

# Cisco Nexus Dashboard Fabric Controller Licensing

**Q** **When do I need to purchase licenses for the Cisco Nexus Dashboard Fabric Controller (NDFC)?**

**A** Each Cisco Nexus device that NDFC manages requires a NDFC right-to-manage license.

**Q** **What are NDFC right-to-manage license?**

**A** There are two types of licenses that bundle in the NDFC right-to-manage. The Cisco Data Center Networking (Cisco DCN) tier-based license (Ex: DCN Essentials, DCN Advantage, DCN Premier) and NDFC smart licenses (Ex: DCNM-LAN-N77-K9=, DCNM-LAN-N5k-K9=).

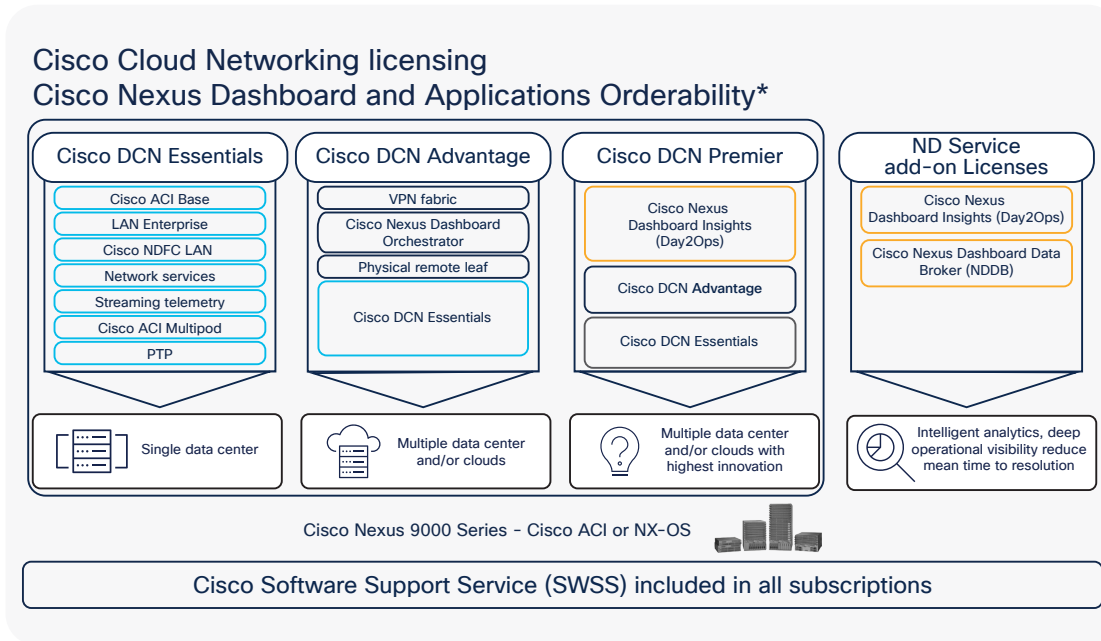
**Q** **For Cisco Nexus 9000 Series and Cisco Nexus 3000 Series switches, what licenses do I have to purchase?**

**A** The Cisco Data Center Networking (Cisco DCN) Software subscription suite includes three tiered licenses:

- Cisco Data Center Networking Essentials subscription.
- Cisco Data Center Networking Advantage subscription.
- Cisco Data Center Networking Premier subscription.

The Cisco NDFC LAN right-to-manage is bundled in the Cisco DCN Essentials tier of the Cisco DCN Software subscription suite for Cisco Nexus 9000 Series switches and Cisco Nexus 3000 Series switches.

Figure 1. Licensing overview



- **Easy activation.** Smart Licensing establishes a pool of software licenses that can be used across the entire organization—no more PAKs (product activation keys).
- **Unified management.** My Cisco Entitlements (MCE) provides a complete view of all of your Cisco products and services in an easy-to-use portal, so you always know what you have and what you are using.
- **License flexibility.** Your subscription software is not node-locked to your hardware, so you can easily use and transfer licenses as needed.

In order to retrieve your Smart Licenses, you will first need to set up a Smart Account on Cisco Software Central (software.cisco.com).

For a more detailed overview of Cisco Licensing, go to [cisco.com/go/licensingguide](https://cisco.com/go/licensingguide).

**Q For platform families that are not supported in the Cisco DCN tier-based license (Ex: Cisco Nexus 7000 Series, Cisco Nexus 5000 Series, etc.), what license do I have to purchase?**

A NDFC still supports Cisco NDFC Smart licenses (Ex: DCNM-LAN-N77-K9=, DCNM-LAN-N5k-K9=) for devices not included in the Cisco DCN tier-based licenses.

**Q What is Smart Licensing?**

A Cisco Smart Licensing is a flexible licensing model that provides you with an easier, faster, and more consistent way to purchase and manage software across the Cisco portfolio and across your organization. And it's secure – you control what users can access. With Smart Licensing you get:

**Q Is Smart Licensing enablement required with NDFC?**

A Yes, starting with NDFC Release 12.0, NDFC is a Smart Licensing-only product. Smart Licensing must be enabled either through NDFC or through Smart mode on the switches.

