



Migration to Meraki Cloud Management Dashboard

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Meraki cloud management dashboard migration

The Meraki cloud management dashboard is a centralized, web-based platform used to configure and monitor Cisco devices and services. Starting from release 26.1.1, you can migrate the Cisco IE3500 rugged series switch to cloud-managed mode. This migration enables you to manage and control your device through the Meraki cloud-based dashboard.

Key aspects of this migration behaviour and access include:

- After migration, the switch operates entirely under the control of the Meraki cloud management dashboard.
- Console access to the switch is unavailable after migration. To troubleshoot or configure the device, use the Meraki cloud management dashboard.

If you cannot use the DNS name, you can access the local status page by entering the device's IP address in your browser. This approach helps if you set up the device on a network without Dynamic Host Configuration Protocol (DHCP) or before assigning its final IP address.

You can use the IP address 1.1.1.100 from the client device to access the local status page (LSP). To access this address, configure a device with these IP settings and browse to the address in a web browser.

- IP address: 1.1.1.99
- Subnet mask: 255.255.255.0
- During migration, the flash memory, USB drives, and SD card of the switch are formatted and reconfigured for the Meraki cloud management runtime environment. This process erases all previous configurations and the device must be reconfigured through the Meraki cloud management dashboard.

Supported switch models for cloud-managed mode

The following Cisco Industrial Ethernet IE3500 series switch models support management in cloud-managed mode using the Meraki cloud management Dashboard. The minimum Cisco IOS XE software release required for IE3500 platform is specified below.

Platform and release compatibility

The table outlines the minimum Cisco IOS XE software release required for Meraki Dashboard management.

Table 1: Platform and release compatibility

Platform	Minimum Software Release	Dashboard Support Status
IE3500 • IE-3500-8T3S • IE-3500-8P3S • IE-3505-8T3S • IE-3505-8P3S • IE-3500-8T3X • IE-3500-8U3X	26.1.1	Supported

How to migrate to a Meraki cloud management dashboard

Follow these steps to migrate your device to Meraki cloud management dashboard.

Before you begin

- Ensure that you have access to the Meraki cloud management dashboard.
- Ensure the device runs IOS-XE version 26.1.1 or later in install mode.
- Ensure that the uplink interface connecting to the Meraki cloud management dashboard is configured in trunk mode. Also, ensure that the port on the peer device is configured in trunk mode.
- Ensure that the device can resolve DNS names and that it has a routable IP address on the appropriate VLAN via DHCP. For more details, see [DHCP IP and DNS configuration, on page 4](#).
- Ensure that the clock settings (date and time) are configured correctly before onboarding the device. Incorrect settings can cause onboarding or connectivity issues. For more information, see [Configure the device clock, on page 3](#).



Note Before initiating the device onboarding process, ensure that the system date and time are configured correctly. Accurate time synchronization is required for certificate validation, secure communication, and event logging. If the system time is not synchronized, authentication errors or onboarding failures may occur.

- Obtain the Cloud ID before adding the device to the network. To register your device and retrieve the Cloud ID, see the [Register and migrate to Meraki cloud management dashboard, on page 6](#) section.

Procedure

- Step 1** Validate device compatibility. See [Validate device compatibility, on page 5](#) for more information.
- Step 2** Register and migrate the device. See [Register and migrate to Meraki cloud management dashboard, on page 6](#) for more information.

Configure the device clock

Configure the device clock to maintain accurate system time. Accurate system time is required for certificate validation, secure communication, device onboarding, and event logging.

Use Network Time Protocol (NTP) to synchronize the device clock with an external time source. If an NTP server is not available, set the clock manually.

Before you begin

Ensure that the device has network reachability to the NTP server, if you are configuring NTP.

Follow these steps to configure the device clock:

Procedure

- Step 1** Use the **configure terminal** command to enter global configuration mode.
- Example:**
- ```
Switch# configure terminal
```
- Step 2** Use the **ntp server** *ntp-server-ip-or-hostname* command to configure the NTP server for time synchronization.
- Example:**
- ```
Switch# (config)# ntp server 111.0.1.11
```
- Step 3** Use the **exit** command to return to privileged EXEC mode.
- Example:**
- ```
Switch# (config)# exit
```

- Step 4** (Optional) Use the **clock set** *<hh:mm:ss> <day> <month-name> <year>* command to set the system clock manually when an NTP server is not available. Use this command in privileged EXEC mode.

**Example:**

```
Switch# clock set 14:30:00 9 July 2026
```

- Step 5** Use the **show clock** command to verify the system date and time.

**Example:**

```
Switch# show clock
```

## DHCP IP and DNS configuration

Perform this task to verify that the device can resolve DNS names and that it has a routable IP address on the appropriate VLAN via DHCP. You can also verify that the device routes traffic to external networks through the default gateway. To optimize performance and system reliability, use Cisco-validated SFP modules with Meraki cloud management dashboard hardware. Configure the Cisco Catalyst IE9300 Rugged Series uplink port as a Trunk port to enable VLAN traffic and support network integration.

**Before you begin**

If your management VLAN exceeds 512, follow the LSP process to change the upstream VLAN to the management VLAN. For more details on LSP, refer [Cisco Meraki Local Status Page](#).

### Procedure

- Step 1** Use the **ip name-server** *dns-server* command to configure the device to use a DNS name server.

