Cisco Nexus Dashboard Insights Topology, Release 6.3.1 - For Cisco NDFC

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New and Changed Information

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

Table 1. New Features and Changed Behavior in the Cisco Nexus Dashboard Insights

Feature	Description	Release	Where Documented
Reorganized Content	Content within this document was originally provided in the Cisco Nexus Dashboard Insights User Guide. Starting with release 6.3.1, this content is now provided solely in this document and is no longer provided in the Cisco Nexus Dashboard Insights User Guide.	6.3.1	Entire document

This document is available from your Cisco Nexus Dashboard Insights GUI as well as online at www.cisco.com. For the latest version of this document, visit Cisco Nexus Dashboard Insights Documentation.

About Topology

About Topology

Topology displays the interconnection of the nodes in the fabric using the LLDP and CDP protocol information. The topology view helps find the nodes that are impacted by anomalies.

Topology displays all the nodes and the anomaly levels for the selected sites with a radial graph.

The page displays the list of nodes, node types, LLDP information from a leaf node to another leaf node, IPN, and anomaly level on the link. In this view, you can distinguish between a spine node, leaf node, and border leaf node by the different avatars.

IPN links are spine node links connected to the IPN and are distinguished from the links connected to the internal leaf nodes. The IPN is shown as a physical entity in the topology.
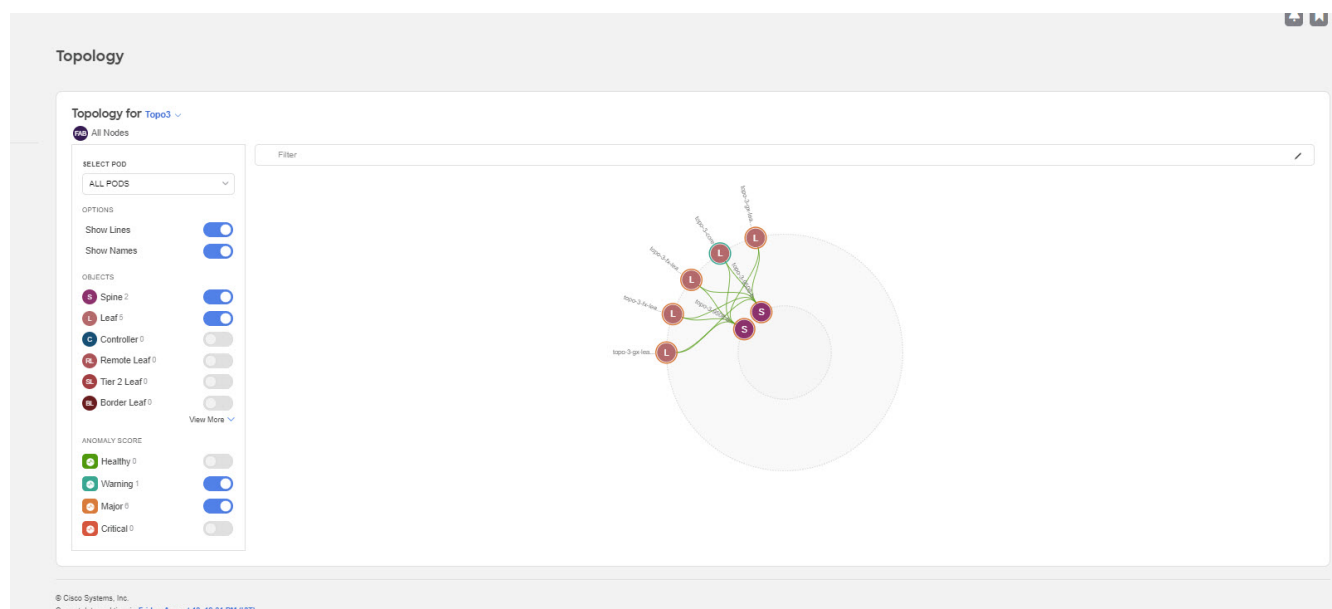
Access Topology by navigating to **Operate** > **Topology**.

