Want a self-driving Data Center Network? Try Cisco ACI & NAE with ServiceNow

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Data Centers Are Undergoing Rapid Transformation

Digitization, Cloud, Mobile Creating New Demands of IT

Scale

10Ks VMs, 100s of Apps, distributed apps, 1M+ policies

Complexity

Multi-DC, multi-tenant, hybrid, virtualized, heterogeneous

Rate of Change

VM mobility, app migration, dynamic scaling, self service portals

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Application Centric Infrastructure (ACI)

Any Cloud, Any Application, Any Platform, Anywhere





But, Operational Paradigms are still Rudimentary

Intent Frequently Breaks...

We Always React...

Leaving Us With...

Operational

>

Troubleshoot

Security

>

Scramble to fix it

Compliance

>

Fail audits

Change

>

Undo changes

>

An Inability to Assure
Intent Proactively



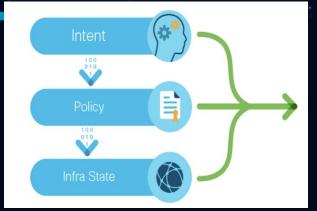
The confidence that the infrastructure is doing what you intended it to do

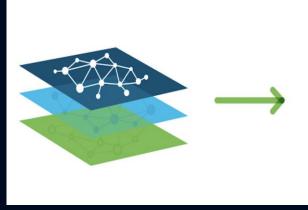
Intent Encompasses Data Center Operations

Configs, Changes, Routing, VMs, Security, ... Compliance, Audits



Network Assurance Engine: How it Works







Data Collection

Capture DC Wide Intent, Policy, Control/State across Forwarding & Security

Formal Modeling of Network

Precise Mathematical Models that codify Cisco's 30+ Years of Networking and Cross Customer Domain Knowledge

Continuous Analysis

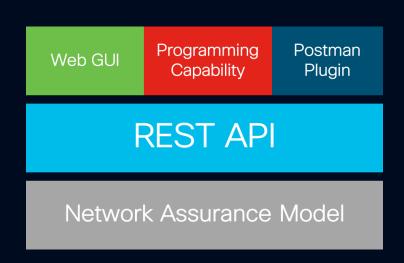
Models verify that **Network operates per Intent** and accurately tell what is wrong,
where, why, impact and how to fix

