What's new in iStorage Server 2.0?
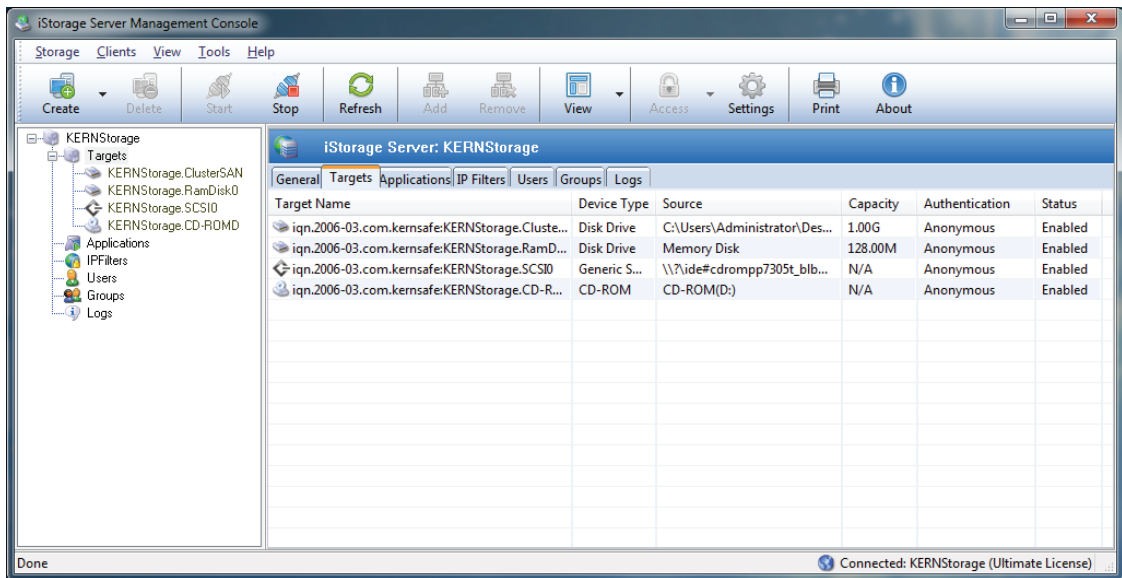
Brand-new architecture design and user interface.

May 12, 2010, today KernSafe Technologies, Inc announced that its product iStorage Server 2.0 preview version is available. Being a full-featured and powerful iSCSI target software, iStorage Server is designed to be flexible and suitable for a wide range of applications. As we know, iStorage Server 1.x has provided native support for x86, x64 and Itanium based windows systems, and supported for a variety of initiators (OS) and applications, such as windows and windows clustering, Linux, Solaris, Citrix Xen Server, ESX Server, Microsoft Hyper-v and so on. In new version 2.0, these features will still be also covered by iStorage Server.
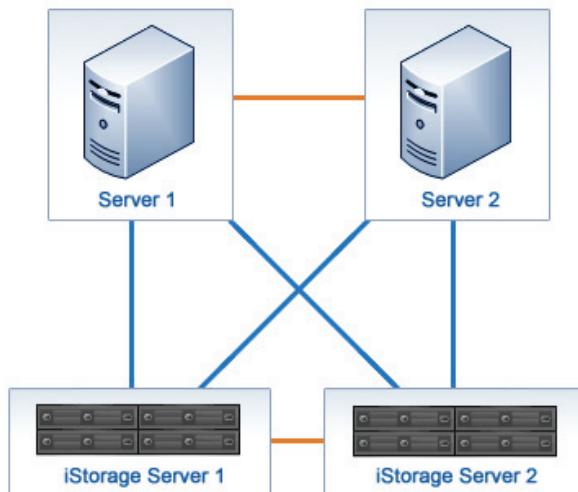
1, Inheritable targets design

In the home page of iStorage Server Management Console, administrators can mange global users, groups and IP filters. These security settings will control the target's security policy which has the property of inheriting from global.

