Nutanix: Base Pack PowerPack Release Notes

Version 106

Overview

Version 106 of the "Nutanix: Base Pack" PowerPack includes run book actions that support Python 3, and Dynamic Applications that can now utilize snippet framework and use snippet arguments to define, collect, and interpret data.

- **Minimum Required SL1 Version**: 10.2.0
- **Support Status**: GA

Before You Install or Upgrade

Ensure that you are running version 10.2.0 or later of SL1 before installing the "Nutanix: Base Pack" PowerPack.

NOTE: For details on upgrading SL1, see the relevant ***SL1 Platform Release Notes***.

WARNING: You can monitor Prism Elements **or** Prism Central. You must choose between monitoring Prism Elements or Prism Central as the root device, and then run discovery accordingly. It is recommended that you monitor Prism Central in all cases, unless you have only Prism Elements instances with **no** Prism Central instances.

Installing or Upgrading the PowerPack to Monitor Prism Element

TIP: By default, installing a new version of a PowerPack will overwrite all content in that PowerPack that has already been installed on the target system. You can use the ***Enable Selective PowerPack Field Protection*** setting in the **Behavior Settings** page (System > Settings > Behavior) to prevent the new version of the PowerPack from overwriting local changes for some commonly customized fields.

NOTE: If you are currently using the Dynamic Applications in this PowerPack to monitor devices, collection errors might occur for one or two polling cycles during the installation of a new version. To prevent collection errors during an upgrade, you can optionally disable collection for monitored devices before performing the following steps and re-enable collection after the upgrade.

To install this PowerPack:

1. Search for and download the PowerPack from the **PowerPacks** page (Product Downloads > PowerPacks & SyncPacks) at the ScienceLogic Support Site.
2. In SL1, go to the **PowerPacks** page (System > Manage > PowerPacks).
3. Click the **Actions** menu and choose *Import PowerPack*. The **Import PowerPack** modal appears.
4. Click **[Browse]** and navigate to the PowerPack file from step 1.
5. Select the PowerPack file and click **[Import]**. The **PowerPack Installer** modal displays a list of the PowerPack contents.
6. Click **[Install]**. The PowerPack is added to the **PowerPack Manager** page.

For more information about using the PowerPack, see the *Monitoring Windows Systems with PowerShell* manual.

Installing or Upgrading the PowerPack to Monitor Prism Central

TIP: By default, installing a new version of a PowerPack will overwrite all content in that PowerPack that has already been installed on the target system. You can use the ***Enable Selective PowerPack Field Protection*** setting in the **Behavior Settings** page (System > Settings > Behavior) to prevent the new version of the PowerPack from overwriting local changes for some commonly customized fields.

NOTE: If you are currently using the Dynamic Applications in this PowerPack to monitor devices, collection errors might occur for one or two polling cycles during the installation of a new version. To prevent collection errors during an upgrade, you can optionally disable collection for monitored devices before performing the following steps and re-enable collection after the upgrade.

To install this PowerPack:

1. Search for and download the PowerPack from the **PowerPacks** page (Product Downloads > PowerPacks & SyncPacks) at the ScienceLogic Support Site.
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3. Click the **Actions** menu and choose *Import PowerPack*. The **Import PowerPack** modal appears.
4. Click **[Browse]** and navigate to the PowerPack file from step 1.
5. Select the PowerPack file and click **[Import]**. The **PowerPack Installer** modal displays a list of the PowerPack contents.
6. Click **[Install]**. The PowerPack is added to the **PowerPack Manager** page.

Installing or Upgrading the PowerPack to switch from Monitoring Prism Element to Monitoring Prism Central

If you monitor Prism Element and want to monitor Prism Central, upgrading to version 103 or greater of the PowerPack might require further steps, depending on if you need to keep historical data.

TIP: By default, installing a new version of a PowerPack will overwrite all content in that PowerPack that has already been installed on the target system. You can use the ***Enable Selective PowerPack Field Protection*** setting in the **Behavior Settings** page (System > Settings > Behavior) to prevent the new version of the PowerPack from overwriting local changes for some commonly customized fields.

