

# IBM Netfinity<sup>®</sup> Fibre Channel Storage Solutions

### Highlights

### Power to drive your business

Data transfer speeds up to 100MBps at distances up to 10km (6 miles) for the power to support the ever-increasing data storage and availability requirements your business needs

### **Outstanding scalability**

Attach more storage devices per PCI slot and more host systems per Fibre Channel connection, thus enabling you to expand your storage system to meet growing business requirements while protecting your current investment.

#### **Control for availability**

Redundant hot-pluggable Fibre Channel components maximize availability. Flexible RAID and storage management support allow you to easily manage your requirements for data availability.

### Service and Support made easy

Renowned service and support are there when you need it, and Options by IBM assume the warranty term of the Netfinity server they are installed on to provide a one stop service point for your business.





### **Advanced storage options**

IBM's new Netfinity Fibre Channel Storage products are designed to support the massive data storage requirements of your business-critical applications. These products offer astounding scalability and growth solutions. High-speed data transfers and the wide range of storage configurations available give you the ability to build enterprise class storage systems to meet the growing demands of your business. From basic high-speed configurations offering continuous data access and protection, to long distance, high availability and fully redundant configurations for critical disaster recovery capabilities, Netfinity Fibre Channel solutions meet your enterprise storage requirements today and tomorrow.

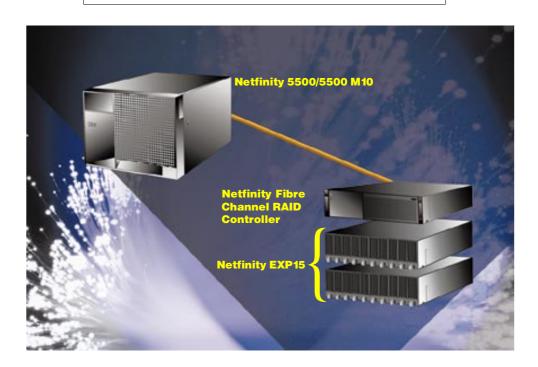
## High performance enterprise storage

With data transfer rates of up to 100MBps, access and storage requirements of your high performance business systems are fulfilled. Whether its large database applications, such as enterprise resource planning systems, multimedia applications, decision support systems, or your data warehouse, you'll benefit from fewer storage bottlenecks. And redundancy support of the Netfinity Fibre Channel Storage solutions and failover capabilities of your operating system will help keep your data and applications ready for business.

#### **Designed for growth**

Netfinity Fibre Channel Storage offers unprecedented scalability and can easily grow to meet your storage needs. The Netfinity Fibre Channel RAID Controller offers six (6) high-speed Ultra-2 LVDS channels, each capable of supporting an IBM EXP15 Expansion Enclosure with ten (10) Wide Ultra-2 SCSI hard disk drives. This allows for up to sixty (60) disk drives and over one (1) TB of data storage per controller. Add the Netfinity Fibre Channel Hub, with 7 ports supporting both short wave and long wave capabilities, Netfinity Fibre Channel PCI Adapters, and additional Netfinity Fibre Channel RAID Controller Units and your storage capabilities can easily expand to nearly limitless possibilities. All this supports your business-critical systems while protecting your current SCSI hard drive investment. The Netfinity Fibre Channel Hub can also be used to implement multi-node server clusters and storage systems throughout your business, bringing the benefit of reliable high-performance to your users. Flexibility is "built-in" to Netfinity Fibre Channel Storage solutions. You can configure according to your changing business requirements, from intra-rack, room to room, across the campus or even across town.

# **Basic high-speed expandable storage configuration**



## Redundancy for maximum availability

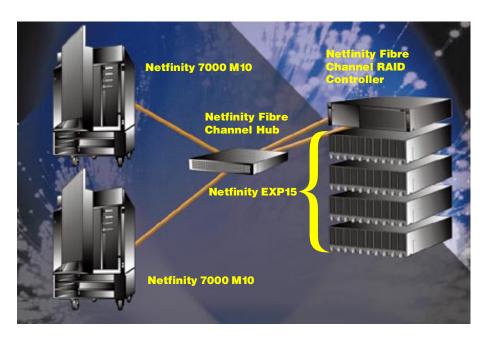
IBM Netfinity Fibre Channel Storage solutions are designed for the high-availability requirements of your business. The long distance capabilities, fast data transfer speeds, and wide range of storage configurations offer the power and reliability needed to protect your valuable data assets and to keep your business-critical applications and information available. Configure your Netfinity Fibre Channel Storage system to support your massive data requirements using a single Netfinity Fibre Channel PCI Adapter connected to the Netfinity Fibre Channel RAID Controller. Additional Netfinity Fibre Channel PCI Adapters give you failover support at the server level and the optional Failsafe RAID controller provides redundancy at the disk/data level. If you have Microsoft Cluster Server requirements, configure your Netfinity Fibre Channel Storage solution for the highest availability with redundant Netfinity Fibre Channel PCI Adapters, Hubs, and RAID Controllers. Add long wave cabling between your Netfinity Fibre Channel Hubs and build disaster recovery into your enterprise storage system. In the event of a catastrophic failure or natural disaster, your work can be transferred to your failover location immediately, without interruption or loss of data.

