Migrating to Meraki Managed Dashboard

The following chapter provides information to migrate a Cisco Catalyst 9300 series switch to a Meraki-managed dashboard device.

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Prerequisites for Migrating to Meraki Managed Dashboard

- You should have access to the Meraki dashboard before migrating and managing the device. See Getting started: Cisco Catalyst 9300 with Meraki Dashboard document for details on setting up a Meraki account.
- You can add the device to the network only if you have obtained the respective Meraki serial number. See Registering your Device section below to complete the registration process and receive the serial number.
- Ensure the device is running Catalyst Switch firmware version CS15.21.1 or newer to access any Meraki dashboard network.
- The following models are supported for migration:

  Switch Models

  - C9300-24P
  - C9300-24T
  - C9300-24U
  - C9300-24UX
  - C9300-48P
  - C9300-48T
  - C9300-48U
  - C9300-48UN
  - C9300-48UXM

  Network Modules

- C9300-NM-2Q
- C9300-NM-8X

Introduction to Migrating to Meraki Managed Dashboard

The Meraki dashboard is a centralized, web browser-based tool used to monitor and configure Meraki devices and services. A dashboard account is used to log in to manage and configure your organizations, networks, and devices. Cisco supports the ability to migrate a Cisco Catalyst 9300 series switch into a Meraki-managed dashboard device. This functionality migrates the switch or switch stack to become fully controlled by Meraki dashboard. After migration, console access to the switch is unavailable. When you are troubleshooting or configuring connectivity, all the configurations and monitoring is performed in the dashboard through the local status page. During the migration process the configuration of the switch, flash, usb-flash, and all storage is formatted and reconfigured to the Meraki runtime.

How to Migrate to Meraki Managed Dashboard

Follow the steps below to migrate your device to a Meraki-managed dashboard.

Validating Compatibility of the Device

Use **show meraki compatibility** command to verify if your device is compatible for migration. If you attempt to migrate an incompatible device or a compatible device with an incompatible network module, the process fails displaying an error message.

The following is sample output of the **show meraki compatibility** command. The output below displays the devices supported for the Meraki dashboard management.

```
Device# show meraki compatibility
==========================================================================================

Compatibility Check Status
------------------------------------------------------------------------------------------

Boot Mode INSTALL  - Compatible
------------------------------------------------------------------------------------------

Device#  SKU                                Bootloader Version             Network Modules

------------------------------------------------------------------------------------------

1        C9300-48UXM        - Compatible    17.10.1r        - Compatible    C9300-NM-8X
 - Compatible
------------------------------------------------------------------------------------------

Compatible SKUs: C9300-24P, C9300-24T, C9300-24U, C9300-24UX, C9300-48P, C9300-48T, C9300-48U,
 C9300-48UN, C9300-48UXM
Compatible NMs : C3850-NM-2-40G, C3850-NM-4-10G, C3850-NM-8-10G, C9300-NM-2Q, C9300-NM-8X,
 MA-MOD-2X40G, MA-MOD-4X10G,
                 MA-MOD-8X10G
------------------------------------------------------------------------------------------
```

Registering your Device

Before you begin

Ensure that the device is capable of resolving DNS names:

- Configure a host that functions as a name server to supply name information for DNS.

```
Device(config)# ip name-server {dns server}
```

- Configure a Switch Virtual Interface (SVI) or routed interface with a routable IP address.

```
Device(config)# vlan {vlan-id} <----- VLAN used for cloud connectivity
Device(config-vlan)# exit!
Device(config)# interface vlan {vlan-id} <----- VLAN where DHCP is present
Device(config-if)# ip address dhcp

Device(config-if)# no shutdown
Device(config-if)# exit
```

- Configure a default gateway defined in the device.

```
Device(config)# ip default-gateway {ip-address}
```

Use the command **service meraki register** for a single switch or **service meraki register switch** *switch-number* for a stack member to register your switch.

The device will reach out to a few resources hosted in dashboard to register itself, and receive its Meraki serial number. This serial number will be used to register each device to the dashboard. Once registered, there may be a delay from when you receive the serial number to when you can claim the device. The device can be registered without being rebooted into Meraki mode.

The following is sample output of the **service meraki register switch** *switch-number* command. The output below displays information of each device in the stack, the chassis serial number, Meraki serial number from the registration process, the system MAC address that is visible in the dashboard, and the current operating mode which is always C9K-C (DNA mode) at this step of the process.

```
Device# service meraki register switch 1
Starting to register switch 1
Successfully connect to Meraki Dashboard
Switch 1 has been successfully registered
Received MAC: AABBCCDDEEFF
Meraki serial number: XXZZ-XXZZ-XXZZ
Device Registration Status:
---------------------------
Switch             Serial                                    Conversion
Num PID            Number      Meraki SN      Mac Address    Status       Mode

--------------------------------------------------------------------------------

1  C9300-48U      FCWxxxxxxxx XXZZ-XXZZ-XXZZ 70xx.79xx.5axx Registered   C9K-C
```

Initiating Migration to Meraki Managed Mode

Before you begin

- Ensure to back up your device configuration and any relevant local files before initiating the migration. This includes any USB flash plugged into the device as all file systems will be formatted.

- Ensure that your device is upgraded to Cisco IOS XE Dublin 17.10.x in install mode before initiating migration. See Release Notes for Cisco Catalyst 9300 Series Switches for install mode upgrades.

Use the **service meraki start** command to initiate migration of your device to Meraki-managed mode.

Once the migration is initiated, the following takes place in the device:

- The device prompts a few times for input on the factory reset procedure, and takes from five to ten minutes for the flash to be wiped.
- Once the device reboots, there might be more than one reboot to enable 802.3bt mode on the device, and in a stack there might be a few reboots before it's steady state.
- When the migration is completed the device or device stack is controlled by Meraki dashboard only.
- The console access is turned down to display log events after the device reboots.
- The device boots up with default configuration and obtains its operational configuration from the Meraki dashboard.

See the documentation here for more information on how zero-touch works and the best practice configurations.

Migrating to DNA or CLI Managed Mode

Contact Meraki support to migrate your device back to DNA or CLI-managed mode.

- Ensure that the device is online and connected to the Meraki dashboard before beginning the process.
- Migration process results in the device to get back to factory default settings and configurations.
- Once the migration to DNA or CLI managed mode is complete, please make sure to install a Cisco TAC supported firmware version on the devcie before deploying them in production networks.