SAP Powerpack for ScienceLogic SL1

Seamless integration of Redpeaks
monitoring solution for SAP with SL1 using the REST toolkit.

Version 1.2

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Overview

- This powerpack facilitates the discovery and monitoring of SAP environments within SL1.
- It utilizes SL1's REST toolkit framework.
- It establishes a connection to Redpeaks API, providing access to monitoring data.
- Automatic creation and grouping of SAP devices occur seamlessly.
- System metadata, metrics, and alerts are automatically associated with their respective devices for streamlined organization.
- A set of dynamic applications will provide visibility on generated alerts and metrics and can be used to build custom dashboards and automation.

Scope

The powerpack specifically focuses on system monitoring across these categories:

- SAP S/4HANA and NetWeaver (starting from version 4.6)
- SAP HANA Database
- SAP BusinessObjects

You will find in the Monitored environments section below an exhaustive list of the monitored components.

Releases

- **V1.4.0** (2025-11-26)
    - Optimizations of queries
    - Fixes to some metric naming
- **V1.3.2** (2024-02-15)
    - Documentation update.
    - Optimizations of queries
- **V1.2.0** (2024-01-26)
    - Uses the updated REST toolkit environment
    - Important: Make sure to use the "Universal" credentials when aligning with the root level discovery application
- **V1.1** (2023/12) – Improvements
    - Fix potential cache issue.
    - Use JMSPATH instead of JSONPath for data parsing.
- **V1.0** (2023/11) - First version of this powerpack
    - Support of S/4HANA, NetWeaver, HANA, BusinessObjects
    - Reports all alerts.

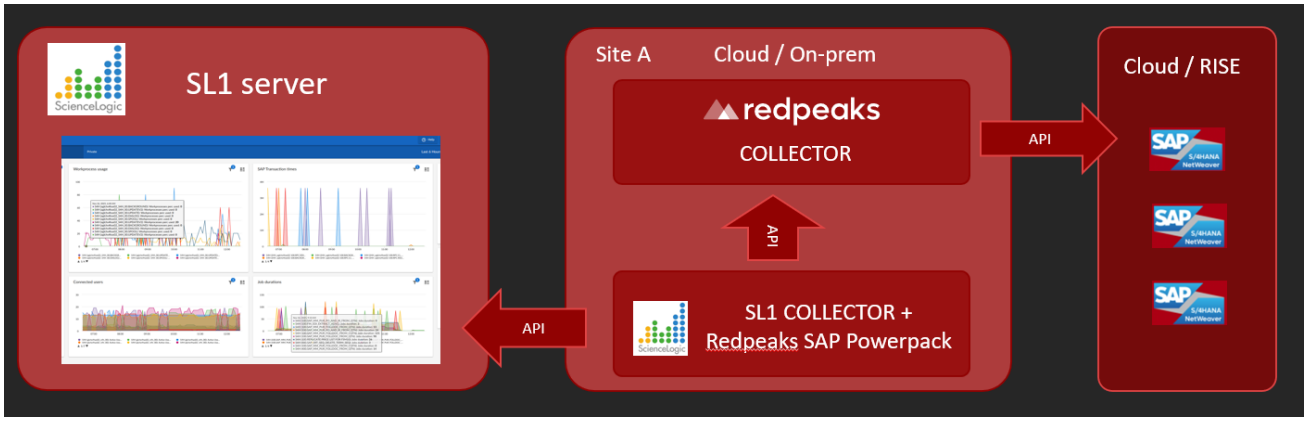
- Collects alerts and metrics for ABAP, J2EE, HANA stack sysems.
- Collects alerts for BusinessObjects systems.

Architecture

- A Redpeaks collector remotely monitors accessible systems.
- An SL1 collector usually connects to one Redpeaks collector within the same network security zone.
- Due to network and resiliency concerns, a 1-to-1 relationship is typical.
- However, it can collect data from multiple Redpeaks instances when needed.
- By example, for monitoring 2 separate SAP landscapes, it is possible to deploy 1 Pro. Redpeaks instance for each landscape, both linked to a single SL1 collector.

