Introduction to Cisco DNA Center

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Agenda

- What is Cisco DNA Center?

- REST API Example With DNA Center

- Postman API Demo

What is Cisco DNA Center?

- Is the network management and analytics platform for Cisco Digital Network Architecture (Cisco DNA).

- Provides rich features in the area of network management, network automation, network assurance, monitoring, analytics and security.

- Using Cisco DNA Center you can provision and configure all your network devices in minutes.

Why use Cisco DNA Center?

- Simplify network management.

- Deploy networks in minutes.

- Lower costs. Policy-driven.

- Transform your network with cloud services.

DNA Center Key Functions

Design

Model your entire network, from sites and buildings to devices and links, both physical and virtual, across campus, branch, WAN and cloud.

- Add site locations on the network
- Designate golden images for device families
- Create wireless profiles of SSIDs

Policy

Use policies to automate and simplify network management, reducing cost and risk while speeding rollout of new and enhanced services.

- Segment your network as Virtual Networks
- Create scalable groups to describe your critical assets
- Define segmentation policies to meet your policy goals

Provision

Provide new services to users with ease, speed and security across your enterprise network, regardless of network size and complexity.

- Discover Devices
- Manage Unclaimed Devices
- Set up fabric across sites

Assurance

Use proactive monitoring and insights from the network, devices, and applications to predict problems faster and ensure that policy and configuration changes achieve the business intent and the user experience you want.

- Assurance Health
- Assurance Issues

Cisco DNA Center
Platform

DNA Center Platform – APIs, Adapters, SDKs

IT and Network System Adapters

servicenow | ITSM

Infoblox | IPAM

+ableau | Reporting

Business and Network APIs

Application Policy	Software Image Management (SWIM)
Assurance	
Wireless Provisioning	Network Inventory / Discovery
Plug-n-Play	Command Runner
Topology	Template Programmer
	eNFV Provisioning

APIs

Policy

Adapters

DNA CENTER

Automation

PLATFORM

Analytics

Adapters

SDKs

X-Domain Adapters

Networking | CISCO Meraki

Security | CISCO Stealthwatch

3rd Party SDKs

Map 3rd Party Network Devices to Data Model

Level 1 Operations support
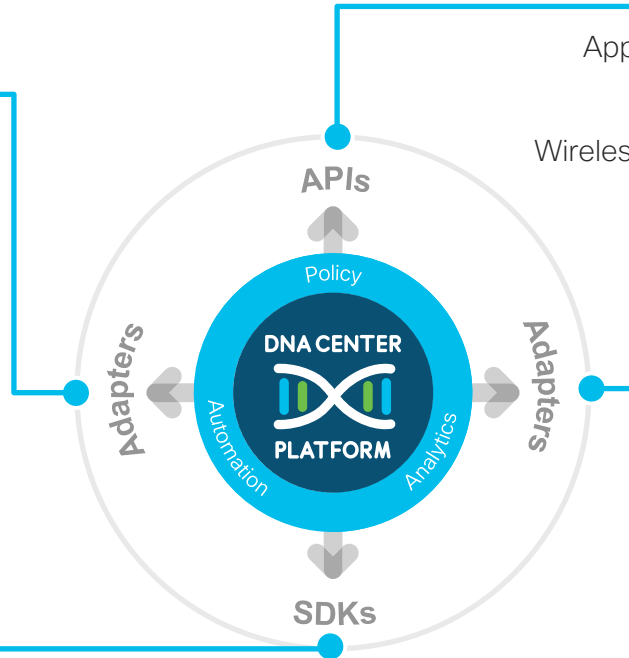(Discovery, Inventory, Topology, Availability, Health Score)

Intent APIs

Network APIs

- Network Level - Features based API

- Consistent model for feature across all devices types

- All UI capabilities of Cisco DNA Center available via the API

- Example: SWIM workflow
  - Create Sites and Network Profiles
  - Create sub-pool for sites
  - Assign site to network profiles
  - Assign Claim device to site
  - Trigger Provision request for ENCS device

