the "Message Overview" screen with a chart titled "Number of Exceptions per Category (3)" showing three categories with values 3, 1, and 0.
- Alerting:** Shows the "Alerting" screen with a list of alerts, including "Erroneous CPI Messages Detected" and "Erroneous Messages(AIF) Detected".
- Tracking:** Shows the "Tracking" screen with a table of messages, including one successful message with ID A4D2A37FC821411CBBC59EA5507F2B25 and status "SUCCESS WIT...".
- Scenario:** Shows the "Configuration for Scenarios" screen, which lists various services and their monitoring, alerting, and reporting configurations.



Hands-On

Part 1 – Integration Monitoring

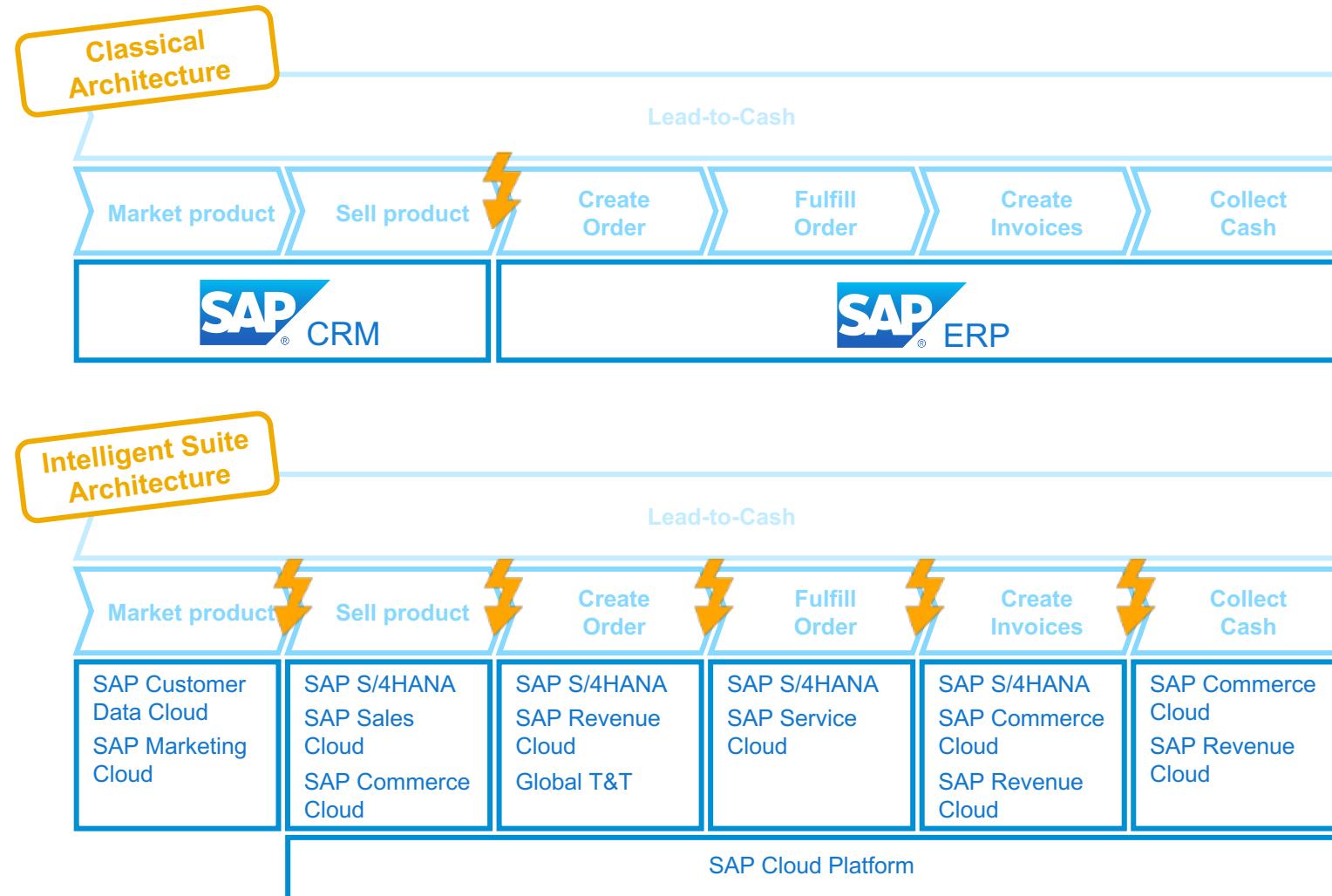
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SAP Cloud ALM for operations