This is the most typical architecture:

1. Monitored SAP systems.
2. Redpeaks collector: Remotely connecting to the systems via standard API.
3. SL1 collector: Performing REST API calls to collect monitoring data.
4. SL1 instance.



Content

Devices

Defines the types of devices that the powerpack will create and manage.

Type	Name	Description	Version
Device category	SAP.Infrastructure	Root element, containing groups of systems	V1.0
Device category	SAP.Group	Group of SAP systems	V1.0
Device category	SAP.System	SAP system device	V1.0
Device category	SAP.Instance	A component of a SAP system	V1.0
Device class	SAP.Infrastructure	Root device for SAP groups	V1.0
Device class	SAP.Group	Virtual device representing a group	V1.0
Device class	SAP.NetWeaver ABAP	Device for ABAP stack systems	V1.0
Device class	SAP.ABAP instance	Device for ABAP application server	V1.0
Device class	SAP.Java instance	Device for J2EE application server	V1.0

Device class	SAP.HANA system	Device for HANA database	V1.0
Device class	SAP.HANA tenant	Device for HANA tenant	V1.0
Device class	SAP.BusinessObject	Device for BusinessObjects systems	V1.0

Dynamic applications

Those applications will collect metrics and health information for the discovered devices.

Name	Description	Version
ABAP metrics	Collect metrics from ABAP systems	V1.0
ABAP instance metrics	Collect metrics from ABAP instances	V1.0
HANA metrics	Collect metrics from HANA tenants	V1.0
HANA services	Collect HANA services status	V1.0
SAP alerts	Collect alerts from any device	V1.0

Event policies

Those policies define how Redpeaks events are being converted in to SL1 alerts.

Name	Description
CRITICAL	Maps event to SL1 CRITICAL alert
MAJOR	Maps event to SL1 MAJOR alert
MINOR	Maps event to SL1 MINOR alert
WARNING	Maps event to SL1 NOTICE alert
INFO	Maps event to SL1 NOTICE alert
CLEAR	Maps event to SL1 HEALTHY (suppresses)

Prerequisites

- This powerpack works with SL1 **V11.3.0** or later (requires the REST toolkit powerpack).
- It needs Redpeaks tor collector version **6.8.5** or above.
- Ensure the Redpeaks collector is both installed and configured.
- Open network routes between the SL1 collector and Redpeaks collector on HTTP/HTTPS ports to allow HTTP REST requests from the SL1 collector to the Redpeaks collector.

Installation

Those are the main steps to complete for configuring the SAP integration in SL1:

1. Get **SAP monitoring with REST toolkit** powerpack from SL1 download center or from redpeaks (support@redpeaks.io)
2. Upload and install the SAP powerpack.
3. Register Redpeaks REST API credentials.
4. Create a root virtual device for SAP systems discovery.
5. Assign the discovery dynamic applications to the root device.

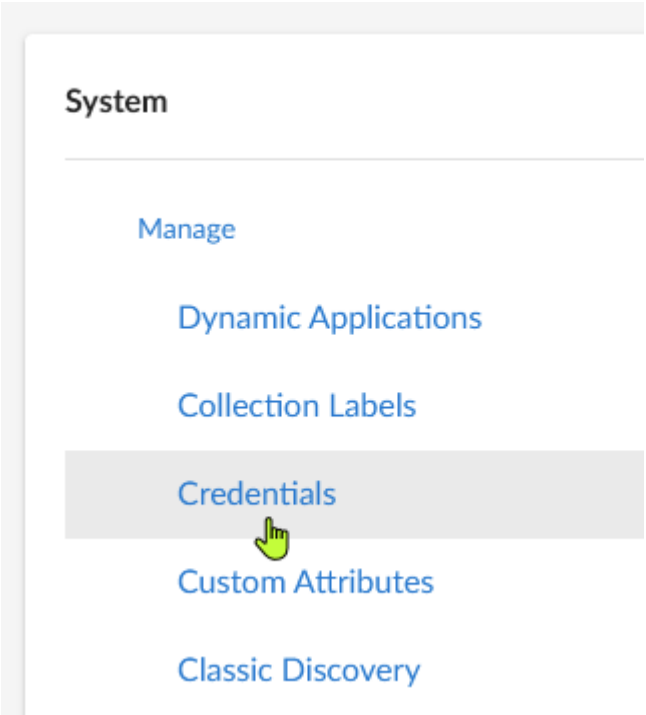
After having completed those few steps, the SAP infrastructure will be discovered, and you will be able to see events and metrics within your SL1 instance.

