

# CloudVision®



## Inside

### Cloud Automation For Everyone

Arista's CloudVision simplifies complex time and resource intensive tasks in a turnkey software solution designed to help customers move to a more automated, cloud-like infrastructure.

### A Network-Wide Database

With CloudVision, the EOS state database model is expanded to a network-wide view with NetDB.

### Complements the Cloud

Using open, standards-based OVSDB and RESTful APIs, CloudVision helps to both simplify and scale controller integration through an abstracted network view and a single point of integration.

### Workflow Automation

Workflow monitoring and provisioning is controlled centrally with pre-integrated tool sets for provisioning, change management, network-wide upgrades & rollback, network compliance auditing, and automated bug visibility.

### Network Telemetry

CloudVision Analytics engines and CloudVision Telemetry Apps take full advantage of the state streaming infrastructure of EOS and NetDB to give Arista customers an unprecedented level of visibility into their network operations.

## Introduction

As data center virtualization, agile provisioning of cost-predictive services, and widespread adoption of cloud network services becomes more prevalent, organizations are driven toward an evolving operating model that applies programmatic and DevOps principles enabling a level of efficiency that the largest cloud titans have already mastered. Traditional organizations have been historically relegated to weave together a patchwork of legacy provisioning and monitoring solutions to manage network operations, while correlating SNMP data, counters, and other various metrics for troubleshooting on a per box and per port basis. Implementing a cohesive network management framework for today's software driven cloud networks remains a particularly arduous challenge for IT decision makers who find they lack the time, resources, and knowledge base within their organization to build a strategic solution. Arista's CloudVision® empowers organizations to simply and effectively bridge a dynamic set of physical and virtual network services with an operational foundation that integrates the automation of provisioning and change management tasks while providing real-time, network wide visibility.

It was specifically designed to simplify the integration of orchestration systems, overlay controllers, and other network services by abstracting the underlying physical network.



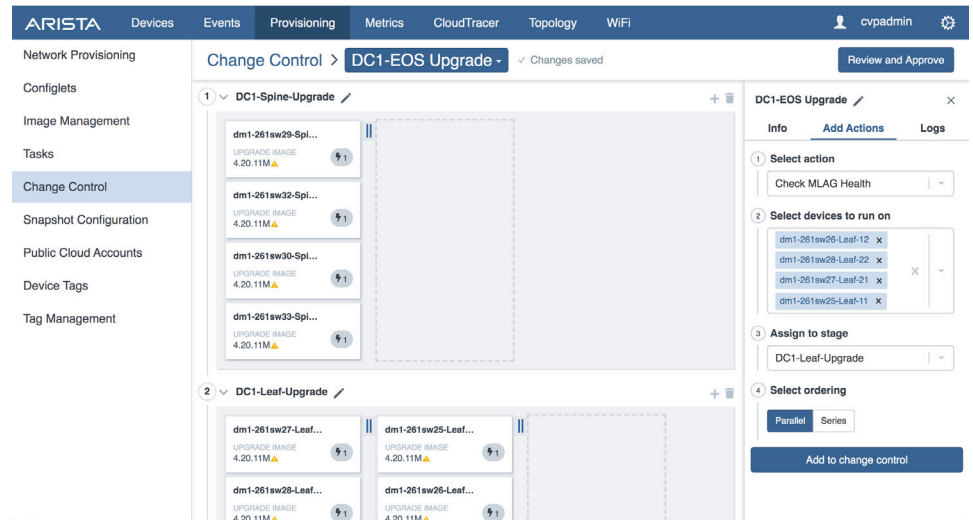
### Arista EOS CloudVision Overview

CloudVision is turnkey solution for network-wide workload orchestration, workflow automation, real-time visibility into network operations. CloudVision's foundation is based on the EOS NetDB, which are infrastructure services for streaming, sharing and aggregating the working state of physical switches running EOS. It was specifically designed to simplify the integration of orchestration systems, overlay controllers, and other network services by abstracting the underlying physical network. It is the platform for integration with Arista's ecosystem of partners, including VMware, Palo Alto Networks, Checkpoint, Fortinet, ServiceNow, and others.

