AVANTRA

# Ensuring SAP systems deliver for the global economy

*21.11 Release - "What's new" Technical Overview*

# How do you enable SAP operations to deliver for your business?

AVANTRA

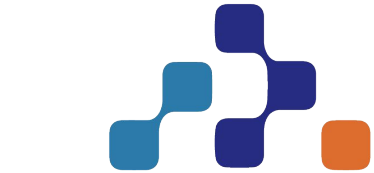
Unlock innovation and wellbeing in the team

Realize the potential of SAP automation

Make security and availability a customer experience issue

# Introducing Avantra 21.11

AIOps platform to ensure SAP systems deliver for your business



AVANTRA

EDITIONS

## Standard

Foundation for monitoring and management of SAP landscapes

## Professional

Integrated operations platform designed for extensibile & complete SAP landscape management

NEW

## Enterprise

AIOps platform for intelligent landscape management including accelerators for advanced SAP Operations

# Avantra 21.11 - designed to ...

AVANTRA

## Observe

Understand everything happening in your SAP world automatically

## Engage

Engage with the team the right way at the right time with reduced false positives

## Act

Automate your activities to drive quality, speed and consistency

# Avantra 21.11 - at a glance

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## Observe

- Automated SAP HotNews analysis
- SAP Notes inventory
- ML based predictive analytics
- All new UX for dashboards and charts
- Native Solution Manager support
- Avantra Add ins

## Engage

- Certified ServiceNow Service Graph integration
- Advanced business logic within notifications

## Act

- BPMN 2.0 workflow automation engine
- Ready to use SAP automation templates

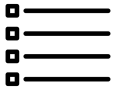
## Platform

- Automated server registration and monitored system auto-discovery
- Multi-level monitoring support without credentials or transports
- Native VMware integration
- Developer productivity enhancements and enhanced APIs
- Native connect support for PostgreSQL and MySQL

# Observe - what's new

*Understand everything happening in your SAP world automatically*

Reduce the time for impact analysis of critical security alerts from weeks to seconds via
**Automated SAP HotNews analysis**



See what repairs, patches and security notes are in every system at a glance with the new
**SAP Notes inventory**

Significantly reduce out of hours false alerts and effort with the new
**ML based predictive analytics**

Deliver a consumer-grade reporting experience to (even) business users via the
**All new UX for dashboards and charts**

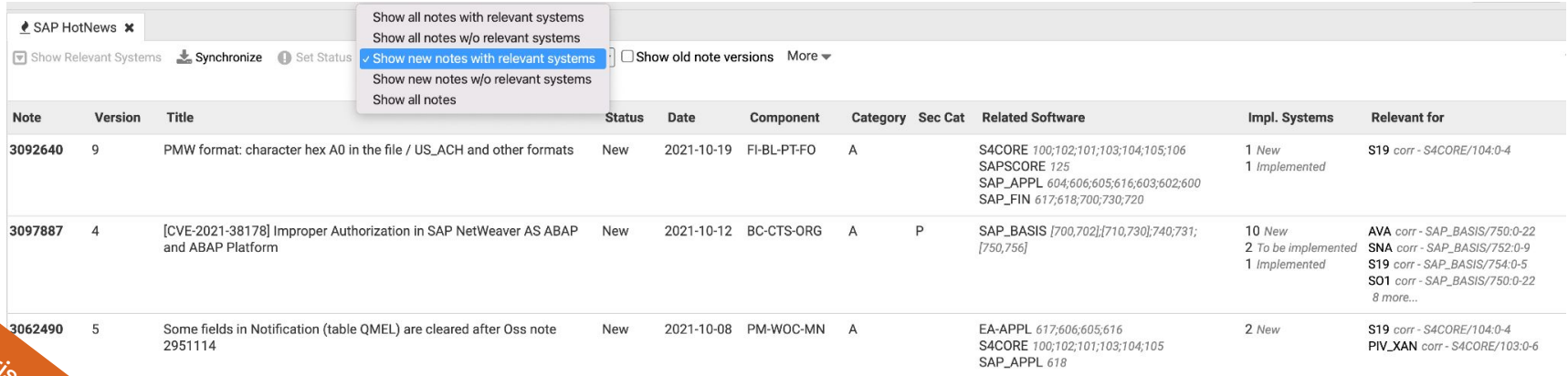
Always be ready for the next SAP upgrade and reduce patching preparation effort with
**Native Solution Manager support**