Toggle Spine nodes, Leaf nodes, and Controllers to add or remove objects from the topology view. Toggle each anomaly score to add or remove from the topology view.

The various anomaly scores available are:

- Warning
- Major
- Critical

Use the zoom in capability to narrow down on portions of the infrastructure based on logical constructs such as EPG, VRF, Tenant. View, sort, and filter anomalies through the topology work pane.

You can refine the displayed nodes by the following filters:

- Name - Display only nodes with a specific name.

- VRF - Display only nodes from a specific VRF.

Use the following operators to filter the refinement:

Operator	Description
==	With the initial filter type, this operator, and a subsequent value, returns an exact match.
!=	With the initial filter type, this operator, and a subsequent value, returns all that do not have the same value.
contains	With the initial filter type, this operator, and a subsequent value, returns all that contain the value.
!contains	With the initial filter type, this operator, and a subsequent value, returns all that do not contain the value.

The anomaly score is represented by the color of the node in the topology.

The different colors show the anomaly level for that object, where:

- **Orange** indicates that this object is in an Anomaly Level Major state

- **Red** indicates that this object is in an Anomaly Level Critical state

- **Gray** indicates that the Anomaly Level for this object is unknown

Hover over the node to view an overview of the following details:

- Type of node

- Name of the node

- Anomaly level

- Number of nodes it is connected to

Click the node on the topology to view additional details for the node. To understand the details available, see Inventory. Click the Actions button to view the details in Inventory.

> **Topology Limitations**
>
> Nodes that do not have LLDP information are not shown in the topology.

Cisco Nexus Dashboard Insights Topology

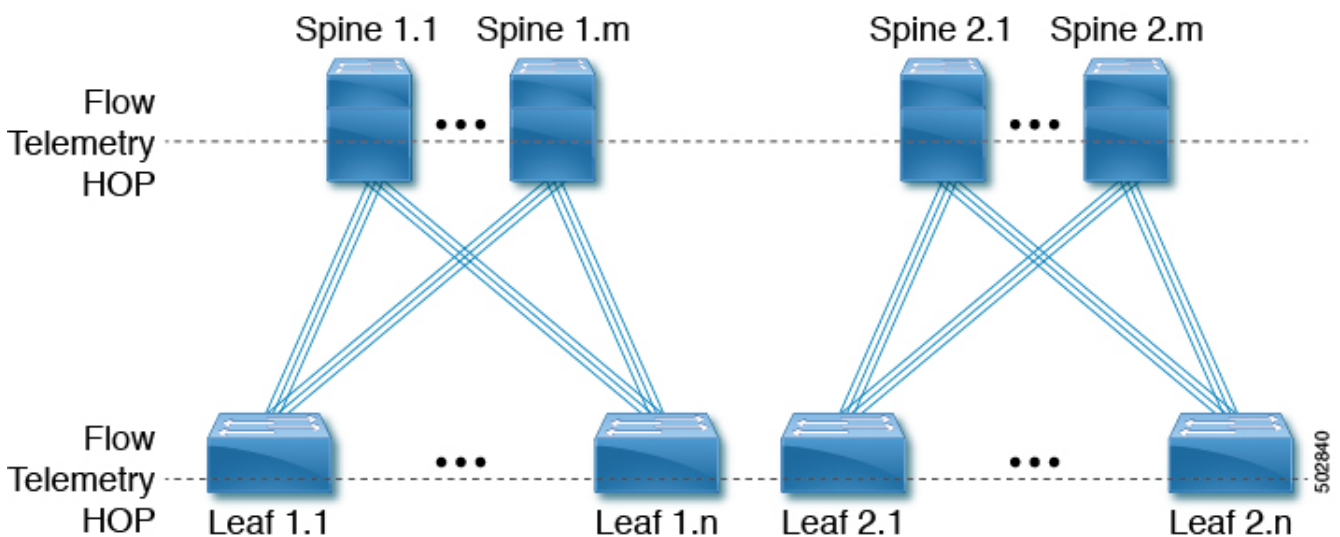The Nexus Dashboard Insights on NDFC supports the following topologies:

- Leaf switch-Spine switch for 2-HOP and 3-HOP flow telemetry correlation.
- Leaf switch-Spine switch-Superspine switch for 3-HOP and 4-HOP flow telemetry correlation.

