DATA SHEET

SecureStack

Visibility is Security

Problem

Networks have data that we need to secure and there are many things to do to achieve this security:

- Inspecting encrypted traffic
- Monitoring who is on the network and evaluating patterns
- Masking sensitive data

Each of these activities is important, but unfortunately, tends to come with a specialized appliance. Each of these appliances can cost thousands of dollars each creating a significant financial burden. Beyond that, learning and maintaining each of these appliances over-extends IT and security teams and prevents from focusing on real risks when they occur.

The modern organization needs a way to streamline how they secure their network. Simplifying the setup and management without compromising on security.

Solution

Ixia allows organizations to shed the burden of many appliances by offering SecureStack capabilities on its visibility platforms – network packet brokers and CloudLens. Organizations know that security is visibility – you have to see the data to be able to secure it and prevent attacks. With Ixia visibility you can decrypt and encrypt data, receive a threat insights feed about your network and have the ability to mask data on your network without specialized appliances. Saving your organization dollars, helping IT and security teams, and all while better protecting your network.

Highlights

- Streamline security by leveraging network packet brokers/visibility platform
- Greater visibility by decrypting traffic to detect malware, prevent data loss, monitor applications and more
- Offload the SSL decryption work and remove your network performance bottleneck
- Supports all leading ciphers
- Secure PII traversing the network, keeping your consumers and organization safe with data masking +
- Get Insight to potential threats on your network



SecureStack



Key Features

Feature	Function
Active SSL	Encrypted traffic has become a dual-edged sword. The same encryption we use to protect data has become the vehicle hackers manipulate to inject malware and other threats into a network. As most traffic becomes encrypted and with ephemeral key on its way to becoming the dominant technology, organizations need a way to retain the benefits of TLS 1.3 standards, while being able to inspect traffic for threats and malware to protect their networks and users.
	Fewer than 20% of firewalls, UTM and IPS deployments support decryption, and next generation firewalls can experience an average performance loss of 74% when using 512b and 1024b ciphers, and 81% when using 2048b ciphers. ¹
	Ixia's Active SSL capability enables organizations to see inside traffic that uses ephemeral key cryptography through its visibility platform. With Ixia's Active SSL you can:
	 Decrypt once and scale monitoring infrastructure. Offloading SSL decryption will optimize security and monitoring tool performance
	 Deploy inline, out-of-band (OOB), and simultaneous inline and OOB configurations for the ultimately flexibility
	 See into both outbound and inbound traffic to inspect downloads and detect server attacks
	 Achieve limitless visibility when used with Ixia's NetStack, PacketStack and AppStack capabilities
	Active SSL is available via a high-performance application module that is compatible with Vision ONE
	 Active SSL employs a dedicated cryptographic processor, to provide the best throughput integrated with a visibility solution
	 Throughput options include 1G, 2G, 4G or 10G (license per module). Upgrades via licensing
	 Includes built-in policy management, URL categorization, and real-time insight through reporting
	Supports all leading ciphers
	 Get visibility to encrypted sessions without compromising security with role-based access controls and bidirectional decryption capability
Passive	Handle 10 million concurrent sessions with up to 8Gbps throughput
SSL	 Support encryption ciphers and key sizes: 3DES, RC4, AES, SHA1/521/384/256/224, MD5, ECC (Elliptic Curve), RSA and Diffie-Hellman Key Exchange
Decryption	No impact on application identification and filtering performance
	 Can work simultaneously with NetFlow generation, data masking, PCAP, and application forwarding

SSL Comparison			
	Active SSL Decryption and for ephemeral key cryptography	Passive SSL Decryption	
SSL/TLS Versions	TLS1.0, TLS1.1, TLS1.2	TLS1.0, TLS1.1, and TLS1.2	
Asymmetric Key Exchange	RSA, ECDH, ECDHE	RSA and ECDH	
Symmetric Keys	AES and 3DES	AES, 3DES, and RC4	
Hashing Algorithms	SHA and AEAD	SHA and MD5	
Maximum concurrent sessions	150,000	Over 1,000,000	
Private Key Storage	Encrypted and 'write only' TBD	Encrypted and 'write only'	

Feature	Function
Threat Insight	Today's organizations are under cyberattack. Malware can find its way into an organization in a multitude of ways including email, clicking on malicious links, mobile devices, USBs used by employees, as well as physical intrusions into a network. Cyber Security Ventures reported that ransomware will attack a business every 14 seconds by the end of 2019. ¹
	With Ixia's threat insights feature, you will be able to:
	 Recognize malware, botnet, exploits, hijacked IPs and phishing activity with your Vision ONE, Vision 7300, or CloudLens
	Send threat information automatically via NetFlow to existing security appliances
	Threat insights from Ixia's Application and Threat Intelligence (ATI) Research Center, also used in Ixia's ThreatARMOR, provide what you need to secure your network without requiring any additional threat intelligence feed. You can ensure the security of your network by easily:
	Detecting IoT attacks
	Tagging suspicious or rogue applications and monitoring them for unusual activity
	Tracking traffic to or from unauthorized geographies
	Tracking questionable file transfers and brute-force attacks
Data	Achieve Payment Card Industry Data Security Standard (PCI-DSS), HIPAA and other regulatory compliance by leveraging pre-defined data patterns. With personally identifiable information traversing the network, security is key to keeping your consumers and your organization safe.
Masking Plus	 Can work simultaneously with NetFlow generation, data masking, PCAP, and application forwarding
	• Pre-defined patterns to mask – including major credit card, SSN and email addresses
	Reduce false positives with the built-in credit card number validation using the Luhn algorithm
	Data masking at the packet level using a user configurable offset with any number of bytes
	Target field identified by user-defined regular expression

