

SPiRENT STUDIO PERFORMANCE

TEST APP-AWARE PERFORMANCE WITH ACCURATE RECREATION OF LATEST APPS

With the explosion of smartphones and tablets, and the apps that run on them, the makeup of today's network traffic is fundamentally different now than just a few years ago. To deal with this, the network is becoming more intelligent with the deployment of next-generation systems such as application firewalls, UTM (unified threat management), and DPI (deep packet inspection) engines. With this application awareness the network has the ability to implement intelligent traffic management, security and QoS (quality of service) policies that are tied to specific application and user characteristics.

However, with many thousands of applications on the network and hundreds of new ones being released every day on millions of devices, QA, engineering and technical marketing teams are struggling to quickly and effectively test, validate and showcase their app-aware systems and networks.

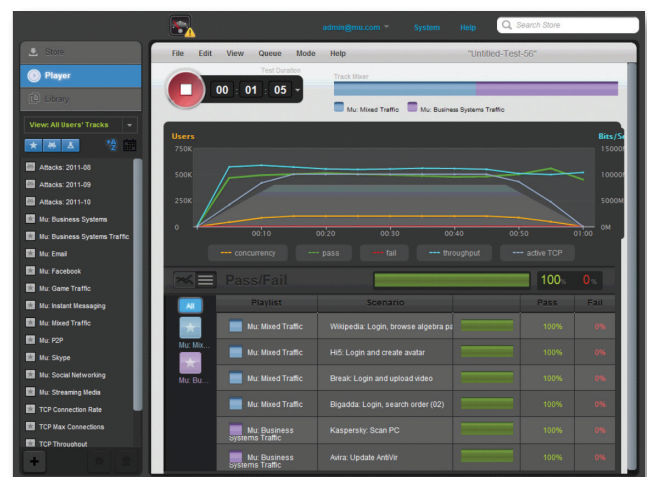
Spirent Studio Performance is the industry's first solution designed for testing the performance and security of application-aware networks. For the first time users are able to accurately recreate a mix of today's most popular applications and the latest security attacks, at real-world performance levels, for the following use cases:

APPLICATIONS

- **Measure the accuracy of application detection and classification engines:** Catch "false positives", in which an application is misclassified, by testing with hundreds of popular application profiles
- **Test the impact of security policies on application performance:** Model the production mix of application profiles, coupled with the latest security attacks, to gauge real-world performance
- **Benchmark scalability numbers of real users on the network:** Identify network capacity by simulating real-world application mixes and security attacks
- **Test the effectiveness of application QoS policies on traffic management:** Recreate production-level mixes of application traffic to trigger different policies
- **Showcase the application-aware capabilities of an intelligent networking device:** Recreate mixes of application traffic to mimic production network profiles for demos, pre-sales or POC (proof-of-concept) labs

BENEFITS

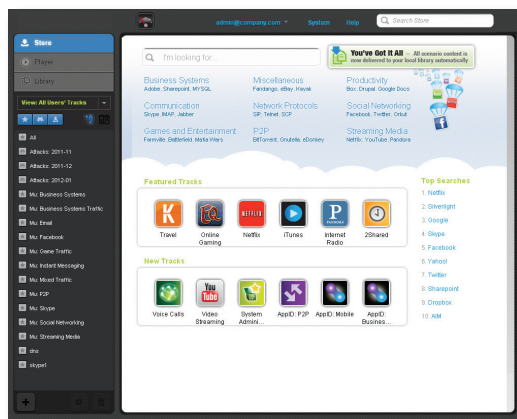
- Mirror your production network by recreating real-world mixes of application traffic and security attacks in the lab at the scale your network can handle
- Gain instant access to thousands of ready-to-run tests including Skype, BitTorrent and Facebook
- Gain immediate access to thousands of the latest security attacks and vulnerabilities to test your network
- Keep up with the latest application versions and client types (e.g., Skype, BitTorrent, Jabber on Android, iPhone, PC and iPad)
- Gain insight into the root cause of problems using detailed application & user level metrics so you can quickly resolve issues



Spirent Studio Performance provides an easy-to-use interface for quickly recreating mixes of application profiles and attack traffic.

