Backup4all

Take full control of your backup

Backup4all User Manual

Backup4all User Manual

for Backup4all version 6

by Softland

This user manual presents all the features in the Professional edition. If you own Lite, Standard or Portable, some of the features presented in this user manual might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check the feature matrix topic.

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Introduction

Part I

1   Introduction

1.1   Product Description

Backup4all is an award-winning backup software for Windows. Backup4all protects your valuable data from partial or total loss by automating backup tasks, password protecting and compressing it to save storage space. Using Backup4all you can easily backup to any local, network drive, backup to FTP (with support for SSL encryption, proxy server, passive mode), SFTP, Amazon, Azure, Dropbox, OneDrive, Box backup to CD, DVD or Blu-ray disc, Google Drive, or other removable media (such as USB or Firewire drives).
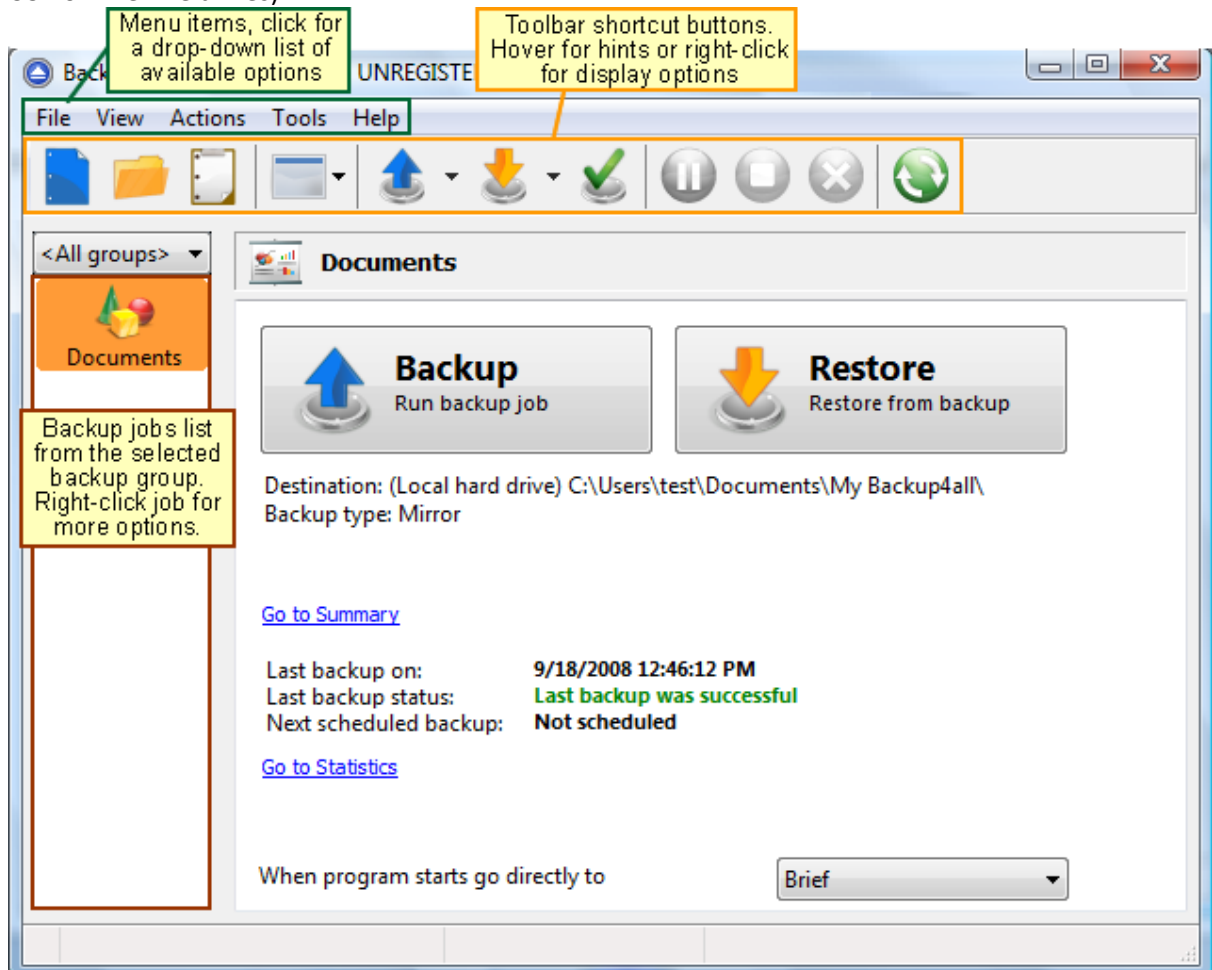
Backup4all can backup open/locked files (if the files are located on local partitions on Windows XP/2003/Vista/Windows 7/Windows 8/8.1/Windows 10) and it can perform smart, full, differential, incremental and mirror backups. Once a backup is performed, you can see what files have been changed since the last backup or you can read the statistics about the next backup execution. You can use the context menu from the tree to run standard actions associated with the file type.

There is also the option to run predefined backups, using the backup plugins such as My Documents, My Pictures, Internet Explorer Favorites, Mozilla FireFox Profiles, Mozilla Thunderbird or Outlook emails and settings.

Backup4all has ZIP64 support (can create backups over 2 GB) and creates standard zip files, meaning that you can access it with any zip compatible utility. Backup4all also allows you to encrypt your backup using AES encryption (128/192/256-bit).

Backup4all keeps track of file versions. You can easily restore any version of files or a whole folder. You can filter files to be restored.
Backup4all tests the backup files automatically to ensure the backup is safe and correctly executed (uses CRC32). You can also enable email notifications to receive an email in case of success/error/ warning.

Backup4all works with any drive letter, including mapped network drives and UNC paths. It comes with its own built-in CD/DVD/Blu-ray burning support.
 Backup4all runs on XP/2003/Vista/Windows 7/Windows 2008/Windows 8/8.1/Windows 2012 both 32-bit/64-bit, Windows 10 and offers multi language support.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

1.2   System Requirements

To install Backup4all you need Windows XP/ Server 2003/ Vista/ Windows 7/ Windows 2008/ Windows 8/ Windows 8.1 /Windows 2012 or Windows 10 and at least 300 MB of free disk space. Because the application uses zip compression, additional disk space is needed for the temporary directory. The amount of free space depends on the size of files to backup.

Note: Backup4all can backup open files only if installed on Windows XP, Windows 2003 Server, Windows Vista, Windows 7, Windows 2008, Windows 8, Windows 8.1, Windows 2012 or Windows 10 and if the files are stored on NTFS partitions.

1.3   Features Summary

Intuitive interface
The Getting Started window allows you to easily define/run backup jobs or restore backed up data. Switching to the Explore View, you can see all the files/folders that are in the backup job and the new files that will be stored at the next backup execution. You can sort and search the file tree in Explore view. You can start this backup application at windows startup or minimize it to the system tray.

Backup locked or open files (XP/2003/Vista/Windows 7/Windows 2008/Windows 8/Windows 8.1/ Windows 10)
Backup4all uses the Volume Shadow Copy service that allows you to back up local open files from NTFS partitions in Windows XP/2003/Vista/2008 Server/Windows 8/8.1/Windows 10. Now you can backup your emails and settings without closing Microsoft Outlook, Outlook Express or other email clients.

File and Folder Filters

Powerful file and folder filtering engine with lots of options to filter by attribute, size, date, name and type). You can create filters using a combination of restrictions and you can define separate filters for inclusion and exclusion.