Integration Monitoring

Business Process Monitoring

Customer Solution Landscape is transforming



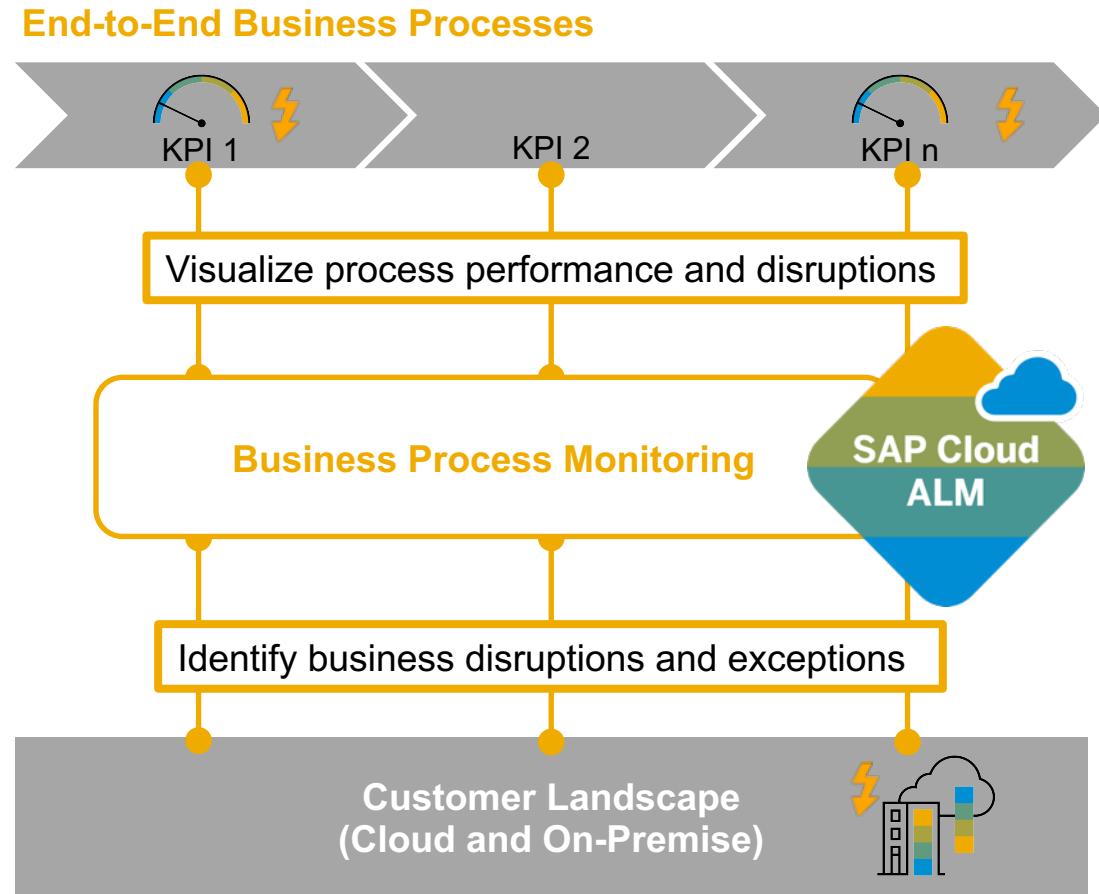
Customer Solution Landscape is **subject to transformation**:

