BackupAssist Quick-Start Guide for…
Portable Media

BackupAssist installation, configuration and setup

Contents

Applies to
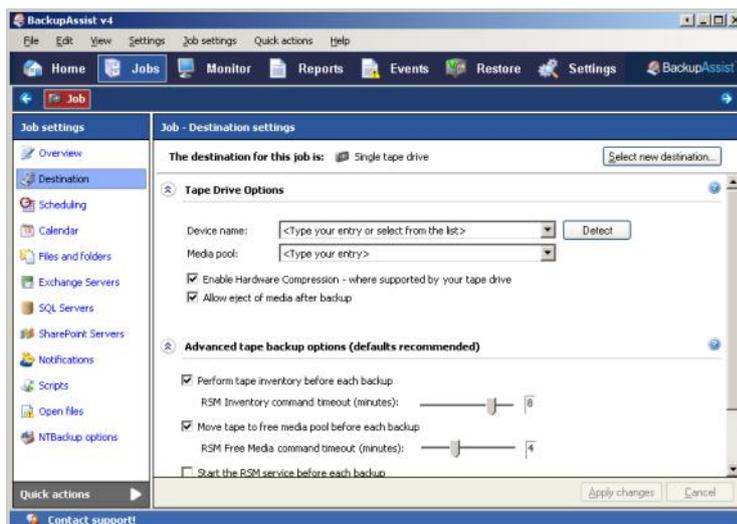
Tape

External hard drive

Iomega REV

rdx QuikStor

Optical (CD/DVD/BluRay)

1. Introduction

BackupAssist includes specialized features that are specifically designed to take the hassle out of portable media backups to ensure that your business is well protected from the disaster of data loss:

1. **Media rotation and preparation -** rapidly setup a range of media rotation strategies for different levels of data security, including pre-configured industry standard schemes and user-defined custom schemes. You can easily prepare backup media for use with a single click.

2. **Notifications -** setup automatic reminders to inform users which media should be inserted and report notifications to indicate the status of each backup. Notifications minimize human error and ensure you are never caught out by silent backup failures.

3. **Manual/automatic scheduling -** choose to either run backups automatically at a specified time according to a recurring schedule or start a job manually just by clicking an icon on your desktop.

2. Before you begin

1. **Drive installation and other backup software -** ensure that your backup drive (tape, external hard drive, optical, REV, QuikStor) has been installed according to manufacturer specifications. Windows should automatically detect and install your backup device, but if not, you may need to manually install drivers that came with the device or from the manufacturer's website. Additionally, some third-party backup software programs overwrite the original manufacturer driver set so if you were previously running other software we advise that you uninstall the current driver and install the original driver set. It is best to remove all other backup software installed on the machine (other than NTBackup and BackupAssist) as it can interfere with BackupAssist.

2. **Scheduled tasks -** remove any backup tasks scheduled in Windows Scheduled Tasks. Backups that are scheduled to run at the same time as BackupAssist jobs will cause conflicts. To check the Windows Scheduled Tasks go to: **Start > Programs > Accessories > System Tools > Scheduled Tasks.**

3. Installation

Installing BackupAssist on your system is easy:

1. **Download -** download the setup program from the BackupAssist website: http://www.backupassist.com/BackupAssist/download.php

2. **Run setupBA.exe -** The Windows .NET 2.0 Framework (22.4MB) is required and is automatically downloaded and installed if not present on the system. Once the .NET framework is installed the BackupAssist installation will continue. Remember to choose **custom** as the setup type if you need to install the open files add-on (typically for users running Windows 2000).

4. Initial setup

After BackupAssist has been installed you are required to complete the initial setup which involves the creation of your first backup job as well as configuring system settings such as the backup user identity and mail server for email notifications. The initial setup ensures that all settings that are required to run a backup have been configured.

Once the initial setup is complete, you can further customize your backup job, edit global system settings and create additional backup jobs through the main BackupAssist console.

See the following sections for details on how to complete the initial setup and create your first backup job.

5. Backup user identity

Backup processes executed by BackupAssist are run as a specific user. This ensures that BackupAssist has the necessary permissions to communicate with backup hardware and access data for backup.