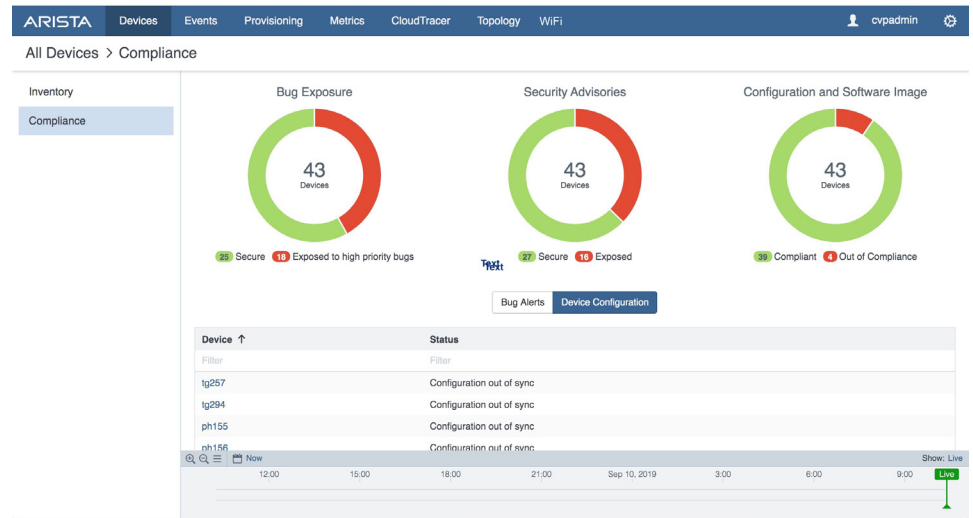
CloudVision is also a web-platform that combines a front-end web-based dashboard for performing the pre-integrated operational workflows and a backend state repository and analytics engine for maintaining historic network state. Workflow automation in CloudVision permits operators to execute common deployment and configuration tasks from a single visual touch point. The portal includes a turnkey solution for Arista's Zero Touch Provisioning (ZTP) and extends that from automating initial device provisioning to include automating ongoing change controls over the operational life cycle of the network devices. CloudVision includes a hierarchical configuration model leveraging config modularity and config reuse to help simplify configuration change management.

The CloudVision database also keeps historical data, including a history of network state, configuration and software versions. This state can be used for taking a network-wide 'snapshot' for pre- and post-change control verification of the network, helping to simplify the change management process and reduce maintenance window times. The Change Control management infrastructure enables advanced pre-integrated tasks such as Smart System Upgrades (SSU) and rollback that can be staged and executed network-wide as part of the portal's change control automation.

To leverage this rich network data, the CloudVision platform provides both the analytics engine and telemetry visualization for this network-wide state to give Arista customers improved visibility, faster problem isolation and correction, and greater visibility of network performance over time.



CloudVision can be used to address audit and compliance requirements, including device inventory, configuration, and image versions. Notification for bug alerts, security and PSIRT announcements are presented via real-time updates from [www.arista.com](http://www.arista.com) to the portal, helping to keep the operator aware of the latest recommendations.



NetDB state streaming provides a modern and granular approach for capturing the state of each network device. To leverage this rich network data, the CloudVision platform provides both the analytics engine and telemetry visualization for this network-wide state to give Arista customers improved visibility, faster problem isolation and correction, and greater visibility of network performance over time. And consistent with Arista's open and programmable model, CloudVision is equipped with open and complete APIs for integration with an organization's existing management and monitoring framework.



## A Complete Cloud Management Solution

CloudVision is a network-wide approach for workload orchestration and workflow automation delivering a turnkey solution for cloud networking. Built on EOS and with an expanded network-wide database view, CloudVision gives operators a complete automation solution for cloud networking.



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