SecureStack

Visibility is security

Introduction

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

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

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

Keysight allows organizations to shed the burden of many appliances by offering SecureStack capabilities on its visibility platforms. Organizations know that security is visibility – you must see the data to be able to secure it and prevent attacks. With Keysight visibility you can decrypt and encrypt data on your network without specialized appliances, saving your organization money, 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 TLS/SSL decryption work and remove your network performance bottleneck
- Supports all leading ciphers

KEYSIGHT

SecureStack Capabilities



Inline Decryption

- 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.
- Next generation firewalls than can perform decryption can experience significant performance drops in average connection rate, application response time and traffic throughput.



Out-of-Band Decryption

- Get visibility to encrypted sessions without compromising security with role-based access controls and bidirectional decryption capability.
- Support encryption ciphers and key sizes: 3DES, RC4, AES, SHA1/521/384/256/224, MD5, ECC (Elliptic Curve), RSA and Diffie-Hellman Key Exchange
- No impact on application identification and out-of-band data filtering performance

Inline Decryption available using high-performance modules

Keysight's Inline Decryption capability enables organizations to see inside traffic that uses ephemeral key cryptography through its visibility platform.

With Keysight's Inline Decryption you can:

- Decrypt/Encrypt once and scale monitoring infrastructure. Offloading TLS/SSL decryption will optimize security and monitoring tool performance
- Deploy inline, out-of-band (OOB), and simultaneous inline and OOB tool 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 Keysight's NetStack, PacketStack and AppStack capabilities

Inline Decryption is available via high-performance dedicated cryptographic processing resources. Vision ONE and Vision X utilize Application Modules, Vision 400 utilizes onboard processing unit to perform Inline Decryption.

- Inline Decryption employs a dedicated cryptographic processor, to provide the best throughput integrated with a visibility solution
- Flexible deployment option to suite any environment: 1G, 2G, 4G or 10G bandwidth license options for Vision One, multiple instance deployment support on Vision X to scale the solution and capacity licenses on Vision 400, to utilize the entire dedicated processing resource or only half of it.
- Service high availability and inline high availability support
- Supports all leading ciphers

Decryption comparison

Function	Inline Decryption	Out-of-Band Decryption
SSL/TLS Versions	TLS1.0, TLS1.1, TLS1.2, TLS1.3	SSL 3.0, TLS1.0, TLS1.1, TLS1.2
Asymmetric Key Exchange	RSA, ECDH, ECDHE, ECC	RSA and ECDH
Symmetric Keys	AES and 3DES	AES, 3DES, and RC4
Hashing Algorithms	SHA1, SHA256, SHA384	SHA and MD5
Maximum concurrent sessions	Over 200,000	Over 1,000,000
Private Key Storage	Encrypted and ‘write only’	Encrypted and ‘write only’

The SecureStack Capabilities Inline Decryption

1. Intuitive graphical user interface
2. Rule repository for easy rule management of thousands of rules
3. Support for “Decrypt” or “Cut-through” rule actions for easy selection of the traffic that needs to be decrypted.
4. More than 95 URL categories in more than 50 languages for straight forward privacy regulation compliancy (e.g. exclude URL categories from the decryption process)
5. OSCP/CRL certificate validation support
6. Built-in dashboard with real time and history statistics for decrypted sessions, TLS handshake rate and decrypted traffic volume.

Ordering Information

SecureStack features are available for Keysight Vision ONE, Vision X and Vision 400

