

The background features a vibrant, multi-colored abstract design. On the left, there are overlapping, wavy, organic shapes in shades of red, orange, and yellow. On the right, a bright white light source emits a series of sharp, radiating lines in various colors, including blue, green, and yellow, creating a sunburst or starburst effect. The overall color palette is a spectrum of rainbow colors.

cisco *Live!*

Let's go

#CiscoLive



The bridge to possible

From Zero to Managed Campus Using Cisco DNAC

Hector Morales, Sr. TSA, Global Partner Engineering

BRKGEN-1366



#CiscoLive

Cisco Webex App

Questions?

Use Cisco Webex App to chat with the speaker after the session

How

- 1 Find this session in the Cisco Live Mobile App
- 2 Click “Join the Discussion”
- 3 Install the Webex App or go directly to the Webex space
- 4 Enter messages/questions in the Webex space

Webex spaces will be moderated by the speaker until June 9, 2023.



<https://ciscolive.ciscoevents.com/ciscolivebot/#BRKGEN-1366>

Agenda

- Customer issues, market evolution and challenges
- Managed Campus Solution Overview
- A deeper look
- Managed campus use cases
- Q&A

Customer issues

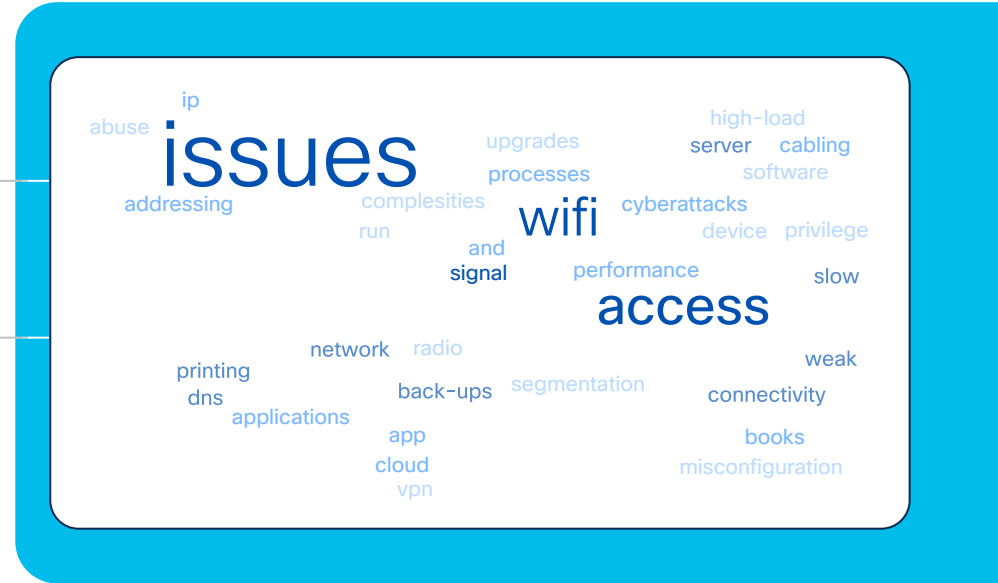


End customer issues during pandemic

Before COVID19 pandemic, internet traffic grew at 30% annually. In fall of 2020, internet traffic grew 20%¹

VPN connectivity increased by 200% and campus traffic decreased by 55%¹

According to Deloitte², cyber attacks increased in 2020 more than 130%, 47% more phishing scams at home and more than 500,000 attacks to video conference services



¹ Feltmann, A, et al. "A Year in Lockdown: How the Waves of COVID-19 Impact Internet Traffic", Communications of the ACM (2021): <https://cacm.acm.org/magazines/2021/7/253468-a-year-in-lockdown/fulltext?mobile=false>

² Deloitte (2022). "Impact of COVID-19 on Cybersecurity": <https://www2.deloitte.com/ch/en/pages/risk/articles/impact-covid-cybersecurity.html>

Digital Transformation is driving new business priorities



Transform processes and business models

- Foster innovations
- Decrease time to market



Empower the workforce with efficiency and innovation

- Increase productivity
- Boost retention



Personalize customer experiences

- Gain greater insights
- Increase loyalty

But new priorities raise IT and network complexity



Mobility

5-7X growth in business mobile traffic through 2022¹



IoT

19% CAGR growth of M2M connections from 2018-2023¹



Cloud

71% of enterprises want consistent visibility and control across clouds²



Security

\$8.19 million was the average cost of a data breach in the U.S. in 2019¹

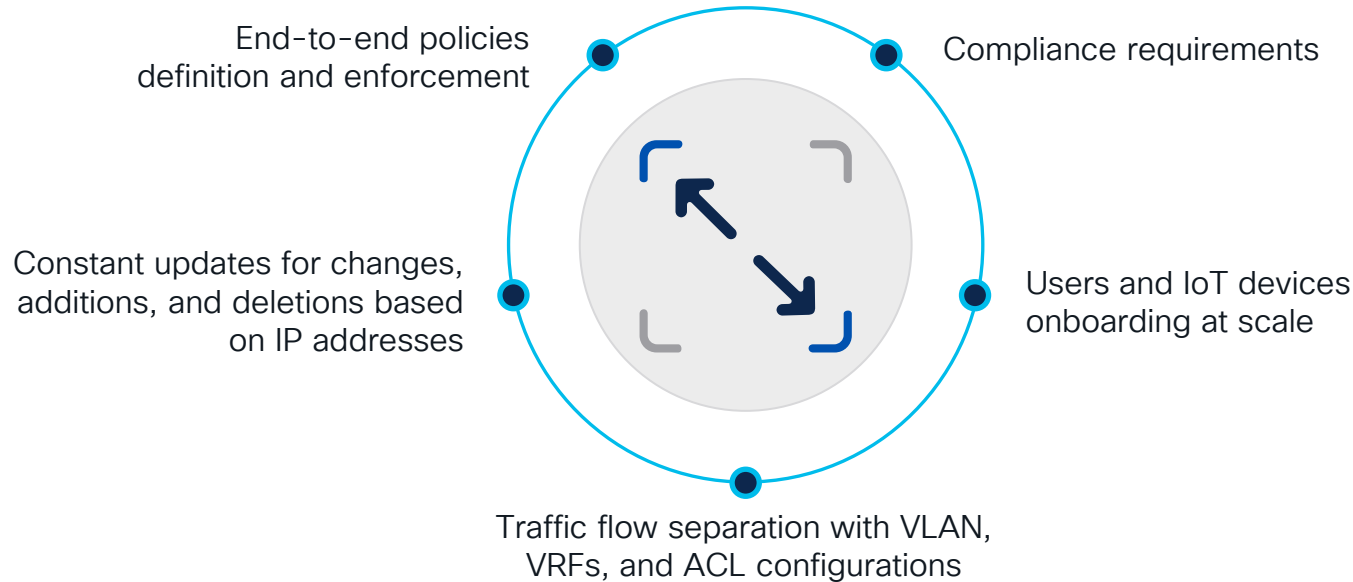
By 2023, 29 billion devices will access the internet. That's nearly 4 devices per person (Cisco® analysis) 98% of all meetings will include participants joining from home (Cisco analysis)

¹ [2020 Cisco VNI](#): Global Fixed and Mobile Internet Traffic Forecasts

² September 2020, IDC Survey Spotlight (Shared Cross-Cloud Management Control Planes Become Enterprise Priority)

But also increased complexities

Provisioning, securing, and scaling are driving up operational costs



95% of network changes are still performed manually.

Market evolution and challenges



Digital transformation has been painful



Any company of any size and in any vertical or industry require to support a flexible, secure and scalable hybrid work operation



Employees are demanding flexibility with 64% saying the ability work from anywhere drives their decision to stay at a job