Hot-pluggable and redundant fans and power supplies help ensure system uptime and ease of installation, and battery back-up RAID circuitry helps protect against loss of data in the event of a power failure. All of this provides still another level of availability for your businesscritical applications and data, helping to ensure continuous access and availability.

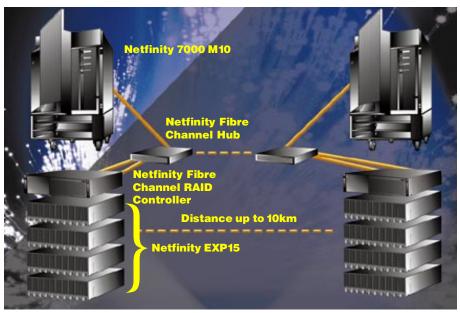
### **Unrivaled service and support**

Because IBM Netfinity Fibre Channel products are Options by IBM, they assume the same warranty term as the IBM Netfinity server they are installed on. This means that these new products come with the acclaimed service and support you expect from IBM. It all begins with IBM Start Up Support: For the first 90 days of your server warranty period, at no additional charge, one call connects you to expert help for IBM and selected non-IBM hardware and network operating systems (NOSs).

### Two node cluster with redundant RAID controllers for high availability



### Mirrored fibre-channel configurations with redundancy and high-availability



For three years, you have the renowned IBM Warranty Service for on-site service when required.

### The case for IBM

So, why IBM? What other company has the depth of experience and the proven track record to produce total server solutions for your business? The first-rate hardware and software products, an exhaustive list of options plus world-class service and support untouched by the competition?

| IBM Netfinity Fibre Channel Components                     |                                                                                                                                                                                                                                                                |  |  |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| IBM Netfinity Fibre<br>Channel RAID Controller<br>Unit     | <ul> <li>Single Raid Controller Standard</li> <li>Dual active redundant controller support unit</li> <li>6 Ultra-2 LVDS drive channels supporting up to 60 HDDs</li> <li>Redundant, hot-pluggable power supplies, fans and optional RAID controller</li> </ul> |  |  |
| IBM Netfinity Fibre<br>Channel Failsafe RAID<br>Controller | <ul> <li>Optional redundant controller</li> <li>Hot-pluggable for easy configuration</li> <li>RAID levels 0, 1, 3, 5</li> <li>128MB battery backed cache</li> </ul>                                                                                            |  |  |
| IBM Netfinity Fibre<br>Channel PCI Adapter                 | <ul> <li>Gigabit speed 100MB/s</li> <li>Fibre Channel direct drive short wave optical to 500m</li> <li>64-bit PCI bus master data transfers up to 264MB/s</li> <li>Fully compatible with 32-bit PCI</li> </ul>                                                 |  |  |
| IBM Netfinity Fibre<br>Channel Hub                         | <ul> <li>7-ports for short or long wave optical</li> <li>Supports N-way clustering</li> <li>4 short wave GBICs included</li> <li>Optional hot-pluggable short and long wave GBICs</li> </ul>                                                                   |  |  |
| Other Supported Options                                    | <ul> <li>Netfinity EXP15 Storage Enclosure Unit</li> <li>Full Netfinity Rack (42U)</li> <li>NetBay22, half-height rack</li> <li>Optional cabling (5m and 25m)</li> </ul>                                                                                       |  |  |

| Netfinity Solutions                                    |                                                                                                                                                                                                                                                                                                                                                                          |  |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Options by IBM</b><br>www.ibm.com/pc/us/accessories | The established way to add capacity and function to<br>your Netfinity server with a wide range of options<br>specifically designed and optimized for your Netfinity<br>system. Options by IBM also offer the added benefit<br>of assuming the three-year warranty term of the<br>Netfinity server system they are installed on to provide<br>seamless warranty coverage. |  |
| The best in the business                               | As an integral part of system design, IBM brings<br>working together the best in the business together for<br>you through strategic alliances with key industry<br>leaders such as Microsoft, Intel, Lotus, Oracle, Novell,<br>SCO, SAP, J.D. Edwards and Baan.                                                                                                          |  |

# Visit the Options Web site at www.ibm.com/pc/us/accessories

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| World Wide Web              |                                          |                         |
| Netfinity                   | www.pc.ibm.com/netfinity                 |                         |



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