Deliver rapid value via scenario-specific accelerator templates for security, hardening and more with
**Avantra Add ins**

# Automated SAP HotNews analysis

Reduce the time for impact analysis of critical security alerts from weeks to seconds

- Easily answer the question “Are my systems affected?”
- SAP HotNews and analysis is completed automatically each night
- Combines SAP component information with OS and DB information for impact analysis
- Notes can be marked as active or inactive, so irrelevant HotNews can easily be hidden
- Track the implementation status of active notes




| Note | Version | Title | Status | Date | Component | Category | Sec Cat | Related Software | Impl. Systems | Relevant for |
|---|---|---|---|---|---|---|---|---|---|---|
| 3092640 | 9 | PMW format: character hex A0 in the file / US_ACH and other formats | New | 2021-10-19 | FI-BL-PT-FO | A | | S4CORE *100;102;101;103;104;105;106*<br>SAPSCORE *125*<br>SAP_APPL *604;606;605;616;603;602;600*<br>SAP_FIN *617;618;700;730;720* | 1 *New*<br>1 *Implemented* | S19 *corr - S4CORE/104:0-4* |
| 3097887 | 4 | [CVE-2021-38178] Improper Authorization in SAP NetWeaver AS ABAP and ABAP Platform | New | 2021-10-12 | BC-CTS-ORG | A | P | SAP_BASIS *[700,702];[710,730];740;731; [750,756]* | 10 *New*<br>2 *To be implemented*<br>1 *Implemented* | AVA *corr - SAP_BASIS/750:0-22*<br>SNA *corr - SAP_BASIS/752:0-9*<br>S19 *corr - SAP_BASIS/754:0-5*<br>SO1 *corr - SAP_BASIS/750:0-22*<br>*8 more...* |
| 3062490 | 5 | Some fields in Notification (table QMEL) are cleared after Oss note 2951114 | New | 2021-10-08 | PM-WOC-MN | A | | EA-APPL *617;606;605;616*<br>S4CORE *100;102;101;103;104;105*<br>SAP_APPL *618* | 2 *New* | S19 *corr - S4CORE/104:0-4*<br>PIV_XAN *corr - S4CORE/103:0-6* |

Enterprise edition

# SAP Notes inventory

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See what repairs, patches and security notes are in every system at a glance

- See complete information around SAP Notes within all systems as standard
- Easily see if there are SAP HotNews items that affect the current SAP system and have not yet been implemented