If you need to preserve historical data, perform the following steps:

1. See the *Before You Install or Upgrade* section. If you have not done so already, upgrade your system to the 10.2.0 or later release.
2. Familiarize yourself with the *Known Issues* for this release.
3. Download "Nutanix: Base Pack" version 106 from the Support Site to a local computer.
4. Go to the **PowerPack Manager** page (System > Manage > PowerPacks). Click the **[Actions]** menu and choose *Import PowerPack*. Import "Nutanix: Base Pack" version 106. For details on importing PowerPacks, see the chapter on *Installing a PowerPack* in the ***PowerPacks*** manual.
5. Click the **[Install]** button. For details on installing PowerPacks, see the chapter on *Installing a PowerPack* in the ***PowerPacks*** manual.
6. Go to the **Device Components** page (Registry > Devices > Device Components). Find the Prism Element Component and select its checkbox.
7. In the ***Select Action*** drop-down list, under **Change Collection State**, select *Disabled (recursive)*.

8. Discover your Prism Central device. After discovery, all Prism Element devices that are a part of Prism Central will appear as component devices under the root device.
9. If you are discovering a Prism Central that contains Prism Element devices that have been previously discovered and user-disabled, the Prism Element devices will need to be re-enabled in order for normal Dynamic Application alignment and data collection to proceed. Go to the **Device Components** page (Registry > Devices > Device Components). Find the Prism Central device tree and select the checkboxes for the Prism Element devices that have been disabled in that tree. In the ***Select Action*** drop-down list, under **Change Collection State**, select *Active(recursive)*.
10. See the manual ***Monitoring Nutanix*** for instructions on using the PowerPack.

If you **do not** need to preserve historical data, perform the following steps:

1. See the *Before You Install or Upgrade* section. If you have not done so already, upgrade your system to the 10.2.0 or later release.
2. Familiarize yourself with the *Known Issues* for this release.
3. Go to the **Device Components** page (Registry > Devices > Device Components). Find the Prism Element Component and select its checkbox.
4. In the ***Select Action*** drop-down list, under **Change Collection State**, select *Disabled (recursive)*.
5. Go to the **Device Manager** page (Registry > Devices > Device Manager) and select all of the disabled Prism Element devices. In the ***Select Action*** drop-down list, under **Administration**, select *DELETE Selected Devices*. This will delete all of the devices except the root device.
6. Once those devices are removed, in the **Device Manager** page (Registry > Devices > Device Manager) select the root Prism Element device. In the ***Select Action*** drop-down list, under **Administration**, select *DELETE Selected Devices*.
7. Go to the **PowerPack Manager** page (System > Manage > PowerPacks). Find the version of the PowerPack you are currently on and select its checkbox. Click the **[Actions]** menu and choose *Delete PowerPack(s)*.
8. Download "Nutanix: Base Pack" version 106 from the Support Site to a local computer.
9. Go to the **PowerPack Manager** page (System > Manage > PowerPacks). Click the **[Actions]** menu and choose *Import PowerPack*. Import "Nutanix: Base Pack" version 106. For details on importing PowerPacks, see the chapter on *Installing a PowerPack* in the ***PowerPacks*** manual.
10. Click the **[Install]** button. For details on installing PowerPacks, see the chapter on *Installing a PowerPack* in the ***PowerPacks*** manual.
11. Discover your Prism Central device. After discovery, all Prism Element devices that are a part of Prism Central will appear as component devices under the root device.
12. See the manual ***Monitoring Nutanix*** for instructions on using the PowerPack.

Features

This release includes the following features:

- Dynamic Applications that discover and collect configuration and performance data for Nutanix devices

- Event Policies and corresponding alerts that are triggered when Nutanix devices meet certain status criteria
- Device Classes for each type of Nutanix device monitored
- A sample Credential for discovering Nutanix devices
- Dashboards that display information about Nutanix instances and component devices
- A Run Book Action and an Automation policy to assign the proper device class to the root device

Enhancements and Issues Addressed

The following enhancements and addressed issues are included in this release:

- The REST API endpoints for the Nutanix Lifecycle Management have been updated. The current endpoints used by the PowerPack will stop working in a future Nutanix cluster upgrade, and the new endpoints return data in a different format.
- Snippet Dynamic Applications now utilize a custom steps library ("silo-low-code-steps-nutanix") and have also been updated to version 2.0.
- The following run book actions (RBA) now support Python 3:
    - Nutanix: Prism Central Classify Root Device Class
    - Nutanix: Prism Element Classify Root Device Class

