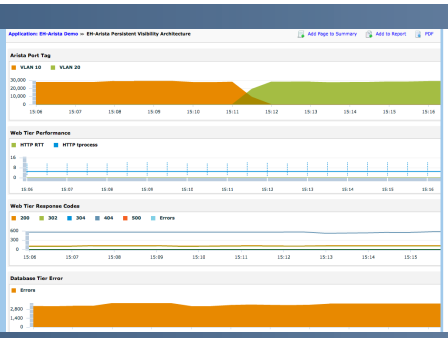
ExtraHop

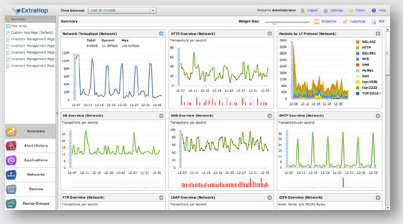


ExtraHop-Arista Persistent Monitoring Architecture

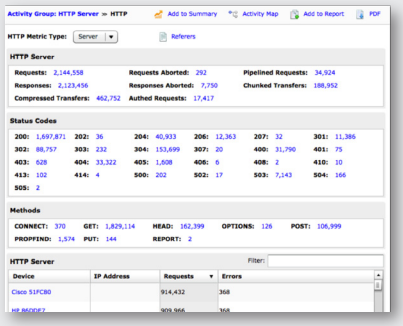
Simplify and de-risk SDN adoption with automatic and orchestrated visibility across the client, network, application, virtualization, database, and storage tiers.

"ExtraHop was the only product we evaluated that could easily capture application traffic as it crossed through our converged network, load balancers, and vast numbers of application and database servers."

—Joseph Steele, VP of IT Infrastructure, MedSolutions



ExtraHop delivers L2–L7 analytics for the client, network, application, virtualization, database, and storage tiers, as well as critical services such as DNS, LDAP, FTP, and SMTP.



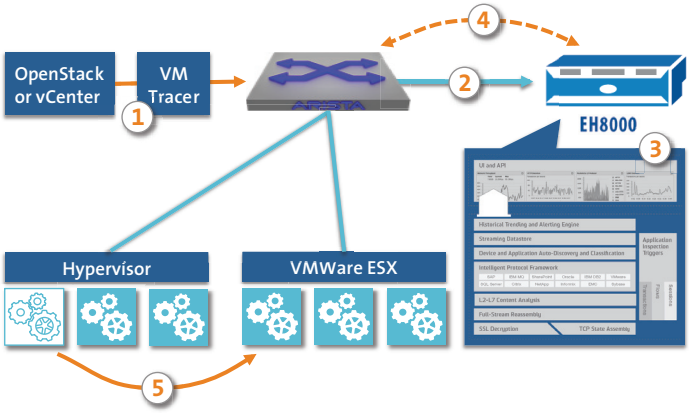
ExtraHop provides detailed metrics that IT Operations teams care about, such as the URI included in an HTTP 500 error, a slow stored database procedure, the file name associated with an NFS error, or the client IP responsible for numerous failed LDAP login attempts.

The joint solution from ExtraHop and Arista enables IT organizations to dramatically simplify their network infrastructure and confidently transition to a software-defined datacenter.

Persistent Visibility Across Tiers

The vision of software-defined datacenters promises to dramatically simplify IT management. But when applications are divorced from dedicated infrastructure, traditional approaches to monitoring performance and security no longer work. The ExtraHop-Arista Persistent Monitoring Architecture offers a non-invasive method for maintaining persistent visibility into increasingly abstracted server, application, storage, and network tiers. IT teams can understand what is really happening with an application workload regardless of where it is running, what it is comprised of, or where it is moving.

The ExtraHop-Arista Persistent Monitoring Architecture enables IT organizations to combine the unparalleled SDN capabilities of Arista's EOS, the world's most advanced network OS, with groundbreaking wire data analytics from the ExtraHop Context and Correlation Engine. IT teams no longer need to create a separate tap aggregation layer just to get access to the data. The DANZ functionality can be programmatically controlled to tap traffic from any source in seconds and ExtraHop transforms that data into meaningful real-time insight for performance, availability, and security.



