

# Interfaces

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# Interfaces

The Interfaces option displays all the interfaces that are discovered for the switch, Virtual Port Channels (vPCs), and intended interfaces missing on the device.

Invalid interface error appears on the following scenarios:

- Interface Mode 'routed' is invalid. Allowed mode is trunk & access.
- Access port which is already allocated to other network.
- Interface which is not available in switch.

You can use the following functions:

• Create, deploy, view, edit and delete a port channel, vPC, Straight-through FEX, Active-Active FEX, loopback, and subinterface.



However, you cannot add or edit interfaces for ASR 9000 Series Routers and Arista switches.

You can filter and view information for any of the given fields (such as Device Name). The following table describes the buttons that appear on this page.

Note

- Ensure that appropriate configurations are deployed on the Fabric before deploying from the Interfaces option, including proper vPC pair configurations. If you add or edit an interface before configurations are deployed on the Fabric, the configuration may fail on the device.
  - Deploy any underlays including vPC Pairing in the fabric before deploying any configurations from the interface manager.

Field	Description
Create Interface	Allows you to add a logical interface such as a port channel, vPC, Straight-through FEX, Active-Active FEX, and loopback.
	For more information, see Adding Interfaces, on page 7.
Create Subinterface	Allows you to add a logical subinterface.
Edit interface	Allows you to edit and change policies that are associated with an interface.
	<b>Note</b> Access-admin user role cannot edit interfaces associated with link policy such as inter-fabric link or intra-fabric link for easy fabrics. The user role can edit interfaces for LAN classic and IPFM fabrics.
Preview interfaces	Allows you to preview the interface configuration.
Deploy interfaces	Allows you to deploy or redeploy saved interface configurations.
No Shutdown	Allows you to enable an interface (no shutdown or admin up).
Shutdown	Allows you to shut down the interface.
Add to interface group	Allows you to add an interface to an interface group.
Remove from interface group	Allows you to remove an interface from an interface group.
Breakout	Allows you to breakout an interface.
Un-Breakout	Allows you to unbreakout interfaces that are in <i>breakout</i> state.
Rediscover Interface	Allows you to rediscover or recalculate the compliance status on the selected interfaces.
Show commands	Allows you to display the interface show commands. A show command requires show templates in the template library.
Deployer History	Allows you to display the interface deployment history details.

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Field	Description
Import	Allows you to import the edited interfaces. The following are the limitations during importing the interfaces:
	• You are not allowed to import interfaces with the below policy templates:
	<ul> <li>All fabric templates with int_fabric or int_ipfm_fabric.</li> </ul>
	<ul> <li>int_vpc_peer and int_vpc_leaf_tor_assoc.</li> </ul>
	<ul> <li>int_freeform templates.</li> </ul>
	• You must update the mandatory fields fabric name, serial number, interface name, and policy name.
	• You are not allowed to import the interfaces with the interface name <i>nve</i> and <i>vlan</i> except <i>int_ipfm_vlan</i> policy. You can import the interface with <i>int_ipfm_vlan</i> policy.
	• The allowed MTU range for integer values is between 576 and 9216.
	• The allowed MTU string values is either <i>default</i> or <i>jumbo</i> .
	• The fabric name, serial number, and interface name must be unique.
	• Single policy import per CSV is only allowed and can not combine with multiple policy types.
	<b>Note</b> There is a server property to set the maximum number of rows that can be imported. By default, the property is 200 for import.
Export	Allows you to export the selected interfaces with multiple types of policies.
	<b>Note</b> There is no limit for number of interfaces to export. There is a server property to set the maximum number of rows that can be exported. By default, the property is 200 for export.
Delete Interface	Allows you to delete a logical interface that is created from the Interfaces screen. An interface having a policy that is attached from an overlay and underlay cannot be deleted.

The following table describes the new user role access-admin operations support in the host facing port of **Interfaces** window from Cisco Nexus Dashboard Fabric Controller Release 11.5(1).

Operations	User Roles	
operations	access-admin	
Create new interface	Save, Preview, Deploy	
Breakout	Blocked	
Un-Breakout	Blocked	
Edit interface	Save, Deploy	
Delete Interface	Save, Deploy	
Shutdown	Save, Deploy	
No Shutdown	Save, Deploy	
Show commands	Clear Output, Execute	
Rediscover interface	Supported	
Deploy Interfaces	Cancel, Deploy Config	
Import	Supported	
Export	Supported	

You can disable deployments, or freeze, a fabric in Nexus Dashboard Fabric Controller as a network administrator. However, you cannot perform all actions when you freeze the fabric or if the fabric is in monitor mode.

