Configuring Infra General Settings

Infra Configuration Dashboard

The Infra Configuration page displays an overview of all sites and inter-site connectivity in your Nexus Dashboard Orchestrator deployment and contains the following information:

Figure 1: Infra Configuration Overview
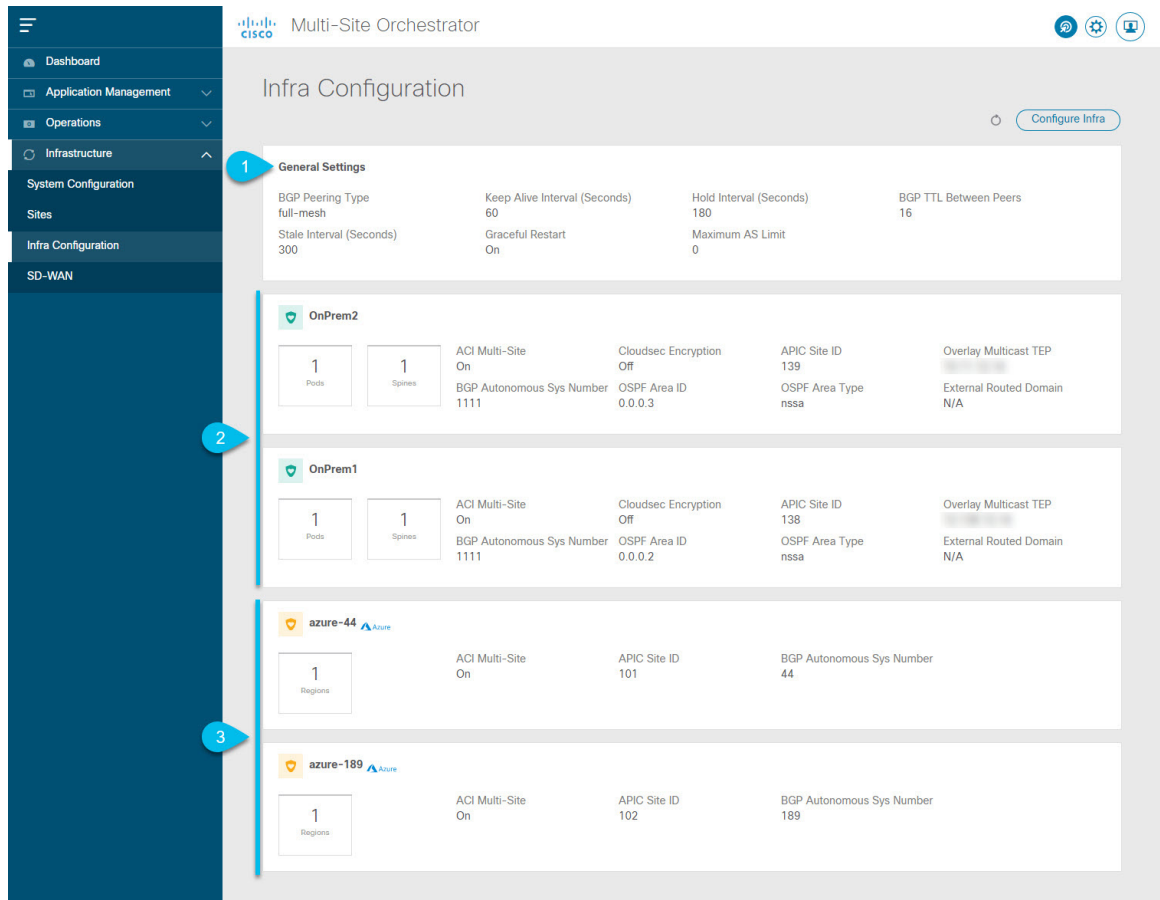
1. The General Settings tile displays information about BGP peering type and its configuration.

   This is described in detail in the next section.

2. The On-Premises tiles display information about every on-premises site that is part of your Multi-Site domain along with their number of Pods and spine switches, OSPF settings, and overlay IPs.