SAP Notes

| Note ID | Priority | Version | Text | SNote Status | Component | Implementation Date | Implementation User | Status | Message |
|---|---|---|---|---|---|---|---|---|---|
| 2596411 | - | 69 | Note Analyzer for ABAP-based Migration and Replication Technology (DMIS2011/DMIS | Obsolete version implemented | HAN-DP-LTR | 2020-09-18 13:02 | PIV | New | |
| 1668882 | - | 27 | Note Assistant: Important notes for SAP_BASIS 730,731,740,750,751,752,753,754 | Completely implemented | BC-UPG-NA | 2020-09-18 12:35 | PIV | New | |
| 2424539 | - | 7 | SAP Note Assistant: Test Note for Digital Signature Verification of SAP Note | Completely implemented | BC-UPG-NA | 2020-07-02 15:27 | PIV | New | |
| 2589309 | - | 9 | Fixes to reimplementation handling - Ignore TADIR for new objects and invalid pr | Completely implemented | BC-UPG-NA | 2020-09-18 12:51 | PIV | New | |
| 2606986 | - | 4 | Upgrade: You cannot reset obsolete SAP Notes in transaction SPAU | Completely implemented | BC-DWB-CEX | 2020-09-18 12:54 | PIV | New | |
| 2714624 | - | 9 | Version Comparison False Result | Completely implemented | BC-UPG-NA | 2020-09-18 12:51 | PIV | New | |
| 2722027 | - | 16 | Certain OSS RFC APIs calls replaced with corresponding web service calls | Completely implemented | BC-UPG-NA | 2021-01-20 09:36 | IVI | New | |
| 2808144 | - | 3 | Note Implementation fails for AMDP Class methods | Completely implemented | BC-UPG-NA | 2020-09-18 12:35 | PIV | New | |
| 2836302 | - | 22 | Automated guided steps for enabling Note Assistant for TCI and Digitally Signed | Completely implemented | BC-UPG-NA | 2021-01-20 09:36 | IVI | New | |
| 2869143 | - | 13 | Composite note for handling of Digitally Signed SAP Notes in Note Assistant (SNO | Completely implemented | BC-UPG-NA | 2021-01-20 09:36 | IVI | New | |

Standard edition

# ML based predictive analytics

Significantly reduce out of hours false alerts and effort

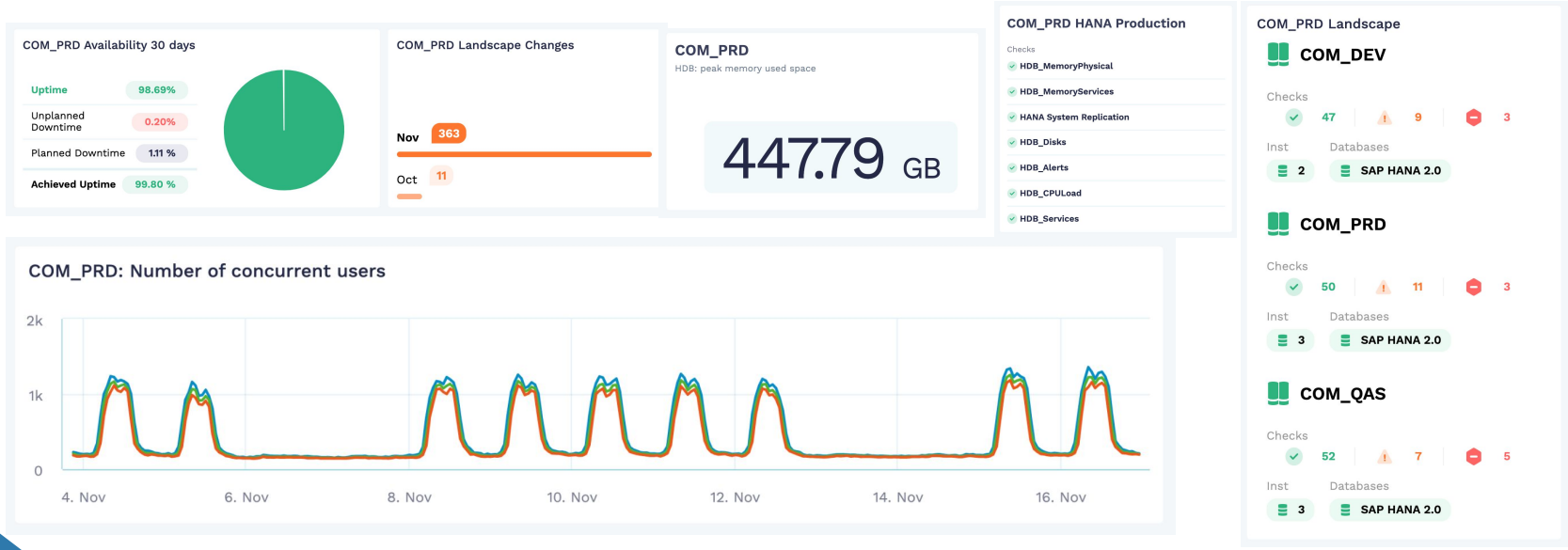
- Uses built-in machine learning algorithms to inform whether current readings are truly an issue or not
- Reduce out of hours false alerts caused by “spikey”, “bursty”, or “flapping” monitoring situations
- Works based on time series data combined with classic threshold based monitoring
- Out of the box support for:
    - CPU load
    - HANA CPU load
      (More coming in Q1 2022)