The following table describes the actions you can perform when you freeze a fabric and when you enable the monitor mode for a fabric.

Onorations	Nexus Dashboard Fabric Controller Mode		
operations	Freeze Mode	Monitor Mode	
Add	Save, Preview	Blocked	
Breakout	Blocked	Blocked	
Unbreakout	Blocked	Blocked	
Edit	Save, Preview	Blocked	
Delete	Save, Preview	Blocked	
Shutdown	Save, Preview	Blocked	
No Shutdown	Save, Preview	Blocked	
Show	Supported	Supported	

Omenetiene	Nexus Dashboard Fabric Controller Mode		
operations	Freeze Mode	Monitor Mode	
Rediscover	Supported	Supported	
Deploy	Blocked	Blocked	
Import	Supported	Supported	
Export	Supported	Supported	

The buttons for the associated operations are grayed out accordingly.

If you perform admin operations (shutdown/no shutdown) on SVI, which is part of a config profile, successive **Save & Deploy** operations generate **no interface vlan** command.

For SVI with no policy, on performing admin operation, that is, shutdown/no shutdown command pushed from **Interface Manager**, **int\_vlan\_admin\_state** policy is associated with the SVI.

For example, create and deploy the SVI from switch\_freeform.

```
interface vlan1234
  description test
  no shutdown
  no ip redirects
  no ipv6 redirects
```

If you shutdown the SVI from interface manager, the int\_vlan\_admin\_state policy is associated with the SVI.

Pending diff is shown as:

```
interface Vlan1234
  shutdown
  no ip redirects
  no ipv6 redirects
  description test
  no shutdown
```

Remove the no shutdown CLI from the free-form config.

If the user has performed admin operation on SVI, device will have interface in running config. Therefore, post network detach **interface vlan** will be still present and interface will be discovered. You need to manually delete the interface from **Interface Manager**.

The following table describes the fields that appear on LAN > Interfaces > Interfaces.

Field	Description
Fabric Name	Specifies the fabric name.
Device Name	Specifies the device name.
Interface	Specifies the interface name.
Admin Status	Specifies the administrative status of the interface. The status can be either Up or Down.

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Field	Description
Oper-Status	Specifies the operational status of the interface. The status can be either Up or Down.
Reason	Specifies the reason.
Policies	Specifies the policy name.
Overlay Network	Specifies the overlay network.
Sync Status	Specifies the sync status. Specifies if the interface status is In-Sync or Out-Of-Sync.
Interface Group	Specifies the interface group to which the interface belongs to.
Port Channel ID	Specified the port channel ID.
vPC ID	Specifies the vPC ID.
Speed	Specifies the interface speed.
MTU	Specifies the MTU size.
Mode	Specifies the interface mode.
VLANs	Specifies the VLANs.
IP/Prefix	Specifies the interface IP/Prefix.
VRF	Specifies virtual routing and forwarding instances (VRFs).
Neighbour	Specifies the interface neighbour.
Description	Specifies the interface description. <b>Note</b> If the interface description is more than 64 characters, you must configure the switch using <b>snmp ifmib ifalias long</b> command.

# **Adding Interfaces**

To add the interfaces from the Cisco Nexus Dashboard Fabric Controller Web UI, perform the following steps:

### Procedure

Step 1	Choose LAN > Interfaces > Interfaces.
Step 2	Click <b>Actions &gt; Create new interface</b> to add a logical interface.
	The Create new interface window appears.

