

Virtual HyperIP

Data Transport Optimization with VMware

Introduction

Virtual HyperIP is a software-based Data Transport Optimizer, that operates on a VMware ESX server to boost the performance of storage replication applications from vendors such as EMC, NetApp, Symantec, IBM, Data Domain, FalconStor and many others. Virtual HyperIP mitigates TCP performance issues that are common when moving storage data over wide area network connections because of bandwidth restrictions, latency due to distance and/or router hop counts, packet loss and network errors.

Customer Successes

The following are examples of customers whom have benefited from the NetEx and storage vendor partnerships through the deployment and implementation of HyperIP Data Transport Optimization appliances:



Supported Applications

Virtual HyperIP supports best-of-breed replication applications that operate from servers, NAS devices or storage arrays using GigE & IP infrastructures. A virtual HyperIP appliance can operate with a remote virtualized HyperIP or a remote HyperIP appliance. Please see our application support matrix at www.netex.com for more information.

VMware Virtual Machine Benefits

- Significant cost reduction for server implementations. Compatible environment for all x86 servers.
- Virtual Machine 'instances' are isolated from each other via the ESX operating system.
- Virtual Machines contain a complete computing environment for each application.
- Virtual appliances operate independently from the underlying hardware platform.
- Provides a consistent infrastructure for BC/DR.

Virtual HyperIP Appliance Benefits

- Leverages VMware ESX virtual infrastructures.
- Increases end-to-end performance of replication applications by 3-10 times.
- Reduces VMotion transfer windows.
- Supports SRM processes and procedures.
- Utilizes 80-90% of available bandwidth between data centers or branch offices up to OC12 rates.
- Provides block level compression from 2:1 to 10:1, depending on the compressibility and prior de-duplication.
- Mitigates the effects of TCP WAN packet loss and/or network errors (up to 6%).
- Mitigates performance degradation due to distance latency.
- Increases WAN efficiencies by aggregating TCP data streams (8000+) from multiple applications.
- Provides 'time of day rate controls' for bandwidth management.

- Supports many-to-many network configurations.
- Provides storage Synchronization and Recovery on Demand features.

