

# SPIRENT AVALANCHE

## LAYER 4-7 TESTING

## SCALABLE APPLICATION PROTOCOL EMULATION ENGINE (SAPEE)

The Avalanche™ Scalable Application Playback Emulation Engine (SAPEE) provides the ability to configure, modify, and scale up practically any application layer network traffic. With SAPEE you can replay captured protocols across a system or device under test to evaluate overall capacities, error handling, effectiveness of (QoS) and (QoE) mechanisms, and other capabilities. SAPEE allows you to blend custom stateful and proprietary protocols into a test alongside other natively supported protocols and attack traffic.

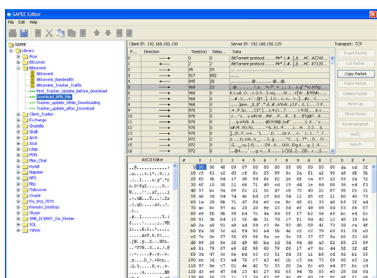
As an application layer feature, SAPEE can play back and magnify traffic that runs over TCP or UDP transports on top of IPv4 or IPv6. It includes an expandable playback library, containing P2P protocols such as Bit Torrent and Gnutella, Instant Messaging, and other business application protocols. You can also import a PCAP file of a protocol and replay the transaction, modify packet contents or create your own custom stream, recreate specific transactions and network behaviors.

### APPLICATIONS

- Create and magnify virtually any UDP or TCP quickly and easily—even custom and proprietary traffic
- Create transaction flows from a library of preconfigured protocols such as BitTorrent, Netflix, Instant Messaging and others
- Blend standard Avalanche protocols and custom protocols directly from the action list for advanced real-world network modeling testing
- Protocol mixes to directly test cloud and virtual services with Avalanche Virtual
- Replay with complete original timing integrity or modify for specific corner case testing
- Replay custom traffic flows at line rate—up to multi 10Gbps

### FEATURES & BENEFITS

- Import and replay virtually any application layer protocol allows Avalanche to extend support for custom traffic profiles including complex multi flow protocols
- Downloadable protocol library—download new protocol from Spirent to add new and topical protocols to you tests
- Decode and modify imported capture files for advanced playback modeling allows you to quickly distill specific transactions from a large playback to target specific transactions
- Modify inter-packet timings of original capture adjusts the nature of the playback to test the effect of timing and latency adjustments on content delivery devices
- Expandable protocol library provides a dynamic library of pre-made protocols for specific test cases: Select Protocol, Configure and Test
- Create and playback your own application protocols over TCP/UDP allows users the flexibility to create their own protocols with their own timing information
- Packet level control allows users to modify information at per packet levels including the timing information
- Add parameters and dynamic data to existing payloads to create realistic dynamic users transactions from static captures
- Change order of packets from client to server / server to client
- Modify TCP parameters



**SPIRENT AVALANCHE**  
**SCALABLE APPLICATION PROTOCOL EMULATION ENGINE (SAPEE)**

**SUPPORTED MODULES & PLATFORMS**

- Avalanche 290
- Avalanche 3100–1G and 10G
- Spirent TestCenter HyperMetrics CM—Converged Multiplay module 1G
- Spirent TestCenter C1 Appliance
- Spirent TestCenter HyperMetrics mX and mXP modules
- Spirent TestCenter HyperMetrics AP—Application Performance module 1G and 10G

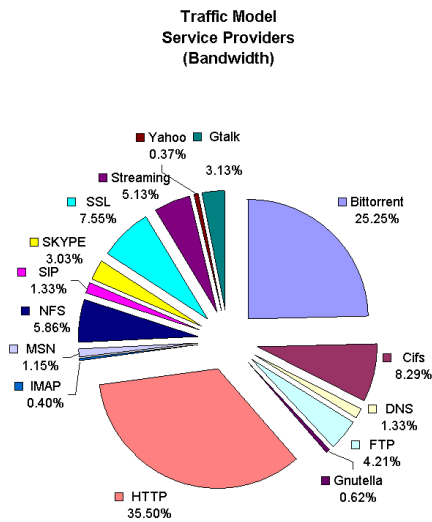
**REQUIREMENTS**

- Avalanche base software 4.00 or greater on
  - Avalanche 290 appliances
  - Avalanche 3100 Appliances
  - Spirent Test Center HyperMetrics CM
  - Spirent TestCenter HyperMetrics AP
  - Spirent TestCenter HyperMetrics MX 10G
  - Avalanche Virtual

ORDERING INFORMATION	
Description	Part Number
SAPEE for Avalanche 290 Appliance	CEE-SW-SAPEE-PT
SAPEE for Avalanche 3100 Appliance	CEE-SW-SAPEE
SAPEE for Spirent TestCenter11U Chassis Hyper Metrics AP, CM 1G and mX 10G Modules	BPK-1224A
Other software configurations are available	

**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](http://www.spirent.com) or contact your Spirent sales representative.



Choose from existing library of traffic distribution for various network profiles including service provider, enterprise, etc.

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