Reactive Troubleshooting to Proactive Operations - continuously, network wide

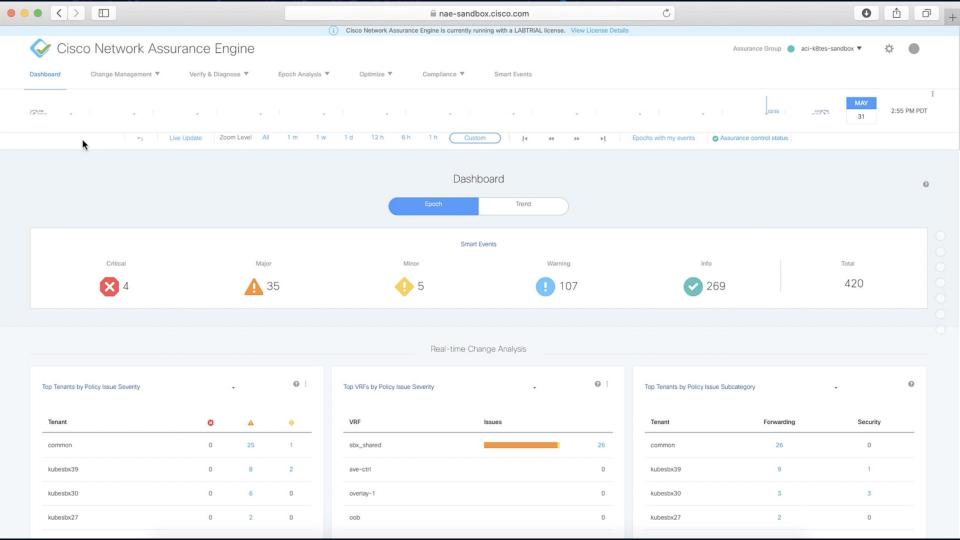


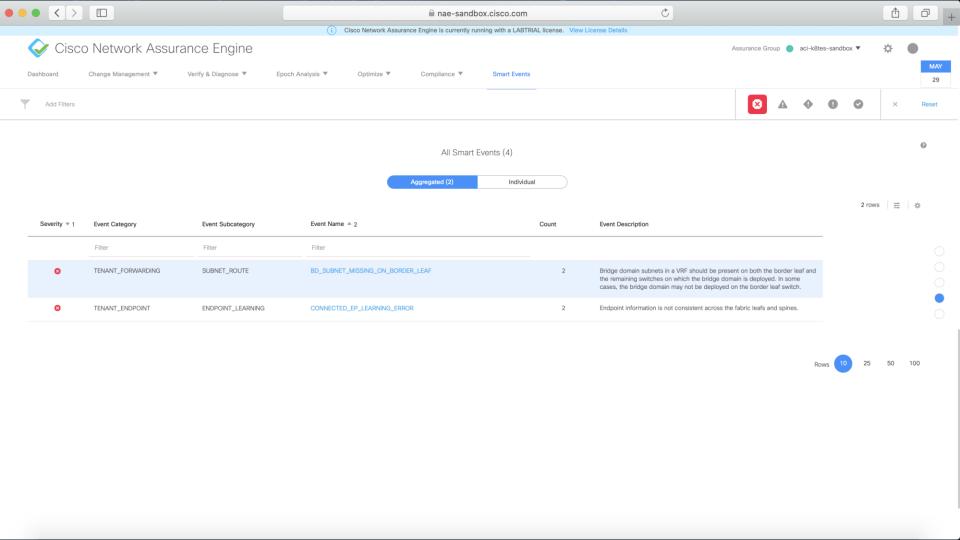
. Network Assurance Engine – Data Model & REST APIs

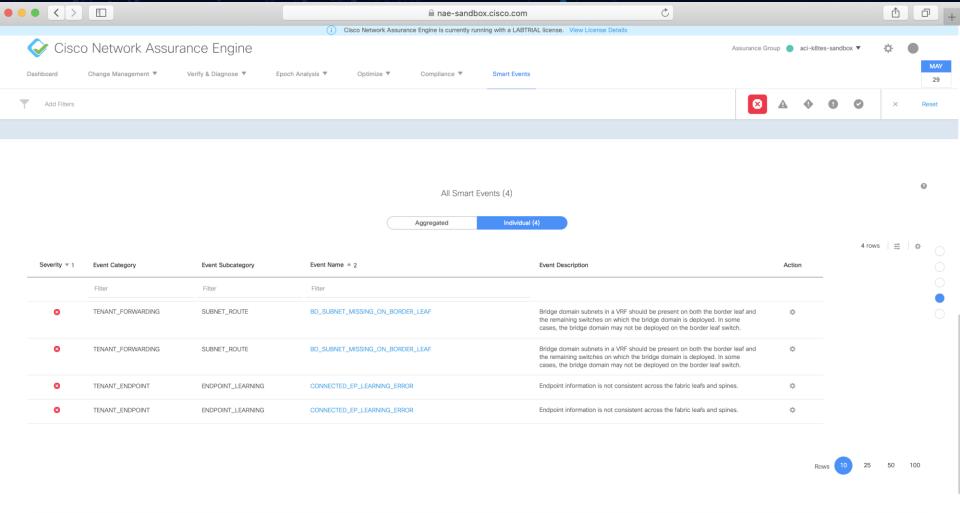
- Same objects irrespective of interface
- Smart Event Data Model
 - Severity, Category, SubCategory, Mnemonic
 - Description
 - Impact
 - Affected Objects
 - Checks
 - Remediation Suggestion

