



The Power of We™

Avaya Configuration and Orchestration Manager

It's a fact. Applications that support strategic business plans and goals are more dependent than ever before on complex network services and protocols. And, although these services and protocols are becoming more complex, installation and configuration of them shouldn't have to be. That's where Avaya Configuration and Orchestration Manager comes in.

What is Avaya Configuration and Orchestration Manager?

Avaya Configuration and Orchestration Manager is a real-time web-based network management solution that offers best-in-class configuration, provisioning and troubleshooting for a wide range of network devices and technologies.

Designed to support multiple users, the topology-driven Avaya Configuration and Orchestration Manager is ideal for companies that want a cost-effective, easy-to-use and easy-to-manage solution that simplifies configuration and device provisioning.

Avaya COM allows authorized and authenticated personnel to conveniently, quickly and securely configure devices on the network regardless of where the user or the device is located.

The solution supports the Avaya portfolio of Ethernet Routing Switches, Virtual Services Platforms, and Wireless LAN (WLAN) products as well as Avaya IP phones.

Centralized element management and access control

Avaya Configuration and Orchestration Manager helps reduce the administration, complexity and related costs of configuring, provisioning and troubleshooting your network — all from one central server.

As a GUI-driven solution, Avaya COM includes anywhere-anytime, network-wide device element management, inventory, updates, and device and user access control. Furthermore, its intuitive and easy-to-use wizards can help reduce

configuration time by as much as 70 percent, freeing up valuable IT expertise.

Avaya COM's powerful user access controls not only protect the network against unauthorized access, but also help avoid misconfiguration issues and downtime. And if you want insight into who made changes and when, the solution's audit logs allow you to see all the details, including who, what and when.

Element management is performed through scalable plug-in software called Off-Box Enterprise Device Manager (EDM). With EDM, you can manage all elements from one server — including assigning specific users access to a given device. Unlike on-box solutions that have limited processing power, Off-Box EDM is able to leverage the server's powerful CPU and memory to accelerate configuration processes and perform faster and better system monitoring.

For organizations with older devices in their network, Avaya COM also supports Java Device Manager (JDM) in addition to Off-Box EDM. Avaya COM will automatically launch JDM or EDM depending on the type of device.

A look at Configuration and Orchestration Manager sub-managers

Avaya Configuration and Orchestration Manager includes multiple sub-managers that allow you to monitor, manage and configure protocols and settings in network devices. For example, the Multicast and VLAN management tools allow network managers to quickly configure or re-configure networks to support new service requirements.

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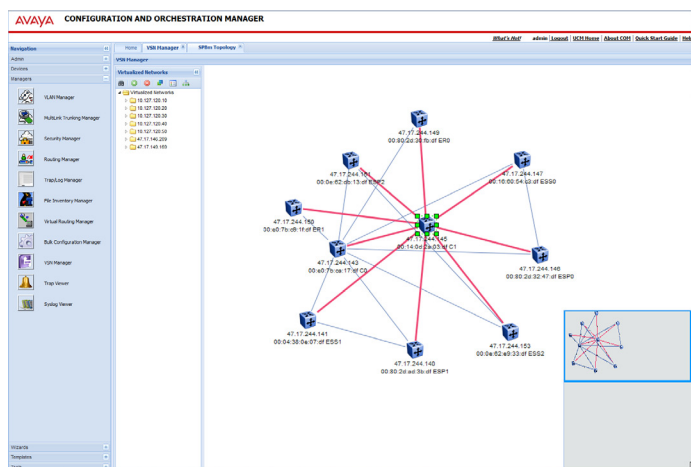


Figure 1. Avaya COM topology views help monitor and simplify network set-up

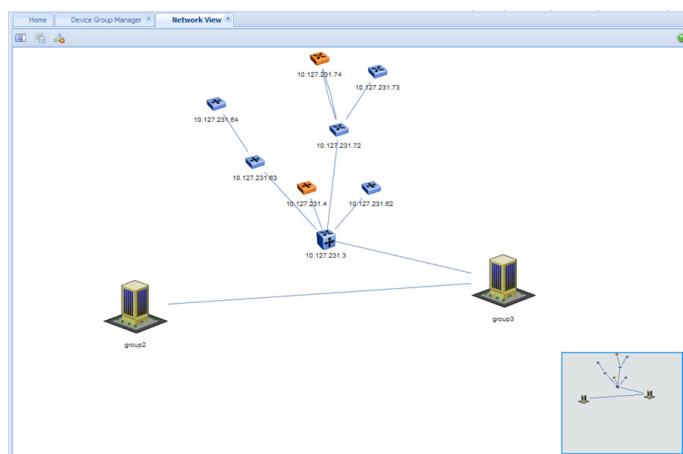


Figure 2. Devices can be grouped on the topology map to help simplify network views while improving manageability

VLAN Manager

With VLAN Manager, network managers can create, delete or modify VLANs across one or multiple devices. They can also view VLAN nodes across the network, as well as view VLAN membership, port configurations and Spanning Tree Protocol information. VLAN configurations can also be exported to a flat file.

