

BackupAssist V3 vs V5 Comparison



TECHNICAL COMPARISON

BackupAssist Version 3 vs 5

www.BackupAssist.com

Overview

The latest release of the award winning BackupAssist software is the best yet and the result of over 24 months of solid development. We have extended our software to be even more useful, with new and improved reporting and support for the latest hardware, enhanced application backup and easy offsite backups.

We also have three new exciting backup engines, plus the ability to monitor multiple installations from one central location!

Ready for Server 2008, SBS & EBS 2008

New: Windows Imaging Engine for fast drive imaging and hardware independent restore

Internet Backup capabilities

New: Backup via the Internet using the bandwidth efficient, in-file delta Rsync protocol

File copying & replication capabilities

New: High performance local file copying with single instance store, enabling hundreds of days of file version history

Centralized Monitoring

New: Monitor multiple jobs and installations using our managed service, and receive one daily email report for all your backup jobs

Improved Reporting

Previous versions of BackupAssist simply reported the output from NTBackup, SQL Backup and ExMerge in plain text. For Version 5, we've **totally reinvented** the report – it's now in HTML, and split into logical sections that show the information you want to see, clearly and succinctly.

```
BackupAssist Backup Summary
-----
Date performed: Wednesday, 07 February 2007 5:40:08 AM
Label: Tuesday
Job name: Data backup
Backup Method: Full
Backup Mode: Overwrite
Destination: File - on M:\DataBackup (Volume: System_backup)

Removing existing backup file(s):
Deleting M:\DataBackup\2007-01-31.bkf
Deleting M:\DataBackup\2007-01-30.bkf

Checking files and directories to backup
-- All selected files and directories are available for backup

Phase One backup operation - success.
Scanning for skipped files...
Number of open files successfully copied: 0
Number of locked files (cannot be copied): 0

Total bytes: 64,361,772,925
Total files: 294,176
Total directories: 64,875
-----
Phase One backup log

Backup Status
Operation: Backup
Active backup destination: File
Media name: "2007-02-07.bkf created 07/Feb/2007 at 5:40 AM"
```



"Data" Report		Backup to: Local directory
Date: Saturday, 27 October 2007 4:09:22 AM		
✔ "Data" Successful		
⊕ Errors / Warnings Summary		
No errors or warnings to report.		
⊖ Backup Job Summary		
⊕ Process Summary		
Process	Status	
✔ Destination Check	Successful	
✔ Delete Old Backups	Successful	
✔ Data Backup	Successful	
Local files		
✔ C:	Successful	
✔ D: Data	Successful	
✔ E: Exchange	Successful	
✔ G: R&D	Successful	
✔ J: SQL	Successful	
✔ M: System_backup	Successful	
✔ Media Usage	Successful	

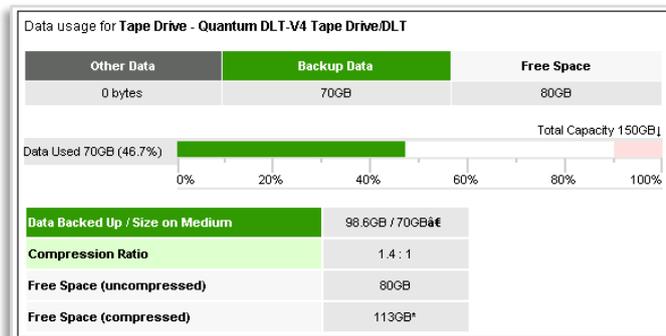
Easy troubleshooting

Any errors in the backup report will have easy to understand descriptions to help you resolve the issue without having to contact support. You can also click on the description and be taken to our online knowledge base to find information from our support team and comments from other users on their experiences. Any errors or warnings are placed at the top of the report so they're easy to see.



Media usage report

Provides you with an overview of your backup media, whether it is tape, local or external HDD, CD/DVD or even NAS and FTP. With this report you can see the amount of free space left on your backup media and the percentage of used space occupied by backup files, helping you to prevent 'out of space' errors before they occur. You can also see any previous backups that are stored on the media.



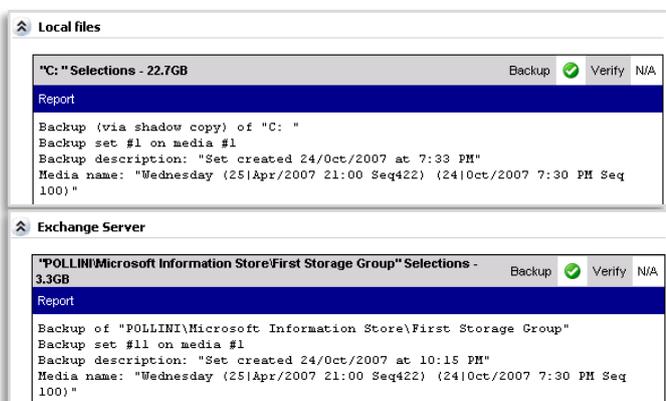
Media check report

See clearly whether your backup operator has been swapping the backup media according to plan. (This applies only to removable backup media like tape, USB hdd, etc). If your clients don't swap the media as expected, a warning will appear in the report.



Data backup report

See clearly the amount of data backed up from each drive. For example, in the screenshot, you can see that 51GB was backed up from C:, 36GB from D: and 10GB from your Exchange Information Store.