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Spirent Studio Performance has integrated access to the TestCloud store containing thousands of application tests and security attacks.

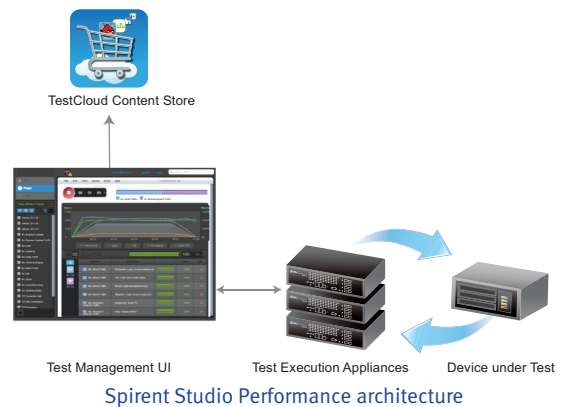
ARCHITECTURE

Spirent Studio Performance is made up of the following key components:

- **TestCloud:** An integrated cloud-based store containing thousands of application tests and security attacks, with hundreds of new tests posted each month
- **Test Management Server:** The software for managing the testing, delivered as a virtual machine (VM) for immediate deployment
- **Spirent TestCenter C100 Appliance for Studio Performance:** Rack mountable appliance that generates the application traffic at production network throughputs.

“This solution enables us to test the network for scalability and security using real applications. We can recreate applications to determine how they affect the network before we roll out our solutions to customers.”

– Rob Cameron, Product Line Engineering Director, Juniper Networks



KEY FEATURES

TestCloud test content

- Immediately access thousands of ready-to-run application profiles from the integrated cloud-based test store, TestCloud
- Keep up with the latest versions of popular web and mobile apps updated every month
- Keep up with variations of applications on different devices
- Keep up with global application variations – e.g., Skype in Asia, Europe, or United States
- Generate multiple forms of “bad” traffic including, malware, known attacks, exploits, threats, and malformed traffic

Real-world performance

- Generate application traffic and attacks up to 20 Gbps per appliance
- Scale up to your maximum network performance using cascaded appliances controlled by a single UI
- Control tests via bandwidth, concurrent connections or connection rate

Test case creation

- Convert your own pcaps to test cases within minutes
- Convert web interactions to test cases within minutes

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Multi-track

- Select multiple types of applications and run them as separate tracks
- Measure policies on a per IP, per interface or per application basis using separate tracks

Multi-user support

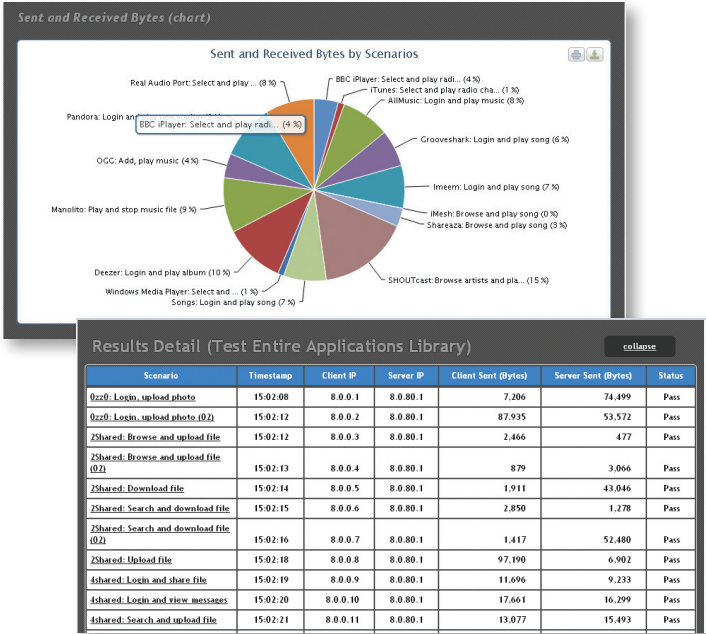
- Multiple testers can access the solution at the same time and run tests concurrently

Complex topologies

- Test with complex topologies involving source and destination NAT and proxies

Detailed metrics

- Includes throughput, connections per second, max connections, user concurrency, bytes sent and received and more



Spirent Studio Performance provides detailed results and reports to identify performance and security problems.



