

# Focused Run: The Operations Platform for On-Premise-Centric Customers

CAA210

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## **Speakers**

### Las Vegas

September 24-27, 2019

Stefan Lahr Janko Budzisch

## Barcelona

October 8-10, 2019

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## Bangalore

November 13-15, 2019

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## Agenda

What is Focused Run?

Mission statement

What is the functional scope?

Use cases overview?

How does the architecture look like?

 High level architecture, components & communication

How to get and implement Focused Run?

Information resources



# What is Focused Run?



## **Focused Run – Mission statement**

- Is a powerful solution for customers & partners to operate their solution centralized and highly automated with minimal TCO impact
- Addresses advanced customer needs in scalability, data volumes, security, automation, openness, dashboarding & artificial intelligence
- Uses the full power of SAP HANA as a platform, including replication, partitioning, predictive analytics, and compression
- Is a separate installation, which can run side-by-side with an existing SAP Solution Manager
- Provides feature rich and powerful functionality dedicated to operations of IT solutions
- Isn't covered by maintenance fee, but needs to be licensed separately from SAP



## **Focused Run in comparison to SAP Solution Manager**

### When to use SAP Solution Manager?

- Customers who have to operate BUILD and RUN in one shared infrastructure (integration first)
- Customers who have to operate a medium size landscape with reasonable effort
- Customers who are satisfied with the functional scope as today provided by SAP Solution Manager
- Customers who are not interested to consume the latest innovations coming from development

## When to use Focused Run?

- Customers & Partners who have to operate large size landscapes with advanced needs in terms of scalability, performance, security, and automation
- Customers & Partners who are interested in advanced functionality as high data volume monitoring and AI use cases
- Customers who like to establish different release cycles for BUILD and RUN functionality (segregation of duties)
- Customers & Partners who are interested in co-innovation based on SAP HANA

# What is the functional scope?



## Focused Run – Use cases in scope



## **Advanced System Management**

Benefit from ultimate scalability, performance, security, and automation

# Manage landscapes with thousands of systems with minimal operations costs

- Detailed System Monitoring for modelled and autodiscovered SAP based systems
- Open Component Monitoring as low-barrier monitoring for unmodeled systems and services
- Monitoring of auto-discovered SAP standard jobs
- IT Calendar, Work Mode Management and Service Availability Management to enable efficient IT event and Service Availability management
- Regular System Health Check to provide health status for systems completely automatically
- License & Maintenance Certificate Management
- Maintenance Planner enabling & data collection for SAP EarlyWatch Alert for ABAP, J2EE, and BO/DS





## **Advanced User Monitoring**

Obtain end-to-end views across systems and technology

# Monitor real as well as synthetic user requests across systems and technology

- Real User Monitoring to monitor every single user activity including resource consumption:
  - Enable efficient triage of performance problems based on end-to-end correlation mechanism
  - Supports SAPGUI, WebDynpro, WebGUI and SAPUI5 (browser running at desktop as well as mobile) as frontends
  - Supports SAP Gateway, SAP ABAP, SAP J2EE and SAP Cloud Platform as backends
  - Allows to map user requests to organizational information
- Synthetic User Monitoring to monitor recorded user scenarios on regular basis:
  - Monitoring of communication from different locations within a IT landscapes based on synthetic probes
- Supports most relevant protocols as HTTP(S), SAPGUI, RFC, and WS





## **Advanced Integration Monitoring**

Monitor high volumes of single interface calls and message flows

# Manage complex landscapes with millions of interface calls and/or message flows

- Support of message flows processed by SAP PI/PO, SAP Data Hub, SAP MII and/or SAP Cloud Platform Integration
- Support of peer-to-peer interface technologies as IDOC, RFC, AIF, Rest and Web Service
- Dashboard based visualization with Systems / Cloud Services or Integration Scenarios as entry point
- Monitoring of exceptions for Cloud and On Premise products based on advanced dashboard capabilities
- Message and document search to identify integration artifacts related certain business context
- End-to-End Monitoring to follow single message flows and interface cross components and technologies
- Integration in Event & Alert Management