1. **Specifying the backup user** - for most installations, we recommend using the local or domain Administrator account as a backup user identity. If, however, you are backing up restricted data you will need to input a user that has access to the secured files. The local system account should only be selected if you have difficulties using a backup user identity. If the account is a local user or not a member of a domain, you can use the computer name of the machine or leave the domain field blank.
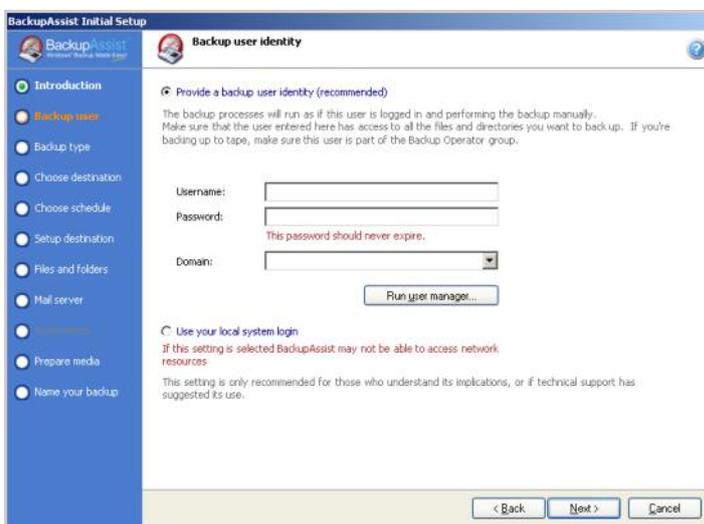
6. Choosing a backup method

Backup methods in BackupAssist determine how data is backed up, what hardware devices can be backed up to and the types of data you can backup.

1. **Choose NTBackup -** select the NTBackup method to use Windows Backup (NTBackup.exe) to backup files, system state, Exchange (information store) and SQL (full database) data to a portable media backup device. Currently NTBackup is the only method that allows for backup to portable media.
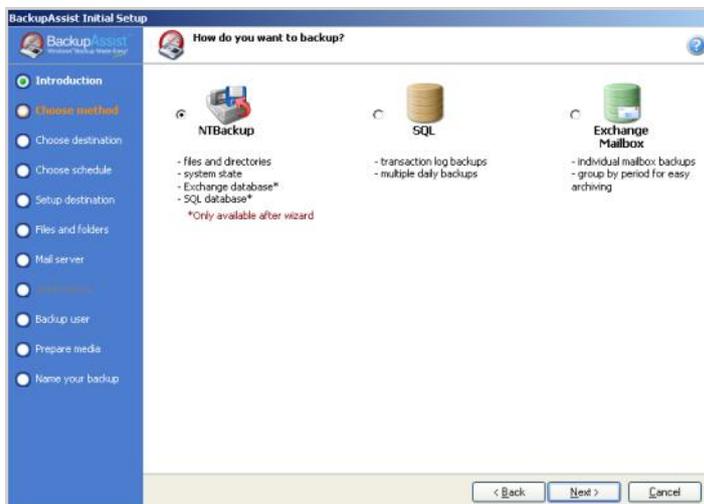
7. Choosing a backup destination

1. **Choose a destination -** See the table below for a list of portable media destinations available in BackupAssist. Our compatibility data sheet explains the advantages/disadvantages of each device: http://www.backupassist.com/education/

| Destination	Type	Capacity	Backup data
Tape	Travan, DAT, AIT, LTO, DLT, etc	10 - 100GB	Written directly to tape media
External HDD	USB, Firewire, etc	Depends on HDD (up to 400GB+)	Written directly to external drive. A second copy can also be stored on an alternate location.
Iomega REV	Internal/external drives with removable REV cartridges	35 and 70GB cartridges	**XP/2003:** Written directly to REV drive; second copy can also be stored on an alternate location. **2000:** written to disk-based storage (e.g. local hard drive) first and then copied directly to the REV drive
rdx QuikStor	Internal/external drive with re-movable QuikStor media	40, 60, and 120GB disks	Written directly to QuikStor disk. A second copy can also be stored on an alternate location.
Optical	CD+-R/RW, DVD+-R/RW, BluRay, DVD-RAM	700MB - 25GB	Written to a local/network drive first and then burnt to writable media.

8. Choosing a schedule

The backup schedule determines how often your data is backed up and how much backup media is required. Each portable hardware type has a different group of rotation schemes, including a number of industry standard strategies which can be selected from and configured. You can also customize each scheme once the job has been created to schedule different backup types such as differential and incremental.

