

# EOS+ Solution Overview

## The Convergence of DevOps and NetOps

In the past, the networking, storage, compute, virtualization and applications worlds were managed as silos. A more integrated approach results in organizational efficiencies and a much lower TCO for enterprises. The Arista EOS+ platform allows the network to be easily integrated with compute, storage and applications, leveraging the programmatic foundations of EOS®. Workload-based provisioning and monitoring can now be integrated with the network ensuring that provisioning of the network elements keeps up with the frenetic pace of change in today's data center.

## The Ability to Adapt

Legacy networking software stacks have struggled to adapt to the changing cloud-based networking requirements. Typically built on closed, proprietary architectures, these software offerings are often limited by their complex and bloated infrastructures. True integration is difficult as the necessary programmability tools are only added as an afterthought.

The Arista Extensible Operating System, EOS, has been built from day one to allow for robust integration and network programmability at cloud-scale. The Arista EOS architecture allows full programmatic access to all aspects of the software, including the event-driven, state-based infrastructure known as SysDB. Already proven at cloud-scale, the EOS approach provides automation and integration flexibility to help gain the efficiencies and cost-savings leveraged in DevOps environments.

### What is EOS+?

EOS+ is the platform for integration with the EOS software stack. There are four building blocks in the EOS+ suite, shown in the diagram below:

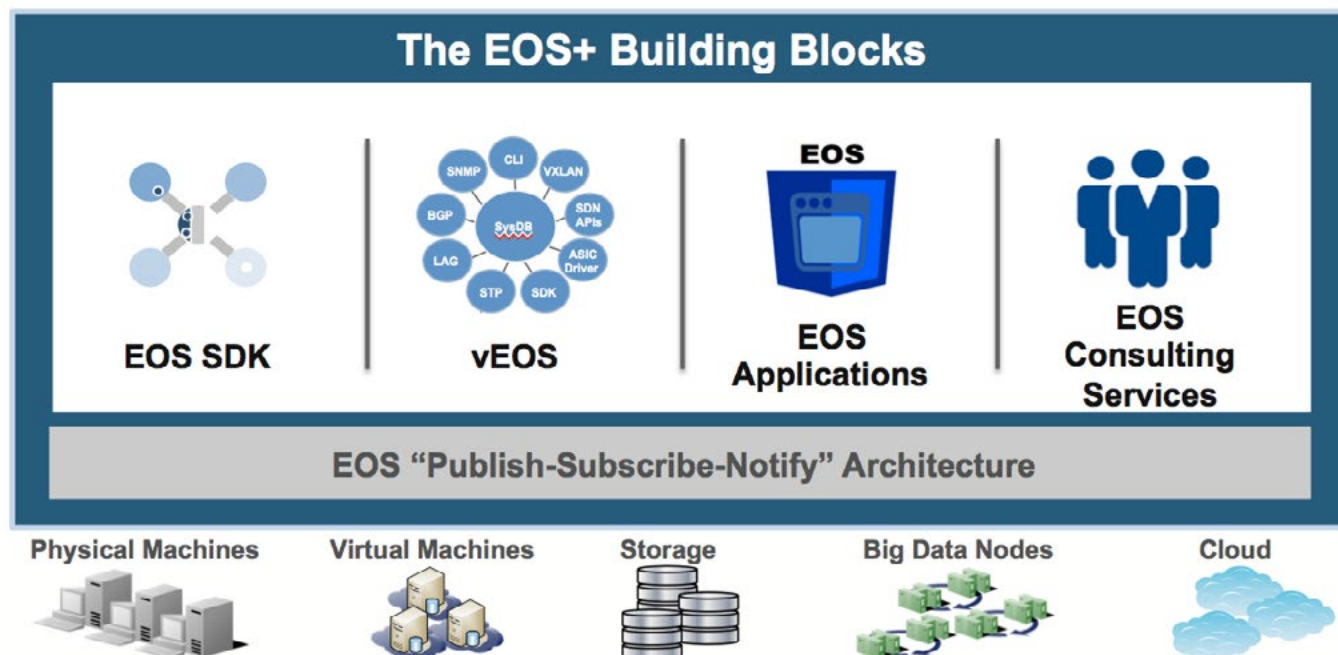


Figure 1: The building blocks of EOS+

#### EOS SDK

The Arista EOS SDK is the native integration point for building applications on top of EOS. A proof point of the EOS open principles, the EOS SDK provides an abstraction of the EOS architecture for Arista solution partners and customer integration. Customers can use the EOS SDK for a “do-it-yourself” approach to create applications that are custom-fit for their network environments. This approach can be used for all types of functionality including customized IP routing, protection against DDoS attacks through selective workflow-based filtering, or data analysis for fine-grained visibility. This setup is ideal for large enterprises and cloud providers that require a high degree of workload mobility and workflow visibility along with the proven effectiveness and reliability of today’s EOS.

#### vEOS

vEOS extends the EOS software platform from the physical switches to a virtual machine-based offering. vEOS provides a flexible solution for rapidly testing lab uses cases, with a diminished need for physical switches. Since vEOS is an actual EOS image, it can be an effective tool for network design, validation of EOS images, rapid development and testing of EOS, as well as for training initiatives.

#### EOS Applications

EOS Applications are turnkey software solutions that extend the baseline EOS feature set. EOS Applications offer integration with technology partners and DevOps tools, addressing a wide range of operational needs such as provisioning and monitoring. Examples of EOS Applications include a ZTPServer offering as well as

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a Network Telemetry solution for Splunk® Enterprise. These pre-built applications provide complete solutions with 24x7 support from Arista's Technical Assistance Center (TAC) engineers.

### **EOS Consulting Services**

Arista's EOS Consulting Services provide customers with access to highly qualified Arista network developers to assist in building new network solutions. When customers would like to add specific functionality or integration to EOS but lack internal development resources, the EOS consulting services provide a turnkey solution. The service offering includes EOS Application customization, custom software development, training and support.

### **Conclusion**

The EOS+ platform is a powerful tool to improve operational efficiencies of network operations and dramatically lower TCO. Building on the architectural principles of EOS' open and standards-based approach, EOS+ is built for true data center stack integration across both 3rd party solutions and customer specific needs.

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