Understand Catalyst Center with C9800 Onboarded Vs Provisioned Feature Matrix

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Introduction

This document describes the functionalities available in Cisco Catalyst Centers depending on the status of your C9800 wireless controller, Onboarded vs Provisioned.

Background Information

The goal of Cisco Catalyst Center (formerly DNA Center) is to facilitate the daily tasks of the network operators through automation. However, it can be a daunting task for network administrators in order to try to keep up with all the different features and capabilities the Cisco Software Defined Network solution brings with every release.

Problem

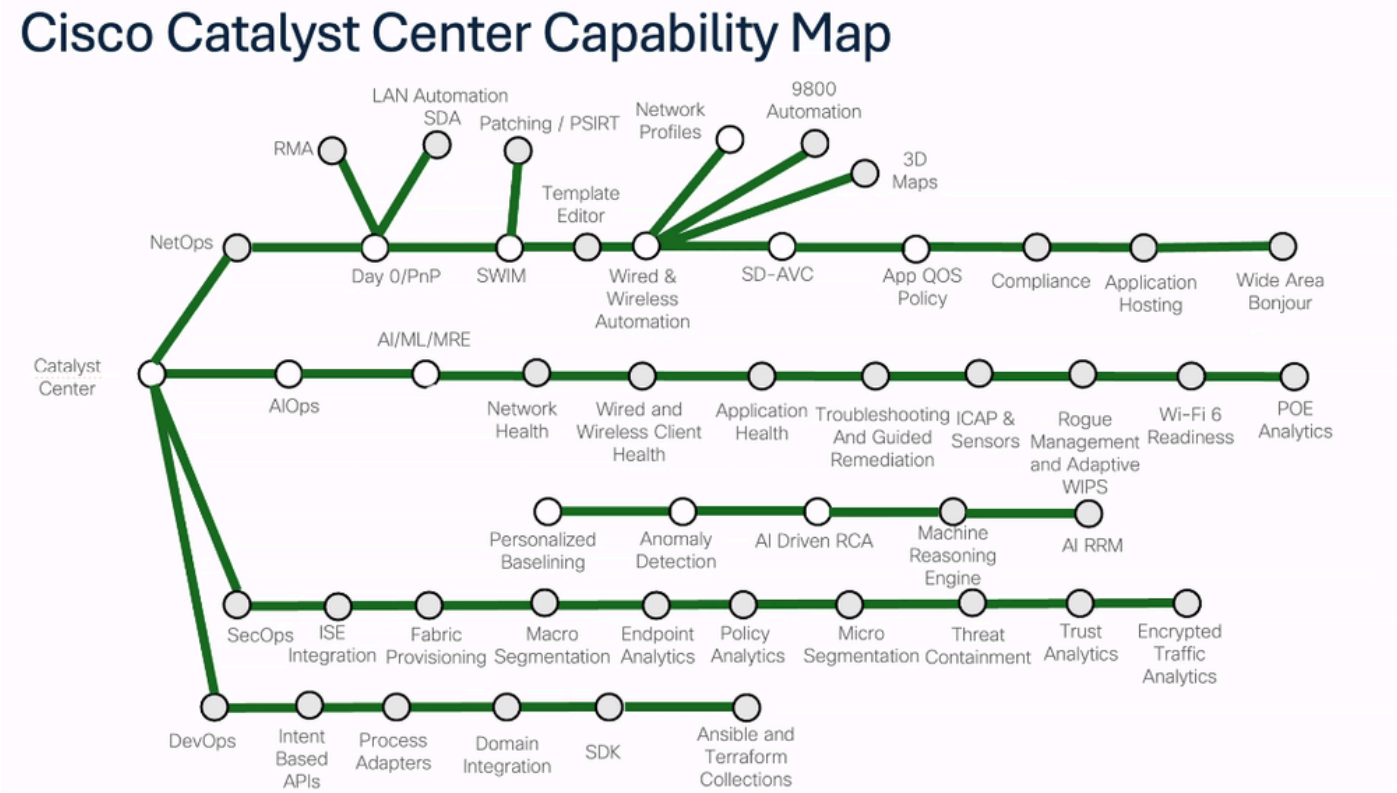
Considering the specifics of each environment in terms of scale, security, and compatibility, it is sometimes not easy/possible to fully adopt the most advanced features available in Catalyst Center such as Software Defined Access (SDA), LAN Automation, Wide Area Bonjour, Application Policy, and so on. The main reason behind that, whether you look at a greenfield or brownfield, is that some features are only available for the network devices that are Provisioned using Catalyst Center as a main point for configuration, operation, and visibility.

On the other hand, many features are available only when your network devices are onboarded. The matrix has the answer to those options.

Note: An **Onboarded** wireless controller is the one that is discovered in the inventory and was assigned to a building or floor, hence, the device has some level of visibility in Assurance for monitoring purposes. However, the wireless configuration (SSIDs, RF Profiles, and so on) is done out of band directly on the device, whereas, a **Provisioned** controller is a device that has been onboarded and deployed based on intent through Wireless Settings, Network Profiles, CLI Templates, and so on.