Typically the better data protection a scheme provides the more backup media it will require; **we recommend** that you choose a scheme with the most backup media you can afford. All good rotation strategies should let you restore from the previous working day. If you are concerned that data loss may not be detected for days or weeks, the scheme should let you restore data from previous weeks, months or even years.

The strategy should also include archiving of data and some type of off-site storage. For example, we strongly recommended that all weekly, monthly, quarterly, and yearly media is stored **offsite** in a safe location to protect against robbery, fire or any other catastrophe. Data backed up to quarterly and yearly media should also be **archived** (stored permanently, not overwritten and replaced with new media after the backup). This way, data will be available for many years to come should you ever need it.

1. **Scheme selection -** select a scheme from the left-hand menu. A media pool diagram will appear to the right which outlines what the rotation strategy involves. The media pool diagram for the **Professional tape scheme** to the right shows that a total of 14 tapes are required: 4 daily, 4 weekly, 2 monthly, 3 quarterly, and 1 yearly.
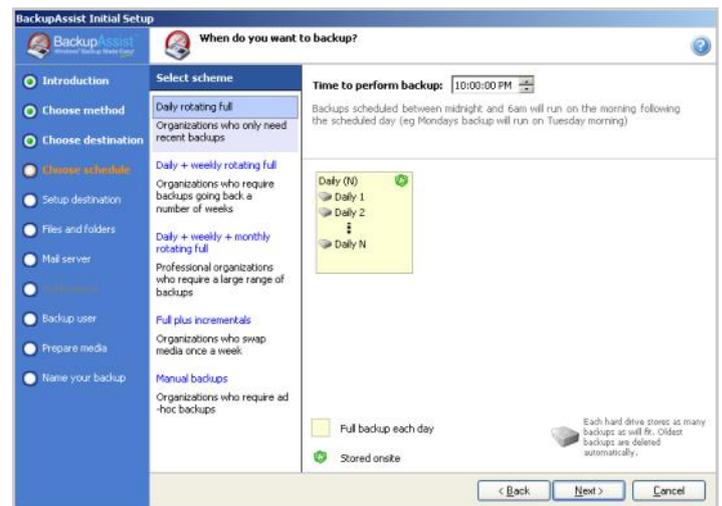
2. **Rotation -** icons at the top-right of each square indicate how the media should be rotated and stored (in the example above monthly tapes should be stored offsite after the backup and brought onsite when next required; a yearly tape, however, should be permanently stored offsite after the backup and replaced with a new tape for the next yearly backup).
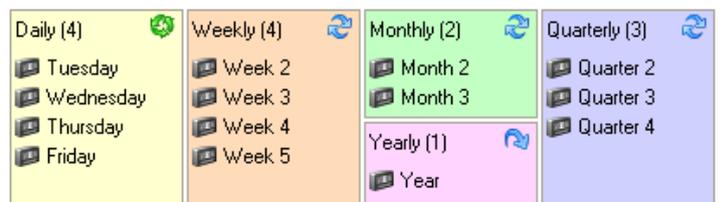
3. **Labeling –** the label for each media item is indicated on the diagram (e.g. Tuesday, Week 2, Month 2) and these labels should be physically written on each separate backup media for easy identification when media swapping is required. Each color represents the backup type for the media within the square (e.g. daily, weekly, monthly, yearly, quarterly).

4. **Timing –** specify what time of the day the backup should run at the top of the window. If multiple jobs are scheduled any jobs that overlap will be placed in a queue and executed as soon as the job running finishes. Backups scheduled between midnight and 6am run on the morning following the scheduled day (i.e. Monday's backup runs on Tuesday morning). This ensures that data created on a Monday, for example, will be written to Monday's backup media rather than Tuesday's.

9. Setting up the destination

After choosing a schedule you can configure settings specific to the hardware device selected for backup. More hardware settings are available for configuration once you have completed the initial setup and the job has been created. See **section 13**, pg. 7 for details on how to edit job settings once the job has been created.