## **Advanced Event & Alert Management**

Manage high volumes of alerts efficiently

# Efficiently operate thousands of system, user, and integration alerts, including integrated IT infrastructure events

- Dashboard-oriented and intuitive alert inbox as central access point for all monitoring use cases
- Alert Search, Alert Reporting and Alert Correlation for efficient handling of high volumes of alerts
- Automated guided procedure execution for alert problem context collection and follow-up actions
- Inbound integration to receive metrics and events from external monitoring tools as IT Infrastructure Management tools e.g. Nagios
- Bi-directional Outbound integration for customer specific integration with ticket management systems e.g. ServiceNow
- Fuzzy search for alerts based on alert name, associated managed object and/or processor



## **Advanced Configuration Monitoring**

Ensure transparency and compliance in huge system landscapes

# Enable central governance of software levels and configuration settings

- Enforces validation of configuration & security settings by automated comparison of TO-BE with AS-IS situation
- TO-BE situation is defined in so-called policies which are derived from configuration templates or security hardening guides
- Policy maintenance via intuitive management tool and distributions of policy templates via GitHub
- Efficient browsing and searching within high volumes of configuration items
- Analysis of software and parameter changes which maybe the root cause for critical issues
- Support of configuration items at system, database and operating system level → Continuous delivery of new content based on customer feedback

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## **Advanced Root Cause Analysis**

Deep dive root cause analysis on request

# Deep detailed root cause analysis capabilities tailored to your needs

 Advanced Root Cause Analysis capabilities as System Analysis, Trace Analysis and File System Brower

System Analysis:

- Intuitive and contextually linked dashboards enabled guided root cause analysis
- Standard content is provided out-of-the-box for HANA, ABAP, J2EE, BO, Apache Tomcat, and OS
- Additional high volume data collection can be switched on demand e.g. in specific hyper care phases
- Open KPI Store to integrate 3<sup>rd</sup> party data sources as APM tools or Infrastructure Management tools
- Trace Analysis allows dynamically to switch on deep detailed component specific traces across system and technology
- File System Browser gives secure read-only access to remote file systems for diagnosis purposes



# **Advanced Analytics & Intelligence**

Enabling of openness, flexibility and prediction

# Use SAP's out-of-the-box Analytics & Intelligence capabilities

- Usage of unified UI shell cross all applications to enable one-stop user experience for monitoring & alerting including embedded analytics
- Out-of-the-box delivery of configurable dashboards using data from different use cases:
  - Tactical dashboards to get an landscape overview
  - Operation Control Center (OCC) dashboards to define purpose oriented expert like dashboards
  - Supported data sources: System Monitoring, Real User Monitoring, Synthetic User Monitoring and Open Component Monitoring
- Usage of SAP's advanced AI capabilities:
  - Forecasting of metric behavior in future
  - System Anomaly Prediction to identify critical situations before actual occurrence based on pre-defined and predelivered ML models





# **Focused Run for SAP Solution Manager**

### Product road map overview – Key innovations

#### **Recent innovations**

#### System mgmt./configuration monitoring

- Job management for system jobs
- Advanced central system administration policy management
- Improved open component monitoring

#### Alert management/operation automation

- Enable alerting per variant capability
- Preparation of generic alert correlation
- SAPUI5-based guided procedure runtime UI

#### Integration monitoring/user monitoring

- New interface monitoring content for on-premise (SLT, SAP MII) and cloud (SAP S/4HANA Cloud and SAP Application Interface Framework)
- New user monitoring content for SAP Ariba solutions and SAP Integrated Business Planning
- WebDynpro and WebGUI support for Real User Monitoring
- Finalize Synthetic User Monitoring configuration UI in SAPUI5

### Root Cause Analysis/analytics and intelligence

- Improved UI design and page management for system analytics
- SAP Operations Control Center dashboards and tactical dashboards
- New system anomaly analysis models

#### System mgmt./configuration monitoring

2019 – Planned innovations<sup>1</sup>

- Data collection for remote services from SAP first wave (continuous quality checks)
- Job management for application jobs
- Template management UI in system monitoring

#### Alert management/operation automation

- Generic alert correlation concept
- Guided procedure UI improvements and new guided procedure content

#### Integration monitoring/user monitoring

- Support of push-based data providers for cloud products as SAP S/4HANA Cloud in interface monitoring
- Ul improvements for user monitoring
- Re-design of the Synthetic User Monitoring recorder for HTTP Archive format

#### Root Cause Analysis/analytics and intelligence

- Open KPI store to support Application Performance Management tools as external data sources
- Improvements for cross-use case dashboards
- Content and infrastructure improvements for system anomaly analysis

