



# Understanding Fabric Groups, Release 4.3.1

# Table of Contents

|                                                                                   |    |
|-----------------------------------------------------------------------------------|----|
| New and changed information                                                       | 1  |
| Understanding fabric groups                                                       | 1  |
| Understanding LAN fabrics, ACI fabrics, and fabric groups                         | 1  |
| Understanding LAN and ACI fabrics                                                 | 2  |
| Grouping fabrics and clusters                                                     | 3  |
| Guidelines and limitations for fabric groups                                      | 4  |
| Understanding the Fabric Groups page                                              | 4  |
| Overview                                                                          | 4  |
| Actions                                                                           | 5  |
| Tiles                                                                             | 5  |
| Anomaly level                                                                     | 6  |
| Advisory level                                                                    | 6  |
| Recent activity                                                                   | 6  |
| General                                                                           | 6  |
| Inventory                                                                         | 7  |
| Interfaces                                                                        | 7  |
| Analytics summary                                                                 | 7  |
| Connectivity                                                                      | 9  |
| Segmentation and security                                                         | 9  |
| Inventory                                                                         | 9  |
| Member fabrics                                                                    | 10 |
| Switches                                                                          | 10 |
| VPC Pairs                                                                         | 11 |
| Other devices                                                                     | 11 |
| Controllers                                                                       | 11 |
| Connectivity                                                                      | 11 |
| Interfaces                                                                        | 12 |
| Endpoints                                                                         | 12 |
| Links                                                                             | 13 |
| Inter-fabric                                                                      | 13 |
| Flows                                                                             | 13 |
| Segmentation and security                                                         | 14 |
| Guidelines and limitations: Segmentation and security for VXLAN-ACI fabric groups | 15 |
| Networks                                                                          | 15 |
| VRFs                                                                              | 15 |
| Security groups                                                                   | 15 |
| Security contracts                                                                | 16 |
| Security associations                                                             | 17 |
| Protocol definitions                                                              | 17 |
| Tenants                                                                           | 17 |
| Configuration policies                                                            | 17 |

|                                                                                |    |
|--------------------------------------------------------------------------------|----|
| Guidelines and limitations: Configuration policies for fabric groups . . . . . | 18 |
| Policies . . . . .                                                             | 18 |
| Resources . . . . .                                                            | 18 |
| Anomalies . . . . .                                                            | 18 |
| Advisories . . . . .                                                           | 19 |
| History . . . . .                                                              | 19 |
| Guidelines and limitations: History for fabric groups . . . . .                | 20 |
| Audit logs . . . . .                                                           | 20 |
| Deployment history . . . . .                                                   | 20 |
| Policy change history . . . . .                                                | 20 |
| Recent tasks . . . . .                                                         | 20 |
| Copyright . . . . .                                                            | 22 |

# New and changed information

The following table provides an overview of the significant changes up to this current release. The table does not provide an exhaustive list of all changes or of the new features up to this release.

| Release Version       | Feature                                                              | Description                                                                                                                                                                                                                                                                                                                         |
|-----------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nexus Dashboard 4.3.1 | New information in a fabric group's <b>Overview</b> page             | The <b>Overview</b> page for a fabric group now provides <b>Advisory level</b> , <b>Analytics summary</b> , and <b>Connectivity</b> information, as well as <b>Fabric bugs</b> information.<br><br>For more information, see <a href="#">Overview</a> .                                                                             |
| Nexus Dashboard 4.3.1 | Ability to run connectivity analysis at the fabric group level       | A <b>Start connectivity analysis job</b> option is now available under <b>Overview &gt; Actions</b> page at the fabric group level.<br><br>For more information, see <a href="#">Actions</a> .                                                                                                                                      |
| Nexus Dashboard 4.3.1 | <b>Endpoints</b> page now available for fabric groups                | The <b>Connectivity &gt; Endpoints</b> page is now available for fabric groups, providing information on the endpoints across the different fabrics in a fabric group.<br><br>For more information, see <a href="#">Endpoints</a> .                                                                                                 |
| Nexus Dashboard 4.3.1 | <b>Inter-fabric</b> page now available for fabric groups             | The <b>Connectivity &gt; Inter-fabric</b> page is now available for fabric groups, which monitors and displays information about previously configured inter-fabric connections, providing visibility into the health and connectivity status of those connections.<br><br>For more information, see <a href="#">Inter-fabric</a> . |
| Nexus Dashboard 4.3.1 | Support for <b>any</b> logical construct for VXLAN-ACI fabric groups | The <b>any</b> logical construct was previously available for VXLAN fabric groups. Beginning with Nexus Dashboard release 4.3.1, the <b>any</b> logical construct is now available for VXLAN-ACI fabric groups as well.<br><br>For more information, see <a href="#">Support for any in VXLAN-ACI fabric groups</a> .               |

## Understanding fabric groups

You can use fabric groups to create a group of fabrics with common attributes for visualization purposes and simpler management.

- [Understanding LAN fabrics, ACI fabrics, and fabric groups](#)
- [Understanding the Fabric Groups page](#)

## Understanding LAN fabrics, ACI fabrics, and fabric groups

Before you begin working with fabrics and fabric groups, it's helpful to understand more about each.

- [Understanding LAN and ACI fabrics](#)
- [Grouping fabrics and clusters](#)

## Understanding LAN and ACI fabrics

Fabrics are on-premises network regions that include a group of switches and other networking devices that provide connectivity to your applications and endpoints. They may be split in different availability zones (such as pods) that are analyzed and managed by Nexus Dashboard.