Predefined Filters
Filters can now be added through the Options window, and once you set some predefined filters you can use them in any backup job. If you change the predefined filter at a later time, it will be automatically modified on each backup job that uses it too.

Manage multiple backup jobs
This backup software allows defining multiple backup jobs and saving them for future use. On the main form, you have an overview of all defined backups organized in tags. Backup4all comes with several predefined backup jobs: "My Documents", "My Pictures", "Outlook Express" and allows importing backup plugins for dozens of other applications.

Email notifications
You can configure Backup4all to send custom emails after a backup finished, with success, error and warning notifications. Environmental variables can be used in the email title and body. Additional options allow you to attach the backup log file and send the email to several addresses.

Pause/Resume or Stop operation
The backup operation supports pausing and resuming, so running a backup job can be interrupted and continued at a later time. There is also a Stop operation now, that when pressed will not Cancel the backup, but instead will save everything until that point when it was pressed.

Automatic updates
Backup4all can now check for updates either manually or automatically at a scheduled date. This allows you to better stay in touch with the latest development of Backup4all.

Backup catalog file
Backup4all stores a summary snapshot of the file and folder information into a backup catalog file (". bkc") each time a backup is executed. This catalog is stored in a different file than the backup itself and it allows Backup4all to keep track of the backed up files. The advantage of using a catalog is faster backup execution. Another advantage is that you can run Backup4all together with other backup applications because they will not interfere with each other.

Backup directly to CD/DVD/Blu-ray
This backup software comes with its own built-in CD/DVD/Blu-ray burning support. Just set the destination on CD/DVD/Blu-ray disc and execute the backup job. However, you can use UDF format (using SPTD driver installed with Backup4all, or other products such as DirectCD or InCD) or the Joliet format. Backup4all also has the possibility to erase CD-RW/DVD-RW/Blu-ray media.

FTP Backup
You can backup your files to remote locations using the FTP service (with SSL support, active/passive transfer modes, firewall support, XCRC tests). You just have to select FTP as destination, enter the connection details and you are ready to backup to FTP.

SFTP Backup
You can backup your files to remote locations using the SFTP service. Select SFTP as destination, enter the configurations and you are ready to backup to SFTP.

Amazon S3 Backup
You can also use Amazon as backup destination. Select Amazon S3 as backup destination and type the Access key ID, the Secret Access Key and the Bucket in order to configure the Amazon S3 destination.

Azure Backup
You can backup your files to Azure destination. Select Azure as backup destination and type the Account name, the Key and the Container to configure the Azure destination.

Google Drive Backup
You can backup your files to Google Drive destination. Select Google Drive as backup destination, choose the account and destination folder.

OneDrive Backup
You can backup your files to OneDrive destination. Select OneDrive as backup destination, choose the account and destination folder.

Box Backup
You can backup your files to Box destination. Select Box as backup destination, choose the account and destination folder.

Dropbox Backup
You can backup your files to Dropbox destination. Select Dropbox as backup destination, choose the account and destination folder.

Backup Destination
You can store the backup in a local folder, on another computer in the same LAN, on media such as: CD-R, CD-RW, DVD+R, DVD-R, DVD+RW, DVD-RW, Blu-ray, Blu-ray RW, on USB drives or other removable media, on FTP, SFTP, Amazon, Azure, Google Drive, OneDrive, Box or Dropbox .

Extra Actions
Perform extra actions before and/or after backup execution.

Statistics
You can actually see the number of files that will be processed at next backup (very useful when you have a large number of files). Other information refers to the size and date of the executed backups and the available free space on storage destination.

Play custom sounds
Backup4all can play custom success/warning/error sounds at the end of the backup.

File warnings
File warnings are displayed to the user during backup execution if the user chooses so. These

warnings are also written to the log file. Scheduled backups do not show these warnings even when this option is set.

New Backup Wizard
This backup software provides step-by-step instructions to create a new backup job by selecting Where, What, How and When to backup.

Easy File and Folder Selection
You can browse a folder tree to select several files and folders as source of the backup or you can include or exclude them individually. Multiple files/folders can be added as Sources at once (drag-and-drop supported).

Backup Types
Different backup types to choose from: smart backup, full backup, differential backup, incremental backup and mirror backup.

Smart backup
This backup type was designed to automatically decide the backup type to use and the number of versions to store, giving a backup destination, without asking you every time what to do.

Block backup
This option is useful when you have large files changed frequently (as .PST or databases). Using the block backup option, allows you to back up only the changes inside the file, not the whole large file.

Standard Zip Compression and zip64 support
If the zip file size is less than 2 Gbytes, Backup4all creates standard zip files. This format is compatible with any zip utility available on the market. Unlike other backup softwares, for zip files greater than 2 Gbytes, Backup4all uses zip64 technology (which allows unlimited zip file size).

Backup Plugins
In Backup4all you can load plugins to backup/restore the settings of specific programs. A plugin is actually an XML file that once imported in Backup4all adds a predefined backup. For instance, a backup plugin for Mozilla FireFox, when loaded, will automatically add in the Predefined Backup list an entry for Firefox, so when defining a new backup job if that's selected, the FireFox profiles will be added as source for the new backup.

Customized Zip Names
You can customize name prefixes for the zip archives, which store your backup versions. Backup4all also supports file/folder paths longer than 260 characters (turn off file parsing).

Password Protection
You can protect your ZIP files by setting a password for each backup job. Besides normal password protection, Backup4all also supports 128-bit, 192-bit and 256-bit AES encryption. These numbers reflect the encryption key size used to encrypt the data - a higher key strenght provides stronger encryption.

Snapshots

Mirror backup type makes an exact copy of selected files and folders (copying NTFS permissions and alternate streams), including empty folders too (for an exact copy of the source). Optionally, for mirror backups you can choose to zip the backed up files individually.

Disk Spanning
Automated support for splitting your backup between many removable disks or even on the same media. You can specify the maximum size of the zip archives. When performing a mirror backup and using disk spanning you can choose not to split the files. This is an useful option because you can copy your music/movies to CD, DVD or Blu-ray disc and not have them split up when the CD, DVD or Blu-ray disc is full.

Logs
The operations performed by Backup4all are logged. This allows you to see the status of performed operations (backup/test/cleanup/restore).

Command Line
A command line version of this backup application is available too (that lets you run different operations using parameters).

Restore Wizard
Restore backed up data step-by-step. Allows you to choose the version of files which will be restored and filter them to restore only the needed versions (file versioning applies to full, differential and incremental backups only). You can quickly restore the latest version of a file/folder as well as restoring versions of files backed up at a specific date.

Compatibility
You can restore data using any standard zip software. Backup4all gives you this way more flexibility if you need to restore data on a different computer (if the backup was created using independent splits, see this section on how to restore correctly using 3rd party zip software).

One touch backup
Some USB enclosures have a button to start the execution of an associated program. If you have such a device, you can configure Backup4all to execute a backup job or a backup tag when this button is pressed (works only with certain USB enclosures).

Summary
Text description of the full setup for each backup job that allows you to easily review the information regarding the backup.

Program security
Backup4all offers an option to lock its interface so that when it starts you will need to provide a password in order to unlock it and be able to make changes to its settings.

Test backup
The application tests the backups (using CRC32). This ensures that the files have been backed up properly and the backup is safe. You can also test the backup integrity at a later time from Backup4all's main menu. When backing up to removable media, after each media item written the

backup test is performed (for spanned backups). When backing up to FTP, the XCRC command can be used (if supported by server). This speeds up the testing as Backup4all will verify the backup based on the CRC information received from server. If Azure, Amazon, Google Drive, OneDrive, Box or Dropbox is used as the backup destination, the test will be made based on the CRC information and the files won't be downloaded again after backup.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

1.4   Feature Matrix

Backup4all comes in three* editions: **Lite**, **Standard** and **Professional**.

