

ARISTA

CLOUD NETWORKING PORTFOLIO

Arista Networks is the leader in building software driven open networks for today's datacenter and cloud computing environments. Arista delivers the most efficient, reliable and high performance Universal Cloud Network architectures based on 10G, 25G, 40G, 50G and 100G platforms delivered with an extensible operating system – Arista EOS®. Arista EOS is built on an open, programmable, and resilient state-sharing architecture that delivers maximum system uptime, reduces CAPEX and OPEX by simplifying IT operations and enables business agility. Arista EOS software offers programmability at all layers, including eAPI, EOS SDK, Linux, DevOps integration (Ansible/Chef/Docker/Puppet), and broad scripting support. Furthermore, Arista CloudVision® software NetDB extends the EOS state-based architecture to a network-wide scope as a platform for workflow automation, workload orchestration, and advanced visibility. 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.

CORPORATE HEADQUARTERS

5453 Great America Parkway,
Santa Clara, CA 95054
Phone: 408-547-5500
Email: info@arista.com

www.arista.com

General Inquiries

Email: info@arista.com

US & North America Sales:
us-sales@arista.com

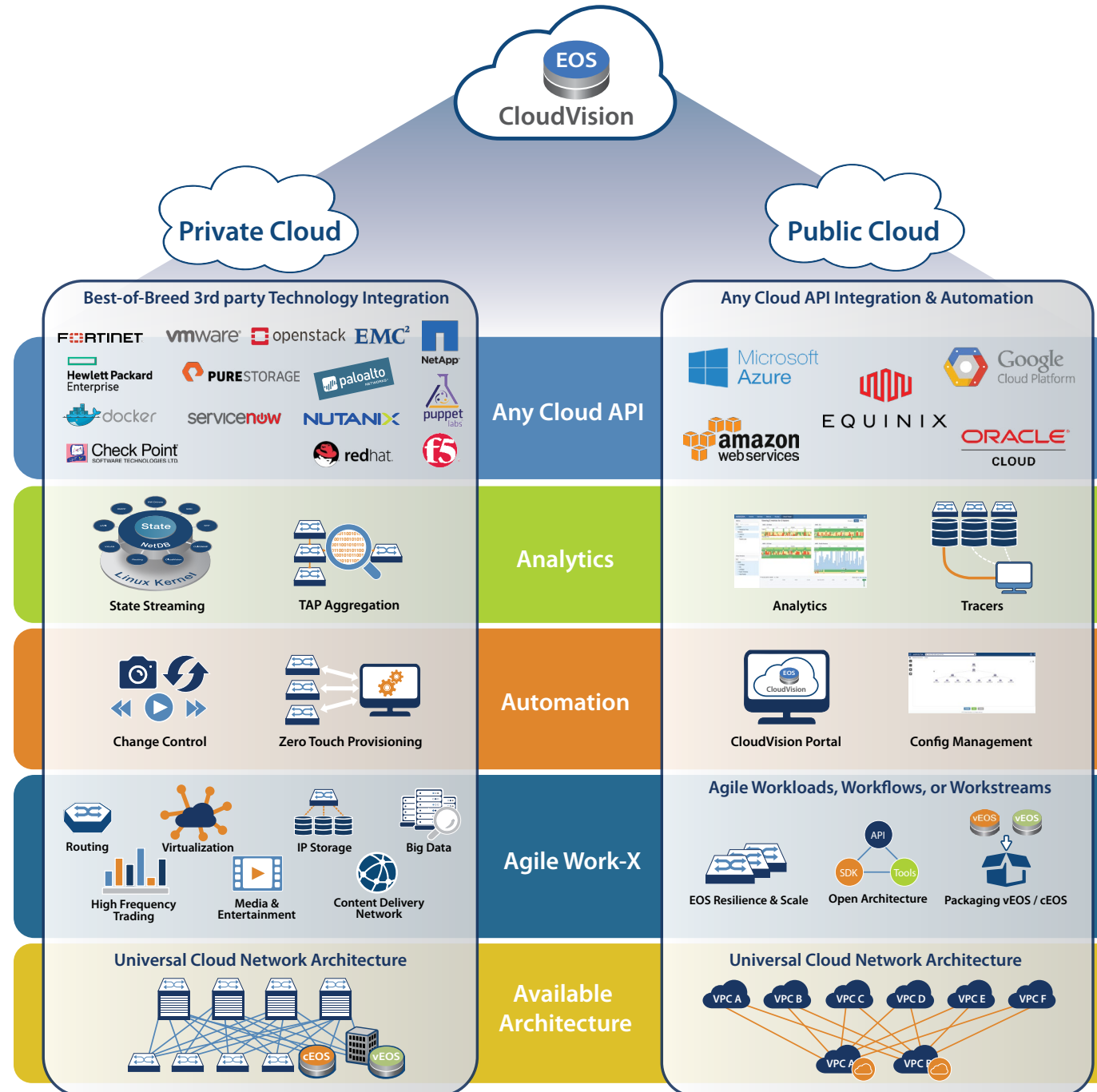
Latin America Sales:
latam-sales@arista.com

