

Legato NetWorker protects the critical business data of more than 10,000 enterprise customers worldwide by simplifying, centralizing, and automating backup and recovery operations across Unix, Windows, Linux, and NetWare platforms. Built upon an open, highly scalable architecture, NetWorker reduces management overhead by providing "lights out" protection of storage assets in the largest corporate data centers and the smallest satellite branch offices.

Legato NetWorker[®] 6

Protecting Critical Information In Data Centers and Branch Offices Worldwide

Legato NetWorker delivers the data protection capabilities and management consistency needed most by heterogeneous enterprises in DAS (direct attached storage), NAS (network attached storage), and SAN (storage area networks) storage environments. Advanced indexing, save set browse/retention, tape cloning, high speed parallelism, NDMP (network data management protocol) support, serverless backup, and dynamic tape drive sharing are among key components that enable administrators to fully protect storage assets and minimize downtime.

Legato NetWorker provides optional application and database aware backup and recovery solutions for Oracle, Sybase, Informix, SAP R/3 on Oracle, Microsoft SQL Server, Microsoft Exchange Server, IBM DB2, EMC² Symmetrix for Oracle, EMC² Symmetrix for SAP R/3 on Oracle, and Lotus Notes/Domino using vendor specific API's. Clustering of critical backup servers, local, remote, and three-way backup of NAS file servers, and LAN-free backup in a SAN are fully supported. NetWorker is also tightly integrated with

complimentary Legato applications, such as file-level archiving, hierarchical storage management, advanced media management, and a policy-based management suite that provides reporting, systems management frameworks integration, and centralized administration of multiple NetWorker servers.

Recent enhancements in NetWorker 6 include:

- Ability to dynamically share tape drives between multiple hosts or between multiple NDMP NAS devices to increase return on library equipment investments
- Newly designed indexing architecture that dramatically improves backup performance and scalability
- NetWorker Server and Storage Node support for leading Linux platforms such as Red Hat, Caldera, SuSE and Turbo Linux to provide greater platform protection and management flexibility
- NDMP support on Solaris, HP-UX and Linux platforms to protect data stored on popular NDMP NAS from vendors such as Network Appliance, EMC², and Auspex

- NDMP Direct Access Restore (DAR) to provide high-speed recovery
- Cluster support for Legato Automated Availability Manager, Sun Cluster, Hewlett Packard MCSG, IBM HACMP, Compaq Tru64 TruCluster, and Microsoft Cluster Services to provide maximum protection in high availability environments

Legato NetWorker 6 is a market leading, globally proven solution for protecting business-critical information and provides a solid foundation for reliable enterprise storage management.

FEATURES AND BENEFITS

Centralized Protection for Heterogeneous Enterprises

- Protects data on UNIX, Windows, Linux, and NetWare servers and all major desktops in DAS, NAS, and SAN environments. Add-on modules provide online protection and granular recovery for leading databases, messaging, and ERP applications

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- Protects all local and remote data, including security, user profiles, access control lists, and critical Windows system files and event logs
- Performs full, incremental, and differential backups
- Tape cloning with interleave consolidation
- Add-on Archive and HSM applications enable manual and policy-driven archive, retrieval, migration, and recall of data
- Allows interchangeable tapes between NetWorker servers on Windows, UNIX, Linux, and NetWare

Superior Performance

- Highly flexible backup and recovery capabilities fully leverage LAN, SAN, and WAN connectivity
- Backup devices can be a single tape drive, tape library(s), or silo(s)
- Multi-tier storage management with optional staging of data to intermediate high-speed disk
- Data compression accelerates throughput while minimizing server load and network traffic
- Built-in parallelism and data interleaving. Scalable to 512 simultaneous backup streams. Supports up to 32 data streams per tape device to maximize backup speed

Advanced Media Management

- Extensive support for tape drives in libraries and silos
- Supports sharing of libraries between a NetWorker Server, NetWorker Storage Nodes, and/or NDMP-compliant NAS
- Optional support for sharing of tape drives by NetWorker host and/or Storage Nodes, or by NDMP-compliant NAS in a single data zone
- Automated save set consolidation
- Advanced media management includes automated media handling, cartridge cleaning support, electronic labeling, bar codes, cartridge access ports, and media verification