Professional is the full edition with all features enabled, while **Standard** and **Lite** are the limited-functionality editions.
Below you can find a comparison of the features available in each edition.
*Backup4all Portable Edition** is a custom version of Backup4all that <u>works only on portable devices</u>.

Backup Destinations

	Lite	Standard	Professional	Portable Edition
NEW: Cloud backups to Google Drive	✖	✖	✔	✖
NEW: Cloud backups to Microsoft OneDrive	✖	✖	✔	✖
NEW: Cloud backups to Box Cloud	✖	✖	✔	✖
NEW: Cloud backups to Dropbox	✖	✖	✔	✖
Cloud backups to Amazon S3	✖	✖	✔	✖
Cloud backups to Azure	✖	✖	✔	✖
Backup to FTP (active/passive transfer modes)	✖	✖	✔	✔
Backup to FTPS (FTPES, FTP-SSL or FTP Secure)	✖	✖	✔	✔
Backup to SFTP (SSH File Transfer Protocol)	✖	✖	✔	✔
Backup to CD/DVD (single/dual layer)	✔	✔	✔	✔
Backup to Blu-ray/HD-DVD	✔	✔	✔	✔
Backup to external hdd (USB/Firewire)	✔	✔	✔	✔
Backup to network drives	✔	✔	✔	✔
Backup to removable media (USB flash drive, floppy)	✔	✔	✔	✔
Backup to local hard drives	✔	✔	✔	✔

Backup to ZIP drives	✓	✓	✓	✓
Can be installed only on portable USB flash drives	✗	✗	✓	✓

Interface

	Lite	Standard	Professional	Portable Edition
Customizable ribbon interface	✓	✓	✓	✓
Show job details in card/list mode	✓	✓	✓	✓
Navigation pane	✓	✓	✓	✓
Notification messages	✓	✓	✓	✓
Windows Explorer contextual right-click menu	✓	✓	✓	✓
Start application at Windows startup	✓	✓	✓	✗
Minimize application to system tray	✓	✓	✓	✓
Add sources with drag-drop	✓	✓	✓	✓
Explore View	✓	✓	✓	✓
Backup View	✓	✓	✓	✓
Progress View	✓	✓	✓	✓
View backup statistics	✓	✓	✓	✓
Group backup configurations using tags	✓	✓	✓	✓
Access application according to system privileges	✓	✓	✓	✓
Lock program interface with a password	✗	✓	✓	✓
Show "Getting Started" window	✓	✓	✓	✓
Show versions in Explore View	✗	✓	✓	✓
Search as-you-type for backup jobs/tags in backup list	✗	✓	✓	✓
History window with backup/restore/test/cleanup logs	✗	✓	✓	✓
Show available space in destination on Statistics View	✓	✓	✓	✓
Create desktop shortcut to backup jobs and backup tags	✗	✓	✓	✗
Predefined backups	✓	✓	✓	✓
Microsoft Outlook backup plugin	✓	✓	✓	✓
Quick access toolbar	✓	✓	✓	✓

	Lite	Standard	Professional	Portable Edition
Visualization modes for application startup	✓	✓	✓	✓
Automatic updates	✓	✓	✓	✓
Multi-language support	✓	✓	✓	✓
MSI setup for automatic deployment	✓	✓	✓	✗

Backup

	Lite	Standard	Professional	Portable Edition
Block-backup (true incremental)	✗	✓	✓	✓
Backup open files (locked or in use)	✓	✓	✓	✓
New Backup Wizard	✓	✓	✓	✓
Stop/cancel all backup jobs	✓	✓	✓	✓
Password store management	✓	✓	✓	✓
Select individual files and folders to be backed up	✓	✓	✓	✓
Inclusion and exclusion filters for files and folders	✓	✓	✓	✓
Create and use general predefined filters	✗	✓	✓	✓
Possibility to Pause/Resume or Stop the backup	✓	✓	✓	✓
Override filters	✓	✓	✓	✓
Suspend application	✓	✓	✓	✓
Run missed schedules	✓	✓	✓	✗
AES encryption (128-bit, 192-bit and 256-bit)	✗	✗	✓	✓
Email notifications on success, errors, warnings	✗	✓	✓	✓
Run program/action before and/or after backup	✗	✓	✓	✓
Run program/action only once	✗	✓	✓	✓
Run at system shutdown	✗	✓	✓	✗
"Clean backup" action with parameters	✗	✓	✓	✓
Clear backup before executing a scheduled job	✗	✓	✓	✓
Erase disc before backup	✗	✓	✓	✓
Use local catalogs	✓	✓	✓	✓
Play sound on success, warning, error	✗	✓	✓	✓
Assign volume labels for removable media	✓	✓	✓	✓
Assign label for each backup version	✓	✓	✓	✓

	Lite	Standard	Professional	Portable Edition
Set backup thread priority	✓	✓	✓	✓
One Touch Backup feature	✗	✓	✓	✗
Independent spanned backups	✓	✓	✓	✓
Back up empty folders	✓	✓	✓	✓
Delete Sources after successful backup	✗	✗	✓	✓
Create backup log	✓	✓	✓	✓
Create backup catalog file	✓	✓	✓	✓
Run backup at log on OR log off	✗	✓	✓	✗
Free Backup Plugins	✓	✓	✓	✓
Possibility to set memory usage for backing up	✓	✓	✓	✓
Plug-n-Backup	✗	✗	✗	✓
Browsable file and folder selection	✓	✓	✓	✓
Set backup thread priority	✓	✓	✓	✓
Search file/folder in Backup view	✓	✓	✓	✓

Backup types

	Lite	Standard	Professional	Portable Edition
Smart backup	✗	✗	✓	✓
Mirror backup - without compression	✓	✓	✓	✓
Mirror backup with individual file compression (.zip)	✓	✓	✓	✓
Full backup	✗	✓	✓	✓
Store multiple versions for full backup type	✗	✓	✓	✓
Differential backup	✗	✓	✓	✓
Store multiple versions for differential backup type	✗	✓	✓	✓
True incremental backup	✗	✗	✓	✓
Store multiple versions for incremental backup type	✗	✗	✓	✓
Limit number of backup versions	✗	✓	✓	✓

Backup format

	Lite	Standard	Professional	Portable Edition
Compress backup files (zip format)	✓	✓	✓	✓

	Lite	Standard	Professional	Portable Edition
Obfuscate file/folder name in zip archive	✓	✓	✓	✓
Support for zip64 technology	✓	✓	✓	✓
Choose zip compression level	✓	✓	✓	✓
Password protected zip files	✓	✓	✓	✓
Customize zip name prefix	✗	✓	✓	✓
Split zip files	✗	✓	✓	✓
One-to-one copy	✓	✓	✓	✓
Copy files with NTFS security permissions and alternate streams	✓	✓	✓	✓
Use NTFS change journal	✓	✓	✓	✓
Custom application data file locations	✗	✓	✓	✓

Backup execution

	Lite	Standard	Professional	Portable Edition
Show backup progress	✓	✓	✓	✓
Compress catalog on destination	✓	✓	✓	✓
Smart file scanning mode	✗	✓	✓	✗
Execute all backup configurations in a tag	✓	✓	✓	✓
Perform unattended backups using Windows scheduler	✓	✓	✓	✗
Command line	✓	✓	✓	✗
NEW: Verify backup integrity before execution	✓	✓	✓	✓