1. **Getting help –** if required, click the ❓ **help** icon at the top-right for a more detailed explanation of each hardware setting available.
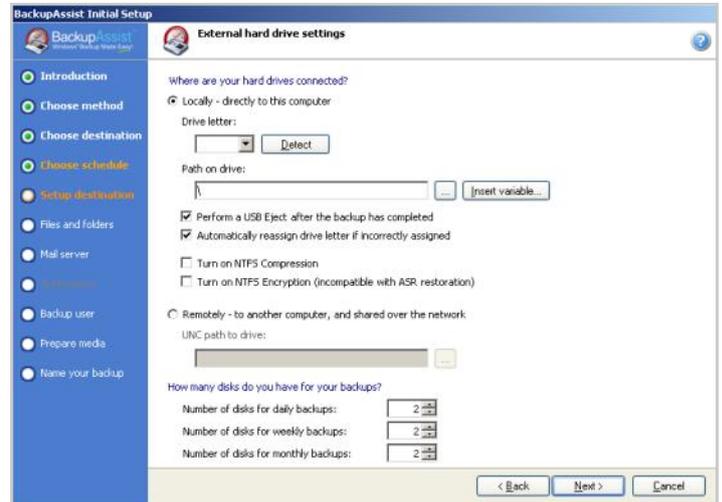
10. Selecting files for backup

You can select which files and folders to backup from a list of all local and mapped network drives on the machine. If any drives are missing or have been recently connected click **refresh** at the bottom-left to update the list.

1. **Recommended selections –** most organizations install the backup device on a file server where all critical data is stored. We recommend backing up at least the system volume (typically C: drive), the system state (active directory, registry, system files) and any critical data located on other partitions. This will ensure that you can both rebuild the server in the event of disaster as well as retrieve all critical data. For maximum protection, select all data on all partitions of the server. Also note that you can only backup the system state of the machine BackupAssist is installed on; remote system state backup is not possible.
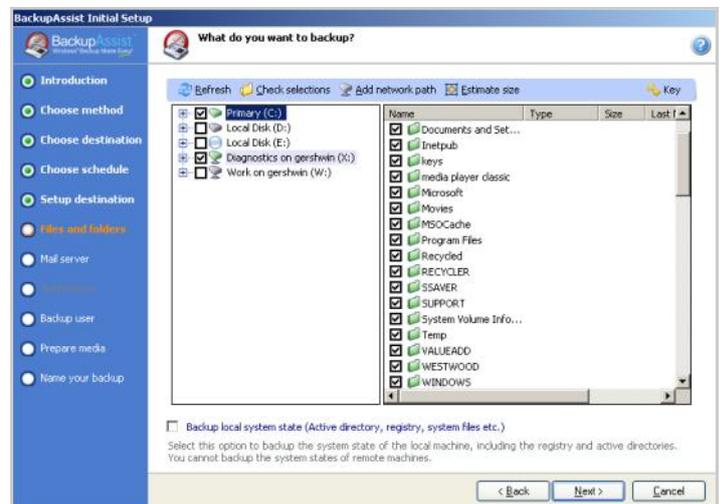
2. **Storage –** ensure that the data selected fits on a single tape, disk, drive, or disc. Backups are typically performed unattended at night so it is generally not practical to change backup media. We also do not recommend spanning backups across multiple media; if the first backup media in a series becomes unreadable or lost, you may not be able to restore data from any of the rest of the backup media in the series. We instead suggest that you create a backup job with data selections that will fit on a single tape, disk, drive, or disc. This method ensures that each backup is 'complete' in itself, and if data cannot be restored from a particular tape, disk, drive, or disc, the rest of your backup media will not be affected.

3. **Estimating selections –** to estimate the size of your file selections click **Estimate size** near the top-right. BackupAssist will calculate the size of your selections and display the result to the right of the button. The system state is not included in the estimate but typically ranges between 300Mb and 600Mb.

11. Mail server and notifications

BackupAssist can be set up to send reminder, report and maintenance notifications. Notifications can be sent in a number of ways, such as a network broadcast message, via a printer, or through email.

To send notifications via email all you need is a working SMTP mail server.

1. **Mail settings -** once you have input your SMTP mail server details click **Test settings and connection type**. BackupAssist will then attempt to connect to your mail server. If you are unsure of your connection type select 'Autodetect' and enter a username and password if you have one. BackupAssist will suggest a connection type when you click the test button.

2. **Adding email notifications -** Check **Add an email report notification** and specify an email address to send the backup reports to. Enter a secondary email address below to send backup reports to another person. You can also specify what reports should be sent to the secondary recipient. For example, you may want to notify the system administrator only when an error occurs rather than sending them reports of all backups (both success and failure).