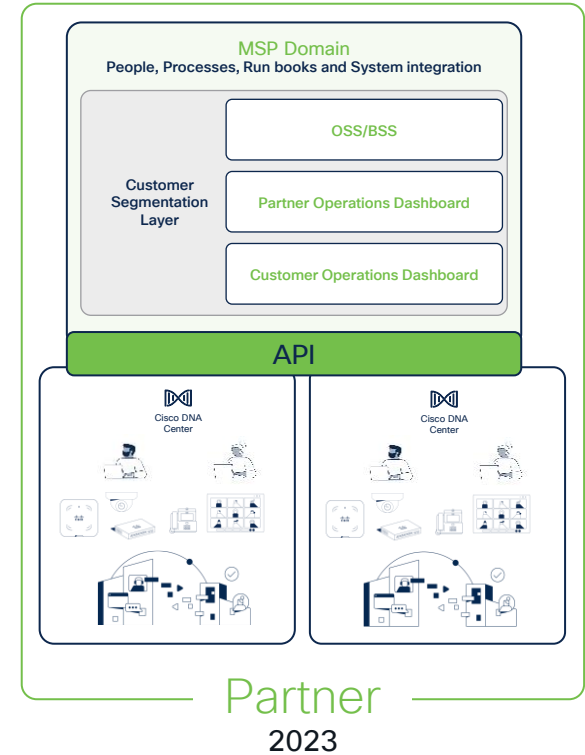
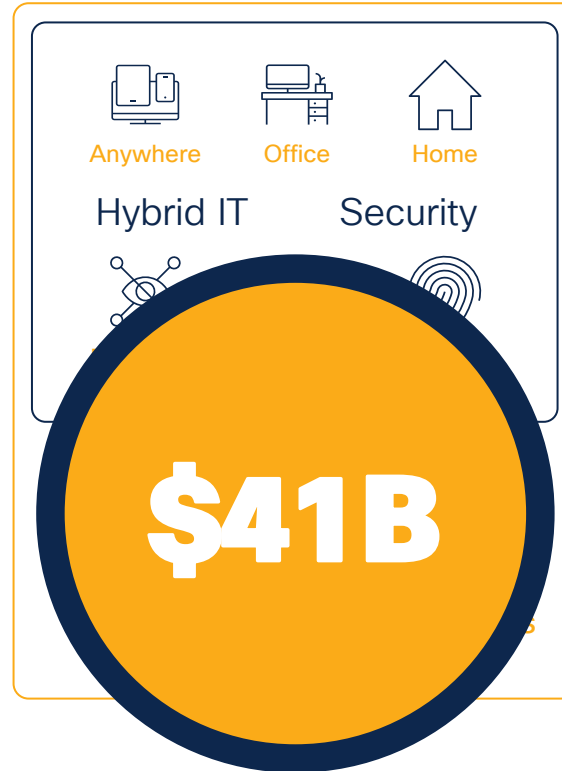
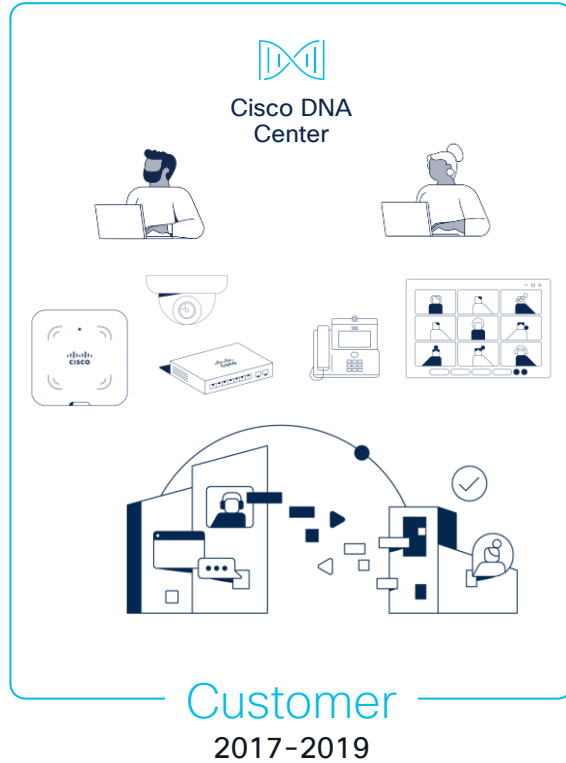
98% of all meetings will have at least one remote participant



Large enterprises face additional challenges:

- Need quicker and more precise responses
- Effectiveness to change requests
- Secured environments
- Lower costs of deployment and operations

Market evolution



Practical Realities of Digital Transformation

It can be hard and expensive

\$60B

Annually spent on
Network Operations,
Labor & Tools¹



95%

Network changes
performed manually



75%

of Opex spent on changes
and troubleshooting



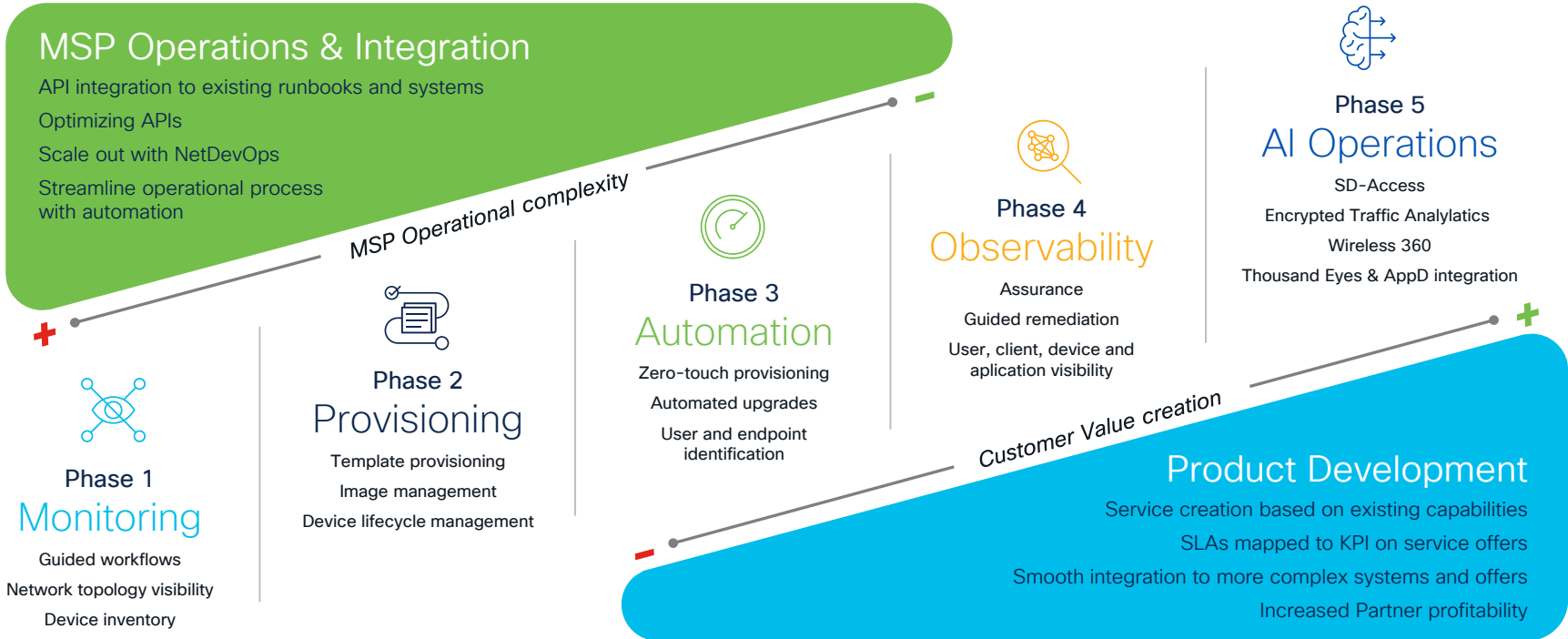
70%

of Policy Violations are
due to human error



The Managed Campus MSP Opportunity

Driving MSP Operational Value & Customer Outcome Value



Managed Campus Solution Overview

Introducing Cisco DNAC for Managed Services



Enables Extensive Network Control for MSPs

Onboard and monitor network devices through automation provisioning and management capabilities



Proactive insights and Analytics

Keep customers informed through automated, customisable reports and data analytics



OSS API Integration Ready

Easily integrate Cisco solutions with your portfolio and management systems



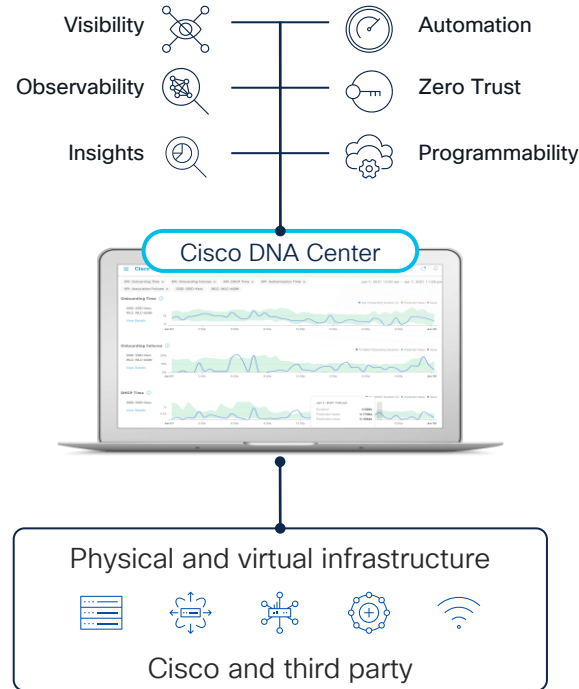
Simplified Service Creation

Quickly deploy utilizing Cisco Developer Resources



DNA Center delivers MSP operational value

Enabling MSPs to deliver business outcomes, smarter and faster at scale



NetOps

Increase Scale

- Providing customers with business resiliency, continuity, and quick time to value
- Enabling customers to achieve Compliance of network with config policies
- MSP automation to simplify the creation and maintenance of customers networks