Email mailbox report

Another advantage of the detailed reporting in BackupAssist v5 is the Individual Mailbox backup report. Using this report you can see not only the amount of mail that is being backed up, but you can also monitor any sudden changes in the mail traffic for a specific user, which may indicate a spam or virus problem.

The Exchange Mailbox task has status: **Successful** ✓

Mailbox	Messages	Folders	Errors
AARON.ANDREWS	7	21	
ADMINISTRATOR	0	19	
ANDREW.COLLIVER	42	88	
ANDREW.TRUONG	49	30	
BELINDA.FRANCIS	3	24	
BOOK.KEEPER	0	17	
DANIELA.PELGRIM	1	17	

Other useful information

You now get detailed reporting of each stage in the backup process, including:

- Summary of the entire backup job
- Pre-backup checks for destination availability
- Checks for sufficient backup space
- Deletion of old backups
- Results of any pre and post-backup scripts you may be running
- Full backup report from NTBackup
- Full backup report from MS Exchange Information Store and Individual Mailboxes phases
- Full backup report for SQL backup

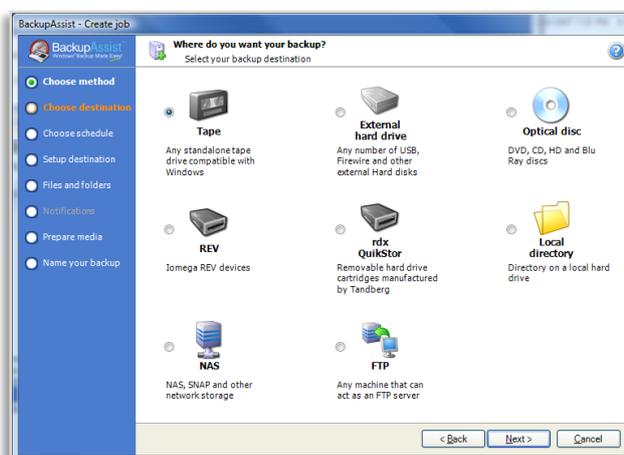
Process Summary

Process	Status
✓ Destination Check	Successful
✓ Delete Old Backups	Successful
✓ Data Backup	Successful
Local files	
✓ C:	Successful
✓ D: Data	Successful
✓ E: Exchange	Successful
✓ G: R&D	Successful
✓ J: SQL	Successful
✓ M: System backup	Successful
✓ Media Usage	Successful

Expanded Hardware Support - tailored support for different devices

With the recent advances in backup technology, many new backup devices have become available. Previous versions of BackupAssist had support for the traditional backup media: Tape and File devices. The backup schemes and management features were tailored to these devices – primarily tape.

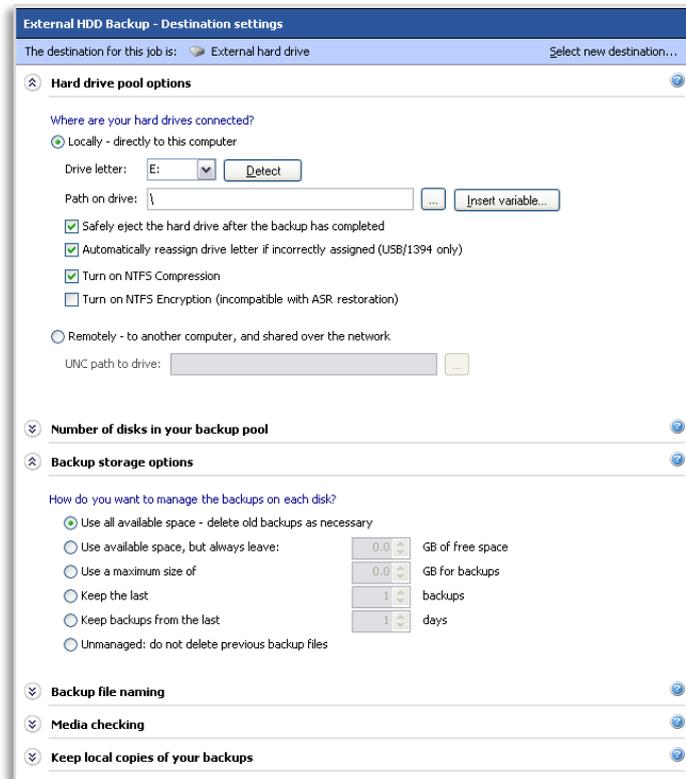
BackupAssist v5 has inbuilt support for the latest types of backup hardware. Version 5 incorporates a new range of strategies to maximize the usage of the new hardware, including specifically designed rotation schemes for each individual device.



USB Drive Support

USB and Firewire connected Hard Drives are an increasingly popular choice for backups, but can be prone to problems. BackupAssist specifically addresses these problems to create a straightforward and reliable backup system. Features include:

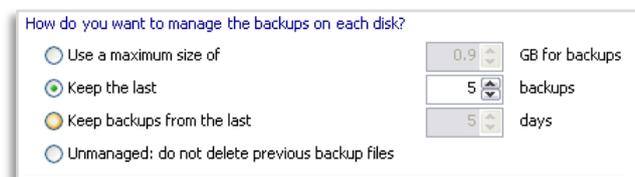
- **Safely removing hardware** after the backup – so no data is lost when the drive is unplugged
- **Automatically assigning the correct drive letter** if the drive is plugged into a different USB port – so your backup will still work if the drive is plugged into a different port
- **Scanning ports for the backup drive** even if it's been “safely removed” – so if your user forgets to swap the drive and it has been safely removed (soft ejected), BackupAssist will remap its drive letter and let the backup proceed.
- **Media management on HDDs**, allowing you to choose to: automatically store as many backups as will fit on each drive, keep the last 3 backups, store up to 300GB of backup data, or from one of several other options.



