

Backup Express

TECHNICAL SPECIFICATIONS

RELEASE 2.1.4

Backup Express is a high performance enterprise-wide backup/restore solution, designed specifically for multi-platform environments.

FLEXIBILITY

Backup Express is designed to meet the needs of rapidly changing, complex networks:

- Back up and restore Windows 95/98/ME/NT/2000, UNIX, Linux, and NetWare machines, and NDMP-compliant filers with a single backup product.
- Distribute storage devices anywhere in your enterprise: LAN, WAN, or SAN.
- Install the backup catalog on either UNIX or Windows NT/2000 with the ability to easily switch platforms.
- Back up or restore at the file, directory, disk, raw partition, node, node group, and enterprise levels.
- Add devices, clients, or servers easily.
- Run GUI in Windows, Motif, or Open Look environments.

PERFORMANCE

Backup Express achieves superior performance through concurrent processing, strategic distribution of work, and sophisticated I/O techniques:

- Maximizes network throughput and minimizes data transmission and network congestion by backing up and restoring data close to or directly attached to the source.
- Direct Access Restore (DAR) through NDMP directly accesses specific files, eliminating the need for multiple tape loading and streaming.
- Writes data concurrently to an unlimited number of tape drives anywhere on the network.
- Splits large files and partitions across multiple devices concurrently to reduce both backup and restore times.
- Reduces server I/O bottlenecks by distributing backup processing.
- Optimizes catalog searches and minimizes disk space usage through scheduled catalog maintenance.
- Backs up and restores concurrently from either a single node to multiple devices, multiple nodes to a single device, or multiple nodes to multiple devices.

EASE OF USE

The intuitive graphical user interface (GUI) and logical design of Backup Express eliminate the need for training:

- Intuitive Windows-like GUI provides the same point-and-click simplicity in all operating environments.
- Simple GUI enables authorized end users to restore their own data.
- Graphical scheduler simplifies job definition.
- Ability to group nodes, storage devices, and storage volumes into node groups, device clusters, and media pools simplifies configuration.

ADMINISTRATION

Day-to-day operation of Backup Express can be fully automated and requires little administrative intervention, allowing lights-out operations:

- Allows drag-and-drop tape library operations between tape slots, drives, and import/export slots.
- Automates tape library management, including labeling, with barcode support, concurrently on multiple devices.
- Centralizes administrative functions such as defining backups, scheduling jobs, running management reports, and monitoring jobs.
- Provides "any-point control." The GUI can be executed from any supported node with a TCP/IP connection, even from home.
- Allows creation of administrators with various selected privileges.
- Provides command line interface that allows backup and restore jobs to be defined and run from UNIX and Windows shell scripts.
- Allows unattended backup, restore, copy, duplicate, and catalog maintenance operations.
- Provides complete information on the location, status, and contents of all storage volumes, on-site or off-site.
- Includes fast copy (disk to disk) and duplicate (tape to tape) functions.

SECURITY

- Provides three optional levels of verification: verify readability, verify tape headers, or verify checksums.
- Encrypts Backup Express commands and messages on the network to avoid interference or intrusions.
- Provides optional data encryption on the network.
- Backs up NT registries, Windows 2000 System State, UNIX ACLs, and NetWare NDS trees and binderies.

INTERFACES

- NDMP interface allows backup and restore of Network Attached Storage (NAS) appliances (filers).
- Direct Oracle interface for Oracle 7, 8, and 9 on UNIX or NT/2000 uses EBU and RMAN APIs to ensure backup integrity.
- Certified SAP R/3 interface seamlessly integrates backup of the SAP database with the overall enterprise backup strategy.
- MS SQL Server interface allows online backups of SQL Server 6.x, 7.x, and 2000.
- MS Exchange 5.5 and Exchange 2000 interfaces allow online backups of Exchange 5.5 or Exchange 2000 with restore granularity at the database, individual folder, and message levels.
- SQL-BackTrack interface enables live backups of Sybase and Informix databases.
- Open File Manager (OFM) interface allows backup of open files on NT/2000 and NetWare.
- Operator Console (OPcon) interface displays real-time Backup Express operational information about one or more servers.
- SNMP interface lets Backup Express work in conjunction with network management software.
- ACSLS and Library Station interfaces from StorageTek, DAS interface for ADIC AMLs, and IBM Magstar 3494 Library Manager interface permit tape library sharing between open systems and mainframes.

RECOVERY

Backup Express provides a quick return to normal operations if all or part of the network suffers from a hardware failure or other disruptive event:

- Scheduled catalog backup guarantees catalog recovery is fast and easy.
- Reconstructive restore option restores a file system to an exact point in time.
- Twinning option creates two sets of backups simultaneously, eliminating the need for separate tape duplication for off-site vaulting.

NEW TECHNOLOGIES

- **SAN Resource Sharing Option (SRS)** allows Backup Express to attach machines (UNIX, Windows NT/2000, Linux, and NetWare servers, and NDMP-compliant filers) to tape devices in a SAN environment and dynamically share tape drives.
- **NDMP support** allows high-speed local, filer-to-filer, and filer-to-server backup of NDMP-compliant filers and appliances.
- **Windows 2000 extended support** includes System State backup and restore; Event Viewer, Terminal Services, RSM, and WMI support; NTFS file security and open file restores; Single Instance Storage (SIS) and Remote Storage support; and cluster handling.

COMPATIBILITY

- Supports industry standard storage devices on Windows 95/98/ME/NT/2000, UNIX, Linux, and NetWare.
- Certified on virtually all automated libraries, independent of media type.
- Supports most storage media, including 4mm, DDS2, DDS3, DDS4, DAT, 8mm, AIT, AIT-2, Mammoth, Mammoth-2, Ecrix, DLT1, DLT4000, DLT7000, DLT8000, SuperDLT, LTO, 9840, 9940, QIC, Sony DTF, Magstar, and IBM 348X/349X/35XX.
- Writes backup data to tape using System Independent Device Format (SIDF) to ensure universal readability and cross-product standardization.
- Supports numerous clients, including UNIX (AIX, HP-UX, Solaris, SunOS, Compaq Tru64, SGI IRIX, Linux, SCO, DG/UX, SINIX, and NCR SVR4), Novell NetWare, Windows 95/98/ME, Windows NT (Intel and Alpha), and Windows 2000.

Contact Backup Express technical support for devices and clients currently supported.

INSTALLATION

The Backup Express Master Server requires at least 100 MB disk space and a minimum of 128 MB RAM. (Disk space requirements increase with the number of clients and the size of the Backup Express catalog.)