Upload and install powerpack

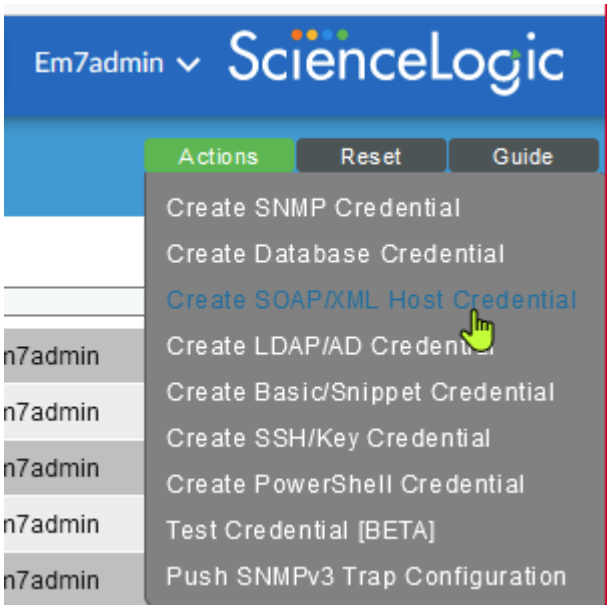
- Navigate to the Powerpack section of SL1 settings.
- Select Action->Import powerpack and upload the powerpack file.
- Once upload is complete, the powerpack installer screen will popup: Press Install
- You should see the new powerpack in the table.

Register Credentials

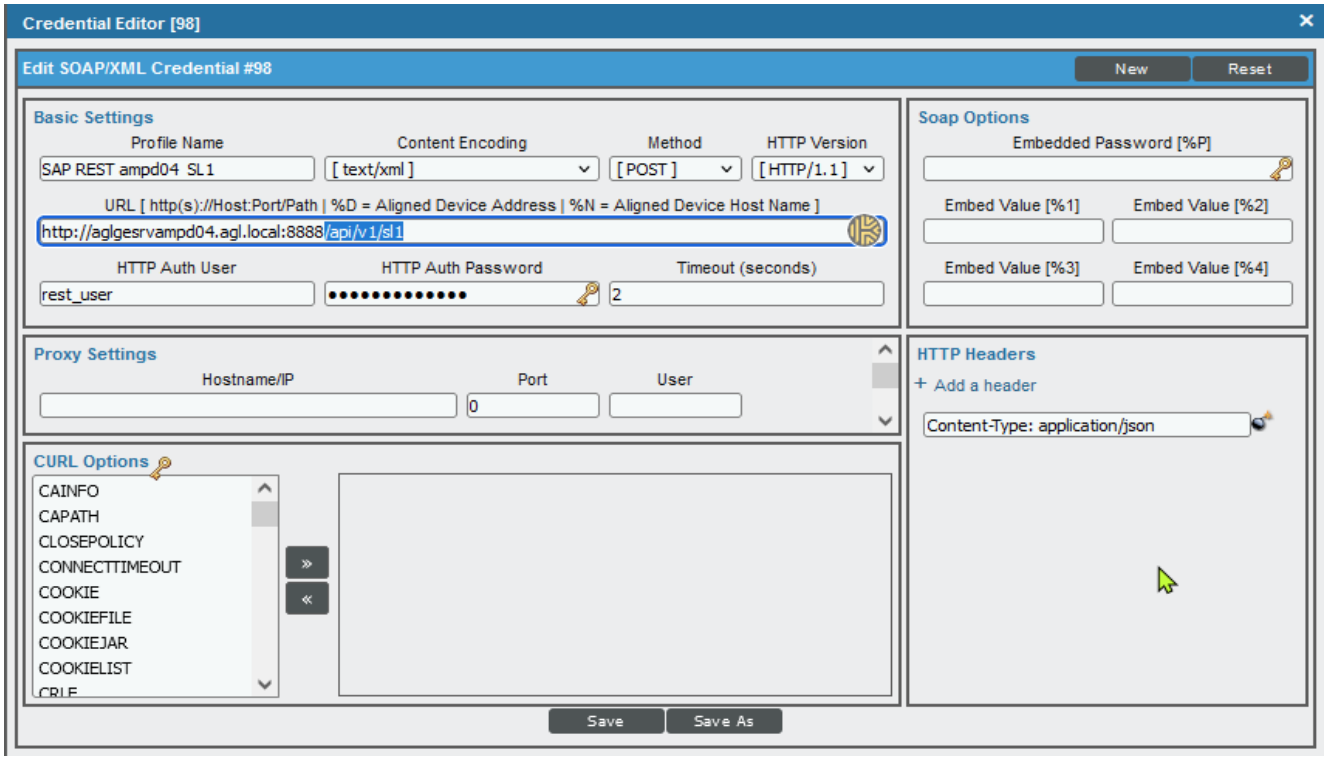
- Navigate to System -> credentials.



