DX NetOps Solution Demonstrations

July 19, 2022

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Thanks for joining!

Goal: Demonstrate progress of some of our key upcoming DX NetOps capabilities

1. provide you with awareness of how you and your teams can benefit
2. get direct feedback on how we're doing

Please provide feedback via Q&A panel and we'll have live Q&A after each demo

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Agenda

Solution overviews and demonstrations:

- **Experience Driven NetOps** - *Jason Normandin*

- **Monitoring Fortinet SD-WAN** - *Sarbdeep Singh*

- **Cisco DNA Center Integration -** *Sandeep Tiwary*

- **Aruba Wi-Fi Monitoring -** *Nikita Shestakov*

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Experience Driven NetOps

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Experience Driven NetOps
AppNeta Network Path integration

Goal: Help IT Operations more effectively identify, prioritize, & solve problems impacting network delivery experience

Key Use Cases:

| Unified Experience Driven Ops Workflows	Continuous SD-WAN Assurance
• Move beyond up/down/connected to end user experience (work problems that matter!) • Alarm noise reduction and correlation • Standardized operational workflow • Baseline alarming and business hour dashboards • Unified AppNeta and NetOps topology	• Compare contextualized controller and experience performance • Unified experience and SDWAN overlay/underlay topology and performance views • SDWAN noise reduction and experience correlation • Controller policy validation using experience insights
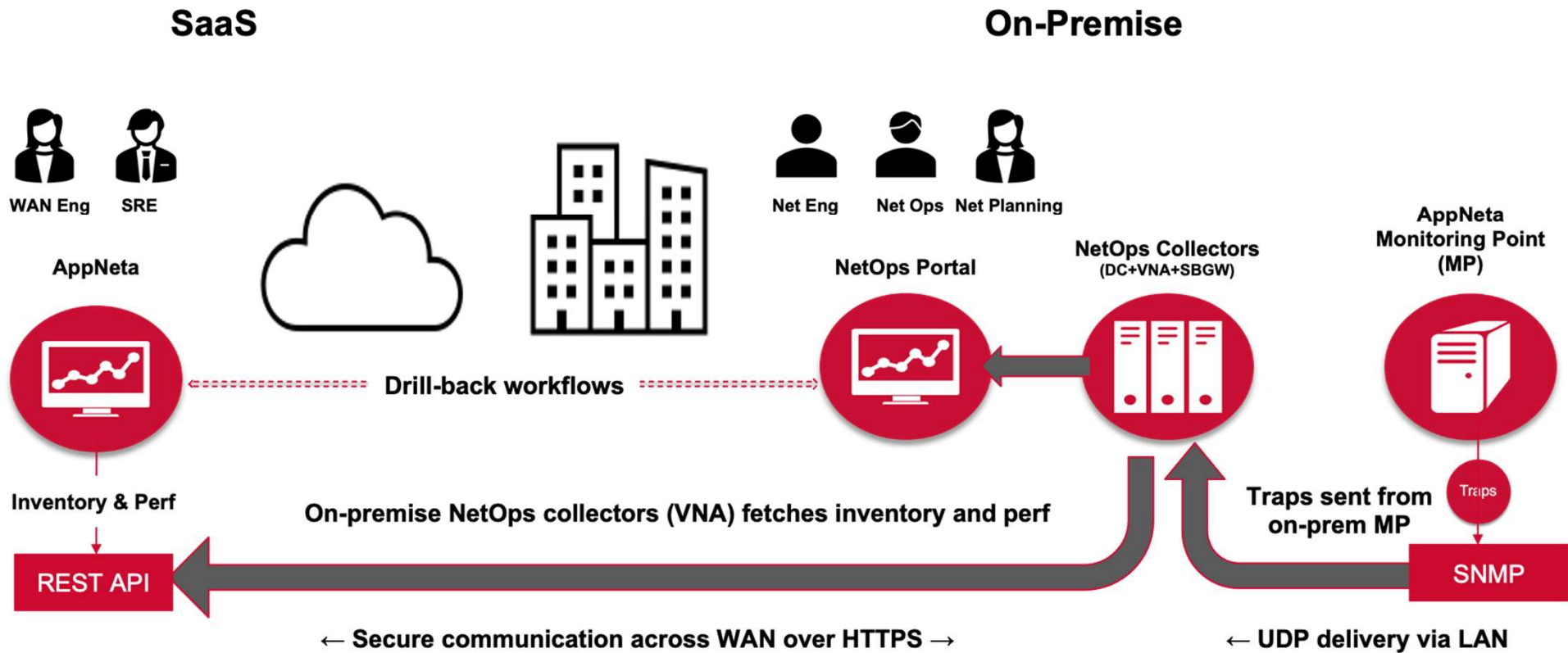
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Solution Architecture

