

JUNIPER NETWORKS 22.1.0-SP2 Paragon Automation User Guide

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Product Information

The product mentioned in the user manual is Paragon Automation, specifically Release 22.1.0-SP2. This release includes separate patch files for the following components:

- Paragon Insights
- Paragon Pathfinder
- Infrastructure

The patch installation instructions provided in the user manual are for the Paragon Automation Release 22.1.0-SP2.

Product Usage Instructions

Install the Paragon Insights patch

1. Create a directory for the patch: `mkdir /var/local/healthbot/patch`
2. Extract the patch files to the patch directory: `tar -zxvf patch_22.1-IS_SP2-20230228.tar.gz -C /var/local/healthbot/patch`
3. Navigate to the patch directory: `cd /var/local/healthbot/patch`
4. Install the patch: `sh -x ./patch.sh`

The patch installation script will install the patch and restart the Paragon Insights services. It will also create a backup-configuration file of the existing Paragon Insights configuration in the directory `/var/local/healthbot/hb_backup`.

Install the Paragon Pathfinder patch

1. Extract the patch file: `tar xf patch_22.1-PF_SP2-20230130_1414-69cd81a.tar`
2. Navigate to the patch directory: `cd patch_22.1-PF_SP2-20221213_1333-78f14a8`
3. Install the patch: `./deploy-images.sh`

The deploy script will install the patch and create a backup-configuration file of the existing Paragon Pathfinder configuration. The backup-configuration file will have a timestamp and be saved in the current directory.

Install the infrastructure patch

1. Extract the patch file: `tar xf patch_22.1-INFRA_SP2-20230130_1419-69cd81a.tar`
2. Navigate to the patch directory
3. Install the patch: `./deploy-images.sh`

The deploy script will install the infrastructure patch and create a backup-configuration file of the existing infrastructure configuration. The backup configuration file will have a timestamp and be saved in the current directory.

Introduction

Juniper® Paragon Automation is a cloud-ready solution for network planning, configuration, provisioning, traffic engineering, monitoring, and life-cycle management that brings advanced visualization capabilities and analytics to network management and monitoring. You can deploy Paragon Automation as an on-premises (customer-managed) application.

Paragon Automation Release 22.1.0-SP2 resolves issues that are reported by users and administrators from previous Paragon Automation releases. These release notes accompany Release 22.1.0-SP2 and detail the issues resolved in this release. These release notes also describe the instructions to install and to apply the Release 22.1.0-SP2 patch to your current Paragon Automation Release 22.1 setup.

For information about the features of the base platform, Paragon Pathfinder, Paragon Planner (Desktop Application), and Paragon Insights modules that are available in Paragon Automation Release 22.1, see Paragon Automation Release Notes, Release 22.1 and Paragon Automation User Guide. For information about installation procedure, upgrade procedure, and requirements (software and hardware) for Paragon Automation Release 22.1, see Paragon Automation Installation Guide.

Installation Instructions

SUMMARY

- This section describes the patch installation instructions for Paragon Automation Release 22.1.0-SP2.

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Paragon Automation Release 22.1.0-SP2 has separate patch files for the Paragon Insights, Paragon Pathfinder, and infrastructure components. Perform the following steps to download and to install the patch files on your current Paragon Automation Release 22.1 setup.

1. Select 22.1 from the Version list on the Paragon Automation software download page at <https://support.juniper.net/support/downloads/?p=pa>.
2. Download the Paragon Automation Setup Service Pack 2 installation files to the primary node of your current Paragon Automation Release 22.1 Kubernetes cluster. In a multi-primary-node setup, you can download to any one of the primary nodes. `root@primary-node:~# wget "https://cdn.juniper.net/software/pa/22.1.0/file-download-url "`
 1. The Paragon Automation Setup Service Pack 2 installation bundle consists of the following files to patch each of the component modules:
 - `patch_22.1-IS_SP2-20230228.tar.gz`, which is the Paragon Insights patch
 - `patch_22.1-PF_SP2-20230130_1414-69cd81a.tar`, which is the Paragon Pathfinder patch
 - `patch_22.1-INFRA_SP2-20230130_1419-69cd81a.tar`, which is the infrastructure component patch

You must install the patch files individually.

Install the Paragon Insights patch

Prerequisite

Ensure that either the KUBECONFIG variable is set or the `~/kube/config` file is present and contains admin credentials for the cluster, since the patch script runs `kubectl`. Also, ensure that the Paragon Insights services are up and running before installing and applying the patch. To verify that the status of the pods is Running, use one of the following commands.