BackupAssist also has a range of backup rotation schemes tailored for USB Hard Drives – such as rotating HDDs daily, the option to include separate weekly and monthly HDD backups, or the alternative option of performing a weekly full backup and daily incrementals.

Inbuilt FTP Support

Off-site storage is an important factor in a complete disaster recovery plan. BackupAssist v5 enables you to perform a local backup and then transfer the file via FTP to your remote server or service provider.



Management of your off-site storage could not be easier. With choices to retain your backups by the amount of space used, the number of backups or the last 'x' number of days, you can monitor and maintain your off-site storage automatically without an FTP client or other management tool. BackupAssist supports all major types of FTP servers: plain FTP, FTP / SSL and SFTP.

Inbuilt NAS Support

NAS devices are becoming increasingly popular because your backup system can be fully automated. With the improved speed of modern networks and increased capacity of NAS devices, many people are adopting a NAS backup to either replace, or complement a tape backup system.

However, many devices, especially Linux or BSD based devices, do not properly integrate with Windows Domain authentication, so BackupAssist provides the ability to specifically authenticate to these devices.



A dialog box titled "NAS Server requires username and password". It contains two input fields: "Username:" and "Password:". Below the fields is a button labeled "Test connection..."

BackupAssist also has a range of backup schemes tailored for NAS devices. Importantly, BackupAssist can also improve the speed and reliability of your backup by backing up to a fast local hard drive and then copying the backup to your NAS.

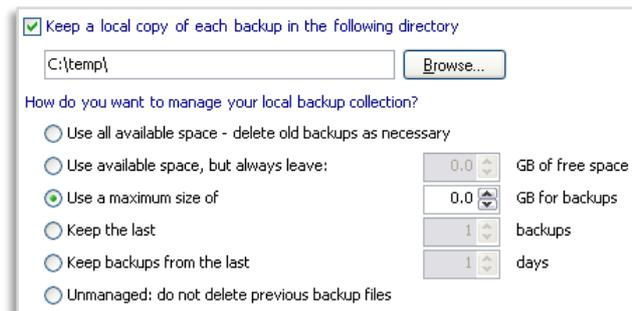
Inbuilt Tandberg QuikStor / Iomega REV / Quantum GoVault

BackupAssist supports disk-cartridge type devices, and will detect and eject these devices. Tailored schemes are provided with optimized media usage for each device. For example, a 160GB cartridge may store 3x 50GB backups, and if you have 5 cartridges (one for each day of the week), you will always have the last 15 backups.

Local Directory Backups

New management options for local directory backups have been added to Version 5, including the ability to retain backups based on overall drive space.

You can also copy your backups to a secondary location and manage the backup retention of those backups separately.



A dialog box titled "Keep a local copy of each backup in the following directory". The directory is set to "C:\temp\" with a "Browse..." button. Below this, the question "How do you want to manage your local backup collection?" is followed by several radio button options and associated controls:

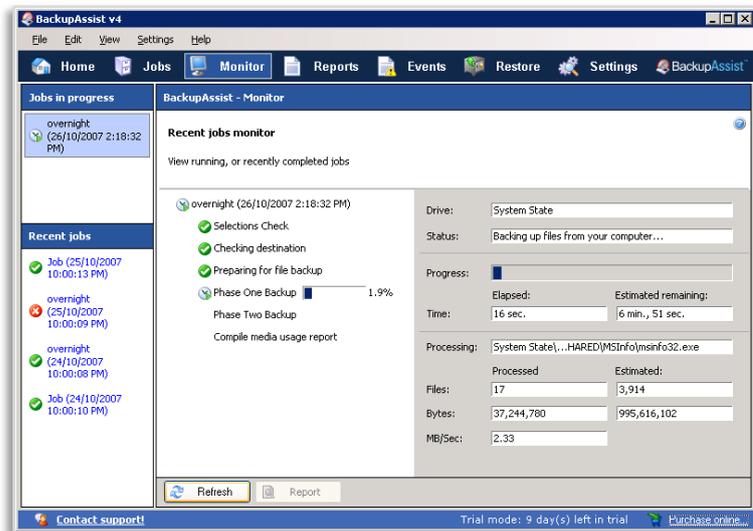
- Use all available space - delete old backups as necessary
- Use available space, but always leave: 0.0 GB of free space
- Use a maximum size of 0.0 GB for backups
- Keep the last 1 backups
- Keep backups from the last 1 days
- Unmanaged: do not delete previous backup files

Other great new features in BackupAssist v5

Real Time Monitoring

In Version 3, you could not see the progress of a running backup unless you were logged into the console of the machine. This limitation has now been addressed.

In Version 5, you can see the live status of any running jobs, even if you are logged in via remote desktop. The monitoring screen enables you to view the full progress of the backup including the stage that it is up to and if there have been any errors. You can also view the report from this screen once the job has completed.