There are many types of fabrics:

- **LAN**—This type of fabric contains either of these switch types:
  - **NX-OS switches**—These are a group of Nexus switches running NX-OS software. Nexus Dashboard manages and monitors NX-OS switches using best-practice templates. You can add a fresh set of NX-OS switches for greenfield deployments or onboard existing NX-OS switches to an existing fabric for incremental management and monitoring.
  - **Non-Nexus switches and devices**—Nexus Dashboard supports onboarding a variety of non-Nexus switches and service appliances such as IOS-XE, IOS-XR, firewalls, and load balancers. These devices support campus VXLAN EVPN fabrics, Layer 4 to Layer 7 (L4-L7) services, and external fabrics that enable east-west or north-south connectivity, such as an IP-based network (IPN), inter-site network (ISN), core, and edge.
- **ACI**—ACI fabric consists of multiple Cisco N9000 switches running ACI software managed by an Application Policy Infrastructure Controller (APIC) cluster.
  - **Monitoring and Analysis:** Onboard existing ACI fabrics for continuous telemetry streaming. In environments with restricted connectivity, such as air-gapped networks, you can onboard ACI switches as offline snapshots to perform point-in-time analysis without a direct network connection.
  - You can also use Orchestration to manage and coordinate policies across multiple ACI sites.
  - In addition, you can group ACI fabrics with NX-OS fabrics using the VXLAN-ACI fabric group, where you can now import tenant policies from ACI fabrics into Nexus Dashboard using the EPG-to-ESG migration workflow. See [Understanding the process for importing tenant policies from ACI fabrics into VXLAN-ACI fabric groups](#) for more information.

Nexus Dashboard multi-cluster architecture categorizes fabrics as **Local** or **Remote**.

- **Local:** A fabric that is present in the local Nexus Dashboard cluster.
- **Remote:** A fabric that is not present in this cluster, but rather is present in another cluster that is part of Nexus Dashboard multi-cluster connectivity.

In addition, local fabrics can be broken down in the following manner:

- **Online fabrics:** Fabrics that are connected to Nexus Dashboard over the network.
- **Snapshot fabrics:** Fabrics that are referenced by a snapshot for use in one-time analysis or demonstrations. They may or may not be connected to Nexus Dashboard over the network.

And finally, you can either **create** new fabrics or **onboard** existing fabrics. Note that before Nexus Dashboard and the individual services were unified into a single product (as described in "[Unified Nexus Dashboard deployment](#)"), there were fabric types that were available previously but might not

be available as a new fabric type with the unified product, such as the Legacy Classic LAN fabric type. You can still onboard those existing fabric types but you will not be able to create a new fabric with those pre-unification fabric types. See [Mapping fabric types](#) for more information.

## Grouping fabrics and clusters

There are several ways to group fabrics and clusters together in Nexus Dashboard:

- [Grouping Nexus Dashboard clusters](#)
- [Grouping fabrics](#)

### Grouping Nexus Dashboard clusters

**Multi-cluster connectivity:** You can establish connectivity between multiple Nexus Dashboard and APIC clusters. For more information, see [Connecting Clusters](#).

### Grouping fabrics

The method that you use to group fabrics together differs depending on the type of fabric:

- **NX-OS fabrics:** You can group fabrics together using a *fabric group*, which is a collection of fabrics grouped for visualization or management. The available fabric group types include:
  - **VXLAN:** A fabric group that is used to interconnect multiple data center VXLAN EVPN fabrics and/or ACI fabrics using border gateways. It can also be used to interconnect Data Center and Campus VXLAN EVPN fabrics. This enables shared overlay deployments for security and segmentation using VXLAN EVPN multisite. The IPN/ISN interconnect network fabric may also be optionally part of this group.

These types of VXLAN fabric groups are available:

- **VXLAN:** This subtype of fabric group can contain multiple NX-OS-based Data Center VXLAN EVPN fabrics and/or IOS-XE-based Campus VXLAN EVPN fabrics (which need NX-OS-based border gateways). The DCI network comprising of Multi-Site and External Connectivity or BGP routed fabrics can also be part of this group.
- **VXLAN-ACI:** A group that includes a Cisco ACI fabric connected to one or more Cisco NX-OS fabrics using the Nexus One architecture for unified management and policy deployment. For more information, see [Understanding the Nexus One architecture](#).
- **Classic:** A Classic fabric group can contain Enhanced Classic LAN, Legacy Classic-LAN, Any VXLAN EVPN and External and Inter-fabric connectivity fabrics. This group allows for a combined visualization at a topology level. No group level deployments are available in this fabric group.
- **IP Fabric for Media:** A logical group of LAN or IP Fabric for Media (IPFM) fabrics. This type of fabric group can contain individual IPFM/IPFM-Classic/Classic-LAN fabrics. This type of group allows shared host and flow definitions.
- **Cisco ACI fabric management models:** You can manage ACI fabrics in Nexus Dashboard using one of two methods:
  - Using Cisco ACI in Nexus Dashboard Orchestration
    - Deploys tenants, networks, and policy configurations across multiple ACI sites.

- Provides a central point for multisite policy consistency and scale.

For more information, see [Connecting Multiple ACI Fabrics](#) and [Working with Orchestration](#).

- Using Cisco ACI in a VXLAN-ACI fabric group

- Enables management and interoperability between Cisco ACI and Cisco NX-OS VXLAN EVPN fabrics.
- Automates the infrastructure configuration for inter-fabric underlay and overlay connectivity between ACI and NX-OS fabrics.
- Centralizes the deployment of security and segmentation policies across Cisco ACI and Cisco NX-OS environments.

