

SCI StorInt™ Dispatch

FalconStor VMworld announcements

At VMworld this past week, FalconStor announced a number of upgrades to their storage systems and software offering.

FalconStor® HyperTrac™ VMware Edition

A new product called FalconStor HyperTrac was announced that integrates their storage virtualization solution, FalconStor Network Storage Server (NSS) with VMware Consolidated Backup (VCB). Historically, VCB used VMware software snapshots to copy VMDKs, which are then mounted to the proxy server for backup processing. With FalconStor NSS and FalconStor HyperTrac VMware Edition, instead of using VMware software snapshots, one can take a much quicker and more efficient FalconStor NSS snapshot at the storage system level and then mount this snapshot to the VCB server. Using FalconStor HyperTrac VMware Edition, VCB can now concurrently backup many more VMs and may even allow the VCB proxy server to run as a VM rather than a standalone server.

To implement these capabilities, a new FalconStor HyperTrac agent is installed on the VCB proxy server. Also, FalconStor HyperTrac configures and uses standby VMs as data staging areas for the FalconStor storage snapshots. Accordingly, in contrast to normal VCB processing, the FalconStor HyperTrac standby VMs are quiesced during VCB processing, leaving the original production VMs in operation while backups occur.

FalconStor NSS with VMware vCenter SRM

VMware's Site Recovery Manager (SRM) currently does not support physical server to virtual machine failover. But with these new FalconStor services the physical server LUNs can be copied to new FalconStor NSS LUN's and converted to VMware Raw Device Mode LUNs that can be mounted to passive VMs. As such, these passive VMs can then be replicated by NSS and configured under SRM to automatically failover to a secondary site. Thus, all data center physical and VM servers can now support DR using VMware's vCenter SRM and FalconStor NSS.

FalconStor Failback Manager for vCenter SRM

Site Recovery Manager (SRM) does not support auto-failback and so, can now only be accomplished manually via extensive SRM reconfiguration. With the new FalconStor failback plug-in for SRM, replication back to the primary site can automatically re-start and SRM can be configured to re-initiate the VMs at the primary site. After this completes, SRM can then support automated failback to the primary site.

FalconStor virtual appliances

For the small office environment, FalconStor has converted all of the FalconStor IPStor® software based appliances to run under VMware as a virtual machine. For example, this means that the FalconStor NSS solution can be run as VMs for remote offices and

smaller storage environments. With its new support for VMDirectPath I/O, FalconStor NSS can now provide high performance iSCSI and FC target services to VMs. Also data can be cross-mirrored between multiple FalconStor NSS virtual appliances or they can be deployed in cluster mode for high availability.

FalconStor also announced a new File-interface Deduplication System (FDS) operating as a VM appliance to provide support for VMware backup applications. Similar to the above, the FalconStor FDS virtual appliance also supports data replication to other virtual or physical appliances.

vCenter plugin to manage FalconStor storage

Also announced was a new vCenter plug-in to manage and maintain FalconStor storage from the vCenter GUI management client. VM administrators now have direct access to FalconStor storage virtualization services such as, VM replication, thin provisioning and storage migration. In this way, administrators can create VMs using FalconStor managed storage without having to leave the vCenter management environment.

Announcement significance

At VMworld2009 VMware's CEO, Paul Maritz, showed that for every \$ spent on VMware software, \$11 was spent on additional hardware, software, storage and services. Consequently, a large, profitable ecosystem has grown up around VMware.

According to VMware's figures, storage represented ~\$2.80 of that \$11. For instance, data center server virtualization often drives storage consolidation, secondarily causing data centers to upgrade storage infrastructure. FalconStor, by tightening their integration with VMware, hopes to claim a bigger portion of that storage spend. These new capabilities are a step in that direction.

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