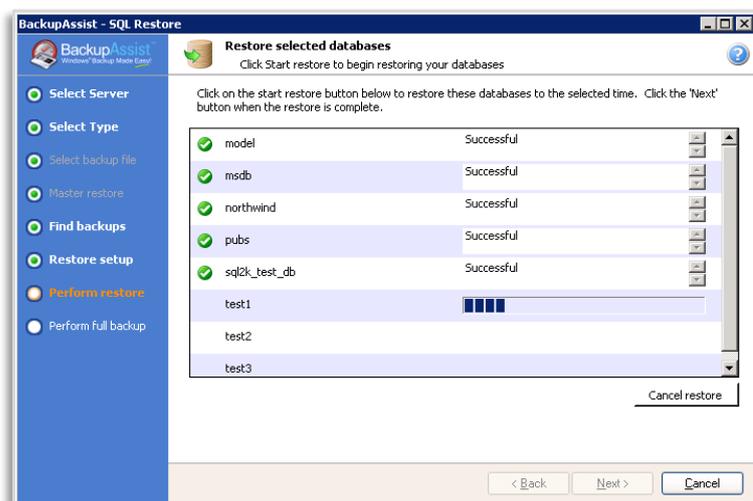
Additionally, the new jobs menu allows you to get a quick glimpse of all the jobs that you have configured, showing you the time they will run, the date of the next scheduled backup, the result of the last backup, the rotation scheme chosen for each job and whether or not the job is active or suspended.

Comprehensive SQL backups – with 15 minute incremental for continuous protection

With many critical systems storing data in MS SQL databases, backing up and, more importantly, restoring these databases is becoming increasingly important to the survival of a business.. The SQL add-on for BackupAssist v5 makes near-continuous data protection for SQL Server easy, allowing you to concentrate on other issues.

New features that have been added to the SQL add-on for BackupAssist v5:

- Daily full backups
- Optional Transaction Log backups throughout the day (eg. every 5, 10 or 15 minutes)
- A simple wizard for recovering your SQL data, including a:
 - 3 step restoration process for individual databases
 - Completely automated **Disaster Recovery** process for re-building or migrating your SQL Server

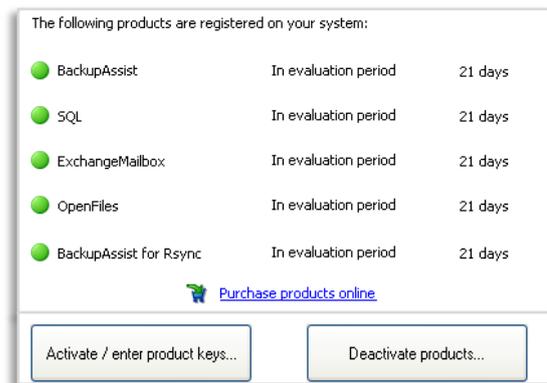


Using the SQL add-on for BackupAssist v5 you now have the option to perform full database backups and transaction log backups to allow for point-in-time restoration. Transactional backups perform a full backup at the start of the day and then at regular intervals throughout the day. For example, if you perform 5 minute transaction log backups, you can restore your entire SQL Server to any point in time, and be guaranteed never to lose more than 5 minutes of work.

Our restoration console wizard makes the restore **dead simple**. It takes all the hard work out of restoring individual databases or even entire servers (including the Master database). Simply select what you want to restore, where you want to restore it to, and the rest is completely automated.

Simplified Licensing

Whether you are a reseller or an end user, licensing Version 5 is much easier than in previous versions of BackupAssist. The new licensing procedure allows you to move your license from machine to machine without contacting support to change the server name, saving you time and effort.



Scheduled ASR Backups

New in BackupAssist v5 is the ability to make your backup an ASR backup automatically. An ASR backup allows you to perform bare-metal disaster recoveries



of your server using the Automated System Recovery features in Windows Server 2003 and XP – which slashes the time and effort required to recover your server after a disaster. BackupAssist is the only tool on the market that allows you to make every backup an ASR backup just by clicking a checkbox, which allows you to do a bare-metal restore from any of your backups.