For more information, see [Understanding the Nexus One architecture](#)

**Constraint:** You cannot enable Orchestration on a Cisco ACI fabric that is a member of a VXLAN-ACI fabric group. Similarly, you cannot add a Cisco ACI fabric to a VXLAN-ACI fabric group if Orchestration is enabled. When adding fabrics to a VXLAN-ACI fabric group, any ACI fabrics with Orchestration enabled will not be available to choose.

- **Multi-cluster fabric groups:** You can create a multi-cluster fabric group that spans multiple Nexus Dashboard clusters to manage VXLAN fabrics across different clusters in a multi-cluster fabric group. For more information, see [Create multi-cluster fabric groups](#).

## Guidelines and limitations for fabric groups

- For fabric groups, the controller and telemetry functions must reside on the same Nexus Dashboard cluster, as co-location of these services across multiple clusters is not supported.

## Understanding the Fabric Groups page

The **Fabric groups** page provides a centralized view of fabric group operations, inventory health, connectivity metrics, configuration, and operational status of the network monitoring infrastructure.

The **Fabric groups** page includes the following tabs.

- [Overview](#)
- [Inventory](#)
- [Connectivity](#)
- [Segmentation and security](#)
- [Configuration policies](#)
- [Anomalies](#)
- [Advisories](#)
- [History](#)

## Overview

The **Overview** tab provides a summary of the health and status of the fabric group. You can also view

the anomaly level, general fabric details (such as software versions and license tier), inventory summaries, and real-time status of input ports, monitoring tools, and packet filters. It also tracks data throughput and recent administrative activity.

Follow these steps to navigate to the **Overview** tab.

1. Navigate to the **Fabric groups** page.

Go to **Manage > Fabrics > Fabric groups**.

2. From the **Fabric groups** table, click a fabric group.

The **Overview** page for that fabric group displays.

- [Actions](#)
- [Tiles](#)

## Actions

These are the actions that you can take at the fabric group level.

| Action                                 | Description                                                                                                                                                                                                                                      |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Edit fabric group settings</b>      | Allows you to modify the configuration settings of the fabric group as needed.                                                                                                                                                                   |
| <b>Add member fabric</b>               | Allows you to add member fabrics to a fabric group.                                                                                                                                                                                              |
| <b>Recalculate and deploy</b>          | Allows you to recalculate fabric policies and configurations, ensuring they are up-to-date and aligned with the desired state. Once recalculated, you can deploy these settings across the fabric group.                                         |
| <b>Associate tenants</b>               | Allows you to associate tenants with the fabric group. For more information, see <a href="#">Associate tenants with a fabric group</a> .                                                                                                         |
| <b>Start connectivity analysis job</b> | Allows you to start a connectivity analysis job scoped to the fabric group. Only endpoints within that fabric group are available for analysis. For more information, see <a href="#">Analyzing endpoint flows using Connectivity Analysis</a> . |
| <b>Configuration</b>                   | Allows you to add links in a fabric group.                                                                                                                                                                                                       |
| <b>Maintenance</b>                     | Provides options to backup and restore a fabric group. For more information, see <a href="#">Backing Up and Restoring Your Nexus Dashboard</a> .                                                                                                 |

## Tiles

Review the information in the various tiles in the **Overview** tab.

- [Anomaly level](#)
- [Advisory level](#)
- [Recent activity](#)
- [General](#)
- [Inventory](#)

- [Interfaces](#)
- [Analytics summary](#)
- [Connectivity](#)
- [Segmentation and security](#)

## Anomaly level

The anomaly data for a fabric group includes the anomalies of the fabric group and all its member fabrics. The aggregate score and level are reflected in the **Overview** page for the fabric group, as well as the **Summary** and **Details** widgets and pages.

Nexus Dashboard proactively detects different types of anomalies across the network, analyzes the anomalies, and identifies remediation methods. The **Anomaly level** tile provides a status of your anomaly levels and a list of your top anomaly categories.

Nexus Dashboard monitors different sets of data from all nodes in the fabrics in the fabric group and baselines the data to identify “normal” behavior. Any deviation is represented as an anomaly. Your time is better spent in resolving the issue instead of tracking the issue. Additionally, it can estimate the impact of the anomaly and generate a recommendation depending on the nature of the anomaly and thus reducing the Mean Time to Troubleshooting and Resolution (MTTR).

Click in the **Anomaly level** tile to navigate directly to the **Anomalies** tab in the **Summary** page. See [Detecting Anomalies in Your Nexus Dashboard](#) for more information.

## Advisory level

The advisory data for a fabric group includes the advisories of the fabric group and all its member fabrics. The aggregate level is reflected in the **Overview** page for the fabric group, as well as in the **Summary** and **Details** widgets and pages. Nexus Dashboard identifies field notices, software and hardware end-of-life and end-of-sale announcements, as well as PSIRTs that can potentially impact the network fabrics that it is monitoring, and generate advisories. Advisories provide recommendations to keep your network under support and running in optimal conditions. The **Advisory level** tile provides a status of your advisory levels and a list of your top advisory categories.

Click in the **Advisory level** tile to navigate directly to the **Advisories** tab in the **Summary** page. See [Identifying Advisories in Your Nexus Dashboard](#) for more information.

## Recent activity

The **Recent activity** tile provides a summary of the most recent changes that have occurred in the fabrics in the fabric group (for example, if you deleted an interface on a switch in a fabric in the fabric group). Click View all to navigate directly to the **History** tab in the **Summary** page. See [History](#) for more information.

