

DATA SHEET

ARUBA NETEDIT

Coordinated network switch configuration, monitoring and troubleshooting

Network administrators face numerous challenges that include device proliferation brought on by IoT and BYOD, as well as the need to provide reliable, secure mobile access to any user, anywhere. The high rate of change to support evolving business requirements is another issue. Non-stop adds, moves and changes can overwhelm what are often short-staffed IT teams, which increases the risk of operator error and, subsequently, performance issues or downtime.

In response to these challenges, Aruba NetEdit empowers IT teams to orchestrate the configuration of multiple switches with automation and analytics to ensure deployments are consistent, conformant, and free of errors. The automation workflows allow for changes without the overhead of programming by providing operators with a user-friendly, CLI-like interface. This arms IT teams with the power to smoothly coordinate end-to-end service roll outs, rapidly initiate network-wide changes, and ensure policy conformance after network updates.

With embedded analytics delivered from the Aruba Network Analytics Engine (NAE), this intelligent assistance and continuous validation assure that network-wide configuration changes are consistent and compliant, ultimately improving the overall health and security of the network.

HOW NETEDIT WORKS

To start, operators simply enter their appropriate subnets within NetEdit's web-based user interface. NetEdit then automatically discovers and imports configuration files for each Aruba CX switch. When NetEdit is made aware of a new switch, it will interrogate the switch configuration, hardware inventory, and neighbor information.

The admin interface allows operators to easily interpret the status of each network device. A customizable application dashboard provides quick visibility into metrics of highest interest. The Network tab provides a deeper view into network health, along with red/yellow/green statuses for every deployed switch.



KEY FEATURES

- Intelligent, error-free configuration with validation for consistency and compliance
- Simultaneous viewing and editing of multiple devices
- Customized validation tests for corporate compliance and network design
- Automated, large-scale configuration deployment without programming
- Advanced analytics and troubleshooting for faster issue resolution
- CLI-like interface with predictive assistance for complete operational simplicity—no new skills required



Figure 1: Aruba NetEdit Dashboard

NetEdit runs as an Open Virtualization Application (OVA) virtual machine (for example, VMware's ESXi) on a server. The following switches running the AOS-CX operating system are supported:

- Aruba CX 6000 Switch Series
- Aruba CX 8000 Switch Series

KEY CAPABILITIES

NetEdit provides automation and analytics across the lifecycle of a switch, greatly simplifying common management tasks to elevate the experience for network operators. The following capabilities enable error-free deployments:

Dynamic Network Topology

The Network tab within the interface provides a holistic view of an organization's network topology, including Aruba CX switches and Aruba access points, as well as third-party switches.

The Health Summary panel provides a real-time snapshot into the health of Aruba switches, including the devices that are experiencing inconsistencies and errors, such as security policy violations.

Dynamic, tailored views of the network are triggered based on which layers an operator selects. These layers offer more visibility into Aruba CX device status and configuration, including what is contributing to a performance or compliance issue. Supported layers include application, client service, device, routing, bridging, segmentation, and "other" (which includes all NAE agents not designated to a specific layer).

To provide further simplicity, NetEdit automatically discovers new network infrastructure devices using the Link Layer Discovery Protocol (LLDP), using REST APIs for Aruba CX switches and SNMP for Aruba wireless and third-party devices. Newly connected switches will appear automatically in the Network tab.



Figure 2: Network tab in NetEdit highlights a Skype application issue

Multi-device Editing

To keep pace with network changes, NetEdit enables operators to easily change configurations on multiple devices at once using complete details of each configuration file. For example, you can centrally define the NTP or the RADIUS server address for all relevant switches, or set an ACL entry on only the access switches.

NetEdit also taps into an operator's existing knowledge of CLI, so no retraining or new skills are required. Predictive assistance, such as command completion, syntax highlighting, and validation, dramatically reduces the time it takes to enter commands.

To bring even more efficiency to change windows, network teams can also implement common configurations, such as switch-to-switch virtual extensible LANs (VXLANs), by using only a few prompt-driven commands.

One-Click Deployments with Auto-Verification

Using NetEdit, you can stage a deployment (or a rollback) on multiple switches, and validate the correct operation of switches after changes. For instance, you can determine whether a change is working properly before deploying it more widely, or you can quickly back out changes if there is a problem.

Upon deployment, NetEdit automatically collects network and services state information before and after a change, and intelligently displays the difference. This lets you decide whether to keep or roll back the change within your allocated window.

Continuous Validation

Further simplification is provided through the ability to continuously monitor and ensure conformance for both corporate and regulatory policies. Validation checks can be performed on all configuration changes, including those made outside of NetEdit, such as using the switch's CLI or through Ansible. For example, it's simple to verify that all management IP addresses are on the management subnetwork, or that all routers running OSPF are logging adjacency changes. Validation tests can easily be customized and extended based on your existing knowledge of configuration commands.

Full Audit Trail

NetEdit records all hardware and software versions, as well as other configuration changes. You can then search through and view all changes, or groups of changes.

This allows you to track changes to the hardware, software and configurations using an automated versioning feature, regardless of whether changes are made in NetEdit or through other means. You can also perform these rollbacks selectively, based upon factors such as the location of the switches or the dates of the changes.

Monitoring and Troubleshooting

Integration with the Aruba Network Analytics Engine (NAE) gives operators real-time access to advanced network analytics and built-in automation for troubleshooting, enabling faster detection and resolution of network-impacting issues.

NAE natively gathers telemetry on the switch via agents that are based on Python scripts. The operator can proactively set rules to monitor and collect specific traffic or events of interest. Examples include monitoring of CPU utilization that exceeds a desired threshold, a configuration mismatch, or an OSPF reachability problem.

NetEdit subscribes to the status of the NAE agent, collecting data when an issue of interest occurs. Integrations with tools like ServiceNow, TOPdesk and Slack then provide for fast notifications, prompting operators to take corrective action.

Upon clicking into NetEdit, the Network tab highlights the devices that match the notification criteria. From here, operators can quickly drill into the impacted device or service and begin troubleshooting by using full diagnostic details that are correlated with the time the event occurred.

In this manner, NetEdit and NAE significantly reduce the number of manual tasks that typically burden operators when troubleshooting. It also produces less load on the network, so performance is not impacted in the process of collecting network-wide telemetry.

Automatic Imports from the Aruba CX Mobile App

To provide further simplicity, Aruba offers a mobile app that enables operators to install Aruba CX switches on iOS and Android devices. Switches that are connected to the network via the **Aruba CX Mobile App** are automatically imported into NetEdit for policy conformance verification.

ADDITIONAL INFORMATION

Consult with your Aruba account representatives for guidelines on the following NetEdit solution components:

- Supported and recommended VMware versions
- Server specifications

Aruba NetEdit is available from the **Aruba Service Portal**. Customers must visit the Aruba Airheads Community and **create an Airheads account** in order to download the NetEdit software. The link for downloading software from this portal is **here**.

DOCUMENTATION

For documentation including manuals for NetEdit, refer to the Documentation tab on the **Aruba Support Center**.

ORDERING INFORMATION

NetEdit is currently available on a trial basis for up to 25 nodes (network switches). There are also licensing options for oneand three-year subscriptions for Aruba Support Services.

ORDERING INFORMATION	
Part Number	Description
N/A	Aruba NetEdit 25 node trial
JL639AAE	Aruba NetEdit Single Node: 1 year
JL640AAE	Aruba NetEdit Single Node: 3 years

Select either 1- or 3-year subscriptions.



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