Demonstration Overview

Demo Goal: Showcase the ability for Network Operations to triage issues related to Network Experience within NetOps portal through:

- Ability to search, view, and group Network Paths

- AppNeta events and alarms

- PM time-over-threshold and baseline deviation from normal events

- Single-click triage for Network Path performance

- Create Operational dashboards and tailor context page contents

- Drive deeper analytics with custom percentile and projections metrics

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Monitoring Fortinet SD-WAN

Fortinet SD WAN

Goal: Provide IT Operations End-to-End visibility into the SD-WAN to ensure site availability, application performance, and policy compliance.
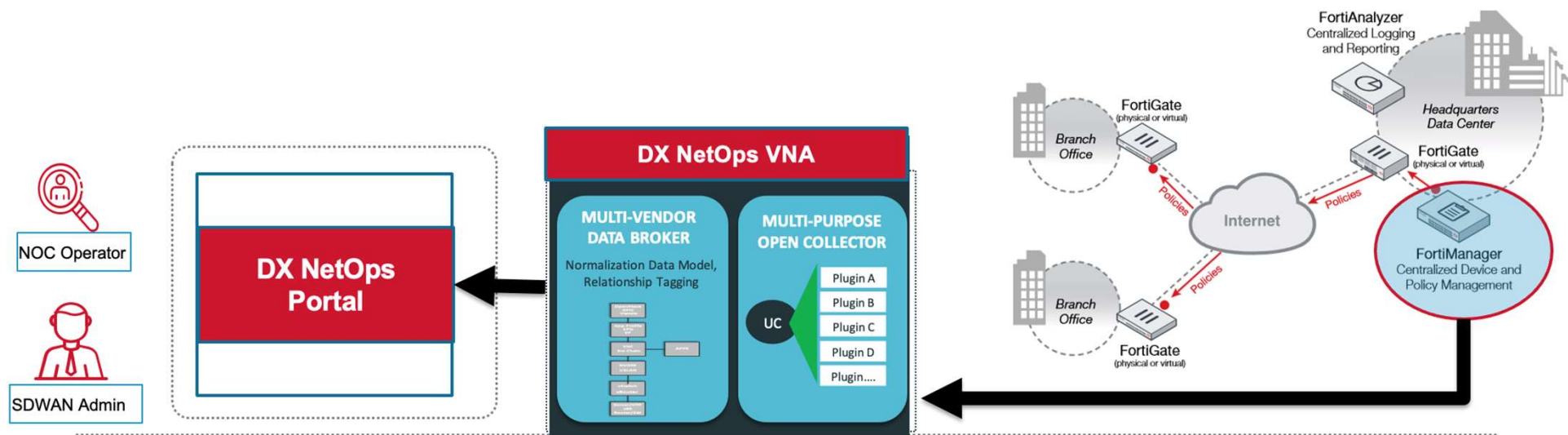
Key Use Cases:

Continuous SD-WAN validation	Noise reduction for Triage workflows
• Visibility into connectivity and performance of SDWAN sites (including underlay/overlay) • Granular insights in Tunnel and policy-based performance • Health indicators and dynamic context dashboards for easy triage	• SD-WAN noise reduction and correlation to reduce tickets and Ops issues • Alarm Triage and root cause analysis to decrease noise and time to resolve issues • Standardized operational workflow for simpler and triage consistent with other technologies

Solution Overview

Inventory	Performance	Topology	Events/Alarms
✓ Sites ✓ FortiGate Edges/Gateways Routers ✓ Device Interfaces ✓ SLA Classes, ✓ Tunnels ✓ SLA-Paths	✓ Router (CPU, memory, disk) ✓ SLA Class (latency, loss, & jitter policy thresholds) ✓ Interface (speed, utilization, errors, discards, packets) ✓ Tunnel (latency, packet-loss, jitter) ✓ SLA Path (% of latency threshold, % of packet-loss threshold, % of jitter threshold)	✓ Geo-map topology on the basis of edge device geo-coordinates ✓ L2/LAN topology ✓ Site-to-Site tunnel topology	✓ Consolidated fault collection ✓ Alarms/Event filtering ✓ Threshold violation alarms ✓ Root Cause Analysis and Alarm Suppression

Demonstration Overview

Demo Goal: Showcase the ability for Network Operations to triage issues related to SD-WAN within NetOps portal through:

- Ability to have visibility in minutes with minimal configuration, Rapid Time to value
- Out of the box, Smart inventory with site grouping and automatic geo-location tagging
- View your SD-WAN from an application-centric perspective
- Ability to easily find poor performing tunnels across WAN
- Ability to understand if WAN transports can meet policies thresholds

Cisco DNA Center Integration

NetOps DNA-C Integration
Monitoring Cisco estate homogeneously

Goal: Help IT Operations manage legacy Cisco LAN and SD-ACCESS LAN uniformly from Portal.
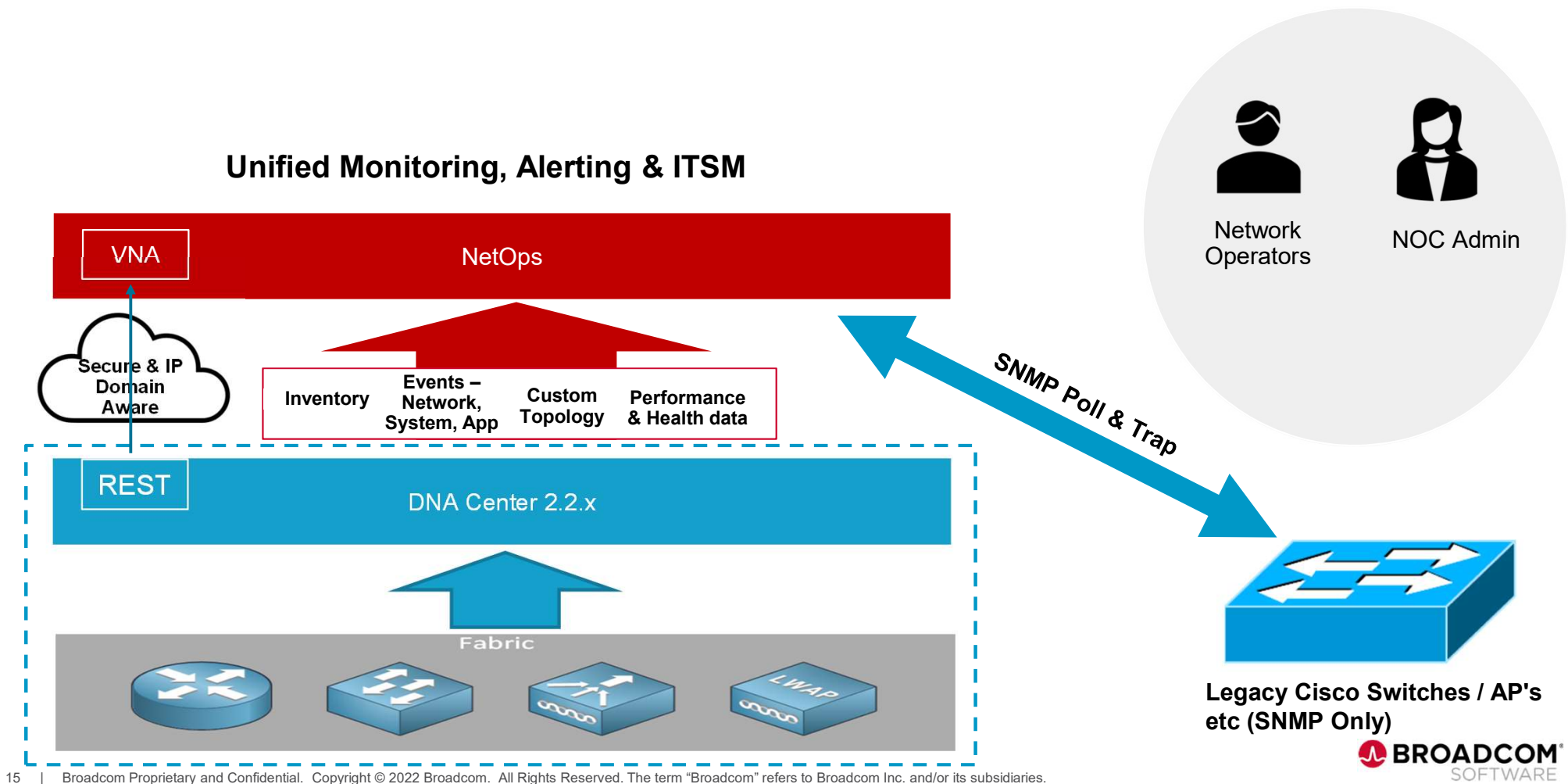
Key Use Cases:

Unified Monitored Inventory	Centralized Alarm management
- Auto reconciliation of devices from DNA-C and SNMP to expand visibility of metrics - Holistic overview for health and performance - Triage via smart dashboards contextual workflows	- Event Integration from DNA-C for simple NOC integration - Events mapped to reconciled device models to drive contextual awareness of problems and performance - Alarm noise reduction and correlation to reduce ticket volumes and focus on issues that are impactful

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Solution Architecture

Unified Monitoring, Alerting & ITSM

Network Operators

NOC Admin

VNA

NetOps

Secure & IP Domain Aware

Inventory | Events – Network, System, App | Custom Topology | Performance & Health data

REST

DNA Center 2.2.x

Fabric

SNMP Poll & Trap

LWAP

Legacy Cisco Switches / AP's etc (SNMP Only)

Demonstration Overview

Demo Goal: Sneak peek into integration with Cisco DNA Center appliance to provide a correlated view of unified inventory, events/alarms along with Health, performance insights:

- Ability to Auto discover DNA-C & well organized inventory including site grouping

- Alarm/Event integration from DNA-C

- Ability to visualize System Performance & Health status of CISCO DNA managed Campus

- Topology view of Campus Fabric for visual triage / problem area identification

- Allow Drill down to Linked dashboards / context pages

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Monitoring Aruba Central WiFi

Wi-Fi Networks Monitoring

Goal: Help IT Operations effectively monitor wireless networks.

