



Case Study

This is a Customer Testimonial for Niagara Networks (Network Packet Broker products) by Ed Cramer (McAfee MFG Test Engineer)

Manufacturing Testing Challenge

McAfee, the device-to-cloud cybersecurity company, constantly evolves its leading security products and develops new technologies to enable customers to keep pace with the dynamic and ever-growing cybersecurity changes facing organizations. The McAfee's Network Security Platform (NSP) has a family of Intrusion Prevention Systems (IPS) products. These hardware products guard network-connected devices from zero-day, DOS, and other attacks. The IPS family of products are vigorously tested

McAfee is the device-to-cloud cybersecurity company. Inspired by the power of working together, McAfee creates enterprise and consumer solutions that make our world a safer place for the benefit of all. McAfee holistic, automated, and open security platform and cloud-first approach to building security solutions allow your products to coexist, communicate, and share threat intelligence with each other anywhere in the digital landscape. Where machine automation is converged with human intelligence so you can streamline workflows more efficiently.

at several specialized test stations at McAfee Contract Manufacturing sites. At the Environmental Stress Screening (ESS) station, McAfee needed a solution for distributing a continuous playback stream of (attack filled network traffic) and reliably converting and distributing it into many copies each of (1G copper, 1G, 10G, 40G, and 100G fiber) media streams. These streams feed into a chamber full of newly built McAfee IPS products. Between each ESS hot or cold test cycle, automation checks the health, port packet counts, attack counts, status, and more and verifies that the count threshold levels were reached with no errors.





Manufacturing Testing Solution

McAfee turned to Niagara Networks for its advanced Network Packet Broker solutions to enable the greatest ease, consolidation of equipment, and flexible GUI or CLI configurable solution for distributing a single stream of simulated network attacks into many streams that feed its Products being tested. The solution supports varying rates of traffic, from 1 to 100 Gbps, and reliably delivers to all the needed traffic port media types.

McAfee has achieved its goal of being able to automate the deployed tools and testing environment by using API-driven model. In addition, all configurations and changes can be done remotely to form a highly agile and efficient lab automation environment that can adapt to any scenario in real-time. The Niagara Networks Packet Brokers proved ideal for testing McAfee NSP/IPS products and accommodating tools for management controls, distributing traffic simulation and automation requirement.

"The Niagara Networks solutions brought a new level of simplicity and agility in the way we can accommodate the testing of many different products using a single source of simulated network traffic with attacks, while reducing the equipment count and cabling complexity. The new approach makes deployments faster and vastly simpler with new capabilities for viewing any of the traffic distribution ports from the Niagara Networks intuitive GUI or CLI interface."

- Ed Cramer, McAfee MFG Test Engineer

Value Proposition

- Simplifies deployments and access to generated test traffic for tools and devices under test (DUT)
- Replicates test traffic and attacks from a single source for testing multiple DUTs simultaneously.
 Greatly reduces the number of test equipment and network devices needed to distribute the playback of the traffic stream
- Grooms test traffic for each DUT
- Safeguards network availability with carrier-grade high availability and simulate various network conditions
- Accommodates multiple speed network connects simultaneously, up to 100 Gbps
- Enables automation (via CLI scripting or API)

"Niagara Networks brought the performance and flexibility we needed for a next-generation testing and development network with quality we could trust." says Cramer

