ISTORAGE SERVER
PRODUCT DATASHEET

KERNSAFE
Secure Storage Solution

INTRODUCTION

Kernsafe is global leader in storage virtualization and data security solutions from desktop to the data center. Our costumers vary from individuals, through middle size firms and finishing at big multinational companies. We are dedicated to produce the highest quality software possible and, at the same time, provide the outstanding customer support. As one of the fastest-growing public software organizations, KernSafe is producing software that is easy to use but can also benefit in professional solutions.

ISTORAGE SERVER OVERVIEW

KernSafe iStorage Server is an advanced and powerful, full-featured iSCSI Target software that makes any x86, x64 or even Itanium Windows machine into an iSCSI Target.

iStorage Server is an IP SAN solution that allows you quickly export existing storages such as disk images, physical disks,partitions, CD/DVD-ROMs, tapes or any other type of SCSI based devices and a variety of popular CD/DVD images, and even a virtual CD/DVD-RW burner to its client machines, which delivers immediate benefits allowing storage to be consolidated, virtualized and centrally managed.

iStorage Server also provides High Availability feature which allows to minimalize downtime of your server. When HA cluster is set up, and one of HA nodes will fail, the other one will take over, to assure business continuity. It is an ideal choice for any sized business that requires minimum downtime. Except for that, you can also benefit from RAID-1 (mirror) feature, which allows you create two devices for mirror backup. The mirror devices can be local image files or remote iSCSI devices.

iStorage Server is a hardware-independent, and do not require an additional hardware. Quickly create an IP SAN in minutes using hardware you already have. iStorage Server takes space on a windows file system and turns it into an iSCSI target. You can now let any computer on an Ethernet network use this iSCSI storage with benefits of cost-effective and scalable.
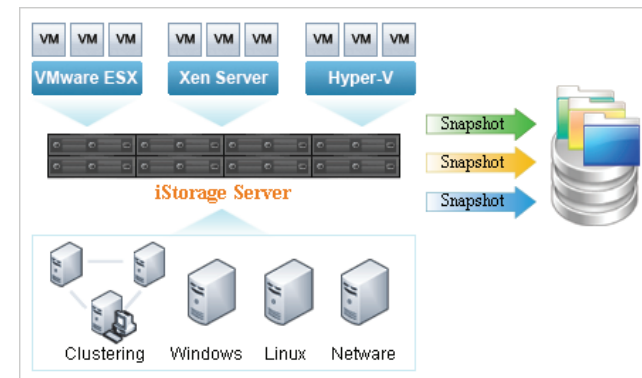
WHAT ISTORAGE SERVER CAN DO FOR YOUR BENEFIT:

1. Create Shared storage for VMware ESX Server

a) Provide remote iSCSI disk for ESX to expand its data storage.

b) Create shared storage array for ESX to enable it to create high-availability virtualization solution.

c) Create active-active high-availability iSCSI SAN for high-availability virtualization solution.

2. Create Shared storage for Citrix XenServer

a) Provide remote iSCSI disk for XenServer to expand its data storage.

b) Create shared storage array for XenServer to enable it to create high-availability virtualization solution.

c) Create active-active high-availability iSCSI SAN for high-availability virtualization solution.

3. Create Shared storage for Microsoft Hyper-v

a) Provide remote iSCSI disk for Hyper-v to expand its data storage.

b) Create shared storage array for Hyper-v to enable it to create high-availability virtualization solution.

c) Create active-active high-availability iSCSI SAN for high-availability virtualization solution.

4. Create Shared storage for Windows Cluster and CSV

a) iStorage Server can create shared storage array for Windows Server and make it enable to create cluster.

b) Create shared storage for CSV (Cluster Shared Volume) to enable concurrent file access between servers.

5. Storage Centralization

a) Enable CD/DVD-ROM/RW remote sharing and remote burning.

b) Enable tape remote sharing and backup from more than one servers to one tape.

c) Create security (Encrypted) image disk for each user.

d) Create shared disk/CD-ROM/Virtual CD-Rom for each user.

e) User CD/DVD-RW virtual burner, to make automatic backup.

