PORTrockIT™ series

Datasheet: PORTrockIT™ Series 200 Virtual instance

Background

There are main reasons for poor performance when sending data across a WAN, but the chief culprit for is latency – the time delay between a source system sending a packet across the network, and the target system receiving that packet. The main cause of latency is the physical distance and all the intermediate pieces of equipment the data encounters on route. It is universally recognised that when data is sent over the network using TCP/IP, even modest latency levels can severely cripple performance. Add in packet loss the situation gets and the whole situation becomes totally untenable.

Windows Host Backup Client   **ESXi PORTrockIT**   1Gb   **ESXi PORTrockIT**   **Windows Host Backup Server**   1Gb   **WAN**   **6Gb SAS**   **LTO 5 Tape Drive**

Sample Configuration

Companies often try to solve TCP/IP performance issues by investing in more expensive network infrastructure that offers a larger maximum bandwidth. However, this does not fix the underlying problem of latency. Latency and packet loss prevent TCP/IP connections from fully utilising the available bandwidth – so any extra investment in bandwidth will simply be wasted unless the latency and packet-loss issues can be addressed.

The solution: PORTrockIT

PORTrockIT provides a solution to network latency and packet loss issues. Instead of sending a group of packets down a single physical connection and waiting for a response, the solution creates a number of parallel virtual connections that send a constant stream of data across the physical connection.

This parallelisation practically eliminates the effects of latency by ensuring that the physical connection is constantly transferring new packets from the sender to the recipient: there is no longer any idle time, and the network's bandwidth can be fully utilised.

PORTrockIT optimises the flow of data across the WAN in real time, even if network conditions change. By incorporating a number of artificial intelligence (AI) engines that continuously manage, control and configure multiple aspects of PORTrockIT – enabling the PORTrockIT to operate optimally at all times, without any need for input from a network administrator.

Whilst it is impossible to mitigate all of the effects of packet loss, PORTrockIT will through the use of the AI engines, learn its way around the worst effects of packet loss and provide magnitudes of performance improvement over that of standard network connection.

In practical terms, PORTrockIT is, deployed at either end of the WAN. This can be as a point to point connection or as a networked number of PORTrockIT nodes.

PORTrockIT is available as a virtual instance or as an physical appliance. Every PORTrockIT node can communicate with any PORTrockIT node irrespective whether it is a Virtual instance, Physical instance or a different series model.

AVAX INTERNATIONAL

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Vendor support

PORTrockIT is available today to work with FTP, REST, NetApp SnapMirror, NetApp SnapVault, Veritas NetBackup, IBM Spectrum Protect, Caringo and Datacore. Please contact Bridgeworks if your vendor software is not listed below or you have unique/encrypted data you wish to accelerate. We have a large ongoing test programme to add many more vendors to the portfolio.

PORTrockIT Virtual Configurations

Model/parameter	V200
Max throughput	200MB/s
PORTrockIT licences	1
Connected Nodes	1
ESXI vers	5.1 5.5 and 6.0
CPU	2 cores @ 1.8GHz
CPU with IPSEC	2 cores @ 3.4GHz
Memory	2GB
Storage [1]	1GB

1 Firmware Image includes: current image, previous image: recovery image, configuration and logs.