1. Arista's VM Tracer links to vCenter to recognize vMotion and VXLAN events.

2. Arista intelligently routes mirrored traffic to ExtraHop where it is processed at up to a sustained 20Gbps.

3. ExtraHop's Context and Correlation Engine discovers and monitors real-time performance and dynamic events across tiers for workloads associated with specific VM instances and clusters.

4. Arista uses the ExtraHop API to show everything that comprises a workload: hosts, applications, databases, storage, etc.

5. ExtraHop and Arista maintain persistent visibility during provisioning, deprovisioning, VM migration, SDN topology change, etc.

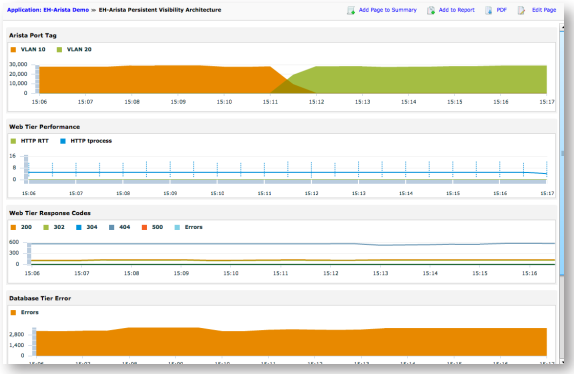
SDN and IT Operations Analytics Leaders

Arista 7150S

- Recognized as the price-performance leader in network switching
- First switch with integrated tap aggregation capabilities (DANZ)
- Layer 2/3/4 switching up to 1.28Tbps and 960Mpps
- Consistent latency as low as 350ns for all packet sizes
- Large L2 and L3 tables for virtualized and cloud network environments

ExtraHop EH8000

- Industry leader in real-time L2-L7 transaction analysis for all tiers
- Performs the full-stream reassembly and full-content analysis at a sustained 20Gbps—sufficient to analyze over 400,000 HTTP transactions per second
- Bulk decryption at 20Gbps with 35,000 handshakes per second for 2048-bit RSA keys



The ExtraHop-Arista solution enables IT teams to maintain persistent visibility into application performance even as workloads are migrated from one host to another and/or from one VLAN to another.

IT Operations Analytics for SDN Environments

As an end-point for orchestrated traffic from Arista, ExtraHop transforms packets into wire data for context and correlation across all tiers without agents or probes. IT teams can understand the conversations taking place within the virtualized datacenter—at the wire protocol level and in real time.

With persistent visibility into application, network, and infrastructure performance, IT organizations can more confidently adopt flexible and cost-effective virtualization technologies.

- Get real-time details for activity at all tiers: client, network, web, application, database, storage, and shared services.
- Measure baseline performance before and after application migrations.
- Track performance-based SLAs for application owners and other stakeholders.

Price-Performance Leadership

Arista and ExtraHop are the price-performance leaders in the switching and real-time transaction analysis markets. With the ExtraHop-Arista Persistent Monitoring Architecture, IT organizations can support SDN for their cloud environments without having to purchase a separate tap aggregation layer or costly agents for every server.

Together, one Arista 7150S switch and ExtraHop EH8000 appliance offer far greater value than legacy switching and monitoring products, both in terms of upfront cost—roughly one-tenth the cost of a comparable legacy solution—and in ongoing maintenance.

- Deploy in as little as 15 minutes with no configuration required and no system overhead.
- Automatically discover and classify applications and devices, avoiding the manual tagging and configuration required by legacy tools.
- Enjoy peace of mind with a passive approach to analyzing data off the wire that uses no agents, probes, polling, or synthetic transactions.

About ExtraHop Networks

ExtraHop provides the real-time operational intelligence required to make IT more agile and proactive. The world's best-run IT organizations use ExtraHop to manage more than half a million devices and monitor over a trillion transactions daily, including Adobe, Alaska Airlines, Concur, Expedia, and Microsoft.

ExtraHop