

## Digital Clusters for Windows NT

Maximum uptime all the time — for your most critical applications

**System crashes, power failures . . . events like these can jeopardize server availability and your users' ability to get work done. Especially in the real world of enterprise-wide computing where work loads are growing exponentially, and high-availability operating system services are critical.**

**Digital Clusters for Windows NT™ heralds a new way of thinking about client/server LANs through its approach to clustering of servers. In short, Digital's cluster technology brings the benefits of affordable, high-availability computing to client/server workloads and usage models.**

How? Redundancy is built in. That means if one server goes down, the other takes on the work load. So your applications are highly available and your data is always accessible. Your end users are happy and productive, and you can manage your LAN proactively.

### Benefits

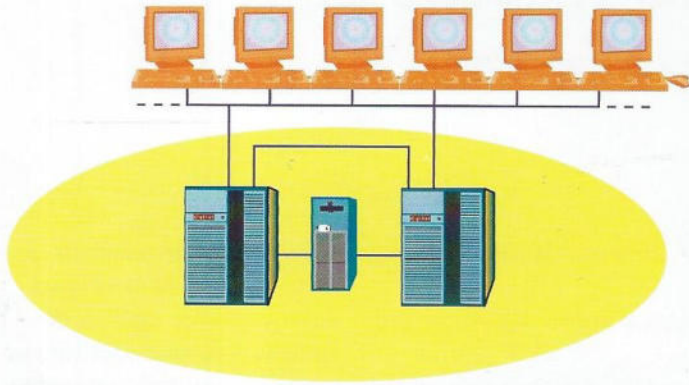
- User data is always available, minimizing downtime
- Maximizes productivity since both servers carry full work loads — all the time — with no idle standby
- Ensures investment protection for existing client applications, which fail over without modification thanks to NTFS failover
- Simplifies cluster management for the system administrator since he or she uses a Windows®-based configuration manager
- Eliminates the need for end-user training since cluster aliasing enables them to access the cluster as a single system

What if you could eliminate the costly downtime that occurs with power failures, system crashes, bad cables, and all the other things that can go wrong with your server? Now you can.

Digital Clusters for Windows NT allows a pair of PC LAN servers to be linked together so that they act like a single system. But they don't fail like a single system would.



# uptime all the time



## **System-level, high-availability — the server solution that won't let you down**

Digital Clusters for Windows NT is simply a pair of Windows NT servers that are accessed by clients as a single system. System-level high-availability is assured through two servers, shared storage, a second Ethernet or FDDI interconnect to ensure cost-effective communication, and redundant data paths. This means even in the event of failures, your system services remain operational.

Because Digital's server platforms are highly scalable, you can add CPU, I/O, and storage incrementally to grow capacity efficiently as your business expands. In addition, Digital Clusters for Windows NT provides very high levels of availability using low-cost, industry-standard hardware and software components.

If increased subsystem availability is a goal, Digital Clusters for Windows NT supports external RAID subsystems.

For businesses, this means increased productivity as a result of significantly reduced downtime. Plus, MIS departments can upgrade their computing resources incrementally and balance work loads across these resources in an efficient way.

From a user's perspective, the cluster is accessed exactly like a single server. For example, with file services, remote directories are accessed by clients through the File Manager utility, the same way you normally access any directory from Windows 95 or Windows NT. The actual location of the directory is transparent to the end user.

At the heart of Digital Clusters for Windows NT is the Failover Manager, which monitors events — such as a server or SCSI bus failure — that would call for a failover. The Failover Manager initiates the failover and determines which services and clients are automatically redirected to the second server.

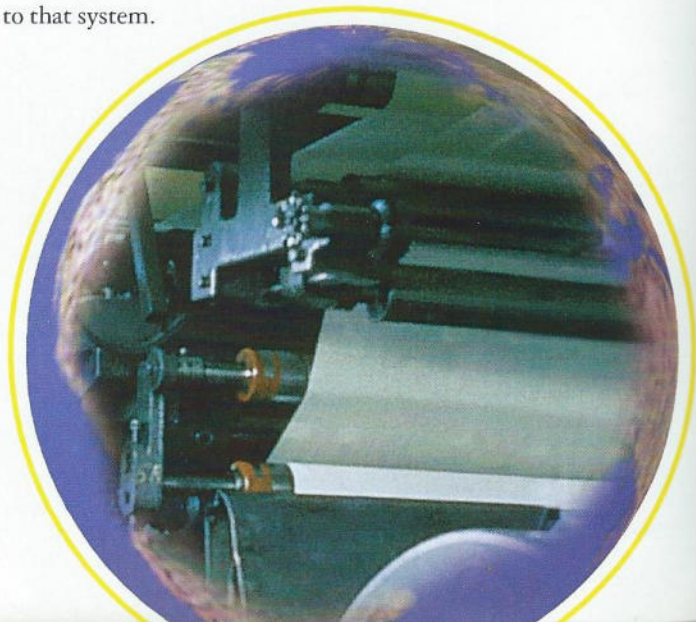
Digital Clusters for Windows NT lets you balance the work load across the cluster. Files and databases are assigned to one server, but can be failed over to the second server in the event of a system failure. With Digital's approach, only those resources or services that are affected by a particular failure are relocated. You also have the ability to create "failover groups," which are collections of services that should fail over together. For example, SQL Server™ and ORACLE® Workgroup database and associated file shares. If the primary server comes back online, the cluster gives the option to initiate failback. The software will then restore services to that system.