## General

The **General** tile provides a summary of this information for the fabric group. Click **Settings** to view more detailed information on the general settings for the fabric group.

| Field                                    | Description                                                                                                                                                                                                                                                              |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Group name                               | Provides the name of the fabric group.                                                                                                                                                                                                                                   |
| Type                                     | Provides the type of fabric group.                                                                                                                                                                                                                                       |
| CloudSec                                 | Shows if CloudSec is enabled or not for this fabric group.                                                                                                                                                                                                               |
| Multi-site overlay IFC deployment method | Provides information on how the data centers connect through the border gateways: manually, directly to the border gateways or through a route server.                                                                                                                   |
| Security group status                    | Provides the security group status for the fabric group.                                                                                                                                                                                                                 |
| Switches software version                | Provides the software versions on the switches in the fabrics in the fabric group. If there are more than two switch software versions in the fabrics in the fabric group, text is displayed that shows how many additional switch software versions are in the fabrics. |
| Fabric bugs                              | Displays bugs that are associated with the software running on the fabrics in the fabric group. Click <b>Show more</b> to view the active and known bugs for the fabrics in the fabric group.                                                                            |

## Inventory

In the **Inventory** tile, you can view the summary of this information in the fabric group.

- **Member fabrics:** Displays the number of member fabrics in the fabric group. Click this box to navigate directly to **Inventory > Member fabrics** for this fabric group.
- **Controllers:** Displays the number of switches in the fabrics in the fabric group. Click this box to navigate directly to **Inventory > Controllers** for this fabric group.
- **Switches:** Displays the number of switches in the fabrics in the fabric group. Click this box to navigate directly to **Inventory > Switches** for this fabric group.
- **VPC pairs:** Displays the number of vPC pairs in the fabrics in the fabric group. Click this box to navigate directly to **Inventory > vPC pairs** for this fabric group.
- **Other devices:** Displays the number of other devices in the fabrics in the fabric group. Click this box to navigate directly to **Inventory > Other devices** for this fabric group.

## Interfaces

In the **Interfaces** tile, you can see the summary of the interfaces for the fabrics in the fabric group, including the number of switches that are in the Up, Down, or Admin Down state.

- Click **Physical** to show only physical interfaces, or click **All** to show physical and virtual interfaces.
- Click the link for the total number of interfaces in the fabric group to navigate directly to **Connectivity > Interfaces** for this fabric group. This provides additional details such as Anomaly Level, Admin Status, Operational Status, and Interface Type. Click the interface name to view additional details.

## Analytics summary

These topics provide information on the **Analytics summary** area for fabric groups.

- [Guidelines and limitations: Analytics summary for fabric groups](#)
- [Analytics summary for fabric groups](#)

## Guidelines and limitations: Analytics summary for fabric groups

- There is no navigation directly from a fabric group's **Analytics summary** area to the **Analytics Hub** page. However, you can navigate directly to the **Analytics Hub** page from the **Analytics summary** area from any member fabric in the fabric group.
- If a report is not available at the fabric level (such as for conformance or energy management), you cannot trigger that report from the fabric level. Instead, you must trigger the report from the **Analytics Hub** page or from the member fabric level.

## Analytics summary for fabric groups

In the **Analytics Summary** tile, you can see an overview of the multiple analytics collected from across the fabric group. Click the appropriate area in the **Analytics Summary** tile to view summarized views, similar to those displayed in the **Overview > Analytics summary** for a fabric.

It displays the status for these areas related to the fabric group.

- **Conformance:** Displays aggregated status for member fabrics in the fabric group. Enables you to visualize and understand the lifecycle of your hardware and software in the network. This assists you in planning upgrades and hardware refresh. Conformance Report is generated everyday for each fabric group for hardware and software conformance and weekly for each fabric group for scale conformance. In the report you can view the conformance status of software, hardware, a combination of both software and hardware, and scale conformance status for fabric groups.

Click the **Conformance** box to bring up a slide-in pane that provides conformance information in these areas.

- Devices by hardware conformance status
- Devices by software conformance status
- Scale conformance status for fabrics or switches
- **Traffic analytics:** Displays an aggregated summary of traffic analytics information for member fabrics in the fabric group. Enables you to monitor your network's latency, congestion, and drops.

Traffic Analytics automatically discovers services running in your network by matching well-known Layer 4 ports to their corresponding service endpoint categories. Nexus Dashboard then assesses service performance based on thresholds for the following metrics:

- Latency: Measures the overall time in microseconds it takes a packet to go from one place to another.
- Congestion: Measures network bandwidth utilization and quality of service (QoS) activation mechanisms to determine if a service is experiencing network congestion.
- Drops: Measures the score or number of dropped packets versus transmitted packets considering factors such as CRC errors, faulty cables, and other devices.

Click the **Traffic analytics** box to bring up a slide-in pane that provides the traffic analytics summary.

- **Energy management:** Displays aggregated values from all member fabrics in the fabric group. Helps you monitor, predict, and improve your network's energy usage, its related carbon emissions, and its total energy cost. The energy management report enables you to get insights on energy utilization, CO2 emissions, and energy cost for all the fabrics in the fabric group on a monthly basis.

The report is generated by calculating the monthly values for Power Consumption and by summing the usage data across all of your devices at each of your fabrics for every single day in the chosen month. This data is then combined with the Cisco Energy Manager to provide greater insight into what that usage means in terms of energy cost, estimated emissions, and estimated switch power consumption. For more information about the Cisco Energy Manager, see [Cisco Energy Manager](#).

Click **Energy management** to bring up a page that provides the energy management report for your fabric group. In addition, if no report is displayed, then you will have to generate the report for all the member fabrics in the fabric group through the **Analyze > Analysis Hub > Energy management** page.