Enterprise edition

# All new UX for dashboards and charts

Deliver a consumer-grade reporting experience to (even) business users

- Consumer-grade user experience with enhanced reporting capabilities
- Available alongside the classic UI



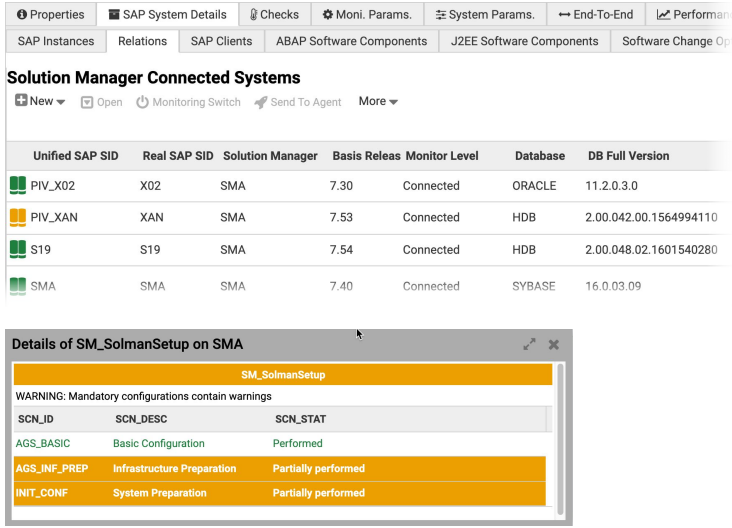

Standard edition

# Native Solution Manager support

Always be ready for the next SAP upgrade and reduce patching preparation effort

- Native out of the box support for Solution Manager
- Show the relationship between Solution Manager and each SAP system (2 way links)
- Six new out of the box checks

| | |
|---|---|
| SM_SolmanSetup | Checks setup of Solution Manager<br>**Deployed on Solution Manager only** |
| SM_LMDBConsistency | Checks consistency of Solution Manager LMDB<br>**Deployed on Solution Manager only** |
| ServiceDataCCN | Checks connection of ABAP systems to Solution Manager |
| DigitalNotesCompliancy | Checks if ABAP System is configured correctly to download digital notes |
| RTCCTool | Performs SAP system service readiness check (RTCCTOOL) |
| TMS_Status | Performs various TMS-related tests and extracts transport route information |




Standard edition

# Avantra Add ins

Deliver rapid value via scenario-specific accelerator templates for security, hardening and more

- Collections of content that accelerate your time to value for specific scenarios e.g. security and hardening
- Available to customers through the Avantra Support Portal.

- Launching with Avantra 21.11:
  - Avantra on Avantra
    The “Focus on Avantra” Add in will allow you to Monitor & Manage your Avantra AIOps Platform from within Avantra, including DB, Security, and integration layers. It is designed to bring confidence that your Avantra platform is running smoothly and forewarn you of issues.
  - SuSE Hardening
    The “SuSE Hardening” add in will allow you to compare your in-use OS settings within SuSE installations with recommendations from the published SuSE Hardening Guide. It is designed to highlight common hardening parameters that should be set within your SuSE install base and ensure rogue settings are identified and changed early.