Solution

This article aims to increase your confidence level to implement as many features as possible in Catalyst Center in order to gain better insights and control over your network.



Catalyst Center Capability Map

This matrix aims to provide a clear view into which features and capabilities are available at different stages of the device management lifecycle, that is Onboarded or Provisioned. This is contrasted against versions of Catalyst Center starting from 2.3.5. If not stated otherwise, Cisco IOS® XE 17.9.x running on C9800 is the minimum version.

Note: This matrix only includes information for Catalyst 9800 Wireless Controllers.

Note: Certain features require a specific version (later than 17.9.x) by the Wireless Controllers. For more details, refer to the 9800 Feature Matrix per Release.

Note: Some capabilities (for example Network Service monitoring for AAA, DHCP, and so on) are dependent also on the actual configuration (for example, Local Mode SSID). Therefore, the configuration guide where such prerequisites/limitations are listed is referenced.

Note: Certain features (for example, Data Packet Capture, Spectrum Analysis, and so on) are dependent on the Access Point model. Consult the referenced configuration guide for details.

Feature/Capability	Catalyst Center 2.3.5.x	Catalyst Center 2.3.7.x
AIOps/Assurance Capabilities		
Assurance Dashboards (Network and Client Health Dashboard, Device and Client 360, Network Services - AAA, DHCP, DNS *[1])	Onboarded	Onboarded

*1 Requires 17.10		
Intelligent Capture: - Access Point RF Stats Capture - Anomaly Capture - Spectrum Analysis*2 - Onboarding Packet Capture - Data Packet Capture*2 - OTA Sniffer*3 *2 Dependent on the AP model used *3 Requires 17.11 and 2.3.7	Onboarded	Onboarded
Rogue and aWIPS Telemetry*8 *8 This automation enables telemetry subscriptions on all Wireless Controllers managed by Catalyst Center.	Onboarded	Onboarded
Rogue Rules and Profiles*9 *10 *9 Rogue Rules and Profiles as well as aWIPS Profiles are significant only in Catalyst Center. *10 Custom Rogue Rules at the Wireless Controller level must be done manually (out-of-band or in-band).	Onboarded	Onboarded
aWIPS Profiles*9*11 *11 aWIPS and Forensics must be enabled manually on the default or custom AP Profile at the Wireless Controller level.	Onboarded	Onboarded
Application Telemetry *4 (also enables Network Services - DNS*1) *4 Application Telemetry configuration temporarily shuts the WLC Policy Profiles disrupting wireless connectivity.	Onboarded	Onboarded
Network Reasoner - Assurance Telemetry Analysis - CPU Utilization - Ping Device - Wireless AP Data Collection	Onboarded	Onboarded

- Wireless Client Data Collection		
AI Network Analytics	Onboarded	Onboarded
3D Maps	Onboarded	Onboarded
Wifi 6 Readiness	Onboarded	Onboarded
Inventory Insights	Onboarded	Onboarded
Reports	Onboarded	Onboarded
Compliance *5 *5 Compliance is comprised of different components such as: 1. Network Settings 2. EoX End of Life 3. Startup vs Running Configuration 4. Network Profiles 5. Software Image 6. Critical Security Advisory The features 2, 3, 5, and 6 work in Onboarded.	Provisioned	Provisioned
SD-AVC (CBAR)	Provisioned	Provisioned
AI Endpoint Analytics *6 *6 Requires SD-AVC (CBAR)	Provisioned	Provisioned
NetOps/Automation Capabilities		
SWIM – Software Inventory Management	Onboarded	Onboarded
AP Configuration Workflow	Onboarded	Onboarded
AP Refresh Workflow	Provisioned	Onboarded

AP Reboot and LED	Onboarded	Onboarded
AP Auto Locate	N/A	Onboarded
License Manager - Smart License Compliance (for Cisco IOS XE 17.3.2 and later)	Onboarded	Onboarded
Wide Area Bonjour	Onboarded	Onboarded
Remote Support Authorization aka RADKit	Onboarded	Onboarded
AI-RRM	Provisioned	Onboarded
AP Power Save *1 *6 *1 Requires 17.10 *6 Switches powering APs must be managed	Provisioned	Provisioned
AP Plug-n-Play *7 *7 It is possible to onboard APs via PnP based using CLI Templates and AP Filters without Provisioning WLC beforehand (BRKEWN-2667 Cisco Live EMEA 2024)	Provisioned	Provisioned
SD-Access - Fabric - Micro-Segmentation	Provisioned	Provisioned
LAN Automation	Provisioned	Provisioned
Application Policy. (App QOS)	Provisioned	Provisioned
Stealthwatch Security Analytics	Provisioned	Provisioned

Related Information

- Cisco DNA Center 2.3.5 Assurance User Guide
- Cisco DNA Center 2.3.7 Assurance User Guide
- Configure Syslog, SNMP Traps, NetFlow Collector Servers, and Wired Client Data Collection Using

Telemetry
- Cisco DNA Center Compatibility Matrix
- Feature Matrix for Access Points
- Bonjour Deployment Guide
- CiscoLive session ID:
  - BRKEWN-2667
  - BRKOPS-2402
- Cisco Technical Support & Downloads