Clone backup jobs

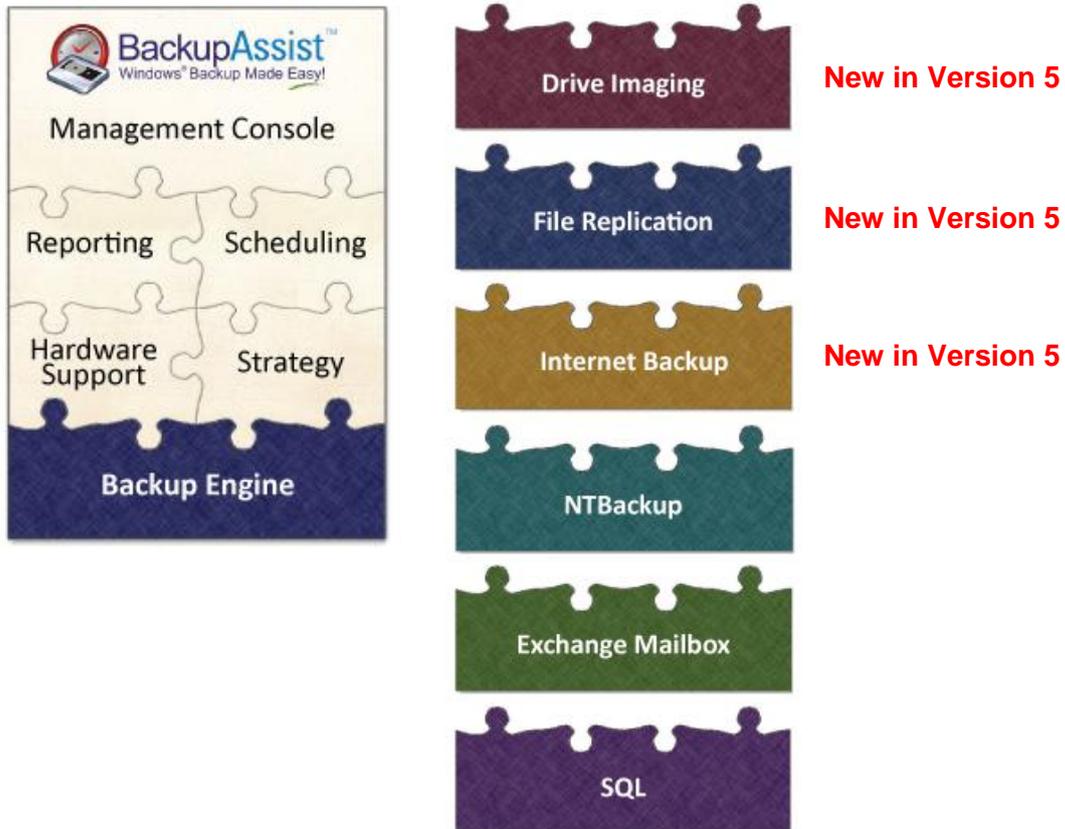
A handy new feature in BackupAssist v5 is the ability to clone an entire backup job. This is useful if you want to run tests and change settings on your backup job, without changing the settings on your original job.



It also enables you to setup the same backup parameters for separate jobs, running to separate destinations – for example, to Tape and NAS.

Complete protection - server recovery, data archival, Internet offsite backup

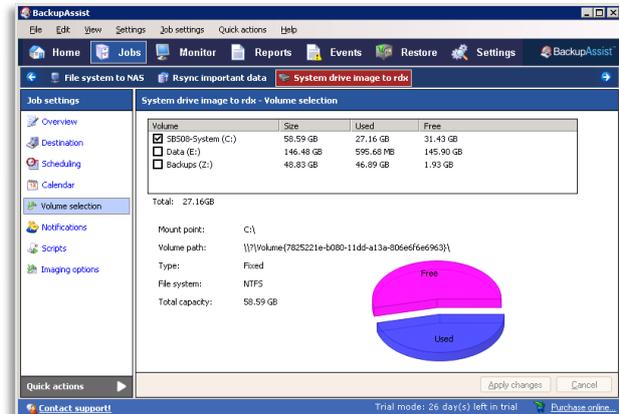
With BackupAssist version 5 users are now able to protect themselves from an entire range of data loss disaster scenarios – not just a subset. It combines multiple backup technologies to create a complete backup strategy that covers all the pieces of the backup puzzle. This means that you can pick and choose components suitable for your systems, or use BackupAssist to complement the limitations of your existing backup strategy.



New Windows Drive Imaging Engine (Server 2008)

BackupAssist version 5 schedules and manages the block-level image-based backup program in Windows Server 2008 and Vista¹, providing excellent data protection and disaster recovery capabilities. You can backup entire volumes, System State and Volume Shadow Copy Service aware applications to disk for fast disaster recovery.

When combined with BackupAssist's easy to configure user interface, extended hardware support, automated media rotation, storage management, and powerful email reporting, you get a complete drive imaging solution at the fraction of the price of similar competing solutions, without the hassles of having to manually script or schedule wbadmin.exe (Windows Server Backup).



Fast differential backups

Using Windows Server Backup technology, you can perform fast differential backups every day after your initial full backup, which helps to reduce your daily backup times. With a variety of differential backups, you have multiple points in time that you can restore from.

Advanced hardware support

BackupAssist's Windows Imaging Engine enhances Windows Server Backup by providing additional hardware support for an extensive range of backup destinations, such as eSata, local disks, NAS and removable disks, like rdx and REV. Removable HDD management is also available with support for safe HDD eject after the backup and automatic drive letter remapping if the backup drive has been incorrectly assigned.



Fast hardware independent restoration

By using Microsoft's block level backup engine you benefit from the ability to restore an entire system to dissimilar hardware at fast speeds (approx. 70-90 GB/hour), meaning that you can perform restores from one physical machine to another or even one physical machine to a virtual machine using VMWare Server. The Drive Imaging functionality makes hardware independent restoration easy: a Windows Recovery Environment boot disk can be used to restore volumes or perform a bare-metal recovery effortlessly.



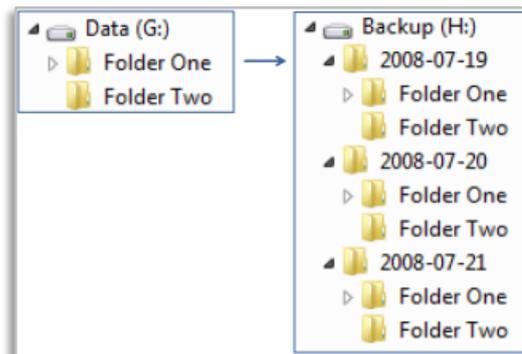
¹ Windows Vista Business or better

New File Replication Engine

Based on the fundamental principle of copying a file from one location to another, the File Replication Engine is BackupAssist's new file-based backup technology. Designed to run on Windows XP, 2003, Vista and 2008, the File Replication engine is fantastic for backing up data files and maintaining version history containing hundreds of day's worth of backups.