Availability and Ordering Information

SecureStack is available on Ixia Vision ONE & TradeVision, Vision 7300, and CloudLens

	Vison one	Vision 7300	CloudLens
	Ixia's turnkey network packet broker	Ixia's highest capacity network packet broker	Ixia's platform for public, private and hybrid cloud visibility
Baseline Platform Requirements	 Chassis (options) SYS-V1-48PX-AC SYS-V1-48PX-DC SYS-V116PX8PGAC SYS-V116PX8PGDC SYS-V14PX16PGAC 	Chassis SYS7300-STD SYS7303-STD Module Module M7300-SSAS-48PX: Ixia Vision 7300 family - module to deliver AppStack (ATIP) and SecureStack (SSL) capabilities - with 48 SFP+ ports (992-0050)	 Virtual Tapping (options) LIC-CL-VTAP-10 LIC-CL-VTAP-50 LIC-CL-VTAP-100 LIC-CL-VTAP-250 LIC-CL-VTAP-1000 SUB-CL-VTAP-1000 SUB-CL-VTAP-CSMP SUB-CL-VTAP-AG100 SUB-CL-VTAP-AG250 SUB-CL-VTAP-AG1000
Active SSL	 Module & License Bundles MV1-ASSL-1G: Ixia Visibility Application Module bundled with Secure Stack - Active SSL license included - 1Gbps (992-0087) MV1-ASSL-2G: Ixia Visibility Application Module bundled with Secure Stack - Active SSL license included - 2Gbps (992-0088) MV1-ASSL-4G: Ixia Visibility Application Module bundled with Secure Stack - Active SSL license included - 4Gbps (992-0089) MV1-ASSL-10G: Ixia Visibility Application Module bundled with Secure Stack - Active SSL license included - 4Gbps (992-0089) MV1-ASSL-10G: Ixia Visibility Application Module bundled with Secure Stack - Active SSL license included - 10Gbps (992-0086) 		

	Vison one	Vision 7300	CloudLens
Threat Insight Passive SSL Decryption Data Masking Plus + All AppStack Features	 Subscription - Hardware Activation & Features SUB-V1-SSAS: Ixia Vision ONE subscription of one-year SecureStack (Passive SSL Decryption) and AppStack (ATIP) license. Includes Passive SSL Decryption and all AppStack features, including the ATI Subscription. (993-0113) 909-5018: Ixia renewal subscription of one-year of SecureStack (Passive SSL Decryption) and AppStack (ATIP) license for Vision ONE and Vision 7300. Includes SSL Decryption and all AppStack features, including the ATI Subscription. (909-5018) 	 Full Subscription SUB-7300-SSAS: Ixia Vision 7300 one-year subscription of SecureStack (Passive SSL Decryption) and AppStack (ATIP) license for M7300- SSAS-48PX. Includes SSL Decryption and all AppStack features, including the ATI Subscription. (993-0049) 909-5018: Ixia renewal subscription of one-year of SecureStack (Passive SSL Decryption) and AppStack (ATIP) license for Vision ONE and Vision 7300. Includes SSL Decryption and all AppStack features, including the ATI Subscription. (909-5018) Perpetual LIC-7300-APPS: IXIA Vision 7300, AppStack Add-on perpetual license for App Filtering, NetFlow, IxFlow, Masking, Regex and Passive SSL. QTY (1) per line card (993-0140) 	 Subscription (no SSL Decryption) SUB-CL-AS-1-F: Ixia CloudLens Private with AppStack (ATIP). Full Feature pack, first year subscription, 1 instance (954-4064) 909-5021: Ixia renewal subscription for SUB-CL- AS-1-F. CloudLens private virtual packet processing with AppStack (ATIP) features (909-5021) Perpetual LIC-CL-AS-1-F: Ixia CloudLens Private with AppStack (ATIP). Full Feature pack, perpetual license, 1 instance (954-4065)
	 Hardware Activation LIC-V1-SSAS-E: Ixia Vision ONE hardware enablement license for SecureStack (Passive SSL Decryption) and AppStack (ATIP) at entry- level performance - QTY (1) (993-0101) LIC-V1-SSAS-F: Ixia Vision ONE hardware enablement license for SecureStack (Passive SSL Decryption) and AppStack (ATIP) at full performance - QTY (1) (993-0102) LIC-V1-SSAS-U: Ixia Vision ONE hardware enablement upgrade license to enable SecureStack (Passive 	Hardware/Dashboard License • LICS-7300-SSAS-F: IXIA Vision 7300, License for AppStack dashboard at full performance - QTY (1) per line card (993-0141)	