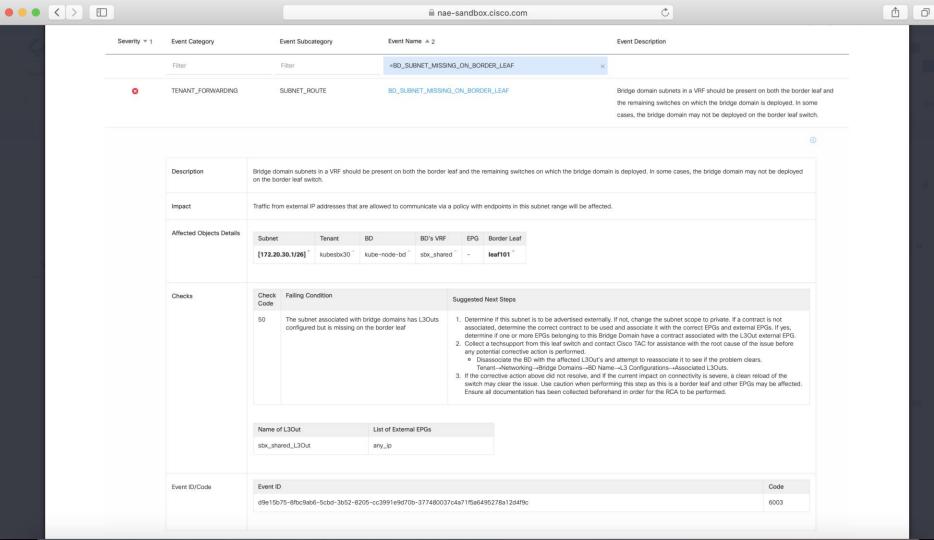


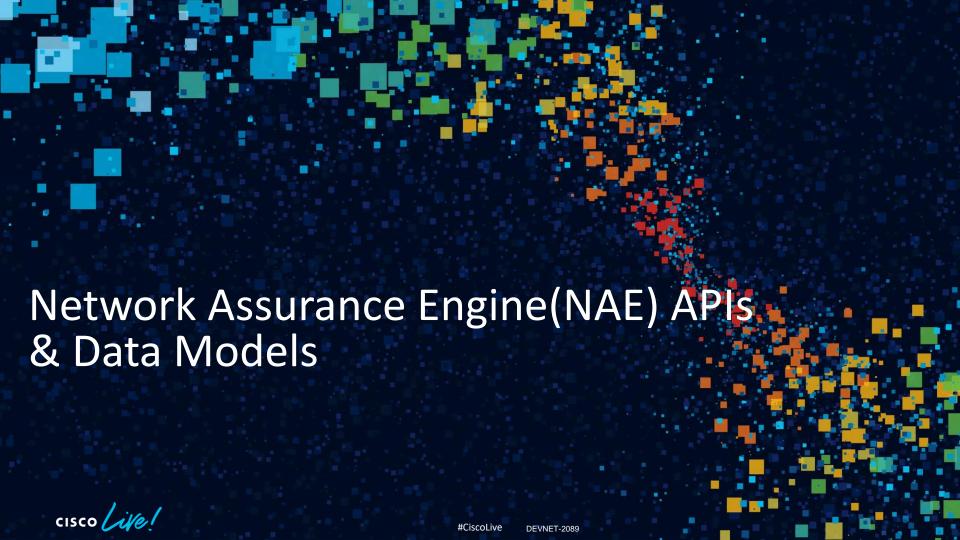






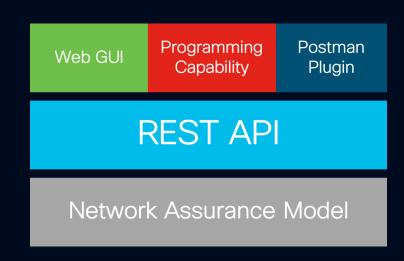




