Mitigating the Risks of Network Downtime

Deployment and management of the McAfee® Network Security Platform NG-IPS

In today's aggressive cyberthreat environment, it's a necessity to deploy and manage in-line security devices while maintaining network uptime for scheduled or unscheduled downtime. By deploying your active, in-line McAfee® Network Security Platform NG-IPS with a Garland bypass network TAP, you mitigate the risks of network downtime as well as secure your organization from external threats. By incorporating a hybrid bypass TAP with packet broker functionality, your NG-IPS can be managed with up to three other active, in-line tools for load balancing and advance chaining functionality.

Garland Bypass Network TAPs Resolves Network Downtime

In normal operation, all network traffic passes unimpeded through the bypass TAP and into the in-line NG-IPS device. Should the NG-IPS lose power or need to be taken offline for scheduled maintenance, the TAP will "bypass" the NG-IPS and keep traffic flowing through the device and network. When the NG-IPS comes back online, the TAP will automatically redirect traffic through the device transparent to the network. If the TAP should lose power, it will fail-safe (bypass) without impacting network.

GARLAND
TECHNOLOGY
See every bit, byte, and packet®

McAfee®
COMPATIBLE

McAfee Compatible Solution

Garland Technology Bypass Network TAP Family:

1G-1U and 2U Modular Chassis System
- Supports RJ-45 Copper, SX Multimode Fiber, LX Multimode Fiber

1G-1U Integrated Bypass Network TAP
- Supports RJ-45 Copper, SX Multimode Fiber, LX Multimode Fiber

- Garland Technology EdgeLens

- In-Line Security Packet Broker System:

1G/10G -1U
- 1 or 4: 1G-SX/10G-SR or LR bypass TAPs (with failover) for security appliances

- 10 or 16: SFP/SFP+ ports for passive monitoring appliances

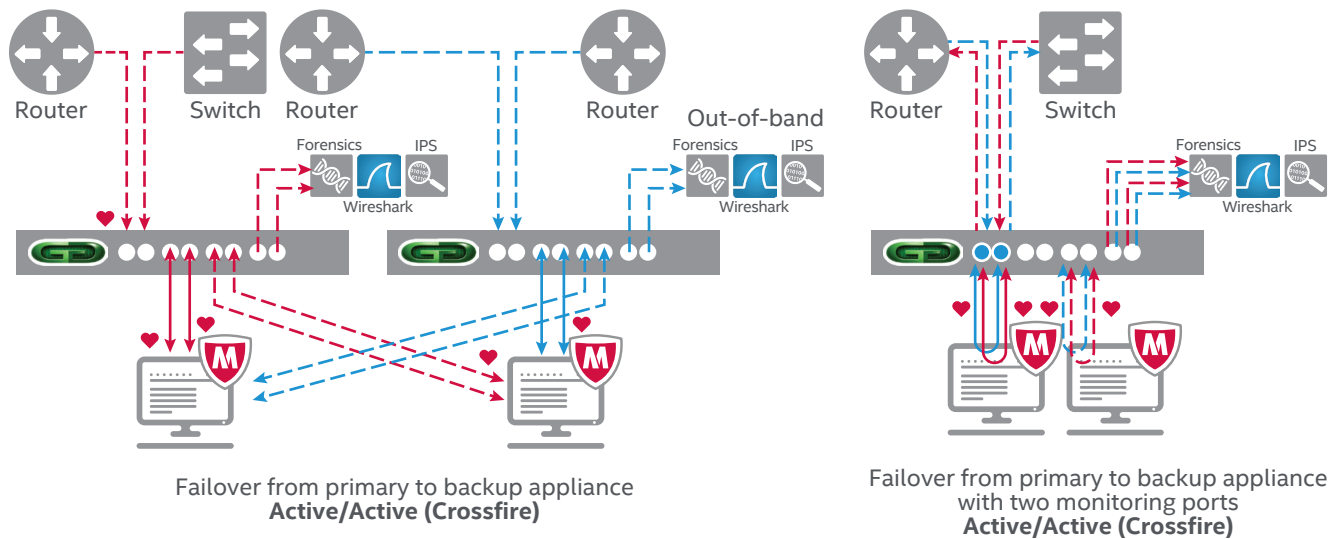*SX Multi-mode Fiber, LX Multi-mode Fiber*

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Figure 1. High-availability (HA) joint solution: 1G or 10G HA with active/active or active/passive primary to back-up devices.

