# Cisco Nexus Dashboard Insights Explore, Release 6.5.1 - For Cisco NDFC or Standalone NX-OS

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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 of the new features up to this release.

*New Features and Changed Behavior in the Cisco Nexus Dashboard Insights*

| Feature | Description | Release | Where Documented |
|---------|-------------|---------|------------------|
| Search and Explore | New Search and Explore enables you to search for any IP or MAC address across all the fabrics managed by Nexus Dashboard Insights, and execute show commands to display anomalies. | 6.5.1 | About Search and Explore |
| Terminology change | The term "sites" is renamed to "fabrics". | 6.5.1 | Entire document |

This document is available from your 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.

# Search and Explore

## About Search and Explore

Search and Explore allows you to quickly search for an IP or MAC address, interface name, or switch name across all the fabrics managed by Nexus Dashboard Insights and view the results within a few seconds. You can also create a **show** query to display anomalies, advisories, controllers and switches in inventory, interfaces, endpoints, and more. Search and Explore also enables you to ask questions or use explore queries to understand how different elements communicate with each other as well as other associations.

### Types of Queries Supported

Search and Explore supports these queries:

- **What Query** - Answers how the different networking entities are related to each other.

  Examples What endpoints are associated with interface: *topology/pod-1/paths-101/pathep-[eth1/3]* or *VRF:uni/tn-secure/ctx-ctx1*

- **Show Query** - Used to view any of the various objects across any fabric currently visible in Nexus Dashboard Insights. You can perform show queries on anomalies, advisories, switches, controllers, endpoints, interfaces, flows and more.

## Guidelines and Limitations

### Guidelines and Limitations for Search and Explore

- Search is supported on IPv4 and IPv6 addresses.
- When you enter a search string, auto-suggest displays the results that begin with the input string and is case sensitive.
- Search is not available for hardware and capacity resources on leaf switches.
- In certain cases, keyword search for interface types such as port channel, virtual port channel, and virtual port channel peer link is not supported.
- Scale limits for Search and Explore include:
  - On virtual Nexus Dashboard we support snapshots with 100,000 logical rules and 350,000 (Vertices + Edges).
  - On physical Nexus Dashboard we support snapshots with 300,000 logical rules and 1000,000 (Vertices + Edges).

### Guidelines and Limitations for Queries

- What *X* to *any association* query is only supported for single fabrics.
- The retention period for a What query is 7 days. After that the What query will not be displayed in historical searches.
- For NX-OS fabric, this feature provides a switch-wide view of VRFs, VLANs, interfaces, endpoints

and leaf switch resources in the fabric. It also provides Layer 2 VNI and Layer 3 VNI as resources.

- Resource aggregation is supported for VLAN and VRF resources. With resource aggregation, resources like VRF and VLAN are discovered for the entire fabric and all the leaf switches are aggregated by these resources. If you query **What VLANs are associated with any?** in the **Query Results** area, you will see a list of all the VLANs available across the fabric. EP and LEAF counts will be aggregated by VLAN and you can find all the EPs and LEAFs associated to a single VLAN by clicking the aggregated resource counts.

  Additionally, as the VLAN and VRF queries are fabric wide, if you want to explore resources for a VLAN on a specific leaf switch, you must use the **AND** operator in your query. For example, **What EPs are associated with VRF:vrf-vrf_51020 and LEAF:CANDID-SYS-S1-L1**.

- A networking asset, such as interfaces on a leaf switch, must be associated with an endpoint in the leaf switch for you to be able to explore it in **Search and Explore**.

- When a VRF is not operational, **Search and Explore** discovers the endpoints as a Layer 2 endpoint. Endpoints are discovered as Layer 3 or Layer 2 endpoints. All endpoints present in a VLAN are discovered, and other endpoints are ignored.

- In **Search and Explore** if you do not see endpoints or other network assets, look for system anomalies in the associated snapshot. Verify that the collection has succeeded in all the leaf switches. If the collection failed, it may result in endpoints not being discovered.

- NDFC based fabric must have endpoints available in VNI or VRF for certain **WHAT** queries to work, since this feature is based on the endpoints learnt on VNI and/or VRF. If the endpoints is not available, the What query for VRF or L3 VNI will not display accurate results.

# Perform Search and Explore

1. Click **Search and Explore**.

   **Search and Explore**

   ## Hi, admin!

   Start exploring by asking me a question or giving me an instruction

   | All Online Fabrics ⌄ | Enter a search term... | Go |

   **GETTING STARTED**

   **Find Anything**

   Search for and quickly jump to any item in Insights. Use **All Fabrics** to search for objects across any fabric currently visible in Insights, or select a specific fabric or integration from the dropdown to limit the search scope.