SecOps

Improved Security

- AI-driven security to classify endpoints and enforce security policies for a complete zero trust workplace solution
- Automate end point visibility, classification, and grouping

DevOps

Improved Service Delivery

- Mature APIs, SDKs, and closed-loop integrations to simplify and streamline ecosystem integration
- Faster service delivery using API-based automation workflows
- Early issue detection and integration with 3rd party platforms through enhanced notification channels

AIOps

Improved Performance Insights

- Reduced proactive problem resolution through faster Root Cause Analysis
- AI-driven visibility, observability, insights, and troubleshooting to ensure the health your customers applications, infrastructure and user experience

DNA Center

Powered for MSP integration

Event Notifications

- Assurance Issues
- AI/ML Insights
- System Health
- Integration Connectivity
- License Management
- Webhooks
- PagerDuty
- Email
- Syslog
- SNMP

Northbound REST APIs

- Network Inventory
- Network Topology
- Network Design
- Provisioning
- SWIM, PnP
- Path Trace
- Assurance
- SDA
- Templates
- RMA
- Config Archive
- Sensors

IT Ecosystem Integrations

- IT Service Management
- IP Address Management
- Reporting
- Wireless Planning
- Alerting
- SIEM

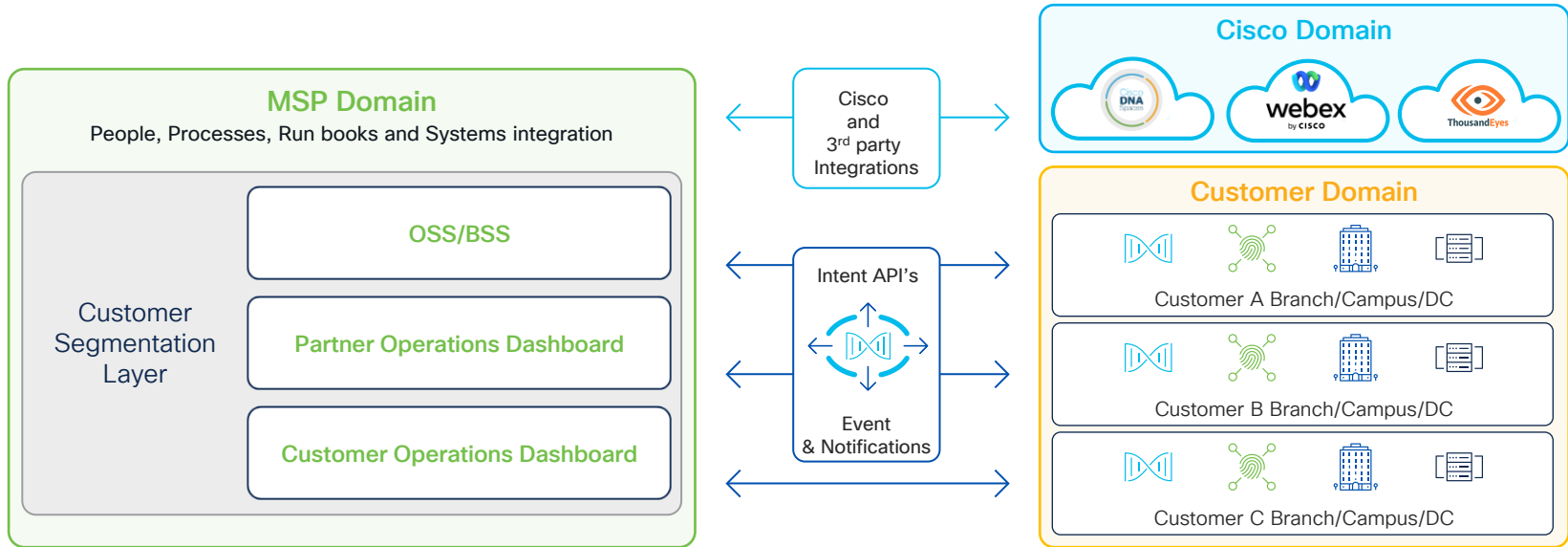
Developer Resources

- Sample Code, Videos
- Python SDK, Ansible, Terraform
- Cisco DevNet
 - Sandboxes, Learning Labs
 - Developer Guides
 - Sample Code



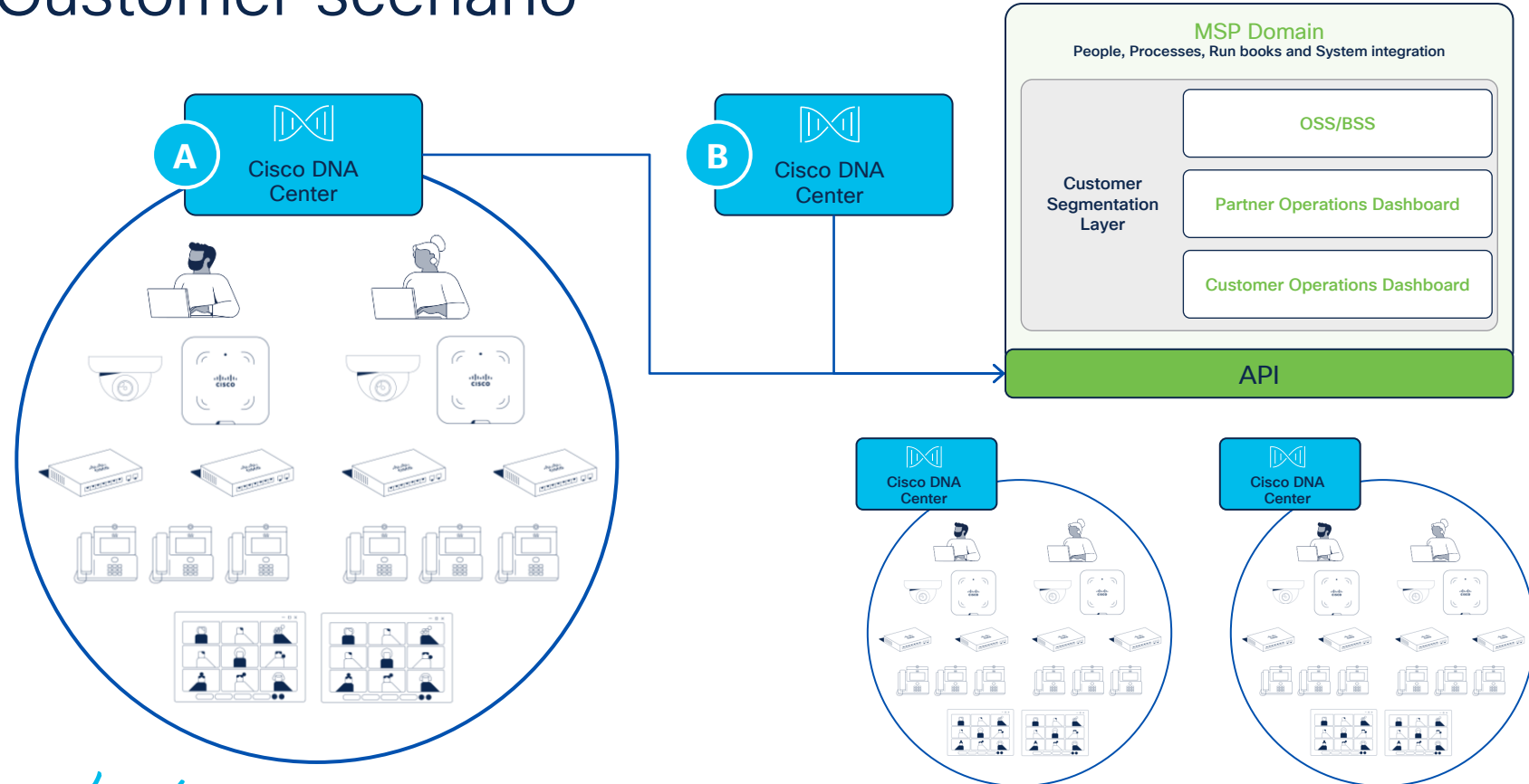
Managed Campus: scaling to multiple customers

Enabling MSPs to create and support DNAC Services at scale



MSP Dashboard

Customer scenario



Managed Campus Solution: a deeper look

Cisco DNAC Intent API

Northbound



The Intent API is a REST API that exposes specific capabilities of the Cisco DNA Center platform.



Provides policy-based abstraction of business intent, allowing focus on an outcome rather than struggling with individual mechanisms steps.



The RESTful Cisco DNA Center Intent API uses HTTPS verbs (GET, POST, PUT, and DELETE) with JSON structures to discover and control the network.

Intent API hierarchies:

- Authentication domain
- Know your network domain
- Site management
- Connectivity
- Operational Tasks
- Policy
- Event Management

Cisco DNAC Event and Notifications

Eastbound



The Cisco DNA Center platform provides the ability to establish a notification handler when specific events are triggered, such as Cisco DNA Assurance and Automation (SWIM) events.