Installation of a bypass TAP provides fail-safe protection for your NG-IPS. In a high availability scenario, when the primary link goes down, traffic can automatically be forced to the secondary link. The solution also manages up to two active, in-line security tools.
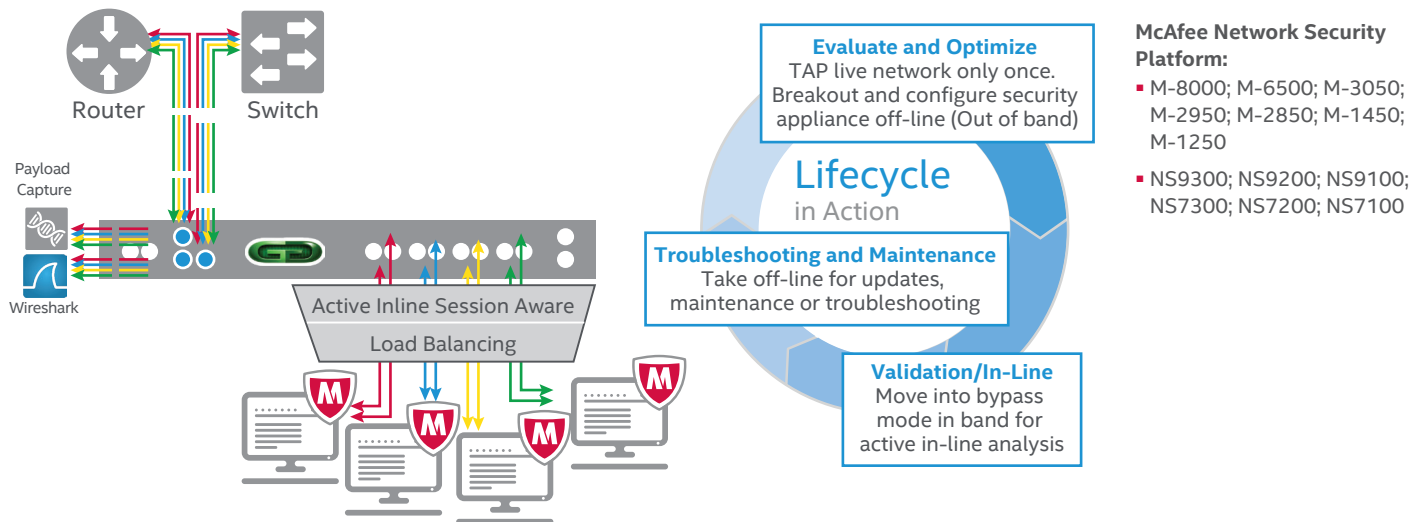

McAfee Network Security Platform:
- M-8000; M-6500; M-3050; M-2950; M-2850; M-1450; M-1250
- NS9300; NS9200; NS9100; NS7300; NS7200; NS7100

Figure 2. Advanced load balancing for 4G to 1G in-line security devices.

Advanced load balancing is a cost-effective strategy when you have a 10G link but multiple 1G appliances. Here, you see an EdgeLens packet broker with 12 ports.

Traffic comes in from the 10G link between a router and a switch and is copied to two out-of-band solutions, a forensics application and Wireshark. The traffic is then load balanced across four separate 1G McAfee Network Security Platform appliances.
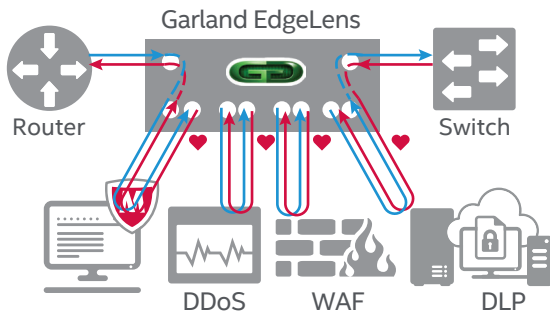
Figure 3. 10G chaining supports up to four in-line security devices.

Chaining, or serial deployment, creates a unified visibility layer by connecting all security appliances to each other through the EdgeLens. When the traffic enters the network, the EdgeLens sends data packets through the in-line security appliance chain. Each appliance analyzes the data. After the data is cleared, the EdgeLens copies and stores it for forensics analysis. This full visibility allows administrators to monitor data packets both before and after they pass through the security stack while maintaining network efficiency. When adding McAfee Network Security Platform to an existing security stack, the EdgeLens plays a leading role providing complete visibility and real-time monitoring for both in-line and out-of-band tools.

About Garland

Garland Technology is the leading network TAP manufacturer and provides the physical connection between the network and your active security applications. Garland Technology's network TAPs guarantees 100% visibility and network access by ensuring every bit, byte, and packet is fed to your security and monitoring appliances. With a full product line of network access tools, including network TAPs in bypass, aggregation/regeneration, and breakout modes, as well as hybrid bypass TAPs with packet broker and filtering capabilities to protect and manage your edge-of-network in-line appliances. Network capabilities support 1G/10G/40G and 100G. Garland's network bypass TAPs support active/active and active/passive fail-safe scenarios and are Intel Security compatible.

About McAfee Network Security Solutions

Our network security solutions include network intrusion prevention and advanced sandboxing detection, all designed from the ground up to work together and protect your network from the next generation of network-based attacks.

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