- The following Dynamic Applications can now utilize snippet framework and use snippet arguments to define, collect, and interpret data:
    - Host Configuration Dynamic Application(s)
        - Nutanix: Host Config & Disk Discovery
    - Storage Container Dynamic Applications
        - Nutanix: Storage Container Capacity and Usage Stats
        - Nutanix: Storage Container Config
        - Nutanix: Storage Container I/O Stats
        - Nutanix: Storage Containers Config
    - CVN Dynamic Applications
        - Nutanix: Cluster Health Summary Stats
        - Nutanix: Controller VM Discovery
        - Nutanix: CVM Config
        - Nutanix: CVM I/O Stats
    - Stats Dynamic Applications
        - Nutanix: Cache Usage Stats
        - Nutanix: Cluster I/O Stats
        - Nutanix: Controller I/O Stats
        - Nutanix: Hypervisor I/O Stats
        - Nutanix: Storage Capacity and Usage Stats
    - Block Dynamic Applications
        - Nutanix: Block Config & Host Discovery
        - Nutanix: Cluster Config & Block Discovery
        - Nutanix: Replication Stats
    - Host Dynamic Applications
        - Nutanix: Host Cache Stats
        - Nutanix: Host I/O Stats
        - Nutanix: Host Storage Stats
        - Nutanix: Host System Stats
        - Nutanix: Cluster Stats
    - VMware Aggregator Dynamic Application(s)
        - Nutanix: VMware Aggregator Config

- VM Dynamic Applications
  - Nutanix: Container Workload VMs Config
  - Nutanix: Host Workload VMs Config
  - Nutanix: VM Config
  - Nutanix: VM I/O Stats
  - Nutanix: Workload VMs Discovery
  - Nutanix: Workload Group Discovery
- Storage Pool Dynamic Applications
  - Nutanix: Storage Pool Capacity and Usage Stats
  - Nutanix: Storage Pool Config
  - Nutanix: Storage Pool I/O Stats
  - Nutanix: Storage Pool Group Discovery
- Disk Configuration Dynamic Applications
  - Nutanix: CVM Disks Config
  - Nutanix: Disk Config
  - Nutanix: Disk I/O Stats
- LCM Entities Dynamic Applications
  - Nutanix: LCM Cluster Config
  - Nutanix: LCM Config
  - Nutanix: LCM Host Config
- Discovery Dynamic Applications
  - Nutanix: Prism Central Config
  - Nutanix: Prism Central LCM Config
  - Nutanix: Prism Element Config & Discovery
  - Nutanix: Prism Elements Discovery

- Alert Dynamic Applications
  - Nutanix: Storage Pools Discovery
  - Nutanix: Storage Container Discovery
  - Nutanix: Storage Container Events
  - Nutanix: Storage Pool Events
  - Nutanix: Cluster Events
  - Nutanix: CVM Events
  - Nutanix: Disk Events
  - Nutanix: Host Events
  - Nutanix: VM Events
  - Nutanix: Prism Central Events
- Virtual Storage Dynamic Applications
  - Nutanix: Storage Pools Discovery
  - Nutanix: Storage Pool Capacity and Usage Stats
  - Nutanix: Storage Pool Config
  - Nutanix: Storage Pool Events
  - Nutanix: Storage Container Discovery
  - Nutanix: Storage Pool I/O Stats
  - Nutanix: Storage Container Capacity and Usage Stats
  - Nutanix: Storage Container Config
  - Nutanix: Storage Container Events
  - Nutanix: Storage Container I/O Stats
  - Nutanix: Container Workload VMs Config