The following illustration describes the Leaf switch-Spine switch topology for 2-HOP flow telemetry correlation.
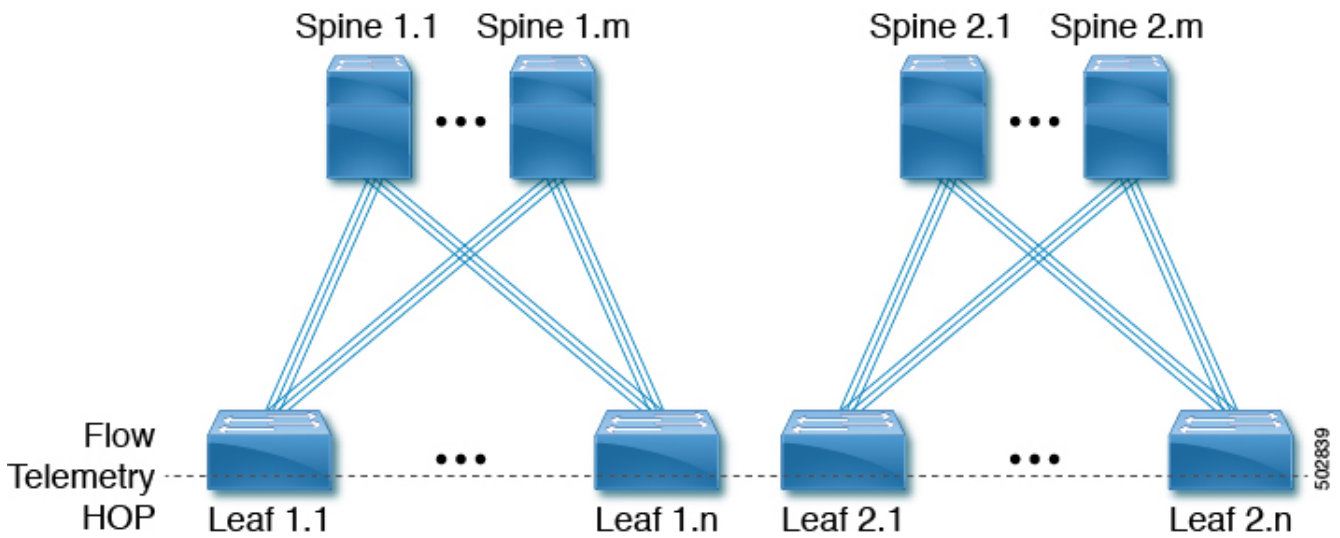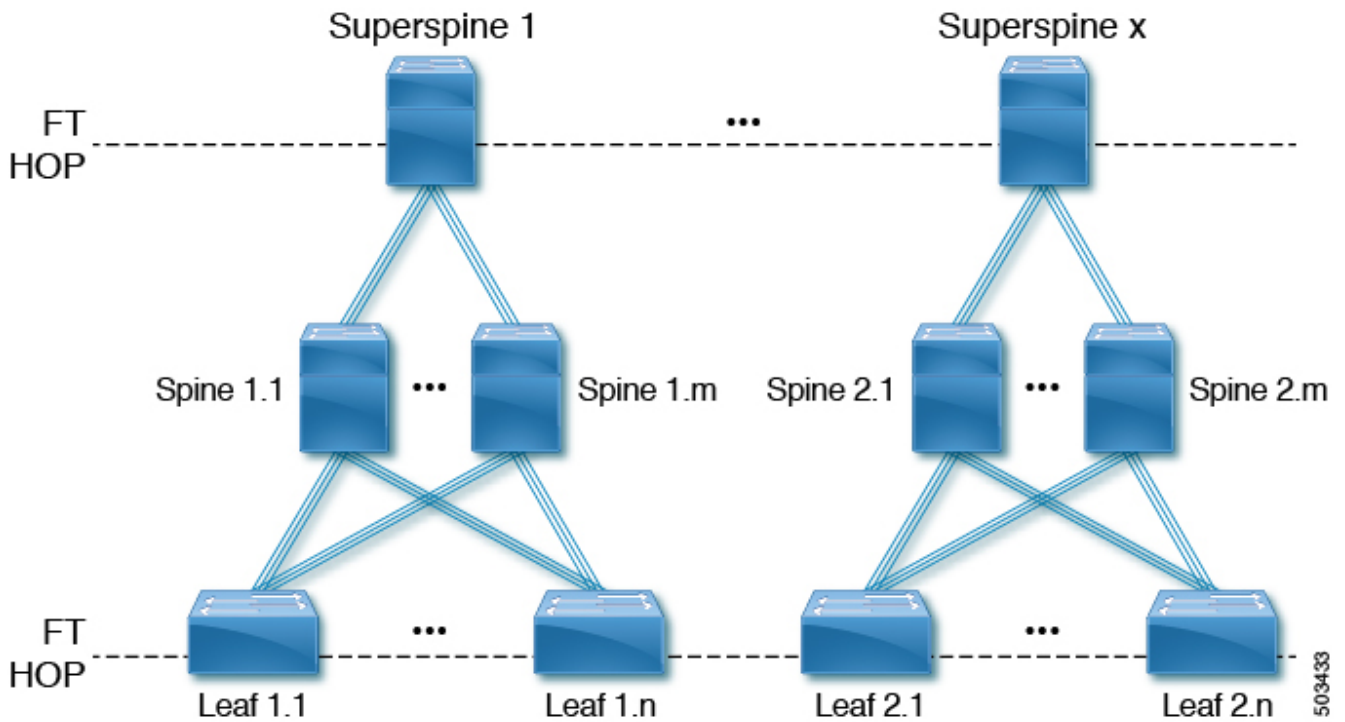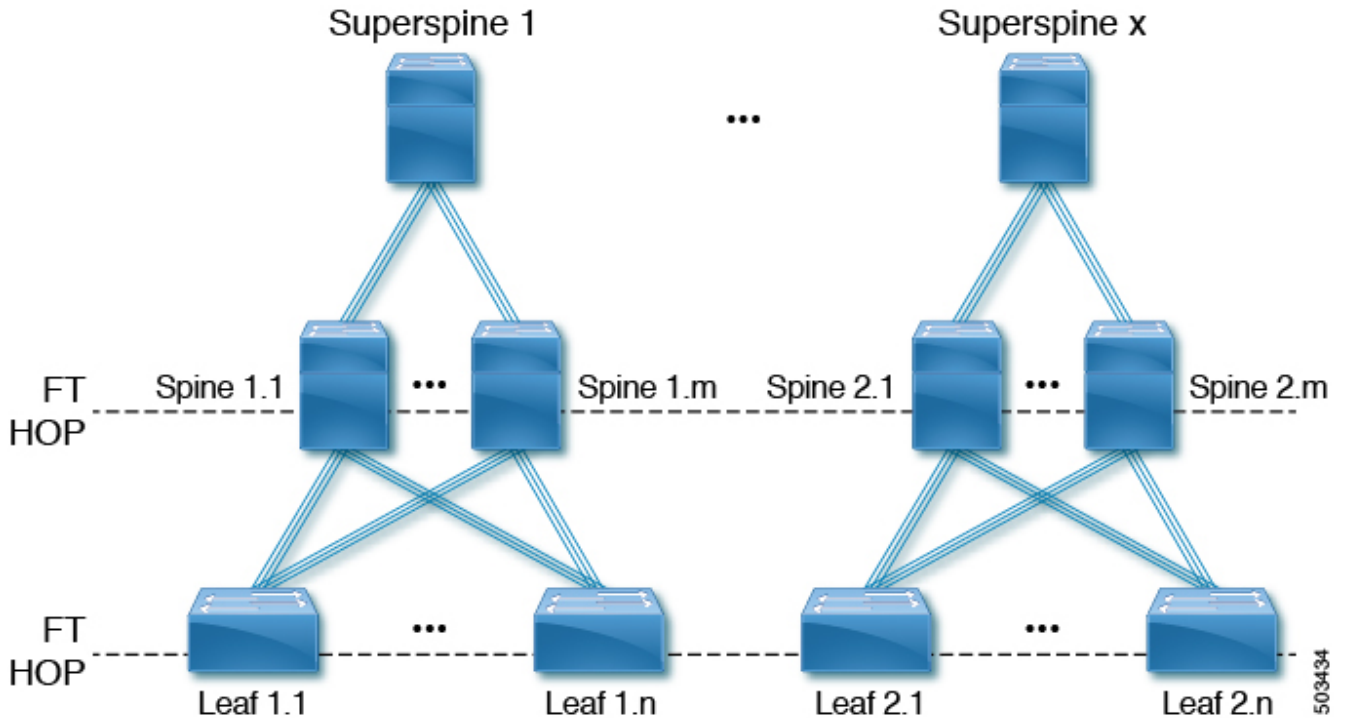

