Revised: April 14, 2026

Cisco Nexus Hyperfabric — Fabric Reference Points

Fabric Reference Points

Fabric Reference Points compares two fabric snapshots to identify changes. A snapshot is a capture of the fabric's operational telemetry and assertion states at a specific time.

You can promote a snapshot to a baseline to create a reference state. Comparing subsequent snapshots against this baseline identifies deviations.

Change metric types

When you compare a snapshot against a baseline, the system categorizes these types of changes.

- **Added**: Elements present in the current snapshot but not in the baseline.
- **Removed**: Elements present in the baseline but not in the current snapshot.
- **Modified**: Elements present in both snapshots that have different values or states.

Supported data types

The system compares these two categories of data.

- **System states**: Operational telemetry, such as device resource usage and management port configurations.
- **Assertions**: Health and configuration rules, such as port link status, device temperature, and port speed consistency.

Create and promote a baseline snapshot

Use this procedure to establish a baseline. A baseline provides a stable reference state, allowing you to measure changes in your fabric's operational health.

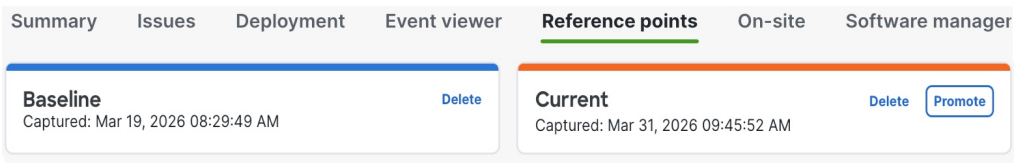
Before you can track changes, you must define the reference state for your fabric. Capturing a snapshot when your network is functioning as intended creates an anchor for all future comparisons.

Step 1 Navigate to the **Reference points** tool.

a) Choose **Fabrics**, then select the fabric that you want to analyze.
b) Select **Reference points**.

Step 2 If a current snapshot exists, you can

- select **Delete** to remove the existing snapshot, or
- select **Promote** to set the existing snapshot as the current baseline state.



Step 3 Select **Capture** to record the current fabric operational state. The date and time of the snapshot appears in the **Current** area.

Step 4 Select **Promote** to set the snapshot as a baseline reference point for future comparisons. The date and time of the snapshot disappears from the **Current** area and appears in the **Baseline** area.

Compare snapshots

Use this procedure to identify operational deviations and assertion failures in your fabric by comparing a saved baseline snapshot against the current system state. Comparing snapshots helps you troubleshoot instability, verify configuration changes, and identify drift from your established baseline.

When network performance degrades or behavior changes, comparing your current operational state against a baseline helps you isolate the cause.

Ensure a baseline reference point exists.

Step 1 Navigate to **Reference points**.

a) Choose **Fabrics**, then select the fabric that you want to analyze.