Enterprise Scalability

- Able to dynamically expand capacity by adding client connections, storage devices, and storage nodes
- Indexing architecture is optimized for resiliency and scalability
- Support for directed cross-platform browse and same platform recover

Easy to Use and Manage

- Single NetWorker Server console for configuring and managing backups and restores

- Backup and Recovery
- Archive and Retrieval
- Migrate and Recall
- Disaster Recovery
- Library/Drive Sharing
- NDMP Backup/Restore

- Online help available within NetWorker GUI or at the command line via MAN pages
- Desktop users can perform ad-hoc backups and browse and recover own files from a graphical online index
- Supports Sun DiskSuite, AIX LVM, Tru64 AdvFS and Veritas volume managers
- Automatic event notification via pager, email, or optional SNMP module

Legato NetWorker Overview

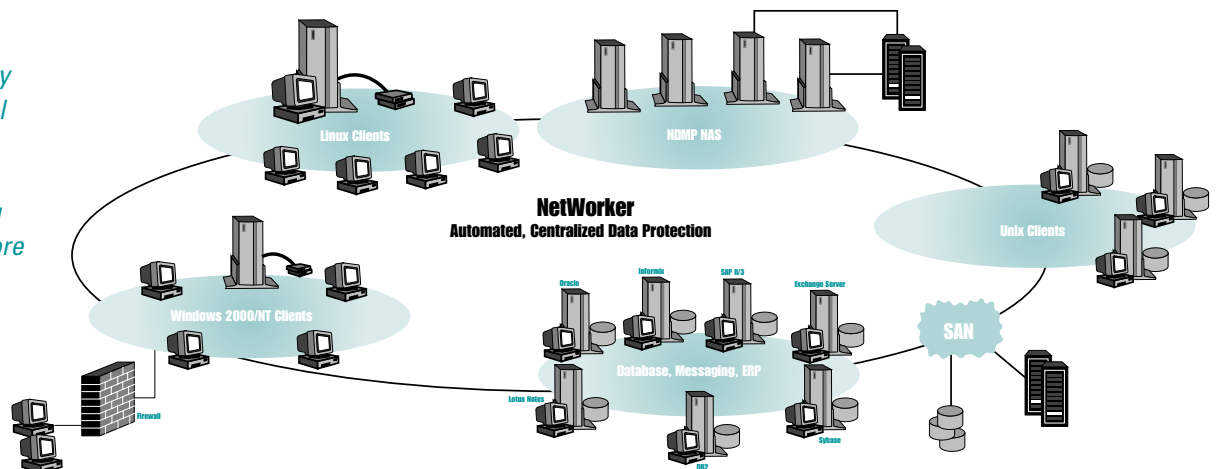
Legato NetWorker utilizes a client/server architecture comprised of three distinct functions within a data zone – Client, Storage Nodes, and Server – to provide the capabilities and performance required to protect and manage data on the most complex networks. A data zone is defined as a single NetWorker Server with multiple clients and/or Storage Node(s). Storage Nodes enable load sharing within a data zone as well as provide flexibility in serving the environment configuration of large data centers or satellite branch offices. Clients can be backed up to any storage node(s) or server, via a LAN, WAN, or SAN. NetWorker enables administrators to centrally manage and automate backup operations within a data zone, while applying varying storage management policies and procedures for individual clients. There are three base NetWorker server editions, each with a level of service designed to meet the differing size and complexity of enterprise computing environments.

Unlimited Scalability – Local or remote centralized administration capabilities and client-server architecture supports automated back up for hundreds to thousands of network attached workstations and servers.

Unmatched Performance – A unique parallel streaming feature supports up to 32 simultaneous client backup/recovery sessions per Storage Node for Network Edition Servers, and up to 64 per Storage Node for Power Edition Servers. Up to 512 backup streams can be performed in parallel.