- `root@primary-node:~# kubectl -n healthbot get pods`
- `root@primary-node:~# kubectl get po -n healthbot`

To install the Paragon Insights patch, perform the following steps:

1. Extract the `patch_22.1-IS_SP2-20230228.tar.gz` file to the `/var/local/healthbot/patch` directory.
 - `root@primary-node:~# mkdir /var/local/healthbot/patch`
 - `root@primary-node:~# tar -zxvf patch_22.1-IS_SP2-20230228.tar.gz -C /var/local/healthbot/patch`
2. Navigate to the `/var/local/healthbot/patch` directory.
 - `root@primary-node:~# cd /var/local/healthbot/patch`
3. Install the patch.
 - `root@primary-node:/var/local/healthbot/patch# sh -x ./patch.sh`

The patch script installs the patch and restarts the Paragon Insights services. The script, also generates a timestamped backup-configuration file of your existing Paragon Insights configuration prior to installing the patch. The backup-configuration file is saved in `/var/local/healthbot/hb_backup`.

Rollback

- In case of any failure, to rollback the patch-related changes, use the following command.

- root@primary-node:/var/local/healthbot/patch# sh -x ./rollback.sh

Install the Paragon Pathfinder patch

To install the Paragon Pathfinder patch, perform the following steps:

1. Extract the patch_22.1-PF_SP2-20230130_1414-69cd81a.tar file.
 - root@primary-node:~# tar xf patch_22.1-PF_SP2-20230130_1414-69cd81a.tar
2. Navigate to the patch directory.
 - root@primary-node:~# cd patch_22.1-PF_SP2-20221213_1333-78f14a8
3. Install the patch.
 - root@primary-node:~/patch_22.1-PF_SP2-20221213_1333-78f14a8# ./deploy-images.sh
 - The deploy script installs the patch. Additionally, it generates a timestamped backup-configuration file (for example, patch_deploy.backup_20221213_1349), of your existing Paragon Pathfinder configuration, prior to installing the patch.

Rollback

- In case of any failure, to rollback the patch-related changes, use the following command.
- root@primary-node:~# ./rollback-images.sh patch_deploy.backup_20221213_1349

Install the infrastructure patch

To install the Paragon Automation infrastructure patch, perform the following steps:

1. Extract the patch_22.1-INFRA_SP2-20230130_1419-69cd81a.tar file.
 - root@primary-node:~# tar xf patch_22.1-INFRA_SP2-20230130_1419-69cd81a.tar
2. Navigate to the patch directory.
 - root@primary-node:~# cd patch_22.1-INFRA_SP2-20221221_1350-6a0657d
3. Install the patch.
 - root@primary-node:~/patch_22.1-INFRA_SP2-20221221_1350-6a0657d# ./deploy-infra.sh
 - The deploy-infra script installs the patch.

Rollback

- In case of any failure, to rollback the patch-related changes, use the following command.
- root@primary-node:~# ./rollback-infra.sh

RELATED DOCUMENTATION

- Paragon Automation Installation Guide

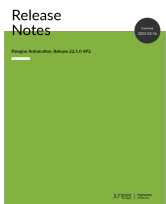
Resolved Issues

This section lists the resolved issues in Paragon Automation Release 22.1.0-SP2.







- Restoration of Paragon Automation configuration through cMGD CLI command is broken.
- High CPU usage of healthbot-topology service if influxdb service is not reachable on localhost (127.0.0.1).
- When Redis connection timeouts for inactivity are not set, TCP connections are not cleared, and Celery hangs and does not pick new jobs.
- A third-party library used for the root cause analysis (RCA) feature causes memory leak in the Inference Engine service. To correct this issue, the RCA feature is disabled and unavailable.
- Multiple SSH connections are spawned for a single device to collect data. This causes the SSH connections on the device to reach their limit.
- The health-tree API returns an Internal Server Error and no health data is received.
- Configuring persist-raw-data through Rule Builder CLI fails.
- Incorrect values displayed for certain telemetry data like bps/pps for logical-interface-aggregation using jti-native ingest.
- API Server crashes unexpectedly in some instances in shared production DB sessions.
- Default device group is overloading the system. It is now disabled by default and can be enabled through configuration changes.
- Unable to create SR LSP in only segment routed networks.
- The calculation of aggregated data stats based on the dynamic elapsed time is improved.
- The Paragon Pathfinder delete demand function is broken, as a result, demands are not deleted (either from Web UI and or directly through REST).
- Exception handling on links without explicit end nodes is improved.
- After the Network Archive task is executed, bblink.x, demand.x, and optunnel.x files are generated but not copied to the destination directory.
- The hbinit job is updated to support SNMP index changes.
- The performance and computation required to query from influxdb by changing SNMP index field to key is improved.
- Out-of-date archives (default 30 days) in the /opt/northstar/data/archives directory are removed. The filesystem timestamp is used to measure time.
- Updates to Paragon Automation Web UI security.

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Documents / Resources

	<p>JUNIPER NETWORKS 22.1.0-SP2 Paragon Automation [pdf] User Guide 22.1.0-SP2 Paragon Automation, 22.1.0-SP2, Paragon Automation, Automation</p>
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References

-  [Downloads](#)
-  [Support 403 | Juniper Networks US](#)
-  [Downloads](#)
-  [Paragon Automation Installation Guide | Juniper Networks](#)
-  [Paragon Automation User Guide | Juniper Networks](#)
-  [Release Notes: Paragon Automation, Release 22.1 | Juniper Networks](#)

Manuals+.