3. Check **Add an email reminder notification** further below and specify an email address to send media change reminders to.

4. Once you have finished the initial setup, you can add as many additional notifications as required which can be sent as an email, network broadcast message, or to a local or network shared printer.
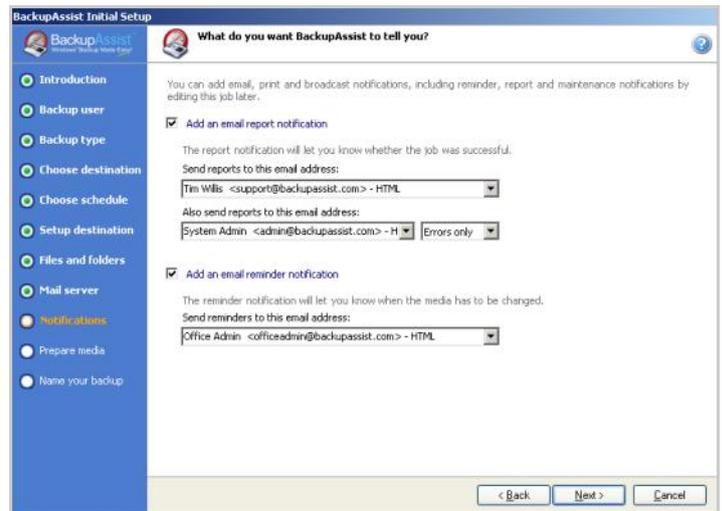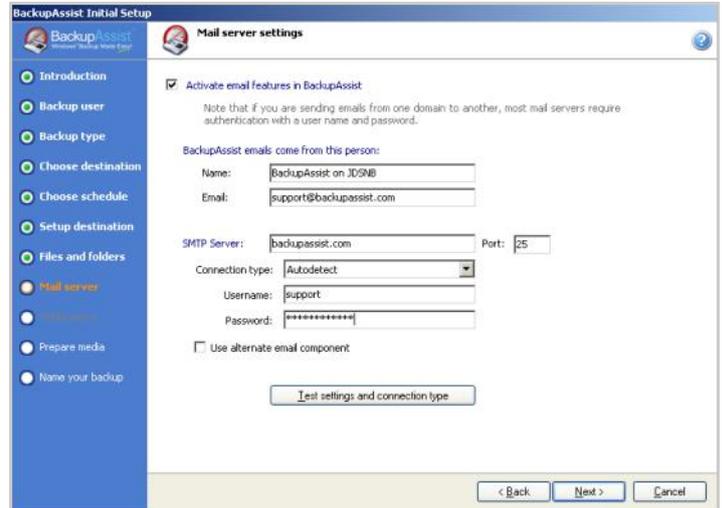
12. Preparing backup media

Preparing backup media ensures that your rotation scheme is followed. Preparation involves writing a label to each media item separately. If media is prepared BackupAssist is able to detect if incorrect or unrecognized media has been inserted or connected. BackupAssist can then check the label of inserted media before performing a backup and take different actions depending on your requirements. For example, you can setup BackupAssist to warn a user if incorrect media is inserted but still proceed with the backup, or, warn the user and not perform the backup. You will also need to prepare any media that has been used previously with another backup program.

1. **Preparing media -** first insert or connect the media that corresponds to an item in the list (e.g. Monday's tape, DVD, REV disk). Edit the assigned label if required and click **Prepare** to the right. A label will then be written to the media connected or inserted.
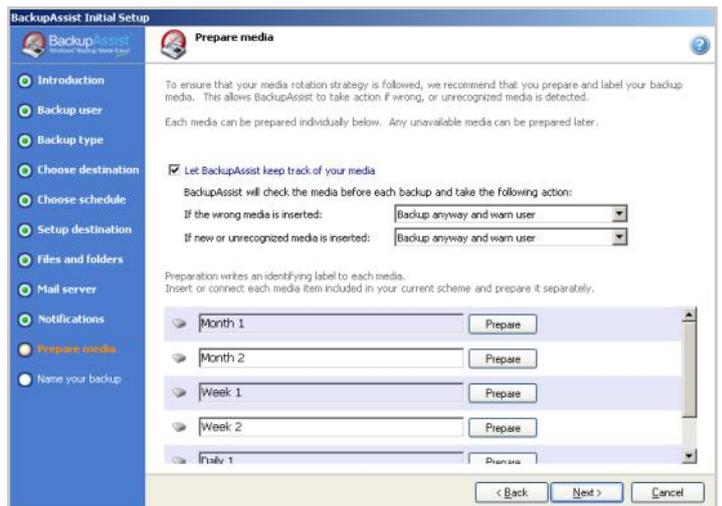
Now eject or disconnect the media and prepare each additional backup media separately. Any backup media not available can be prepared later. Remember to physically write labels on each tape, disk, drive, disc after preparing it. This will ensure that the right media is inserted when requested in the reminder notification.