**Example:**

```
Device(config)# ip name-server 192.0.2.10
```

You can specify up to six DNS servers if needed.

- Step 2** Configure a switch virtual interface (SVI) or routed interface with a routable IP address.

- a) Use the **vlan** *vlan-id* command to create the VLAN for cloud connectivity.

**Example:**

```
Device(config)# vlan 10 ! VLAN used for cloud connectivity
```

- b) Use the **exit** command to exit VLAN configuration mode.

**Example:**

```
Device(config-vlan)# exit
```

- c) Use the **interface** **vlan** *vlan-id* command to enter interface configuration mode for the VLAN.

**Example:**

```
Device(config)# interface vlan 10
```

Use the same VLAN ID where the DHCP is present.

- d) Use the **ip address** **dhcp** command to assign an IP address through DHCP.

**Example:**

```
Device(config-if)# ip address dhcp
```

The DHCP provides gateway and DNS information.

- e) Use the **no shutdown** command to enable the VLAN interface.

**Example:**

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

- f) Use the **exit** command to exit the interface configuration mode.

**Example:**

```
Device(config-if)# exit
```

- g) Use the **ping meraki.com** command to verify that the ping is successful to the Meraki cloud management dashboard.

**Example:**

```
Device# ping meraki.com
```

Type escape sequence to abort.

Sending 5, 100-byte ICMP Echos to 52.84.205.125, timeout is 2 seconds:

!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 4/4/4 ms

```
Device#
```

## Validate device compatibility

Follow this procedure to validate if your device is compatible for migration.

### Procedure

Use the **show cloud-mgmt compatibility** command to verify if your device is compatible for migration.

**Example:**

```
Device# show cloud-mgmt compatibility
```

```
=====
Compatibility Check Status

Boot Mode INSTALL - Compatible

Switch# SKU Bootloader Version Network Modules

1 IE-3500-8T3S (M) - Compatible 17_18_1r - Compatible N/A

Compatible NMs :
```

**Note**

If you attempt to migrate an incompatible device or a compatible device with an incompatible network module, the process fails and displays an error message.

# Register and migrate to Meraki cloud management dashboard

Perform this procedure to register your device and migrate to cloud management mode.

**Before you begin**

Complete these steps before you initiate the migration process. You can also refer [How to migrate to a Meraki cloud management dashboard, on page 2](#).

- Back up your device configuration and any relevant local files, including any USB flash drives, and SD cards connected to the device. This is important because all file systems will be formatted once you initiate the migration process.
- Upgrade to Cisco IOS XE 26.1.1 or later in install mode. For details about install mode upgrades, see the Release Notes for Cisco IE3500 Series Switches.

**Procedure**

**Step 1** Use the **configure terminal** command to enter global configuration mode.

**Example:**

```
Device# configure terminal
```

**Step 2** Use the **service cloud-mgmt connect** command to register and initiate migration of your device to cloud-mgmt mode.

Running this command generates a *cloud-ID*, which is required to claim the switch in the Meraki cloud management dashboard.

The device contacts resources on the Meraki cloud management dashboard to register. Use the Cloud ID to add each device to the dashboard. After adding the device to a dashboard network with an active uplink and cloud access, it begins converting to Meraki cloud management cloud mode. When this occurs, the device performs a factory reset, which then restricts console access.

**Example:**

```
Switch(config)# service cloud-mgmt connect
Starting to connect switch 1
Successfully connect to Meraki Dashboard
Switch 1 has been successfully registered
Received MAC: AABCCDDDEEFF
Cloud ID: ABCD-ABCD
```

Device Registration Status:

| Switch Num | PID | Serial Number | Cloud ID | Mac Address | Migration Status |
|------------|-----|---------------|----------|-------------|------------------|
| Mode       |     |               |          |             |                  |

```
1 IE-9320-16P8U4X ABCD-ABCD ABCD-ABCD aaa.bbb.cccc Registered IE9K-C
[Monitoring]
```

Please note down the Cloud ID as that is required for claiming it in Cloud-Mgmt Dashboard

#### Example:

```
Switch# show cloud-mgmt
Switch
Num PID Serial
Number Cloud ID Mac Address Migration
Status Mode

1 IE-9320-26S2C FDO2546J16L ABCD-ABCD aaa.bbb.cccc Registered IE9K-C
[Monitoring]
```

**Step 3** Use the **exit** command to exit global configuration mode.

#### Example:

```
Device(config)# exit
```

## Revert the switch to IOS-XE mode

Contact Meraki cloud management support to migrate your device back to IOS-XE mode.

Consider these key aspects when migrating the device:

- Ensure that the device is online and connected to the Meraki cloud management dashboard before beginning the process.
- The migration process resets the device to its default factory settings and configurations.
- Ensure the migration to IOS-XE mode is complete before deploying the device in production networks.

## How the device behaves during migration

### Summary

This section lists the events that occur on the device during migration.

- The device boots up with the default configuration and obtains its operational configuration from the Meraki cloud management dashboard. This migration process usually takes 5 to 10 minutes.
- During the migration process to Meraki cloud management mode, external removable storage such as SD cards and USB drives will be formatted and disabled. These storage devices will not be operational.
- When the migration is complete, you can control your device from the Meraki cloud management dashboard.

Refer to the [Configure your Dashboard Network](#) documentation for more information and configuration best practices.