**Q** **How do I enable Smart Licensing with NDFC?**  
**A** To start, you must configure Smart Licensing. Please refer to this guide: <https://www.cisco.com/c/en/us/td/docs/dcn/ndfc/121x/licensing/smart-licensing-using-policy-for-cisco-ndfc-121x.html>.

**Q** **How do I configure Smart Licensing for a Cisco DCN or NX-OS tier-based license?**  
**A** Cisco DCN tier-based licenses are switch-based. For NDFC to consume these licenses, they require the switches to have Smart mode configured.

For Cisco DCNM, DCNM 11.5.x and NX-OS 9.3.6 is required for Smart Licensing as these releases support the switches running in smart mode.

**Q** **How do I configure Smart Licensing for the NDFC Smart License (Ex: DCNM-LAN-N77-K9=, DCNM-LAN-N5k-K9=)?**  
**A** Enable Smart Licensing through the NDFC GUI license management screen.

**Q** **Can you enable Smart mode both on the switch and in the NDFC UI?**  
**A** Yes, the licenses are per switch so NDFC will be able to enable Smart Licensing in the NDFC UI as well as the switches that are running in Smart mode.

**Q** **If my license expires or subscription term is over, will my devices managed by NDFC lose functionality?**  
**A** No, NDFC does not do license enforcement. It follows an honor-based license model and there will be no impact to your production environment. However, customers need to renew the subscription in order to be in compliance and receive new innovations and software support.

**Q** **If my switch does not have a license, for example for L2 Tor use cases, which license do I have to buy?**  
**A** Please buy NDFC Smart Licenses (Ex: DCNM-LAN-N93-K9=, DCNM-LAN-N95-K9=)

## Migration from Cisco DCNM to NDFC

**Q** **Will my existing DCNM licenses be supported in NDFC?**  
**A** Yes, you can migrate your existing DCNM licenses to NDFC.

**Q** **I have existing Cisco DCNM server-based licenses. Can I use these for NDFC?**  
**A** Yes. These licenses are still supported with NDFC. Cisco DCNM server-based licenses that were generic for a given product family (Ex: DCNM-LAN-N77-K9=, etc.) were tied to the DCNM server MAC address. With NDFC, there is no “server MAC address,” so the DCNM server-based licenses will need to be converted to Smart Licenses to be consumed with NDFC.

Please refer to the following migration guide: <https://www.cisco.com/c/dam/en/us/products/se/2020/8/Collateral/brownfield-conversion-qrq.pdf>.

**Q** **Will there be any interruptions to my fabric operation, if I temporarily disconnect my switch from the Smart Account in order to assign it from DCNM/NDFC?**  
**A** No, NDFC follows an honor-based licensing model so there will be no impact to the product functionality or network operation.

**Q** **Do I still need to purchase the \$0 Server PID (Ex: DCNM-SVR-11-K9)?**  
**A** No, NDFC does not require the purchase of the \$0 Server PID.

**Q Can I convert my DCNM LAN server-based license to the Cisco DCN or NX-OS tier-based license?**

A No this is not supported.

## Services and support

**Q How is software support provided?**

A Cisco Solution Support with Software Support Service (SSPT) is included in Cisco Data Center Networking subscriptions and with NDFC legacy Smart Licenses.

- Customers receive proactive Cisco TAC support with a primary point of contact and expeditious resolution of issues, knowledge-base access, and software downloads. No additional software support purchase is required for licenses with embedded support.

**Q How do I get support and services for Cisco Nexus Dashboard?**

A Please refer to the Cisco Nexus Dashboard ordering guide:

<https://www.cisco.com/c/en/us/products/collateral/data-center-analytics/nexus-dashboard/guide-c07-744361.html>.

**Q I have a valid DCNM-SVR-11-K9 SKU support and services contract. Can I use this with NDFC?**

A For DCNM and NDFC, the support and services are included in the Cisco DCN tier- based license and the legacy Smart (which used to be server-based) Licenses. If you have a valid DCNM-SVR-11-K9 SKU and are planning on deploying the virtual form factor of Cisco Nexus Dashboard, you can cancel an existing contract for credit and purchase an equivalent amount of ND-Virtual=, which is a \$0 PID with a services-and-support contract for Cisco Virtual Nexus Dashboard.

Please refer to the Cisco Virtual Nexus Dashboard guide

<https://www.cisco.com/c/en/us/products/collateral/data-center-analytics/nexus-dashboard/guide-c07-744361.html#Option2CiscoVirtualNexusDashboardNDVIRTUAL>.

## Related services

**Q Where can I find the details regarding Cisco Nexus Dashboard ordering requirements?**

A Please refer to the Cisco Nexus Dashboard ordering guide here: <https://www.cisco.com/c/en/us/products/collateral/data-center-analytics/nexus-dashboard/guide-c07-744361.html>.

**Q I am using Cisco Nexus Dashboard Orchestrator (NDO) and/or Cisco Nexus Dashboard Insights (NDI) with NDFC. Do I need to buy a separate license for these services?**

A Cisco NDO is included in the Cisco DCN Advantage tier and the Cisco NDI is included in the Cisco DCN Premier and Cisco Nexus Dashboard services add-on license. Please purchase the respective tier based on what services you are using.