## Connectivity

In the **Connectivity** tile, you can view details about these areas related to this fabric group.

- **Endpoints:** Displays the total number of endpoints from all member fabrics in the fabric group. Click the number of endpoints shown to navigate directly to **Connectivity > Endpoints** for this fabric group. See [Endpoints](#) for more information.
- **Inter-fabric:** Displays the total number of inter-fabric links between member fabrics in the fabric group. Click the number of inter-fabric connections shown to navigate directly to **Connectivity > Inter-fabric** for this fabric group. See [Inter-fabric](#) for more information.

## Segmentation and security

In the **Segmentation and security** tile, you can view details about these areas related to this fabric.

- **Tenants:** Click the number of tenants shown to navigate directly to **Segmentation and security > tenants** for this fabric group.
- **VRFs:** Click the number of VRFs shown to navigate directly to **Segmentation and security > VRFs** for this fabric group.
- **Security groups:** Click the number of security groups shown to navigate directly to **Segmentation and security > Security groups** for this fabric group.
- **Networks:** Click the number of networks shown to navigate directly to **Segmentation and security > Networks** for this fabric group.

## Inventory

The **Inventory** tab lists all hardware assets managed within the fabrics in the fabric group, including switches and controllers. It allows you to monitor hardware resources, view capacity, and verify the operational status of each device in the network.

Follow these steps to navigate to the **Inventory** tab.

1. Navigate to the **Fabric groups** page.

Go to **Manage > Fabrics > Fabric groups**.

2. From the **Fabric groups** table, click a fabric group.

3. In the fabric group page, click **Inventory**.

The **Inventory** page displays the following tabs.

- [Member fabrics](#)
- [Switches](#)
- [VPC Pairs](#)
- [Other devices](#)
- [Controllers](#)

## Member fabrics

The **Member fabrics** area is an **Inventory** page that is specific to fabric groups. It provides this information on the member fabrics in this fabric group.

| Field                 | Description                                                                                                                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fabric name           | Specifies the names of the member fabrics in this fabric group.                                                                                                                                   |
| Type                  | Specifies the types of member fabrics in this fabric group.                                                                                                                                       |
| Anomaly level         | Displays the anomaly levels of the fabrics in this fabric group, classified as <b>Healthy</b> , <b>Critical</b> , <b>Major</b> , <b>Minor</b> , and <b>Warning</b> , based on operational issues. |
| Advisory level        | Displays the advisory levels of the fabrics in this fabric group, classified as <b>Healthy</b> , <b>Critical</b> , <b>Major</b> , or <b>Warning</b> , based on operational issues.                |
| License tier          | Displays the license tiers for the fabrics in this fabric group.                                                                                                                                  |
| ASN                   | Displays the ASNs for the fabrics in this fabric group.                                                                                                                                           |
| Connectivity status   | Indicates whether the connectivity for the fabrics in this fabric group is <b>Up</b> or <b>Down</b> .                                                                                             |
| Software version      | Specifies the software versions for the fabrics in this fabric group.                                                                                                                             |
| Security group status | Displays the status of the security groups for the fabrics in this fabric group.                                                                                                                  |

## Switches

The information provided in the **Switches** page for fabric groups is an aggregation of the information from the **Switches** pages from the member fabrics in the fabric group.

These articles describe the fabric-level information provided on the **Switches** page:

- [Switches information in ACI fabrics](#)

- [Switches](#) information in NX-OS fabrics

## VPC Pairs

The information provided in the **VPC pairs** page for fabric groups is an aggregation of the information from the **VPC pairs** pages from the member fabrics in the fabric group.

These articles describe the fabric-level information provided on the **VPC pairs** page:

- [VPC pairs](#) information in ACI fabrics
- [VPC pairs](#) information in NX-OS fabrics

## Other devices

The information provided in the **Other devices** page for fabric groups is an aggregation of the information from the **Other devices** pages from the member NX-OS fabrics in the fabric group.

This article describes the NX-OS fabric-level information provided on the **Other devices** page:

[Other devices](#) information in NX-OS fabrics

## Controllers

The information provided in the **Controllers** page for fabric groups is an aggregation of the information from the **Controllers** pages from the member ACI fabrics in the fabric group.

This article describes the ACI fabric-level information provided on the **Controllers** page:

[Controllers](#) information in ACI fabrics

## Connectivity

The **Connectivity** tab provides a centralized location to manage and monitor the physical and logical connections for the fabrics in your fabric group. It allows you to verify that interfaces function correctly and traffic follows your defined policies.

Follow these steps to navigate to the **Connectivity** tab.

1. Navigate to the **Fabric groups** page.

Go to **Manage > Fabrics > Fabric groups**.

2. From the **Fabric groups** table, click a fabric group.
3. In the fabric group page, click **Connectivity**.

The **Connectivity** page displays the following tabs.

- [Interfaces](#)
- [Endpoints](#)
- [Links](#)
- [Inter-fabric](#)

- [Flows](#)

## Interfaces

Click **Interfaces** to view the interfaces for fabric group, then click the appropriate sub category, depending on the fabric type in your fabric group:

- [NX Interfaces](#)
- [ACI Interfaces](#)

### NX Interfaces

The information provided in the **NX Interfaces** page for fabric groups is an aggregation of the information from the **Interfaces** pages from the member NX-OS fabrics in the fabric group.