Test

	Lite	Standard	Professional	Portable Edition
Test backups	✓	✓	✓	✓
Test backup tags	✓	✓	✓	✓
Test & repair backups	✓	✓	✓	✓
Test FTP/SFTP backups	✗	✗	✓	✓
Test after backup option	✓	✓	✓	✓
Set test thread priority	✓	✓	✓	✓
Backup test performed after writing each disc	✗	✓	✓	✓
Create test log	✓	✓	✓	✓

Restore

	Lite	Standard	Professional	Portable Edition
Restore wizard	✓	✓	✓	✓
Schedule a restore operation	✓	✓	✓	✗
Restore using command line	✓	✓	✓	✗
Restore specific backup increments	✗	✓	✓	✓
Filter files to restore	✓	✓	✓	✓
Restore all files as of specific date	✗	✓	✓	✓
Restore to different folder	✓	✓	✓	✓
Restore selected file	✓	✓	✓	✓
Restore selected version of a file	✗	✓	✓	✓
Restore selected folder	✓	✓	✓	✓
Restore preview	✓	✓	✓	✓
Set restore thread priority	✓	✓	✓	✓
Create restore log	✓	✓	✓	✓

Languages

	Lite	Standard	Professional	Portable Edition
Multi-language support	✓	✓	✓	✓

Legend

"New" means the feature is new and is available only from Backup4all 6

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

Getting Started

Part

II

2 Getting Started

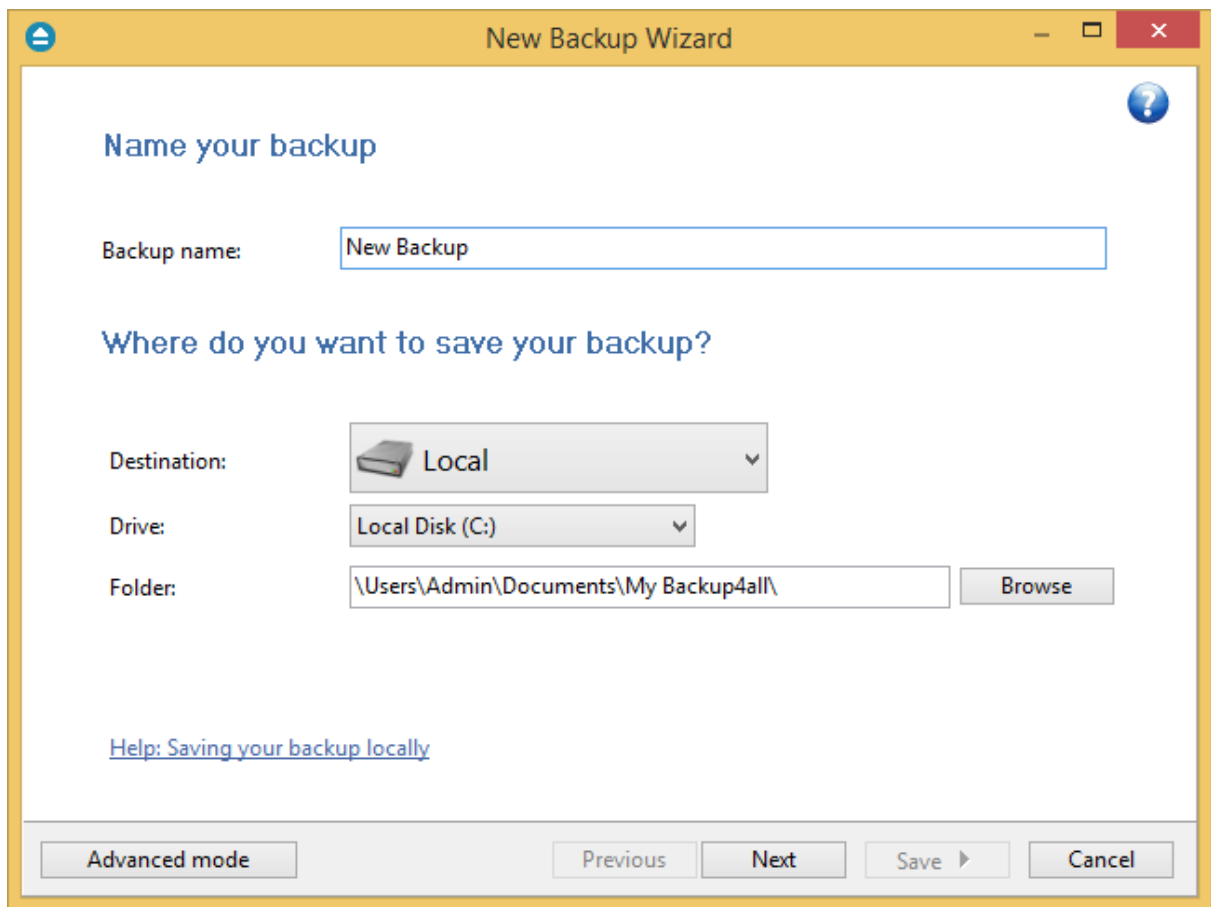## 2.1 How to Configure a New Backup?

To create a new backup job, click on the **New Backup Wizard** toolbar button ( ). For each backup job you must specify at least its name, a valid storage destination and the source files (first two steps of this wizard), the rest of the options not being mandatory. In **New Backup Wizard**, you can switch anytime to **Advanced mode** for more configuration options.

These are the steps you must perform in the **New Backup Wizard**:

1) Enter the name of the backup in the **Backup name** field and select a location where you want to save the backup. You can choose as destination:

- your local hard drive (**Local**)
- a network computer (**LAN**)
- an FTP location (**FTP**)
- an SFTP location (**SFTP**)
- an Azure account (**Azure**)
- an Amazon account (**Amazon S3**)
- a Google Drive account (**Google Drive**)
- an OneDrive account (**OneDrive**)
- a Box account (**Box**)
- a Dropbox account (**DropBox**)

Click **Next** to go to the following step.

