Arista Networks Telemetry Application for Splunk v1.1.1

Data Sheet

Product Highlights

Why is the Telemetry Application needed?

- Monitoring and visualization at scale requires intelligent indexing of large data sets
- Standard system logging provides minimal device state information
- Consolidation of rich data from EOS provides real time and historical analytics of network state and performance
- Centralized, proactive alerting of key events is vital to always on operations
- Topology and health visualization provides deep insight into current network operations to minimize downtime

What does the telemetry app index?

- System logging data (syslog)
- Network topology via LLDP
- Switch health and inventory data (modules and transceivers) including power consumption, optical light levels and switch capacity
- Latency Analysis data (LANZ)

Leverages Arista EOS

- Direct EOS CLI integration for Splunk Universal Forwarder configuration
- eAPI based Telemetry App gathers system state for export to Splunk
- Provides rich metrics of network health and performance directly from EOS Sysdb

Extensible

- Modular design permits custom Splunk Universal Forwarder configurations for data export
- Custom data export and facts can be developed by customers or EOS Consulting Services

Supported EOS Platforms and Versions

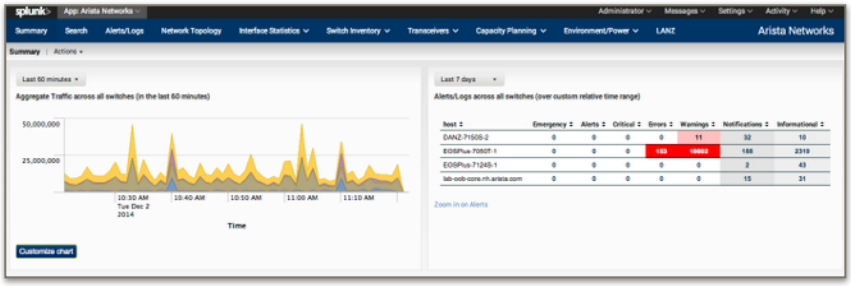
- All 1 and 2RU fixed Arista platforms
- Arista modular systems
- EOS version 4.13.3 or greater
- 7148/7124/7120T/7140T platforms require EOS version 4.13.8 or greater

Overview

The Arista Networks Telemetry Application for Splunk is the latest addition to the suite of Telemetry applications available for EOS. Arista EOS provides visibility into network traffic via such mechanisms as Latency Analyzer (LANZ), Data Analyzer (DANZ), sFlow, Path Tracer, VM Tracer, MapReduce Tracer as well as tools like Advanced Event Monitor (AEM) that provides an on-switch record of data-plane forwarding changes.

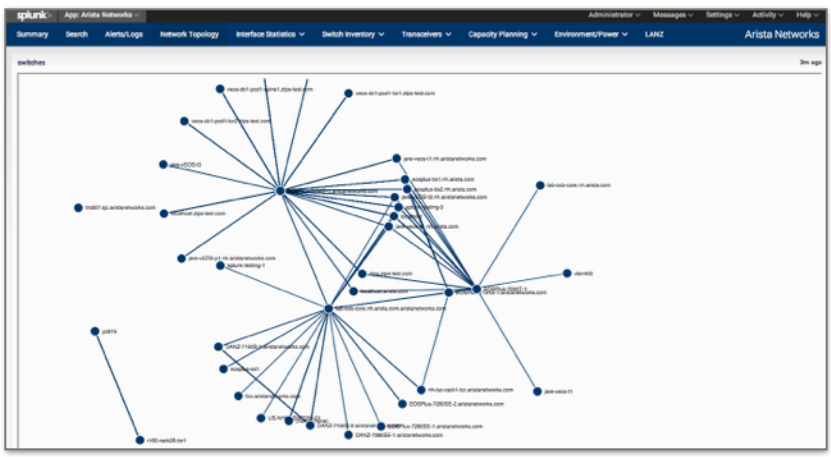
Arista's Network Telemetry Application for Splunk augments these with additional network telemetry data pushed to a centralized Splunk server. The Arista Network Telemetry App for Splunk provides pre-built dashboards, views, searches and add-ons for visualizing this network telemetry data.