#### 2020 – Product direction<sup>1</sup>

#### **Business service management**

- Modeling of use-case-specific business services, such as integration scenarios, user scenarios, availability scenarios, ...
- Definition and reporting of service-level agreements (SLAs) at the business service level

#### Usage of machine learning

 Initial threshold definition and dynamic threshold adaptation based on machine learning in integration monitoring and user monitoring

#### **Open infrastructure**

 Simplified consumption of external data sources including UI integration and correlation with data originally coming from Focused Run

#### 2021 – Product vision<sup>1</sup>

#### Prediction

 Predict anomalies across all monitoring use cases to allow identification of problems before they influence business service availability

#### Correlation

 Correlate events and metrics coming from different monitoring use cases to problem contexts to accelerate the problem resolution process

#### Automation

- Close the gap between problem detection and problem resolution by delivering out-of-the-box and automated "problem resolution procedures"
- Provide automation content for on-premise and cloud products to relieve operation staff from reoccurring tasks

1. This is the current state of planning and may be changed by SAP at any time without notice.

# How does the architecture looks like?



## Focused Run – Use cases & high level architecture



## **Focused Run – Components & communication**



## **Focused Run - Your immediate benefits**

# Small technical footprint and reduced total cost of ownership

- Extremely simplified architecture through removal of J2EE Stack, SAP BW, SAP CRM, DBA Cockpit, Extractor Framework, SLD (optional)
- Streamlined push based communication (no RFC, no native DB, no RMI)

# Improved scalability, performance, and data throughput

- Scalability improved by factor 20 up to 20,000 systems!
- Performance increased by factor 15
- Data throughput increased by factor 40
- Data footprint decreased by factor 20

### **Highest possible security levels**

- Proven built-in security concept with HTTP(S) as communication protocols and push as communication direction
- Clear separation of different customers with multitenancy enablement

## Maximum of automation during assignment and maintenance of managed systems

- Simple Diagnostic Agent is **embedded** in SAP Host Agent
- Automated preparation as well as automated assignment of managed systems (UI driven or API driven)
- Automatic reconfiguration as reaction to auto-discovered landscape changes

# How to get and implement Focused Run?



## How to get and implement Focused Run?

## Focused Run Positioning Workshop

- As result of the workshop, SAP will provide a project proposal including Hardware sizing, License sizing, and possible consulting package
- Customers & Partners get full transparency regarding the boundary conditions for the Focused Run implementation project

# Buy the Focused Run license

The software is sold via SAP Global Price List by SAP Sales Organization. Customer individual discounts can be applied.

# Focused Run Project Setup & Architecture Workshop

- Download the appropriate software package from the SAP Support Portal
- As a jumpstart the Focused Run Project Setup & Architecture Workshop should be conducted

## More information can be found here:

https://support.sap.com/en/solution-manager/focused-solutions/focused-run.html

## **Focused Run – The ultimate solution for Operations**

- Low Total Cost of Operations through simplified architecture and automated setup and operation
- Effective management of high volume of managed objects using well-performing, scalable and secure platform
- Added value for customer through advanced functionality as Advanced User & Integration Monitoring
- Innovation platform with clear focus on operations to enable Artificial Intelligence use cases supported by SAP HANA
- Ability to operate multiple customer in one platform because of strong customer data separation and secure communication
- SLA tracking and improvement with System Monitoring, Service Availability Management and System Anomaly Analysis
- Cloud-ready for managing hybrid customer landscapes



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### **Related SAP TechEd Learning Journeys**

- CAA6 Manage a hybrid SAP solution landscape
- CAA7 Manage a cloud-centric SAP solution landscape

### **Related SAP TechEd sessions**

- CAA213 SAP Cloud ALM News and Road Map from an Operations Perspective
- CAA374 Monitoring Non-SAP Components with Focused Run for SAP Solution Manager
- CAA378 Monitoring of Cloud-Centric Landscapes with Focused Run

### **Public SAP Web sites**

- SAP Community: <u>www.sap.com/community</u>
- SAP products: <u>www.sap.com/products</u>
- Focused Run Support Portal: <u>https://support.sap.com/en/alm/focused-solutions/focused-run.html</u>
- Focused Run Expert Portal: <u>https://support.sap.com/en/alm/focused-solutions/focused-run-expert-portal.html</u>



# Thanks for attending this session.



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## **Contact for further topic inquiries**

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