On-Premises/Private Cloud Visibility for Application/Network Performance Monitoring

Business Challenges

- **Exponential Data Growth**
  As digital transformation, mobility, and business applications continue to increase.
- **Workload Performance**
  Due to scattered data across private/hybrid cloud, application complexity, and mobile users.
- **Delayed Actions**
  As reduced visibility makes it hard to manage application performance, capacity planning, and timely resolution of issues during data center consolidation, virtualization and cloud transition.

Business Value

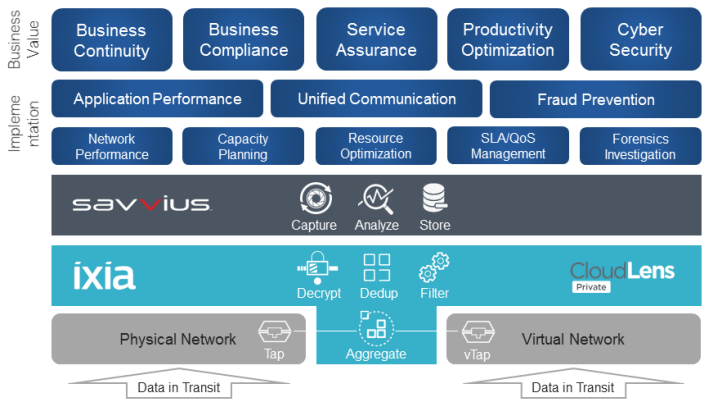
- **Business Continuity**
  Through proactive, end-to-end network visibility and rapid application issue resolution.
- **Regulatory/Policy Compliance**
  Through application-level control and network data recording and playback.
- **Service Assurance**
  Through performance optimization and proactive SLA management.

Need for Network Visibility

Business sectors like finance, healthcare, retail, manufacturing, energy, education, and service providers are going through massive changes due to digital transformation, which is driving explosive growth in data over the network. On top of that, millions of mobile devices, Internet of Things (IoT), and new applications continue to enter the space and contribute to further growth in data. Most of this 'data in transit' is related to the applications hosted in the data centers and private/hybrid cloud, going through the service provider/private network to/from the enterprise branch offices. Almost every business is considering or going through one of the following transitions: data center consolidation, virtualization, and cloud adoption. This raises the challenges of application performance, management and security, all of which require deep visibility into application and network data. Scattered data at multiple locations, increased application complexity and a mobile work force pose another set of challenges and push the limits for capacity planning, application performance and security. To address those challenges, visibility is required to be able to access data from disparate sources, aggregate and process it, and properly manage it for appropriate monitoring.

Overall Solution

The Savvius and Ixia joint solution works in a layered model where Ixia's CloudLens Private virtual tapping (vTap) and Vision Network Packet Brokers (NPB) work with the data in transit from within virtualized and physical networks and relay the data to Savvius tools like Savvius Omnipliance and Savvius Insight series appliances. Ixia provides data aggregation and manipulation to provide Savvius tools a clean data stream for capturing, storing and analyzing. Using the Savvius Spotlight and Savvius Omnipeek applications, IT and network operations personnel can then connect to the data from anywhere, anytime, and perform real-time monitoring and real-time/delayed analysis related to application and network behavior. The result is improved application performance, enhanced customer experience and increased business continuity.



Ixia Network Visibility and Data Services

Planning and building visibility as a core function is now a must-have in enterprises and data centers. Ixia CloudLens Private bridges the gap between virtual and physical networks, extending access to inter-VM east-west traffic. The fundamental of building a visibility Infrastructure starts by placing CloudLens vTap at the strategic locations within the virtual

Solution Benefits

- **Full Network Visibility**
  Leaves no blind spots for network investigation or security planning. Network data is monitored in real-time, and stored for a playback analysis.
- **Simple and Versatile**
  Supports multiple hypervisors including VMware ESXi/NSX, OpenStack KVM, Microsoft Hyper-V, vSwitch (VSS, vDS) with multi-tenancy.
- **Easily Scalable**
  Scales programmatically with virtual machines to millions of flows, multi-gigabit capture-to-disk rates, and multi-terabyte storage capacity.

CloudLens Private

Offers organizations the visibility they need, while keeping aligned to "all cloud," hybrid cloud, multi-cloud or any cloud strategy.

savvius Spotlight

Actionable network visibility to identify and solve application/ network performance problems and locate network policy/security issues with unprecedented speed and precision.

savvius Omnipeek

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

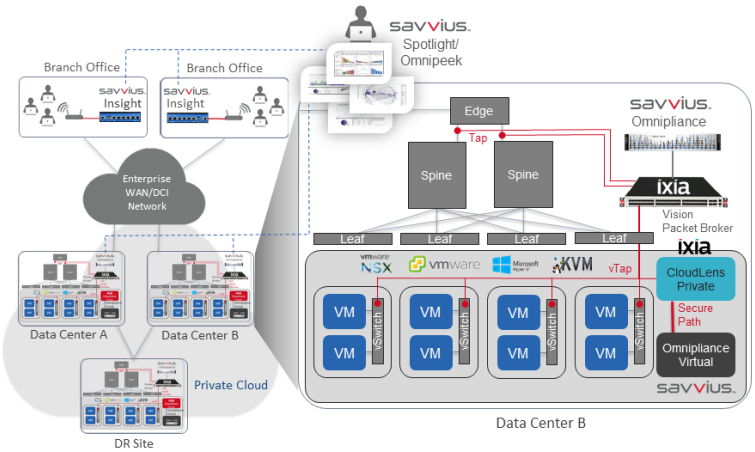
savvius Omnipliance

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.

environment to be monitored. CloudLens supports leading hypervisors such as VMWare ESXi/NSX, OpenStack KVM, and Microsoft Hyper-V via a single management interface to support organizations that use a variety of private cloud technologies. CloudLens supports multi-tenancy while being vSwitch (VSS, vDS) agnostic. The virtual traffic can be routed to Savvius tools, Vision NPB, or kept within CloudLens for further processing. CloudLens Private enables aggregation, filtering, advanced packet processing, and application-layer intelligence using Ixia's Netstack, PacketStack and AppStack capabilities before delivering the groomed traffic to Savvius tools. Features are supported such as SSL decryption, so encrypted data can be accessed. De-duplication, so only a single data stream is delivered for analysis. And filtering - Ixia offers not only basic L2-L4 based filtering, but also provides unique application based filtering. With those capabilities, analysis and storage is efficient - no duplicate data is captured and only relevant data is sent to Savvius tools.

Savvius Application/Network Performance Monitoring and Analysis

Data traffic relayed by Ixia CloudLens Private vTap, physical Tap, and Vision NPB is put to real use when Savvius Spotlight and Savvius Omnipeek applications process it through advanced data analysis algorithms. At the same time, Savvius tools capture and store critical network flow/packet data for long-term analysis/playback using Savvius Omnilpliance, Savvius OmniplianceVirtual and Savvius Insight series appliances. The result is actionable analysis and visualization of key network performance metrics such as worst application/user flows, application latency, TCP quality, unified communication quality, top applications, dependency mapping, network utilization and multi-segment analysis. Such analysis enables enterprises to resolve application/network performance issues quickly (operational continuity, higher productivity, better customer experience), perform capacity planning for future growth, and close the security loopholes (traffic profiling).



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.

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.