Step 3	From the <b>Type</b> drop-down list, choose the type of the interface. Valid values are Port Channel, virtual Port Channel (vPC), Straight-through (ST) FEX, Active-Active (AA) FEX, Loopback, Subinterface, Tunnel Ethernet, and Switch Virtual Interface (SVI). The respective interface ID field is displayed when you select an interface type.
	• When you create a port channel through Nexus Dashboard Fabric Controller, add interfaces of the same speed. A port channel that is created from interfaces of varying speeds won't come up. For example, a port channel with two <i>10 Gigabit Ethernet</i> ports is valid. However, a port channel with a <i>10-Gigabit Ethernet</i> port combination isn't valid.
	• To add vPC hosts, you must designate vPC switches in the fabric topology and deploy vPC and peer-link configurations using the <b>Save Deploy</b> option. After the vPC pair configurations are deployed, it appears in the Select a vPC pair drop-down box.
	You can create a vPC using the <b>int_vpc_trunk_host</b> policy.
	• When adding a subinterface, you must select a routed interface from the interface table before clicking the Add button.
	• You can preprovision Ethernet interfaces in the Interface window. This preprovisioning feature is supported in Easy, eBGP, and External fabrics.
	• After preprovision the Ethernet interface you can preprovision subinterface on a physical interface.
Step 4	In the Select a device field, choose a device.
	Devices are listed based on the fabric and interface type In the case of vPC or Active to Active FEX, select the vPC switch pair.
Step 5	Enter the ID value in the respective interface ID field ( <b>Port Channel ID</b> , <b>vPC ID</b> , <b>Loopback ID</b> , <b>Tunnel ID</b> , <b>Interface name</b> , <b>VLAN ID</b> , and <b>Subinterface ID</b> ) that is displayed, based on the selected interface.
	You can override this value. The new value is used only if it's available in the Resource Manager pool. Else, it results in an error.
Step 6	Under the <b>Policy</b> field, select a policy to apply on an interface.
	The field only lists the Interface Python Policy with tag <i>interface_edit_policy</i> and filtered based on the interface type.
	You must not create a <b>_upg</b> interface policy. For example, you shouldn't create a policy using the <b>vpc_trunk_host_upg</b> , <b>port_channel_aa_fex_upg</b> , <b>port_channel_trunk_host_upg</b> , and <b>trunk_host_upg</b> options.
	<b>Note</b> The policies are filtered based on the interface type you choose in the <b>Type</b> drop-down list and the device you choose in the <b>Select a device</b> drop-down list.
Step 7	Enter values in the required fields under <b>Policy Options</b> .
	The fields vary according to the interface type you choose.
	Note
	From Cisco Nexus Dashboard Fabric Controller Release 11.5(1) you can mirror the configurations of Peer-1 on Peer-2 while creating a vPC. When you check the <b>Enable Config Mirroring</b> check box, the Peer-2 fields will be grayed out. The configurations that you enter in the Peer-1 fields will be copied to Peer-2 fields.

From Cisco NDFC Release 12.1.2e, you can set Native Vlan for the interface which has **int\_trunk\_host** or **int\_port\_channel\_trunk\_host**, or **int\_vpc\_trunk\_host** policy template.

A trunk port can carry nontagged packets simultaneously with tagged packets. When you assign a default port VLAN ID to the trunk port, all untagged traffic travels on the default port VLAN ID for the trunk port, and all untagged traffic is assumed to belong to this VLAN. This VLAN is referred to as the native VLAN ID for a trunk port. That is, the native VLAN ID is the VLAN that carries untagged traffic on trunk ports.

rface			? ->
Туре*			
Port Channel 🗸			
Select a device*			
n9k-4-LEAF-VPC 🗸 🗸			
Port Channel ID*			
502			
Policy*			
int_port_channel_trunk_host >			
Policy Options			
Port Channel Member Interfaces	0 Set of members interference [n m of (5 oth) (7, 0]		
	A list of memory interfaces (e.g. e1/b,ear() > 9)		
Port Channel Mode*			
active	Channel mode options: on, active and passive		
Enable BPDU Guard*	Enable spanning-tree boduguard: true='enable', false='disable',		
true 🗸	no='return to default settings'		
Enable Port Type Fast*	Enable ensemine-tree artre port habition		
MATLE*	chable spanning-dee edge por behavior		
jumbo 🗸	MTU for the Port Channel		
SDEED			
Auto	Port Channel Speed		
none	Allowed values: 'none', 'all', or vian ranges (ex:		
	1-200,500-2000,3000)		
Native Vian	Set native VLAN for the port-channel		
Port Channel Description	Add description to the port-channel (Max Size 254)		
	· · · · · · · · · · · · · · · · · · ·		
Copy PO Description	Check this to copy PO description to all member interfaces		
Freeform Config			
		Additional CLI for the port-channel	
Enable Port Channel*	Unchark to resulta the port-channel		
Enable Netflow	onversions so unadore une por crusterine		
	Netflow is supported only if it is enabled on fabric		
Netflow Monitor			
	Provide the Layer 2 Monitor Name		

Step 8

Click Save to save the configurations.