Europe, Middle East & Africa Sales:
emea-sales@arista.com

Asia-Pacific Sales:
apac-sales@arista.com

Japan Sales:
japan-sales@arista.com

UNIVERSAL CLOUD NETWORK AND ECOSYSTEM



TCO

3x

Savings with faster migration and integration between public and private cloud

10x

OPEX savings using single pane of glass for network automation and analytics into public and private cloud

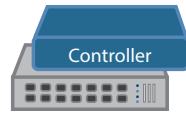
5x

Cost savings using same operational model for public and private cloud

ARISTA - THE PLATFORM FOR SOFTWARE DRIVEN CLOUD NETWORKING

- Fully programmable platforms allow rapid, automated deployment and provisioning
- Open SDK/APIs for easy integration with third-party and customer extensions
- Single-OS consistency across use cases for every place in the cloud
- Proven solutions and reference designs with a broad best-in-class ecosystem of partners

SDN Controllers and Security



VMware NSX, OVSDB Controllers, Checkpoint, F5, Fortinet, Palo Alto Networks

DevOps / Network Services



Puppet, Chef, Ansible, Docker

ANY CLOUD API

Orchestration/ IT Operations Tools



OpenStack, HPE VMware vCenter, ServiceNow

Big Data Analytics



Splunk Enterprise, VMware Log Insight

Hybrid Cloud



AWS, Microsoft Azure, Oracle Cloud Infrastructure, Google Cloud Platform

ARCHITECTURE

High Availability

- Open, predictable and efficient network designs with only modern, open and standards-based protocols using ECMP & VXLAN
- Advanced hitless upgrade/update and auto recovery features with 100% active-active utilization of all bandwidth, resources and links

Scalability

- A state sharing, highly resilient, multi-process architecture that enhances reliability, visibility and scalability
- Supports networks from a few nodes to millions of VMs, containers and end-points at Internet scale and with linear expansion

Efficiency

- Designed to utilize advancing developments in merchant silicon hardware, ensuring a path for customers to new advances in speed, scale and efficiencies with proven investment protection

AUTOMATION

Cloud Automation for Everyone

- CloudVision provides a turnkey automation hub for config and image management, change control simplification, operations compliance, and much more

Zero Touch Provisioning

- Reduce operating costs and time to production with ZTP by eliminating human errors during rack expansion or replacement
- Automate infrastructure scale-out using standards-based mechanisms that are customizable and scripted at any scale

DevOps Integration

- Integrate development and operations workflows with DevOps and CI/CD tools including Docker, Ansible, Chef, Puppet and others
- Automate network and server management with access to any virtualized, containerized or Linux tool running natively on EOS

ANALYTICS

Telemetry

- Access and record network-wide state and congestion information for every workload, workflow and workstream
- Identify and troubleshoot issues in underlay and overlay network topologies for real-time or forensic analysis

