SPIRENT AVALANCHE

VULNERABILITY ASSESSMENT TESTING SOLUTIONS

CYBER SECURITY ATTACK TESTING

In today's hostile computing environment, companies are justifiably concerned about suffering attacks from malicious entities. Distributed Denial of Service (DDoS), ConFickr worm, Nimda, SQL Slammer, email viruses and their endless variants—IT professionals understand that defending against these attacks is a difficult proposition, and that the price of failure is higher than most companies are willing to admit.

THOUSANDS OF ATTACKS AND VARIANTS INCLUDING:

- **DDoS**
- **Worms**
- **E-mail attacks**
- **Viruses/Trojans/Malware**
- **VoIP attacks**
- **Application penetration**
- **Evaded Attacks/Fragmentation**
- **Port Scanning/Port Corruption**
- **Buffer Overflows/Protocol Exploitation**
- **Additional emulations become possible with the continuous release of new exploit definitions and threat updates**
- **Create millions of flooding attacks per second**

Spirent's™ next-generation solution provides visibility into essential areas of network security and allows Spirent customers to move beyond just measuring the network's capacity for normal traffic. Customers can now emulate and analyze the effects of corrupt and malicious traffic and other impairments on their networks alongside normalized user traffic. By using Avalanche's Vulnerability Assessment, network security professionals can identify vulnerabilities through realistic attacks like DDoS on individual devices or entire networks. The ability to run sequences of controlled attacks (even timing attacks throughout an entire test run) greatly accelerates the task of closing system vulnerabilities and setting the right cyber security policies. Continuously updated exploit definitions in the Avalanche Attack knowledge base assist in the prevention of malware surprises.

Avalanche 3100

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DON'T FACE THE THREAT ALONE

Avalanche is the industry leading Layer 4-7 test solution for emulating millions of users for testing content aware networks and devices. In the mix of normalized traffic are the undercurrents of threats and traffic anomalies that can be difficult to assess and address. By incorporating the power of Spirent's ThreatEx attack generation solution into Avalanche you now have a consolidated and powerful ally in the ongoing battle to defend your network against malicious traffic and tighten you security counter measures. Some benefits of this solution include:

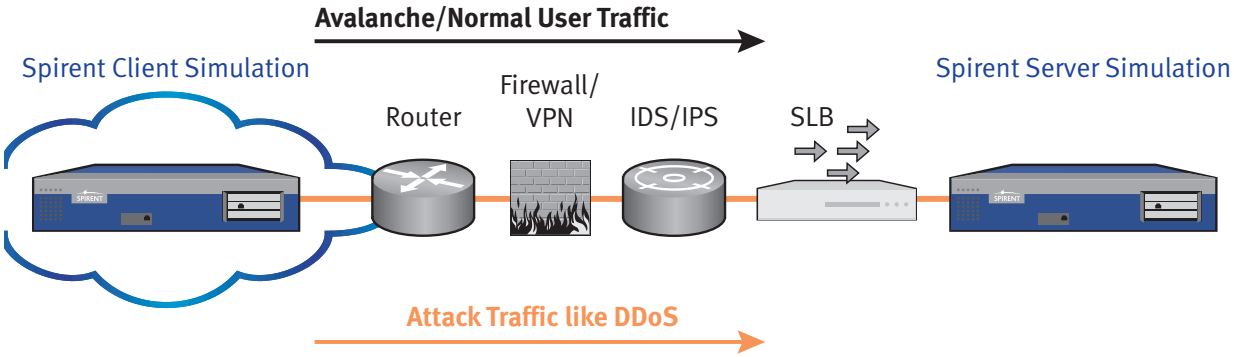
- Closes the window of vulnerability and reduces the need for in-house research by providing threat updates as soon as new outbreaks occur
- Enhances lab-based vulnerability testing by injecting hostile traffic in conjunction with normalized (good) traffic
- Enables IT personnel to confirm vendor performance claims by assessing network defenses against known and unknown threats
- Features diagnostic, assessment and reporting capabilities
- Provides a proactive threat-containment strategy, reducing the risk of costly network downtime
- Allows testing of robustness for next generation UTM (Unified Threat Management) Systems and other advanced security mechanism, verifying their capability under mixed attack and high volume normal traffic conditions
- Test attack generation and deflection directly in the cloud with Avalanche Virtual

AVALANCHE ATTACK KNOWLEDGE BASE AND UPDATE SERVICE

To ensure you are fully protected against the latest threats, Spirent offers a subscription based threat definition update service for the Avalanche solution. Subscription to this database ensures your QA and IT staff have immediate access to the latest threat signatures, delivering zero-day testing capabilities. Avalanche attack knowledge base updates can be downloaded at the end of each business day or pulled down as needed.

AVALANCHE ATTACK DESIGNER

Avalanche Attack Designer enables IT and QA staff to modify existing threats or to create customized threats in minutes–without timeintensive programming. The intuitive point-and-click graphical user inter face enables threats and exploits to be developed simply by describing them. The software then generates exploits using a patented TDL (Threat Definition Language) format. Users can also import specific traffic via Pcap files and replay or modify unique protocols or other transactions. Threat files can be executed directly by the Avalanche system or stored in a central database for future use.