Multi-Link Trunking Manager

The Multi-Link Trunking Manager allows creation, deletion and editing of Multi-Link or Split Multi-Link Trunk (MLT or SMLT) membership information across devices in the network. MLT and SMLT are key technologies of the Avaya Virtual Enterprise Network Architecture (VENA) and enable multiple switch ports to be aggregated into a single logical port with access to the total bandwidth.

Bulk Configuration Manager

The Bulk Configuration Manager centralizes file uploads or downloads across multiple devices. This feature makes it easy to schedule, update and deploy updated images or configuration files across the network. It can also perform centralized backup and restore of device configurations, including automated re-boot after a restore operation.

Virtual Routing and Forwarding Manager

The Virtual Routing and Forwarding (VRF) Manager enables users to configure VRF services via a single GUI workflow. It further enables users

to be mapped to a specific VRF instance for access control and device partitioning purposes, especially where multiple users, enterprises and/or divisions may share a VRF-based device.

Virtual Services Network Manager

The Virtual Services Network (VSN) enables users to monitor, configure and troubleshoot Shortest Path Bridging (SPB) parameters on Avaya ERS and VSP platforms. This includes the ability to discover and provision the Layer 2, Layer 3 and BGP VSNs, as well as view and troubleshoot the SPB topology. VSN Manager further operates in conjunction with Avaya Virtualization Provisioning Service (VPS) to synchronize VSN/SPB provisioning and monitoring with an enterprise's virtual server environment.

Multimedia Manager

Multimedia Manager enables users to manage Ethernet switch parameters associated with Avaya IP phones. The Auto Detect/Auto Configuration (ADAC) capability on Avaya Ethernet switches automatically detects and configures VLAN, port and QoS settings for Avaya IP phones. Multimedia Manager allows users to view and configure the Ethernet port parameters (including IEEE 802.1ab settings) associated with the ADAC service.

Routing Manager

With the Routing Manager, users can configure routing parameters on network devices discovered by Avaya Configuration and Orchestration

Manager. The manager supports IP Routing, RIP, OSPF, ARP, VRRP, IPv6 Routing and Ipv6 OSPF.

Multicast Manager

The Multicast Manager enables administrators to view and configure devices that use multicast protocols, including viewing of multicast delivery trees. The manager supports IGMP, DVMRP and PIM-SM protocols.

Trap and Log Manager

With Trap and Log Manager, administrators can view traps and log files for network devices, as well as set event notifications. Trap/log severity levels can be configured via color codes and viewed within the event manager. The manager can also propagate the trap/log levels to the topology map by the color codes. Event notifications can be sent to a specific host and/or port, as well as via e-mail. By consolidating traps and logs for all managed devices, Avaya Configuration and Orchestration Manager can eliminate the overhead of checking individual device event status.

Security Manager

Security Manager helps centralize network management access to devices discovered by Avaya Configuration and Orchestration Manager. This tool allows network managers to set, change and synchronize passwords and security features for CLI access, web access, SNMP access, RADIUS properties and access policies.

Features and benefits at a glance

Feature	Benefit
User-based views allow administrators to create device groupings, which can be assigned to users and/or displayed on the topology map.	Better control of user access to the network. Simplified topology maps, especially for large networks.
Advanced event management lets administrators associate colors to trap types or severities. When a trap is received, topology map icons can be color-highlighted and an e-mail sent to users.	Quick visualization of network issues helps troubleshooting.
Proactive change management compares device configurations to a previous baseline during and delivers results in a report or e-mail message.	Improved configuration monitoring helps reduce network errors.
IP phone discovery with centralized oversight of related Ethernet switch parameters.	Enhanced integrated management of Avaya IP phones within the network.
Increased scalability for larger networks.	Up to 1,500 devices can be managed via a single license.

Inventory Manager

Inventory Manager can discover and display lists of hardware and software installed across the network. This helps an enterprise build a consolidated view of its network equipment. Inventory information can also be imported or exported to an external file.

Wizards and templates

Avaya Configuration and Orchestration Manager also facilitates the most complex network set-up tasks through simplified, intuitive wizards and easy-to-use templates. Operating through a guided workflow, wizards help create configuration templates that can be saved and used multiple times. This can result in fewer keystrokes, accelerated installation and a reduction in errors that can lead

to costly network downtime. Wizards are available for the following complex protocols and services:

- Split Multi-Link Trunking/Multi-Link Trunking (SMLT/MLT) Clustering
- Virtual Local Area Network (VLAN) Management
- Virtual Services Networks (VSN)
- Software Device Patch Management

Key features and tools

TFTP Server allows file transfers between servers without authentication. You can also trace information on file transfer when the trace mode feature is enabled.

Smart Diff is a tool that compares ASCII-based switch configuration files. Through analysis, it creates a Diff list that can be stored as a file.

Device Port Scan enables network device port scanning to determine the MAC addresses of connected end nodes. The data collected from these

scans is stored and put into a file format. Scans can be scheduled at regular intervals or manually triggered.

Scheduler allows you to schedule tasks submitted by sub-managers. This tool runs in the background independent of Avaya Configuration and Orchestration Manager. It can execute scheduled tasks with or without COM running in front.

