Benefits of Bypass

When Deploying and Managing Your Inline Appliance

Are you on a security team deploying active inline security strategies that comprise of a firewall, Intrusion prevention system (IPS), Web application firewall (WAF), Data loss prevention, Distributed denial of service (DDoS) protection, or SSL decryption?

When architecting your inline security tools into your network, incorporating bypass technology is a fundamental best practice to avoid costly network downtime. Simply put, a Bypass TAP provides the ability to manage your inline tool any time without having to take down the network or impact business availability for maintenance or upgrades.

In the tense moments of unplanned downtime, bypass provides expedited problem resolution in the event of a tool failure, having the flexibility to bypass the tool and keep the network up, failover to a redundant link or an HA solution.

How does a Bypass TAP work?

1. Bypass Mode Inline
2. Out-of-band tap ‘breakout’ mode
3. Failsafe

In the event an inline device becomes unavailable, it is bypassed and traffic is automatically forwarded around the failed tool (Diagram 2), keeping the link up.

The Bypass TAP functions differently than other types of TAPs. Instead of generating copies of monitoring links, the monitoring ports (Diagram 1, ports C & D) are used to bring a connected appliance inline without the appliance physically connecting to the surrounding network devices. In addition, bypass TAPs are also equipped with failsafe functionality on their network ports (Diagram 3, ports A & B), ensuring the link stays up.

Heartbeats Monitor the Health of Your Inline Tool

Heartbeat packets, a soft detection technology, are configured to monitor the health of inline appliance. Instead of relying on the direct connectivity of the network to the tool, the bypass TAP is purpose-built, designed specifically to pass heartbeat packets back and forth to detect an issue with the connected appliance. In the event of a failure, the bypass TAP will either bypass the tool to keep the link up, or in some scenarios, close the link in order not to let unmonitored data through the network.
Inline Lifecycle Management

Manage Your Inline Tool Any Time Without Downtime

Utilizing an external Bypass TAP offers the unique ability to implement inline lifecycle management. From sandboxing a new tool deployment to easily taking tools out-of-band for updates, installing patches, performing maintenance or troubleshooting to optimize and validate before pushing back inline, a Bypass TAP has quickly become the essential complement to any inline tool.

Sandbox or pilot new tools in your real environment with live packet data, without impacting the availability of the network. This provides the ability to evaluate and optimize the tool out-of-band, before deploying it live inline in your network.

The tool being tested is also exposed to the same type of data it would be monitoring for a production deployment, which increases the confidence of the piloting being performed.

- Tool Sandbox [Pilot or deploy new tools]

  - Evaluate & Optimize the tool out-of-band
  - Validation - Push active inline
  - Troubleshooting & Maintenance