

# IT and Business Insight at Wire Speed

EXTRAHOP DISCOVER APPLIANCES The ExtraHop Discover appliance transforms raw packets into structured wire data for highly scalable, real-time IT and business analysis. Our physical and virtual ExtraHop Discover appliances are optimized for our real-time stream processor, which performs full-stream reassembly and content analysis of all application communication and data transacting on the wire. For the first time, organizations can easily extract, customize, visualize, alert, and trend on their wire data for unbiased and comprehensive insight. With ExtraHop as a central and strategic point of analysis, IT teams can proactively improve performance, availability, security, and business intelligence both on-premises and in the cloud.

ExtraHop leads the IT Operations Analytics (ITOA) category in price, performance, and functionality. Monitor and analyze everything on the wire with a non-invasive, unified, and easily customizable platform.

### **KEY BENEFITS**

#### **IMMEDIATE VALUE FOR ALL TEAMS**

Connect an ExtraHop Discover appliance to a port mirror or network tap and its stream analysis automatically discovers and classifies your environment, providing valuable insights in minutes. As time passes, the platform learns what is normal and alerts you when things are not.

### **INSIGHTS LIMITED ONLY BY IMAGINATION**

Quickly provide value to various teams with automatically generated role-based dashboards, simple-but-powerful scripting that allows you to mine any data transacting on the wire, and a range of visualization options to convey that information intuitively.

### **POWERFUL VISUALIZATIONS**

A single ExtraHop Discover appliance can process a sustained 40 Gbps of wire data analysis with bulk decryption, providing a central and strategic point of analysis for any IT organization. ExtraHop deployments can scale from a single appliance to several hundred distributed appliances, both physical and virtual, monitoring hundreds of thousands of systems and clients on-premises and in the cloud.

#### **BROAD TECHNOLOGY SUPPORT**

Address all your requirements with support for a wide range of transport and application protocols for web, middleware, database, storage, VDI, and nearly any TCP- or UDP-based system or application. If it communicates over the wire, ExtraHop has it covered.

### **BENEFITS OF A TRUE PLATFORM**

Extract maximum value from your wire data with an open platform that you can easily and rapidly program to extract, measure, and visualize wire data elements. Extend the platform using community-driven bundles, and integrate ExtraHop with Big Data solutions and other monitoring data sources, such as machine data and agent data platforms.

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## PHYSICAL

	THE PARTY INCOME AND A			
SPECIFICATIONS	EDA 9100	EDA 8100		
TRAFFIC ANALYTICS				
Servers	5,500	4,000		
Fhroughput	40 Gbps	20 Gbps		
Throughput using RPCAP	20 Gbps + 3 x 1 Gbps	10 Gbps + 3 x 1 Gbps		
Packets per second (typical)	up to 4 million	up to 2 million		
HTTP TPS	up to 1.3 million	up to 825,000		
NETWORK	ExtraHop appliances can receive data via RPC	ExtraHop appliances can receive data via RPCAP (1 G ports only), physical ports, or ERSPAN.		
1000BASE-T management port	1	1		
1000BASE-T monitoring ports	3	3		
10GbE SFP+ monitoring ports with 10GBASE-SR modules included	4	2		
HARDWARE SSL DECRYPTION (OPTIONAL)				
Handshakes per second (2048-bit RSA)	64,000	32,000		
Throughput	40 Gbps	20 Gbps		
CHASSIS				
Processor	Dual Intel Xeon 14-core CPUs	Dual Intel Xeon 8-core CPUs		
Memory	128 GB DDR4	96 GB DDR4		
Datastore	2.4 TB (RAID 10)	1.8 TB (RAID 10)		
Packet capture (optional)	480 GB	480 GB		
Power supply	2 x 750 W	2 x 495 W		
Height	8.73 cm (3.44 in.)	4.28 cm (1.68 in.)		
Width	44.40 cm (17.49 in.)	48.23 cm (18.98 in.)		
Depth	68.40 cm (26.92 in.)	75.51 cm (29.72 in.)		
Weight	31.4 kg (69.2 lbs)	18.6 kg (41.0 lbs)		
Environment details				
Heat dissipation	2891 BTU/hr maximum	1908 BTU/hr maximum		
Operating temperature	5 °C to 40 °C at 5% to 85% RH with 29 °C dew point	5 °C to 40 °C at 5% to 85% RH with 29 °C dew point		
Storage temperature	-40 °C to 65 °C (-40 °F to 149 °F)	-40 °C to 65 °C (-40 °F to 149 °F)		
Operating relative humidity	10% to 80% RH with 29 °C (84.2° F) max. dew point	5% to 95% RH with 33 °C (91 °F) max. dew point		
Operating vibration	0.26 Grms at 5 Hz to 350 Hz	0.26 Grms at 5 Hz to 350 Hz		
Operating altitude	-15.2 m to 3,048 m (-50 ft to 10,000 ft)	3,048 m (10,000 ft)		
Operating shock	Six consecutively executed shock pulses in the positive and negative x, y, and z axes of 40 G for up to 2.3 ms	positive and negative x, y, and z axes		
Operating system		The operating system is a security-hardened embedded Linux with a networking microkernel developed specifically for high-speed packet processing via the ExtraHop real-time stream processor.		
Remote management	iDRAC8 remote management controller	iDRAC8 remote management controller		



