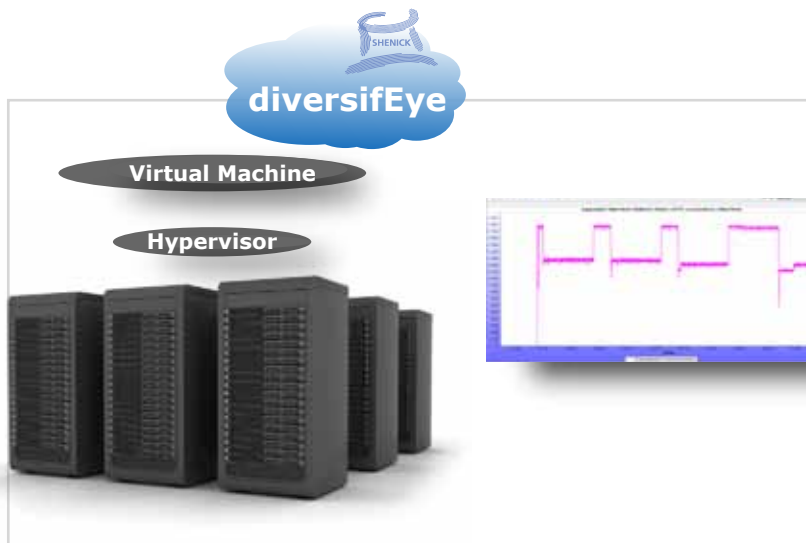
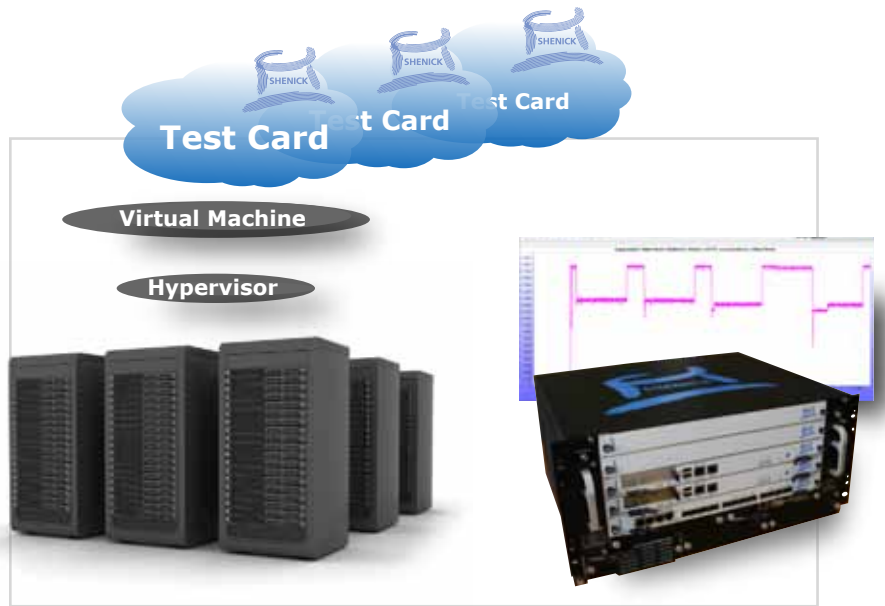


Virtual Infrastructure Test & Measurement Solutions

Hybrid -
Virtual Test Solutions



Completely Integrated -
Virtual Test Solutions



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 10.8.1.2 ffx4::0000
ff02:0000::0001:0002
 ff0x:0000:00fb 233.0.0.19 ff02:0000::0001:0002 :0000
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224.0.0.0

Virtual Infrastructure Testing

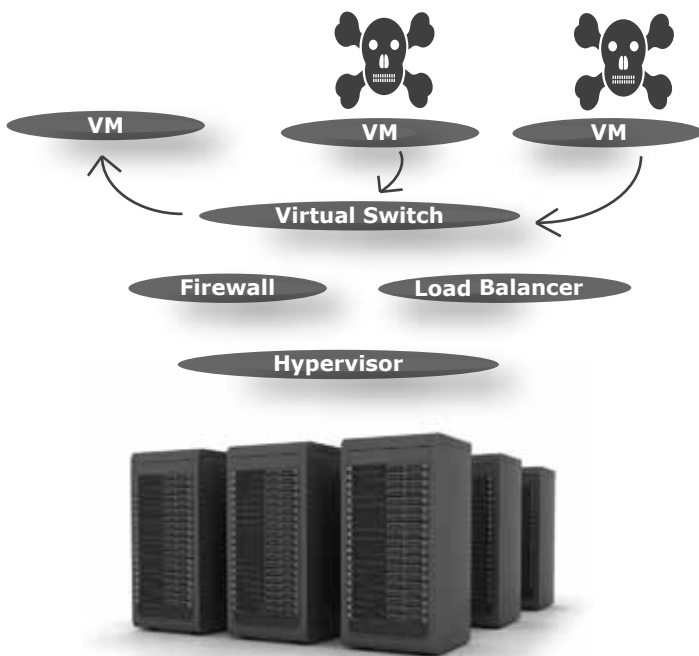
Performance testing of Virtual Infrastructure requires a per flow process, enabling measurements on concurrent flows on a per Virtual Machine basis.