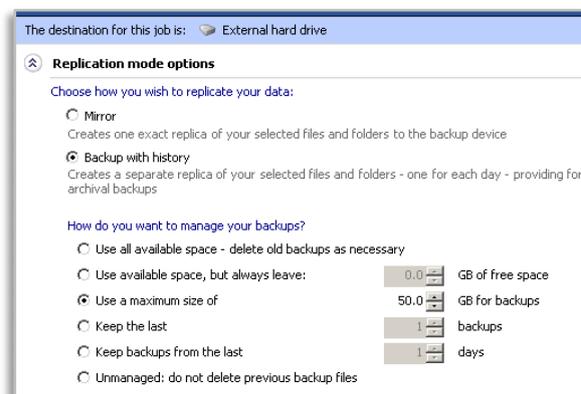
Tuned for high performance

Using our "side-by-side" differential comparison technology, only the differences between source folders and the backup destination are copied across. So your initial backup will replicate all your data to the backup device, and subsequent backups will only replicate the changes. This makes it eminently suitable for backing up huge data sets in limited time. Thanks to its speed and design, it's also suitable in a disk-to-disk-to-tape, disk-to-disk-to-NAS or disk-to-disk-to-Internet setup.



Backup more with less space using Single Instance Store

The File Replication engine uses the power of our new Single Instance Store technology so that only one unique copy of each file is stored. This means that you can achieve faster differential backups, helping you slash daily backup times. And you can store more backups on your backup destination.



No more scripting and debugging

You can use BackupAssist to replace commonly used scripting tools, such as Robocopy, while adding a number of powerful advantages, including: automatic monitoring, reporting and scheduling, open file backup via VSS support, an easy to set up user interface, and Single Instance Store for backup history.

Preserve file attributes

The File Replication engine creates exact copies of files, which means that file attributes such as dates, NTFS security permissions and data streams are preserved in your backups.

Simple one-step restore

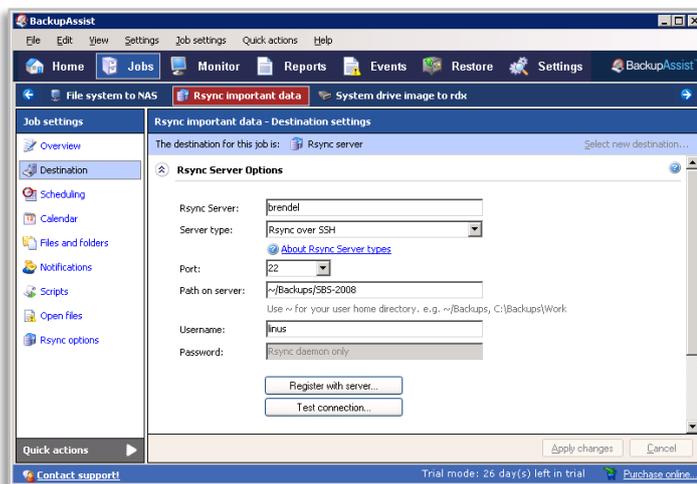
In a "backup file" recovery situation, accessing an important file or folder is a one step process, eliminating the complexity and cost of traditional recovery processes. Simply search for the file or folder you wish to restore on your backup destination as you would with on a normal file server and copy it to the original destination. Due to

the non-proprietary nature of the file replication engine backups, you don't need any special software to restore the files from your backup.

New Rsync Internet Backup Engine

With our Rsync Internet backup engine you can easily achieve fully automated, set-and-forget and secure offsite backups using the proven and popular Rsync protocol. Rsync backups are perfect as an extra layer of data protection in addition to backing up locally for Disaster Recovery.

Combined with BackupAssist's easy to configure UI, powerful email reporting and VSS support, BackupAssist allows you to take advantage of the world's most widely deployed in-file delta remote backup protocol in an easy-to-use Windows based application.



Industry standard Rsync protocol

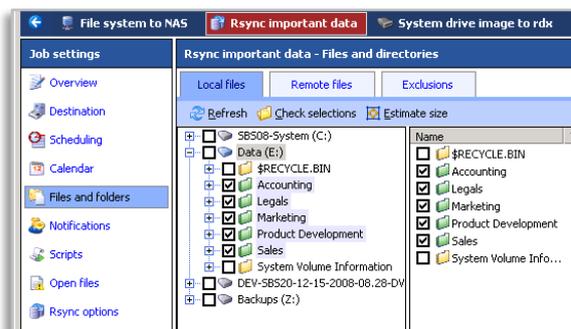
Using an industry standard backup method gives you:

- Proven backup technology, developed for over 10 years and deployed on millions of computers
- Maximum interoperability and compatibility
- Over the wire encryption when using Rsync over SSH

Easy setup and monitoring

BackupAssist makes it easy to set up your Rsync jobs:

- Fully managed in our intuitive UI
- Easily select which files and directories (local or network) to backup
- Backup open files with inbuilt VSS support
- Saves time: no messing with complex command line parameters, manual scripting, cygwin versions
- Overcomes the Windows limitation on 253 character filenames

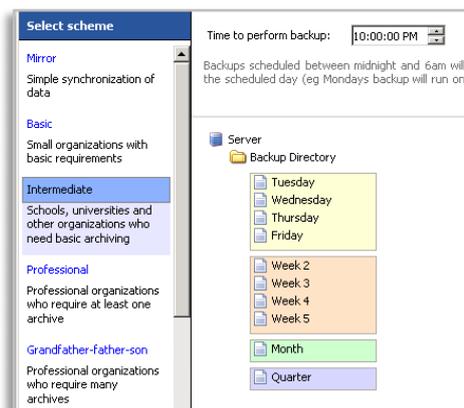


Easy scheduling and backup history

You can set up BackupAssist to run in one of two modes:

- Simple mirror – where your backup device contains an up-to-date mirror of your original file system
- Backup with history – where a range of backups and version history are available (such as Monday – Friday, Week 1 – Week 4, etc). The transparent single-instance-store means that unchanged files are only stored once, saving space and making the backups faster.

