Visibility through CloudLens Public for Application/Network Performance Monitoring

Business Challenges

• **Exponential Data Growth**
  As digital transformation, mobility, and business applications continue to increase.

• **Workload Performance**
  As public cloud offers economies of scale but restricts application data visibility and network control.

• **Delayed Actions**
  As restricted visibility makes it hard to manage application performance, capacity planning, and timely resolution of issues.

Business Value

• **Business Continuity**
  Through proactive, end-to-end network visibility and fast application issue resolution.

• **Regulatory/Policy Compliance**
  Through application-level control and network data recording/playback.

• **Service Assurance**
  Through performance optimization and proactive SLA management.

Need for Visibility in the Public Cloud

Changes to the business models driven by technological innovation and digital transformation are pushing small-to-medium businesses (SMB) and enterprises to figure out the most economical and scalable way to run their IT operations and stay profitable. Digitization and mobility drive the exponential rise in data and ‘data in transit’ through the network. Almost every business sector (retail, education, finance, healthcare, manufacturing, energy, and service providers) is considering or going through one of the following transitions: data center consolidation, virtualization, and migration to public cloud. While SMB had started moving their IT operations to the public cloud long ago, medium/large enterprises are now also benefitting from the irresistible economies of scale the public cloud offers. Increased competition among the Cloud Service Providers (CSP) makes it more affordable for everyone. The public cloud however, has strict policies and Service Level Agreements (SLAs). This raises challenges in terms of managing application performance and security, which require deep visibility into the network. Since public cloud design limits access to physical infrastructure for traditional visibility, traditional tools like physical Taps and Network Packet Brokers (NPB) cannot be used. Moreover, those tools are not capable of addressing the needs of a distributed architecture like public cloud. To meet this challenge, innovative, cloud-native solutions are needed to provide the visibility allowing businesses to stay on top of their IT operations while benefiting from the economics of cloud computing.

Overall Solution

Savvius and Ixia CloudLens Public work together in a layered model. Ixia builds a visibility network inside the public cloud - reaching within and across Virtual Private Clouds (VPC) and instances to access application/network packet data. CloudLens does this with ‘sensors,’ lightweight Docker-based containers that attach to instances, and a central management platform offered as Software-as-a-Service (SaaS), where the sensors and visibility is managed. Through the sensors, CloudLens Public copies and filters relevant cloud instance application (or other) data seamlessly over a secure path to Savvius tools such as Savvius Omnipeek Virtual. Using the Savvius Omnipeek application, IT and network operations personnel can then connect to the data from anywhere, anytime, and perform real-time or delayed analysis related to application and network behavior. The result is improved application performance, enhanced customer experience and increased business continuity.
Solution Benefits

• **Full Network Visibility**
  Leaves no blind spots in network investigation or security planning. Network traffic is monitored in real-time, and stored for playback analysis.

• **Simplified Deployment**
  Easy to deploy plug-n-play solution that is compatible with other tools in the cloud. Single-pan-of-glass analysis access from anywhere.

• **Easily Scalable**
  Scales programmatically with cloud instances, virtual appliances, multi-gigabit capture-to-disk rates, and multi-gigabyte storage capacity.

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**CloudLens**

The first network-level solution that provides Visibility-as-a-Service (VaaS) through a Software-as-a-Service (SaaS). Designed from the ground up to retain the elastic scale, flexibility, and agility benefits of the cloud.

**Omnipeek.**

Network analytics/security investigation software providing intuitive visualization and effective forensics for faster resolution of application/network performance and security issues.

**Omnipliance.**

Intelligent packet capture and analysis appliances with zero-loss capture-to-disk and extensible storage capacity for real-time and post-event data analysis of high speed networks.

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**Ixia CloudLens Public Visibility and Data Services**

Planning and building a foundation for visibility is a must-have in today’s public cloud environments. The first step in building a visibility infrastructure is placing Ixia CloudLens Public sensors at strategic locations to be monitored in your public cloud. CloudLens sensors are light-weight, Docker-based containers that sit in your cloud instances. Depending on the number of instances, CloudLens auto-determines the level of visibility and monitoring needed. CloudLens is built to scale with the cloud. As workloads and applications scale-out or in, CloudLens adjusts and scales the Visibility-as-a-Service (VaaS) subscribed to. Once CloudLens is placed in all strategic locations, data is seamlessly delivered to Savvius tools. This ensures that Savvius tools get a clean data stream for capturing, storing and analyzing. From that point on, the visibility service can be turned on or off on an hourly, weekly or monthly basis, offering a pay-as-you-use model for running a cost-effective IT operation.

**Savvius Application/Network Performance Monitoring and Analysis**

As enterprises move workloads to public cloud, they struggle to understand how to make them work properly and get the required level of application performance out of the cloud. The traffic relayed by the CloudLens Public sensors is put to real use when Savvius OmniplianceVirtual captures and stores the application related network flow/packet data for long term visibility. and Savvius Omnipeek application processes it through advanced data analysis algorithms. The result is an actionable visualization of key network performance metrics such as application latency, unified communication quality, top applications, dependency mapping, network utilization and multi-segment analysis. Savvius Insight, Savvius Omnipliance and the Savvius OmniplianceVirtual with zero-loss data capture and retention solution can be deployed in branch offices, on-premises data centers, and cloud. The solution is ideal for managed service providers (MSP) offering on-demand VaaS service to their SMB clients.

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**About Ixia**

Ixia, recently acquired by Keysight Technologies, provides testing, visibility, and security solutions, strengthening networks and cloud environments for enterprises, service providers, and network equipment manufacturers. Ixia offers companies trusted environments in which to develop, deploy, and operate. Customers worldwide rely on Ixia to verify their designs, optimize their performance, and ensure protection of their networks and cloud environments to make their networks stronger. Learn more at [www.ixiacom.com](http://www.ixiacom.com).

**About Savvius**

Savvius offers a range of powerful software and appliance products that automate the collection of critical network data for network forensics in security investigations and for network and application visibility and performance diagnostics. Savvius products are trusted by network and security professionals at over 6,000 companies in 60 countries around the world. Learn more at [www.savvius.com](http://www.savvius.com).

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