This article describes the NX-OS fabric-level information provided on the **Interfaces** page:

[Interfaces information in NX-OS fabrics](#)

### ACI Interfaces

The information provided in the **ACI Interfaces** page for fabric groups is an aggregation of the information from the **Interfaces** pages from the member ACI fabrics in the fabric group.

This article describes the ACI fabric-level information provided on the **Interfaces** page:

[Interfaces information in ACI fabrics](#)

## Endpoints

The **Endpoints** page provides information on the endpoints learnt in each fabric in this fabric group. You can filter the results based on MAC address, IP addresses, hostname, anomaly level, interface, status, VRF instance, Layer 3 switches, and Layer 3 interfaces.

The information provided in the **Endpoints** page for fabric groups is an aggregation of the information from the **Endpoints** pages from the member fabrics in the fabric group. While there might be differences between endpoint information that is displayed at the ACI fabric and NX-OS fabric levels, at the fabric group level, the endpoint information that is displayed is a subset of the endpoint information that is common between the two fabric types. The endpoint information that is provided at the fabric group level is similar to the endpoint information that is displayed when you click on **Active Endpoints** in the global **Overview** page.

These articles describe the endpoints information at the individual fabrics level:

- [Endpoints information in ACI fabrics](#)
- [Endpoints information in NX-OS fabrics](#)

### Guidelines and limitations: Endpoints in fabric groups

- Endpoints information is not supported for multi-cluster fabric groups, so endpoints are not displayed in the endpoints table in the **Endpoints** tab under **Connectivity** for multi-cluster fabric groups. See [Grouping fabrics](#) for more information on multi-cluster fabric groups.

- For single-cluster fabric groups, endpoints are displayed in the endpoints table in the **Endpoints** tab under **Connectivity**; however, Real Time Event Visualization (RTEV) information is not displayed in the endpoints table for single-cluster fabric groups.

## Links

You can add links between border switches of different fabrics (inter-fabric links) or between switches in the same fabric (intra-fabric links). You can only create an inter-fabric connection (IFC) for a switch that is managed by Nexus Dashboard.

The information provided in the **Links** page for fabric groups is an aggregation of the information from the **Links** pages from the member NX-OS fabrics in the fabric group.

This article describes the NX-OS fabric-level information provided on the **Links** page:

[Links information in NX-OS fabrics](#)

## Inter-fabric

Click **Inter-fabric** to view inter-fabric connections for the fabrics in this fabric group.

For the most part, the information provided in the **Inter-fabric** page for fabric groups is an aggregation of the information from the **Inter-fabric** pages from the member fabrics in the fabric group.

This information in the fabric group's **Inter-fabric** page is specific to fabric groups.

| Field                         | Description                                                                                       |
|-------------------------------|---------------------------------------------------------------------------------------------------|
| Source fabric                 | The source fabric in the inter-fabric connection.                                                 |
| Source fabric group name      | The name of the fabric group that contains the source fabric in the inter-fabric connection.      |
| Destination fabric            | The destination fabric in the inter-fabric connection.                                            |
| Destination fabric group name | The name of the fabric group that contains the destination fabric in the inter-fabric connection. |

The remaining information that is provided in the fabric group's **Inter-fabric** page is an aggregation of the information from the **Inter-fabric** pages from the member fabrics in the fabric group.

These articles describe the fabric-level information provided on the **Inter-fabric** page:

- [Inter-fabric information in ACI fabrics](#)
- [Inter-fabric information in NX-OS fabrics](#)

While there might be differences between inter-fabric information that is displayed at the ACI fabric and NX-OS fabric levels, at the fabric group level, the inter-fabric information that is displayed is similar to what is displayed when you click on **Inter-fabric** in the global **Overview** page.

## Flows

Flows provides deep insights at a flow level giving details such as average latency and packet drop

indicator. It also raises anomalies when the latency of the flows increase or when packets get dropped because of congestion or forwarding errors.

Each flow has a packet counter representing the number of packets entering the ASIC for that flow over a period of time. This period of time is called aggregation interval. There are several points where flow statistics for a given flow can be aggregated. Aggregation can happen in the ASIC, switch software, and server software.

The **Flows** page in Nexus Dashboard displays the telemetry information collected from various devices in the fabric that were added to the fabric.

The information provided in the **Flows** page for fabric groups is an aggregation of the information from the **Flows** pages from the member fabrics in the fabric group.

These articles describe the fabric-level information provided on the **Flows** page:

- [Flows information in ACI fabrics](#)
- [Flows information in NX-OS fabrics](#)

## Segmentation and security

The **Segmentation and security** page allows you to configure these areas:

- VRFs (Virtual Routing and Forwarding)
- Networks
- Security groups or Endpoint Security Groups (ESGs)
- Security contracts and associations
- Protocol definitions
- Tenants in the fabric segmentation and security context

Follow these steps to navigate to the **Segmentation and security** tab.

1. Navigate to the **Fabric groups** page.

Go to **Manage > Fabrics > Fabric groups**.

2. From the **Fabric groups** table, click a fabric group.
3. In the fabric group page, click **Segmentation and security**.

The **Segmentation and security** page displays the following tabs.

- [Networks](#)
- [VRFs](#)
- [Security groups](#)
- [Security contracts](#)
- [Security associations](#)
- [Protocol definitions](#)

- [Tenants](#)

## Guidelines and limitations: Segmentation and security for VXLAN-ACI fabric groups

You cannot configure L4-L7 services at the VXLAN-ACI fabric group level as you would at an NX-OS fabric level.

### Networks

The information provided in the **Networks** page for fabric groups is an aggregation of the information from the **Networks** pages from the member fabrics in the fabric group and any networks that were created at the fabric group level.