This mechanism enables external systems to take actions in response to an event. For example, a custom application could execute a software upgrade action in response to notification of network devices that are out of compliance.



Notifications may also be triggered by events internal DNA Center events. For example, Assurance events can be customized for IT Service Management incidents.

Cisco DNAC Integration API

Westbound



The Cisco DNA Center platform provides mechanisms for integrating Cisco DNA Assurance end-to-end workflows and data with third-party IT **Service Management (ITSM)** solutions.



ITSM minimizes handoffs, reduces duplication of issues, and optimizes processes by integrating the Cisco DNA Center platform into incident-management, change-management and problem-management systems. Integrates the Cisco DNA Center platform into approval- and pre-approval chains, and it links the Cisco DNA Center platform with formal change- and maintenance-window schedules.

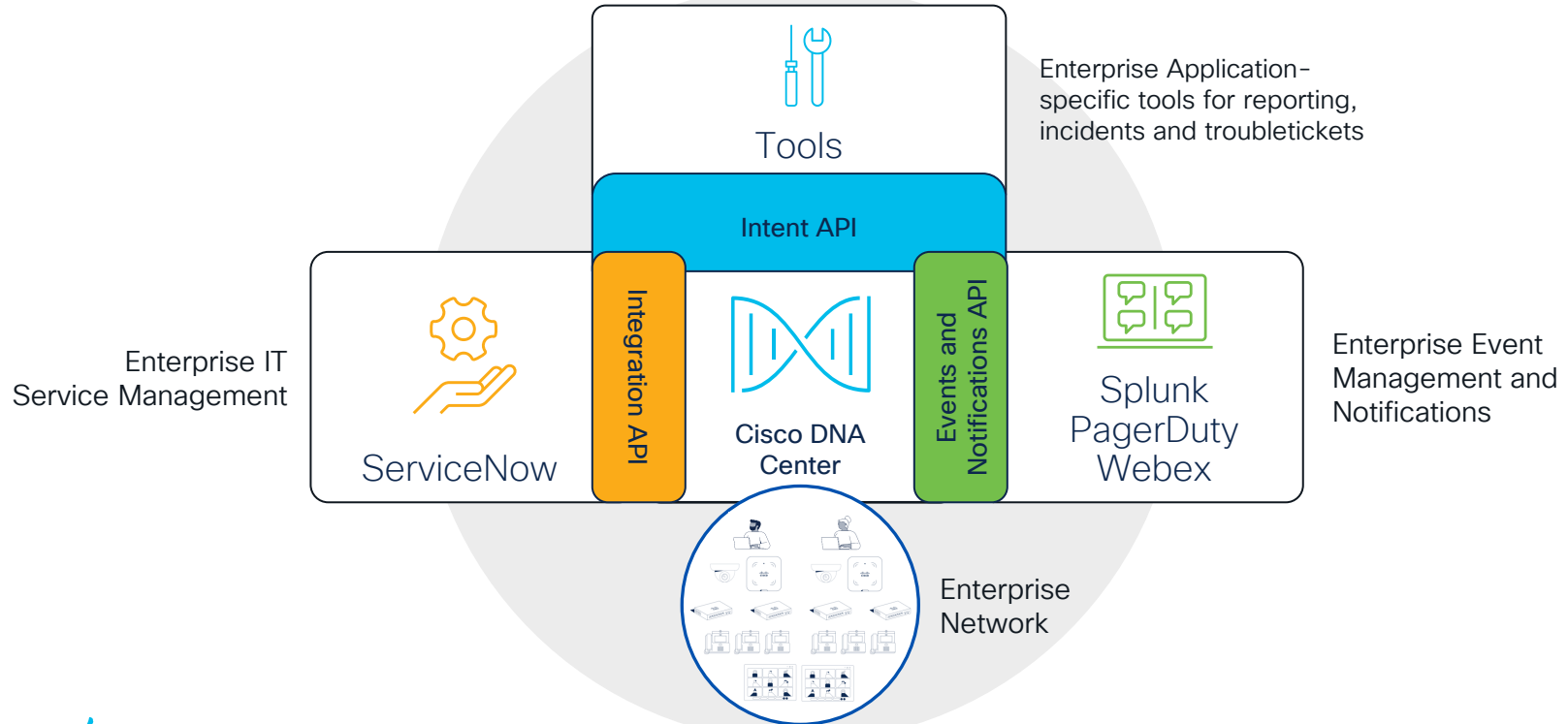


DNAC also Integrates with Reporting and Analytics capabilities for capacity planning, asset management, compliance control, and auditing.



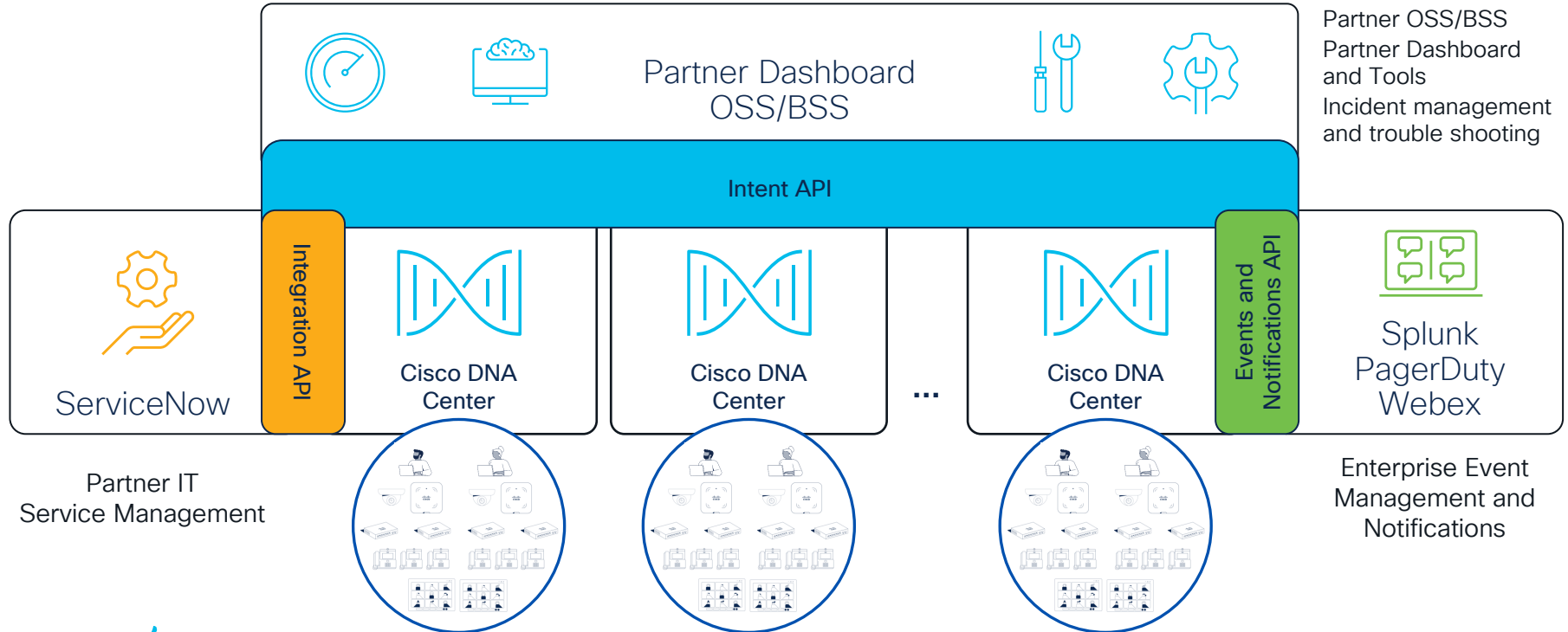
Cisco DNAC architecture

Enterprise ITIL Management




Cisco DNAC architecture

Ready for MSPs







Cisco DNA Center

Platform overview

 Cisco DNA Center

Platform · Overview



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Developer Toolkit

Discover APIs to manage your network, configure integration flows and access network data to analyze, export and visualize complex reports.

Runtime Dashboard

Get insights into API usage, view events published to IT systems such as number of API calls, response time(s), events published, bundles activated etc.

Configurations

View and set global or bundle specific settings to manage your integration configurations and modify event specific settings.

Notifications

≡ Find

BUNDLE UPDATE

The Cisco DNA Center REST API bundle is enabled.

Sep 20 2022, 08:47 am

[View Details](#) | [Dismiss](#)

BUNDLE UPDATE

Disabled the Cisco DNA Center REST API bundle.

Sep 20 2022, 08:47 am

[View Details](#) | [Dismiss](#)

BUNDLE UPDATE

The Cisco DNA Center REST API bundle is enabled.