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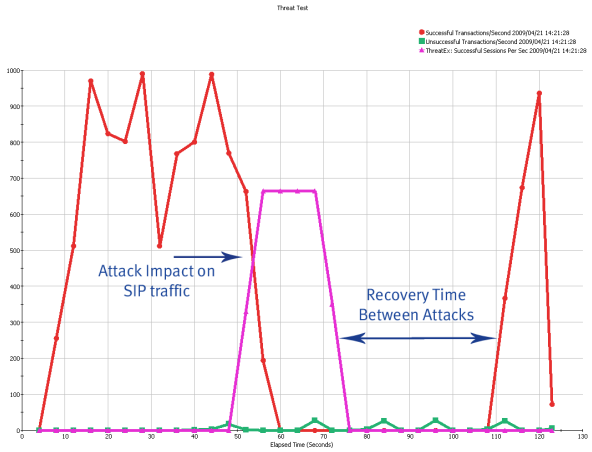
Adding Avalanche Vulnerability Assessment to existing test methodologies Enables IT and QA staff to use mixtures of both positive and negative traffic to test the security infrastructure under load and will determine the absolute cause and effect of attack mitigation.

HTTP/SIP with Attacks



AUTOMATION

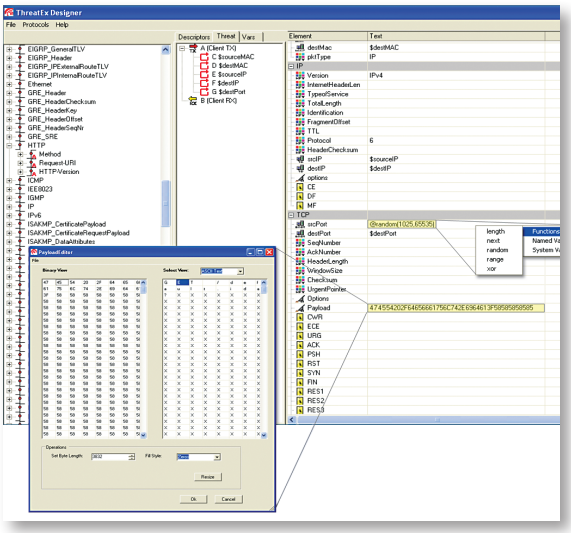
To streamline and automate the testing process Avalanche provides a complete TCL API so QA staff can select export Avalanche test plans to TCL or develop an entire test through the API. This automated approach simplifies the process of re-testing the network each time a new threat is detected. Developers can configure test parameters, threat parameters and statistical monitoring techniques through an intuitive GUI, and automatically generate Tcl scripts to be executed.

AN END-TO-END SOLUTION

Avalanche Attack Testingdelivers a complete negative traffic testing assessment solution to protect your network from hostile attacks. By adding Vulnerability Assessment testing to you standard methodologies your company gains more than access to the market-leading testing platform for malicious attacks. You also get a full and active partner constantly on the alert for new threats. Don't go at it alone – deflect hostile network threats by using Avalanche Vulnerability Assessment

MULTI-PLATFORM SUPPORT

Avalanche Attack Testing works on all current hardware platforms available today for Avalanche to address various testing needs. ThreatEx will run Avalanche 290 and 3100 Appliances, the Spirent TestCenter™ multi-slot chassis or Avalanche Virtual for maximum versatility. The Avalanche 290 is perfect for smaller bench level applications needing up to 2Gbps of bandwidth and the Avalanche 3100 appliance provides high density 1Gbps scale and up to four 10Gbps interfaces delivering maximum performance. For added flexibility, scalability and complete assessment capabilities, Avalanche Vulnerability Assessment will also run on the multi-slot Spirent TestCenter chassis and all Avalanche compatible HyperMetrics test modules. Doing so expands the test bench to include threat capabilities to the many other applications supported on the Spirent TestCenter platform.



Avalanche Attack Designer enables you to control the attributes of any threat, and embed any payload into the protocol stream without programming.

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CYBER SECURITY ATTACK TESTING

Avalanche Vulnerability Assessment – Applications

ORDERING INFORMATION	
Description	**Part Number**
Avalanche Vulnerability Assessment Option for Avalanche 3100 1G to 10G solutions	CEE-SW-VA
Avalanche Vulnerability Assessment Option for Avalanche 290 Portable 1G	CEE-SW-VA-PT
Avalanche Vulnerability Assessment Attack Knowledge Base 1Yr Subscription	SUB-0001

Avalanche Vulnerability Assessment – Spirent TestCenter

ORDERING INFORMATION	
Description	**Part Number**
Avalanche Vulnerability Assessment Option for Avalanche on Spirent Test Center – HyperMetrics modules - 9U chassis	BPK-1223A
Avalanche Vulnerability Assessment Option for Avalanche on Spirent Test Center – HyperMetrics modules - 2U chassis	BPK-1223A-2XMOD
Avalanche Vulnerability Assessment Attack Knowledge Base 1Yr Subscription	SUB-0001

Note – Other options are available

SPIRENT GLOBAL SERVICES

Spirent Communications understands that internal resources for managing complex testing programs may not always be available. Our Global Services engineers enable your business to quickly implement field-proven solutions, instead of spending time and resources to develop them in-house. Further information can be found at www.spirent.com/gs.

- **Avalanche Implementation Service:** Spirent can help you manage all facets of installing the Avalanche solution into your test bed – from site readiness analysis to physical installation and systems configuration. Knowledge transfer services are also available to help your staff per form critical testing tasks without delay
- **Network Security Assessment:** Experienced engineers from Spirent Global Services are available to assist in network vulnerability and performance assessment. Regulatory compliance can be established, and costs can be controlled by right-sizing your network security infrastructure
- **Engineering Services:** In-house access to Avalanche product experts can reduce your company's overall risk and accelerate the delivery of custom functionality. Additional resources translate into quick ramp-up, development, testing and deployment of customized attacks and protocols

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