#### Note

To apply QoS policies on the interface, create the interface freeform with references accordingly.

Only saved configurations are pushed to the device. While adding the interface, you can only modify the policy attribute after the first save. If you try to use an ID that is already used, you encounter the *Resource* could not be allocated error.

Step 9 To view configurations for a created new interface, double-click on the policy name in the Policies tab.

- Step 10 (Optional) Click the **Preview** option to preview the configurations to be deployed.
- Step 11 Click Deploy to deploy the specified logical interface.

The newly added interface appears in the screen.

Breakout and Un-Breakout: You can break out and unbreakout an interface by using the Breakout and Un-Breakout options.

# **Breakout**

To breakout an interface, from the Cisco Nexus Dashboard Fabric Controller Web UI, perform the following steps:

1. On Interface window, click Actions > Breakout.

The Breakout Interfaces window appears.

2. Choose the required option in the window and click **Breakout**.

The available options are 10g-4x, 25g-4x, 50g-2x, 50g-4x, 100g-2x, 100g-4x, 200g-2x, and Unbreakout.

# **UnBreakout**

You can unbreakout interface that are in breakout state.

On Interface window, click Actions > UnBreakout.

Note

The Interface which are not in breakout state, the unbreakout option is grayed out.

# **Editing Interfaces**

To edit the interfaces from the Cisco Nexus Dashboard Fabric Controller Web UI, perform the following steps:

Expected config fab1 > n9k-4-LEAF-VPC interface port-channel501 switchport switchport mode trunk switchport trunk allowed vlan none mtu 9216 spanning-tree bpduguard enable spanning-tree port type edge trunk switchport trunk native vlan 11

**Note** The **Edit interface** allows you to change the policy and add or remove an interface from a port channel or vPC.

#### Procedure

### Choose LAN > Interfaces > Interfaces. Step 1 You can break out and unbreak out an interface by using the breakout option in the Actions menu. Step 2 Select the interface check box to edit an interface or vPC. Select corresponding check boxes for editing multiple interfaces. You cannot edit multiple port channels and vPC. You cannot edit interfaces of different types at the same time. Step 3 Click Actions > Edit interface to edit an interface. The variables that are shown in the **Edit interface** window are based on the template and its policy. Select the appropriate policy. Save the policy and deploy the same. This window lists only Interface Python Policy with the tag *interface\_edit\_policy* and filtered based on the interface type. In a vPC setup, the two switches are in the order the switch names are displayed in the edit window. For example, if Switch Name is displayed as *LEAF1:LEAF2*, then Leaf1 is peer switch one and Leaf2 is peer switch two. During overlay network deployment on switches, the network can be associated with trunk interfaces. The trunk interface to network association is reflected in the **Interfaces** tab. You can update such interfaces. For interface policies that are not created from the LAN > Interfaces > Interfaces screen, you can edit some configurations but not change the policy itself. The policy and fields that cannot be edited are grayed out. The following are some examples of policies that cannot be edited: • Loopback interface policies - The int fabric loopback policy is used to create a loopback interface. You can edit the loopback IP address and description but not the int\_fabric\_loopback policy instance. • Fabric underlay network interface policies (int fabric num, for example) and fabric overlay network interface (NVE) policies. Policies associated with port channels and member ports of port channels, including the port channels and member ports associated with a vPC.

#### SVIs created during network and VRF creation. The associated VLANs appear in the interfaces list.

### **Editing Interfaces Associated with Links**

There are two types of links, namely intra-fabric links and inter-fabric links. As the name implies, intra-fabric links are set up between devices within the same Easy fabric and are typically used for spine-leaf connectivity. Inter-fabric links are set up between the Easy fabric, and typically other external or Easy fabrics. They are used for external WAN and/or DCI connectivity. A policy is associated with each link that effectively states the configuration that is applied to both ends of the link. In other words, the link policy becomes the parent

of the individual child interface policies that are associated with the two interfaces that form the link. In this scenario, you must edit the link policy to edit the interface policy fields such as description, IP address, and any per interface freeform config. The following procedure shows how to edit the interfaces associated with links:

#### Procedure

Step 1	Choose LAN > Interfaces > Interfaces.
Step 2	Select a link and click <b>Actions &gt; More &gt; Rediscover Interface</b> .