	Vison one	Vision 7300	CloudLens
	SSL Decryption) and AppStack (ATIP) capabilities (from entry- level to full performance) - QTY (1). Requires additional licenses for features. (993-0104)		
Threat Insight	 SUB-V1-APTL: Ixia Vision ONE AppStack (ATIP) one-year subscription license. Includes Application Identification & Filtering, Geolocation & tagging, Application and Threat Intelligence (ATI) data feed - QTY (1) (993-0112) 909-5019: Ixia Vision ONE AppStack (ATIP) renewal license for SUB- V1-APTL. Includes Application Identification & Filtering, Geolocation & tagging, Application and Threat Intelligence (ATI) data feed - QTY (1) (909-5019) 	• SUB-7300-APTL : Ixia Vision 7300 AppStack, first year subscription license, required per line card. Includes Application signature updates and Threat insight feature and updates. QTY (1) (993-0077)	
Passive SSL Decryption	LIC-V1-PSSL: Ixia Vision ONE SecureStack - Passive SSL Decryption feature license - QTY (1) (993-0110)		
Data Data Masking Plus	LIC-V1-MASK-REGX: Ixia Vision ONE - Data masking plus (SecureStack) and Regular Expression Filtering (AppStack - ATIP) feature license- QTY (1) (993-0118)		
Bundles: System + Licenses	SYS-V14PX16PGACSYSV1FC8PX4P4XAC		

	Vison one	Vision 7300	CloudLens
Security Bundles	 BD-V1-ASSL-1G BD-V1-ASSL-2G BD-V1-ASSL-4G BD-V1-ASSL-10G BD-V1TAMR-ASSL-1G BD-V1TAMR-ASSL-2G 		

Vision One

Features	Perpetual	Subscription
Application Identification, Geolocation, Application- based filtering & IxFlow (with NetFlow License)	SUB-V1-APTL 909-5019	SUB-V1-APTL 909-5019 Image: Sub-V1-SSAS 909-5018
NetFlow Generation (Includes IxFlow if App Intelligence is licensed)		SUB-V1-SSAS 909-5018
RegEx filtering & Data Masking	LIC-V1-MASK- REGEX	(*) (•) SUB-V1-SSAS 909-5018
Passive SSL decryption	LIC-V1-PSSL	SUB-V1-SSAS 909-5018
Core – Performance	۲۵ *LIC-V1-SSAS-E	SUB-V1-SSAS 909-5018
	*LIC-V1-SSAS-F	
*//C-V1-SSAS-E can be		

*LIC-V1-SSAS-E can be upgraded to LIC-V1-SSAS-F by using LIC-V1-SSAS-U

Vision 7300

Features	Perpetual	Subscription	
Application signature updates and Threat insight feature and updates	SUB-7300-APTL 909-5019	SUB-7300-APTL 909-5019 SUB-7300-SSAS 909-5018	
App Filtering, NetFlow, IxFlow, Masking, Regex and Passive SSL	LIC-V7300-APPS 909-5019	SUB-7300-SSAS 909-5018	
Core – Performance	ED LIC-V1-SSAS-F	(30) SUB-7300-SSAS 909-5018	

Specifications for M7300-SSAS-48PX

General Specifications		
 Performance All ports are bidirectional and fully non-blocking Full line-rate across all ports with filtering enabled 	 Management SNMP v1, v2, v3 support Local, RADIUS, and TACACS+ support (members and groups) Granular access control features Event monitoring and logging Syslog IT Automation control with web-based API 	
Physical Specifications		
 1U high interface card for 19" chassis Dimensions: 17.5W x 15L x 1.75H (inches) Weight: 17.0lb (7.7 kg) 	 Operating input voltage: -40 to -60VDC Nominal current: 4.15A @ -53VDC, 220W Maximum operating input current: 5.5A @ 40VDC, 220W max Heat/power dissipation for module at 100% traffic load: maximum 220W / 751 BTU/hour 	
Operating Specifications		
 Temperature Operating: 5°C to 40°C Short-term*: -5°C to 55°C (*not to exceed 96 consecutive hours) Short-term* with fan failure: -5°C to 40°C (*not to exceed 96 consecutive hours) 	 Humidity Operating: 5% to 85%, (non-condensing) Short-term*: 5% to 90% (non-condensing, *not to exceed 96 hours) 	

Learn more at: www.keysight.com

For more information on Keysight Technologies' products, applications or services, • please contact your local Keysight office. The complete list is available at: www.keysight.com/find/contactus