A Virtual Machine (VM) or Virtual Network Infrastructure's performance must at minimum maintain the level of quality and performance that exist in physical devices and services. Measuring performance becomes more challenging as the embedded devices are no longer reachable via a physical test interface.

The Challenge

Measuring performance in the cloud is becoming more complex as more devices and applications are migrated to Virtual Machines. The depth at which the VM is embedded behind the Hypervisor on the Virtual Platform can leave an application server isolated with no physical access to an external test system.

To test the performance of these isolated servers on the virtual platform requires Shenick's embedded diversifEye Virtual Solutions. diversifEye Virtual Solutions enable performance testing via a mix of hybrid (both physical and virtual test ports are used) or via a completely embedded virtual solution.



diversifEye Virtual Solutions provide layer 4-7 emulation and measurement on a per flow basis. diversifEye VMs are used to deliver a mix of legal and illegal traffic flows into the core of the virtual platform.

Along with verification of the VM's performance on a per user, per application basis diversifEye enables testing of the Hypervisor's performance under extreme conditions. diversifEye is used to emulate islands of VM which include DDoS types of attacks.

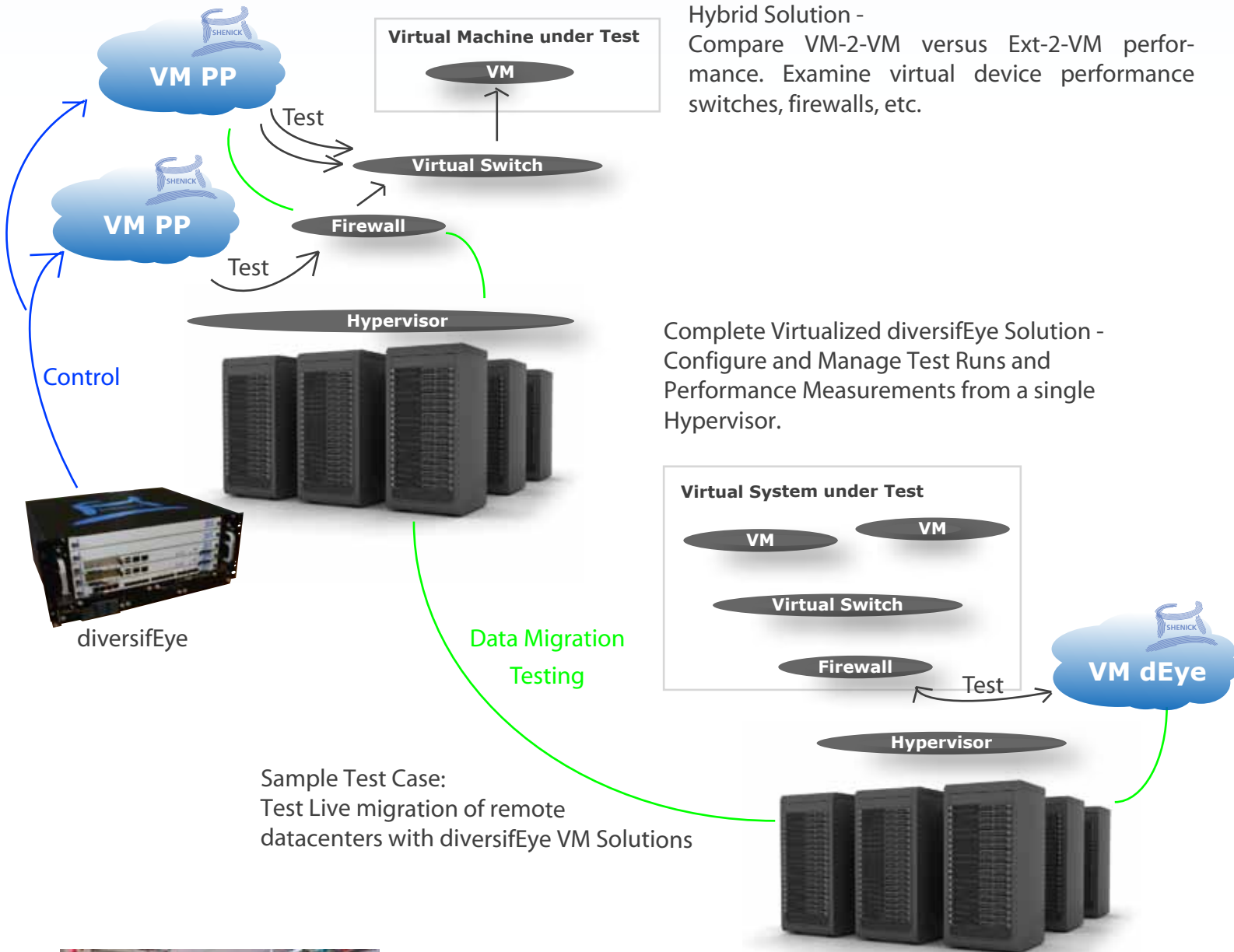
Sample test scenarios using diversifEye VM