Superior Reliability – Bulletproof, write once/read many, indexing and NetWorker's industry standard OpenTape format ensures robust protection and highly reliable recovery of business critical information.

NDMP Ready – Local, remote and three-way protection of NDMP-compliant NAS provides optimal flexibility for maximizing library investments and consolidating backups. DAR (Direct Access Restore) is also supported.



Concurrent Device – Provides support for concurrent backup and recovery operations using up to 16 backup devices, including multiple autochangers, per NetWorker Server or Storage Node in a Power or Network Edition data zone.

AutoChanger Ready – Systems running NetWorker Network Edition or Power Edition can be extended to operate with the industry's widest range of tape and optical autochangers through the addition of the appropriate AutoChanger Software Module. The dynamic drive sharing option is supported across the full range of tape devices supported by NetWorker.

Archive Ready – Legato NetWorker can be expanded to provide client archive and retrieval services with the addition of the Legato NetWorker Archive module.

Legato NetWorker Add-On Modules and Complimentary Applications

Legato NetWorker NDMP Connections enable local, remote, and three-way data protection in native format for the most widely used NAS devices utilizing NDMP. Devices supported include leading vendors such as Network Appliance, EMC² and Auspex.

Autochanger/Silo Software Modules enable hands-free, automated data protection using a wide variety of autochangers. Modules are licensed according to the number of slots supported by the robotic device: 1-9, 1-16, 1-32, 1-64, 1-128, 1-256, 1-512, and unlimited slots. Silo Software Module allows Legato NetWorker to interface with mainframe-class storage systems from IBM, StorageTek, and EMASS.

Dynamic Drive Sharing (DDS) Option allows tape drives to be shared within a single data zone between a NetWorker Server and/or Storage Node(s), or between homogeneous NDMP-compliant NAS file servers.

Legato NetWorker Modules provide high-performance, online protection for popular databases, messaging and ERP applications, including Oracle, EMC² Symmetrix for Oracle, SAP R/3 on Oracle, EMC² Symmetrix for SAP R/3 on Oracle, IBM DB/2, Informix, Sybase, MS SQL Server, MS Exchange Server, and Lotus Notes.

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Legato NetWorker 6	Power Edition	Network Edition	Workgroup Edition*
Pre-configured Support			
Number of Client Connections	10	10	8
Parallel data streams per NetWorker Server	64	32	12
Parallel data streams per Storage Node (SN)	32	32	N/A
Number of devices	32 per server and/or SN	16 per server and/or SN	4 per server
Cluster Support – Server / Client	Server / Client	Client	N/A
Storage Nodes	Yes	Yes	N/A
Options Supported			
Additional Client Connections	Yes	Yes	Yes
ClientPaks for heterogeneous environments	Yes	Yes	Yes
AutoChanger Software Modules	All	All	1-9, 1-16, 1-32 slots
Library Sharing	Yes	Yes	No
Dynamic Drive Sharing Option	Yes	Yes	No
Silo Software Modules	All	All	No
GEMS SmartMedia	Yes	Yes	No
Archive Module	Yes	Yes	No
Legato Application Modules	Yes	Yes	Yes
NetWorker NDMP Client Connections	Yes	Yes	No
NetWorker SnapImage Module	Yes	Yes	No
Legato Celestra Power	Yes	No	No
HSM Module – Sun Solaris and Tru64 Unix	Yes	Yes	No
HSM Module – Windows (2000 & NT)	Yes	Yes	No
Open File Manager	Yes	Yes	No
GEMS Console 2.0	Yes	Yes	Yes
SNMP Module	Yes	Yes	No
HP-IT Operations Module	Yes	Yes	No
Tivoli Module	Yes	Yes	No
CA-UniCenter Module	Yes	Yes	No

*Administrators may upgrade Workgroup Edition to Network Edition to expand capabilities. Similarly, Network Edition can be upgraded to Power Edition. Backup policies, configurations, tape usage, and recovery capabilities are maintained with upgrades.

Legato Open File Manager provides support for backup of open application files, mail files, and user files residing on Windows and NetWare servers. It ensures that a consistent copy of these files is backed up even when the file is locked or open, or in deny or write mode.

