Data Sheet

Product Highlights

ZTX-7250S-16S-F

- · 80 Gbps Aggregate Throughput
- · 16 x 1/10 Gbps Ethernet ports (SFP+)

Virtual ZTX Appliances

- · 1 Gbps or 10Gbps Aggregate Throughput
- · CloudEOS on ESXi or KVM

Traffic Mapping

- Stateful packet inspection of mirrored traffic from the network
- · TCP/UDP/ICMP session analysis
- EOS switches provide option to truncate and rate limit mirrored packets
- Track session state and directionality to simplify the creation of zero trust rules
- Summarizes sessions with the same L4 ephemeral port
- · Deduplicates the same sessions coming from different switches in the network
- Collects bidirectional traffic counters for each session

Zero Trust Policy Planning

· Arista CloudVision MSS Policy Builder

Enterprise and DC Resilience

- · N+1 redundant power/cooling
- · Traffic load balancing
- SSU for software upgrades and hitless patching

Arista Extensible Operating System (EOS®)

- · Single binary image
- · Fine-grained truly modular network OS
- · Stateful Fault Containment (SFC)
- · Stateful Fault Repair (SFR)
- · Full access to Linux shell and tools
- Extensible platform: bash, python, C++, Go, OpenConfig

Unleash Visibility For Zero Trust: Introducing the Arista ZTX Traffic Mappers For MSS

The Arista ZTX Traffic Mapper for MSS are a family of EOS based physical (ZTX-7250S) and virtual appliances (vZTX) that leverage the Arista MSS (Multidomain Segmentation Service) technology to provide a scalable and interoperable network-wide solution for zero-trust policy planning and continuous traffic monitoring.

Zero Trust principles require all traffic to be explicitly allowed by security policies. To create zero trust policies that explicitly allow only the existing valid traffic, it is necessary to have full visibility into the traffic sessions on the network. The ZTX appliances empowers Arista MSS with a powerful Traffic Mapping service. This service provides:

- · Precise and granular zero trust policy planning: gain deep insights into network traffic flows, enabling the creation of accurate and granular zero-trust policies.
- · Visibility into policy violations: identify traffic flows violating configured zero trust rules, allowing for targeted policy adjustments.

CloudVision MSS Policy Manager configures "monitoring" rules in the network, mirroring selected traffic to the ZTX appliance which analyzes (via stateful inspection) network packets and generates a detailed traffic map of all the endpoint communications. Based on this map, CloudVision MSS Policy Builder recommends zero trust rules to explicitly allow the traffic between microperimeters. This simplifies the planning process of zero trust policies and enable the deployment of granular microperimeter policies without inadvertently breaking any existing applications.

To complete a zero trust policy the "last rule" drops any traffic not explicitly permitted. The ZTX then continuously monitors dropped traffic, providing insights for potential policy adjustments to explicitly allow new valid applications to connect to the network.



Arista ZTX-7250S MSS Traffic Mapper

Arista EOS

The Arista ZTX appliances runs the same Arista EOS software as all Arista products, simplifying network administration. Arista EOS is a modular switch operating system with a unique state-sharing architecture that cleanly separates switch state from protocol processing and application logic. Built on top of a standard Linux kernel, all EOS processes run in their own protected memory space and exchange state through an in-memory database. This multi-process state-sharing architecture provides the foundation for in-service software updates and self-healing resiliency.



System Overview

Arista ZTX-7250-16S

Provides:

- · 80 Gbps Aggregate Throughput
- · 16 x 1/10 Gbps Ethernet ports (SFP+)



Performance

Parameter	Scalability
Total aggregated* IPv4 sessions	10 Millions (tested) (32 Million max)
Bandwidth at 256 bytes (truncated mirrored traffic from MSS switches)	80 Gbps
Max number of GRE tunnels (= mirroring devices)	256
Port Channel	16

^{*}Session aggregation based on aggregating similar session with different L4 ephemeral ports into a single IPFIX record exported to CloudVision

Power supplies and Fans

The ZTX-7250-16S MSS Node supports n+1 redundant power supplies. It ships with two power supplies by default. The ZTX-7250-16S MSS Node has built-in fans as shown in the figure below. It ships with four hot-swappable field-replaceable fans.



ZTX-7250-16S Rear (front to rear airflow)



vZTX	1Gbps Minimum Requirements
Minimum Server Requirements	 Intel(R) Xeon(R) CPU E5-2650 v3 @ 2.30GHz 2 cores 32 GB memory Intel VT-d support
Network Card Support	1 x 82599EB in SRIOV modeIntel X710, X520
Hypervisor Support	 KVM (RedHat Enterprise Linux version 7.0-7.4) VMware (ESXi version 6.0 and and above)
Virtual Machine	2 vCPUs32 GB memory
Minimum EOS Version	TBD
Minimum CloudVision Version	TBD

vZTX	10Gbps Minimum Requirements
Minimum Server Requirements	 Intel(R) Xeon(R) CPU E5-2650 v3 @ 2.30GHz 4 cores 16 GB memory Intel VT-d support
Network Card Support	1 x 82599EB in SRIOV modeIntel X710, X520
Hypervisor Support	 KVM (RedHat Enterprise Linux version 7.0-7.4) VMware (ESXi version 6.0 and and above)
Virtual Machine	4 vCPUs32 GB memory
Minimum EOS Version	TBD
Minimum CloudVision Version	TBD



