



Backup You Can TrustSM



BRU SERVER FOR MAC OS X

BRU Server for Mac OS X is a native Macintosh backup software solution that protects critical information on client/server-based Mac OS X networks. Based on the ultra-reliable BRU™ engine, BRU Server for Mac OS X delivers the functionality and flexibility to meet your organization's data protection needs. BRU Server for Mac OS X sets the backup industry's high water mark for reliability and data recoverability when protecting data on networked Mac OS X systems.

BACKUP, YOUR WAY

Pressures on computing resources to provide greater direct support of an organization are begging non-traditional approaches to backing up data. The time available (the backup window) to protect critical data is fast shrinking, and this poses a challenge. BRU Server for Mac OS X allows data to be committed directly to tape, the traditional approach, or can it can be "staged" in a centralized disk farm attached to the server to virtually eliminate the perceived backup window at the client system level. Staging the data prior to commitment to tape also provides near instantaneous access when recovering data contained in these near-line disk volumes.

THE BRU ADVANTAGE

The unique BRU format is the foundation of its industry-leading reliability. Each and every bit taken off the disk is audited until written through to the archive device onto the media. Users have multiple options to verify the backup's accuracy—including even performing the verification on a different machine. The BRU format also supports the maximum recovery of data should bits become corrupt during storage of the media. Unlike other products, BRU does not abort the recovery when bad bits are detected. Rather, the specific location detail is reported and mechanisms are employed to read past the corrupted data, and continue the restore.

INVESTMENT PROTECTION

BRU Server for Mac OS X provides investment protection. BRU's native support of all tape library technology configurations, without the need for special software drivers and their attendant cost, means BRU Server will integrate seamlessly into your current system environment and support your hardware when you upgrade in the future. BRU Server's low overhead allows multiple, simultaneous streams of non-interleaved data to be written with little impact on the performance of the server system, allowing you to realize the maximum performance your hardware can deliver. Bottom Line—Your organization's data is critical, and how to protect it is an important decision. BRU Server for Mac OS X delivers the reliability, functionality, flexibility, scalability and overall excellent value necessary to provide you with backup peace-of-mind.

PRODUCT HIGHLIGHTS

- Human Interface that delivers an expected Macintosh user experience
- Live database backup support
- Character-based and graphical management consoles provide local and remote control and fully scriptable from the command line
- Headless backup and restore operations can be managed via telnet or ssh sessions
- Proven data restorability of BRU technology – corrupt data is reported, circumvented, and the restore continues unless the tape drive is physically unable to proceed
- Straightforward installation; client systems and tape devices are automatically recognized and configured
- Supports disk-to-disk (D2D), disk-to-tape (D2T), and disk-to-disk-to-tape (D2D2T) backup strategies
- Backups can be committed to a disk staging area at primary storage subsystem performance levels – virtually eliminating perceived backup windows at the client system level
- Industry's shortest backup window (fully verified backups) by using Disk Staging and out-of-band data verification
- Low overhead allows multiple BRU processes to write to multiple storage devices simultaneously with very little impact on system performance
- Intelligent cataloguing provides a powerful query capability to recover select files quickly from tape
- E-mail notification of all operations including interact requirements and job status
- Catalogs copied to tape in addition to the server HDD to provide enhanced availability to backup data should the server system HDD fail
- Full support of IP Classless environments
- Full support of VTLs
- Full native compatibility with Apple's Xsan, ADIC's StorNext, and other distributed filesystems for both backup and as the disk Stage for D2D backup operations. No special tape emulation layer required
- Fully supports Pro Audio and Pro Video tools
- Supports multiple libraries attached to the system running BRU Server—no special licensing is required

LEADERSHIP DATA PROTECTION

- Native Mac OS X client/server backup software
- Ultra-reliable BRU™ engine delivers industry-leading data protection reliability and ultimate restorability of the protected data
- Backups can be 100% verified without access to the original filesystems
- Anytime Verify™ and Inspect Mode backup verification options can be run as an out-of-band process, freeing up the server faster
- Broad compatibility – backups can be verified on a different system, and even on a different platform
- Highly scalable
- Provides broadest Mac OS X tape library support available
- Performance that streams modern tape drives
- Data can be restored from any BRU backup data set without dependence on any special files contained on the server hard disk
- Client system data is not interleaved with other client system data
- Client-side data encryption provides secure communication between client systems and the server
- Network traffic data compression is configurable and can provide better utilization of available network bandwidth

SEAMLESS SUPPORT FOR MAC OS X

- Client system backups are not interleaved, thereby further shortening the time to restore selected client system files
- Full support for mach-o or CFM single file binaries and their resource fork and finder information, as well as full UNIX-based compatibility
- Handles files and permissions skipped by other Mac OS X backup utilities
- Properly backs up so-called "open files" under Mac OS X Full support of case sensitivity under HFS+ filesystem
- Single archives of any size can be created
- There is no limitation to the size of the catalogs
- Supports Panther's FileVault feature
- Integrates with Apple's Xsan technology
- Remote log-in and administration

