Introduction

Overview

Backup Exec for Windows NT Enterprise Edition and Single Server Edition are true 32-bit client/server data storage and management solutions designed specifically for Windows NT networks and BackOffice application servers. Offering advanced features such as centralized administration and monitoring, remote administration (using Remote Access Server), Global Network View, unattended scheduled backup, disk grooming, e-mail notification, concurrent backup, and compression, Backup Exec provides a wide range of data protection services for the entire Windows NT network.

Backup Exec for Windows NT Enterprise Edition and Single Server Edition capabilities can be augmented with the following agents and modules:

- Autoloader Module provides flexible lights-out capabilities for Windows NT networks. A graphical interface simplifies user-defined magazine configuration, using loader slots sequentially for extremely high capacity backup, or grouping the slots for specific operations. Supports multi-drive devices.

- Windows 95, Macintosh, and UNIX Agents provides the capability to protect the data on these servers and workstations. Support for protecting Windows 95 machines is included with Backup Exec for Windows NT Enterprise Edition.

Key Features

- Centralized Administration -- Allows you to administer one or more backup servers on the network from a single Windows NT machine. This eliminates you having to be physically located at the machine that needs to be administered.

- Multi-Backup Server Monitoring -- Using this capability the administrator can select to monitor multiple backup servers on the network, concurrently. Administrators can view all scheduled, completed, and active jobs. The administrator can quickly identify any backup server(s) that require operator attention. This capability facilitates management of multiple backup servers in a network.

- Remote Access Server (RAS) Support – Allows remote site administration over a general purpose modem line using Microsoft Remote Access Server (included with Windows NT). This facilitates managing backups at remote locations.

- System Service–based Backup Server – All backup server components are built as Windows NT System Services. By implementing these as Windows NT System Services, the backup server will automatically start when the Windows NT machine is powered on, or is restarted (re-booted). It eliminates the need for you to have to log on to the machine in order to start the backup server software.

- Optional Arcada Agent Support – Backup Exec can now protect Macintosh, UNIX, and Windows 95 machines on a network using our existing Arcada Agent technology.

Platform	SPX	TCP/IP	ADSP
UNIX (HP/UX, Solaris, SunOS, SCO, and UNIXWare)		X	
Macintosh			X
Windows 95	X	X	

These Arcada agents complement Backup Exec's existing support for protecting Windows NT, DOS, Windows For Workgroups, and OS/2 machines, and provide complete data protection for all workstations on a Windows NT network.

- Cheyenne ARCServe for NetWare Tape Read Support -- Backup Exec 6.0 will read ARCServe for NetWare 4.x and 5.x tapes. This facilitates the transition from existing NetWare ARCServe for NetWare sites to Arcada Backup Exec for Windows NT.

- Pre and Post Command Support -- Backup Exec 6.0 will run a user–specified command before and/or after a backup job. This allows the you to stop and restart server applications before the start of the backup, and after the backup completes, respectively.

- Global Network View – recognizes all servers and shares by their UNC names. This feature makes it easy for you to recognize exactly which shares are selected for backup and/or restore, without mapping or remapping drive letters. Machines that do not belong to a Windows NT domain can be assigned usernames and passwords enabling dynamic logins for backups and restore. The passwords are maintained in encrypted form in the password data base.

- Data compression -- improves performance and maximizes tape efficiency by selecting either of two methods of data compression. You may select STAC software data compression, which compresses the data before it is sent to the tape drive; or you may select hardware data compression, if the tape drive has that capability. Either may be accessed with "point and click" ease as part of the selection process.

- Disk grooming -- frees up valuable hard disk space by moving inactive files off the server disk and on to tape.

- E-mail notification – records and sends the results of unattended backup operations. When the backup operation is complete, the log file is mailed to a pre-selected mailing list using Microsoft Windows NT built in mail support. The results of the operation can, for example, be sent to the administrator for a specific work group; or, through remote e-mail access, you can obtain a detailed result of the operation, even if you are away from the office.

- File versioning – searches the catalogs and provides a list of all versions of a file that have been backed up to tape. The list indicates the name of the file, all the dates and times of the backups, and the tapes that hold each version of that file. This enables you to locate and restore a specific file - for example, the version of a departmental budget as it was three weeks ago.

- Multi-drive concurrent backup – supports scheduled, concurrent backup to multiple tape drives or multiple device loaders on a workstation or server. You can create duplicate backup sets, send sets of data to different tapes (for example, to back up different departments at the same time), or minimize the time required to capture data on tape by running different scheduled jobs at the same time. A "do it now" backup on critical data can be sent to one tape drive even when another tape drive is busy with a scheduled backup.

- Optional Loader Support – supports most popular autoloaders. The loader software partitions the loader into one or more groups, and provides random access to these groups for backup, file migration, and restore operations. The autoloader module option may be added to Backup Exec for Windows NT whenever you are ready to add this hardware to your network. Full support for multiple drive loaders is now available. Call Arcada for additional information.

- Full Windows NT file system support – backs up all Windows NT file systems: FAT, HPFS, and NTFS. This includes support for backing up Macintosh files and the Windows NT registry. Full support ensures the backup of all Windows NT data, including important user and system configuration data and security information.

- Scheduled/unattended backup – performs operations at a predetermined time, using customized backup strategies. In only a few moments, with a simple graphical selection technique, you can create schedules for full backups, for backup of only modified files, for backup of certain volumes, directories, or files – by the hour, day, week, month and these operations occur without further thought or action by you – completely automatically.

- Open and skipped file processing – provides user-defined handling of open files. During background operations, files are often in use when they are accessed for backup. You can set the rules to skip or retry. Skipped files are logged; they can be automatically batched for backup after the regular job is finished, or they can be backed up manually at a later time.