Advanced Monitoring and Provisioning

- · Mirror-to-GRE Destination/Flow Collector
- · Zero Touch Provisioning (ZTP)
- · Integrated packet capture/analysis (tcpdump/libpcap)
- · IPFIX

Extensibility

- · Advanced Event Management (AEM)
- · CLI Scheduler
- · Event Manager
- · Event Monitor
- · Linux Tools
- · Bash shell access and scripting
- · RPM support
- · DevOps/NetOps Tool Support
- · CloudVision
- · Ansible/Chef/Puppet/Salt
- · ServiceNow
- · Programmatic access to network-wide state
- · Python, C++, Go

SNMP MIBs

- · RFC 3635 EtherLike-MIB
- · RFC 3418 SNMPv2-MIB
- · RFC 2864 IF-INVERTED-STACK-MIB
- · RFC 2863 IF-MIB
- · RFC 2790 HOST-RESOURCES-MIB
- · RFC 2013 UDP-MIB
- · RFC 2012 TCP-MIB
- · RFC 2011 IP-MIB
- · RFC 6353 SNMP-TLS-TM-MIB
- · RFC 5591 SNMP-TSM-MIB
- · HOST-RESOURCES-MIB
- · ENTITY-STATE-MIB
- · ENTITY-MIB
- · ARISTA-SNMP-TRANSPORTS-MIB
- · ARISTA-SMI-MIB
- · ARISTA-PRODUCTS-MIB
- · ARISTA-PFC-MIB
- · ARISTA-IF-MIB
- · ARISTA-DAEMON-MIB
- · ARISTA-CONFIG-MAN-MIB
- · ARISTA-CONFIG-COPY-MIB
- · User-configurable custom OIDs

SNMP TRAPs

- Authentication Failure trap, linkUp, LinkDown, coldStart, nsNotifyRestart, entConfigChange, entStateOperEnabled, entStateOperDisabled supported.
- Additional event traps and log messages can be generated through AEM and eAPI scripting.

Network Management

- · CloudVision
- · Configuration session commit and rollback
- · 100/1000 Management Port
- · RS-232 Serial Console Port
- · USB A & C Port
- · SNMP v1, v2, v3
- · Telnet and SSHv2
- Syslog
- · AAA
- · Industry Standard CLI
- · Beacon LED for system identification
- · System Logging
- · Environment monitoring
- · Maintenance mode

Extensibility

- · Linux Tools
- · Bash shell access and scripting
- · RPM support
- · Custom kernel modules
- · Programmatic access to the system state



Feature/Model	ZTX-7250-16S	
Ports	16 1/10G SFP+	
CPU	20-core Intel x86 processor	
System Memory	128 GB	
System Flash	1 TB	
USB Ports	2	
Console Ports	1	
100M/1G Management port	1	
Bluetooth Antenna	1	
Airflow	Front to Rear	
Power (Max)	800 W	
Size (WxHxD)	17.32" x 3.47" x 20.47" (44 x 8.8 x 52 cm)	
Weight	29.98 lbs. (13.6 kg)	
Fans:	FAN-7202-RED (3 + 1)	
Maximum Power Supplies	2	
Power Supply	PWR-861-AC-RED	
Min EOS version	4.33.2	
Min CloudVision version	2024.3.0	



Arista Optics and Cables

The Arista ZTX-7250-16S MSS Node supports a wide range of 1 GbE and 10 GbE pluggable optics and cables in the SFP receptacles. For details about the different optical modules and the minimum EOS Software release required for each of the supported optical modules, visit https://www.arista.com/en/products/transceivers-cables

Supported Optics and Cables

ZTX-7250S-16S-F	
Ports 1/1-1/8 (10G)	10GBASE-CR 1 0GBASE-AOC 10GBASE-SR 10GBASE-LR
Ports 1/1-1/8 (1G)	1GbE SX/LX
Ports 1/1-1/16 (1G)	SFP-1G-T
Ports 1/9-1/16 ACP (10G)	10GBASE-CR 10GBASE-AOC 10GBASE-SRL 10GBASE-SR 10GBASE-LRL 10GBASE-LR 10GBASE-ER 10GBASE-ZR 10GBASE-DWDM SFP-10G-T



Environmental Characteristics

Operating Temperature 1	0 to 40°C (32 to 104°F)	
Storage Temperature	-40 to 70°C (-40 to 158°F)	
Relative Humidity	5 to 95% (non-condensing)	
Operating Altitude	0 to 10,000 ft, (0-3,000m)	
Measured sound (ISO 7779) declared (ISO 9296) at 50% & 100% power	Lwa (dB) 57.59/68.17 (1RU)	

