Innovators in Storage Technologies

JMR DataMover

The JMR BlueStor™ DataMover™ appliance is a high speed enterprise class data mover that allows users to easily transfer files across networks, whether locally, across the nation or around the world at very near line speed, and is independent of file size or depth of directory nesting. The system includes the capability to compress, de-duplicate, encrypt, and difference data, in virtually any combination, during data movement. All of these features operate at full bandwidth, independent of any latency introduced by the distance between the source and destination.

The system includes a 2U appliance running CentOS and the DataMover application, which uses TCP/IP for orderly accelerated transactions and "drop-in" implementation with existing infrastructures. The appliance provides dual GbE and dual 10GbE networking ports and includes a custom, easy-to-use GUI that is compatible with Windows, Mac, and Linux OS.

With the DataMover, typical transfers across a 10GbE fiber optic link are in excess of 925MB/s with a 300ms latency and approximately 1.1GB/s with lower latencies. JMR has tested file transfers inclusive of media files, such as DPX, large contiguous mezzanine files, and metadata files that typically choke even the highest bandwidth connections.

- **Transforms:** DataMover implements data transforms (compress, deduplicate, encrypt, and difference), in virtually any combination, during data movement. All of these features operate at full bandwidth, independent of latency introduced by the distance between the source and destination services.
- **Links:** Links are software abstractions of a WAN or LAN connection. There is no limit to the number of Links that may be established and maintained. Links are persistent, but use no CPU resources while not in use. Each Link describes the source and destination service, the additional data transforms to be employed, and may include the file system directories or lists of files to be transferred.
- **Usability:** DataMover moves files at line speed independent of file size or depth of directory nesting. It is easily embedded in all platforms including Linux/UNIX/AIX, Windows, and MAC OS X. Since it runs as a service, no code needs to be written and any program that addresses a TCP port for transfer can be routed through the DataMover service.
- **Capacity:** User storage is mounted to the DataMover via the user's internal network, either GbE or 10GbE, and the system has unlimited capacity.

A typical deployment would consist of two DataMover units. A user would go to the simple user interface on one of the units, and select the file or folder to transfer and enter the IP address or name of the other JMR unit. The hybrid software and hardware solution will analyze and configure the transfer to account for latencies and different file types, sizes, and quantity. Simply pressing the transfer button starts the transfer, while real-time transfer status and progress bar are provided to the user.

To help facilitate ease-of-transfer convenience, the system also incorporates a web-based directory which allows any authorized users to upload and download files with a simple browser plug-in.

Specifications:

Power supply: 500W, universal input 90-264V 50/60 Hz
Cooling: Three (3) hot-swappable cooling fans, N+1configuration
CPU: Intel 8-core i7, 3.5 GHz
RAM: 32GB
System disk: 120GB SSD
Caching (local storage): 1,024GB NVMe
OS: CentOS 7.x
Networking: (2) GbE; (2) 10GbE
Dimensions: 20"(D) x 19"(W) x 3.5"(H) (2U); 508mm(D) x 482mm(W) x 88mm(H) (2U)
Weight: 26 lbs; 11.8 kg
Warranty: 3-year Limited Warranty (parts/labor/updates included)

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