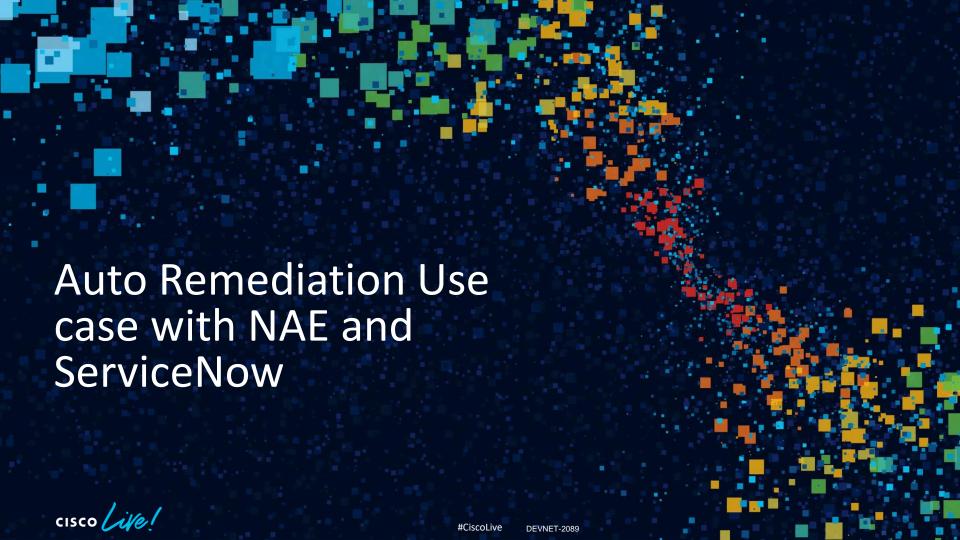


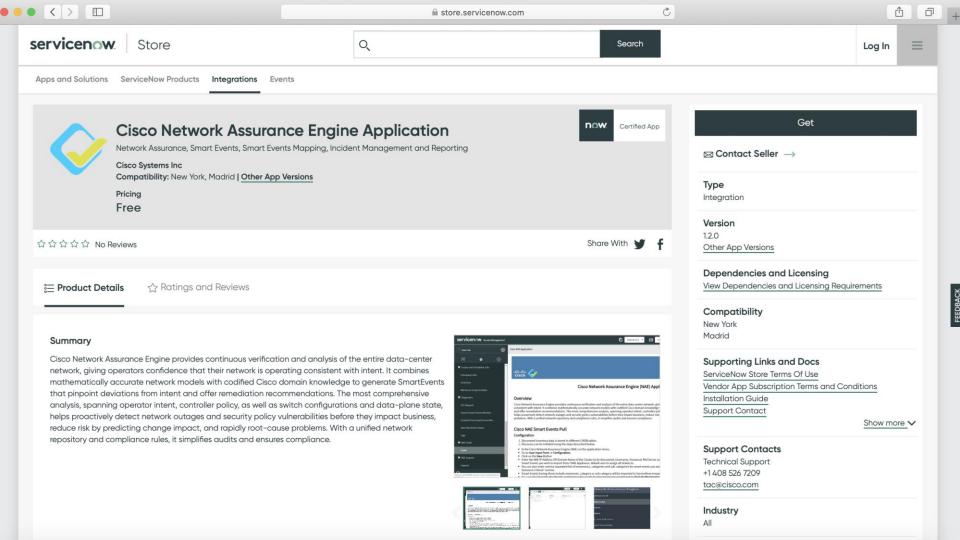
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