

SCI StorInt™ Dispatch – HP080505

Announcing HP StorageWorks 9100 Extreme Data Storage System

HP announced today, a new packaging of PolyServe scalable NAS software and dense storage to address the growing need for NAS storage in the web 2.0 marketplace.

Extreme storage

HP's scalable NAS is currently available and can be configured to use anyone's backend storage but this announcement provides a new packaged appliance with server blades and storage bricks that pack 820TB in 2 racks. The product supports 1TB SAS drives and uses Linux and the clustered file system for high availability.

The product supplies both high performance and capacity scaling. The product can be configured from 4- to 16-server blades and 3-82TB storage blocks in the initial rack with an expansion chassis that can accommodate an additional 7-82TB storage blocks to a total capacity of 820TB. Server blades or storage blocks can be added non-disruptively.

Web 2.0 customers are putting out PB or more RFPs and have difficulty finding products that can support this size storage economically. The advantage of HP's ExDS9100 is that it can support these capacities with scalable performance with relatively inexpensive storage, at less than \$2/GB. At this price I might consider getting one for the home office. But power and cooling are another matter. On the call, HP stated that the initial rack would take about 7.5Kwh and with the expansion rack this would come up to 24.5Kwh - a little too hot for my place.

The product comes in a RAID 6 configuration, is based on Linux and supports NFS, HTTP and something, which HP calls DirectIO. DirectIO allows a customer to run applications on the same servers with the PolyServe software thus eliminating going out on the network to retrieve data. This will eliminate a lot of overhead and should perform better than having the product be Ethernet attached. The cluster interconnect is GigE in this configuration.

HP does not have current benchmark data for the product but their modeling indicates that end-customers should see about 200 MB/sec per blade of RAW performance. So for the initial system configured with 4 blades this would be 800MB/s and should easily scale to 3.2GB/s with a fully populated 16-blade system.

HP does not currently support CIFS in this product. However, HP sees the majority of customers in this space looking primarily for HTTP interface to file storage as the main driver. There was also no mention of iSCSI support on the product.

Announcement significance

It seems everyone is getting on the bandwagon. HP will have lots of company here, what with EMC Hulk/Maui and others having announced or already shipping products to address this storage space. HP plans to start shipping the product in the last quarter of

2008 but as I said before you can do much the same today with the cluster file system software running on HP blade servers connecting to HP EVA or MSA storage but it will cost more and take more space and power.

HP scalable NAS is a proven product and is currently running in a number of installations worldwide today. Very economical and highly available storage products like this should do well in this marketplace what with very visible Web 2.0 installations going down every month or so.

HP has a number of storage offerings in the NAS or near NAS space, including their Persist acquisition, their medical archive, LUSTRE Scaleable file system, EFS and of course Windows Storage Servers. What sets this product apart from the others is that it is very dense storage and costs are very reasonable.

Silverton Consulting, Inc. is a Storage, Strategy & Systems consulting services company, based in the USA offering products and services to the data storage community