- 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

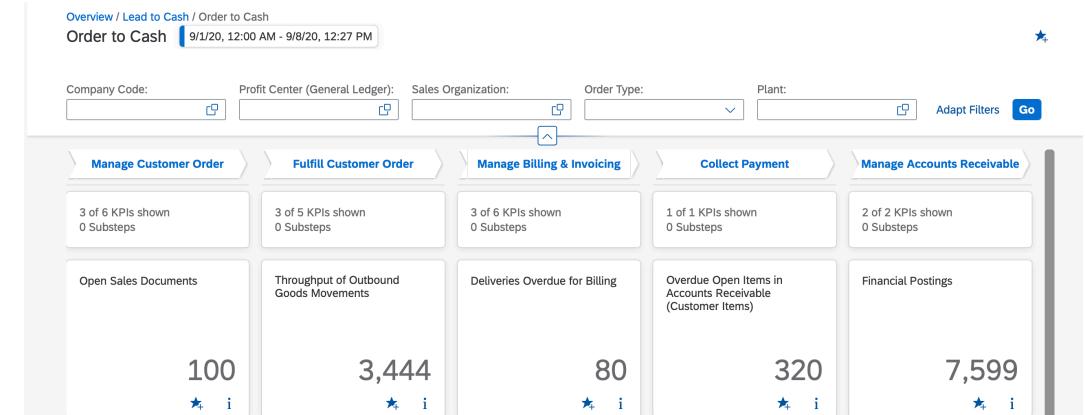
Why do we need central Business Process Monitoring?



- 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



The screenshot shows a detailed view of 'Sales Document Items Created' with the URL 'Overview / Lead to Cash / Order to Cash / Manage Customer Order / Sales Document Items Created'. It includes filters for Company Code, Profit Center (General Ledger), Sales Organization, Order Type, and Plant, along with 'Adapt Filters' and 'Go' buttons. Below the filters is a table titled 'Documents (9,862)'.

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...)	ecojo 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...)	ecojo AG (10000006)	Paper 80g 1000 Sheets...	830	EUR	Sep 7, 2020
45445763	20	Standard Order (TA)	Dom. Sales Org CN (13...)	execucee Ltd. (100000...)	Printer Cartridge Magent...	2400.12	EUR	Sep 7, 2020
45461973	10	Standard Order (TA)	Dom. Sales Org JP (15...)	foror Ltd. (10000009)	Printer 6835 (PR-6835)	2400.12	EUR	Sep 10, 2020
45472306	10	Standard Order (TA)	Dom. Sales Org ID (15...)	antifit trd (10000010)	Printer 6835 (PR-6835)	1.400	EUR	Sep 1, 2020

The screenshot shows an 'Alerting' section with the URL 'Overview / Lead to Cash / Order to Cash / Manage Customer Order / Sales Document Items Created / Alerts'. It includes filters for Company Code, Profit Center (General Ledger), Sales Organization, Order Type, and Plant, along with 'Adapt Filters' and 'Go' buttons. Below the filters is a table titled 'Alerts (3)'.

Alert Name and Message	Alert Context	Object Details	Last Updated	Status	Processor
<input type="checkbox"/> Number of Open Sales Documents exceeded	Business Process Monitoring	KPI Name=Open Sales Documents; KPI Category=Backlog	Sep 10, 2020, 10:22:07 AM	Open	>
<input type="checkbox"/> Number of Sales Documents with Credit Block exceeded	Business Process Monitoring	KPI Name=Sales Documents with Credit Block; KPI Category=Backlog	Sep 10, 2020, 10:22:07 AM	Open	>
<input type="checkbox"/> Low number of Sales Documents Created	Business Process Monitoring	KPI Name=Sales Documents Created; KPI Category=Throughput	Sep 9, 2020, 3:04:30 PM	Open	>

Key personas and use cases of Business Process Monitoring

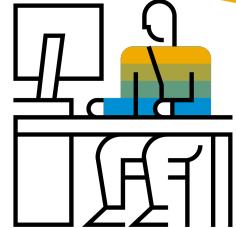


**Global / Local
Process Manager
(LoB Management / LoB Operation)**

**Process Manager
Lead-to-Cash**

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)**

**Sub-Process Manager
Order Manager**

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)**

Application Owner (IT)

I need to monitor operations of my solutions:

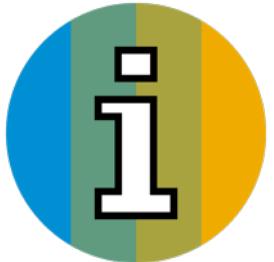
- Overview of critical technical deviations and affected processes
- Collaborate on assigned tasks for critical exceptions



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.

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