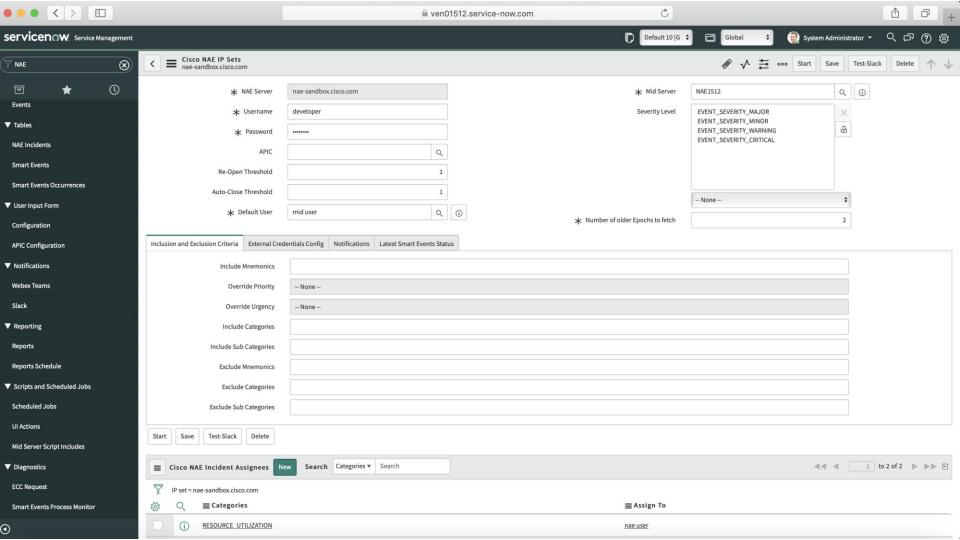
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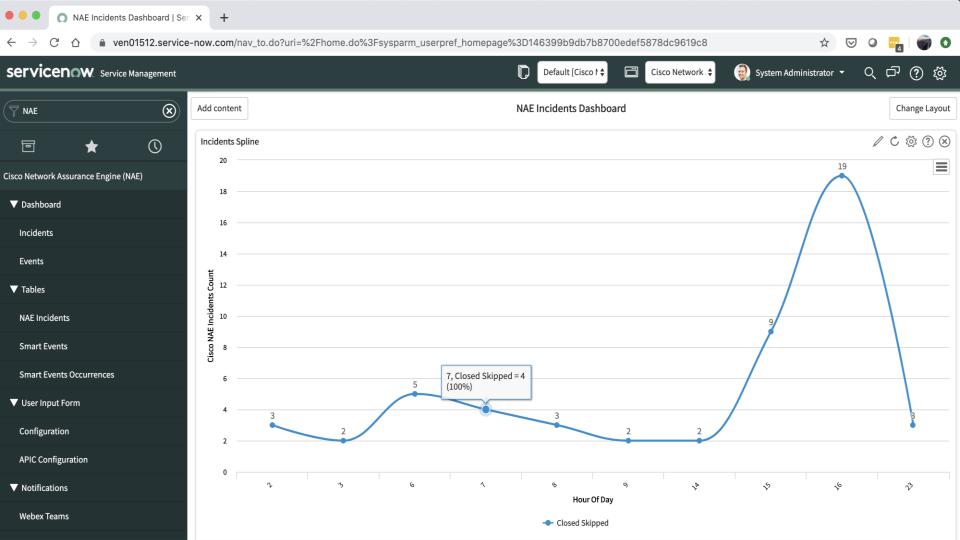