Legato NetWorker SnapImage is a dual-purpose module. First, it provides live, block level backup, reducing server overhead and backup completion times when protecting multitudes of small files. Second, it provides an NDMP tape server that allows remote protection of NAS filers in native format to Unix-attached libraries, optimizing library investments and backup consolidation.

Legato Celestra®Power delivers server-less, LAN-free backup in direct-attached storage and SAN environments. Managed by NetWorker, data is backed up live at the block level, directly from disk to tape, enabling complete protection of mission-critical data without impacting application and network performance.

GEMS SmartMedia™ provides the ability to share tape libraries and associated tape drives among Legato NetWorker Servers and Storage Nodes across multiple data zones. GEMS SmartMedia is an open media management application that provides IEEE standard interfaces for applications, robotic library control, Dynamic Drive Sharing (DDS) and administration.

Legato GEMS Console is a web-enabled application that addresses the challenges of managing heterogeneous distributed storage across an enterprise of one or more data zones. GEMS Console is designed to simplify the administration and monitoring of NetWorker servers via an intuitive web based GUI. It enables local and remote management of NetWorker capabilities, while simultaneously gathering a wide variety of metrics from distributed NetWorker backup resources.

Legato Automated Availability Manager (LAAM) delivers high-availability of NetWorker and other mission critical applications including ERP, database, email, and web, through its ability to manage applications. With LAAM, backup operations continue in the event a NetWorker server host fails. NetWorker may also be kept highly available using cluster solutions like Sun Cluster, Hewlett Packard MCSG, Compaq TruCluster, IBM HACMP, and Microsoft Cluster Services.

Hierarchical Storage Manager (HSM) is a management application that migrates data from one storage medium to another based on a definable set of policies around data age and usage. This reduces the amount of disk storage and the rate of disk storage growth.

Legato NetWorker Archive is an advanced data management application that delivers file-level archiving and file grooming services for authorized clients on the network.

Legato NetWorker 6 Servers / Storage Nodes / Clients

Legato NetWorker 6 Servers	Legato NetWorker 6 Storage Nodes	Legato NetWorker 6 Clients
Microsoft Windows 2000 / NT (Intel x86)	Microsoft Windows 2000 / NT (Intel x86)	Microsoft Windows 2000 / NT (Intel x86) Microsoft Windows 98 Microsoft Windows 95
Sun Solaris (SPARC) HP – UX (PA-RISC) Compaq Tru64 Unix (Alpha) IBM AIX (Power PC) SGI IRIX (MIPS) Sequent Symmetry & NUMA Red Hat Linux (Intel x86) Caldera Linux (Intel x86) SuSE Linux (Intel x86) Turbo Linux (Intel x86)	Sun Solaris (SPARC) HP – UX (PA-RISC) Compaq Tru64 Unix (Alpha) IBM AIX (Power PC) SGI IRIX (MIPS) Sequent Symmetry & NUMA Red Hat Linux (Intel x86) Caldera Linux (Intel x86) SuSE Linux (Intel x86) Turbo Linux (Intel x86)	Sun Solaris (SPARC & Intel x86) HP – UX (PA-RISC) Compaq Tru64 Unix (Alpha) IBM AIX (Power PC) SGI IRIX (MIPS) Sequent Symmetry & NUMA Red Hat Linux (Intel x86) Caldera Linux (Intel x86) SuSE Linux (Intel x86) Turbo Linux (Intel x86)

Note: NetWorker 4.15 for Netware provides client and server support for Netware environments. Visit www.legato.com for the latest in software compatibility information.

Please see Legato Software Compatibility Guide for complete support listings.



Keeping the World's Business-Critical Information Available

Legato Systems, Inc.

2350 West El Camino Real
Mountain View, CA 94040
USA

Tel (888) 853.4286 • (650) 210.7000

Fax (650) 210.7032

www.legato.com

For a complete listing of Legato Systems offices worldwide, please visit <http://www.legato.com/offices/>

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