2) Select the files and folders you want to backup (sources of the backup) or choose a predefined backup from the drop down list and click **Next.**
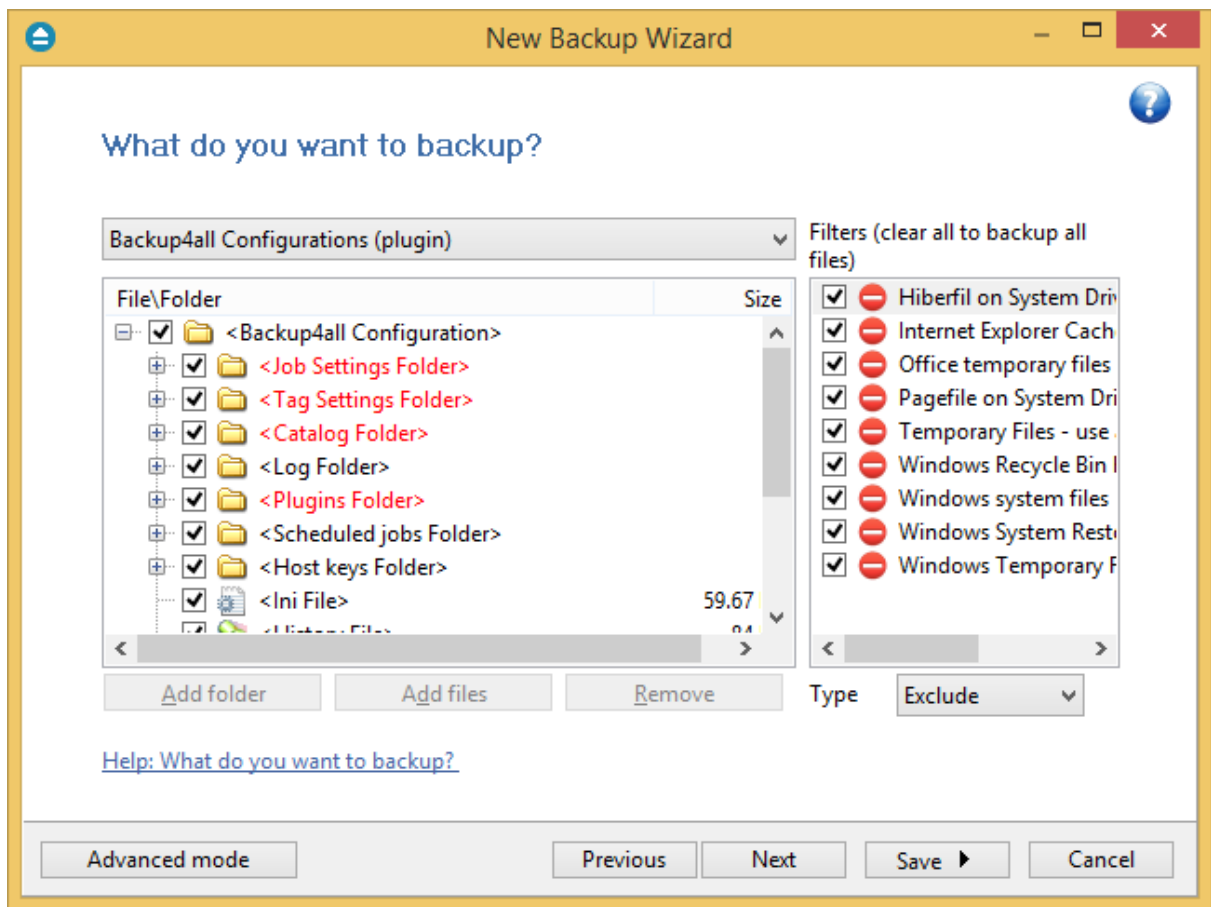
3) Select how do you want to backup. By default, the Smart type is selected. You can also use encryption for the backup types that creates zip files.
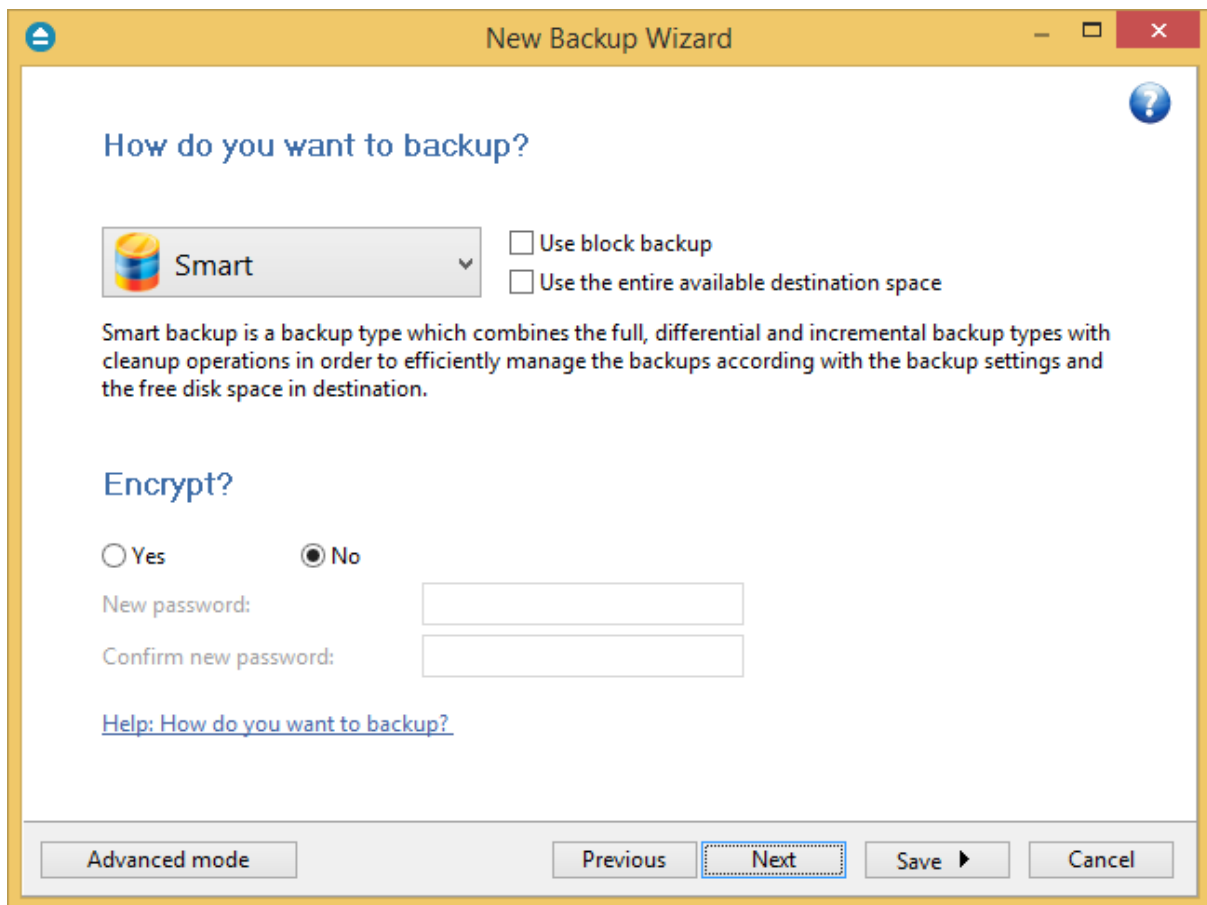
Backup4all provides extended information about the backup, which can be consulted before the backup execution. You can switch between views by selecting one of the available views from the Job view menu:

- **Explore** - shows the source files and folders for the backup job
- **Backup -** shows the list of backup executions with the sources status before each execution
- **Statistics** - shows statistics about the latest backup and the next backup job

The wizard creates an ".ini" file in the **IniFiles** folder (usually in C:\<user>\AppData\Roaming\Softland\Backup4all 6\) with the same name as the backup job. In addition, a backup catalog file (".bkc") is created both in the destination and locally in the BkcFiles folder (same directory where the **IniFiles** folder is created).

Manually modifying ".bkc" or ".ini" files may result in corrupted backup jobs and the impossibility of restoring the data you backed up. A backup job is automatically created when double clicking on a ".bkc" file. You can also recreate the backup job by opening a ".bkc" or ".ini" file from the **File->Open Backup** menu.

Once the backup job is created, it will be displayed on the center column of the application's main

window. On the right, you will see the content of the backup job (files and folders), depending on the chosen view (explore, backup or statistics) and on the left side you will see the tags list.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.2   How to Run a Backup Job?

To start a backup click the **Backup** button ( ) from the application's toolbar or press F6.
You can also right click the backup job and select the Backup action to start.

If an error occurred during backup and the backup was aborted, the **Error** icon appears in front of the backup job. Read the log files (from **Jobs** tab, **History** section, **View Log**) for details about the errors. The icon will disappear when the backup is executed again and the execution is successful.

If one or more files could not be backed up (not enough user rights etc.), then the **Warning** icon appears in front of the default backup job icon, after the backup finished. Read the log files (from **Jobs** tab, **History** section, **View Log**) for details about the files that were not backed up. The **Warning** icon will disappear when the backup is executed again and all files were backed up.

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2.3   How to Manage Backup Jobs?