- Create a **SOAP/XML Host**

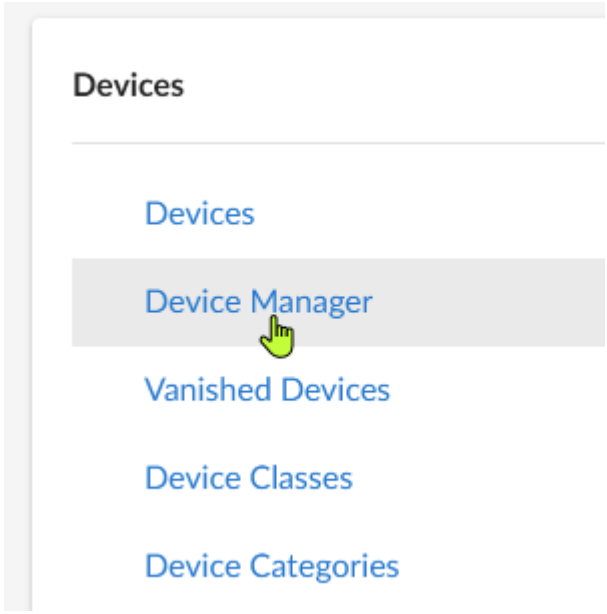


- Set the Redpeaks collector URL and authentication parameters.
- Use **/api/v1/sl1** as API endpoint.