Aug 19 2022, 07:37 pm

[View Details](#) | [Dismiss](#)

Cisco DNA Center

APIs usage and documentation

The screenshot displays the Cisco DNA Center Platform Developer Toolkit interface. The top navigation bar includes the Cisco DNA Center logo, the title 'Platform · Developer Toolkit', and search, help, and notification icons. Below the navigation bar, the 'APIs' tab is selected, showing a list of API categories on the left: Authentication, Know Your Network, Site Management, Connectivity, Operational Tasks, Policy, Event Management, Ecosystem Integrations, and Cisco DNA Center System. The main content area is divided into two sections: 'Authentication' and 'Know Your Network'. The 'Authentication' section includes a description of authentication APIs and a table of three APIs: 'ImportCertificate', 'ImportCertificateP12', and 'Authentication API'. The 'Know Your Network' section includes a description of network APIs and a table of two APIs: 'Assign Device To Site' and 'Get Site Health'. Each API entry in the tables includes its method (POST or GET), name, description, and URL.

Authentication

Authentication APIs provide an authorized token for accessing any REST API.
***Prerequisite*:** Add the request header 'x-auth-token' with the generated authorized token to get a successful API response.

Method	Name	Description	URL
POST	ImportCertificate	This method is used to upload a certificate	/certificate
POST	ImportCertificateP12	This method is used to upload a PKCS#12 file	/certificate-p12
POST	Authentication API	API to obtain an access token. The token obtained using this API is required to be set as value to the X-Auth-Token HTTP Header for all API calls to Cisco DNA...	/auth/token

Know Your Network

Know your Network APIs can be used to discover details about clients, sites, topology and devices. It also provides programmatic REST APIs to add devices to the network and export device data.

Sites

Method	Name	Description	URL
POST	Assign Device To Site	Assigns list of devices to a site	/site/{siteid}/device
GET	Get Site Health	Returns Overall Health information for all sites	/site-health

Authentication



POST

Authentication API

API to obtain an access token. The token obtained using this API is required to be set as value to the X-Auth-Token HTTP Header for all API calls to Cisco DNA...

/auth/token

```
def get_token(dnac_ip,uname,passwd):  
    token = requests.post(  
        'https://' + str(dnac_ip)+ '/dna/  
        auth=HTTPBasicAuth(  
            username=uname,  
            password=passwd  
        ),  
        headers={'content-type': 'applica  
        verify=False,  
    )  
    data = token.json()  
    return data['Token']
```

DNAC code

Define variables

dnac_ip = <Your DNAC DNS/IP>

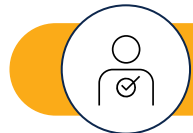
username = <Your DNAC username>

password = <Your DNAC password>

token = get_token(dnac_ip, username, password)

print(token)

General instructions to call a DNAC API



```
# Headers
headers = {'content-type': 'application/json', 'x-auth-token': token}

sites = get_sites(BASE_URL, SITE_URL, headers)
```

```
# Authentication
BASE_URL = 'https://dnac-79.infra.ciscomsx.com'
AUTH_URL = '/dna/system/api/v1/auth/token'

# URLs
SITE_URL = '/dna/intent/api/v1/site'
SITE_COUNT_URL = '/dna/intent/api/v1/site/count'
MEMBERSHIP_SITE_URL = '/dna/intent/api/v1/membership/{site_id}'
SITE_HEALTH_URL = '/dna/intent/api/v1/site-health'
ISSUES = url = '/dna/intent/api/v1/issues'
```

```
# Get list of sites
def get_sites(BASE_URL, URL, headers):
    response = requests.get(BASE_URL + URL,
                             headers=headers, verify=False)
    return response.json()['response']
```

Monitoring your network

Site



GET	Get Site Health ^{Intent}	Returns Overall Health information for all sites	/site-health
GET	Get Site ^{Intent}	Get site using siteNameHierarchy/siteId/type ,return all sites if these parameters are not given as input.	/site
GET	Get Membership ^{Intent}	Getting the site children details and device details.	/membership/\${siteId}
GET	Issues ^{Intent}	Intent API to get a list of global issues, issues for a specific device, or issue for a specific client device's MAC address.	/issues

Monitoring your network

Topology



GET	Get VLAN details	Returns the list of VLAN names	/topology/vlan/vlan-names
GET	Get Physical Topology	Returns the raw physical topology by specified criteria of nodeType	/topology/physical-topology
GET	Get L3 Topology Details	Returns the Layer 3 network topology by routing protocol	/topology/l3/\${topologyType}
GET	Get Site Topology	Returns site topology	/topology/site-topology
GET	Get topology details	Returns Layer 2 network topology by specified VLAN ID	/topology/l2/\${vlanID}
GET	Get Overall Network Health ^{Intent}	Returns Overall Network Health information by Device category (Access, Distribution, Core, Router, Wireless) for any given point of time	/network-health

Monitoring your network

Issues



GET

Issues^{Intent}

Intent API to get a list of global issues, issues for a specific device, or issue for a specific client device's MAC address.

/issues

```
{
  "issueId": "04f6c371-5b98-433b-98b2-375d67b6e95c",
  "name": "Excessive time lag between Cisco DNA Center and device \"MSX-OTT02-CAT3650-01\"",
  "siteId": "",
  "deviceId": "0ed45671-ec6f-4b66-9ab8-a919d31008f5",
  "deviceRole": "",
  "aiDriven": "",
  "clientMac": "",
  "issue_occurence_count": 1,
  "status": "active",
  "priority": "",
  "category": "",
  "last_occurence_time": 1682364608000
}
```


Monitoring your network

Issues



GET

Get Issue Enrichment Details^{Intent}

Enriches a given network issue context (an issue id or end user's Mac Address) with details about the issue(s), impacted hosts and suggested actions for...

/issue-enrichment-details

```
"issueDetails":{
  "issue":[
    {
      "issueId":"04f6c371-5b98-433b-98b2-375d67b6e95c",
      "issueSource":"Cisco DNA",
      "issueCategory":"Device",
      "issueName":"device_time_drift",
      "issueDescription":"The time on Cisco DNA Center and Device \\"MSX-OTT02-CAT3650-01\\"
      "issueEntity":"network_device",
      "issueEntityValue":"0ed45671-ec6f-4b66-9ab8-a919d31008f5",
      "issueSeverity":"HIGH",
      "issuePriority":"P3",
      "issueSummary":"Excessive time lag between Cisco DNA Center and device \\"MSX-OTT02-CAT3650-01\\"
      "issueTimestamp":1682364608000,
      "deviceId":"0ed45671-ec6f-4b66-9ab8-a919d31008f5",
```

```
"suggestedActions":[
  {
    "message":"Check time on the Device",
    "steps":[
      {
        "entityId":"0ed45671-ec6f-4b66-9ab8-a919d31008f5",
        "description":"Check system time",
        "command":"show clock",
        "stepType":"command-Runner",
        "runButton":null
      }
    ]
  },
]
```

Monitoring your network

Health and Performance

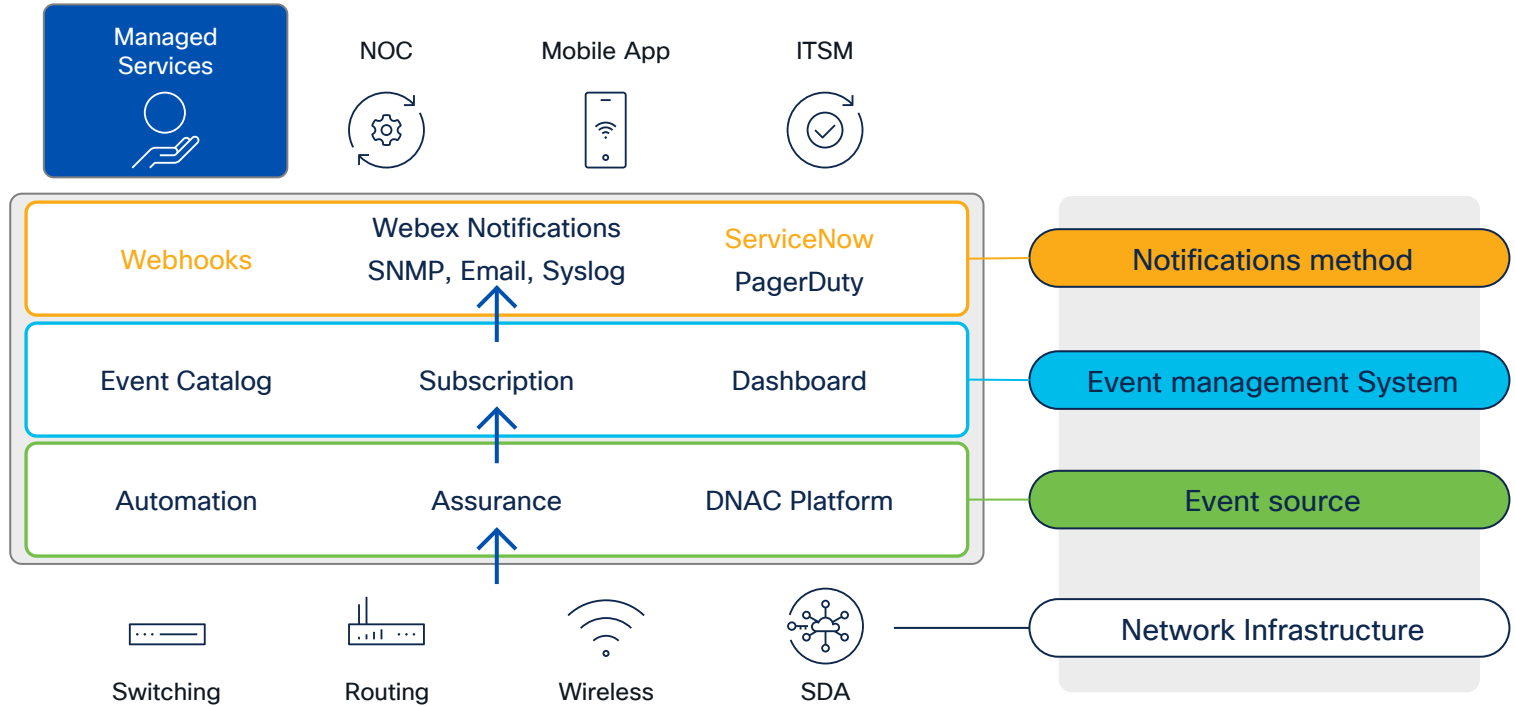


```
# Get System Health
def get_system_health (BASE_URL, URL, headers):
    response = requests.get(BASE_URL + URL,
                            headers=headers, verify=False)
    print(response)
    return response.json()|
```