Copy an Existing Backup Configuration

You can use the **Duplicate Backup** (Ctrl+L) option from the **Jobs** tab to create a duplicate of the selected backup job and after that you can easily modify its configuration. This option can also be selected from the right-click menu of the backup job.

Modify a Backup Job Configuration

First you must select the backup job you wish to modify. Then press the **Properties** button ( ) from the application's toolbar. This will open the **Backup Properties** window. You can also change its configuration by choosing **Properties** from the right-click menu of the backup job. After the

Properties window is opened, go to the page with the settings you want to modify.

Delete a Backup Job

Select the backup job you want to delete and select **Delete Backup** option from the **Jobs** tab. Another possibility is to choose **Delete** (CTRL+Del) from the right-click menu of the backup job.
Files and folders from the source and destination will not be deleted, by any of these operations.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.4   How to Restore from a Backup?

With Backup4all you can do the following restore operations:
- restore the latest version of all files
- restore all files as they were on a specified date
- filtered restore
- restore all files from a folder
- restore the latest version of a particular file
- restore the latest version of multiple selected files
- restore any version of a particular file
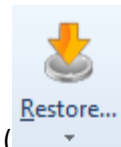
To make a full or a filtered restore start the **Restore Wizard** by pressing the **Restore** button ( ) from the application's toolbar. You can restore to the original location or to a different location of your choice.

You can restore the latest version of a file, several selected files or all files from a folder by selecting the files or folder in the **Explore View**, right-click and select **Restore Latest Version** or **Restore Latest Version To...**
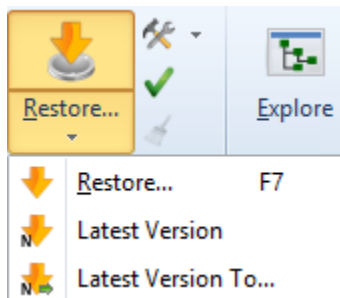
If you want to restore a particular file version, switch to the **Explore View**, select the targeted file in the tree, right-click on a file version from the bottom list and choose **Restore** or **Restore to...**
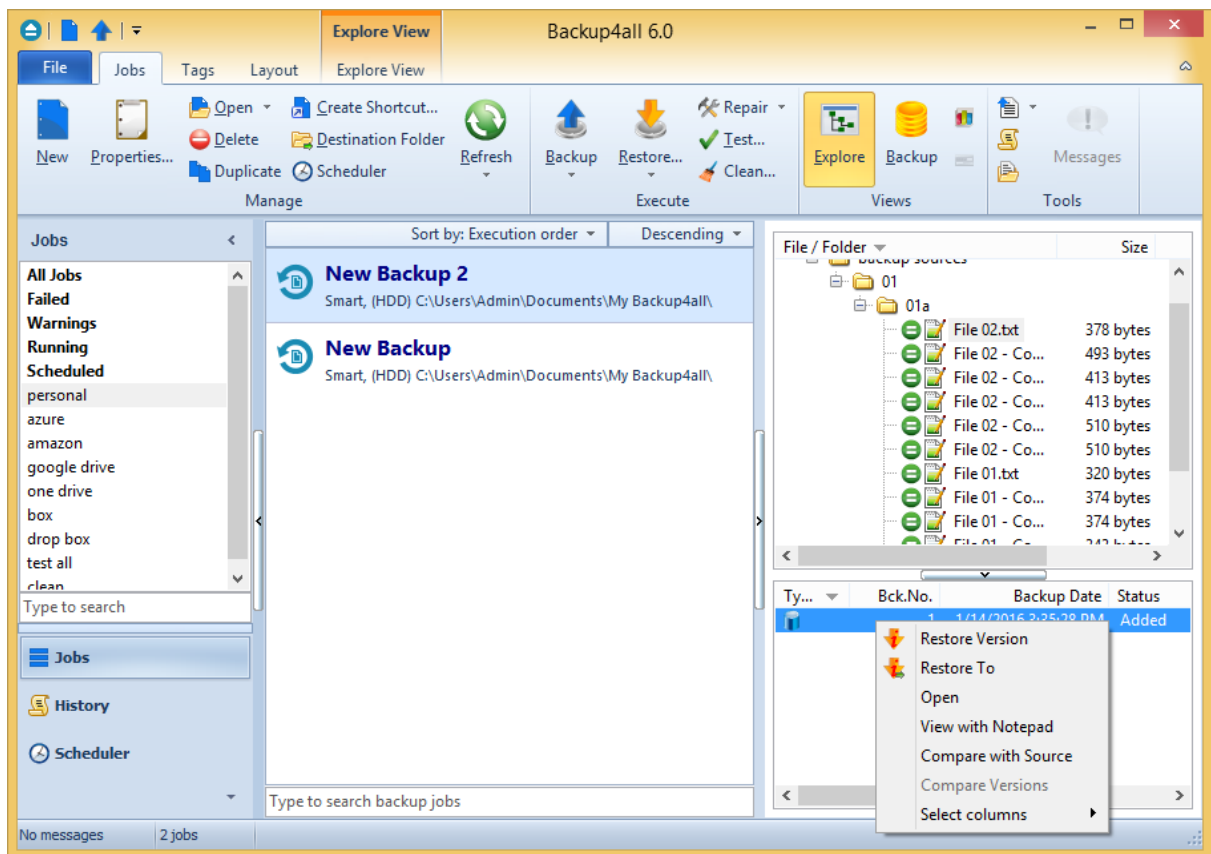
Beside files, <u>folder information is also added to backup, so a restore process can recreate the original folder structure</u>.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.5   How to Test a Backup?

With Backup4all you can:
- test one or more versions of a backup (you can select any version for testing)
- automatically test latest version of a backup at each backup job execution

