Design, Deploy, and Operate Your Network Faster, More Efficiently, and with Less Risk

The Challenge

In today's networks, the need to reconstruct live traffic for assessment is critical for successful deployment of network configurations, topologies and new network services. Modern networks now contain multiple state-aware devices that require realistic upper layer application traffic to fully exercise the network elements.

The Solution

Together, Gigamon and Spirent have created the industry's first solution for recreating actual application traffic in pre-production environments. By combining their core competencies, Gigamon and Spirent are allowing customers to characterize complex, interleaved stateful traffic and reproduce application-aware flows in a repeatable fashion. The result is that network operators—including service providers, enterprise IT and governments—can adopt, deploy,

Joint Solution Benefits

- Adopt, deploy and operate new networking technologies faster, more efficiently, and with less risk
- Precisely recreate, record, and playback complex traffic patterns with QoE measured results
- Tap and aggregate live traffic using Gigamon and then reproduce this in Spirent Cyberflood
- Generate test traffic and flows that model exact application behavior using Gigamon Application Metadata

Introduction

The ability to test new, large-scale network systems using realistic and accurate workloads is critical for organizations where these systems will represent their brand and reputation to customers, business partners and employees. But recreating realistic application workloads and network flows in lab and test environments is a complex and challenging process. This challenge causes many organizations to simply test even the most mission-critical systems using PCAP-based playback rather than using stateful traffic that accurately reproduces the real-world environment.

The Gigamon and Spirent Joint Solution

Gigamon and Spirent test tools can be used in concert to allow network operators to design, deploy, and operate their networks faster, more efficiently, and with less risk.

- The combined solution of Gigamon Visibility Fabric and Spirent CyberFlood empowers the user for the first time to successfully and swiftly characterize stateful, interleaved application level traffic in the production network and then successfully reconstruct this traffic as a predictive, reproducible test pattern with Quality of Experience (QoE) measured results.
- Gigamon Application Intelligence taps and aggregates live traffic in the production network and identifies the application workflow based on content. By automatically identifying the application workflows and their relative percentages of all traffic, Gigamon classifies and reports the specific application distribution over the selected sample period with a much greater level of precision.
- Spirent CyberFlood can recreate traffic at the application workflow level, allowing the user to mix traffic according to the measured ratios between apps in the live network. In addition, Spirent CyberFlood has an extensive TestCloud library of applications, allowing the user to closely model apps. Once a traffic mix is created, it can be played back exactly or scaled up according to bandwidth or client and server IP addresses while measuring crucial KPI metrics.

Example Use Cases

There are many use cases for playing back stateful application workflows. Three of the most common are:

- **Support** – the support department can remotely schedule classification using the Gigamon Application Intelligence for specific network segments, subnets and time periods. Once application identification is complete, the user can construct the traffic mix in Spirent CyberFlood and play back the remote network's traffic in the lab.
- **RFP (Request for Proposal) testing** – the IT department can classify their traffic specific to the target subnet, and even choose multiple scenarios representing nominal and high utilization time periods using the Gigamon Application Intelligence.
- **Live Network Debugging** – the user can classify and reconstruct traffic allow for rapid debugging and prototyping of impact of device settings on application traffic.
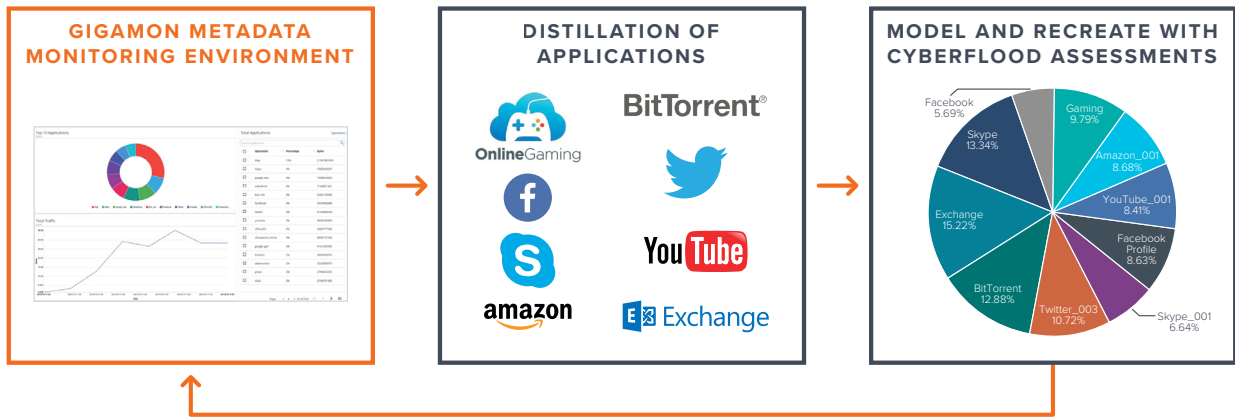
About Spirent Communications

Spirent Communications (LSE: SPT) is a global leader with deep expertise and decades of experience in testing, assurance, analytics and security, serving developers, service providers, and enterprise networks. We help bring clarity to increasingly complex technological and business challenges. Spirent's customers have made a promise to their customers to deliver superior performance. Spirent assures that those promises are fulfilled. For more information, visit: www.spirent.com.

About Gigamon

Gigamon delivers network visibility and analytics for digital applications and services across physical, virtual and cloud infrastructure enabling organizations to run fast, stay secure and innovate. Only Gigamon offers a full-stack solution with a common architecture across an organization's complex hybrid infrastructure to address performance and security needs. Since 2004, Gigamon has been awarded over 75 technology patents and enjoys industry-leading customer satisfaction with more than 3,000 organizations, including over 80 percent of the Fortune 100 and the majority of the world's Top 10 banks, healthcare providers, technology companies, mobile operators and government agencies. Headquartered in Silicon Valley, Gigamon operates globally. For the full story on how Gigamon can help your organization, please visit www.gigamon.com.

For more information on Gigamon and Spirent, visit:
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