   For example, "Leaf-101" or "Show anomalies"

   **Explore Relationships with "Can" Queries**

   To get started, select an individual ACI fabric or NDO Integration. Then, you can ask if objects can talk and see their contracts, relationships, and more using Explore queries. You can adjust your query's time range from the results page.

   For example, "Can EP 1.1.1.1 talk to EP 1.1.1.2"

2. From the drop-down list, select **All Online Fabrics** or a single fabric.

3. **Keyword Search**

   a. To perform a keyword search start typing the IP or MAC address, interface name, or switch name. Once you start typing the first 3 alphabets or numbers, auto-suggest results are displayed.
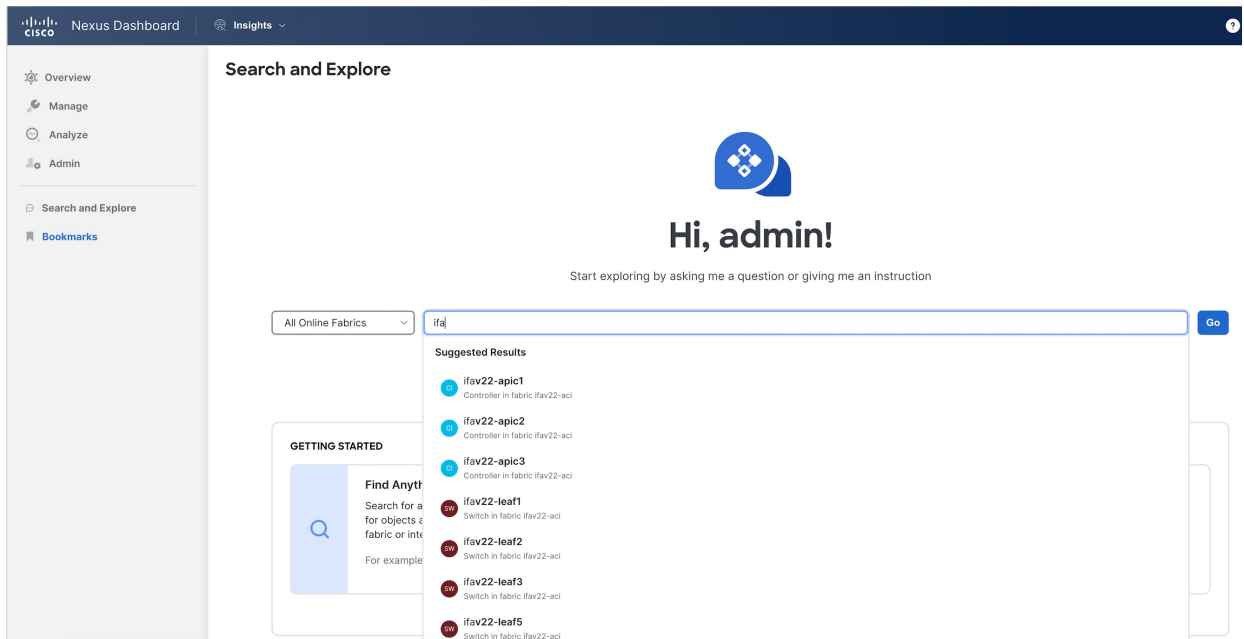


   > Keyword search is supported on online fabrics. Keyword search is case sensitive.

   b. Select a result from the suggested results and click **Go**.

   c. By default, search results for **Active Now** are displayed. From the Date and Time selector, select the time range to view results for a specific time.

   d. For MAC and IP address search the endpoint page is displayed. For switch and interface name search the inventory page is displayed.

4. **Show Queries**

   a. You can perform show queries on anomalies, advisories, switches, controllers, endpoints, interfaces, flows and more.

