FORTINET | ixia

SOLUTION BRIEF

Fortinet and Ixia Security Solution

Better Data for Faster Responses

Ponemon Institute reports that it still takes about six months to identify a data breach and more than two months to contain it once detected. To speed the appropriate response to security events, organizations need a highly integrated and automated security infrastructure that makes it easy to detect and block threats, enforce policies, and scale. All of this hinges on having complete, intelligent visibility across hybrid networks and data centers.

Fortinet and Ixia have teamed up to deliver complete solutions that mitigate complexity and effort as well as risk. Leveraging the Fortinet Security Fabric with Ixia's hybrid network visibility automates data capture, speeds analysis, and promotes the right proactive and preventive response.

Fortinet and Ixia Joint Solution

The integrated solution from Fortinet and Ixia leverages the Fortinet Security Fabric that is designed around a series of open application programming interfaces (APIs), open authentication technology, and standardized telemetry data. The Security Fabric enables organizations to integrate existing security technologies via open interfaces and provide end-to-end security without compromise.

Ixia's intelligent network and cloud visibility play a crucial role in operating and scaling an end-to-end security infrastructure. Ixia provides the packet-level visibility needed to equip Fortinet appliances with precisely the right data to promote fast and accurate responses, and automated failover protection to ensure resilience.

How It Works

Ixia's network visibility solutions include physical and virtual taps (vTaps) that capture packet-level data across a hybrid network or data center. Traffic is sent to Ixia's Vision network packet brokers (NPBs) for intelligent processing to remove duplicates as well as sensitive data and any unnecessary packets or header information. Vision NPBs then deliver precisely the right data that each FortiGate solution requires for fast and accurate analysis.

Joint Solution Components

- Fortinet FortiGate, FortiSIEM, FortiDDoS, FortiSwitch
- Ixia Vision Network Packet Broker (NPB), iBypass Switch

Joint Solution Benefits

- Flexible security design
- Intelligent Visibility Architecture
- Better data for better decisions
- High Availability Security Architectures

FORTINET FABRIC-READY

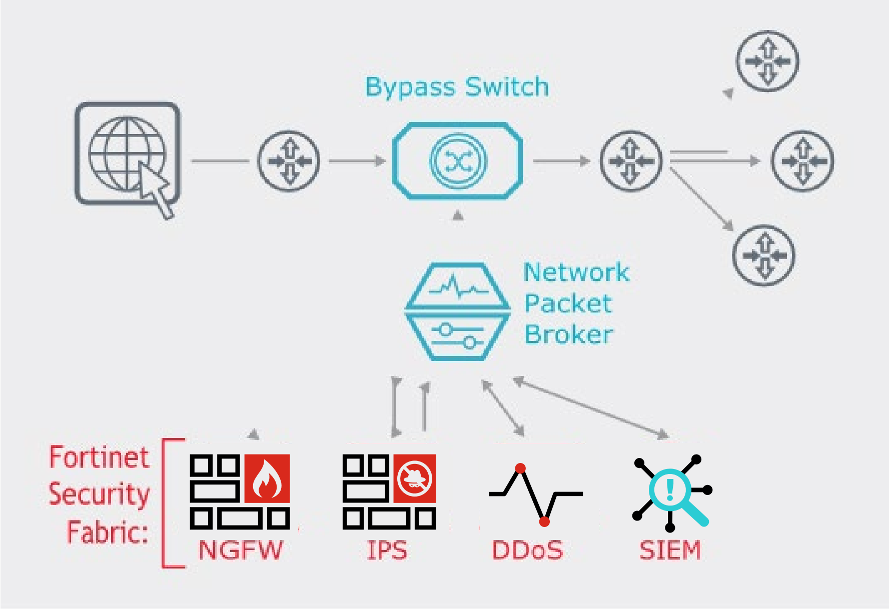

Figure 1: Diagram of Joint Solution.

Flexible Security Design

Ixia's visibility solutions deliver real-time data from live networks to inline and out-of-band security and performance monitoring solutions. Bypass switching allows devices to be brought inline or taken out of service as needed while Vision NPBs deliver precisely the right data from the network to each element of the Fortinet Security Fabric.

