



# NAS Server FISC CDH

FISC CDH is a dual-function NAS server performing both CD mirror and file server applications. It is the first NAS server available in the market for cross-platform storing and sharing all sorts of data files and CD/DVD information.

- Performing both CD mirror and file storage functions
- Cross-platform connectivity
- Multiple protocols transparency
- Remote Web-based administration
- Complete data redundancy functions
- Simple LCD panel system settings and monitoring



FISC = *Fast Internet Server Controller*



# First NAS server performing both CD/DVD mirror and file server functions

## **Unrivalled storage power**

Equipped with four independent UDMA-100 IDE channels, the FISC CDH carries out extraordinarily high efficiency of data processing. The powerful channels enable the FISC CDH controller to hook up with eight ATA-100 HDD or CD/DVD devices, depending on your task requirements.

The FISC CDH provides the flexibility you need for sharing CD information. Empowered by super high speed CD caching and CD mirroring functions, you can enjoy yourself with smooth and immediate CD sharing. The FISC CDH supports almost all CD formats, such as music CD, CDR, VCD and DVD. Attached with CD-R/RW devices, the FISC CDH not only shares CDs but also creates them. Now you can archive your data as CD images on the FISC CDHs' hard drives and, whenever necessary, put them onto CD-R/RW discs. It is also not a problem to make copies. The FISC CDH extends seamlessly its sharing capabilities to CD recording devices.

Utilizing the FISC CDH to store data files is a pleasant experience, just like using a quality file server. The FISC CDH provides you with full function file management, such as file opening, duplicating and backup.

Plus, don't worry about the storage capacity. The FISC CDH gives you hundreds of GB space with 1,000-volume storage capacity, enabling a managed co-existence of CD/DVD information and data files.

## **Invulnerable data safety and security**

The FISC CDH features a shutdown protection circuit coordinating the ATX power system to protect your data. Upon receiving your shutdown command, the FISC CDH automatically secures the data system and then turns off the power with all files safe and sound. In addition to the advanced power management function, the FISC CDH is equipped with share and user level security controls to prevent unauthorized access of data.

That is not all. The FISC CDH uniquely provides you operating information and issues warning messages about the system status on the LCD display. To keep the server from being over-heated, the FISC CDH reminds you of the server temperature collected with a build-in thermal sensing circuit.

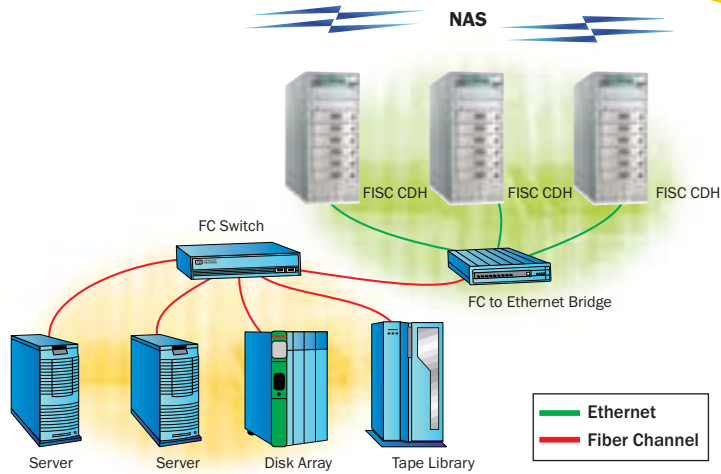
## **Easy but universal utilization**

Fitting in a variety of network environments has always been the focus of the FISC family of products. The FISC CDH functions perfectly under most network environments such as Microsoft Windows, Novell NetWare, Apple Macintosh, UNIX and Web browsers.

Set-up in minutes, the FISC CDH features all convenience and utilization a NAS server should contain. Imagine how fast and easy the server can be ready, you just connect the FISC CDH onto the network, turn on the power and input the IP address directly on the LCD panel of the controller.