Tracers

- Enable real-time visibility and automation for highly dynamic, virtualized, containerized, big data and bare metal workloads
- Correlate network health and reachability information with workload placements in the public, private and hybrid cloud

TAP Aggregation and Advanced Mirroring

- Get precision access to raw and filtered packet data anywhere and anytime at industry-leading scale with both in-band and out-of-band capture, replication and analysis capabilities
- Generate and analyze high rate sFlow metadata for macro-level visibility into performance trends and security threats

FOUNDATION FOR UNIVERSAL CLOUD NETWORKING

EOS – Open and Extensible Networking Software

- State sharing, highly resilient, multi-process architecture that enhances reliability, visibility, serviceability at any scale
- Built on state-of-the-art NetDB process isolation architecture and continuous development model to enable ease of customer extension, high stability and rapid delivery of advanced features
- At its core, a native unmodified Linux kernel and runtime supporting open APIs, Python, Go, JSON eAPI/SDK, OpenFlow/DirectFlow, AEM event notification, Docker runtime, Linux tools, etc.
- Packaged as bundled EOS on Arista switches, containerized EOS, or virtualized EOS – for any production or simulation use case



CloudVision – A Platform for Cloud Automation and Visibility

- Extends EOS shared-state to a network-wide model for global automation, orchestration, visibility, and analytics
- Unified control point for third party (SDN/SDDC) network controllers, orchestration systems, and security platforms
- Turnkey automation for provisioning and ongoing change management with network-wide snapshot and rollback
- Visibility and correlation of network state across physical, virtual and cloud network infrastructures