To test a selection or all the versions for the selected backup job, open the **Test Backup** window by pressing the **Test** button (   ) from the application's toolbar (or using the keyboard shortcut **F9**).
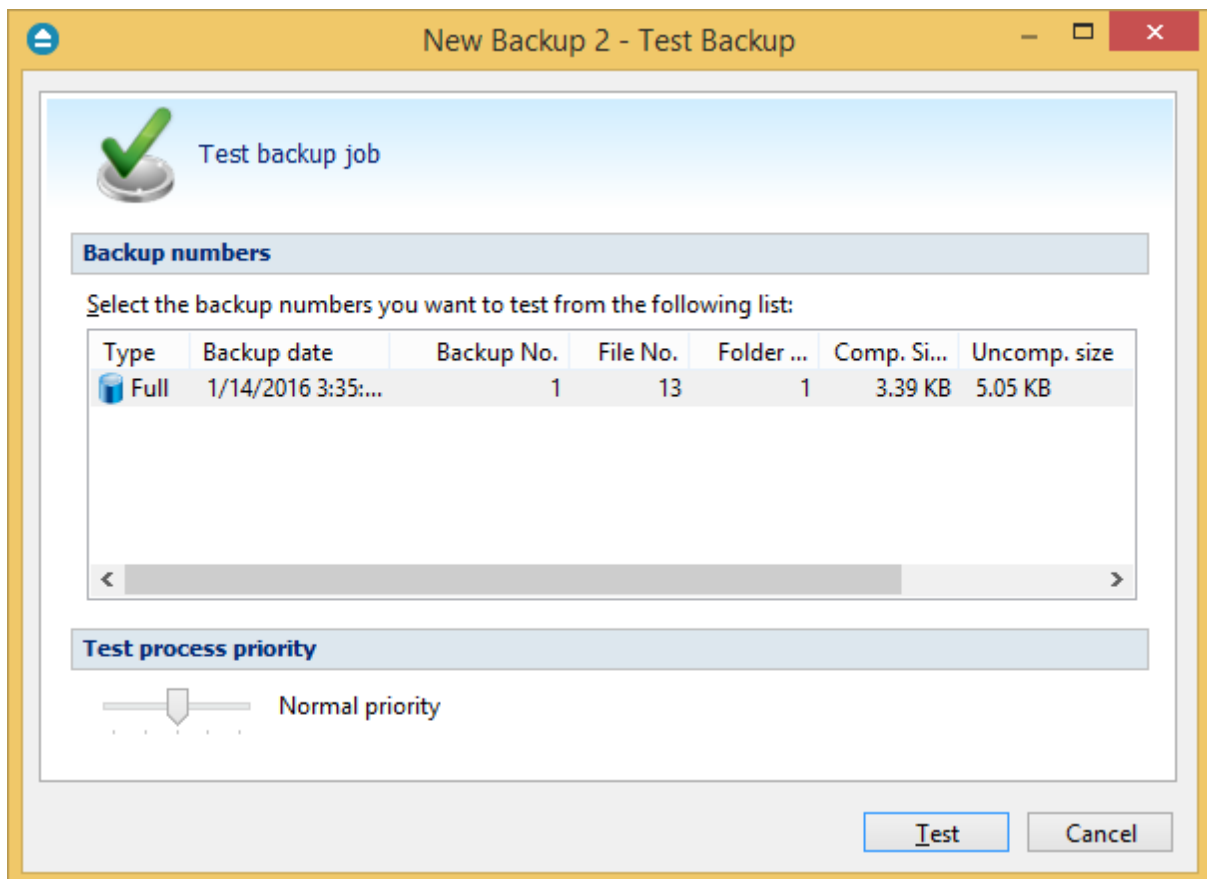
In the test window, select the backup versions you wish to test and press the **Test** button. You can also modify the priority of the test process by moving the slider to a lower or higher priority (default is Normal). A **High priority** process finishes faster but consumes more resources than a **Normal priority** process.

You can also test a backup execution if you switch to **Backup View**, right-click on a version and select **Test**.

To be sure the test automatically runs after each backup, you should open the **Backup Properties** window by pressing the **Properties** button ( ) from the application's toolbar and in the **Advanced** tab make sure the **Test after backup** option is checked.

If the test was executed automatically after backup and it failed, the **Error** icon appears in front of the backup job icon. Read the log file for details about the errors (from **Jobs** tab, **History** section, **View Log**). The icon will disappear when the backup job will be successful.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.6 How to Password Protect a Backup?

Passwords are used to protect your backup files from unauthorized access.

Setting the Password

The **Encryption Settings** section is shown on the **Compression** page of the **Backup Properties** window or in the **New Backup Wizard** on backup type page. The button is available only for Smart backup, full, incremental, differential and mirror with zip backup types (not available for mirror without zip).

By default the **No encryption** option is selected.
If you want to protect your backup, you can choose the type of the encryption to be used.
The **Zip(2) compatible encryption** offers moderate security but is compatible with all third party zip applications.

The best choice is the **AES encryption** which is the new standard in ZIP protection, but is recognized only by the latest version of third party zip applications (like Winzip or PKWare). Backup4all supports **AES encryption** in 3 different key strengths: 128-bit, 192-bit and 256-bit. These numbers reflect the size of the encryption keys used to protect the data - the higher the number the stronger the encryption. All three types provide higher security than the password protection method.
When choosing a password, it is recommended that you use a combination of letters and numbers and at least a 6 character long password.

You should manually enter the password in the **New password** field and re-enter it in the **Confirm new password** field to avoid typing errors.
The **Old password** field is enabled only when the backup job already has a password. You can change the password only if you enter the old one in this field.
This way only the owner of the backup will be allowed to change the password.

The system makes it possible to set different passwords for the same backup job, so the backup may contain zip files with different passwords. Make sure that you remember all passwords that have been used for a backup job, or you will not be able to restore your files.

By default, Backup4all stores the passwords on the local Windows account in order not to ask you the password every time you want to run a new backup or to test it from the local computer. You can also protect the stored passwords using a master password or you can chose not to store any passwords. You can change these settings if you go to **File->Options->Passwords**.

How to Remove the Password?

In the **Backup Properties->Compression** page, go to **Encrypt the zip file** section, select the **No Encryption** option and enter the password that you used in the **Old password** field. You cannot remove the password if you don't provide the old one.
If you have the **Zip(2) compatible encryption** or **AES encryption** option selected, you can also remove the password by entering the **Old password** and leave the **New password** and **Confirm new password** fields empty.

Using Passwords when Restoring

During the restore process of backups with password protection, if you do not use the option to store the passwords in the local Windows account, the **Enter Password** dialog will appear. Enter the password and press **OK**. If you do not know the password for this backup number you can:
- press **Skip backup** to go to the next archive - the restore may be incomplete in this case.
- press **Stop restore** to stop the whole process - the restore will be incomplete, because only a part of the files were restored.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.7 How to Backup to FTP?

Backup4all supports backing up to a remote computer or device using FTP (File Transfer Protocol) connection. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection.

Defining FTP configuration

Before using FTP as a destination for backing up, you should define a new FTP configuration using the **File->Options->FTP** window. Once defined, you will be able to apply this FTP configuration to individual backup jobs.

Press the **Add** button once in **File->Options->FTP** to add a new FTP connection . The **New FTP configuration** name will appear in the list and you can enter the other settings for this connection:
- **Configuration name** - Enter here an arbitrary name for the connection.
- **Server name or IP** - In this field you have to enter the name or IP address for the FTP server
- **Port** - In this field you have to enter the port number if different than the default FTP ports (21).
- **Destination folder** - Here you can enter the destination path if different than root.
- **User name** - If this is a private FTP server (no anonymous access allowed) enter the user name for your account.
- **Password** - In this field enter the password for the FTP server.

There are FTP servers that allow anonymous access (public FTP servers). You can connect to these types of FTP servers using as user name Anonymous and your email address as password. It is not recommended to backup important files to public FTP servers.
In the **When destination server is not ready** section you can enter the number of attempts and time between those attempts to connect to the FTP server. By default, if the FTP server is not reachable, Backup4all will try 3 times at a 5 seconds delay before aborting the backup. You can increase or decrease these values using the **Retry** and **wait** fields.
Additional settings like bandwidth, SSL connection and firewall can also be configured from this page.

Once you have finished defining the connection, press the **Test** button to check if the FTP details you have entered are correct. If the test was successful, **The FTP connection was tested successfully** message will be displayed.

Setting the destination to FTP

When defining a new backup job using the **New Backup Wizard**, select the **FTP** option in the d estination section (1st page of the wizard). If you already have a backup job defined and want to change the destination to FTP, select that backup job, open the **Properties** window (Ctrl+P), go to the **Destination** page and select **FTP server**. After that, go to **FTP server** page and specify an existing FTP configuration or create a new one.

From the **Use existing configuration** select an already defined FTP configuration (given that you added one in the **File->Options->FTP** window). The description of the selected FTP configuration will be listed bellow.
You can change the defined settings by selecting the **Custom configuration** option and pressing the **Edit configuration** button. Here you can modify the data in the fields and press **OK** to save. However, if you do changes, it is recommended to use the **Test FTP connection** button to see if the FTP settings are correct.
Once you press the **OK** button, Backup4all will try to connect to the FTP server to see if a backup catalog already exists on the destination. If the FTP destination is not available, a **Cannot connect to the FTP server** message is displayed in the status bar (bottom of the main window).
In the **File->Options->Backup** window you can set the number of retries and the time between the retries when the FTP server is unavailable (the **When destination not ready** section).