### **Deleting Interfaces**

To delete the interfaces from the Cisco Nexus Dashboard Fabric Controller Web UI, perform the following steps:



Note

This option allows you to delete only logical ports, port channels, and vPCs. You can delete the interface if it does not have overlay or underlay policy attached.

When a port channel or vPC is removed, the corresponding member ports get the default policy associated. The Default Policy can be configured in server.properties file.

#### Procedure

Step 1	Choose LAN > Interfaces > Interfaces.
Step 2	Select the interfaces.
Step 3	Click Actions > More > Delete Interface.
	You cannot delete logical interfaces created in the fabric underlay.
Step 4	Click Save.
Step 5	Click <b>Deploy</b> to delete the interface.

# **Shutting Down and Bringing Up Interfaces**

To shut down and bring up the interfaces from the Cisco Nexus Dashboard Fabric Controller Web UI, perform the following steps:

#### Procedure

Step 1 Choose LAN > Interfaces > Interfaces.

Step 2	Select the interfaces that you want to shut down or bring up.
Step 3	Click <b>Shutdown</b> to disable the selected interfaces. For example, you may want to isolate a host from the network or a host that is not active in the network.
	A confirmation window appears where you can save, preview, and deploy the changes. Click <b>Save</b> to preview of deploy the changes.
Step 4	Click <b>No Shutdown</b> to bring up the selected interfaces.
	A confirmation window appears where you can save, preview, and deploy the changes. Click <b>Save</b> to preview or deploy the changes.

# **Viewing Interface Configuration**

To view the interface configuration commands and execute them from the Cisco Nexus Dashboard Fabric Controller Web UI, perform the following steps:

#### Procedure

Step 1	Choose LAN > Interfaces > Interfaces.
	Select the interface whose configurations you want to view and click <b>Actions &gt; More &gt; Show commands</b> .
Step 2	In the <b>Interface show commands</b> window, select the action from the <b>Commands</b> drop-down box and click <b>Execute</b> . The interface configurations are displayed on the right of the screen.
	For Show commands, you must have corresponding <b>show</b> templates for interface or interface sub types like port channel or vPC, defined in the <b>Templates</b> .

# **Rediscovering Interfaces**

To rediscover the interfaces from the Cisco Nexus Dashboard Fabric Controller Web UI, perform the following steps:

#### Procedure

Step 1	Choose LAN > Interfaces > Interfaces.
Step 2	Select the interfaces that you want to rediscover and click <b>Actions &gt; More &gt; Rediscover Interface</b> to rediscover the selected interfaces. For example, after you edit or enable an interface, you can rediscover the interface
	interface.

### **Viewing Interface History**

To view the interface history from the Cisco Nexus Dashboard Fabric Controller Web UI, perform the following steps:

#### Procedure

Step 1	Choose LAN > Interfaces > Interfaces.
Step 2	Select the interface and click <b>Actions &gt; More &gt; Deployer History</b> to view the configuration history on the interface.
Step 3	Click Status to view each command that is configured for that configuration instance.

# **Deploying Interface Configurations**

To deploy the interface configuration from the Cisco Nexus Dashboard Fabric Controller Web UI, perform the following steps:

#### Procedure

Step 1 Choose LAN > Interfaces > Interfaces.

**Step 2** Select an interface that you want to deploy and click **Actions > Deploy Interfaces** to deploy or redeploy configurations that are saved for the interface.

#### Note

You can select multiple interfaces and deploy pending configurations.

After you deploy the interface configuration, the interface status information is updated. However, the overall switch-level state may be in the pending state, which is in blue. The overall switch-level state goes to the pending state whenever there is a change in intent from any module, such as interface, link, policy template update, top-down, or so on. In the pending state, a switch may have pending configurations or switch-level recomputation occurs when:

- You deploy for the switch
- During a deploy
- During hourly sync

# **Creating External Fabric Interfaces**

You can add and edit port channel, vPC, subinterface, and loopback interfaces for external fabric devices. You cannot add Straight-through FEX and Active-Active FEX functions.

The Breakout port function is only supported for the Cisco Nexus 9000, 3000, and 7000 Series Switches in the external fabric.

