Spirent Avalanche Virtual
Application and Security Testing Solutions

Spirent's Avalanche Virtual is the industry's only “all-in-one” cloud test solution designed to test and measure the Performance, Availability, Security and Scale of virtualized network infrastructure and applications deployed in the cloud with hypervisors such as VMware, Xen/Citrix, QEMU, KVM, including others. Avalanche Virtual is a software solution, based on industry-leading Spirent Avalanche platform that resides in virtualized data center environments. It offers both enterprise and cloud service providers with an unparalleled opportunity to correlate the impact of large-scale cloud-based application deployments with the promised quality of experience (QoE).

Applications

With Spirent Avalanche Virtual, enterprises and cloud computing providers can now test and validate:

- **Cloud performance testing**: Performance and capacities of virtualized networking appliances using real-world emulated users and business traffic/transactions
- **Cloud availability testing**: Availability under stress of live migration of applications and other fail-over scenarios
- **Cloud security testing**: Security robustness and resiliency of the cloud with encrypted traffic and threats simultaneously
- **Cloud scalability testing**: Dynamic scalability of applications from zero to millions of users to evaluate cost benefits that the cloud promises
- **Performance of different hypervisors**: Run Avalanche under different hypervisors such as VMware, Xen/Citrix and others for specific virtual applications

Avalanche Virtual exercises all layers of the cloud and allows the right applicable models like Software-as-a-Service (SaaS), Platform-as-a-Service (PaaS) and Infrastructure-as-a-Service (IaaS) to be tested. Spirent’s solution is well-suited to evaluate emerging cloud technologies like virtual application delivery controllers, firewalls and load balancers.

Features

Spirent Avalanche Virtual is the only test solution that offers both client and server emulation required to accurately replicate real user traffic in cloud environments. Key features include:

- **All of Avalanche in the cloud**: All of Avalanche’s hyper realistic user and security traffic is available for testing directly in the cloud
- **Client/server**: Emulates millions of real-world subscribers (clients) and application services (servers) end-to-end to measure QoS and QoE impact on each infrastructure component
- **User realism**: Avalanche provides realistic user behavior based on a specific browser, authentication, task, timing, content validation, etc., necessary to interact with actual deployed applications
- **On-the-fly load**: The user load can be dynamically grown in size during the test to see the impact of surge on the application load and response times
- **Detailed statistics**: The detailed run-time and post-run statistics help accurately and succinctly identify bottlenecks in the network and applications

Avalanche Virtual allows you to install the test solution on multiple hypervisors including:

- VMware ESXi 5.x
- QEMU
- Hyper V
- KVM
- Xen/Citrix
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.

Benefits

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<th>Benefits</th>
<th>Details</th>
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<td>Assure reliability</td>
<td>Isolates problems and issues encountered in pre-deployment stage, by network elements and applications due to scale and expandability.</td>
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<td>Guarantee high accuracy</td>
<td>Ensures that the SLA is unaffected for mission-critical applications during dynamic allocation of resources, and customers experience faultless service from the beginning.</td>
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<td>Reduce TCO</td>
<td>Delivers same real-world testing capabilities in the cloud as in traditional network with a single integrated system, thereby reducing the costs to compare and assess physical and virtual appliances.</td>
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<td>Mitigate the risk and concerns of the cloud unknown</td>
<td>Provides the most holistic solution to test the biggest challenges behind the promises of cloud computing: Performance, Availability, Security and Scale.</td>
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<td>Avalanche Virtual anywhere</td>
<td>A new edition of Avalanche Virtual that provides compatibility with virtual environments such as Xen/Citrix, KVM and QEMU.</td>
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Ordering Information

Due to the wide range of available system configurations, please contact your regional Spirent sales representative for detailed ordering information.