   You can click on the Pods tile that displays the number of Pods in the site to show information about the Overlay Unicast TEP addresses of each Pod.

   This is described in detail in Configuring Infra for Cisco APIC Sites.

3. The Cloud tiles display information about every cloud site that is part of your Multi-Site domain along with their number of regions and basic site information.

   This is described in detail in Configuring Infra for Cisco Cloud APIC Sites.

The following sections describe the steps necessary to configure the general fabric Infra settings. Fabric-specific requirements and procedures are described in the following chapters based on the specific type of fabric you are managing.

Before you proceed with Infra configuration, you must have configured and added the sites as described in previous sections.

In addition, any infrastructure changes such as adding and removing spine switches or spine node ID changes require a Nexus Dashboard Orchestrator fabric connectivity information refresh described in the Refreshing Site Connectivity Information as part of the general Infra configuration procedures.

Configuring Infra: General Settings

This section describes how to configure general Infra settings for all the sites.

Step 1   Log in to the Cisco Nexus Dashboard Orchestrator GUI.

Step 2   In the left navigation menu, select Infrastructure > Infra Configuration.

Step 3   In the main pane, click Configure Infra.

Step 4   In the left sidebar, select General Settings.

Step 5   Configure Control Plane BGP.

    a)   Select the Control Plane BGP tab.

    b)   Choose BGP Peering Type.

- `full-mesh`—All border gateway switches in each site will establish peer connectivity with remote sites' border gateway switches.

  In `full-mesh` configuration, Nexus Dashboard Orchestrator uses the spine switches for ACI managed fabrics and border gateways for DCNM managed fabrics.

- `route-reflector`—The route-reflector option allows you to specify one or more control-plane nodes to which each site establishes MP-BGP EVPN sessions. The use of route-reflector nodes avoids creating MP-BGP EVPN full mesh adjacencies between all the sites managed by NDO.

  For ACI fabrics, the `route-reflector` option is effective only for fabrics that are part of the same BGP ASN.

    c)   In the Keepalive Interval (Seconds) field, enter the keep alive interval seconds.

We recommend keeping the default value.

    d)   In the Hold Interval (Seconds) field, enter the hold interval seconds.

We recommend keeping the default value.

    e)   In the Stale Interval (Seconds) field, enter stale interval seconds.

We recommend keeping the default value.

    f)   Choose whether you want to turn on the Graceful Helper option.

    g)   Provide the Maximum AS Limit.

We recommend keeping the default value.

    h)   Provide the BGP TTL Between Peers.

We recommend keeping the default value.

The following settings are for cloud sites' inter-site connectivity:

    a)   Provide the OSPF Area ID field.

This is OSPF area ID used by cloud sites for on-premises ISN peering, which you previously configured in the Cloud APIC for inter-site connectivity in earlier Nexus Dashboard Orchestrator releases.

b) Click +Add IP Address to add one or more external subnet pools.

This subnet will be used to address the IPsec tunnel interfaces and loopbacks of the Cloud Routers used for on-premises connectivity, which you previously configured in the Cloud APIC for inter-site connectivity in earlier Nexus Dashboard Orchestrator releases.

The subnets must not overlap with other on-premises TEP pools, should not begin with `0.x.x.x` or `0.0.x.x`, and should have a network mask between `/16` and `/24`, for example `30.29.0.0/16`.

Step 6   Provide the IPN Devices information.

When you configure inter-site underlay connectivity between on-premises and cloud sites as described in later sections, you will need to select an on-premises IPN device which will establish connectivity to the cloud CSRs. These IPN devices must first be defined here before they are available in the on-premises site configuration screen, which is described in more detail in Configuring Infra: On-Premises Site Settings.

a) Select the IPN Devices tab.
b) Click Add IPN Device.
c) Provide the Name and the IP Address of the IPN device.

The IP address you provide will be used as the tunnel peer address from the Cloud APIC's CSRs, not the IPN device's management IP address.

d) Click the check mark icon to save the device information.
e) Repeat this step for any additional IPN devices you want to add.