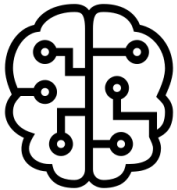
Enterprise edition

**More Add ins will be released throughout 2022 and beyond**

# Engage - what's new

*Engage the right way at the right time with reduced false positives*

Bring enriched SAP landscape information closer to the business and into the CMDB via our **Certified ServiceNow Service Graph integration**

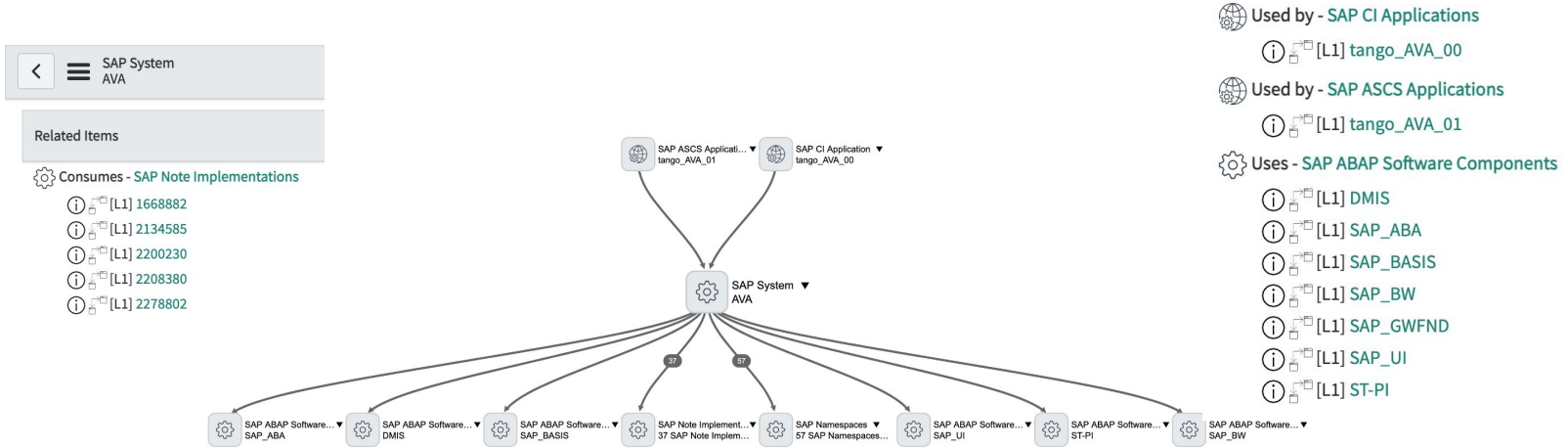


Add business logic to your outbound engagements to intelligently route updates, alerts and more **Advanced business logic within notifications**

# ServiceNow Service Graph connector

Bring enriched SAP landscape information closer to the business and into the CMDB

- Native support within Avantra and also within ServiceNow as part of a ServiceNow certified co-innovation
- Simple and no-code setup and configuration
- Avantra has influenced the ServiceNow CMDB council to introduce SAP data structures e.g. SAP Notes
- No need for discovery via MID server




Professional edition

# Advanced business logic within notifications

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Add business logic to your outbound engagements to intelligently route updates, alerts and more

- Design and deploy business login within the notification engine
- Logic is designed using Javascript with significant flexibility
- Facilitates a memory of previously incident data for updates and more
- High level of flexibility to adopt to 3rd party interface or API
- Examples available in our new API documentation

Critical check result raised in Avantra → Notification sent to 3rd party system → New incident in 3rd party system. Ticket ID returned to Avantra and stored within check → Check result is changed to OK in Avantra → OK notification now used to update previous ticket → Incident in 3rd party system can be updated, eg. priority changed or automatically closed

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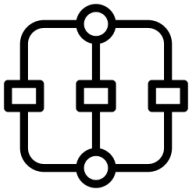
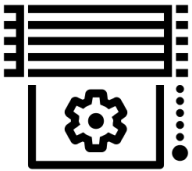
# Act – what's new