CLI management allows users to interact with the device using Telnet and SSH. CLI manager is integrated with Avaya Configuration and Orchestration Manager, eliminating the need to install the tool on individual devices.

Supported devices

- Virtual Services Platform 9000 – v3.0 or higher
- Virtual Services Platform 7000 – v10.0 or higher
- Ethernet Routing Switch 8600/8800 – v4.0 or higher
- Ethernet Routing Switch 8300 – v4.1, v4.2
- Ethernet Routing Switch 5510, 5520 – v6.0 or higher
- Ethernet Routing Switch 56xx – v5.1 or higher
- Ethernet Routing Switch 5530 – v5.1 or higher
- Ethernet Routing Switch 48xx – v5.6 or higher
- Ethernet Routing Switch 45xx – v5.2 or higher

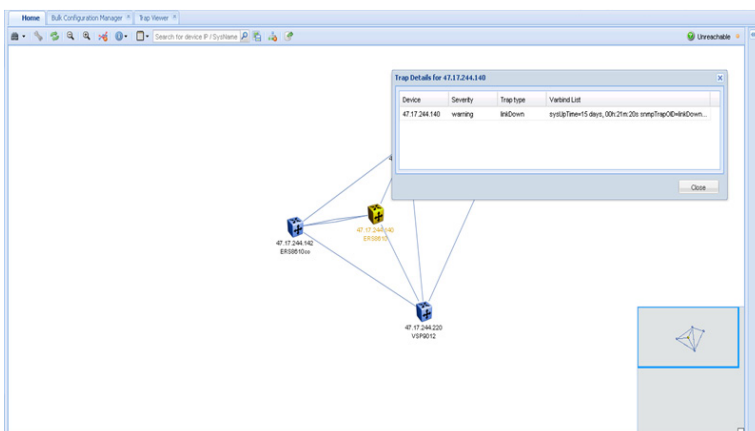


Figure 3. Device events can be color-highlighted and viewed from the topology map

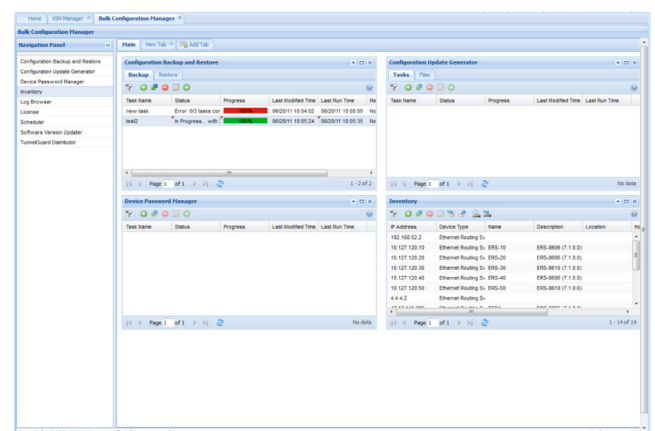


Figure 4. Bulk Configuration Manager enables centralized management of device software

- Ethernet Routing Switch 35xx — v5.0 or higher
- Ethernet Routing Switch 25xx — v4.1 or higher
- Ethernet Routing Switch 16xx — v2.1.5.x or higher
- WLAN 8100 — v1.0 or higher
- WLAN Access Points 2200 and 2221 — 1.3
- Belden Hirschmann devices

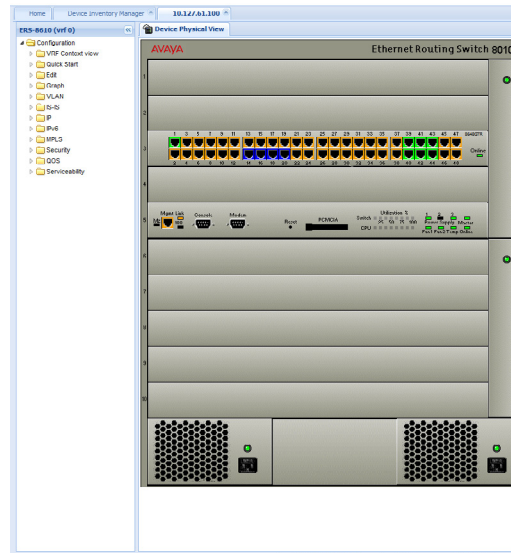


Figure 5. Off-Box Enterprise Device Manager (EDM)

WHAT IS OFF-BOX ENTERPRISE DEVICE MANAGER?

Centralized Off-Box EDM is state-of-the-art device element management software that allows you to manage all devices centrally from a single server. Through Off-Box EDM, you have better control over who makes changes to devices. The manager offers:

- Read-only and read-write access control
- User-based access control and device list management
- Support for up to 30 EDM user sessions concurrently
- User-based audit logs

Learn More

To learn more about Avaya Configuration and Orchestration Manager, contact your Avaya Account Manager or Avaya Authorized Partner. Or, visit us online at avaya.com.

About Avaya

Avaya is a global provider of business collaboration and communications solutions, providing unified communications, contact centers, networking and related services to companies of all sizes around the world. For more information please visit www.avaya.com.