- Layer 4-7 testing in consolidated virtualized data centers.
- SSL Offload/Tunnel testing - diversifEye VM with Applications and Tunnels.
- Address Spoofing Verification, Isolation, Policy Enforcement and Visibility testing.
- VM DDoS and mitigation performance testing.
- VLAN, CoS, QoS VM Testing. Multicast in a VM environment.
- VM Resource Testing (diversifEye VM with different resource limits).
- IDS/IPS Loading.
- Testing Availability and Service Assurance for Applications.
- Failover, Maintenance and migration.

diversifEye Virtualization

Shenick utilizes its award winning per flow test and measurement architecture to enable three unique virtual solutions for performance testing in the cloud. The solutions operate on all leading Hypervisors.

- diversifEye VM PP - A Virtual test card, with multiple virtual ports (managed by a physical diversifEye).
- diversifEye VM dEye - A completely virtualized diversifEye (both Management and Test Interfaces).
- diversifEye VM App - A performance limited version of the diversifEye VM dEye.



A considerable factor in deploying a Hypervisor solution is the ability to assure a high performance of Quality of Service in times of failover.

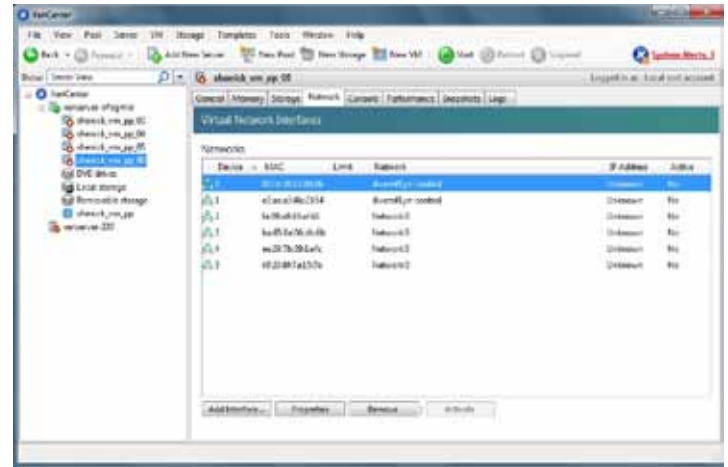
Shenick's Virtual Test Solution is built on the success of diversifEye per flow architecture. The ability to emulate and measure performance on a per flow basis provides the necessary microscopic view required to view the success of a failover transition plan in the datacenter.

diversifEye VM PP

diversifEye VM PP is the virtualization of the physical test interfaces associated with diversifEye. diversifEye VM PP are easily integrated into existing test beds where the physical diversifEye manages the diversifEye VM PP. This flexibility enables Shenick deliver the necessary test capabilities for VM-2-VM, along with Ext-2-VM testing on a wide range of virtual platforms.

diversifEye VM PPs provide per flow test and measurement functionality on a wide range of IP protocols. diversifEye VM PP are used to emulate and measure performance on real flows of varying types over the virtual infrastructure.

- Are highly scalable - multiple VM PPs per host
- Provide a full suite of IP protocols (incl. SSL/TLS/IPSec)
- Flexible Configuration (CPU speeds, Memory allocation)
- Per Virtual Machine, per application analysis



Multi-Hypervisor Compatible

One of the key challenges facing datacenter CIOs is to find the delicate balance of horsepower versus dollars in a Multi-Hypervisor deployment.

This non-trivial task is one of the challenges Shenick simplifies with its diversifEye Virtual Solutions. diversifEye Virtual Solutions are currently the only test solution available that has been adapted to work on all leading Hypervisors.

diversifEye Virtual Solutions enable CIOs to test various Multi-Hypervisor deployment strategies at an early stage ensuring every detail of the Multi-Hypervisor fits, from selecting the right Hypervisor to match the various workloads, or to meeting the varying storage needs.

About Shenick

Established in 2000, Shenick Network Systems delivers award winning IP communication test and performance measurement solutions, which enable Service Providers, Network Equipment Manufacturers and Enterprise customers test and deliver revenue winning devices and services.

Shenick's uniqueness is the delivery of 'Per flow' performance measurements, this fundamental principle of unique flows on unique emulated hosts with layer 2 and 3 properties enables Shenick deliver the most advanced test and quality assurance solutions.

With a global customer base of companies providing advanced telecoms and networking solutions, Shenick strives to ensure the delivery of quality test solutions and services for testing of these advanced next generation solutions.

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