

iStorage Server: Building iSCSI target on the cheap

A cheap IP SAN solution by using KernSafe iStorage Server

iStorage Server provides the ability for several different kinds of iSCSI Target:
disks in iSCSI Initiator based on image files;
disks based on RAM;
disks based on volumes(partition);
disks based on physical disk;
CD-ROMs based on physical CD-ROM;
CD-ROMs based on CD-ROM image files(ISO9660 files);
and also provides individual disks with encryption option on each client, based on image files in a server computer's folder. That is a brand-new iSCSI duty.

iStorage Server, a software only iSCSI Target on windows, available from <http://www.kernsafe.com>. Comes with only one licensing option, this commercial license that allows unlimited connections and targets (\$299). KernSafe also makes available a developer edition, which allows bundling of the product with other services, for an undisclosed price.

iStorage Server provides the normal basic iSCSI volume creation options, but also allows you to virtualize some of your more expensive hardware, such as DVD burners and SCSI disks. Using the software, you can make a remote SCSI based drive, for example, appear locally on a desktop system. KernSafe also provides snapshot capabilities in next version.

Once installed, start the iStorage Server Configurator and expand the tree in left view, so that you can see the targets tree root and others components. Right-click the tree root and choose Create Target. The default option is to create a security disk images for each user connected to this target, and any image can be encrypted with the user's CHAP password, the other option such as create a Disk-to-Disk bridged target, Partition-to-disk bridged target, virtual disk using disk images, virtual CDROM using iso9660 files, a CDROM-to-CDROM bridged target, and also a RAM virtual disk. For this example, I'm going to create and make available an "security disk images for each user" target, named "iqn.2006-03.com.kernsafe.kernsafe.SecureDisc" and select location at "d:\\" note that you need to specifically indicate to iStorage Server the location in which you'd like to place these image files, and select size is 256MB.

When any client logon this target will create a image files that named by CHAP user name or client IP Address which depend on authentication mechanism. I've shared an image file with a target named "iqn.2006.03.com.kernsafe.kernsafe.test.img" (housed on this volume) out over the iSCSI network. This mode is very useful for centralized management and centralized backup.

iStorage Server supply two Provides authentication mechanisms, they are CHAP user authentication mechanism and client's IP address authentication mechanism. I highly recommend that you limit access to iSCSI volumes based on both client IP address and a username/password, if you plan to use iSCSI in a production environment.

System Requirements:

- Â· Microsoft Windows 2000 or above
- Â· 750 MHz Intel Pentium III class processor
- Â· 256 MB of RAM
- Â· 30 MB of disk space for application data
- Â· Ethernet connection