# FISC CDH applications

## A super-capacity temporary storage server



Problems of insufficient storage capacity and backup usually arise with increasing data. The FISC CDH can help IT staffs with effective planning and allocation regarding routine backup. It offers advantages of instant backup, high speed and high compatibility with various high-capacity hard drives. It complies with common backup software (e.g. ARC serve IT, Microsoft Backup, etc.) and after collecting the data, sends it to a backend backup server for

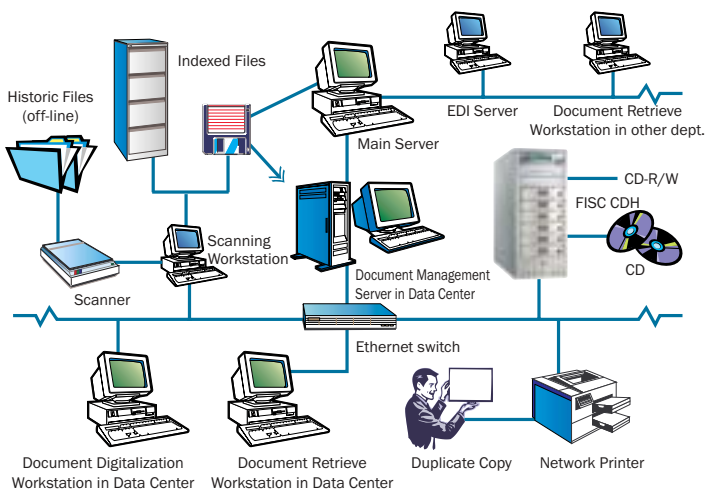
**Suitable users:** ICP, ASP, IDC, Data centers, government organizations and most enterprises.

### Benefits:

- A system with high stability and high reliability, offering customers 24/7 instant service
- A complete solution, in line with the storage of enormous files and data from optical disks
- Centralized data management and security backup, thus reducing overall scaling-up costs for storage equipment
- File server load reduction in the network, thus increasing performance of data saving and retrieving speed in the network
- Compliance with common backup software, sending data to a backend backup server for centralized backup

centralized backup. Therefore, for large-scale data center, due to the features of online instant backup, high speed and high capacity, the FISC CDH can temporarily store all data from front-end application servers and perform centralized backup at any time without interrupting the normal operation of intranet.

## A super-performing instant data center



### Suitable users:

R&D and accounting departments in large-scale enterprises, government administrations, electronic governmental document management systems, CAD/CAM departments in manufacturing industries, law firms, accounting firms, architecture firms, medical records in hospitals, X-ray film reading rooms, banks, stock brokerage companies, airline and freight transportation companies, etc.

### Benefits:

- Cost saving on expansion of high-priced fault-tolerance storage equipment (Subsystem)
- Information sharing, easy management and cost lowering of network management
- Data security and reliability with fault-tolerance and backup functions
- Remote management, mirroring and burning CDs
- Sharing storage equipment when installed at backends of various central units

Large companies promote the idea of a paper-free office, research, development and evaluation commissions are also actively developing electronic governmental documents to respond to the upcoming of an electronic government, which manifests the importance of digital file management. No matter, be it for enterprises or the government, inadequate planning of information management causes employees to spend over 25% of their time searching for data, resulting in increasing hard drive and backup capacity demands, increasing server load and creating more headaches and troubles for all information management departments. The FISC CDH is

definitely part of the solution in this era of information explosion. Through file servers, one can directly off-load data online to the hard drives of the FISC CDH such as historical files or considerable quantities of picture banks that are scarcely used and do not need modification. Security backup of data can also be made directly by means of the CD-R/W devices of the FISC CDH onto CD-R/CD-RW disks, which can be shared on the network through the FISC CDH and as such easily establish an instant data saving and retrieving center in the network.