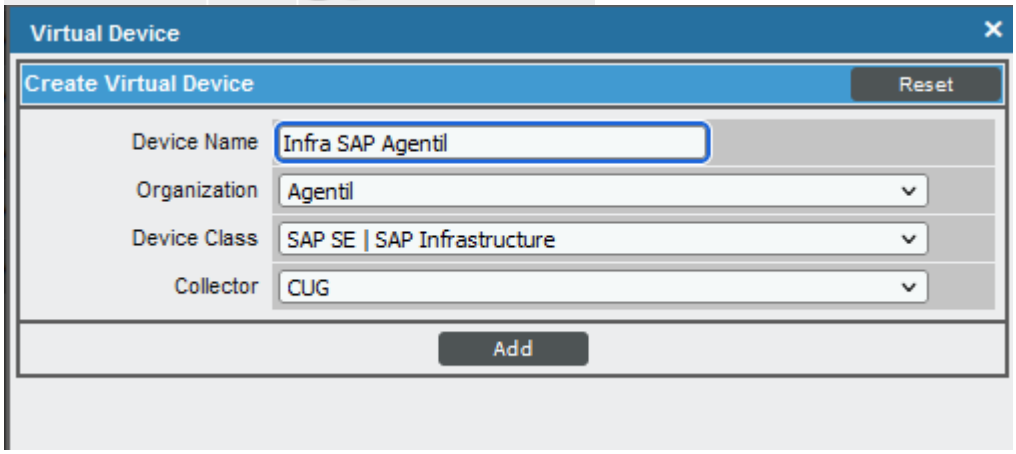


Create SAP root device

- Navigate to Device manager

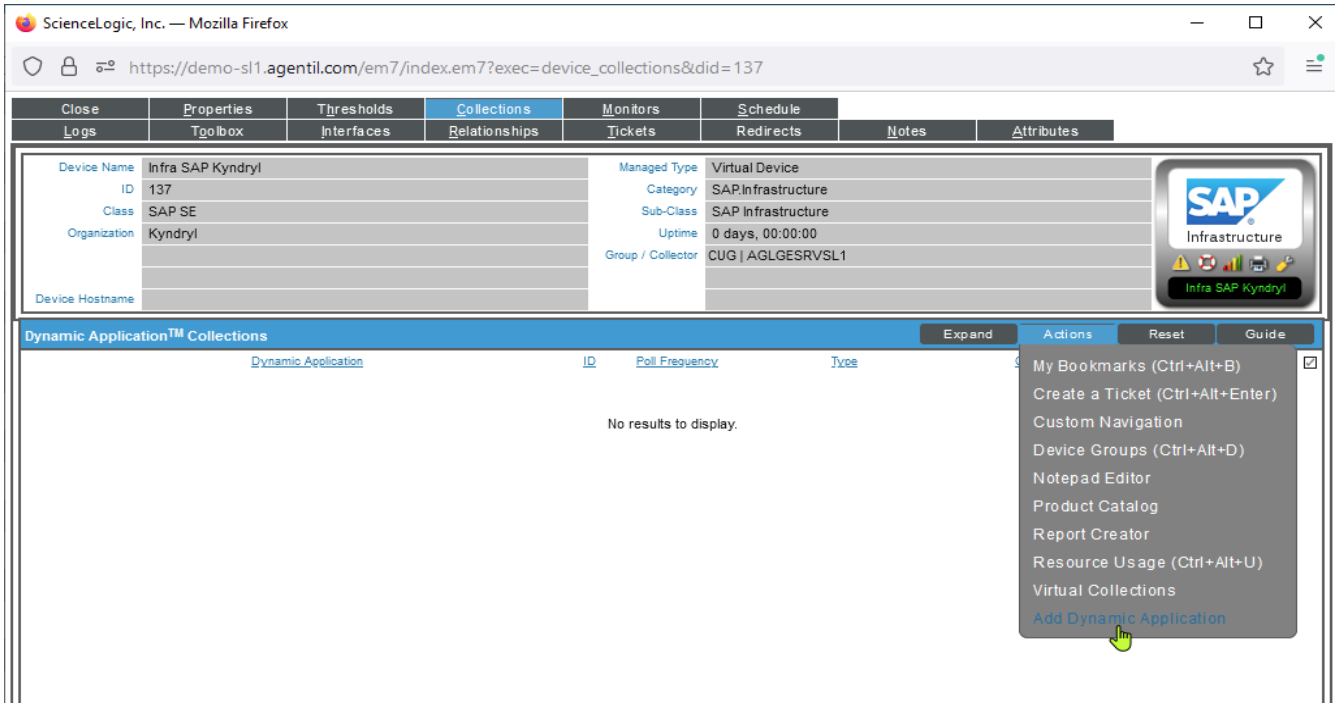


- Create a virtual device.

