Cisco: Meraki [API] PowerPack Release Notes

Version 113.5

Overview

Version 113.5 of the *Cisco: Meraki API* PowerPack adds two new Dynamic Applications, "Cisco: Meraki Switch Port Status Performance [API]" and "Cisco: Meraki Appliance Uplinks Usage Performance [API]".

- **Minimum Required SL1 Version**: 11.3.0

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Before You Install or Upgrade

Ensure that you are running version 11.3.0 or later of SL1 before installing *Cisco: Meraki [API]* version 113.5.

NOTE: For details on upgrading SL1, see the appropriate Release Notes.

Installing or Upgrading the PowerPack

IMPORTANT: If you are upgrading from a version of the *Cisco: Meraki [API]* PowerPack earlier than version 106, ScienceLogic does not guarantee the success of the upgrade.

Additionally, customers that are upgrading directly from the version 107 Limited Availability release might need to perform the following steps for collection to work:

1. Locate the Cisco Meraki physical device and click its bar graph icon ( ).
2. On the **Device Summary** page, click the **Events** tab.
3. Locate all the events labeled "Cisco: Meraki Cloud Controller discovered as a component of organization...", select their checkbox(es), and then click the **[Del]** button to delete the events.
4. After the events are deleted, the "Cisco: Meraki Cloud Controller Creation" run book action will run automatically and collection will work.

To install or upgrade to Version 113.5 of the *Cisco: Meraki [API]* PowerPack, perform the following steps:

1. Familiarize yourself with the ***Known Issues*** for this release.
2. If you have not done so already, upgrade your system to the **Minimum Required SL1 Version**: 11.3.0 or later release.
3. Download Version 113.5 of the *Cisco: Meraki [API]* PowerPack 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*. When prompted, import Version 113.5 of the *Cisco: Meraki [API]* PowerPack.
5. After importing the PowerPack, you will be prompted to install the PowerPack. Click the **[Install]** button to install the PowerPack.

NOTE: Version 113.5 of the PowerPack adds a new "encoding" method defined within the "Request Manager" snippet in order to support latin-1 characters in Meraki network and device names. In order to update the names of any devices or networks that already exist with untranslated special characters, uncheck the ***Preserve Hostname*** option on each individual device to allow the new encoding fix to update the device or network names.

NOTE: After installing the PowerPack, you might want to disable the "Data Collection: Async Dynamic App Collection" process prior to discovering your Meraki system. Asynchronous collection can cause slower device discovery. For more information, see the ***Monitoring Cisco Meraki (API)*** manual.

NOTE: After upgrading the PowerPack, you must delete all SNMP Dynamic Applications that were included in previous versions of the PowerPack. These Dynamic Applications will not function correctly with newer versions of the PowerPack, and upgrading the PowerPack will not automatically remove them.

Features

Version 113.5 of the *Cisco: Meraki [API]* PowerPack includes the following features:

- Dynamic Applications to discover and monitor Cisco Meraki devices, networks, and organizations
- Device classes for each type of Meraki component device SL1 monitors
- Event policies that are triggered when Meraki component devices, networks, and organizations meet certain status criteria
- Sample credentials for discovering Cisco Meraki devices:
    - A SOAP/XML credential for users who connect to the Meraki API through a third-party proxy server
    - A SOAP/XML credential for users who want to discover only select devices
    - A Basic/Snippet credential for users who do not fall into either of the two above categories

- Run book action and automation policies that perform the following actions:
    - Create a virtual device that represents a Meraki organization during discovery
    - Vanish devices and child devices
    - Reboot devices
    - Change switch configurations

NOTE: The PowerPack includes some event policies that can generate events in SL1 based on emails SL1 receives from Cisco Meraki. To enable SL1 to generate these events from email, you must first configure your Meraki devices to send email to SL1 using certain formatting rules. You must then configure SL1 to generate events from the inbound Meraki emails. For instructions, see the ***Monitoring Cisco Meraki (API)*** manual.

ScienceLogic recommends configuring webhooks in SL1 and Meraki to receive these alerts if you are using SL1 version 11.2 or later. For more information about webooks, see the ***Events*** manual. Contact your client success manager if you have additional questions on how to implement Meraki webhooks.