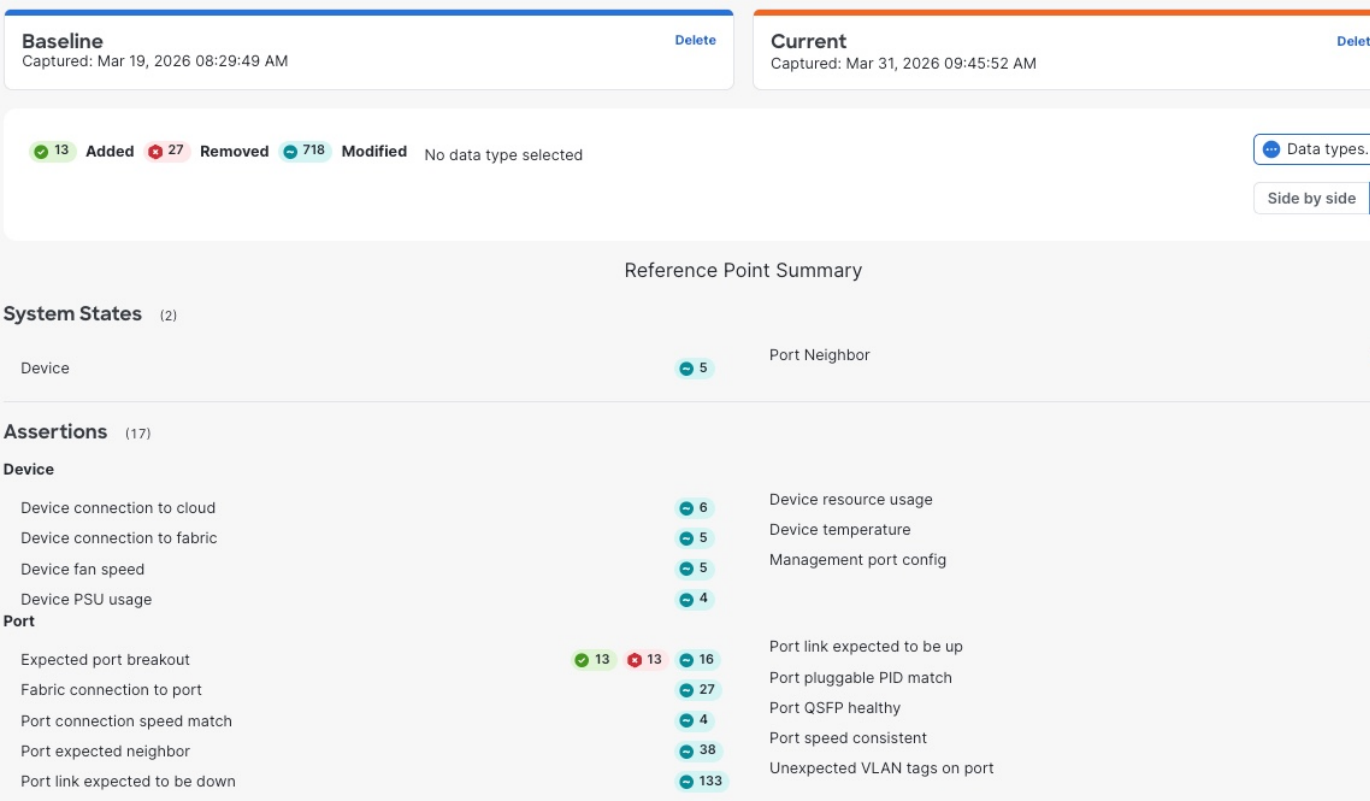
b) Select **Reference points**.

Step 2 If a snapshot exists in the **Current** area, you can

- select **Delete** to remove the existing snapshot, or
- select **Promote** to set the existing snapshot a baseline.

Step 3 In the **Current** area, select **Capture**.

Step 4 Review the change summary.

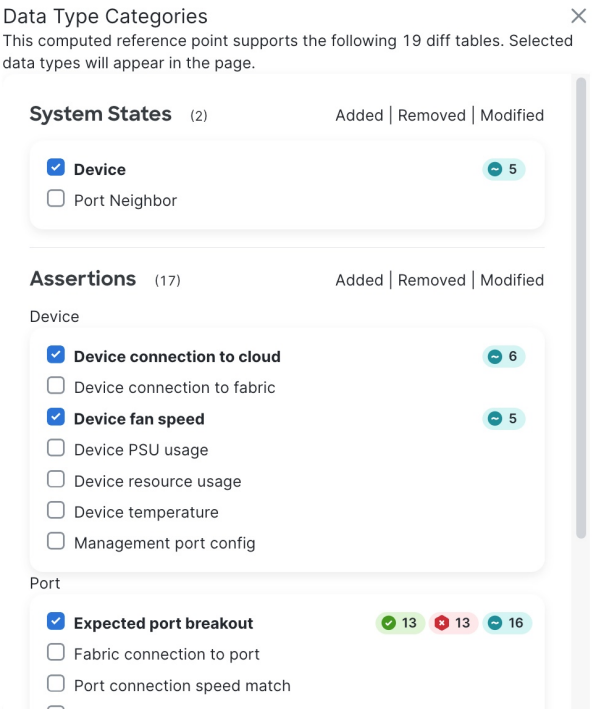


The system displays a color-coded summary of differences, allowing you to pinpoint system state or assertion-based changes since the baseline was captured. Scroll through the **Reference Point Summary** to inspect specific changes

a) Examine the high-level metrics: View the number of added, removed, and modified elements.
b) Identify element status: Check the status indicators next to each system state or assertion type item.

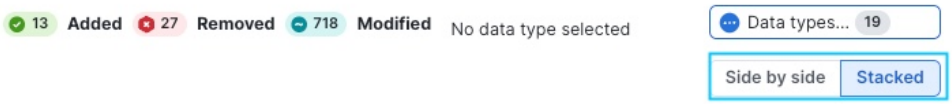
Step 5 Analyze the detailed differences.

a) Select **Data types**.
b) Check the system state and assertion type check boxes that you want to view details for.