In the server settings page, user can specify portal addresses and link portal addresses to one single target. Whether the target inherits global settings or not is decided by its inheritable property. This feature makes iStorage Server suitable for working in different kinds of complex and layered networks, and it is also an important feature for synchronous replication and failover.

2, Synchronous replication and Failover cluster SAN.

In iStorage Server 2.0 and future versions, these features are designed as **Applications**. User can make any **Disk** interfaced iSCSI target to have mirrored or failed-over feature. To create a mirror or failover, just select two iSCSI targets to be mirrored or failed-over.

Additionally, iStorage Server 2.0 has also brought flexible features that make it possible for creating more than two clustering nodes for synchronization / asynchronous replication and failover. Theoretically, it can support an unlimited number of clustering nodes.

3, Enhanced Security Feature

IStorage Server 2.0 provides 4 types of authorization methods:

1), Anonymous:

   All initiators will get full access permission without any authorization required.

2) CHAP (Challenge-handshake authentication protocol)

   All initiators need to specify a CHAP user and secret to connect to the target. iStorage Server has a built-in user called "Guest", which is used for initiators without CHAP secret specified.

3) IP Filters

   All initiators will be authorized by the incoming IP address defined by IP Filter roles.

4) Mixed

   Security policy is determined by both CHAP and IP Filters.

iStorage Server 2.0 has also provided 4 type of access permission:

   1) Full Access
      Initiators can read data from and write data to target.
   2) Virtual Write
      Initiators can read data from and write data to target, but all the changes can only be visible by each Initiator itself.
   3) Read Only
      Initiators only read data from target.
   4) Refuse
      Initiators cannot connect to the target.

4, COW Protection (Virtual Write Access)

IStorage Server 2.0 brings two useful features called COW Protection:
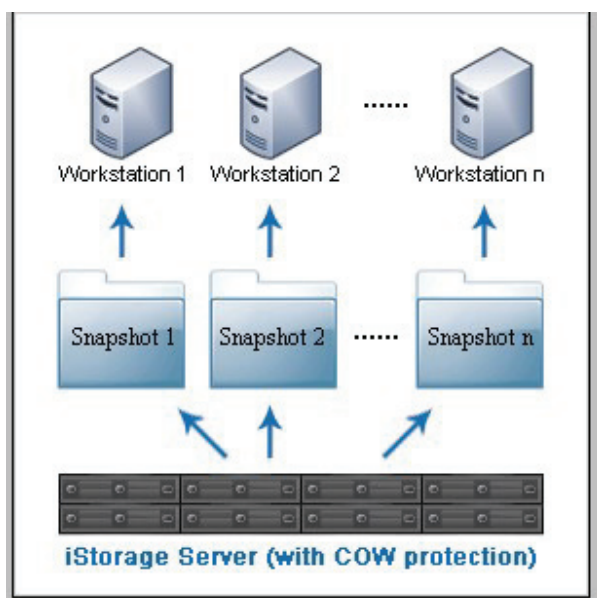
Persisted COW Protection:

All changes will be saved for the initiators with Virtual Write access right.

Volatile COW Protection.

All changes will be disposed when the initiators log-out from target.

COW Protection is a very useful function for Storage sharing and iSCSI SAN clustering as mentioned before.

iStorage Server COW Protection feature will create independent snapshot for each initiator.

5, other changes

All in one Server Management Console: user can manage all the functions of iStorage Server in management tool

Image Disk Expendable: user can expend an image disk's capacity after image disk already created.

Log supported: When errors occur, user can retrieve the log to find the details for the errors.

Memory disk:

The memory disk feature in iStorage Server 2.0: it supports synchronization with an image file, for working in a performance critical environment, such as disk less boot.

6, Links

http://www.kernsafe.com/default.aspx, KernSafe home page.

http://www.kernsafe.com/product.aspx?id=5, iStorage Server index page.

http://www.kernsafe.com/product.aspx?id=5&&name=Features, iStorage Server features list.

http://www.kernsafe.com/contact.aspx?id=Technical, Technical support.