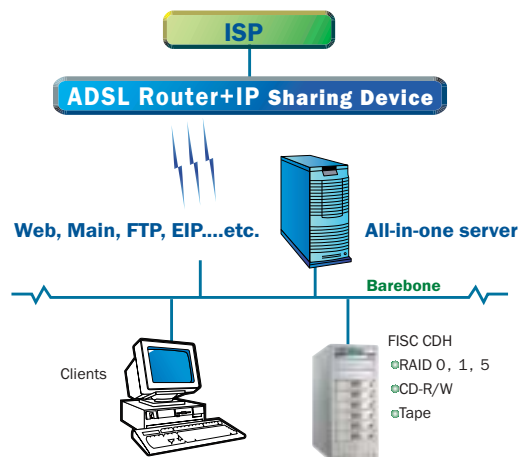
## A multifunctional data server

**Suitable users:** Small businesses, trade firms, publishers of books and magazines, digital media studios.

### Benefits:

- Useable as a cross-platform open system, providing services and improving network information and synchronized file sharing
- Data sharing, super capacity
- Flexible expansion capabilities, easy maintenance
- Data security and reliability with fault-tolerance and backup function
- Support of CD-R/CD-RW and CD burning functions

Because of the demand to cope with the transition of the business management model in the 21<sup>st</sup> century, how to utilize the e-business technology to improve operation performances and strengthen the internal file management is a tough issue which needs to be considered and resolved urgently by the owners of small and medium businesses. The FISC CDH can easily help you enjoy the same benefits used by large enterprises with the same conception of information management framework at a minimum cost. It is worthy to possess a multifunctional network storage server such as the



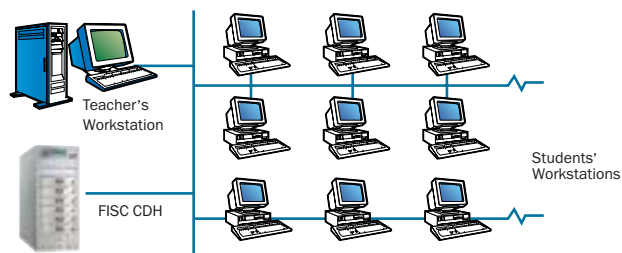
FISC CDH, which can be used as a file server, an optical disk server, a FTP and backup server. Using an Internet sharing device and a dial-up account, it employs a virtual account internally and a real account externally to connect a number of internally used workstations and to form a complete business network. This simple information framework satisfactorily establishes a data center for instant online saving and retrieving and helps reaching the goal of a mobile office.

## An interactive multimedia teaching server

**Suitable users:** Educational organizations such as schools, learning institutes, training centers, etc.

### Benefits:

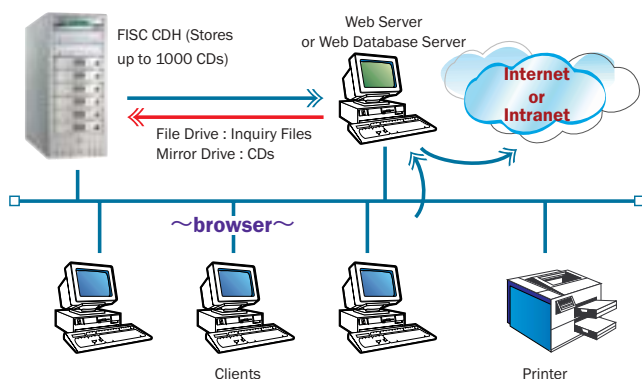
- Plug and play, a worthy and independent multimedia teaching server
- Fast installation and ease of use
- Flexible expansion and ease of maintenance
- Low installation cost, cost saving on expansion of terminal CD drives and hard drives, risk prevention of CD losses and damages
- Teaching on demand, learning on demand and video on demand (VOD)
- High capacity, high performance of data transmission, much easier to use than a traditional CD Jukebox
- As both a CD server and file server, it also supports school administrative file storage operations



With the rapid advancement of network information technology, teaching resources are no longer limited to articles, figures and static pictures in traditional textbooks. How to create a rich and diversified multimedia teaching environment is the main issue all schools are currently focusing their efforts on. Consequently, by using the existing network equipment in schools with the FISC CDH, the large number of educational CDs used in classrooms can be stored and shared in the network. It only needs a multimedia teaching server as the FISC CDH to operate beyond time and space, attaining the goal of sharing CD resources, everywhere in classrooms as all resources are shared by a large amount of computers.