- _____Verification methods – Backup Exec supports Cyclical Redundancy Check (CRC) verification. During the backup operation the software generates a unique number for each file, based on the contents of the file. This unique number is then recorded on the tape. During the verify pass this unique number is recalculated and compared with the value recorded on the tape. CRC verification is much faster than tape–to–disk compare operations and can even be done on files that are constantly changing.

- Advanced network support -- backs up shared data in DOS and Windows for Workgroups, OS/2, and other Windows NT workstations, ensuring data protection for a variety of operating systems on the Windows NT network.

- Automated log files – allows you to view or print a built-in audit trail of the backup or restore sessions. You can determine how much information is recorded. The list can provide a record of the name and size of all files included in the session, the date/time stamp of the operation, identification of any corrupt files encountered, a log of skipped files, and other important information. The log file can be stored electronically and/or printed. It can also be sent to preselected addressees using Microsoft Windows NT's built–in mail support.

- Disk-based catalogs – allows you to quickly locate files for retrieval. You can select full catalogs, to provide detailed file information for easy identification of a desired file; or partial, to provide only the essentials.

- Catalog aging/grooming – allows you to set a timeframe for automatically deleting older catalogs. If you decide that older catalogs are taking up too much disk space, you can set a timeframe to automatically remove them from the hard drive. If, for example, you decide that your chances of needing to locate and restore a file that is more than four months old is remote, you may decide to delete catalogs that are more than 120 days old. The catalogs are available from the tapes and may be replaced if the need should later arise.

- Advanced file selection capabilities – allows quick selection by volume, directory, and/or file for inclusion or exclusion in backup and restore operations. With this flexibility, you can easily customize backup sets to include exactly the desired data and can easily restore an entire network or only one specific file.

- Advanced sorting – allows you to arrange the information in the File Selection window, Backup Set window, and Search Results window by file name, date, time, extension, size, or attributes. This sorting allows you to locate specific files or sets of files quickly, even if information about the desired data is limited. For example, if you know that the file you are seeking from the backup catalog is an Excel worksheet that was created the middle of last month, a search by *.xls will produce all possible Excel files, and a sort of that list by date would allow a quick focus on those created during the past month. The sort criteria columns in these windows may also be sized for easier use.

- Multiple backup methods – incremental, differential, normal (full), Daily, and copy – support a variety of backup strategies. Weekends, when most files are closed, may be a good time to perform full backups. During the day, critical files that have changed (like sales orders) may be backed up several times. The ability to accommodate each user's need is important in creating useful data protection strategies.

- Fast File Access (Quick File Access) – on supported tape drives, FFA fast forwards the tape to quickly locate the selected file. When a file is selected from the catalog and the correct tape is mounted in the drive, FFA moves the tape at speeds up to 200 times faster than its usual rate. When Backup Exec finds the selected file with FFA, it positions the tape and begins the restore. A selected file can be located in seconds, even on a multi-gigabyte tape.

- Background operations – allows operations while another application is in active use. There is no need to try to schedule backups while you are away from the computer; Backup Exec will initiate scheduled operations or execute on–demand operations while you continue with other work.

Compatibility

- Reads and writes Microsoft Tape Format v1.0
- Reads Cheyenne ARCServe for NetWare 4.x and 5.x Tape Format
- Reads Maynard Tape Format
- Read Sytos Plus for OS/2 Tape Format

System Requirements

The following are the minimum system requirements for running Backup Exec.

Software Requirements

- Microsoft Windows NT Workstation and/or Windows NT Server Operating System version 3.5 or later
- Administrator rights at the Backup Exec backup server

Hardware Requirements

Computers

- 80386, 80486, or Pentium systems; MIPS systems; DEC Alpha systems; PowerPC systems
- A minimum of 5 MB of hard disk space (after Microsoft Windows NT is installed).
- Printer(s) supported by Microsoft Windows NT
  (optional - only needed to print log files)
- A mouse is recommended, but not required

Note: Backup Exec is available in four versions: Intel, MIPS, DEC Alpha, and PowerPC. These versions are not interchangeable. Be sure you select the correct version for your machine.

Tape Drives, Loaders, and Controllers

Backup Exec requires at least one tape drive or loader and its appropriate tape controller card.

- Supports most DC6000, 4mm, and 8mm SCSI tape drives, including those branded by Archive, Compaq, Conner, Exabyte, HP, IBM, Iomega, Maynard, Sony, Tanberg, Tecmar, WangDAT, and Wangtek. Refer to the Windows NT Hardware Compatibility List and the README.TXT file on the Drivers diskette for a complete list of devices that are supported.

- Supports most QIC-80 standard (DC2000) Minicartridge tape drives.

- Separate autoloader module supports many popular devices, including those manufactured and/or branded by ADIC, Compaq, Conner, Digital Equipment Corp., Dilog, Hewlett Packard, Lago, and SpectraLogic. Support for loaders is available separately. For more information, call 1-800-327-2232.

- Compatible with SCSI host adapters supported by Windows NT. Refer to the Windows NT Hardware Compatibility list for a complete list of supported SCSI controllers.

What This Manual Covers

This manual covers the installation and operation of both the Enterprise Edition and Single Server Edition of Backup Exec for Windows NT.

The major difference between the two products can be seen when first starting Backup Exec. After starting the Backup Exec for Windows NT – Enterprise Edition, multiple Windows NT servers can be seen in the Backup Selections window and are available to be backed up. Other platforms such as UNIX or Macintosh can also be protected, provided you have purchased the required Arcada Agent software modules.

If you are using Backup Exec for Windows NT – Single Server Edition, only the local Windows NT server drive letters are shown in the Backup Selections window; no other Windows NT servers can be backed up. Other platforms such as UNIX or Macintosh can still be protected, provided you have purchased the required Arcada Agent software modules.