Note: this response does not have the 'response' key in the json response

GET	System Health Count API ^{Intent}	This API gives the count of the latest system events	/diagnostics/system/health/count
GET	System Health API ^{Intent}	This API retrieves the latest system events	/diagnostics/system/health
GET	System Performance Historical API ^{Intent}	This API retrieves the historical performance indicators . The data can be retrieved for the last 3 months.	/diagnostics/system/performance/history
GET	System Performance API ^{Intent}	This API gives the aggregated performance indicators. The data can be retrieved for the last 3 months.	/diagnostics/system/performance






DNAC Notifications Framework



Cisco DNA Center

Platform overview



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Notifications

Find

BUNDLE UPDATE
The Cisco DNA Center REST API bundle is enabled.
Sep 20 2022, 08:47 am
[View Details](#) | [Dismiss](#)

BUNDLE UPDATE
Disabled the Cisco DNA Center REST API bundle.
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Aug 19 2022, 07:37 pm
[View Details](#) | [Dismiss](#)

Events notifications

Subscription



☰ Cisco DNA Center

Platform - Developer Toolkit

🔍 ⓘ 🟢 🔔

APIs Integration Flows Multivendor Support Events

Events

🔍 Search Table

🔔Subscribe 0 Selected

<input type="checkbox"/>	Event ID ▾	Name	Description	Type	Category	Severity	
<input type="checkbox"/>	NETWORK-CLIENTS-4-366	Wireless clients took a long time to connect - WLC failures	Wireless clients took a long time to connect - Excessive time due to WLC failures	NETWORK	INFO	4	Not Subscribed
<input type="checkbox"/>	NETWORK-CLIENTS-4-368	Wireless clients took a long time to connect - Excessive time due to DHCP server failures	Wireless clients took a long time to connect - Excessive time due to DHCP server failures	NETWORK	INFO	4	Not Subscribed
<input type="checkbox"/>	NETWORK-DEVICES-1-216	TCAM Utilization High Issues	Issues for TCAM exhaustion in layer 2, layer 3, QoS and SGACL	NETWORK	ALERT	1	Not Subscribed
<input type="checkbox"/>	NETWORK-DEVICES-1-271	WAN Interface Down	WAN Interface Down	NETWORK	ALERT	1	Not Subscribed
<input type="checkbox"/>	NETWORK-DEVICES-2-106	AP disconnected from WLC	AP disconnected from WLC	NETWORK	ERROR	2	Not Subscribed
<input type="checkbox"/>	NETWORK-DEVICES-2-152	WLC Reboot Crash	WLC has rebooted due to a hardware or software crash	NETWORK	ERROR	2	Not Subscribed

Events notifications

Subscription (Cont.)



Cisco DNA Center

Platform · Developer Toolkit

APIs

Integration Flows

Multivendor Support

Events

Events

Search Table

Subscribe

1 Selected

<div></div>	Event ID	Name	Description	Type	Category	Severity	
<div></div>	NETWORK-CLIENTS-4-366	Wireless clients took a long time to connect - WLC failures	Wireless clients took a long time to connect - Excessive time due to WLC failures	NETWORK	INFO	4	Not Subscribed
<div></div>	NETWORK-CLIENTS-4-368	Wireless clients took a long time to connect - Excessive time due to DHCP server failures	Wireless clients took a long time to connect - Excessive time due to DHCP server failures	NETWORK	INFO	4	Not Subscribed
<div></div>	NETWORK-DEVICES-1-216	TCAM Utilization High Issues	Issues for TCAM exhaustion in layer 2, layer 3, QoS and SGACL	NETWORK	ALERT	1	Not Subscribed
<div></div>	NETWORK-DEVICES-1-271	WAN Interface Down	WAN Interface Down	NETWORK	ALERT	1	Not Subscribed
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Events notifications

Subscription (Cont.)



Subscribe

1 Event selected

SUBSCRIPTION DETAILS

Name*

Subscription Type

REST

REST

EMAIL

SYSLOG

PAGERDUTY

URL

create a new instance.

Subscription Type

REST

Select an existing instance. Or Click [here](#) to create a new instance.

Subscription Endpoint

URL

Destinations

Add a webhook



Settings / External Services

Destinations

Configure various types of destinations to deliver events to the Cisco ISE Center Platform

Webhook

Email

Syslog

SNMP

Configure the REST Endpoint to receive Audit logs and Alerts from the Cisco ISE Platform