BRU SERVER SUPPORT OF TAPE TECHNOLOGY

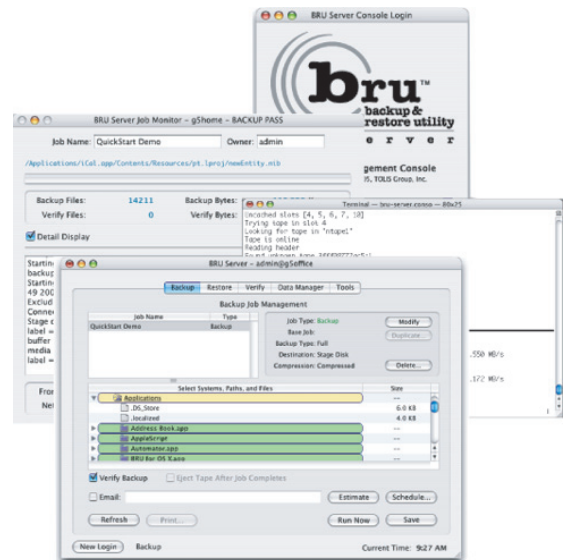
- Compatibility with all SCSI, Fibre Channel, Firewire and USB tape drives
- Compatibility with all tape technologies (i.e. LTO, DLT, AIT, VXA, DTF)
- Compatibility with all SCSI and Fibre Channel libraries containing any number of tape drives
- Supports any number of tape slots in a library
- Fully supports Virtual Tape Libraries (VTL)
- The ability to define "Destinations" as a fixed set of slots
- The assignment of Destinations from a pool of free slots as needed
- The allocation of slots within a tape library in an arbitrary manner
- Ability to define and exclude sets of tape cartridge slots from use
- Ability to write concurrent, non-interleaved data streams to multiple tape drives within a tape library.
- Support of variable block mode to allow modern tape drives to achieve their maximum performance potential
- TapeAlert™ to monitor and report connectivity issues, dirty tape drives, bad tape drives, and bad tapes
- Alerts users to manually insert a cleaning cartridge into a standalone tape drive
- Automatically inserts a tape cleaning cartridge into a tape drive in a tape library
- Tape bar code reader support
- Unique Drive Autobalancing™ that spreads loads across multiple drives within a library to assure enhanced library hardware uptime
- An efficient data layout on tape to optimize utilization of tape cartridge capacity
- Support of tape WORM (Write Once Read Many) technology

FLEXIBLE BACKUPS AND RESTORES

- Flexibility to define how the backup operation should be performed because very few sites have the same backup requirements
- Lights-out, automated backup operations are scheduled from the user interface
- Transport layer agnostic—Fibre Channel, SCSI, iSCSI, Gigabit Ethernet, Wireless LAN, etc.
- Provides data backup and restore services within NAS, SAN and wireless environments
- QFA (Quick File Access) provides fast access to files contained on the tape device
- Files and directories can be excluded from the backup from the client system (excluding mp3 files, for example)

EASY-TO-ACCESS SUPPORT

- Built-In help Pages. Useful when you can't find the manual.
- Backup Assistance Hotline. If you need assistance, we're here to help. Expert technical support FREE for the first 30 days, renewable in low-cost, one-year increments.
- Annual support agreements provide unlimited phone, fax and e-mail support as well as free updates and special discounts on product upgrades.



The GUI console provides local and remote point-and-click access to BRU Server's rich feature set. Character-based and command line operation is also supported.

BRU SERVER CLIENT SUPPORT

- Mac OS X/OSX Server 10.2, 10.3, 10.4
- Virtually all Linux Distributions
- Solaris x86 / Solaris SPARC
- FreeBSD
- OpenBSD
- SCO OpenServer
- AIX
- IRIX
- HP-UX
- Windows Me
- Windows XP Home/Professional (Includes SP2)
- Windows NT 4.0 Workstation/Server/Enterprise Edition (Requires SP6)
- Windows 2000 Professional/Server/Advanced Server (Requires SP4)
- Windows Server 2003 Web/Standard/Enterprise/Datacenter
- Windows Database Applications such as Oracle, SQL, Exchange, etc...require the BRU Server Open File Manager Ad-On**

BRU SERVER SYSTEM REQUIREMENTS

- Minimum Requirements
- Mac OS X 10.2, 10.3, 10.4
- G3 500Mhz or better Processor
- 256 MB RAM
- All transport layers are supported (SCSI, Fibre-Channel, USB, and Firewire)

- Recommended System Configuration
- Mac OS X 10.2, 10.3 or 10.4
- 1 GHz G5
- 512MB RAM
- ATTO Technologies UL3, UL4, UL5 SCSI HBA (for SCSI Tapes/Libraries)
- ATTO Technologies Celerity FC HBA (for Fibre-Channel Tapes/Libraries) or a FC switch if using Apple FC HBA.

Disk Requirements

- BRU Server, 55 MB of disk for full install (server software, user interface, server agent)
- 15 MB of disk on client systems
- 3 MB of disk space for catalogs on the server per 100,000 files backed up
- Disk staging: disk requirement defined by administrator

Network Requirements

- BRU Server requires ports 14441 to 14450 open for bi-directional TCP traffic

More information:
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