13. Editing job settings

After you have named your first backup job and completed the initial the main BackupAssist console will load and you will be taken to the **Jobs** screen. Here you can administer, edit, delete, and create backup jobs.

1. **Editing a job -** select the job you created from the list on the **Jobs** window and click **Edit** above the job list. You will be taken to the overview window which gives you a quick reference to the job's basic configuration. You can also rename, and suspend or activate the job here. To the left of the job window is a Job settings menu with a list of settings that can be configured and edited for the job:

   - **Destination**: configure settings for the hardware device that backups are written to.
   - **Scheduling**: choose and configure a media rotation scheme.
   - **Calendar view**: view a detailed calendar that describes your backup schedule.
   - **Files and folders**: select which files and folders should be backed up.
   - **Exchange server**: backup Microsoft Exchange Server data (information store and mailbox-level).
   - **SQL server**: backup Microsoft SQL Server (full database backup).
   - **Notifications**: setup reminder, report and maintenance notifications.
   - **Scripts**: input scripts to run before and after the backup process.
   - **Open files**: select a snapshot manager to backup open files.
   - **NTBackup options**: configure settings specific to the Windows Backup Utility (NTBackup.exe), as well as enable software compression.
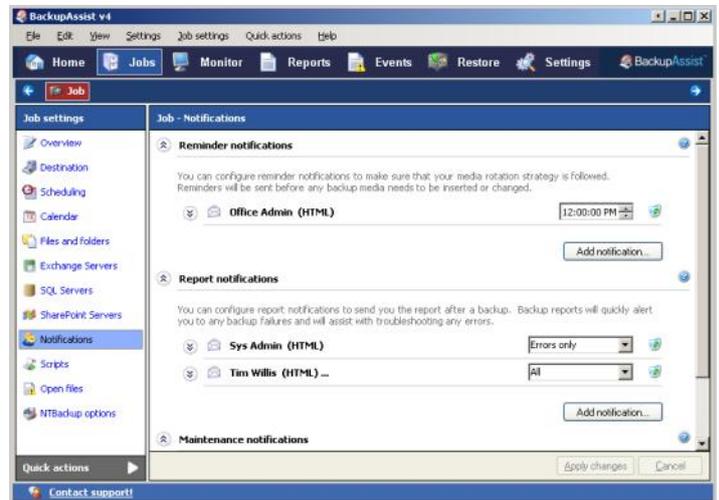
14. Running a test backup

Once you have finished modifying your backup job and are happy with the configuration, you should perform a test backup to verify that all settings are correct.

1. **Testing the backup -** click **Quick Actions** at the bottom-left and click **Run backup now**. A new window will appear. Click **Run** again to start the test backup. You will be taken directly to the monitor window where you can view a real-time status of the job running, including the task currently in operation, the amount of data backed up so far and the estimated time until completion.

   The test will take as long as a full scheduled backup so if you have large amounts of data selected, you may like to temporarily remove some of your file selections in the **files and folders** section to run the test. It is best to leave files selected from each partition or share you wish to backup from so that the test can verify that BackupAssist can access all relevant locations.