## A high-speed digital CD library

**Suitable users:** Libraries, museums, video and audio centers, etc.



Storing the data from a library CD and inquiry files using the independent multifunctional server FISC CDH makes it possible for the users on library workstations and even the Internet users to easily access any CD information. By digitally (by means of scanning or optical character recognition) storing the contents of books, newspapers, magazines and paper publications onto CDs and DVDs with the use of the FISC CDH and CD file classification software (such as the "Content Manager"), a high-speed electronic library can be developed and maintained beyond time and space.

Once the digital transformation is accomplished, one CD can store ten thousand times the information contained on paper with the same content during at least a hundred years, without special care. The FISC CDH server can store the contents of thousand CDs, equivalent to tens of million of pages of paper publications. Together with the integration of a book title search system and a full content inquiry system, it provides you with the convenience at your fingertips of a trouble-free search on all kinds of information.

# Boost your FISC CDH with eMulateCD and eConsole

## eMulateCD

eMulateCD is an utility which emulates the network folders located in either the FISC CDH server or other workstations in your LAN to become a native CD-ROM drive at your own workstation. It solves the problem of some CD titles needing to be in local CD-ROM drives for execution and which cannot be run across the network. You can also use eMulateCD to map several network drives at the same time. It is far more powerful than the built-in "Map Network Drive" function in the Windows system.

- Emulates network folders as local CD-ROM drives.
- Accesses some CD titles which are not designed for network accessing.
- Maps multiple network drives and performs as a central management window to all the mapped drives.
- Saves the up-to-the-minute mapping status to a profile and retrieves it whenever needed.

## eConsole

eConsole is a powerful utility for FISC CDHs' administration. It provides two major functions: managing FISC CDH servers and remotely loading CD/DVD images into the FISC CDH. You can either duplicate a whole CD or build an image from a bunch of files. It also supports the CD-R function of the FISC CDH. Sharing and publishing data has never been so easy.

### Remote creation of CD images

- Remotely loads CD images from a local CD-ROM drive into the FISC CDH.
- Collects and duplicates files into the FISC CDH as a single CD image.
- Allows users to assign 6 different destination servers when building CD images.
- Fully integrates the CD-R functions of the FISC CDH.
- Supports up to 16 different tasks.

### User interface

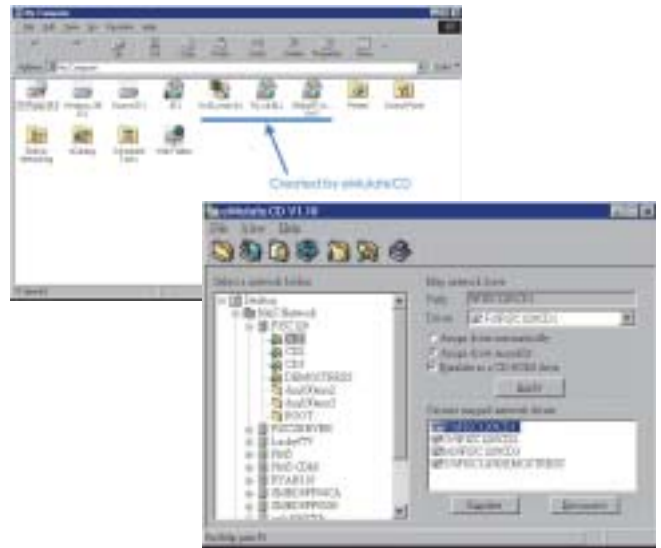
- Explorer-like user interface together with user friendly wizards.
- The Task Manager monitors all on-going and scheduled tasks.



Collects and duplicates files into the FISC CDH as a single CD image



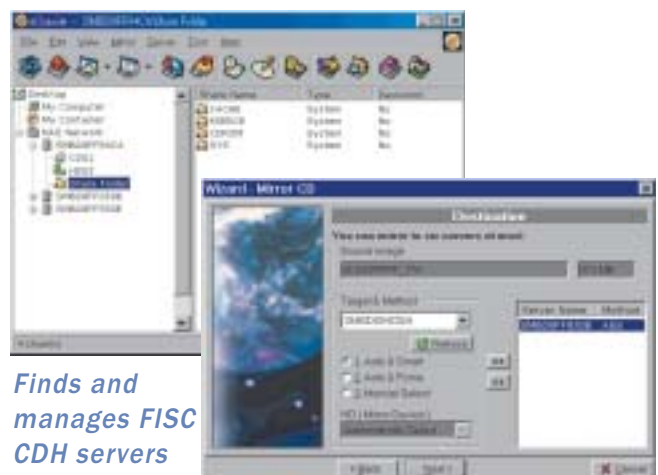
Emulate network folders as local CD-ROM drives.