Intelligent Visibility Architecture

Ixia's Vision packet brokers perform deduplication, secure sockets layer (SSL) decryption, timestamping, header-stripping, and a host of other intelligent processes to groom traffic for efficient use by Fortinet security solutions. Vision NPBs also load balance to multiple security and monitoring tools to optimize utilization and extend the value of existing investments in security. The visibility architecture also includes external bypass switches that ensure high availability with failover protection during planned and unplanned link, power, and device outages.

Better Data for Better Decisions

Intelligent visibility makes security operations (SecOps) more efficient by delivering precisely the right network data to every security monitoring solution that needs to see it. This promotes fast, effective responses, reduces cost, and aids in forensics and other efforts to prevent blind spots and future vulnerabilities.

Ixia's Vision network packet brokers are known throughout the industry for reliable (zero packet loss) processing, ease of use, and delivering Layer 7 application intelligence. Vision NPBs also perform SSL decryption to alleviate the processing burden on firewalls, IPs, and other security solutions that process encrypted data.

High-availability Security Architectures

Ixia's iBypass switches maintain external connectivity during power failures and other outages, even when security appliances share a power supply with the bypass switch. Fortinet recommends automating failover using a bypass switch such as iBypass that features integrated heartbeat technology that automatically pings devices. Upon detecting failures, iBypass instantly begins routing traffic around security devices to keep data flowing.

Automated failover protection adds resilience that prevents issues from leading to costly full-blown outages. Bypass switching also allows devices to be taken in and out of service as needed without compromising the live network. This helps to speed and streamline deployments of firewalls, intrusion prevention systems (IPS), and other security solutions without having to wait for or consume valuable maintenance windows.

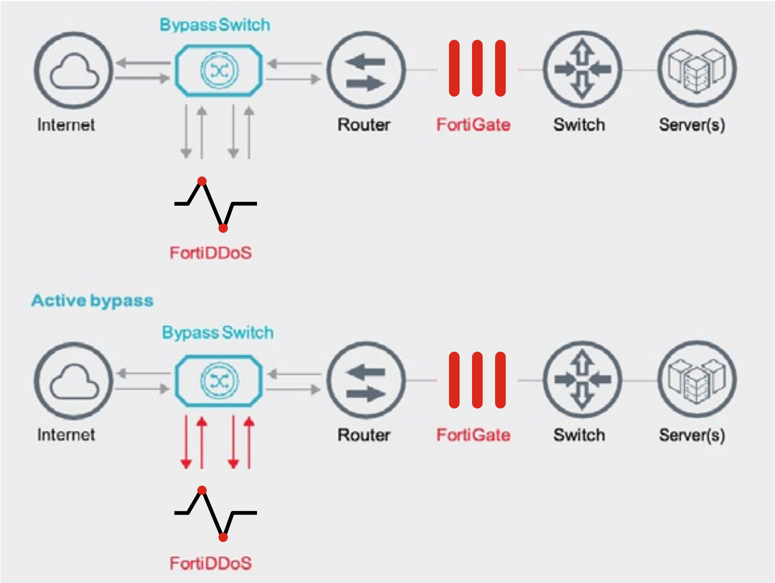

Figure 2: A typical DDoS configuration.

Fortinet Security Fabric

The Fortinet Security Fabric is an architectural approach that unifies the security technologies deployed across the digital network—including multi-cloud, endpoints, email and web applications, and network access points—into a single security system integrated through a combination of open standards and a common operating system. These same types of solutions are integrated into the OT environments that are enhanced through the integration of advanced threat protection technologies and a unified correlation, management, orchestration, and analysis system.

About Keysight Technologies

Keysight Technologies, Inc. (NYSE: KEYS) is a leading technology company that helps enterprises, service providers, and governments accelerate innovation to connect and secure the world. Keysight's solutions optimize networks and bring electronic products to market faster and at a lower cost with offerings from design simulation, to prototype validation, to manufacturing test, to optimization in networks and cloud environments. Customers span the worldwide communications ecosystem, aerospace and defense, automotive, energy, semiconductor and general electronics end markets. Keysight generated revenues of $3.2B in fiscal year 2017. In April 2017, Keysight acquired Ixia, a leader in network test, visibility, and security.

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