Vision ONE ordering information

Part number	Vision ONE
Baseline Platform Requirements	**Chassis (options)** • **SYS-V1-48PX-AC** • **SYS-V1-48PX-DC** • **SYS-V116PX8PGAC** • **SYS-V116PX8PGDC** • **SYS-V14PX16PGAC**
Application Module	
MV1-VAM	Keysight Vision ONE Visibility Application Module, for use in Vision ONE Network Packet Broker (992-0142)
Licenses	**Out of Band Decryption**
SUB-V1-PSSL	Keysight Vision ONE, One (1) year Decryption Out-of-band subscription; Licensed for the Vision ONE Visibility Application Module (VAM) (993-0178)
LIC-V1-PSSL2	Keysight Vision ONE Decryption Out-of-Band perpetual feature; Licensed for the Vision ONE Visibility Application Module (VAM) (993-0225)
Bundles	**Application Module and Inline Decryption License**
MV1-ASSL-1G	Keysight Visibility Application Module bundled with Secure Stack - Active SSL license included – 1 Gbps (992-0087)
MV1-ASSL-2G	Keysight Visibility Application Module bundled with Secure Stack - Active SSL license included – 2 Gbps (992-0088)
MV1-ASSL-4G	Keysight Visibility Application Module bundled with Secure Stack - Active SSL license included – 4 Gbps (992-0089)
MV1-ASSL-10G	Keysight Visibility Application Module bundled with Secure Stack - Active SSL license included – 10 Gbps (992-0086)
Security Bundles	**Vision One unit, Application Module, Ports, Inline and Inline Decryption Licenses**
BD-V1-ASSL-1G	Keysight Security Bundle includes: Vision ONE, with a license for 8x1G ports and the Inline feature, and Visibility Application Module bundled with Secure Stack - Active SSL license - 1Gbps (991-0192)
BD-V1-ASSL-2G	Keysight Security Bundle includes: Vision ONE, with a license for 8x1G ports and the Inline feature, and Visibility Application Module bundled with Secure Stack - Active SSL license - 2Gbps (991-0193)
BD-V1-ASSL-4G	Keysight Security Bundle includes: Vision ONE, with license for 4x10G and 8x1G ports and the Inline feature, and Visibility Application Module bundled with Secure Stack - Active SSL license - 4Gbps (991-0194)
BD-V1-ASSL-10G	Keysight Security Bundle includes: Vision ONE, with license for 4x10G and 8x1G ports and the Inline feature, and Visibility Application Module bundled with Secure Stack - Active SSL license - 10Gbps (991-0195)
Licenses	**Host categorization Service for Application Inline Decryption License**
SUB-ASSL-HCS-1G	Keysight Host Categorization Service subscription for 1G SSL (993-0125)
SUB-ASSL-HCS-2G	Keysight Host Categorization Service subscription for 2G SSL (993-0126)
SUB-ASSL-HCS-4G	Keysight Host Categorization Service subscription for 4G SSL (993-0127)
SUB-ASSL-HCS-10G	Keysight Host Categorization Service subscription for 10G SSL (993-0128)

Vision X ordering information

Part number	Vision X
Baseline Platform Requirements	**Chassis (options)** • **SYSVX-BASE-AC** • **SYSVX-BASE-DC**
Application Module	
MVX-AM4PC	Keysight VisionX, Application Module, (4) port 100G front panel ports. Two (2) processors, each capable of running an independent supported application.
Licenses	**Inline Decryption**
LIC-VX-ASSL	Keysight Vision X, Inline Decryption perpetual features. Licensed for one (1) CPU on MVX-AM4PC module. Max (2) per module
SUB-VX-ASSL-HCS	Keysight Vision X, Host Categorization Service subscription. Licensed for one (1) CPU on MVX-AM4PC module. Max (2) per module. Licensed for one year.
Licenses	**Out-of-Band Decryption**
SUB-VX-PSSL	Keysight Vision X, One (1) year Decryption Out-of-Band subscription; Licensed for one (1) CPU on MVX-AM4PC module; Max (2) per module (993-0179)
LIC-VX-PSSL	Keysight Vision X Decryption Out-of-Band perpetual feature; license for one (1) CPU on MVX-AM4PC module; Max (2) per module (993.0192)

Vision 400 ordering information

Part number	Vision 400
Baseline Platform Requirements	**Chassis (options)** • **SYS-V400-BASE-AC** • **SYS-V400-BASE-DC**
Licenses	**Inline Decryption**
LIC-V400-SS-INLD	Keysight Vision 400 SecureStack Inline Decryption feature licensed with 50 Gbps throughput (993-0309).
SUB-V400-SS-HCS	Keysight Vision 400 one year subscription for Inline Decryption Host Categorization Service feature (993-0315)

Support

Keysight's Visibility industry-best products are backed by our industry-leading expertise. Our comprehensive product support does more than ensure uptime – it ensures a competitive edge. The Keysight support team partners with customers to:

- Avoid downtime and keep schedules on track
- Implement according to industry specifications
- Develop best practices to meet individual needs and objectives
- Maximize efficiency and reduce operating expenses
- Protect and maximize investments in test and visibility

In addition to above, Keysight customers registering for the secure area and access to the Support Site will also be able to view and download our product Security Advisories.

Access Keysight Visibility Support

About Keysight Visibility

Connect and Secure the World with Dynamic Network Intelligence

The need for always-on networks is pervasive, and expectations are high when it comes to keeping them connected and secure. As technologies advance, edge computing, cloud environments, sophisticated security threats, increasing bandwidth requirements, and demanding compliance regulations make it challenging to extract actionable insight from your network.

Keysight can help. Customers rely on our solutions to deliver rich data about network traffic, applications, and users across any networking environment. This deep insight is what we call dynamic network intelligence. It helps you continuously innovate, meet aggressive service level agreements, and keep applications running smoothly and securely.

Learn more about Keysight Visibility Solutions

Keysight enables innovators to push the boundaries of engineering by quickly solving design, emulation, and test challenges to create the best product experiences. Start your innovation journey at www.keysight.com.

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