   b. To perform a show query start typing **show**. Once you start typing auto-suggest results are displayed.
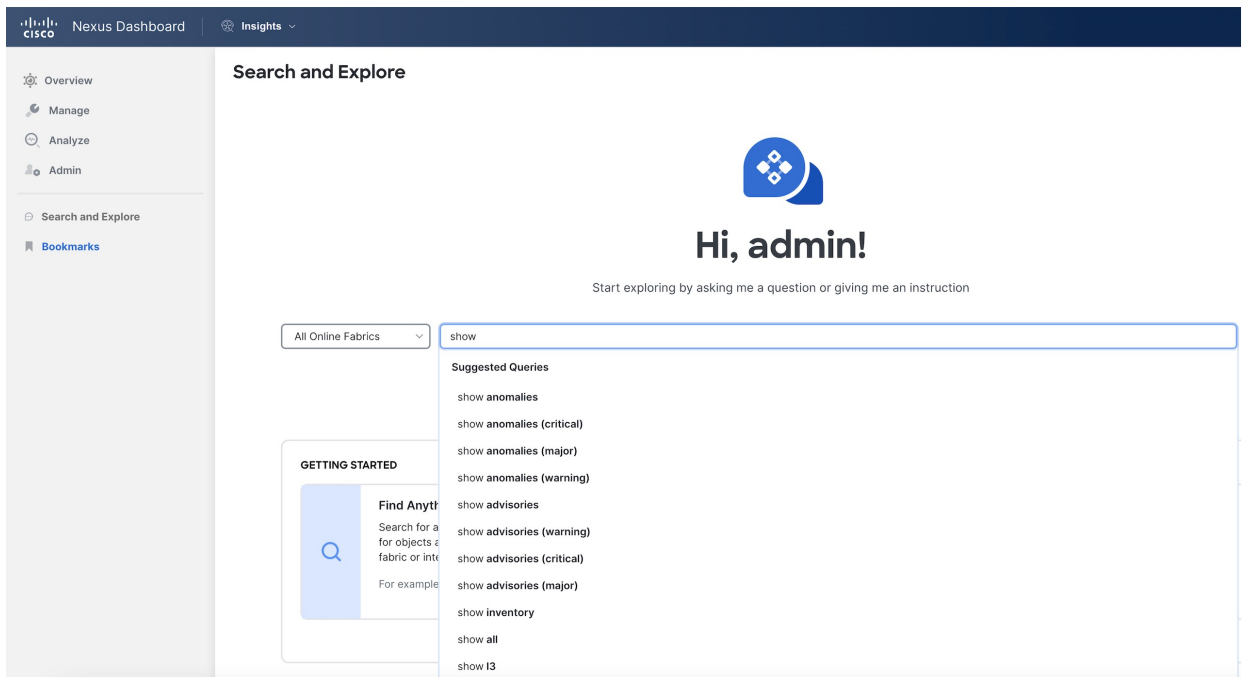
c. Select a query from the suggested results and click **Go**.

d. By default, search results for **Active Now** are displayed. From the Date and Time selector, select the time range to view results for a specific time.

e. The show query results are displayed in the existing Insights page with filters.

5. **What Queries**

   a. You can perform a what query to answer the question, **What entities are associated with each other?**

   b. To perform a what query, select a single fabric from the drop-down list and start typing **what**.

   c. Once you start typing auto-suggest results are displayed.
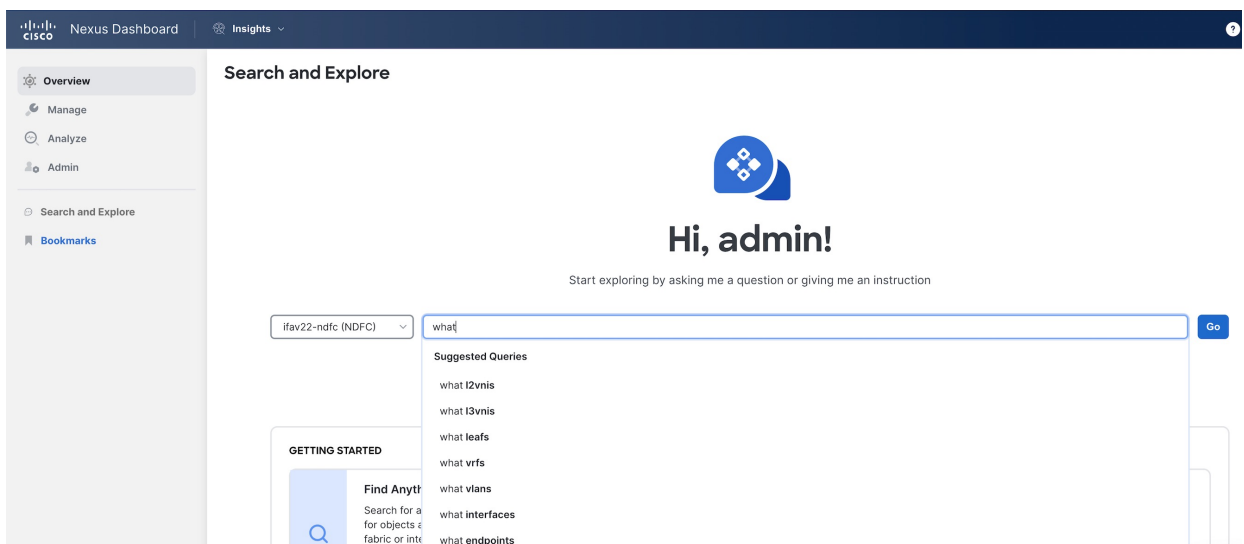


d. Select a query from the suggested results and click **Go**.

e. By default, search results for **Active Now** are displayed. From the Date and Time selector, select the time range to view results for a specific time.

f. The what query results are displayed in a tabular format.

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