Product Line Overview	GbE		Ultra-Low Latency			Programmable Leaf			Multi Function Programmable		10/25/40/100 GbE				10/25/40/100 GbE Spline™				10/40/100GbE Dynamic Deep Buffers				10/40GbE Spline™			10/25/40/50/100GbE Universal Spine																
Chassis	7010T	7020TR	7150S			7160			7170		7050X / 7250X				7060CX / 7260X				7280R				7300			7500R																
Model Number	48	48	24	52	64	48T	48Y	32C	32C	64C	7050TX	7050SX	7050QX	7050CX3	32S	QX-64	CX-64	CX3-64	SR	TR	QR	CR	4-Slot	8-Slot	4-Slot	8-Slot	12-Slot	16-Slot														
Height	1RU	1RU	1RU			1RU			1RU		2RU		1RU / 2RU				1RU				1RU				1RU			1RU														
Line Card Slots	-	-	-			-			-		-				-				-				-			-																
Backplane Capacity	-	-	-			-			-		-				-				-				-			-																
Switching Capacity	176Gbps	216Gbps	480Gbps	1.04Tbps	1.28Tbps	2.16Tbps	3.6Tbps	6.4Tbps	6.4Tbps	12.8Tbps	1.44-2.56Tbps				2.56-5.12Tbps				6.4Tbps				2.16Tbps	2.16Tbps	4.32-6.4Tbps		6-12Tbps	25Tbps	50Tbps	38.4Tbps	76.8Tbps	115Tbps	150Tbps									
Per Slot Capacity	-	-	-			-			-		-				-				-				-			-																
Forwarding Capacity	132Mpps	162Mpps	480Mpps	720Mpps	960Mpps	1.28ppps			2.58ppps		5.08ppps		720-1.448ppps	960-1.448ppps	1.44-3.848ppps		28ppps		3.38ppps	3.38ppps	9.52ppps	4.28ppps	720Mpps	720Mpps	1.44-2.888ppps		2.5-5.78ppps		198ppps	388ppps	698ppps											
Ports																																										
100/1000 BASE-T	48	48	-			-			-		-				-				-				-				-			-												
100Mb/1Gb/10Gb BASE-T	-	-	-			-			-		-				-				-				-				-			-												
1/10GbE (SFP+)	4	6	24	52	48	-	48	-	2	2	-				-				-				-				-			-												
10/40GbE	-	-	-			-			-		-				-				-				-				-			-												
25/100GbE	-	-	-			-			-		-				-				-				-				-			-												
Port-Port Latency	3usec	3usec	350ns	380ns	380ns	From 3usec	From 2usec	Sub usec		3usec				550ns				550-1800ns				450ns				From 3.8usec				550-1,800ns			under 4usec									
Forwarding Technology	Store and Forward	Store and Forward	Cut-Through			Store and Forward			Cut-Through		Cut-Through				Cut-Through				Store and Forward				Cut-Through				Store and Forward				Store and Forward			Store and Forward								
Buffer Size	4MB	3GB	9.5MB - Dynamic Allocation			24MB			22MB		12MB				12MB				12MB - 48MB				32MB		16MB	16MB	64MB		42MB		4GB	4GB	8-16GB		12-24GB		96MB	192MB	96GB	192GB	288GB	384GB
Environmental																																										
AC + AC Power Redundancy	Yes	Yes	Yes			Yes			Yes		Yes				Yes				Yes				Yes				Yes			Yes												
DC Power	Yes	Yes	Yes			Yes			Yes		Yes				Yes				Yes				Yes				Yes			Yes												
N+1 Hot Swappable Fans	Yes	Yes	Yes			Yes			Yes		Yes				Yes				Yes				Yes				Yes			Yes												
Average/Max Power Draw (W)	52/65	105/115	191/334	191/450	224/455	408/482	168/382	310/465	221/490	271/571	305-507/367-704		140-235/220-415		150-622/302-1229		206/265		220/410	315/800	1672/2090		340/660		263/381	290/405	9/15 per port		34-42 per port		1560/2262	2986/4360	3650/4978	6439/8586	9618/12824	12824/17098						
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 / No			Yes / Yes			Yes / No									
Features																																										
EOS Single Binary Image	Yes	Yes	Yes			Yes			Yes		Yes				Yes				Yes				Yes				Yes			Yes												
Latency Analyzer (LANZ)	No	No	Yes			Yes			Yes		Yes				Yes				Yes				Yes				Yes			Yes												
VM Tracer	Yes	Yes	Yes			Yes			Yes		Yes				Yes				Yes				Yes				Yes			Yes												
Zero Touch Provisioning (ZTP)	Yes	Yes	Yes			Yes			Yes		Yes				Yes				Yes				Yes				Yes			Yes												
Max VLANs	4,096	4,096	4,096			4,096			4,096		4,096				4,096				4,096				4,096				4,096			4,096												
Max MAC Entries	84K	256K	64K			128K			64K		288K				136K				264K				768K				288K			768K												
Multi Chassis LAG	Yes - 32 Link	Yes - 32 Link	Yes - 32 Link			Yes - 64 Link			Yes - 64 Link		Yes - 64 Link				Yes - 64 Link				Yes - 128 Link				Yes - 64 Link				Yes - 128 Link			Yes - 128 Link												
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			9,216 Bytes												
Max ARP Entries	84K	80K	64K			80K			128K		32K (208K UFT *)				64K				32K (208K UFT *)				64K				92K - 736K				32K (208K UFT *)			768K								
Max Routes (IPv4 / IPv6)	16K/8K	200K/100K	84K/21K			128K/64K			160K/16K		16K/8K (144K/77K UFT *)				384K/192K (UFT*)				16K/8K (144K/77K UFT *)				384K/192K (UFT *)				over 1M+ entries in hardware				16K/8K (144K/77K UFT *)			Over 1M+ entries in hardware								
BGP/OSPF	Wirespeed	Wirespeed	Wirespeed			Wirespeed			Wirespeed		Wirespeed				Wirespeed				Wirespeed				Wirespeed				Wirespeed			Wirespeed												
Multicast Routing	PIM-SM	PIM-SM	PIM-SM			PIM-SM			PIM-SM		PIM-SM				PIM-SM				PIM-SM				PIM-SM				PIM-SM			PIM-SM												
Multicast Groups	8K	24K	23K			128K			16K		8K				16K				8K				16K				128K				8K			128K								