This article describes the NX-OS fabric-level information provided on the **Networks** page:

[Networks information in NX-OS fabrics](#)

### VRFs

The information provided in the **VRFs** page for fabric groups is an aggregation of the information from the **VRFs** pages from the member fabrics in the fabric group and any VRFs that were created at the fabric group level.

This article describes the NX-OS fabric-level information provided on the **VRFs** page:

[VRFs information in NX-OS fabrics](#)

### Security groups

The information provided in the **Security groups** page for fabric groups is an aggregation of the information from the **Security groups** pages from the member fabrics in the fabric group and any security groups that were created at the fabric group level.

This article describes the NX-OS fabric-level information provided on the **Security groups** page:

[Security groups information in NX-OS fabrics](#)

### Support for **any** in VXLAN-ACI fabric groups

The **any** logical construct, which represents all the security groups and non-classified resources for a given VRF, was previously available for VXLAN fabric groups. Beginning with Nexus Dashboard release 4.3.1, the **any** logical construct is now available for VXLAN-ACI fabric groups as well. With this feature, the **any** logical construct is supported when creating a new VXLAN-ACI fabric group, as well as when importing ACI vzAny policies from an ACI fabric as an **any** logical construct in Nexus Dashboard. For more information on importing ACI vzAny policies from an ACI fabric, see [Understanding the process for importing tenant policies from ACI fabrics into VXLAN-ACI fabric groups](#).

The **any** logical construct offers a convenient way of associating any traffic within a Virtual Routing and Forwarding (VRF) instance to a contract, which allows for communication without creating separate contract relations for each security group.

These are the advantages of using the **any** logical construct:

- TCAM space is saved
- Simplified configuration and maintenance

The **any** logical construct is created automatically when you choose either **strict** or **loose** in the **Enable Security Group** field under **Security** when editing a fabric group. The **any** logical construct is then displayed under **Segmentation and security > Security groups** for that fabric group.

#### Use cases for the **any** logical construct

These are the use cases for the **any** logical construct:

- **Any-to-Any intra-VRF communication:** When creating a security association for the fabric group, choose:
  - **Any** in the **Source group** field
  - **Any** in the **Destination** group field
  - The same VRF in both the **Source group VRF** and the **Destination group VRF** fields
- **Any-to-Security Group in the same VRF:** When creating a security association for the fabric group, choose:
  - **Any** in the **Source group** field
  - The appropriate security group in the **Destination** group field
  - The appropriate VRF for the **any** logical construct in the **Source group VRF** field
- **Security Group-to-Any in same VRF:** When creating a security association for the fabric group, choose:
  - **Any** in the **Source group** field
  - The appropriate security group in the **Destination** group field
  - The appropriate VRF for the **any** logical construct in the **Destination group VRF** field

#### Guidelines and limitations: **any** logical construct

- If a VRF is defined in tenant **common**, then you can perform the security association involving **any** only in tenant **common**.
- The **any** logical construct, along with security groups in general, are not supported in inter-VRF scenarios for VXLAN-ACI fabric groups.

## Security contracts

The information provided in the **Security contracts** page for fabric groups is an aggregation of the information from the **Security contracts** pages from the member fabrics in the fabric group and any security contracts that were created at the fabric group level.

This article describes the NX-OS fabric-level information provided on the **Security contracts** page:

[Security contracts information in NX-OS fabrics](#)

## Security associations

The information provided in the **Security associations** page for fabric groups is an aggregation of the information from the **Security associations** pages from the member fabrics in the fabric group and any security associations that were created at the fabric group level.

This article describes the NX-OS fabric-level information provided on the **Security associations** page:

[Security associations information in NX-OS fabrics](#)

## Protocol definitions

The information provided in the **Protocol definitions** page for fabric groups is an aggregation of the information from the **Protocol definitions** pages from the member fabrics in the fabric group and any protocol definitions that were created at the fabric group level.

This article describes the NX-OS fabric-level information provided on the **Protocol definitions** page:

[Protocol definitions information in NX-OS fabrics](#)

## Tenants

The information provided in the **Tenants** page for fabric groups is an aggregation of the information from the **Tenants** pages from the member fabrics in the fabric group and any tenants that were created at the fabric group level.

This article describes the NX-OS fabric-level information provided on the **Tenants** page:

[Tenants information in NX-OS fabrics](#)

## Configuration policies

The **Configuration policies** tab allows you to manage and deploy CLI-based configuration templates to the switches within the fabrics in the fabric group. It applies settings such as interface breakouts and system features directly to the hardware.

Follow these steps to navigate to the **Configuration policies** tab.

1. Navigate to the **Fabric groups** page.

Go to **Manage > Fabrics > Fabric groups**.

2. From the **Fabric groups** table, click a fabric group.
3. In the fabric group page, click the **Configuration policies** tab.

The **Configuration policies** page displays the following tabs.

- [Policies](#)
- [Resources](#)

## Guidelines and limitations: Configuration policies for fabric groups

- A fabric group's **Configuration policies** page displays information only for NX-OS fabrics.
- Beginning with Nexus Dashboard Release 4.3, users with only the **Observer** role have access restrictions that prevent access to most device configuration settings. Conversely, users with other roles, including users assigned the **Observer** role in addition to other roles across various security domains, retain some access to view device configurations.

## Policies

The information provided in the **Policies** page for fabric groups is an aggregation of the information from the **Policies** pages from the member NX-OS fabrics in the fabric group.

This article describes the NX-OS fabric-level information provided on the **Policies** page:

[Policies information in NX-OS fabrics](#)

## Resources

The information provided in the **Resources** page for fabric groups is an aggregation of the information from the **Resources** pages from the member NX-OS fabrics in the fabric group.