Business APIs

- Intent Based API for network operations

- Network capabilities abstraction

- API's aligned with business constructs

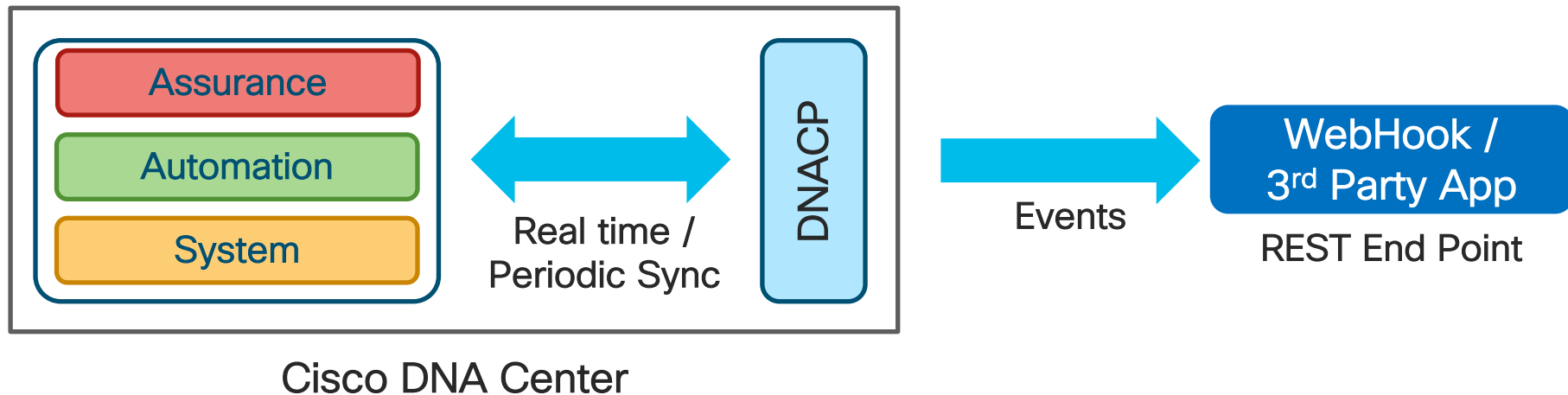- Custom Business API from an aggregation of network APIs

Example of Business Intent API: SSID Creation

➤ Create Dynamic Interface

➤ Create SSID

➤ Create Wireless Network Profile

➤ Associate device physical location

➤ Associate managed AP locations

➤ Provision WLC
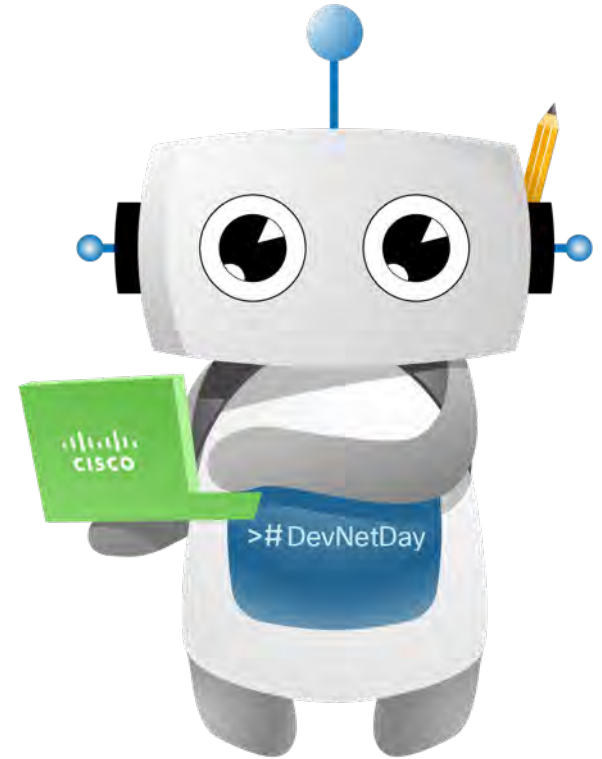
➤ Create and Provision SSID

Cisco DNA Center Platform
Events & Notifications

Assurance

Automation

System

Real time /
Periodic Sync

DNACP

Cisco DNA Center

Events

WebHook /
3rd Party App

REST End Point

Le Tour du Monde

Explore More

- [Getting Started with Cisco DNA-Center APIs](#)

- [Cisco DNA Center on Code Exchange](#)

- [Cisco DNA Center on Automation Exchange](#)

- [Cisco DNA Center collection on Postman hub](#)

Thank you