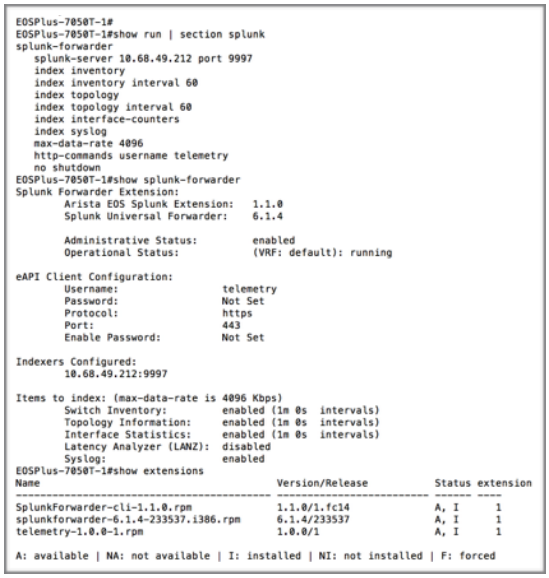
As enterprises and service providers evolve from traditional static networks to virtualized on-demand cloud networks, troubleshooting and monitoring toolsets also need to evolve to provide fine-grained visibility into application performance and network wide monitoring capabilities that integrate with both industry standards and customer specific dev/ops solutions. The Arista Networks Telemetry Application for Splunk provides such a solution.



Empowering Deep Insight and Visualization

Traditional syslog and SNMP provide standard interfaces for collection and visualization, but are difficult to scale, index, correlate and visualize in the data center context. The Network Telemetry Application for Splunk proactively exports rich information and statistics in a format that is indexed and stored by the Splunk server. Ad hoc or prebuilt queries provide alerting based on the wealth of data indexed in real-time. This provides network operators the power to automate sifting through large data sets, alerting and pinpointing specific indicators of failure or health degradation.





```
EOSPlus-7050T-1#
EOSPlus-7050T-1#show run | section splunk
splunk-forwarder
   splunk-server 10.68.49.212 port 9997
   index inventory
   index inventory interval 60
   index topology
   index topology interval 60
   index interface-counters
   index syslog
   max-data-rate 4096
   http-commands username telemetry
   no shutdown
EOSPlus-7050T-1#show splunk-forwarder
Splunk Forwarder Extension:
        Arista EOS Splunk Extension:   1.1.0
        Splunk Universal Forwarder:    6.1.4

        Administrative Status:         enabled
        Operational Status:            (VRF: default): running

eAPI Client Configuration:
        Username:                 telemetry
        Password:                 Not Set
        Protocol:                 https
        Port:                     443
        Enable Password:          Not Set

Indexers Configured:
        10.68.49.212:9997

Items to index: (max-data-rate is 4096 Kbps)
        Switch Inventory:         enabled (1m 0s  intervals)
        Topology Information:     enabled (1m 0s  intervals)
        Interface Statistics:     enabled (1m 0s  intervals)
        Latency Analyzer (LANZ):  disabled
        Syslog:                   enabled
EOSPlus-7050T-1#show extensions
Name                                      Version/Release           Status extension
----------------------------------------- ------------------------- ------ ---
SplunkForwarder-cli-1.1.0.rpm             1.1.0/1.fc14              A, I      1
splunkforwarder-6.1.4-233537.i386.rpm     6.1.4/233537              A, I      1
telemetry-1.0.0-1.rpm                     1.0.0/1                   A, I      1

A: available | NA: not available | I: installed | NI: not installed | F: forced
```

Solution Components

The complete Telemetry Application for Splunk solution includes:

Telemetry v1.1.0 extension

- An Arista supported package that collects facts from the EOS system

EOS CLI for Splunk v1.1.1 extension

- Provides access to and persistent storage for the most common Splunk Universal Forwarder configuration items from the EOS CLI.

Arista Networks App for Splunk Dashboard v1.2

- A dashboard application built for Splunk server.

Splunk Universal Forwarder package v6.1.3 or greater

- A package provided by Splunk, handles the forwarding of facts to the Splunk server

Flexible deployment and configuration

The Telemetry Application for Splunk can be deployed as a set of packages via automation systems or via standard CLI based operations. Once deployed and installed, the customer has a choice of CLI or native configuration filed configuration of the Splunk Universal Forwarder. This flexibility enables ease of test and deployment while providing direct access to the standard Splunk configuration files for customers that choose Splunk deployment server options.

Feature	Benefit
Arista specific telemetry data made available to Splunk server. (Syslog, Inventory, Interface Stats, Topology)	Adds Splunk visibility and alerting to the network as well as the rest of the IT Infrastructure
Splunk Universal Forwarder configured from EOS Config	Simple integrated Splunk forwarding on Arista switches
LANZ data forwarded to Splunk Server	Consolidated, searchable and reportable network inventory and performance data in Splunk
Fully supported by Arista	Tested and supported for use in production networks

Ordering Information

Product Number	Product Description
SS-APP-TELE-1M	Arista EOS+ Telemetry Application per device monthly subscription - delivered electronically

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