# ARISTA

## CLOUD NETWORKING PORTFOLIO

Arista Networks is the leader in building software defined, open networks for today's data center, Web 2.0, and cloud computing environments. Arista delivers the most efficient, reliable and high performance universal cloud network architectures based on 10GbE, 40GbE, and 100GbE platforms. Arista EOS® is built on an open, programmable, and resilient architecture that delivers maximum system uptime, reduces CAPEX and OPEX by simplifying IT operations, and enables business agility. Arista EOS offers programmability at all layers, including eAPI, EOS SDK, Linux APIs, DevOps integration (Puppet/Chef/ Ansible) and broad scripting support. Furthermore, Arista EOS CloudVision® extends the FOS state-based architecture to a network-wide scope as a platform for workflow automation, workload orchestration, and advanced telemetry. CloudVision's open framework leverages modern APIs and state streaming to capture granular network state and to integrate with a variety of network overlay, network orchestration, telemetry, and security ecosystem partners.

### EOS: THE PLATFORM FOR SOFTWARE DRIVEN CLOUD NETWORKING

- **ECOSYSTEM FOR EOS APPLICATIONS**  Open framework for custom or third party integration DevOps / SDN Controllers **Big Data** Orchestration Hybrid Cloud Programmable interfaces allow rapid integration Network and Security Analytics Tools Services Proven solutions with deployed examples Allows best-of-breed integration Available as standalone on GitHub or as VMware NSX. **OVSDB** Controllers, Puppet, Chef, Ansible, **OpenStack, HPE** Splunk Enterprise, turnkey solution from Arista VMTurbo, Cirba Checkpoint, F5, Fortinet, VMware vCenter VMware Log Insight Docker Palo Alto Networks **RESILIENCY AND SCALABILITY VISIBILITY AND TELEMETRY AUTOMATION** Scalable Architecture **Network Visibility** Zero Touch Provisioning (ZTP/ ZTR) EOS NetDB provides real-time state streaming for network telemetry and • Simplified, repeatable design leveraging open, standards-based Automates provisioning of infrastructure using standard protocols and protocols. No vendor-specific lock-in to the design analytics, a modern approach to replace legacy polling per device offers advanced customized scripting capabilities • Scale to your needs, from 100 to 300,000+ compute and storage . Reduces cost of deployment and speeds time to production for new EOS CloudVision provides the analytics and telemetry apps to provide nodes using MLAG in a Layer 2 active-active mode services by reducing human errors an unprecedented level of granularity for real-time monitoring and ECMP provides an all active multi-path for Layer 3 with exceptional historic network state for forensic troubleshooting **DevOps Integration** scale and consistent performance for 2 tier network designs VM Tracer offers visibility into which VMware hosts and VMs are on a • Natively supports Puppet, Chef, and Ansible and extends Puppet/Chef Standards-based network virtualization with VXLAN - extends layer 2 given physical network port command line tools into EOS CLI to support up to 16M virtual networks without requiring multicast Automates network configuration in same manner as servers Container Tracer provides current Docker node and exposed port • EOS NetDB enables route scale with best-in-class convergence information to network administrators Enables deployment of Docker containers on EOS with choice of • EOS CloudVision offers single point of integration and controller thousands of applications from Docker Hub agnostic support for virtual and physical workload orchestration using MapReduce Tracer tracks and interacts with Hadoop workloads Onsite or remote EOS-focused development with a team of seasoned open APIs such as OVSDB, JSON and OpenStack plugin ensuring faster recovery in case of a node failure or congested link network software programmers Health Tracer facilitates infrastructure resiliency at the hardware and **Resilient Software** software layer to increase overall service availability Automation with EOS CloudVision Reduced maintenance window with Arista Smart System Upgrade (SSU) through graceful removal, upgrade, and reinsertion of network Turnkey automation for zero touch provisioning and on-going Path Tracer monitors and detects issues with all paths in an active-active elements configuration and image management Layer 2 or Layer 3 ECMP network Live patching and upgrade of individual processes within EOS during Change Management framework for network-wide upgrades and LANZ offers proactive congestion management and notification by normal switch operation rollback, including snapshot views of the change control providing visibility into real-time queue depth analysis and streaming Self-healing resiliency through fault containment within a single module Bug Visibility with automated bug alerts for identifying live caveats and and stateful process restart DANZ TAP Aggregation/Advanced Mirroring/LANZ security vulnerabilities. Turnkey solution for network-wide upgrades and rollback with EOS Provides advanced traffic monitoring, including sFlow Compliance dashboard for security, audit, and patch management CloudVision Facilitates precision filtering and flow analysis with timestamps Macro Segmentation Service (MSS) capability allows automatic insertion of service appliances like firewalls in the physical network by defining Captures all 10/40/100GbE network traffic for recording and analysis inter-segment service policies Filtered mirroring to CPU enables local traffic analysis using TCPdump or other monitoring tools **OPEN AND PROGRAMMABLE FOUNDATION** 
  - EOS SW Architecture Strong Fundamentals • NetDB architecture built on SysDB state for resiliency, programmability, extensibility, automation, and scale