ISTORAGE SERVER REQUIREMENTS

Server Side:

· Microsoft Windows 2000 or above, 32bit and x64bit (AMD64, EM64T and IA64)

· 750 MHz Intel Pentium III class processor

· 256 MB of RAM

· 30 MB of disk space for application data

· Ethernet connection

Client Side:

Software requires:

· Microsoft Windows 2000 or above, 32bit and 64bit (AMD64, EM64T and IA64), Microsoft iSCSI initiator

· Linux with kernel >= 2.6.16, open-iscsi

· Citrix XenServer

· VMware ESX Server/ESXi Server

· SUN Solaris 10, Open-iSCSI Initiator

· Novell NetWare 6.5 or above

Hardware requires:

· 750 MHz Intel Pentium III class processor

· 256 MB of RAM

· 30 MB of disk space for application data

· Ethernet connection

ISTORAGE SERVER FULL FEATURE LIST

• Provides extremely fast ISCSI RAM disk drives for temporary data storing on network.

• Provides security disks for each client, Option, each client use own disk which use his/her CHAP password encrypted.

• Provides a built-in iSCSI CD/DVD-ROM emulator which exports existing DVD-ROM ISO images to mounted iSCSI DVD-ROM drives on the clients. This prevents the original DVD-ROM media from possible physical damage or loss, so it also allows client machines without optical drives and allows storing DVD backup data on a single server.

• Provides a built-in iSCSI virtual disk emulator. It exports existing disk images to mounted iSCSI disk drives on the clients. All the clients share the same contents.

• Provides a virtual CD/DVD-RW which allows create an iSCSI target using virtual burner and burn into ISO file.

• Provides auto-mount feature for CD/DVD-RW emulator that automatically mounts new blank disk after previous burning process will finish.

• Provides a network-bridged method. It exports an existing partition, disk, CD/DVD-ROM to clients as a virtual iSCSI drive.

• Provides RAID-1 (Mirror) feature, it allows you to create two image files for mirror backup, image file can be local file or remote iSCSI device.

• Provides fast replication synchronization and failover feature, that allows you can create an high-availability iSCSI SAN by using two or more than two iSCSI targets.

• Provides volatile and persisted COW protection feature, that automatically create snapshots for each initiators with virtual write permission.

• Provides Generic SCSI device, it allows you map generic SCSI devices to your initiator, such as USB Storage, Tape and Optical Scanner.

• Provides read and write caching, which use memory on server as cache to improve data transfers speed and response time.

• Provides CHAP user authentication mechanism.

ISTORAGE SERVER FULL FEATURE LIST

• Provides client's IP address authentication mechanism with additional security.

• Active Directory-integrated local and remote management console.

• Provides iSCSI Target portal address management, which allows you to make iStorage Server to be able to work behind the firewall.

• Provides simple and banausic user management tool, to manage CHAP users.

• No restrictions on disk capacity, total number of hard disk installed, number of CPUs or CPU cores, and ethernet ports or the amount of RAM.

• Supports CDP/Snapshots, is compatible with Microsoft VSS (Volume Shadow Copy Services) snapshot, volume cloning and incremental backups with unlimited number of rollback points.

• Supports Microsoft Virtual Hard Disk (.VHD) and VHD snapshot, which provides instant and point in any time snapshot feature.

• Supports image file (.IMG) snapshot, which provides instant and point in any time snapshot feature.

• Supports multiple connections per iSCSI session, which allows you to create Round Robin, Weighted Paths and so on.

• Supports x86 and x64 machines.

• Supports 64-bit LBA, providing more than 2TB of disk space.

• Supports sparse image file on NTFS file system. It allows the size of disk image file only depend on its content used.

• Supports any features on file system, such as in NTFS, a image file can be encrypted, compressed, or shared with other computers.

• Supports a variety of popular CD/DVD image formats, such as: .iso, .bin, .mdf, .cdi, .b5i, .nrg, .ccd, .sub, .img, .raw.

• Supports a variety of partition table format, such as the MBR, GPT.

• Provides "Hold and Update" mechanism that allow you can update data file from initiators to targets.

• Fully Supports SCSI-2 Reserve/Release.

• Fully Supports SCSI-3 Persistent Reserve.

• Fully Supports Citrix XenServer.

• Fully Supports open-iscsi on linux.

• Fully conforms to the latest iSCSI Standard 1.0 (former Draft 20).

CONTACT INFORMATION

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Product Page: http://www.kernsafe.com/product/istorage-server.aspx

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