Agenda

NetEdit Overview
What’s New in NetEdit?
NetEdit Demo
Summary and Q&A
CX Tools: CX mobile app, NetEdit, and NAE

Unleashing the power of AOS-CX

The power of the CX architecture underlies many Aruba switching innovations

The Database architecture provides a firm foundation to innovate on top of, bringing solutions that matter to our customers

• **CX mobile app** – CX toolbox in your pocket: initial deployment, in closet troubleshooting

• **NetEdit** – Validates, automates and displays network health and configurations

• **NAE** – Network analytics that can autonomously react to changes, provides health status, or provide insights into specific issues

Together these capabilities provide automated workflows for network admins
Challenges of Complexity

Configuring individual components of a large distributed system is a complex task.

Networks are especially complex to configure because of the growing set of:

- Requirements from the business
  - new applications
  - diversity of clients and IoT
  - increased security threats
- Parameters of required protocols and features
  - L1, L2, L3, …
  - security, QoS, …
  - virtualization, stacking, redundancy

Complexity leads to configuration errors.

Aruba NetEdit
Superpowers for Network Administrators

Network Configuration Assistance for the Expert Network Administrator

Search  Edit  Validate  Deploy  Audit

Intelligent assistance and continuous validation ensures device configurations are consistent, compliant, and error free.

Gain the benefits of automated assistance for configuration, without retraining, by leveraging your teams existing knowledge and experience.
NetEdit 1.0 Workflow

Import
- CX devices added individually or imported as a group
- Device communication via REST APIs to get device information, including running and startup configs

Search
- Devices identified and selected based on a query based search

Edit
- Plans created containing the selected devices, allowing config editing
- MultiEditor provides syntax assisted editing of multiple device configurations

Validate
- Syntax validation based upon device grammar
- Conformance validation run against company defined policies
- Device validation run to ensure semantic correctness based on device specific limits

Deploy
- Deploy validated configuration to devices in plan
- Commit or rollback configuration based upon review of pre and post change validation results

Audit
- Provides audit trail of configurations on devices
What’s New in NetEdit 2.0

Network monitoring, troubleshooting, and express solution configuration assistance for the expert administrator
NetEdit Solution Architecture

- **Web Browser**
- **NetEdit (OVA)**
- **Server**
- **Switch (AOS-CX)**
- **Switch (AOS-Switch)**
- **Switch (AOS-CX)**
- **Switch (AOS-CX)**
- **3rd Party Devices**

**Wireless Controllers**

**SNMPv2/v3**
- non-Aruba CX device discovery

**REST**
- discovery
- subscriptions
- configuration monitoring
- device validation
- deployment
- software update

**SSH**
- change validation
NetEdit 2.0 Config Workflow

Discovery
- CX devices are discovered using LLDP
- NetEdit subscribes to CX DB, notified of config or status change

Search
- Devices identified and selected based on a query based search

Solution Config
- UI based simplified configuration of solutions
- Backed by NetEdit plans providing full validation and flexible deployment, ensuring correctness of the device configurations

Validate
- Syntax validation based upon device grammar
- Conformance validation run against company defined policies
- Device validation run to ensure semantic correctness based on device specific limits

Deploy
- Deploy validated configuration to devices in plan
- Commit or rollback configuration based upon review of pre and post change validation results

Audit
- Provides audit trail of configurations on devices
NetEdit 2.0 Monitoring & Troubleshooting Workflow

Discovery
• CX devices are discovered using LLDP
• NetEdit subscribes to CX DB, notified of config or status change

Search
• Devices identified and selected based on a query based search

Monitor
• The health and properties of the selected devices can be viewed in the topology UI
• Consolidated NAE device agent state and consistency validation provides overall network health

Notify
• Notification based on configured device query and condition (nae-status:CRITICAL)
• Supported notification methods: Slack, ServiceNow, TopDesk, and log only

Troubleshoot
• Network layers can be enabled, providing greater visibility into network state and device configurations, highlighting error states or configuration mismatch
• Supported layers: Application, Segmentation, Client Services, Routing, Bridging, and Device
NetEdit 2.0 & NAE

- Network Analytics Engine agents are a key indicator of CX device and network health in NetEdit 2.0
- Hyperlink to launch device Web UI to enable drill down of agent
- NAE agent status will be searchable using a device query,
  - e.g. show all devices with nae-status:CRITICAL
NetEdit Demo Topology
Summary

NetEdit builds on the power of the CX Database architecture to assist network admins in configuration, validation, monitoring, and troubleshooting workflows.

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<th>Feature</th>
<th>NetEdit 1.0</th>
<th>NetEdit 2.0</th>
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<tr>
<td>Device Import, CX only</td>
<td>✔</td>
<td>Discovery</td>
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<tr>
<td>MultiEditor – IDE for device configurations</td>
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<td>✔</td>
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<tr>
<td>Validations (syntax, conformance, device, change)</td>
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<tr>
<td>Search - query devices and plans matching criteria</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Attributes – built-in and custom tags for devices and plans</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Device history – audit trail of device configurations via NetEdit, CLI/SSH, REST, etc…</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Device Discovery (CX, Aruba, 3rd party)</td>
<td>✔</td>
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<td>Topology View</td>
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<td>Network Layers</td>
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<td>NAE Device/Network Health</td>
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<td>Solutions Configuration – UI express configuration of solutions</td>
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<td>Notifications (ServiceNow, TopDesk, Slack)</td>
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<td>Technician RBAC</td>
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Intelligent Edge Related Demos at Tech Playground

- SimpliVity/AOS-CX Integration
- NetEdit
- NAE
- and more....
Questions?
atmosphere

2019 APAC

Thank You