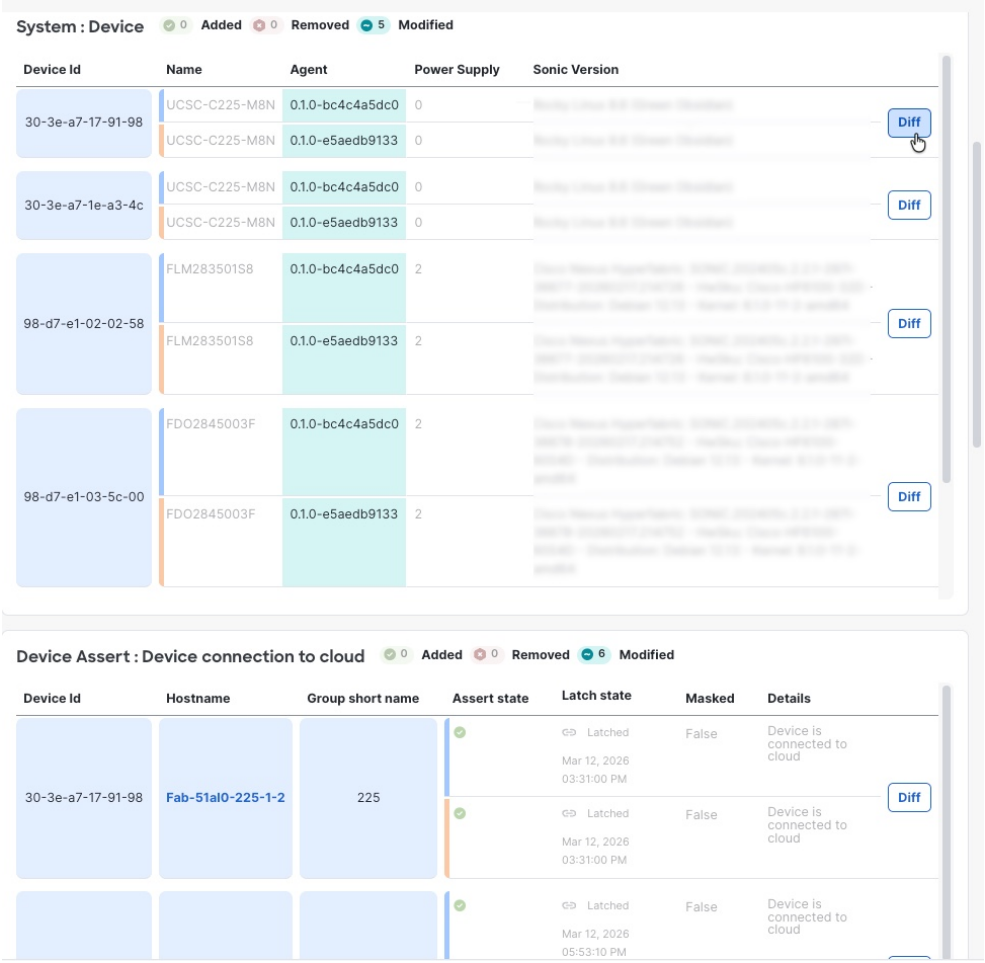


c) Close the **Data Type Categories** drawer. The data comparison of the baseline value versus the current value is displayed.

d) Choose whether you want to view the detailed data side-by-side or stacked.



e) Select **Diff** to view the raw JSON comparison for advanced troubleshooting.


System : Device
0 Added
0 Removed
5 Modified
Device Id
Name
Agent
Power Supply
Sonic Version
30-3e-a7-17-91-98
UCSC-C225-M8N
0.1.0-bc4c4a5dc0
0
UCSC-C225-M8N
0.1.0-e5aedb9133
0
Diff
30-3e-a7-1e-a3-4c
UCSC-C225-M8N
0.1.0-bc4c4a5dc0
0
UCSC-C225-M8N
0.1.0-e5aedb9133
0
Diff
98-d7-e1-02-02-58
FLM283501S8
0.1.0-bc4c4a5dc0
2
FLM283501S8
0.1.0-e5aedb9133
2
Diff
98-d7-e1-03-5c-00
FDO2845003F
0.1.0-bc4c4a5dc0
2
FDO2845003F
0.1.0-e5aedb9133
2
Diff
Device Assert : Device connection to cloud
0 Added
0 Removed
6 Modified
Device Id
Hostname
Group short name
Assert state
Latch state
Masked
Details
30-3e-a7-17-91-98
Fab-51al0-225-1-2
225
Latched
Mar 12, 2026
03:31:00 PM
False
Device is connected to cloud
Diff
Latched
Mar 12, 2026
03:31:00 PM
False
Device is connected to cloud
Latched
Mar 12, 2026
05:53:10 PM
False
Device is connected to cloud