## **Field service feature — on call 24 hours a day**

Digital clustering software allows the initiation of manual failover so preventive maintenance or system upgrades can be performed without disrupting the user community. It's like having a field service organization available 24 hours a day!

## **Designed specifically for the Windows NT environment**

With Digital Clusters for Windows NT, you get continuous availability for your most critical client/server applications — without a forklift overhaul of your existing Windows NT environment. That's because Digital Clusters for Windows NT is designed from the ground up to be consistent with client/server work loads and usage models.





Digital's Windows NT cluster technology uses all industry-standard components, including hardware, interconnects, and the Windows NT Server operating system. It is a layered application, which means we haven't changed anything in the native Windows NT software. It supports multiple Windows NT server platforms — either Prioris or AlphaServer™ — as well as multiple client types. On the client side, the goal is for you to be able to use essentially any client you have today. These could be the Windows family, MS-DOS®, Macintosh®, and, of course, Windows NT.

**Greater manageability to optimize your LAN**

Digital Clusters for Windows NT builds on the common account management and security that is provided by the Windows NT Server Domain capability. We simply add on a set of tools and extensions to manage clustered resources and services as a single system.

With our management approach, you can manipulate cluster shares from the Windows File Manager. Or through our graphical management interface, gain a cluster-wide view of events. We've included an SNMP agent and Management Information Bases (MIBs) for cluster resources, so you can use Digital's ServerWORKS Manager to gain real-time network monitoring, analysis, and cluster statistics to ensure your NT Cluster is performing at peak efficiency.

**Superior server solutions**

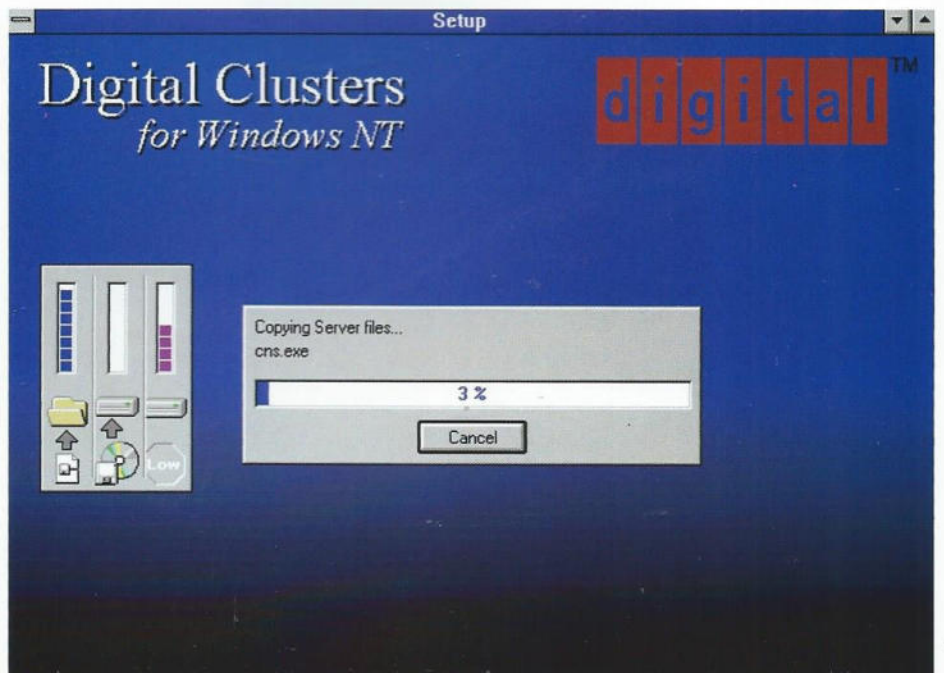
At Digital, we're committed to delivering server solutions that offer you availability, reliability, and an unlimited potential for growth.

Our recent Alliance for Enterprise Computing with Microsoft Corporation is an example of this commitment. Microsoft is working with Digital and others to source technology for future releases of Windows NT Server.

**World-class, worldwide service and support**

At Digital, we have the experience, the expertise, and the worldwide service and support to help you bring your business-critical applications to your client/server LANs. The fact that we have committed our finest technical resources to this new technology and plan to include Help Desk support with Digital Clusters for Windows NT is proof positive. We work with our Digital Business Partners to offer a comprehensive portfolio of upgrade services, which include:

- Installation Services
- Help Desk Support Upgrade
- Hardware Maintenance



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