Name	Description
------	-------------

Add Webhook

Name*

Description

URL*

Trust Certificate

☐ Yes

☒ No

Method*

POST

Authentication

☐ Basic

☐ Token

☒ No Auth

Headers

+ Add

Save






More information on Event notification

+ Add

Bundle Integrations

ServiceNow integration



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Bundles

ServiceNow



Bundles

Configurations

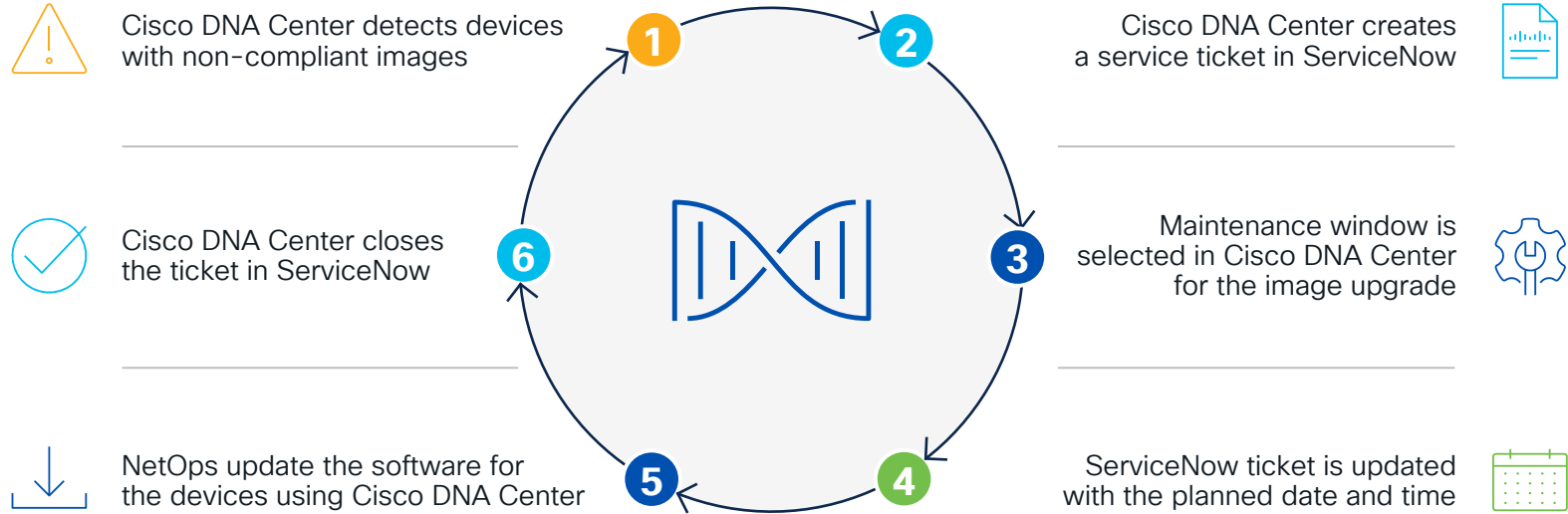
Bundles

Filter

Find

Bundle	Status	Description
<div><div>B</div><div><div>Basic ITSM (ServiceNow) CMDB synchronization</div><div>Cisco Systems, Inc.</div><div>v1.7.0 Cisco DNA Center 1.2.5 +</div><div>Version Dated Jan 22, 2021</div></div></div>	ENABLED	<div>You can schedule a synchronization or trigger an update between Cisco DNA Center's device inventory and your ITSM(ServiceNow) configuration management database(CMDB). These activities integrate Cisco DNA Center's processes into the IT System Management processes of incident, change or problem management.</div> <div>Note: If your network...</div> <div>Configure</div>
<div><div>C</div><div><div>Cisco DNA Center Automation events for ITSM (ServiceNow)</div><div>Cisco Systems, Inc.</div><div>v1.7.1 Cisco DNA Center 1.2.5 +</div><div>Version Dated May 25, 2021</div></div></div>	ENABLED	<div>This bundle can be used to: 1. Monitor and publish events that require software image updates for compliance, security or any other operational triggers, to an ITSM(ServiceNow) system. 2. Monitor and publish events that require Fabric Role updates for security or other operational triggers, to an ITSM(ServiceNow) system. ...</div> <div>Configure</div>
<div><div>C</div><div><div>Cisco DNA Center REST API</div><div>Cisco Systems, Inc.</div><div>v1.7.12 Cisco DNA Center 1.2.5 +</div><div>Version Dated Jan 13, 2022</div></div></div>	ACTIVE	<div>This bundle contains the REST API supported by Cisco DNA Center. These REST APIs provide a rich set of capabilities, including the ability to discover network devices, query network health and provision network devices.</div>
<div><div>D</div><div><div>Disaster Recovery API</div><div>Cisco Systems, Inc.</div><div>v1.0.0 Cisco DNA Center 2.2.2.0+</div><div>Version Dated Mar 8, 2021</div></div></div>	ACTIVE	<div>This bundle contains the REST APIs supported by Disaster Recovery. These REST APIs provide support to monitor the Disaster Recovery system. Please enable this bundle after installation of Disaster Recovery package.</div>
<div><div>E</div><div><div>Endpoint Attribute Retrieval with ITSM (ServiceNow)</div><div>Cisco Systems, Inc.</div><div>v1.3.0 Cisco DNA Center 2.1.1 +</div><div>Version Dated Dec 8, 2020</div></div></div>	ENABLED	<div>You can schedule a synchronization or trigger an update between the Endpoint Inventory and your ITSM (ServiceNow) configuration management database (CMDB). Endpoint attribute information from ServiceNow can be used to help profile endpoints on your network. ServiceNow appears in the endpoint profiling workspace as an...</div> <div>Configure</div>
<div><div>N</div><div><div>Network Issue Monitor and Enrichment for ITSM (ServiceNow)</div><div>Cisco Systems, Inc.</div><div>v1.7.0 Cisco DNA Center 1.2.5 +</div><div>Version Dated Dec 1, 2020</div></div></div>	ENABLED	<div>You can use this bundle to monitor your network for assurance and maintenance issues, and then publish the event details about these issues to an ITSM(ServiceNow) system. This bundle also contains APIs that extract rich network context data. Please note that, if your network devices have not yet been synchronized between...</div> <div>Configure</div>

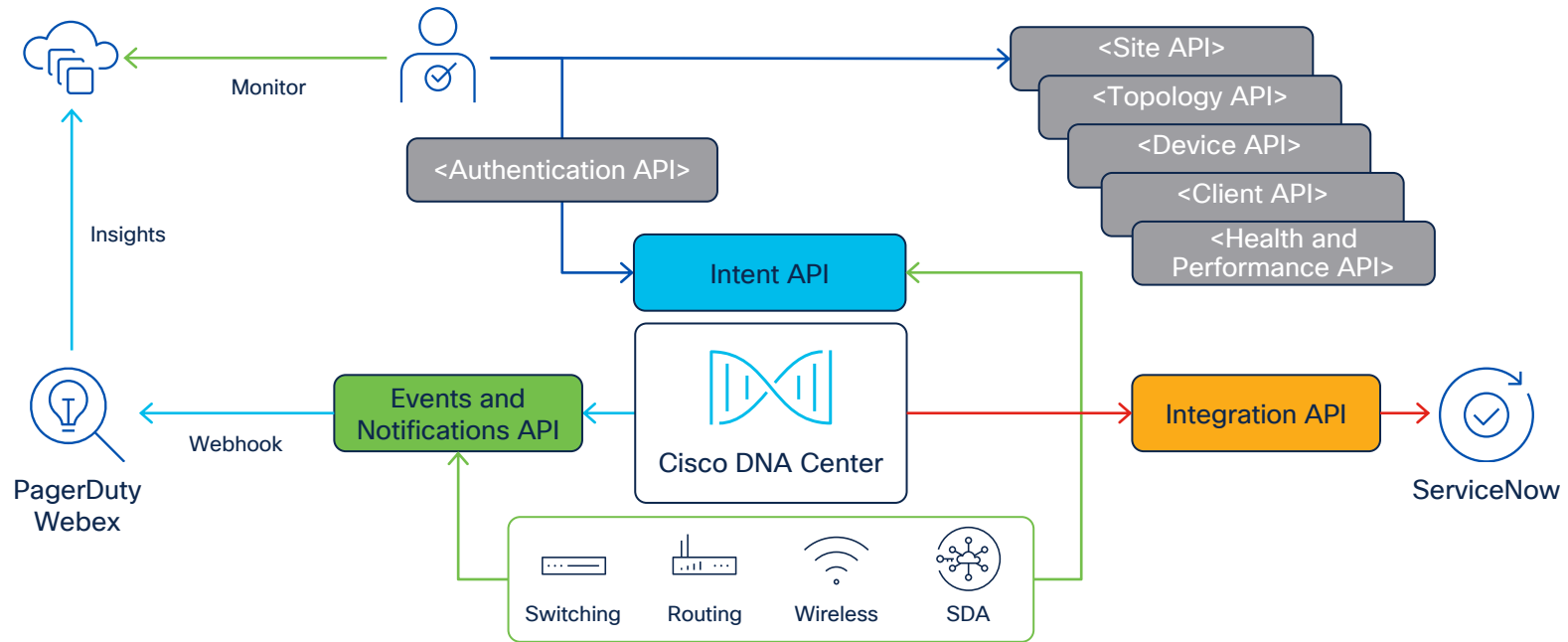
Closed-Loop ITSM integration example for MSPs



<https://developer.cisco.com/dnacenter/integrationapis/>

A quick review

Managed Campus





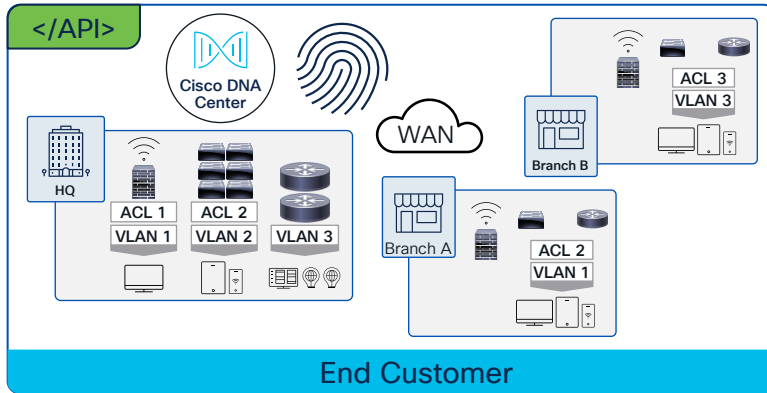
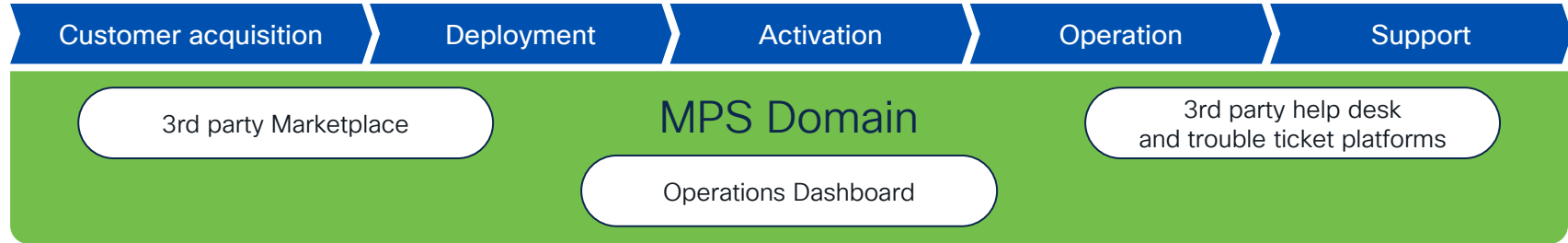
Putting everything together