#### Open and Programmable

- Standards-based protocols and designs with open APIs
- Extensive Tools: Native Linux kernel, Python, eAPI, EOS SDK, DirectFlow/
  OpenFlow, AEM, Docker, Go
- vEOS for flexible lab, development, and certification use cases

#### EOS CloudVision – A Platform for Automation and Visibility

 Extends EOS to offer network-wide approach to automation, orchestration, visibility, analytics



- Network control point for integration with third party controllers, orchestration systems, and network services (Macro-Segmentation Services, MSS)
- Turnkey automation for provisioning and ongoing change management
- Visibility across physical and virtual network infrastructure

	GbE	Ultra-Low Latency	10GBASE-T	10/40GbE		10/40GbE Spline™	10/40/100Gl Deep Buffe		10/40GbE Spline™	10/25/40/50/100GbE Universal Spine	CORPORATE HEADQUARTERS
Product Line Overview											5453 Great America Parkway, Santa Clara, CA 95054 Phone: 408-547-5500 Email: info@arista.com
Chassis		7150S	7050TX	7050SX	7050QX	7250QX 7060CX 7260X	7280SE	7280R	7300 Series	7500R	
Model Number		24 52 64	48 64 72 72Q 96 128	64 72 72Q 96 128		64 32S QX-64 C	K-64 64 68 7	2 SR-48C6 TR-48C6 QR-C36 CR-48	4-Slot 8-Slot 16-Slot	4 Slot 8 Slot 12 Slot	www.arista.com
Height	1RU	1RU	1RU 2RU	1RU 2RU	1RU	2RU 1RU 2RU :	RU 1RU	1RU 1RU 1RU 2RU	8RU 13RU 21RU	7U 13U 18U	
Line Card Slots	-	-	-	-	-	-	-	-	4 8 16	4 8 12	General Inquiries
Backplane Capacity	-	-	-	-	-	-	-	-	25Tbps 50Tbps 40Tbps	38.4Tbps 76.8Tbps 115Tbps	Email: info@arista.com
Switching Capacity	176Gbps	480Gbps 1.04Tbps 1.28Tbps	960Gbps 1.28Tbps 1.44Tbps 1.44Tbps 1.92Tbps 2.56Tbps	1.28Tbps 1.44Tbps 1.44Tbps 1.92Tbps 2.56Tbps	2.56Tbps	5.12Tbps 6.4Tbps 5.12Tbps 12.	BTbps 1.28 -1.44Tbps	2.16Tbps 2.16Tbps 4.32Tbps 10.24Tbp	s 25Tbps 50Tbps 40Tbps	38Tbps 75Tbps 115Tbps	
Per Slot Capacity	-	-	-	-	-	-	-	-	3.2Tbps In/3.2Tbps Out 2.56Tbps	9.6Tbps	US & North America Sales:
Forwarding Capacity	132Mpps	– – 960Mpps	720Mpps 960Mpps 1.08Bpps 1.08Bpps 1.44Bpps 1.44Bpps	960Mpps 1.08Bpps 1.08Bpps 1.44Bpps 1.44Bpps	1.44Bpps	3.84Bpps 3.3Bpps 3.3Bpps 9.5	2Bpps 900Mpps	720Mpps 720Mpps 1.44Bpps 5.76Bpps	s 19Bpps 38Bpps 30Bpps	51Bpps	us-sales@arista.com
Ports											
100/1000 BASE-T	48	-	_	_	_	-	-	_	-	-	Latin America Sales:
100Mb/1Gb/10Gb BASE-T	-	-	32 48 48 48 48 96	-	-	-	-	- 48	192 384 768	192 384 576	latam-sales@arista.com
1/10GbE (SFP+)	4	24 52 48	-	48 48 48 48 96	- 4	- 2 2	2 48	48	192 384 768	192 384 576	
10/40GbE	-	16/4	16/4 16/4 24/6 24/6 48/12 -/8	16/4 24/6 24/6 48/12 -/8	96/32 96/32	256/64 130/32 - /64 25	8/64 16/4, 8/2, 24/6	24/6 24/6 144/36 224/56	512/128 1,024/256 2,048/512	576/144 1,152/288 1,728/432	Europe, Middle East & Africa Sales:
100GbE	-	-	-	-	-	- 32 -	64 - /2 /2	6 6 12 48	128 256 -	144 288 432	emea-sales@arista.com
Port-Port Latency	3usec	350ns 380ns 380ns	3usec	550ns	550ns	550-1,800ns 450ns 550ns 550-	1,800ns under 4usec	3.8usec	550-1,800ns	under 4usec	
Forwarding Technology	Store and Forward	Cut-Through	Cut-Through	Cut-Through	Cut-Through	Store and Forward Cut-Through Fo	re and ward Store and Forwa	rd Store and Forward	Store and Forward	Store and Forward	Asia-Pacific Sales:
Buffer Size	4MB	9.5MB - Dynamic Allocation	12MB - Dynamic Allocation	12MB - Dynamic Allocation	12MB - Dynamic Allocation	48MB 16MB 16MB 6	4MB 9GB - Dynamic Allocation	4GB 4GB 8GB 32GB	96MB 192MB 384MB	96GB 192GB 288GB	apac-sales@arista.com
Environmental											
AC + AC Power Redundancy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	2 (1+1 redundant)	Yes	Yes	Japan Sales:
DC Power	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	japan-sales@arista.com
N+1 Hot Swappable Fans	Yes	Yes	Yes	Yes	Yes	Yes	Yes	4 (N+1 redundant)	Yes	Yes	
Average/Max Power Draw (W)	52/65	191/334 191/450 224/455	305/367 315/387 349/440 340/430 355/455 507/740	140/220 144/267 144/261 158/240 235/415	162/332 150/302	622/1,229 220/410 315/800 167	2/2090 Various	263/381 290/405 324/499 1363/171	0 1560/2262 2986/4360 6006/9324	3650/4978 6439/8586 9618/12824d	
Front-to-Rear/Rear-to-Front Air	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes Yes / Yes / Yes / Yes / No	Yes / Yes	Yes / No	
Features		·				· · · · · · · · · · · · · · · · · · ·	I				Copyright 2016 Arista Networks, Inc. All
EOS Single Binary Image	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Rights Reserved. ARISTA, EOS, Spline,
Latency Analyzer (LANZ)	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	and CloudVision are among the registered
VM Tracer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	and unregistered trademarks of Arista
Zero Touch Provisioning (ZTP)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Networks, Inc. in jurisdictions around
Max VLANs	4,096	4,096	4,096	4,096	4,096	4,096	4,096	4,096	4,096	4,096	the world. All other company names are trademarks of their respective holders.
Max MAC Entries	84K	64K	288K	288K	288K	288K	256K	768K	288K	768K	Information in this document is subject to
Multi Chassis LAG	Yes - 32 Link	Yes - 32 Link	Yes - 64 Link	Yes - 64 Link	Yes - 64 Link	Yes - 64 Link	Yes - 128 Link	Yes - 128 Link	Yes - 64 Link	Yes - 128 Link	change without notice. Certain features
Jumbo Frames	9,216 Bytes	9,216 Bytes	9,216 Bytes	9,216 Bytes	9,216 Bytes	9,216 Bytes	9,216 Bytes	9,216 Bytes	9,216 Bytes	9,216 Bytes	may not yet be generally available. Arista
Max ARP Entries	84K	64K	32K (208K UFT *)	32K (208K UFT *)	32K (208K UFT *)	32K (208K UFT *)	96K	768K	32K (208K UFT *)	768K	Networks, Inc. assumes no responsibil-
Max Routes (IPv4 / IPv6)	16K/8K	84K/21K	16K/8K (144K/77K UFT *)	16K/8K (144K/77K UFT *)	16K/8K (144K/77K UFT *)	) 16K/8K (144K/77K UFT *)	64K/12K	over 1M+ entries in hardware	16K/8K (144K/77K UFT *)	over 1M+ entries in hardware	ity for any errors that may appear in this
BGP/OSPF	Wirespeed	Wirespeed	Wirespeed	Wirespeed	Wirespeed	Wirespeed	Wirespeed	Wirespeed	Wirespeed	Wirespeed	document.
Multicast Routing	PIM-SM	PIM-SM	PIM-SM	PIM-SM	PIM-SM	PIM-SM	PIM-SM	PIM-SM	PIM-SM	PIM-SM	-
Multicast Groups	8K	23K	8K	8K	8K	8К	64K	128K	8K	128K	

### UNIVERSAL CLOUD NETWORK

- Scalable, standards-based universal cloud network designs with MLAG, ECMP, and VXLAN
- Network wide automation, provisioning, and telemetry services with EOS CloudVision
- Single point of integration for both orchestration services and third party controllers



