Cisco Nexus Dashboard Smart Licensing, Release 3.1.x

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Smart Licensing Overview

Cisco Nexus Dashboard Smart Licensing is a software management platform that manages all Nexus Dashboard and services product licenses.

Beginning with release 3.1.1, you can establish connectivity to the Cisco Smart Software Manager (CSSM) from your Nexus Dashboard cluster and track the inventory and license consumption by the Nexus Dashboard Insights service.

Unlike some of the other Cisco products which support multiple types of connectivity to the CSSM server, this release of Nexus Dashboard supports the following:

- **Direct Connect to CSSM**: This is the most commonly used network setting. The Nexus Dashboard must have an Internet connectivity so that the Nexus Dashboard can send RUM reports to the CSSM directly. The DNS must be configured and the CSSM hostname (https://smartreceiver.cisco.com/licservice/license) must be pingable.

- **HTTPS Proxy**: With this setting, the Nexus Dashboard does not have Internet connectivity. The Nexus Dashboard sends RUM reports to the CSSM using your web server. Make sure the web server is properly configured to allow the smart licensing messages to pass through the firewall and to reach the destination (https://smartreceiver.cisco.com/licservice/license).

  Note that there is no separate proxy configuration specific to licensing, the cluster-wide proxy configuration is used.

Smart Licensing Guidelines and Limitations

The following guidelines apply when enabling CSSM connectivity for your Nexus Dashboard:

- While this release allows you to see the licenses that are currently in use, it does not enforce the licensing policy and is used for informational purposes only.

- In this release, only the Nexus Dashboard Insights service can use the smart licensing feature configured at the platform level.

  Only the number of devices which consume licenses is shown in this release.

- In this release, only two license types are supported: N9K Day2 operations suite fixed and N9K Day2 operations suite modular.

- License consumption shown in the Nexus Dashboard UI screens is updated every 15 seconds for NDFC and NX-OS sites and every 15 minutes for ACI sites.

  In addition, license information is updated any time a site or a switch is added or removed.

- When configuring a proxy for CSSM connectivity, the following limitations apply:

  - Full IPv6 addresses are not supported.

    You can provide a hostname that resolves to an IPv6 address, but literal IPv6 addresses are not supported

  - Only the following characters are supported for proxy passwords: a-z,A-Z,0-9~.-_.

  - The proxy server must be configured for HTTPS traffic, while the proxy server itself must be HTTP.

Licensing Details

The following table lists the features available in each licensing tier.

Table 1. Licensing Details

		ESSENTIALS Basic Device and Network Monitoring features	**ADVANTAGE** Device Network Monitoring and Troubleshooting Tools	**PREMIER** Advantage Network Analytics and Day 2 Operations
Inventory Get information about the number of switches and other elements in your site.	Global, fabric, switch, ports, endpoints, VMs	✓	✓	✓
	L3 neighbors, IPv4/v6 routing tables*, capacity	⊘	✓	✓
Topology Get information about the number of switches and other elements in your site.	One fabric at a time	✓	✓	✓
	Across fabrics	⊘	✓	✓
Anomalies Detect problems in your network faster.	Basic (switch and interface down only)	✓	✓	✓
	All	⊘	✓	✓
Advisories EoS/EoL Notifications for Hardware and Software, PSIRTs and other recommendations.	Severity 1 PSIRTs and EoS	✓	✓	✓
	Best Practices, Field Notices, Sustainability	⊘	✓	✓
Conformance View interfaces, L3 neighbors, connected endpoints and more!	Hardware/Software lifecycle & EoS	✓	✓	✓
	Verified scale	⊘	⊘	✓

Analytics and Troubleshooting Get actionable data-driven insights to optimize network performance and security.	Sustainability Bug Scan, CAM Analyzer	⊘	✓	✓
	Flow and Traffic Connectivity and Explorer Delta (pre/post) Compliance	⊘	⊘	✓
Software Upgrade Support	Basic upgrade checks & TAC Assist	✓	✓	✓
	Full upgrade analytic	⊘	⊘	✓
AI/ML & QoS	PFC/ECN (NX-OS/NDFC Only)	⊘	✓	✓
	Microbursts	⊘	✓	✓
Integrations	VMware	✓	✓	✓
	DNS, Panduit	⊘	✓	✓
	All (Splunk, ServiceNow, AppDynamics, etc)	⊘	⊘	✓
Others	Journey, ND multi-cluster support	✓	✓	✓
	Multicast PIM, IGMP (NX-OS/NDFC only), log collector, snapshots (ACI only) and snapshot assistant	⊘	✓	✓
	Customized alerts and compliance rules, customizable dashboards, pre-change analysis (ACI only)	⊘	⊘	✓

Enabling Smart Licensing

To enable Smart Licensing:

1. Ensure that your Nexus Dashboard cluster can connect to the Smart Licensing service.

   If your cluster can already access the licensing service at https://smartreceiver.cisco.com/licservice/license, skip this step. Otherwise, you may need to configure a proxy server for your cluster:

   a. Navigate to your Nexus Dashboard cluster's **Admin Console**.

   b. From the left-hand navigation pane, choose **Admin > System Settings**.

   c. In the **System Settings** page, click the **Edit** button in the **Proxy Settings** tile.

   d. In the **Proxy Configuration** screen, click **Add Server**.

   e. Provide proxy server information.

      ▪ From the **Type** drop down, select HTTPS as appropriate.

        Smart licensing supports HTTPS proxy servers only.

      ▪ In the **Server** field, provide the IP address of the proxy server.

      ▪ If your proxy server requires authentication, provide the **Username** and **Password**.

        Then click the checkmark icon to save the proxy server.

2. Generate a Smart Licensing token.

   a. Navigate to https://software.cisco.com/software/smart-licensing/inventory.

   b. Select your virtual account.

   c. Under **Product Instance Registration Token**, click **New Token**.

   d. Define the expiration for your new token and click **Create Token**.

3. Configure your Nexus Dashboard cluster to enable smart licensing.

   a. Log in to your Nexus Dashboard cluster's **Admin Console**

   b. Navigate to **Admin > Licensing**.

   c. Click **Configure License Settings**.

   d. In the **Product Instance ID Token** field, provide the token you generated in the previous step.

   e. Click **Save**.

Viewing Current License Usage

After you have configured your Nexus Dashboard to connect to the CSSM, you can view the currently used licenses in the **Admin Console**'s **Admin > Licensing** page:

Admin > Licensing

Smart Licensing

Refresh · Configure License Settings

Learn more the features available for each license type.

Status

⊘ Active

Licenses by type

16

■ N9K Day2 operations suite fixed **16**

Site Name	Site Type	License Type	Number of Licenses
DC-NDI-N02-PND	DCNM	N9K Day2 operations suite fixed	6
DC-NDI-A04	ACI	N9K Day2 operations suite fixed	10

Trademarks

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