Map several network drives at the same time.

### Server management

- Finds and manages all FISC CDH servers on a LAN.
- Configures the FISC CDH server for the first-time setup or quick setup.
- Performs administration functions to all FISC CDH servers attached to the LAN.
- Initializes the FISC CDH hard disk drives.
- Deletes any volumes in the FISC CDH server.
- Shuts down or resets the FISC CDH server.



Finds and manages FISC CDH servers on the LAN

Remotely loads CD images from a PC CD-ROM drive into the FISC CDH

## Technical specifications

### Controller

- CPU** — Pentium class CPU - 300MHz
- Memory** — 32MB SDRAM ( on Board ), expandable up to 256MB
- EIDE channels** — 4 independent ATA-100
- Connectivity** — Auto-sensing 10baseT/100baseTX Fast Ethernet
- LCD display** — 3 push-buttons back-lit LCD display for IP setting & system status/event information

### IDE devices

- ➔ CD-ROM, DVD-ROM drive
- ➔ CD-R, CD-R/W drive
- ➔ ATA compliant hard drive, support ATA-100
- ➔ ATA compliant tape drive for data backup and restore

### Data redundancy

- ➔ Built-in RAID 0, 1, 5
- ➔ Compliant to approved IDE-to-IDE RAID 1 hot-swappable controller
- ➔ Data in a file volume can be backed-up/restored using popular backup software
- ➔ Tape device supporting mirror, file volume backup and restore
- ➔ CD-R, R/W device supporting DAO ( Disk At Once ) to burn CDs

### Security management

- └ Share and User Level Security

### Media formats

- └ **CD/DVD formats**
  - ➔ CD-ROM, CD-R, CD-DA ( Audio CD ), Video CD, Photo CD, Multi-Session and DVD
  - ➔ ISO9660 level 1, 2, 3 ( including : Romeo, Joliet and Rock-Ridge Extension ), High Sierra, HFS, UDF and Hybrid

### File system

- └ **Cross-platform file system**
  - ➔ The internal file system is compliant to different network file sharing protocols, such as Windows, NetWare, Macintosh and UNIX.
  - ➔ It allows different network OS to read/write simultaneously data from/to the same network share.

### Multi-lingual supports

- └ **Web page** — English, French, German, Italian, Spanish
- └ **Code page** — English, West European languages, Mac OS

### F/W upgrade

- └ Upgrading is remotely done using a standard Internet browser ( HTTP ).

### Regulatory approvals

- └ RU, cRU and FCC Class B, CE, UL

### Warranty

- └ Two years ( parts & labor )

### Network Environments

Network	Network systems	Protocols	Security	Data access
Windows	95/98/NT/ME/2000	NetBEUI, NetBIOS over TCP/IP	Share and User Level Security	MS Explorer
NetWare	3.1x/4.x/5.x	NCP over IPX	Authentication by local user database, NetWare Bindery server	Standard tools provided by NetWare client
Macintosh	7.x/8.x/9.x/10.x	AppleTalk, TCP/IP	Share and User Level Security	AppleShare or AppleShare IP
UNIX/Linux	NFS	NFS version 2	Host IP, UID, GID	UNIX or Windows-based NFS clients
WEB	NS4.x, IE4.x ~ ,HTML 2.0 ~	TCP/IP	Share and User Level Security	Standard Internet browser
FTP	FTP	TCP/IP	Share and User Level Security	FTP



### Targeted applications:

- Data warehouse
- Imaging & Graphics
- Education & Library
- Pre-press environment
- ISP & ASP
- Government, Banks, Hospitals, etc.