CAUTION: The email event policies included in the PowerPack each have an expiration delay setting that specifies the amount of time after which an active event is automatically cleared from SL1 if the event has not reoccurred. However, clearing an event for reaching its expiration delay setting does not mean that the initial condition that caused the event has been resolved.

Enhancements and Issues Addressed

The following enhancements and addressed issues are included in version 113.5 of the *Cisco: Meraki [API]* PowerPack:

- Updated the "Cisco: Meraki Request Manager [API]" Dynamic Application to include a new "encoding" method defined within the "Request Manager" snippet in order to avoid the default SL1 behavior of displaying hex code for some characters outside the ASCII character set for Meraki network and device names. The "encoding" function passed will be used to translate non-ASCii characters to their approximate ASCii equivalents using the "fix_encoding" method in the silo-apps library. For any characters that cannot be converted directly by the method above, the snippet "encoding" function also allows you to specify additional replacements, as defined in the "prefix_encoding" dictionary.

NOTE: To disable this character replacement, you can update the RequestManager instantiation in the snippet to no longer pass on the encoding function reference by removing `,encoding=encoding` from the end of the snippet.

NOTE: The "Cisco: Meraki Organization Discovery [API]" Dynamic Application was similarly updated in this release. Although the "Organization Discovery" snippet was updated to handle non latin-1 characters in version 112 of the PowerPack, the mechanism has now been moved into the Dynamic Application to give the user greater control over how the encoding updates should be applied.

- Updated the "Organization Discovery" snippet of the "Cisco: Meraki Organization Discovery [API]" Dynamic Application and the "Request Manager" snippet of the "Cisco: Meraki Request Manager [API]" Dynamic Application to include an example dictionary that demonstrates how to substitute characters beyond the normal latin-1 character translations supported by the encoding fix:

```
prefix_encoding = {

"[\\\\xf8]": "o",

"[\\\\xe6]": "ae",

"[\\\\u0153]": "oe",

"[\\\\u2019]": "'",

"[\\\\xc6] ": "AE",

"[\\\\xdf]": "B",

}
```

- Added two new Dynamic Applications to the PowerPack:
    - ***Cisco: Meraki Switch Port Status Performance [API]***: This Dynamic Application requires the "Cisco: Meraki Switch Port Status Configuration [API]" Dynamic Application to be enabled, aligned to the same device, and collecting data. The "Cisco: Meraki [API] Switch Port Status Performance" Dynamic Application can then be aligned and enabled. It will then collect data from the cache created by the "Cisco: Meraki Switch Port Status Configuration [API]" Dynamic Application and display it as performance data.
    - ***Cisco: Meraki Appliance Uplinks Usage Performance [API]***: This Dynamic Application is disabled by default and can be enabled and aligned to MX and Z devices to perform an additional API call to collect usage data for uplinks.

NOTE: The polling interval for the "Cisco: Meraki [API] Switch Port Status Performance" Dynamic Application cannot be changed.

CAUTION: Enabling and aligning the "Cisco: Meraki [API] Uplink Usage" Dynamic Application will increase the number of API calls made to the Meraki API endpoint.

Known Issues

The following known issues affect version 113.5 of the *Cisco: Meraki [API]* PowerPack:

- Meraki Organizations will not be modeled if another device in SL1 has the same name. For a workaround, see the Troubleshooting section in the ***Cisco: Meraki [API]*** manual.
- The Meraki API may not always send a "retry header". If this occurs, the PowerPack does not retry the API call, which will result in a gap in data when it occurs. This will be addressed in a future version of the PowerPack.
- If a Cisco Meraki device name includes a special character, the device name will appear in hexadecimal values on the **Device Components** page.
- The Meraki Organization will not be modeled after discovery if the Meraki organization has an apostrophe in its name.
- Due to a limitation in the number of requests that Meraki can handle per second, data collection gaps might occur when monitoring larger-scale systems.
- The PowerPack cannot filter out particular organizations during discovery and will discover every organization that the API key returns.

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800-SCI-LOGIC (1-800-724-5644)

International: +1-703-354-1010