The Flow Telemetry HOP line crossing every switch in the illustration represents the switches that are capable of exporting the Flow telemetry data. For example: With the flow telemetry HOP line, the packet flows from Leaf 1.1 to Leaf 1.n are considered as 2 flow telemetry hops.

The following illustration describes the Leaf switch-Spine switch topology for 3-HOP flow telemetry correlation.

The Flow Telemetry HOP line crossing every switch in the illustration represents the switches that are capable of exporting the Flow Telemetry data. For Example: With the two flow telemetry HOP lines, the packet flows from Leaf 1.1 to Spine 1.1 and then to Leaf 1.n are considered are 3 flow telemetry hops.

The following illustration describes the Leaf switch-Spine switch-Superspine switch for 3-HOP flow telemetry correlation.

The Flow Telemetry HOP line crossing every switch in the illustration represents the switches that are capable of exporting the Flow Telemetry data. For Example: The packet flows from Leaf 1.1 to Superspine-1 and then to Leaf 1.n are considered as 3 flow telemetry hops.

The following figure describes the Leaf switch-Spine switch-Superspine switch for 4-HOP flow telemetry correlation.

The Flow Telemetry HOP line crossing every switch in the illustration represents the switches that are capable of exporting the Flow Telemetry data. For Example: With the two flow telemetry HOP lines, the packet flows from Leaf 1.1 to Spine 1.1 and then to Spine 1.m to Leaf 1.n are considered as 4 flow telemetry hops.

Supported Scenarios

The Nexus Dashboard Insights topology supports the following scenarios.

VXLAN

- vPC on leaf switch
- Border spine switch
- Border leaf switch
- IR or Multicast underlay
- EBGP or IBGP
- IPv4 underlay
- IPv4/IPv6 overlay

Legacy/Classic LAN

- vPC on leaf switch
- IPv4 or IPv6

Supported Roles

The Nexus Dashboard Insights topology supports the following roles.

VXLAN

- Leaf (current) switch
- Border switch
- Border Spine switch
- Border Gateway switch
- Border Gateway Spine switch
- Super Spine switch
- Border Super Spine switch
- Border Gateway Super Spine switch
- Spine switch

Classic LAN

- Access switch
- Aggregation switch
- Edge Router switch
- Core Router switch

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