*Automate your activities to drive quality, speed and consistency*



Design and deliver business-led operations automations linked to business outcomes using the new **BPMN 2.0 workflow automation engine**



Significantly reduce manual effort, increase service quality and scale to match business growth via **Ready to use SAP automation templates**

# BPMN 2.0 workflow automation engine

Design and deliver business-led operations automations linked to business outcomes

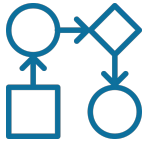
Separate automation code and data by using variables

Allow manual steps in automations

Improved scheduling possibilities

- Designed based on customer feedback from the existing automation engine
- Avantra will deliver SAP Automation templates within this engine for Enterprise subscription customers

- Existing automations continue to work on previous engine
- A later 21.11.x release will provide a function to transfer automations on previous engine to new BPMN engine



Support complex workflows

Customisable automation actions

Better integration to Avantra inventory

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# Ready to use SAP automation templates

AVANTRA

Significantly reduce manual effort, increase service quality and scale to match business growth

- Automated SAP Kernel Upgrades - available today

Launching in Q1 2022 with the new automation engine. Templates are planned for the following use cases to be delivered throughout 2022:

- Update of SPAM / SAINT
- Installation of add-ons and support packages, like Support Tools for ABAP Systems (ST-PI / ST-A/PI)
- Update and restart of SAP host agent
- Apply of instance profile parameters
- Apply of HANA database parameters
- Install of SAP notes with automatic corrections
- Copy of table contents from source to destination SAP system
- SAP system refresh for HANA based systems

Enterprise edition

# Platform - what's new

AVANTRA

*Deliver consistent, secure and intelligent operations powered by a flexible and robust AIOps Platform*

Easily scale to match business initiatives through significantly reduced deployment effort via **Automated server registration and monitored system auto-discovery**

Deliver immediate observational insight for new systems with the new **Multi-level monitoring support**

Treat your cloud and on-premise landscapes the same including end to end automation support with **Native VMware integration**

Enable operations teams to create and deploy enhanced business-led observations and automations via **Developer productivity enhancements and enhanced APIs**

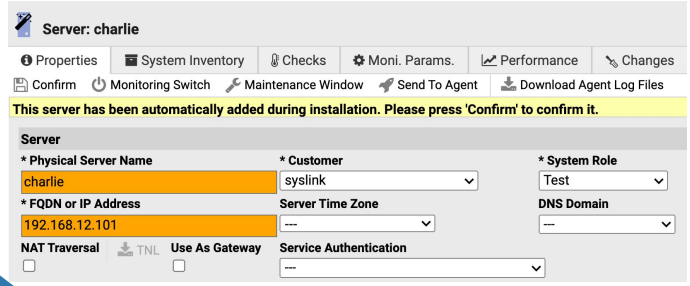
Drive additional insight from business critical non-SAP systems with the new **Native connect support for PostgreSQL and MySQL**

# Auto server registration & system discovery

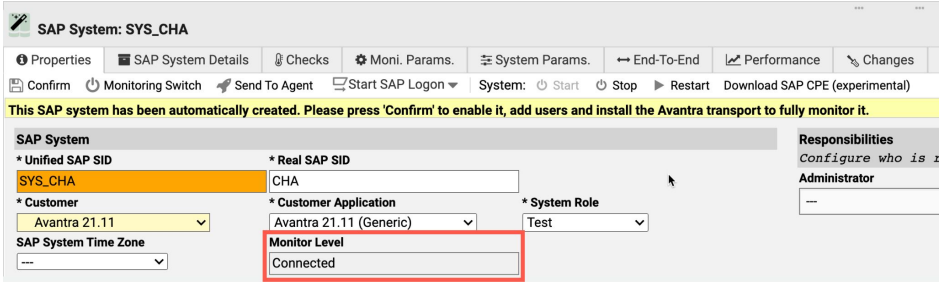
Easily scale to match business initiatives through significantly reduced deployment effort

