Troubleshoot Layer 3 Interface Configuration Problem in Meraki MS and MX Device

Contents

Introduction

This document describes how to troubleshoot the Layer 3 interface configuration problem in Meraki MS And MX devices.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Basic knowledge of Meraki Solutions
- Configuration exposure on Meraki MS Switch
- Configuration exposure on Meraki MX Security Appliance

Components Used

The information in this document is based on these software and hardware versions:

- Meraki MS Stack Switch And Software Version prior release to MS 15.8.
- Meraki MX Security Appliance And Software Version prior release to MX 15.8.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Problem

Steps to add new Layer 3 Interface in Meraki stack switch:

1. Login into the **Meraki** dashboard.

2. Navigate to **Switch> Configure > Routing & DHCP** as shown in the image.
3. In the **Interface** section click **Add** as shown in the image.
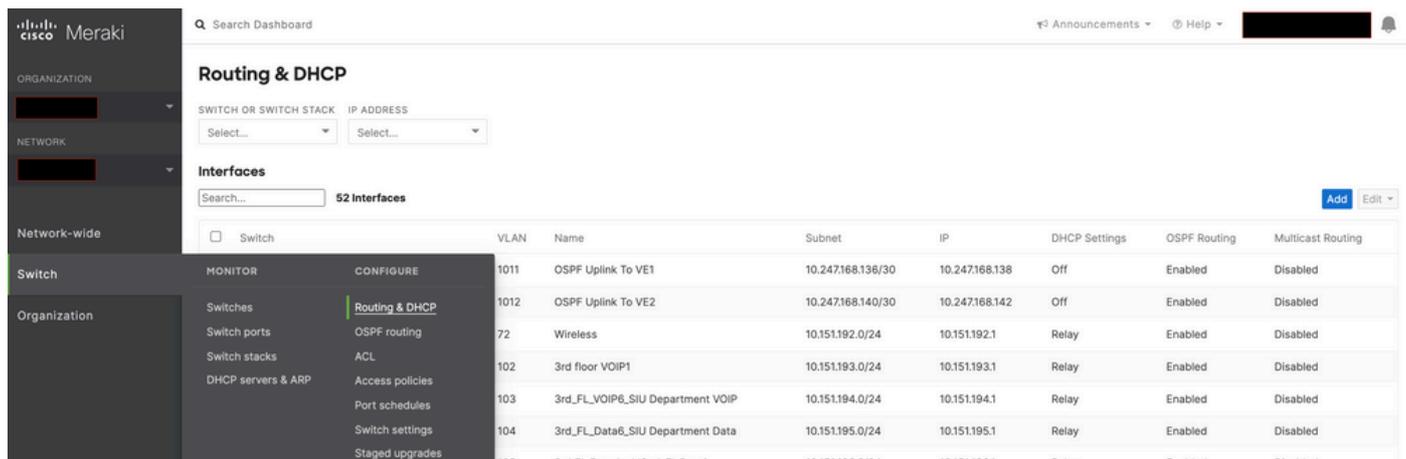
Meraki MS Switch Routing & DHCP Setting

Steps to add a new Layer 3 Interface in Meraki MX Security Appliance:

1. Login into the **Meraki** dashboard.
2. Navigate to **Security & SD-WAN > Configure > Addressing & VLANs** as shown in the image.
3. In the **Routing** section click **Add VLAN** as shown in the image.
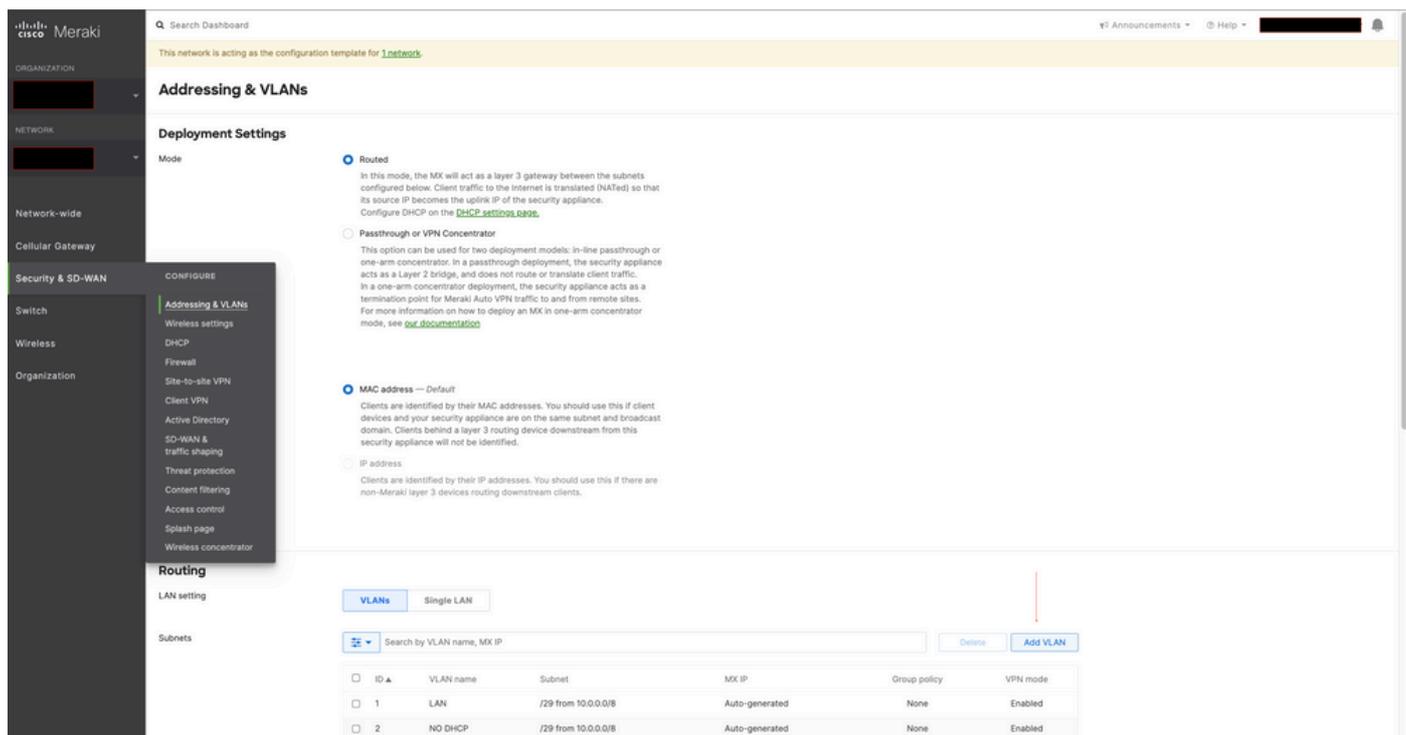
Meraki MX Security Appliance Routing Setting

When you configure the new Layer 3 Interface on the Meraki MS425 stack switch And Meraki MX Security Appliance, refer to observed symptoms.

1. Meraki stack switch and MX Security Appliance goes in Unreachable state in Meraki dashboard, Meraki MS switch and MX Security Appliance device lost the connectivity to Meraki dashboard.
2. Meraki stack switch and Meraki MX Security Appliance stops forward traffic.
3. Change in the L3 interface would trigger the Meraki stack switch and Meraki MX Security Appliance number the wrong VLAN for routes.

Solution

Meraki MS Stack Switch:

1. Add a new Layer 3 interface on the Meraki stack switch and Reboot the stack switch. This refresh the correct VLAN route information and the Meraki stack start forward the traffic. (Temporary fix)
2. Upgrade Meraki stack switch software version to MS 15.8 or later release.

Meraki MX Security Appliance:
1. Add a new Layer 3 interface on the MX Security Appliance and Reboot the MX Security Appliance. This refreshes the correct VLAN route information and the Meraki Security Appliance starts forward the traffic. (Temporary fix)
2. Upgrade Meraki MX Security Appliance software version to MX 15.8 or later release.