Key Use Cases

| Wi-Fi Overview	Wi-Fi Assurance
- Unified Wi-Fi ecosystem view to gain holistic understanding of my Wireless deployment - Inventory, performance, SSID, radio, channel and clients monitoring within NetOps portal to allow simple triage of wireless issues	- Standardized operational workflow for Alarms to streamline integration of Wireless monitoring in NOC - Key performance baselining to understand when performance is deviating from it's normal behavior

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Solution Architecture
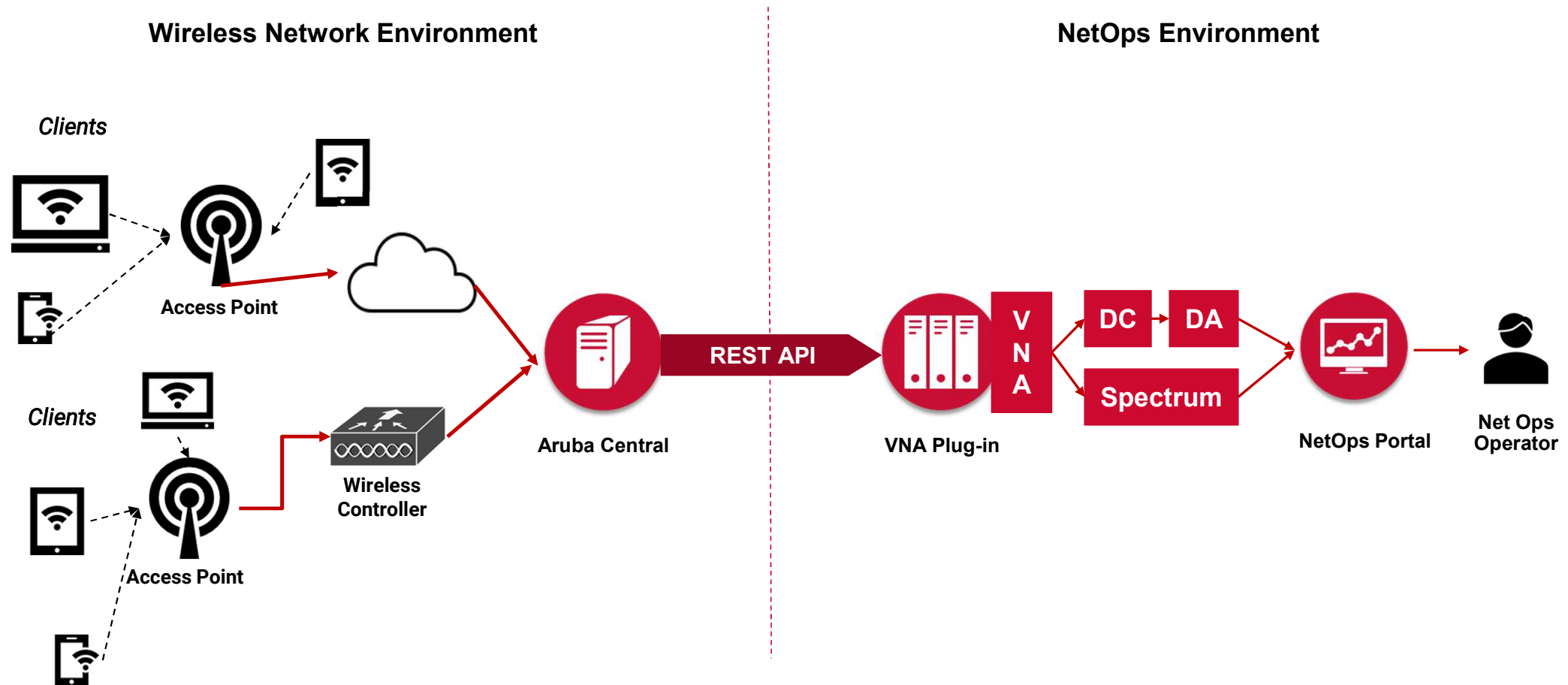
Demonstration Overview

Demo Goal is to Showcase the ability for Network Operations to triage Wi-Fi issues within NetOps portal through:

- Enterprise Wi-Fi Health overview

- Wi-Fi Inventory & Performance

- Wi-Fi specific Alerts & Events

- Antennas Monitoring

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