

Save Power. Save Space. Save Money.

WebTech Q&A Session, August 17, 2011

1. How does auto-tiering save money?

Often, 80% of data is stored and never retrieved, so you may be paying for expensive capacity you don't need. Hitachi Dynamic Tiering (HDT) puts that data on lower cost disk so you can move it off Tier 1 storage to lower cost storage. Our HDT can take advantage of external storage as one of the tiers saving you money by utilizing lower cost storage you may already own. We also use 2.5-inch drives in our tiers which allow you to use low power devices in your storage pool. Adding SSD in those tiers further drives down power and can improve performance as well. This type of automated data classification can save your storage personnel time as well using the system for automated tiering of data according to its value.

2. How do you reclaim space in file systems?

Hitachi Dynamic Provisioning can now be used in conjunction with Symantec Storage Foundation's VxFS filesystem to support ongoing filesystem storage reclamation to increase storage cost savings. "Write Same" is a repurposed SCSI command that provides a mechanism to allow the server-based filesystem such as Symantec VxFS to notify the array which pages on a thinly provisioned LUN or volume do not have meaningful data. The array can then safely disassociate the page from a thinly provisioned LUN or volume and make it available for re-use.

3. How does Hitachi Content Platform reduce power?

In a customer study we found that 95% of files are reopened fewer than 5 times and 90% of files reopened are for read only.

The majority of files are inactive or static, so that static data should be moved to Hitachi Content Platform. This eliminates backup, reduces the working set of active data, and eliminates redundant copies. The reduction in power is achieved through consolidation of static data to fewer, larger capacity disks.