When you add an interface to an external fabric device, the Resource Manager is not in sync with the device. So, ensure that the value populated in the ID field (Port-channel ID, vPC ID, Loopback ID, etc) is not previously configured on the switch.

If you want to configure a portchannel in the external fabric, you should add and deploy the **feature\_lacp** policy on the switches where the portchannel will be configured.

When an external fabric is set to **Fabric Monitor Mode Only**, you cannot deploy configurations on its switches. If you click **Save & Deploy** in the fabric topology screen, it displays an error message. However, the following settings (available when you right-click the switch icon) are allowed:

vPC pairing - You can designate a vPC switch pair, but it is only for reference.

View/edit policy - You can add a policy but you cannot deploy it on the switch.

Manage interfaces – You can only create intent for adding interfaces. If you try to deploy, edit, or delete interfaces, it results in an error message.

# **Interface Groups**

An interface group consists of multiple interfaces with same attributes. You can create an interface group that allows grouping of host-facing interfaces at a fabric level. Specifically, you can create an interface group for physical Ethernet interfaces, Layer 2 port-channels, and vPCs. You can attach or detach multiple overlay networks to the interfaces in an interface group.

#### **Shared Policy**

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From Cisco NDFC Release 12.1.2e, you can create and add a shared policy for an interface group. This policy ensure update of appropriate configurations for all the interfaces in the Interface group. In the shared policy, all the interfaces will have the same underlay and overlay attributes. When you change the configuration in the shared policy, then that configuration is applied to all the interfaces.

You can see the details of shared policy under the Policies

AN	Interfaces								0
terface	s Interface Groups								
Polici	es contains trunk_host $\times$								X Actions ~
	Fabric Name	Device Name	Interface	Admin Status	Oper. Status	Reason	Policies	Overlay Network	Sync Status
	mani_switches	ma_b2	Ethernet1/27	↑ Up	↓ Down	XCVR not inserted	int_trunk_host	NA <b>T</b>	Out-Of-Sync
	mani_switches	ma_b2	Ethernet1/28	↑ Up	↓ Down	XCVR not inserted	int_trunk_host	NA	Out-Of-Sync
	mani_switches	ma_l1	Ethernet1/1	↑ Up	↓ Down	Link not connected	int_shared_trunk_host	NA	In-Sync
	mani_switches	ma_11	Ethernet1/2	↑ Up	↓ Down	XCVR not inserted	int_shared_trunk_host	NA	In-Sync
	mani_switches	ma_l1	Ethernet1/3	↓ Down	↓ Down	Administratively down	int_trunk_host	NA	In-Sync
	mani_switches	ma_l1	Ethernet1/5	↓ Down	↓ Down	Administratively down	int_trunk_host	NA	In-Sync
	mani_switches	ma_I1	Ethernet1/6	↑ Up	↓ Down	XCVR not inserted	int_trunk_host	NA	• In-Sync 🗸

LA	٩N	Interfaces						O
Inte	rface	Interface Groups						
	Filter	by attributes						Actions ~
		Fabric	Interface Group Name	Interfaces	Туре	Associated Networks	IsShared	Shared Policy Id
		mani_switches	ig1	50	Ethernet	0	false	
		mani_switches	ig-shared	2	Ethernet	ō	true T	POLICY-SHARED- 2246000
		FABRIC-1	test	0	Ethernet	0	true	POLICY-SHARED- 5446000

Custom policy can also be created by selecting the policy from the template list and **Duplicate Template** to add the additional information. The shared policy must contain the tags **interface\_edit\_policy**, **interface\_edit\_shared\_policy**, and **int\_trunk**.