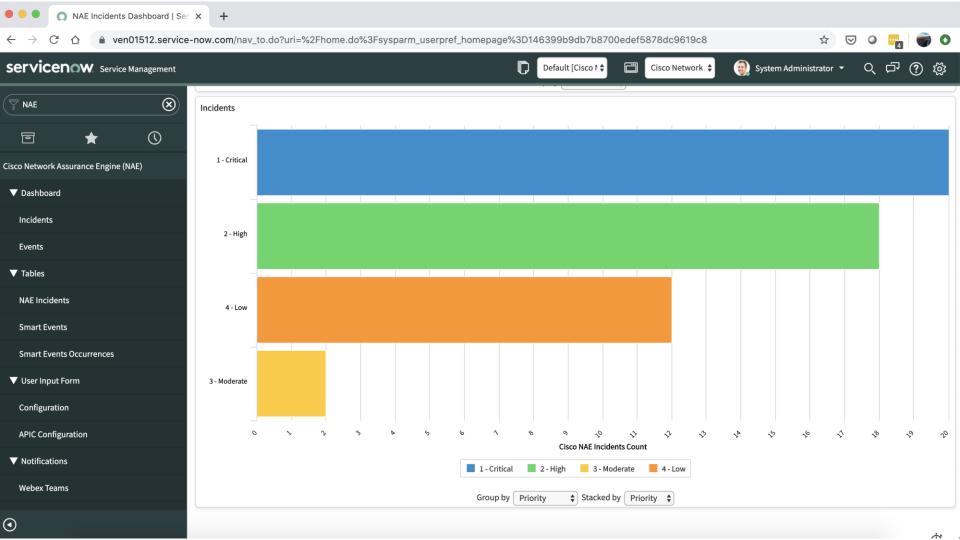


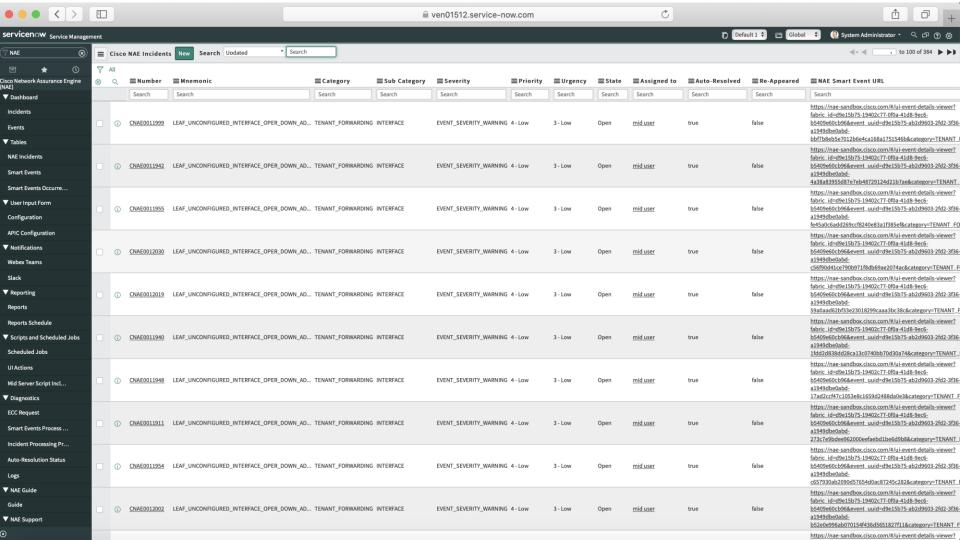


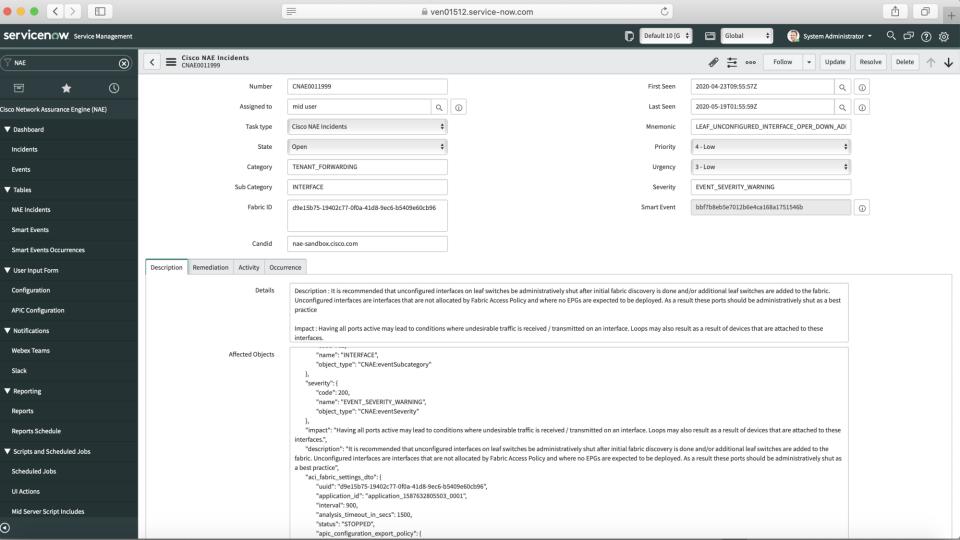


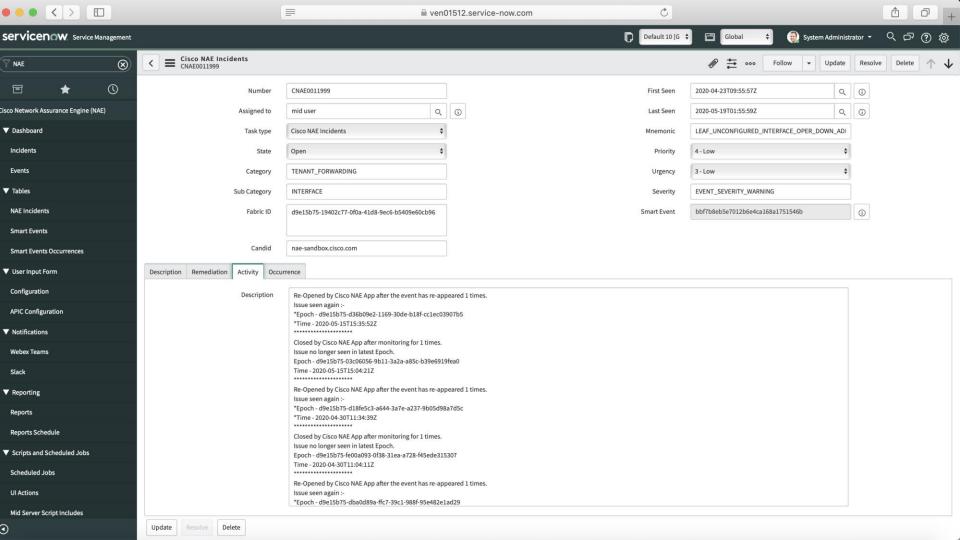


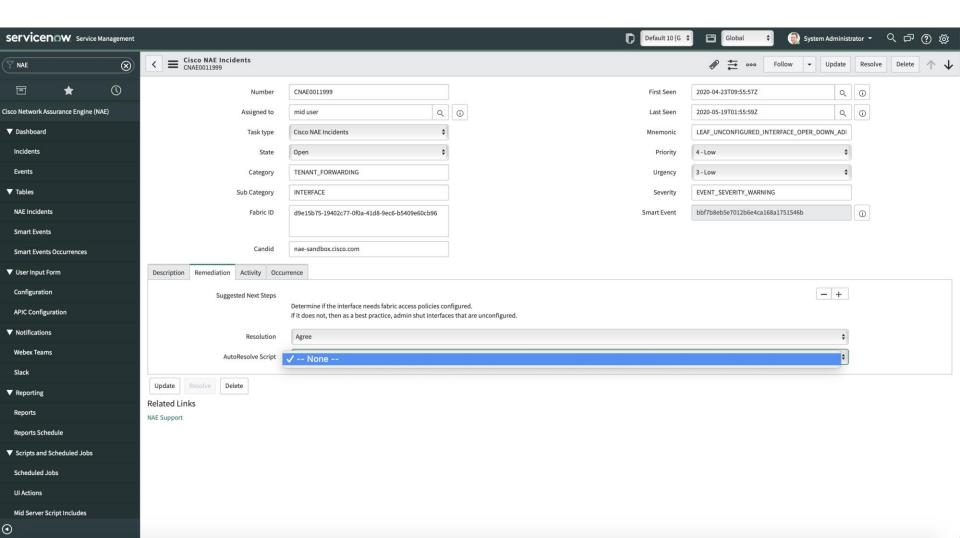












.Resources & Next Steps

Learn More

- Cisco Network Assurance Engine
- NAE ServiceNow Solution Overview
- NAE Service-Now Demo

Build your own Self-Driving Data Center

- <u>Try NAE on DevNet Sandbox</u>
- <u>Download NAE Plugin on ServiceNow Store</u>
- Review NAE REST API Guide
- Request NAE Trial License





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