   You will notice that the **files and folders** selection is separated into tabs at the top of the window. Remember to re-select the data after the test has completed.
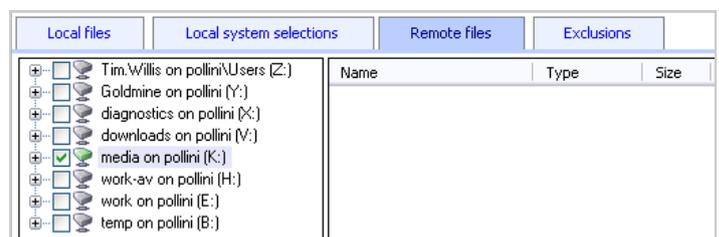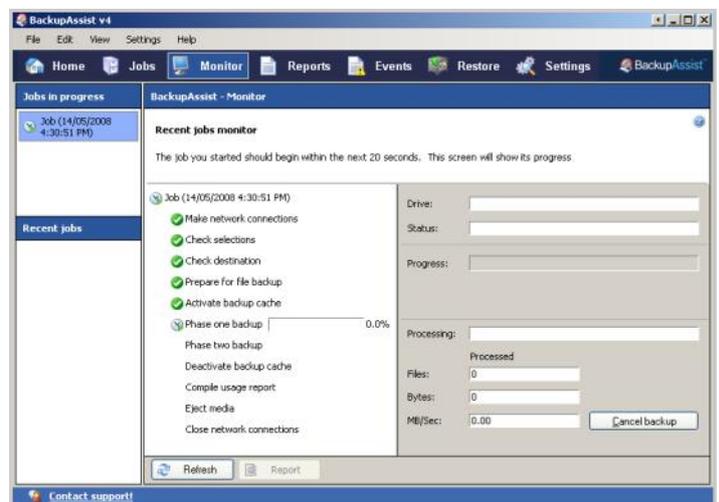
15. What to do now?

You are all done! All that remains is to keep an eye on the backup report emails to make sure that backups are running successfully and to change backup media each time you receive a reminder notification from BackupAssist.

It is also important to test your restore capability. Initially you may perform a test restore on your first few backups but even after you are confident that both the backup and restore are reliable, you should still perform periodic restores. There is nothing worse than realizing several months down the track that your backups are all useless because of a simple hardware problem that was not detected. Even the most reliable backup system cannot offer a 100% guarantee on your data backup so it is best to play it safe.

If you have any questions first try consulting the help file; context-sensitive help is accessible throughout the software by clicking the 🌐 **help** icon at the top-right of most sections. Any further queries can be directed to support@backupassist.com

16. Frequently asked questions

1. **What format will my backup media be in?**
   Standard Windows backup format. BackupAssist uses the Windows Backup utility to backup to portable media, so your backups will be in the standard backup format. No proprietary software is needed to restore data from BackupAssist backups.

2. **How do I restore data?**
   Simply restore data from your portable media using the Windows Backup program, as you would do if the backups were performed manually. No special processes are required unless you are attempting to restore SQL databases and you should refer to the education center on our website: http://www.backupassist.com/education for further instructions on this. Restoration should generally only be performed by qualified technical personnel.

3. **Can I use media that has been previously used by other backup programs?**
   Yes, although you may need to prepare it first. Refer to **section 12,** pg. 6, of this guide for preparation details. If you need to prepare media after creating a job click **Quick actions** on the top menu and select **Prepare media**. You only need to prepare each media item once. Please note that many other backup solutions install their own tape drivers. If you are using a tape drive you may have to uninstall your current drivers and reinstall the default Windows drivers.

4. **I need to run additional tasks before and after the backup - can BackupAssist do this?**
   Yes. BackupAssist provides a facility to run scripts before and after the backup. Click **Scripts** in the left menu when editing a backup job. See **section 13,** pg. 7, for details on how to edit a job.

5. **I need to backup data on a mapped network drive. Where do I set up the mapped drives?**
   Each time you access 📂 **Files and folders** when editing a job and select the **Remote files** tab, BackupAssist will automatically detect network drives that have been mapped in Windows and add them to the file selection list. No extra configuration is required unless the backup user (see **section 11,** pg. 6) does not have access to the share. If this is case, click **Settings** on the top menu and select **Network paths.** Now select the relevant share and click **Edit** to alter the authentication details for the share.

6. **What types of backup does BackupAssist support?**
   Full, Differential, Copy, Daily and Incremental backups are all supported.

7. **Do I have to use one of the pre-defined schemes?**
   Each pre-defined scheme can be customized which enables you to design your own backup schedule and rotation strategy. When editing a job click 🗓️ **Scheduling** on the left menu and then click **Customize** at the top of the window.

8. **What kind of support does BackupAssist provide for open files?**
   BackupAssist provides two options for open file backup: Snapshot manager or Conventional file copy. You can read more about each option in our open files white paper in the education centre on our website:
   http://www.backupassist.com/education/