

Cybernetics Announces the Release of SANDR 4.0

Powerful iSCSI SAN Solution Sustains 400,000 IOPS

March 5, 2010, Yorktown, Virginia -- Cybernetics announced the next generation of its popular iSCSI SAN models, iSAN and miSAN D Series. Significant in this release is a dramatic boost in IOPS, Input and Output Operations per Second - a major standard by which disk performance is measured. IOPS are particularly critical in virtualized environments as well as in transaction intensive database applications. The iSAN D Series now delivers an incredible 400,000 IOPS, and the more affordable miSAN D Series can handle an impressive 100,000 IOPS.

At the SAN storage level, disk latency introduces speed issues. Latency is primarily a result of the time it takes for the HDD read/write heads to position to the cylinder, and for the platter to spin into the sector, then execute a server's block request. The performance drain that results from disk latency is enormous. Cybernetics has developed proprietary smart, predictive data caching algorithms, which utilize the high-speed cache memory buffers in iSAN and miSAN models. The result is that the Cybernetics iSAN can perform to the standards of non-rotating, solid state disk on more affordable SATA and SAS disk drives.

Dynamic LUN Provisioning

Storage requirements are dynamic, and so is the new Cybernetics SANDR 4.0 feature for dynamic LUN expansion. With the new Dynamic LUN Provisioning feature, the storage administrator can add capacity to any server or application on the fly. This feature also supports spanning RAID sets, so as capacity expansion modules are added to an original iSAN or miSAN, any single virtual disk (LUN) can span to the newly added storage space. This feature makes it possible to provision for today's storage needs, and add storage only as needed, all without any disruption to production servers. Cybernetics iSAN and miSAN models support as many as eight RAID modules (128 spindles) within a single SAN configuration, and they have more than enough horsepower to support the add-on capacity modules, so the scalability is remarkable.

Dynamic Snapshot Provisioning

Previous versions of the SANDR engine integrated agnostic, block-level snapshot backup, and with the release of 4.0, the feature is dramatically improved with the ability to migrate the online disk backup to second tier storage. A virtual disk / LUN running on expensive SSD or 15K SAS disk can send snapshot backup to a completely different RAID set running on SATA disk. And, exactly like the new Dynamic LUN Provisioning feature, snapshot allocation is also dynamically expandable, with the ability to span RAID sets. The flexibility to store online disk snapshot backup on second tier storage, and automatically migrate the snapshot backup to tape for archival, builds in a level of information life cycle management – without any backup server or backup software.

iSCSI Tape and VTL Backup

With SANDR 4.0, Cybernetics has expanded tape and virtual tape backup support to iSCSI attached devices. Cybernetics VTL solutions incorporate both SCSI and iSCSI connectivity, and Cybernetics iTape solutions are iSCSI attached. Now the Cybernetics SAN can stream serverless image backup to these devices without the requirement for a direct SCSI connection. iSCSI technology frees tape backup devices from the bonds of restrictive SCSI cables, for placement anywhere there is a network connection.

A Legacy of Performance and Value

Connectivity

All the processing power in the world cannot overcome connectivity limitations on a SAN. For this reason, Cybernetics incorporates ten GbE ports on the iSAN D Series, and offers upgrade to 10GbE. Even the smallest entry-level miSAN D Series models include five GbE ports. Each 125MB/s port has an independent IP address, and is compatible with MPIO to sustain blazing transfer rates between the SAN and network servers. Because the Cybernetics hardware models have the physical connections to transfer the exceptional performance within the SAN, the iSAN supports up to 1.2GB/s and the miSAN supports up to 500MB/s.

Data Protection

SAN storage virtualization enables powerful benefits for maximizing utilization through storage resource consolidation, emphasizing the importance of instantaneous and automatic data protection. Cybernetics SANDR incorporates layers of protection against all types of threats to data, including snapshot backup, portable disk backup, tape backup, and encrypted, deduplicated WAN replication – all without a dedicated backup server or third-party software.

Since 1978, storage and backup have been the sole focus of Cybernetics' engineering efforts, and many of the features taken for granted today trace their origins to Cybernetics development teams. Cybernetics is so confident in the quality and performance of its products that all of its solutions are backed by free telephone technical support for as long as the original customer has the product in use.

For more information, call (757) 833-9000.