

Release Notes for Juniper® HealthBot Release 3.2.0

Release 3.2.0
19 January 2021

These release notes accompany Juniper Networks HealthBot Release 3.2.0.

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Introduction

HealthBot is a highly automated and programmable device-level diagnostics and network analytics tool that provides consistent and coherent operational intelligence across network deployments.

Integrated with multiple data collection methods (such as Junos Telemetry Interface, NETCONF, SNMP, syslog, and NetFlow), HealthBot aggregates and correlates large volumes of time-sensitive telemetry data, providing a multidimensional and predictive view of the network. Additionally, HealthBot translates troubleshooting, maintenance, and real-time analytics into an intuitive user experience to give network operators actionable insights into the health of an individual device and the overall network.

Installation

For information on how to install HealthBot, as well as the software and hardware requirements for HealthBot, see the [HealthBot Installation Guide](#).

New and Changed Features

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We're pleased to announce the availability of HealthBot Release 3.2.0. With this release, the new and changed features include:

Support for Ubuntu 18.04 (Bionic Beaver)

Starting with HealthBot Release 3.2.0, you can install and run HealthBot on version 18.04 or later of the Ubuntu operating system. The offline package installer is supported only on 18.04.04. No earlier version of 18.04 is supported for the offline package installer.

sFlow Ingest

Starting with HealthBot Release 3.2.0, you can configure HealthBot to accept sFlow as an ingest method from configured devices. sFlow encoded packets arrive at HealthBot, are processed, and stored in the TSDB database. Thus, HealthBot can analyze sFlow data in the same ways as it does for other ingest methods.

Outbound SSH Support for iAgent on Junos Devices

Outbound SSH allows Junos OS devices to establish SSH/Netconf connections with network management platforms so that the Junos OS device acts as the server and the management platform (HealthBot) acts as the client. Once the device is added to HealthBot, you can enable Outbound SSH for the device or device group by clicking the enable button and providing a unique port number for the device to communicate over. Once HealthBot completes an Outbound SSH connection with a device, it initiates a key exchange so that all future communications are key-based.

IPv6 Support in HealthBot

HealthBot supports networking devices that are configured with IPv6 addresses.

NOTE: For installing HealthBot, you must use only IPv4 addresses.

Time Inspector View in Health Monitor

The Time Inspector view allows users to drill down into the health status information shown in the table view on the **Monitor > Health** page. Time inspector provides insight, in graphical form, into what triggered the status indicator of selected telemetry data to appear as green, yellow, or red.

Resolved Issues

User Defined Function Execution

User Defined Functions (UDFs) which python can use to extend fields needs to be populated in a rule were earlier executed in each ingest. The python interpreters which are spawned to execute these UDF's were mostly idle but could handle only one request at a time. This increased the overall processing time when using these functions. Even with enough computing power and RAM available, the rate at which HealthBot was able to consume the data was low.

These UDF executions have been moved out of TAND and into a UDF farm which can process multiple requests at a time. This has resulted in a 4.5 to 5 times improvement in the rate at which HealthBot can process rules that have UDFs.

Invalid/Missing Kubernetes Configuration During Install

An error appears during multi-node installation: **Invalid/Missing kubernetes configuration.**

Due to changes in back end infrastructure the HealthBot CLI no longer has access to files outside of the path `/var/local/healthbot/`. To correct this, you can create an environment variable using the command: **export HB_EXTRA_MOUNT1=/root/.kube/config**, or copy the kubernetes configuration file into the `/var/local/healthbot/` directory.

After completing one of these two, the installer will complete normally.

Holt-Winters Issue in Anomaly Detection

An issue which prevented the successful use of Holt-Winters anomaly detection and prediction in certain circumstances has been resolved.

Machine Learning Issue

In some rules where tagging was used, machine learning algorithms did not function. This issue has been resolved.

Tagged Field References

In rules that contained tagged fields, using a reference to those fields from other rules would fail. This issue has been resolved.

Known Issues

Upgrade from 2.X to 3.X

If you are on a 2.X release of HealthBot and want to move to 3.1.0 release with a multi-node (Kubernetes) installation, you must do a fresh installation. To migrate your data from HealthBot Release 2.X (docker-compose) to 3.1.0 (Kubernetes) follow the procedure here: [Migration from HealthBot Release 2.X to 3.X](#). This issue does not apply if upgrading from release 3.0.0/3.0.1 to release 3.1.0

User Credentials from 2.X

Any user credentials present prior to upgrade from 2.X must be recreated after upgrade from release 2.X to release 3.2.0. This issue does not apply if upgrading from release 3.X to release 3.2.0

RBAC Limitations

The RBAC feature is limited to providing either read-only or read-write access to all pages for any user except the hbadmim user. Fine grained access to pages or features is not controlled in this release.

Retaining Graph and Timeline View Data

In some cases, Graph and timeline view data is not retained during an upgrade or migration from release 2.X to 3.X. To deal with this issue, click Deploy in the left-nav before performing an upgrade. This issue does not apply when upgrading from release 3.0.0/3.0.1 to release 3.2.0

HealthBot CLI

No documentation support is provided for the HealthBot CLI. Contact a Juniper Networks representative for support.

Requesting Technical Support

Technical product support is available through the Juniper Networks Technical Assistance Center (JTAC). If you are a customer with an active J-Care or Partner Support Service support contract, or are covered under warranty, and need post-sales technical support, you can access our tools and resources online or open a case with JTAC.

- JTAC policies—For a complete understanding of our JTAC procedures and policies, review the *JTAC User Guide* located at <https://www.juniper.net/us/en/local/pdf/resource-guides/7100059-en.pdf>.
- Product warranties—For product warranty information, visit <http://www.juniper.net/support/warranty/>.
- JTAC hours of operation—The JTAC centers have resources available 24 hours a day, 7 days a week, 365 days a year.

Self-Help Online Tools and Resources

For quick and easy problem resolution, Juniper Networks has designed an online self-service portal called the Customer Support Center (CSC) that provides you with the following features:

- Find CSC offerings: <https://www.juniper.net/customers/support/>
- Search for known bugs: <https://prsearch.juniper.net/>
- Find product documentation: <https://www.juniper.net/documentation/>
- Find solutions and answer questions using our Knowledge Base: <https://kb.juniper.net/>

- Download the latest versions of software and review release notes:
<https://www.juniper.net/customers/csc/software/>
- Search technical bulletins for relevant hardware and software notifications:
<https://kb.juniper.net/InfoCenter/>
- Join and participate in the Juniper Networks Community Forum:
<https://www.juniper.net/company/communities/>
- Create a service request online: <https://myjuniper.juniper.net>

To verify service entitlement by product serial number, use our Serial Number Entitlement (SNE) Tool:
<https://entitlementsearch.juniper.net/entitlementsearch/>

Creating a Service Request with JTAC

You can create a service request with JTAC on the Web or by telephone.

- Visit <https://myjuniper.juniper.net>.
- Call 1-888-314-JTAC (1-888-314-5822 toll-free in the USA, Canada, and Mexico).

For international or direct-dial options in countries without toll-free numbers, see
<https://support.juniper.net/support/requesting-support/>.

Revision History

19 January, 2021—HealthBot Release 3.2.0

05 April 2021—HealthBot Release 3.2.0

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