- Light demo

Managed Campus Use Cases

Managed Campus Services Lifecycle

MSP Operations for Direct Managed DNAC



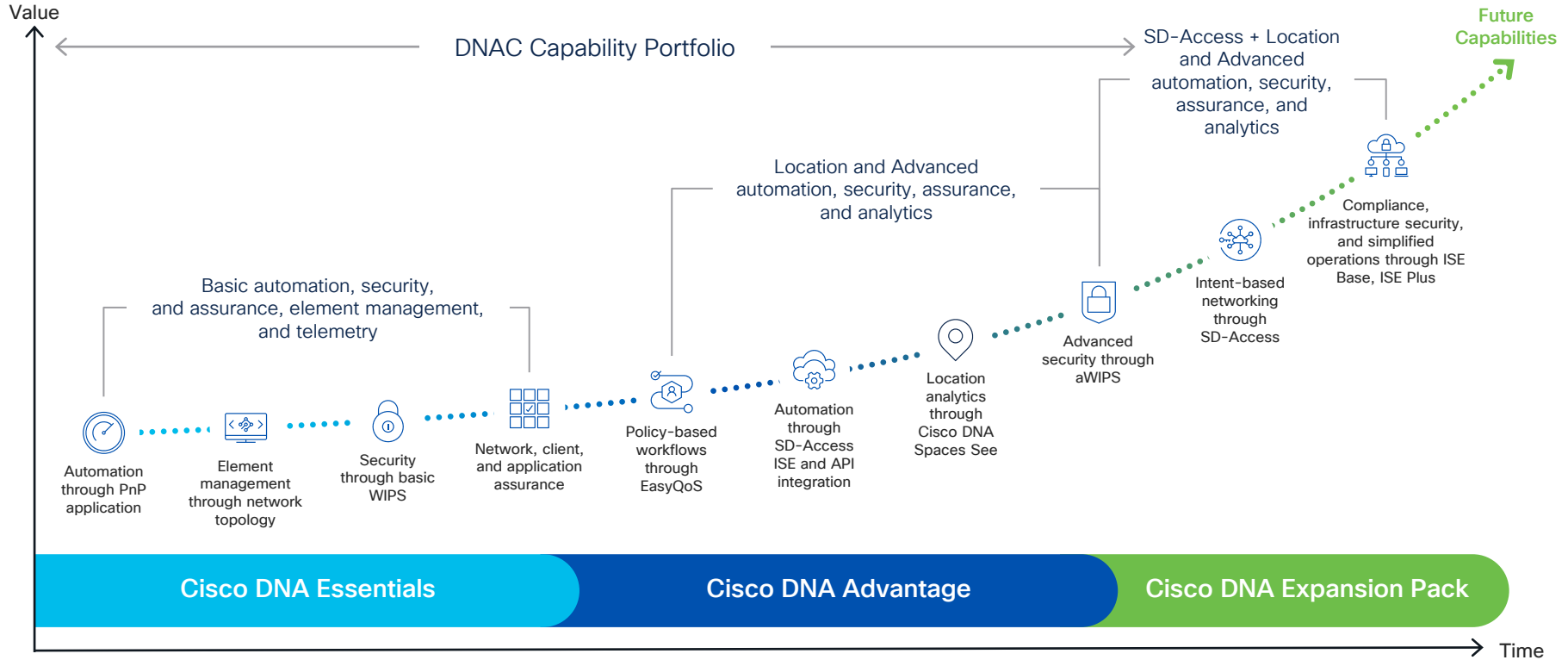
- MSP owns the service Lifecycle
- Managing infrastructure cases:
 - End customer owns all infrastructure including DNAC
 - End customer, owns network infrastructure, MSP manages it using DNAC
 - MSP owns and manage all network infrastructure using DNAC
- MSP might offer the service using a home-grown dashboard or a marketplace
- Deployment, activation and operations are done via DNAC API's and integrations
- Support might be offer with standard help desk and trouble ticketing platforms with DNAC integration

Use Case Capabilities

— Base Automation — Assurance — SD-Access —

Use Cases	Network Device Onboarding	Software Image Management	Network Assurance	Network Segmentation	Network Policy
Capabilities	Discovery, onboarding, and provisioning devices using Plug-n-Play	Upgrading and patching network device software images	Monitoring health scores (network, app, client etc.)	Configuring segmentation for users, guests and network devices	Configuring security policies and maintaining compliance
	Managing network inventory and topology	Identifying security vulnerabilities	Troubleshooting and guided remediation	Configuring segmentation for IoT devices	Host onboarding and enforcing end-point authentication policies
	Applying configuration templates and network MACD		Managing network analytics, gaining visibility	Enabling unified NetOps and user mobility across wired and wireless	

Increasing Customer Value and MSP Profitability



Managed Campus Packaging



Managed Infrastructure



Fully Managed Campus



Managed Automation



ISE Policy Control (SD-Access)*

3 Primary Offers

+ SD-Access Add-on






Comprehensive Managed Campus Offers

Model based on customer technology ownership

If Customer has:

They need:

DNA Center Capabilities	Campus Network Infrastructure	Campus Management Capabilities	ISE Policy Control (SD-Access)*	Offers
✓	✓	✗	+	 Managed Infrastructure
✗	✓	✗	+	 Managed Automation
✗	✗	✗	+	 Fully Managed Campus

First step into managed Cisco Managed Campus journey

There's a model to fit each
customer's mixed environment

Every organization has different:

Investments (Technology investment)

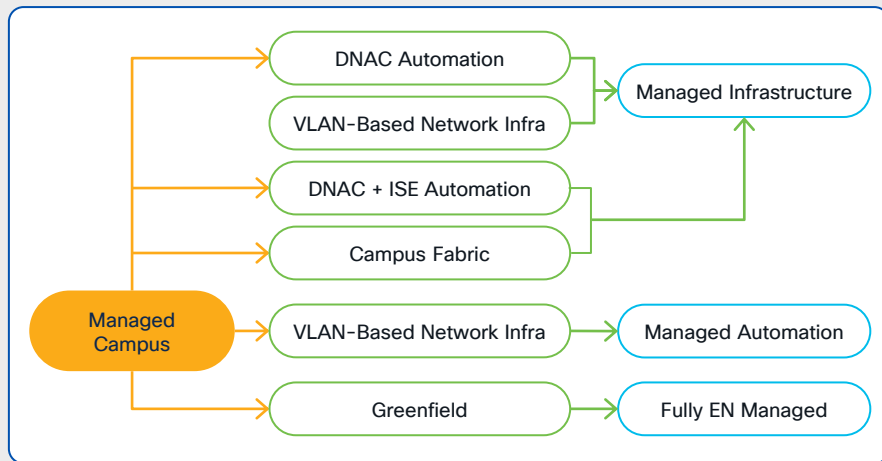
Architectures (Technology mix)

Managed Requirements (Managed class)

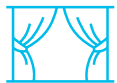
Digital Transformation Plans

Your journey is unique

Do Managed Campus your way



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Meet the Engineer, Sanjit Aiyappa (Meeting Zone or request a meeting in our Booth)



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BRKGEN-2000 - Demystifying Cisco FSO Stack APIs- Building a secure code pipeline with Concourse CI and Vault Integration

DEVNET 2778 - Using IOT + Collab + Meraki API's for a safer return to the school

BRKIOT-1127 - Build pervasive wireless mobility in industrial environment



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The bridge to possible

Thank you

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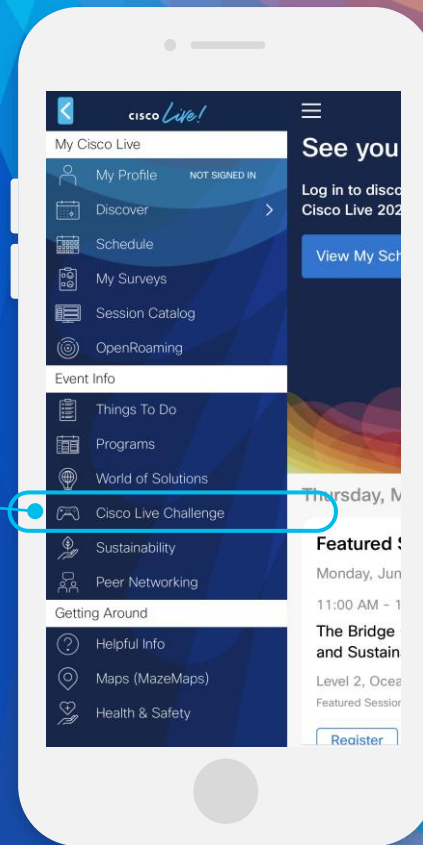
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- 3 Click on View Your Badges at the top.
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The background of the slide is a vibrant, abstract graphic. It features a series of overlapping, wavy bands of color in shades of red, orange, yellow, green, and blue, creating a sense of movement and energy. On the right side, there is a bright, multi-colored sunburst or starburst effect that radiates outwards, adding to the dynamic feel of the design.

cisco *Live!*

Let's go

#CiscoLive