#### Guidelines

- Interface groups are only supported for the fabrics with the **Data Center VXLAN EVPN** template.
- An interface group is specific to a fabric. For example, consider two fabrics: Fab1 and Fab 2. The interface
  group IG1 in Fab1 isn't applicable to Fab 2.
- An interface group can only have interfaces of a certain type. For example, you need three separate interface groups if you want to group three types of interfaces such as IG1 for physical Ethernet trunk interfaces, IG2 for Layer 2 trunk port-channels, and IG3 for vPC host trunk ports.
- An interface group can also be created using preprovisioned interfaces.
- Interface groups are supported only to switches with leaf or border roles. For Border Gateway roles, Interface Groups are supported only on vPC BGWs but not on Anycast BGW, BGW Spine, or BGW SuperSpine.
- From Cisco NDFC Release 12.1.2e, you can include Layer 2 ToR interfaces in the interface groups.
- Interfaces added to an interface group with a shared policy replaces the individual policy and get the shared policy.
- You can change description and status of each interface in interface group.
- Interface removed from an interface group with a shared policy will set to a default policy.
- VMs should have the same configuration for all the interfaces under the shared policy.
- Shared policy is supported only for **Ethernet** interface type in interface group.
- Ethernet interface groups now have a common policy.
- **Port-Channel** and **vPC** interface types are not supported for adding shared policy in interface group.
- When the MTU value in the shared policy has to be changed, make sure to update the fabric settings with the same value across all switches of that fabric.
- When the **ptp**, **ttag**, and **ttag-strip** option from the shared policy has to be used, make sure to enable PTP globally in fabric settings.
- When the netflow option has to be used, make sure all the interfaces of interface groups are capable of netflow configuration and that it is enabled globally in fabric settings.

- For Layer 2 port-channels and vPCs that are part of an interface group, they can't be deleted until they are de-associated from the interface group even if there are no networks associated with the interface group. Similarly, a trunk port that has no overlay networks but is part of an IG can't be converted to an access port. In other words, you can't change policies for interfaces that are part of an interface group. However, you can edit certain fields for policies.
- For L4-L7 services configuration on leaf switches, trunk ports that are used for services attachment can't be part of interface groups.
- When you perform a per fabric backup of an easy fabric, if there are interface groups created in that fabric, all the associated interface group state is backed up.
- If an easy fabric contains an interface group, then this fabric can't be imported into the MSO. Similarly, if an easy fabric has been added to the MSO, you can't create interface groups for interfaces that belong to switches in the easy fabric.
- The Add to Interface Group and Remove from Interface Group button is enabled only for Admin and Stager users. For all other users, this button is disabled.
- The Interface Group button is disabled in the following circumstances:
  - Select any other interface apart from vPC, Port-channel, and Ethernet.
  - If the interface has a policy attached from another source, for example:
    - If the interface is member of a port-channel or vPC.
    - If the port-channel is member of vPC.
    - If the interface has a policy from underlay or links.



#### Note

If you select different types of interfaces, the **Interface Group** button is enabled. However, when you try to create or save different types of interfaces to an interface group, an error is displayed.

# **Creating an Interface Group**

To create an interface group from the Cisco Nexus Dashboard Fabric Controller Web UI, perform the following steps:

#### Procedure

Step 1	Choose LAN > Interfaces > Interface Groups.
Step 2	Click Actions > Create new interface group.
Step 3	From the Select Fabric window, select a fabric and click Select.
Step 4	In the <b>Create new interface group</b> window, provide an interface group name in the <b>Interface Group Name</b> field, select an Interface Type, and click <b>Save</b> .
	An interface group name can have a maximum length of 64 characters

#### Note

An interface can be added to single interface group only.

Step 5 Click on the Policy field, the Select Policy window appears. Choose int\_shared\_trunk\_host policy and then click Select.

From Cisco NDFC Release 12.1.2e, a new **Policy** field is introduced in the **Create new interface group** window. You can add a shared policy to the interface group which can be shared by the interfaces existing in that group. Shared Policy is optional, for upgrades, all the existing interface group will not have a policy.

#### Note

The policy field supports the **Ethernet** interface type only.

- **Step 6** Enter the mandatory parameters in the text field and click **Save**.
- **Step 7** Click the **Interfaces** tab.
- **Step 8** Select the interfaces that have to be grouped and click **Actions > Add to interface Group**.
- **Step 9** In the **Add new interface Group** window, create a custom interface group by entering an interface group name in the **Select Interface Group** field and click **Create custom**.

If you have already created an interface group, select it from the **Select Interface Group** drop-down list. Also, if an interface is already part of an interface group, you can move it to a different interface group by selecting the new group from the **Select Interface Group** drop-down list.

You can create interface groups from either the **Interfaces Groups** window or the **Interfaces** window under Fabric Overview.

#### Step 10 Click Save.

In the Interfaces window, you can see the interface group name under the Interface Group column.

Step 11 To edit an interface group, click Actions > Edit Interface Group. You can update the policy options after you assigned the shared policy.

#### Note

You cannot edit or delete the shared policy template.