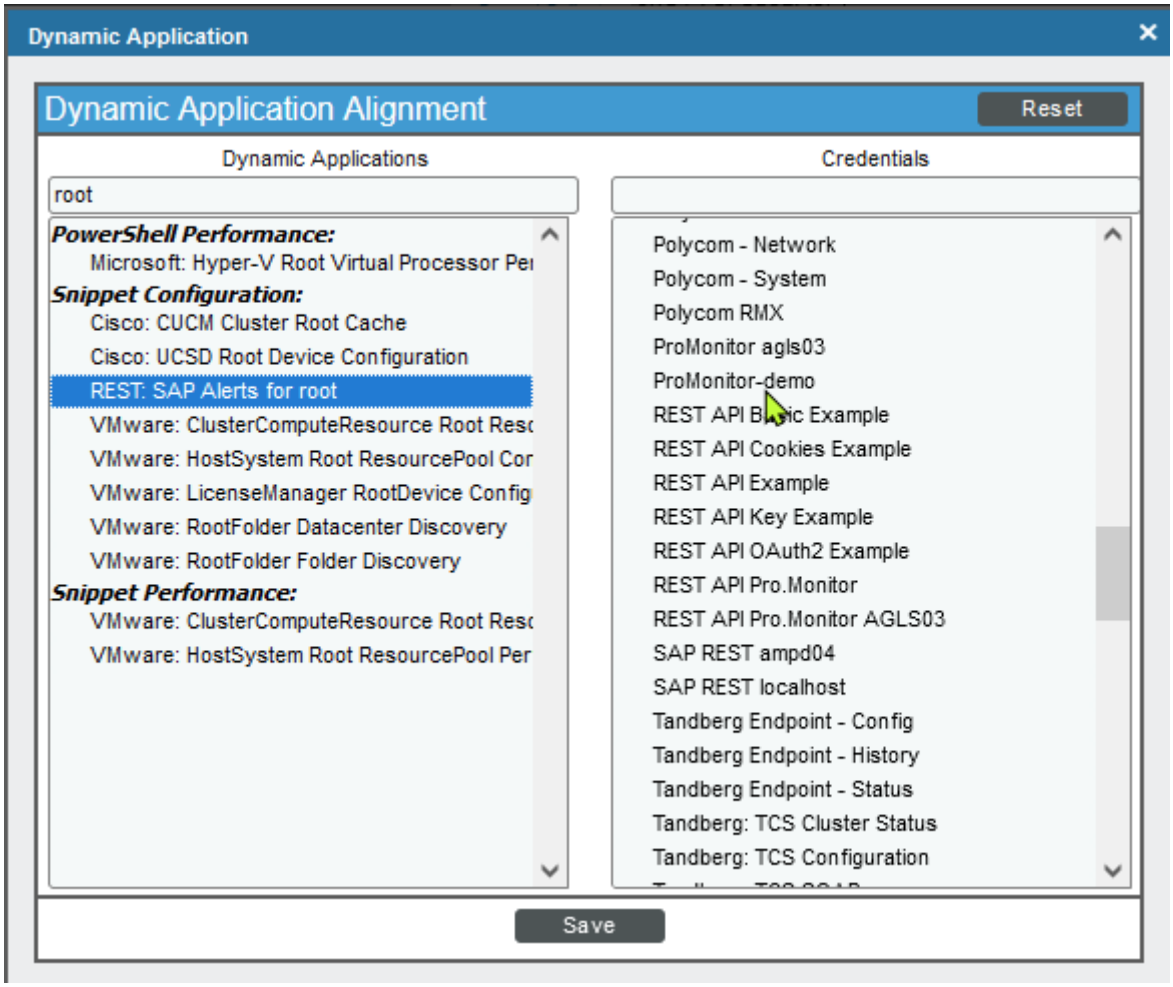


Align discovery applications

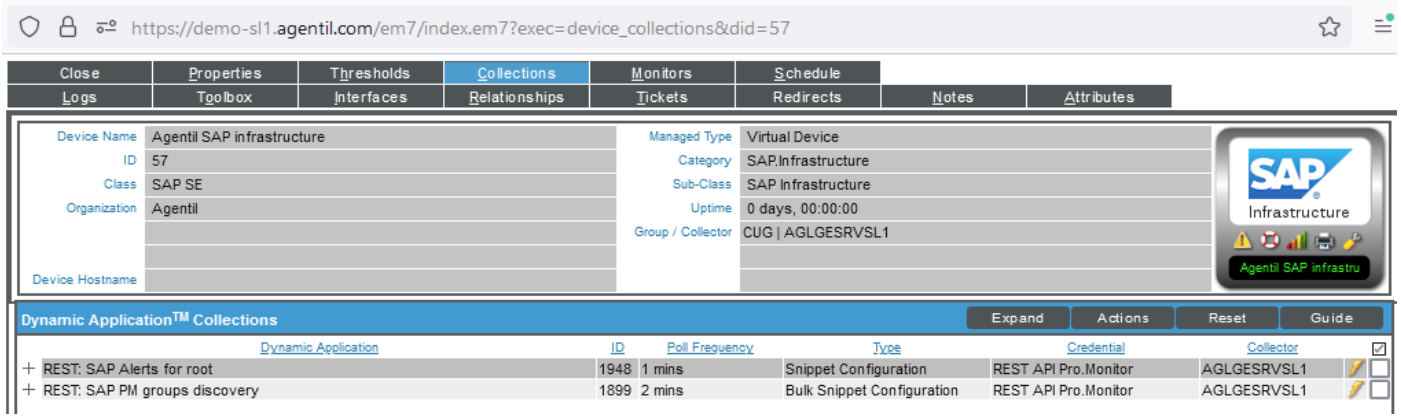
- Edit the created device and go to collectors tab.
- Assign dynamic applications:



- You need to assign two applications:
  - **SAP_RP: SAP alerts**
  - **SAP_RP: SAP groups discovery**
- Select the applications within the list.
- Once clicked on the application name, this will list the available credentials.
- Select the credentials that you created and save.



- Once done, you should see two applications aligned with the device.
- From now on, your SAP architecture will be automatically discovered.



Monitored environments

- This is a description of the discovered devices by environment and associated monitored components

S/4HANA - NetWeaver

Devices	Description
SAP system	The SAP logical system composed by application servers
SAP ABAP instance	An ABAP instance
SAP J2EE instance	A J2EE instance

Components

ABAP instance memory
ABAP instance response time
ABAP locks
ABAP shortdumps
Batch inputs
Database backups
Database size
DB Exclusive locks
Dispatcher queues
ICM status and usage
IDOC exchange monitoring
Instances availability
PI/XI messages ABAP
Process Chains monitoring
Queued RFC
RFC Destinations availability
SAP buffers
SAP change settings
SAPconnect (SCOT/SOST)
SAP Jobs monitoring
SAP transaction times
SAP transports
SAP users
Spools

Components for J2EE

Java components status
Java instances status
Java processes status
SAP Control metrics tree

HANA DB

Devices	Description

HANA system	The SAP logical system composed of one or several tenants
HANA tenant	A tenant database

Components for HANA

Database CPU utilization
Database disk usage
Database memory utilization
HANA backups
HANA connections
HANA nodes status
HANA replication LOG retention statistics
HANA replication shipping statistics
HANA replication status
HANA tables
HANA threads
HANA transactions
Merge statistics
Services status

BusinessObjects

Devices	Description
BusinessObjects system	A standalone BusinessObjects system

Components

Concurrent users
Schedules
Servers status
Server metrics

Support

- For support or feature requests please use our Jira system: Service Desk Redpeaks
- If you don't have an account yet, contact Redpeaks at support@redpeaks.io
- You will find the latest information about this powerpack here: https://wiki.redpeaks.io/doku.php?id=products:promonitor:latest:userguide:integrations:sciencelogic