Of course, this is all managed behind the scenes by BackupAssist!



Choose where to host your data

Unlike virtually all other remote backup solutions, BackupAssist's solution allows you unparalleled flexibility in choosing where to host your data. Basically, any Rsync Server can be used to host data:

- Internally hosted – at a different branch office, to the boss' home
- Externally hosted – at a 3rd party data center, Amazon, or one of our recommended hosting partners
- Windows or Linux machines
- Selected NAS devices can be used for a turnkey solution ([Rsync-enabled NAS Hardware Compatibility List](#))

New Centralized Monitoring Console (CMC)

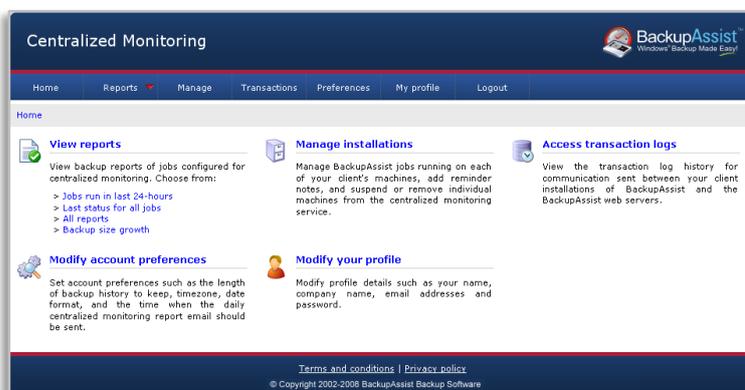
With BackupAssist version 5, comes the new Centralized Monitoring Console which makes it easy to monitor multiple BackupAssist installations.

Using the CMC, you can manage multiple BackupAssist installations from one location, create personalized summary reports using your company logo for your clients, and view the backup data growth over time.

This tool is created for System Administrators or VARs who deploy many installations of BackupAssist. The CMC takes over the collection and

sorting of the backup reports so executives have more time to fulfil the demands from their customers and users. The CMC prepares reports so executives can easily identify issues that can undermine your backup strategy.

With Centralized Monitoring it is easy to proactively manage numerous BackupAssist jobs, running on multiple servers or sites from anywhere around the world. No additional hardware or software is required.

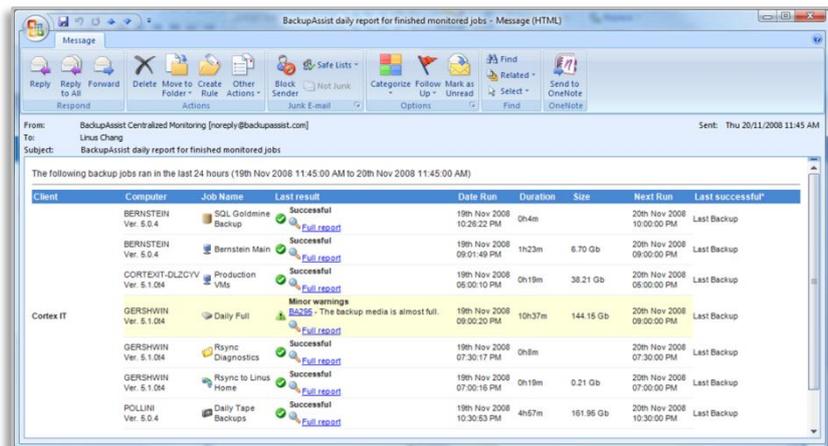


Daily Summary Emails

Instead of receiving one email per job that you're monitoring, you can use the Centralized Monitoring Console to process all the different BackupAssist installations that are being monitored into **one** summary email delivered to your inbox every day.

A summary at the top shows problem sites clearly so that you are aware as soon as an error with the backup occurs and are able to organise appropriate maintenance activity.

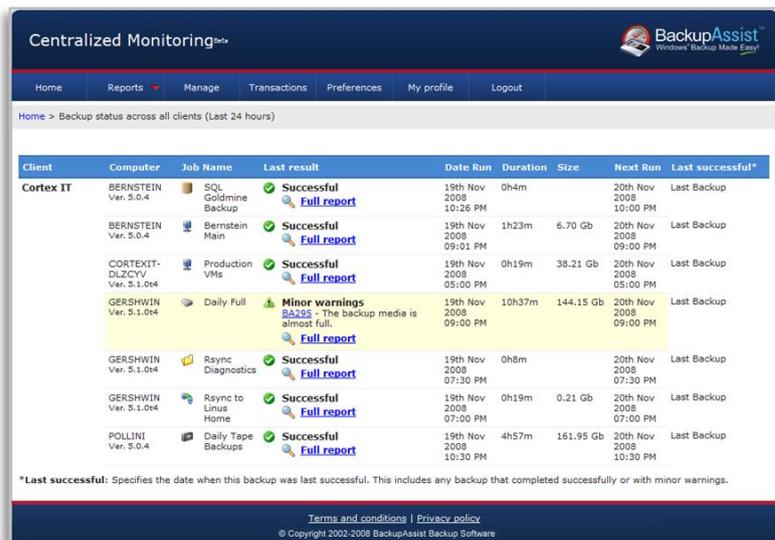
The summary email also gives you full details on all the previous day's backups, full reports for individual jobs and let you know when a backup has been missed.