- Automatic self-registration from deployed agents to simplify and speed up new systems

  Simply use: agent-21.11.0.bin -- --masterhost=your-master-host --custid=123
- Detected SAP instances and SAP systems are now automatically discovered by the agent and created within the Avantra system
- Avantra administrators confirm automatically created systems individually or in a bulk action




Server




SAP system

Standard edition

# Multi-level monitoring support

Deliver immediate observational insight for new systems

- SAP Systems can now be monitored even without credentials and transport
- Deliver value-add insights from the very start
- Monitoring level visible in list and detail views
- Mode is adjusted automatically based on level of visibility into the system

| Unified SAP SID | Real SAP SID | Monitor Level |
|---|---|---|
| AVA | AVA | Auth. & Deployed |
| AVA_MII | MII | Connected |
| AVA_PI7 | PI7 | Authenticated |

**Connected**

Basic monitoring mode.

Connectivity checked on TCP/IP level.

**Authenticated**

RFC / J2EE and DB users have been setup.

Many checks are available now.

ABAP Only

**Auth. and Deployed**

Transport has been deployed to ABAP systems.

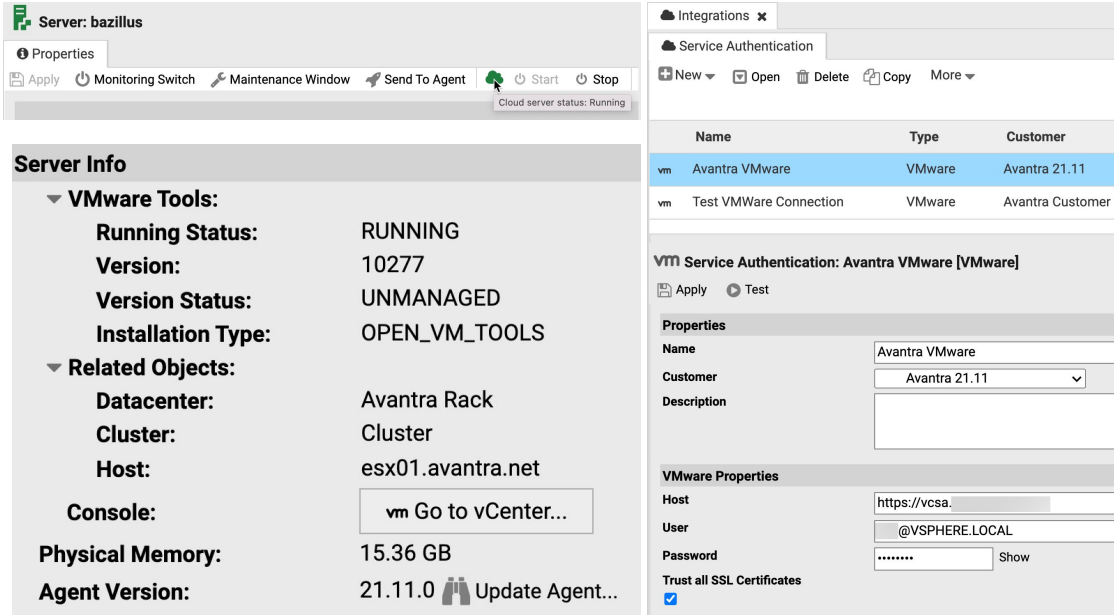
Full set of features and automations available.