REAL APPS SUCH AS:

Business Apps

- MS Active Directory
- MS SharePoint
- Oracle
- WebEx

Communication

- AIM
- Google Talk
- ICQ
- Jabber
- Rediff Bol
- Yahoo! Messenger

Games/Facebook Apps

- Armagetron
- Battlefield 1942
- FrontierVille
- World of Warcraft
- Zynga Poker

Peer-to-Peer (P2P)

- BitTorrent
- Frostwire
- Gnucleus
- Gnutella

Social Networking

- Delicious
- Facebook
- LinkedIn
- Twitter

Streaming

- BBC iPlayer
- Hulu
- Metacafe
- Netflix
- Silverlight
- Skype

Known Security Attacks

- Adobe
- Apple
- Cisco
- Microsoft
- Oracle
- VMWare

SPIRENT STUDIO PERFORMANCE

TEST APP-AWARE PERFORMANCE WITH ACCURATE RECREATION OS LATEST APPS

STUDIO PERFORMANCE SOFTWARE SPECIFICATIONS	
Application Content	Over 2,400 application test including Skype, BitTorrent, Facebook, SharePoint and Exchange with new tests added every month
Attack Content	Over 1,300 known attacks with new attacks added every month
No. of concurrent tests	Up to 4
Reporting Metrics	<ul style="list-style-type: none">• Metrics: Connections, bytes sent/received, timeouts, errors, applications, attacks• Reporting by: Appliance, interface, track, scenario, IP address
Custom Test Creation	Yes
Elastic Scale	Unlimited appliances can be used in a single test
Automation APIs	Yes
Supported Browsers	Chrome, Firefox
Supported Virtual Machine (VM)	VMware vSphere Hypervisor™ (ESXi) v4.1.0 or higher, 64-bit, bare metal
Software Live Update	Yes (single update for both VM and appliances)

SPIRENT TEST CENTER C100 FOR STUDIO PERFORMANCE & TECHNICAL SPECIFICATIONS	
Dimensions	5.25" H x 16.53" W x 19.75" D, fits standard 19" rack, 3U high
Weight	31 lbs. (14.06 kg)
Power	115-230V, 50/60 Hz-460W
Environment	<ul style="list-style-type: none">• Operating temperature: 5°C-35°C• Storage temperature: 0°C-50°C• Operating or storage relative humidity: 10 to 95%, non-condensing
Regulatory Approvals	FCC Class A, EN 55022 Class A, EN 55024
Connectors	<ul style="list-style-type: none">• (2) Ethernet (10/100/1000 Mbps auto-negotiating, RJ45)• (1) serial console port (RS-232 DB9)• (2) USB ports
Test Ports	<ul style="list-style-type: none">• (8) 10-Gigabit SFP+ (10 Gbps, multi-mode, fiber); PHY is IEEE 802.3 10GBASE-SR• (2) Gigabit SFP (1 Gbps, multi-mode, fiber); PHY is IEEE 802.3 1000BASE-SX
CPU	(16) physical cores with hyper-threading
Throughput	40 Gbps per appliance
TCP Connections	5,000,000 TCP connections
TCP Connection Rate	150,000 TCP connections per second

SPIRENT SERVICES

Spirent Global Services provides a variety of professional services, support services and education services—all focused on helping customers meet their complex testing and service assurance requirements. For more information, visit the Global Services website at www.spirent.com or contact your Spirent sales representative.

Developed by  Mu Dynamics

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