Web console and PDF reporting

For organizations spread over many sites, the Centralized Monitoring Console lets you monitor and report on recent or historical backup results over the last 90 days from anywhere around the world. Available reports include:

- All backup results in last 24 hours
- The status of all backup jobs and individual job reports
- Graphs of data growth for individual clients



You can also personalize the reports with your own company details and logo for a more professional look.

Analyze your backup results for better results

The online Centralized Monitoring Console lets you view your backup results over a 90 day period, enabling you to identify and analyse any patterns of issues. The Data Growth graph helps you anticipate the need and timing for future hardware upgrades to accommodate larger data sets. These facilities will reassure your clients that their backup strategy is being closely monitored and that they are well protected against data loss.

Comparison matrix

Features	BackupAssist v3	BackupAssist v5
Backup Engines		
Windows Drive Imaging	✗	✓
Fast differential backups	✗	✓
Advanced hardware support	✗	✓
Fast hardware independent restoration	✗	✓
File Replication	✗	✓
High performance delta copy	✗	✓
Single instance storage for improved disk space usage	✗	✓
File attributes are preserved	✗	✓
Backup history and mirroring capabilities	✗	✓
Simple one-step restore	✗	✓
VSS support for open file backup	✗	✓
Script free, fully automated replacement for 'Robocopy'	✗	✓
Rsync Internet Backup	✗	✓
Industry standard, in-file delta Rsync protocol	✗	✓
Single instance storage for improved disk space usage	✗	✓
Bandwidth throttling	✗	✓
Backup history and mirroring capabilities	✗	✓
VSS support for open file backup	✗	✓
Choose where to host your data (Windows, Linux, NAS).	✗	✓
Centralized Monitoring	✗	✓
Daily summary email for all backup jobs	✗	✓
Web console for backup report analysis	✗	✓
Customizable PDF reports (success rate/data growth)	✗	✓
User Interface		
HTML reporting	✗	✓
Create new jobs via wizard	✗	✓
Full Job History	✓	✓
Live Monitoring	✗	✓
Job Summary List	✗	✓
Built-in Restoration Facility	✗	✓
User Customizable Views	✗	✓

Backup		
Local Full System Backup	✓	✓
ASR Backup	✗	✓
Open File Support	✓	✓
Keep Local Copy of Backup	✓	✓
Built-in Support for NAS	✗	✓
Built-in Support for FTP	✗	✓
Customized Settings for Iomega REV	✗	✓
Customized Settings for Tandberg RDX QuikStor	✗	✓
Support for BluRay devices	✗	✓
Stand alone Tape Drive Support	✓	✓
File Exclusions	✓	✓
Write to CD/DVD without 3rd Party Software	✓	✓
Restoration		
Launch Restoration from UI	✗	✓
3 Step restoration process for SQL databases	✗	✓
Full Disaster Recovery of SQL server	✗	✓
Point-in-Time Restoration of SQL databases	✗	✓
Scheduling and Management		
Best Practice Rotation Schemes	✓	✓
Scheduled ASR Backups	✗	✓
Full Management of Local Storage	✓	✓
Full Management of External, Network and FTP Storage	✗	✓
Customizable Scheduling	✓	✓
Full Support for USB devices	✗	✓
Soft Eject option for USB HDDs	✗	✓
Scan USB Ports and re-connect lost devices	✗	✓
Prepare USB media for backup	✗	✓

Calendar Based Scheduling	✓	✓
Queue Based Backup to prevent concurrency issues	✗	✓
Management of Mapped and UNC Network Drives	✓	✓
Exchange and SQL Backup		
Live Backup of MS Exchange and MS SQL servers	✓	✓
Backup Multiple SQL servers with single job	✓	✓
Backup Multiple Exchange servers with single job	✗	✓
Transaction Log backup for SQL servers	✗	✓
Individual Mailbox Backup for Exchange Server	✓	✓
Reporting and Maintenance		
Detailed HTML Backup Reports	✗	✓
Integration with SBS Performance Reports	✓	✓
Scheduled Maintenance Emails	✓	✓
On-Line Knowledge Base articles linked to Backup Report	✗	✓
Pre and Post Backup Script Reporting	✗	✓
Media Usage Reports	✗	✓
Destination Check during Backup	✗	✓
Intuitive Error Reporting	✗	✓
Global Email Address Lists	✗	✓
Licensing		
Activation and De-activation of Licenses	✗	✓
License based on Server and Organization Name	✓	✗
Key Based Licensing	✗	✓
Additional Features		
Pre and post backup scripts	✓	✓
Self Help Troubleshooting Tools	✗	✓
Built in Feedback and Reporting for Contacting Support	✗	✓
NTFS Compression for HDD Backups	✗	✓

Self Extracting ZIP files	✘	✔
AES Encryption of backup files	✔	✔