This article describes the NX-OS fabric-level information provided on the **Resources** page:

[Resources information in NX-OS fabrics](#)

## Anomalies

The **Anomalies** tab displays all detected anomalies within the fabrics in the fabric group. It organizes the anomalies by severity level and category, allowing you to filter and group events to identify and troubleshoot specific problems like hardware health issues.

Follow these steps to navigate to the **Anomalies** tab.

1. Navigate to the **Fabric groups** page.

Go to **Manage > Fabrics > Fabric groups**.

2. From the **Fabric groups** table, click a fabric group.
3. In the fabric group page, click the **Anomalies** tab.

The information provided in the **Anomalies** page for fabric groups is an aggregation of the information from the **Anomalies** pages from the member fabrics in the fabric group.

This article describes the fabric-level information provided on the **Anomalies** page for both ACI fabrics and NX-OS fabrics:

[Detecting Anomalies in Your Nexus Dashboard](#)

# Advisories

Nexus Dashboard identifies field notices, software and hardware end-of-life and end-of-sale announcements, as well as PSIRTs that can potentially impact the network fabrics that it is monitoring, and generate advisories. Advisories provides recommendations to keep your network under support and running in optimal conditions.

Advisories in Nexus Dashboard provide details of relevant impact from field notices, PSIRTs, EoL/EoS of hardware and software, and best practices. You can view the advisories by level and category for a particular fabric based on the selected time range.

When **Advisories** identifies field notices that can potentially impact the network fabrics that it is monitoring, Nexus Dashboard validates the serial number of the devices in the fabrics against a list of affected device serial numbers in each field notice. If a serial number is not included in a field notice, Nexus Dashboard excludes that field notice. For Advisories to validate the device serial numbers, Nexus Dashboard must have an Internet connection and be connected to and registered to Cisco Intersight. Without such connectivity, Advisories cannot validate the serial numbers, which can result in Advisories incorrectly including field notices that do not apply. Not all field notices include serial number validation.

Follow these steps to navigate to the **Advisories** tab.

1. Navigate to the **Fabric groups** page.

Go to **Manage > Fabrics > Fabric groups**.

2. From the **Fabric groups** table, click a fabric group.
3. In the fabric group page, click the **Advisories** tab.

The information provided in the **Advisories** page for fabric groups is an aggregation of the information from the **Advisories** pages from the member fabrics in the fabric group.

This article describes the fabric-level information provided on the **Advisories** page for both ACI fabrics and NX-OS fabrics:

[Identifying Advisories in Your Nexus Dashboard](#)

## History

The **History** tab provides a comprehensive activity log of all actions taken within the fabrics in the fabric group. It provides details about audit logs, deployment history, policy change history, and system events in chronological order, which is essential for compliance, auditing, and tracking the root cause of configuration changes.

Follow these steps to navigate to the **History** tab.

1. Navigate to the **Fabric groups** page.

Go to **Manage > Fabrics > Fabric groups**.

2. From the **Fabric groups** table, click a fabric group.
3. In the fabric group page, click the **History** tab.

The **History** page displays the following tabs.

- [Audit logs](#)
- [Deployment history](#)
- [Policy change history](#)
- [Recent tasks](#)

## Guidelines and limitations: History for fabric groups

The **Audit logs** tab provides information for both ACI and NX-OS fabrics, whereas the **Deployment history**, **Policy change history**, and **Recent tasks** tabs provide information only for NX-OS fabrics.

### Audit logs

The information provided in the **Audit logs** page for fabric groups is an aggregation of the information from the **Audit logs** pages from the member fabrics in the fabric group.

This article describes the fabric-level information provided on the **Audit logs** page for both ACI fabrics and NX-OS fabrics:

[Reviewing History and Logs in Your Nexus Dashboard](#)

### Deployment history

The information provided in the **Deployment history** page for fabric groups is an aggregation of the information from the **Deployment history** pages from the member fabrics in the fabric group.

This article describes the fabric-level information provided on the **Deployment history** page for NX-OS fabrics:

[Reviewing History and Logs in Your Nexus Dashboard](#)

### Policy change history

The information provided in the **Policy change history** page for fabric groups is an aggregation of the information from the **Policy change history** pages from the member fabrics in the fabric group.

This article describes the fabric-level information provided on the **Policy change history** page for NX-OS fabrics:

[Reviewing History and Logs in Your Nexus Dashboard](#)

### Recent tasks

The information provided in the **Recent tasks** page for fabric groups is an aggregation of the information from the **Recent tasks** pages from the member fabrics in the fabric group.

This article describes the fabric-level information provided on the **Recent tasks** page for NX-OS fabrics:

[Reviewing History and Logs in Your Nexus Dashboard](#)



# Copyright

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

The documentation set for this product strives to use bias-free language. For the purposes of this documentation set, bias-free is defined as language that does not imply discrimination based on age, disability, gender, racial identity, ethnic identity, sexual orientation, socioeconomic status, and intersectionality. Exceptions may be present in the documentation due to language that is hardcoded in the user interfaces of the product software, language used based on RFP documentation, or language that is used by a referenced third-party product.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: <https://www.cisco.com/go/trademarks>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

© 2017–2026 Cisco Systems, Inc. All rights reserved.

## **Americas Headquarters**

Cisco Systems, Inc.

170 West Tasman Drive

San Jose, CA 95134-1706

USA

<https://www.cisco.com>

Tel: 408 526-4000

800 553-NETS (6387)

Fax: 408 527-0883