## PHYSICAL

SPECIFICATIONS	EDA 6100	EDA 3000		
TRAFFIC ANALYTICS				
Servers	3,000	1,000		
Throughput	10 Gbps	3 Gbps		
Throughput using RPCAP	5 Gbps + 3 x 1 Gbps	3 x 1 Gbps		
Packets per second (typical)	up to 1 million	up to 450,000		
HTTP TPS	up to 530,000	up to 160,000		
NETWORK	ExtraHop appliances can receive data via RPC	ExtraHop appliances can receive data via RPCAP (1 G ports only), physical ports, or ERSPAN.		
1000BASE-T management port	1	1		
1000BASE-T monitoring ports	3	3		
10GbE SFP+ monitoring ports with 10GBASE-SR modules included	2	N/A		
HARDWARE SSL DECRYPTION (OPTIONAL)				
Handshakes per second (2048-bit RSA)	13,000	1,500		
Throughput	10 Gbps	3 Gbps		
CHASSIS				
Processor	Intel Xeon 8-core CPU	Dual Intel Xeon 6-core CPUs		
Memory	64 GB DDR4	32 GB DDR3		
Datastore	1.2 TB (RAID 10 optional)	1.2 TB		
Packet capture (optional)	480 GB	480 GB		
Power supply	1 x 495 W	1 x 495 W		
Height	4.28 cm (1.68 in.)	4.28 cm (1.68 in.)		
Width	48.23 cm (18.98 in.)	48.23 cm (18.98 in.)		
Depth	75.51 cm (29.72 in.)	75.51 cm (29.72 in.)		
Weight	18.6 kg (41.0 lbs)	18.6 kg (41.0 lbs)		
Environment details				
Heat dissipation	1908 BTU/hr maximum	1908 BTU/hr maximum		
Operating temperature	5 °C to 40 °C at 5% to 85% RH with 29 °C dew point	10 °C to 35 °C (50 °F to 95 °F)		
Storage temperature	-40 °C to 65 °C (-40 °F to 149 °F)	-40 °C to 65 °C (-40 °F to 149 °F)		
Operating relative humidity	5% to 95% RH with 33 °C (91 °F) max. dew point	10% to 80% non-condensing		
Operating vibration	0.26 Grms at 5 Hz to 350 Hz	0.26 Grms at 5 Hz to 350 Hz		
Operating altitude	3,048 m (10,000 ft)	-15.2 m to 3,048 m (-50 ft to 10,000 ft)		
Operating shock	One shock pulse in the positive z axis of 31 G for 2.6 ms	Half sine shock of 31 G for up to 2.6 ms		
Operating system		The operating system is a security-hardened embedded Linux with a networking microkernel developed specifically for high-speed packet processing via the ExtraHop real-time stream processor.		
Remote management	iDRAC8 remote management controller	iDRAC7 remote management controller		



## VIRTUAL

	ExtraHop	ExtraHop			
SPECIFICATIONS	EDA 6100V	EDA 2000V	EDA 1000v		
TRAFFIC ANALYTICS					
Servers	3,000	1,000	250		
Throughput	up to 10 Gbps*	3 x 1 Gbps	up to 1 Gbps		
Packets per second (typical)	up to 1 million	up to 411,000	up to 180,000		
HTTP TPS	up to 530,000	up to 178,000	up to 76,000		
SOFTWARE SSL DECRYPTION (OPTIONAL)					
Handshakes per second (2048-bit RSA)	up to 4,130	up to 1,750	up to 450		
Throughput	up to 3.3 Gbps	up to 1 Gbps	up to 500 Mbps		
NETWORK REQUIREMENTS					
Monitoring options	ExtraHop appliances can receive data via RPCAP, ERSPAN, and port mirroring. RPCAP and ERSPAN have a maximum throughput of 1 Gbps per management virtual interface.				
Management virtual interface	1 or more	1 or more	1 or more		
Capture virtual interfaces	3	3	1		
Firewall requirements	TCP port 443 inbound to appliance for administration purposes UDP port 53 outbound to Internet for registration purposes, unless managed by an ExtraHop Central Manager (ECM)				
RESOURCE REQUIREMENTS	ExtraHop requires thick provisioning on all virtual appliances. CPUs require hyperthreading, VT-x technology, 64-bit architecture, and a minimum of 2.5 GHz clock speed.				
vCPUs	16	6	2 (or 3 with SSL decryption)		
Memory	64 GB	6 GB	4 GB		
Disk	1 TB	255 GB	46 GB		
Packet capture (optional)	1 GB – 500 GB	1 GB – 500 GB	1 GB – 500 GB		
VIRTUAL ENVIRONMENTS					
ESX	v5.1 or later	v4.0 or later	v4.0 or later		
Hyper-V	Not supported	Windows Server 2012 R2	Windows Server 2012 R2		
KVM	Not supported	64-bit Linux kernel, 3.6.11-4 and later	64-bit Linux kernel, 3.6.11-4 and later		
Operating system	The operating system is a security-hardened embedded Linux with a networking microkernel developed specifically for high-speed packet processing via the ExtraHop real-time stream processor.				

\*ExtraHop was the sole tenant on the server during performance testing. The server under test used two Intel Xeon processors E5-2695 v2, 96GB DDR3 RAM, and 1 TB of storage, and was running VMware ESX v5.1. Data was sent from physical port mirrors to two dedicated 10GbE physical interfaces. Performance may vary by server and network configuration.