Emissions and Safety Compliance

EMC Emissions Immunity	FCC Part15, subpart B (Class A) ICES-003: 2020 Issue 07 EN 301 489-1 EN 301 489-17 EN55032 EN 300 386 EN 61000-3-2:2014 EN IEC 61000-3-2 EN 61000-3-3:2013, VCCI-CISPR32 AS/ NZS CISPR32 EN55035
Radio	FCC 15.247 RSS-247 EN 300 328 EN 62479
Bluetooth	BCQ
Safety	UL 62368-1, 3rd Edition CAN/CSA C22.2 No. 62368-1-19 EN 62368-1:2014+A11:2017 IEC 62368-1:2014
Certifications	BSMI, NCC (Taiwan) CE (European Union) KCC (South Korea) NRTL (North America RCM (Australia / New Zealand) UKCA (United Kingdom) VCCI (Japan)
European Union Directives	Directive 2014/53/EU Directive 2014/35/EU Directive 2014/30/EU Directive 2012/19/EU WEEE Directive 2011/65/EU RoHS Directive 2015/863/EU

Power Supply Specifications

Power Supply	AWE-5500-800-A-PS
Output Power	800W
Input Voltage	100-240AC
Input Current	10 - 5A
Input Frequency	50-60Hz
Input Connector	IEC-320-C16
Efficiency	80+ Platinum



ZTX-7250S MSS Traffic Mapper | Ordering Information

Physical Appliance Product Number	Product Description
ZTX-7250S-16S-F	Arista ZTX-7250S MSS appliance, 2 RU, 16 x 1/10 Gbps SFP+, 4 expn. slots, front to rear air, 2x AC, Includes software
FAN-7202-RED	Spare fan module for Arista 7200 Series Routers (front-to-rear airflow)
PWR-861-AC-RED	Spare 800 Watt AC power supply for Arista 7200 Series Routers (front-to-rear airflow)
SVC-ZTX-7250S-1M-2H	1-Month A-Care 24x7x2 Software & Hardware Replacement for ZTX-7250-16S
SVC-ZTX-7250S-1M-4H	1-Month A-Care 24x7x4 Software & Hardware Replacement for ZTX-7250-16S
SVC-ZTX-7250S-1M-NB	1 Month A-Care Software & NBD Hardware Replacement/Same Day Ship for ZTX-7250-16S
KIT-7010-4POST	Spare 4-post rack mount kit
KIT-7010-2POST	Spare 2-post rack mount kit
SS-CV-ZTX4-1M	CloudVision SW Subscription License for 1-Month for Arista ZTX-7250 platform . Download only.
SS-CVS-ZTX4-1M	CloudVision as-a-Service Subscription License for 1-Month for Arista ZTX-7250 platform
CAB-C13-AUS	Power Cord, Australia, C13 (2.5m)
CAB-C13-C14	Power Cord C13 to C14 (2m)
CAB-C13-C14-INTL	Power Cord C13 to C14 (2m)
CAB-C13-EUR	Power Cord, Europe, C13, 8 Feet (2.5m)
CAB-C13-IT	Power Cord, Italy, C13, 8 Feet (2.5m)
CAB-C13-UK	Power Cord, United Kingdom, C13, 8 Feet (2.5m)
CAB-C13-US	Power Cord, United States, C13 , 8 Feet (2.5m)
CAB-C13-BR	Power Cord, Brazil, C13, 10A/250V, 1.00mm2, 2.5M
CAB-C13-AR	Power Cord, Argentina, C13, 1.00mm2, 2.5M
CAB-C13-TW	Power Cord, Taiwan, C13, 2.5M



ZTX-7250S MSS Traffic Mapper | Ordering Information

Virtual Appliance Product Number	Product Description
SS-CLOUDEOS-VZTX-CVS-1G-B-1M	CloudEOS ZTX for VM/Cloud SW Sub Lic for 1-Month up to 1G throughput, 1-Month CloudVision as-a-Service for single instance, includes A-care SW Support
SS-CLOUDEOS-VZTX-CVS-10G-B-1M	CloudEOS ZTX for VM/Cloud SW Sub Lic for 1-Month up to 10G throughput, 1-Month CloudVision as-a-Service for single instance, includes A-care SW Support
SS-CLOUDEOS-VZTX-CV-1G-B-1M	CloudEOS ZTX for VM/Cloud SW Sub Lic for 1-Month for up to 1G throughput,A-care Support, and 1-Month CloudVision for single instance, includes A-care SW Support
SS-CLOUDEOS-VZTX-CV-10G-B-1M	CloudEOS ZTX for VM/Cloud SW Sub Lic for 1-Month for up to 10G throughput,A-care Support, and 1-Month CloudVision for single instance, includes A-care SW Support

Warranty

The Arista ZTX-7250S-16S MSS Node comes with a one-year limited hardware warranty, which covers parts, repair, or replacement with a 10-business-day turnaround after the unit is received.

Service and Support

Support services including next business day and 4-hour advance hardware replacement are available. For service depot locations, please see: http://www.arista.com/en/service

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