- Block Appliance Dynamic Applications
    - Nutanix: Block Config & Host Discovery
    - Nutanix: Host Workload VMs Config
    - Nutanix: LCM Host Config
    - Nutanix: Host Cache Stats
    - Nutanix: Controller VM Discovery
    - Nutanix: Host System Stats
    - Nutanix: Host Storage Stats
    - Nutanix: Host Config & Disk Discovery
    - Nutanix: Host I/O Stats
    - Nutanix: Host Events
    - Nutanix: CVM Events
    - Nutanix: CVM Config
    - Nutanix: CVM I/O Stats
    - Nutanix: CVM Disk Config
    - Nutanix: Storage Containers Config
- Workload Dynamic Applications
    - Nutanix: Workload VMs Discovery
    - Nutanix: VM Events
    - Nutanix: VM Config
    - Nutanix: VM I/O Stats
    - Nutanix: Disk Events
    - Nutanix: Disk Config
    - Nutanix: Disk I/O Stats

- Cluster Dynamic Applications
  - Nutanix: Controller I/O Stats
  - Nutanix: Health Check Run Config
  - Nutanix: LCM Cluster Events
  - Nutanix: Cluster Events
  - Nutanix: Replication Stats
  - Nutanix: License Status Config
  - Nutanix: Cluster Config & Block Discovery
  - Nutanix: LCM Entities Cache
  - Nutanix: Collection Cache
  - Nutanix: Storage Capacity and Usage Stats
  - Nutanix: Workload Group Discovery
  - Nutanix: Cache Usage Stats
  - Nutanix: Cluster Health Summary Stats
  - Nutanix: Health Check Catalog Cache
  - Nutanix: Cluster I/O Stats
  - Nutanix: VMware Aggregator Config
  - Nutanix: Storage Pool Group Discovery
  - Nutanix: Cluster Stats
  - Nutanix: LCM Config
  - Nutanix: Hypervisor I/O Stats
- Root Dynamic Applications
  - Nutanix: Prism Central LCM Config
  - Nutanix: Prism Elements Discovery
  - Nutanix: Prism Central Config
  - Nutanix: Prism Element Config & Discovery
  - Nutanix: Prism Central Events

Known Issues

The following known issues affect version 106 of the "Nutanix: Base Pack" PowerPack:

- When upgrading from version 102 or earlier of the PowerPack, the following stats—removed from version 103—will display as "No Data Found":
    - Nutanix: VM I/O Stats: CPU Usage
    - Nutanix: CVM I/O and Performance: CPU Utilization
- When discovering a Prism Central that contains Prism Element devices that have been previously discovered and user-disabled, the Prism Element devices will need to be re-enabled after the Prism Element devices have been moved to the new Prism Central device tree so that normal Dynamic Application alignment and data collection can proceed.
- Dynamic Application auto-alignment may take as long as 30 minutes to complete.
- When discovering Prism Element and Prism Central devices, do not include both types of devices in the IP list for discovery, as the DCM tree will not fully build out and will be missing component devices. It is recommended that you either discover individual Prism Element clusters, or discover a Prism Central device with multiple Prism Element clusters.
- When upgrading the PowerPack from a version earlier than version 101, duplicate virtual devices may be created in your Dynamic Component Map (DCM) when upgrading the PowerPack. This is due to the change to the unique ID and SL1 recognizing it as a new device.

  To remove the old devices from the DCM, set the ***Component Vanish Timeout*** field (in either the **Global Threshold Settings** page [System > Settings > Thresholds> System], the ***Device Thresholds*** page for the component device [Registry > Devices > Device Manager > wrench icon > Thresholds], or the ***Device Thresholds*** page for a device higher in the component tree) on the DCM tree so that the old virtual devices get moved out of the DCM and only the newly discovered devices remain.

  If you do not need to retain the old devices for historical data purposes, then the ***Component Purge Timeout*** field (in either the **Global Threshold Settings** page [System > Settings > Thresholds], the ***Device Thresholds*** page for the component device [Registry > Devices > Device Manager > wrench icon > Thresholds], or the **Device Thresholds** page for a device higher in the component tree) can be used to eventually remove those devices completely from the system.

- Discovery and auto-alignment of Dynamic Applications can take up to about 30 minutes to complete.
- If detailed discovery has completed and no Dynamic Applications are aligned, it may be due to a discovery Dynamic Application in the *Microsoft HyperV* v2.1 PowerPack. If you are monitoring Hyper-V, delete the *Microsoft HyperV* v2.1 PowerPack and install the updated *Microsoft Hyper-V Server* v100 PowerPack.

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