# **Removing Interfaces from an Interface Group**

To remove interfaces from an interface group from the Cisco Nexus Dashboard Fabric Controller Web UI, perform the following steps:

#### Procedure

#### Step 1 Choose LAN > Interfaces.

**Step 2** Select the interfaces to disassociate from an interface group and click **Actions > Remove from interface Group**.

A dialog box pops up asking whether you want to clear all the associated interfaces. Click **Yes** to proceed. Note that if there are any networks attached to these interfaces, they are detached as well when you click **Clear**.

# **Attaching Networks to an Interface Group**

To attach networks to an interface group from the Cisco Nexus Dashboard Fabric Controller Web UI, perform the following steps:

#### Procedure

Group.
• An overlay network can belong to multiple interface groups
• You can select only the networks with a VLAN ID. Otherwise, an appropriate error message is disp
In the Interface Groups window, you can perform the following:
• Select an existing interface group from the Select Interface Group drop-down list and click Sav
For example, you select three networks and the interface group <b>test</b> , and click the <b>Save</b> button, the following operations are performed in the background:
a. Nexus Dashboard Fabric Controller retrieves interfaces that are part of the interface group te
<ul> <li>b. Nexus Dashboard Fabric Controller determines that three networks are added to the interface test. Therefore, it autoattaches these networks to all the interfaces that are part of the interface test.</li> </ul>
c. For each interface, Nexus Dashboard Fabric Controller pushes the "switchport trunk allowe add xxxx" command three times for each selected network.
<b>Note</b> Nexus Dashboard Fabric Controller ensures that there's no duplicate configuration intent.
If you click the <b>Clear</b> button, Nexus Dashboard Fabric Controller pushes " <b>switchport trunk all vlan remove xxx</b> ' config intent.
<ul> <li>Create a custom interface group by entering an interface group name in the Select Interface Grou and click Create new interface group. Click Save.</li> </ul>
If you choose this option, make sure to add interfaces to this Interface Group in the <b>Interfaces</b> w As a result, Nexus Dashboard Fabric Controller performs the following operations:
<b>a.</b> Removes all existing overlay networks that don't belong to the interface group from these interface group from these interface group from the second se

**b.** Adds new overlay networks to these interfaces that are part of the interface group but not yet attached to these interfaces.

For more information about associating interfaces to interface groups, see Creating an Interface Group, on page 17.

**Step 4** Click **Actions > Recalculate & Deploy** to deploy the selected networks on the switches.

## **Detaching a Network from an Interface Group**

This procedure shows how to detach a network from an interface group in the Networks window. Also, you can detach networks when you remove an interface from an interface group in the **Interfaces** window. For more information, see *Removing Interfaces from an Interface Group*.

#### Procedure

Step 1	Double click on the fabric to launch Fabric Overview.
Step 2	On the <b>Networks</b> tab, select the networks that you need to detach to an interface group and click <b>Add to Interface Group</b> .
Step 3	In the <b>Add to Interface Groups</b> window, select the interface group from the <b>Select Interface Group</b> drop-down list and click <b>Clear</b> to detach a network.
Step 4	(Optional) Navigate to LAN > Interfaces.
	Under the <b>Overlay Network</b> column, you can see the detached network in the red color for the corresponding interface. Click the network to view the expected config that is struck through.
Step 5	Navigate to the <b>Networks</b> tab and choose <b>Actions &gt; Recalculate &amp; Deploy</b> .

# **Deleting an Interface Group**

An interface group is automatically deleted when it's not in use. You can perform an explicit delete by clicking on **Interface Group > Actions > Delete Interface group**. This check is performed whenever you click the **Clear** button in the **Edit Interface Group** window. There may be exception scenarios where you need to clean up the interface groups explicitly.

For example, you create an interface group **storageIG** and add an interface to it. Later, you want to change the interface mapping to another group. Therefore, you select the interface and click **Interface Group** to open the **Edit Interface Group** window. Select the other interface group named **diskIG**. Now, the **storageIG** interface group doesn't have any associated member interfaces or networks. In this case, perform the following steps:

#### Procedure

**Step 1** Select an interface that doesn't belong to an interface group.

- **Step 2** Click **Interface Group** to open the **Edit Interface Group** window.
- **Step 3** Select the **StorageIG** interface group from the **Select Interface Group** drop-down list.
- Step 4 Click Clear.