Standard edition

# Native VMware integration

Treat your cloud and on-premise landscapes the same including end to end automation support

- VMWare is now natively integrated similar to cloud hyperscalers
- Metadata retrieval and visibility
- End to end start-/stop automation
- Direct link to vCenter
- Multi-customer, multi-tenant

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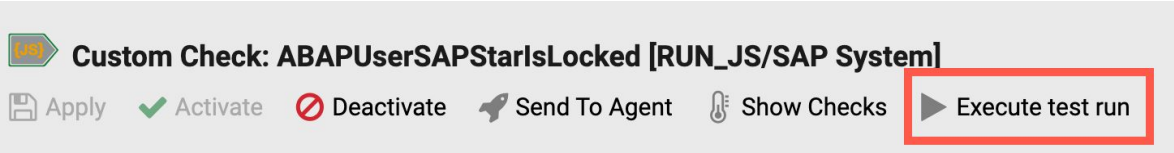
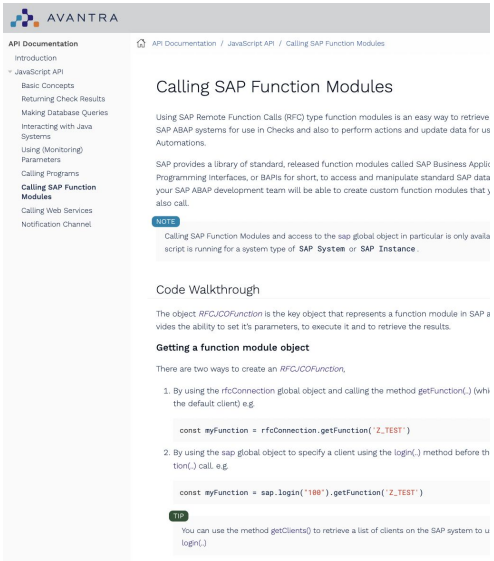
# Developer productivity enhancements

Enable operations teams to create and deploy enhanced business-led observations and automations

JavaScript based extensions are getting increasingly popular

- Significantly improved code to test to deploy timeframes (minutes to seconds)
- New test function to return JavaScript based custom check results instantly
- New simplified API for interacting with remote web services
- Improved and simplified API for calling SAP function modules
- All new streamlined API documentation with comprehensive example code



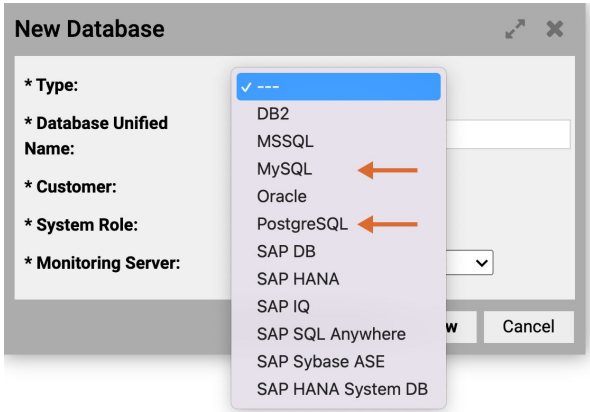




Professional edition

# Connect support for PostgreSQL & MySQL

Drive additional insight from business critical non-SAP systems

- New native support for popular open source databases PostgreSQL and MySQL
- Designed for customers to enhance and deploy their own observation requirements with ease
- More out of the box checks for PostgreSQL planned for 2022
- PostgreSQL support used for Avantra self monitoring on Linux
  (used within the Avantra self-monitoring Enterprise add in)




Professional edition

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# Upgrade notes

AVANTRA

- Release 21.11 replaces 20.11
- Upgrade like applying a patch: typically less than a few minutes on the master server
- Previous Agent releases (20.11, 20.5) are compatible with Avantra server 21.11
- New transport for 21.11 are compatible for all supported ABAP basis releases
  The transport version must not be higher than the Agent version.
- Java Runtime Environment 8 is the recommended version to use with Avantra Server and Avantra Agents
- Avantra now supports PostgreSQL version 13

# Thank you!

**Oli Rogers**
Product Manager
oli@avantra.com

**Bernd Engist**
Chief Technology Officer
bee@avantra.com


www.avantra.com

AVANTRA

## Technology Partners

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SAP Silver Partner

SAP® Certified
Integration with SAP NetWeaver®

SAP Certified
Integration with SAP S/4HANA

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