By default, the FTP transfer mode used by Backup4all for Mirror backups is **Binary.** You can change it and use **ASCII** or **Auto** mode. The list of ASCII file types can be found in **File->Options->FTP.**

Recommendations for backing up to FTP

1) After each change to the FTP configuration be sure to use the **Test** function.
2) Most FTP sites have policies against hammering (trying repeatedly to connect to an unavailable FTP server with little or no time between connection attempts). Thus they require FTP clients to set retry times at specific intervals, commonly at least 120 seconds between each attempt to connect. Most FTP sites can also monitor for devices that hammer, and once detected the server will ban access to the offending IP address either permanently or for a limited amount of time. Thus, when you set the retry times intervals in **File->Options->FTP, you should use 60 seconds or more**.
3) If you backup important data to a remote location using FTP, encrypt the zip files for increased security. In this case, even if another person manages to gain unauthorized access to the FTP, your files will still be protected.
4) Use XCRC when testing the FTP backups (faster)

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.7.1   Connecting in Passive Mode

Some FTP servers require the connection to be established in a passive mode (i.e. your computer establishes the connection so the flow of data is set up and initiated by you).
Most Web browsers (which act as FTP clients) use passive FTP by default because companies prefer it as a safety measure. So switching to passive mode may be necessary with some FTP servers that are behind firewalls that do not allow connections from outside.

To set Backup4all to connect using **Passive mode**:
  1) On the **Backup Properties->FTP server** window (or **File->Options->FTP**) click **Edit configuration**
  2) Check the **Use passive mode for transfers (like WWW browsers)** option
  3) Press **OK**

After that use the **Test FTP connection** button to see if the FTP connection works.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.7.2   Connecting Through Proxy

If you are connecting to the Internet through a proxy server, you will have to enter the connection details in the **FTP Configuration** window in order to be able to backup to FTP.

Setting Backup4all to backup to FTP using proxy

  1) Go to **Backup Properties->FTP server->Edit configuration** (or **File->Options->FTP->Edit**)
  2) Select a **Proxy Type** from the available options:
   - **None** - Sends the **User name** and optional **Password** for the FTP server as entered in the FTP window
   - **Send command USER** - Sends the **User name** and optional **Password** defined in the proxy settings, followed immediately by the **User name** and optional **Password** for the FTP server.
   - **Send command SITE** - Sends the **User name** and optional **Password** defined in the proxy settings, the **SITE** command with the **Host** value, and the **User name** and optional **Password** for the FTP site.
   - **Send command OPEN** - Sends the **User name** and optional **Password** defined in the proxy settings, sends the **OPEN** command with the **Host** value, and the **User name** and optional **Password** for the FTP site.
   - **USER user@firewalluser@hostname / PASS pass@firewallpass** - Sends the command **USER user@proxyuser@host**, then the command **PASS pwd@proxypwd**, or optionally **PASS pwd**.
   - **Transparent** - Sends the **User name** and optional **Password** defined in the proxy settings, followed immediately by the FTP server **User name** and optional **Password**.
  3) Enter the name or IP address for the proxy server (firewall) in the **Host name or IP** field.
  4) Enter the port number in the **Host Port** field.
  5) Enter the user name and password needed for this proxy connection in the **User name** and

Password fields.

6) Press **OK** and then test the connection.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.7.3 Using SSL Encryption

When you connect through FTP to a remote computer you send the username and password in clear, unencrypted text. Also, when you backup your files to a remote computer, the information is not sent directly to that computer. Instead it is routed through several other computers to get there. Anyone along the route can access what you are sending, including your username and password, if the data is not encrypted. If an unauthorized person has access to this data, your account and the remote system you have access to, may no longer be secure. Backup4all solves this by allowing SSL encryption support when using FTP (and also AES encryption for the backed up zip files).

SSL (Secure Sockets Layer) is a protocol used for transmitting private documents via the Internet. SSL uses a cryptographic system that uses two keys to encrypt data - a public key known to everyone and a private or secret key known only to the recipient of the message.

Backing up to FTP using SSL encryption

1) In **Backup Properties->FTP server->Custom configuration**. (or the **File->Options->FTP** window)
2) From the SSL encryption level box select an option that applies to your situation:
- **No SSL** - the server does not require Secure Socket Layer transport
- **Implicit SSL** - implies that Secure Socket Layer is in use
- **Only explicit SSL** - allows the connection to the FTP server only if SSL is available.
- **Explicit SSL, if available** - When SSL is available, uses explicit security by default. The server allows regular FTP sessions without encryption as well as encrypted FTP sessions using SSL.
3) Press **OK** and test your connection

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.8 How to Backup to SFTP?

Backup4all supports backing up to a remote computer or device using SFTP (SSH File Transfer Protocol) connection. This is also practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection.

Defining SFTP configuration

Before using SFTP as a destination for backing up, you should define a new SFTP configuration using the **File->Options->SFTP** window. Once defined, you will be able to apply this SFTP configuration to individual backup jobs.

Press the **Add** button once in **File->Options->SFTP** to add a new SFTP connection . The **New SFTP configuration** name will appear in the list and you can enter the other settings for this connection:

- **Configuration name** - Enter here an arbitrary name for the connection.
- **Server name or IP** - In this field you have to enter the name or IP address for the SFTP server
- **Port** - In this field you have to enter the port number if different than the default SFTP ports (22).
- **Destination folder** - Here you can enter the destination path if different than root.
- **User name** - If this is a private SFTP server (no anonymous access allowed) enter the user name for your account.
- **Password** - In this field enter the password for the SFTP server.

In the **When SFTP server is not ready** section you can enter the number of attempts and time between those attempts to connect to the SFTP server. By default, if the SFTP server is not reachable, Backup4all will try 3 times at a 5 seconds delay before aborting the backup. You can increase or decrease these values using the **Retry** and **wait** fields.
Additional settings like private key, bandwidth limitation, authentications, encryption and compression can also be configured from this page.

Once you have finished defining the connection, press the **Test** button to check if the SFTP details you have entered are correct. If the test was successful, **The SFTP connection was tested successfully** message will be displayed.

Setting the destination to SFTP

When defining a new backup job using the **New Backup Wizard**, select the **SFTP** option in the d estination section (1st page of the wizard). If you already have a backup job defined and want to change the destination to SFTP, select that backup job, open the **Properties** window (Ctrl+P), go to the **Destination** page and select **SFTP server**. After that, go to **SFTP server** page and specify an existing SFTP configuration or create a new one.

From the **Use existing configuration** select an already defined SFTP configuration (given that you added one in the **File->Options->SFTP** window). The description of the selected SFTP configuration will be listed bellow.

You can change the defined settings by selecting the **Custom configuration** option and pressing the **Edit configuration** button. Here you can modify the data in the fields and press **OK** to save. However, if you do changes, it is recommended to use the **Test SFTP connection** button to see if the SFTP settings are correct.

Once you press the **OK** button, Backup4all will try to connect to the SFTP server to see if a backup catalog already exists on the destination. If the SFTP destination is not available, a **Cannot connect to**

the SFTP server message is displayed in the status bar (bottom of the main window).

In the **File->Options->Backup** window you can set the number of retries and the time between the retries when the SFTP server is unavailable (the **When destination not ready** section).

<u>**Recommendations for backing up to SFTP**</u>
1) After each change to the SFTP configuration be sure to use the **Test** function.
2) Most SFTP sites have policies against hammering (trying repeatedly to connect to an unavailable SFTP server with little or no time between connection attempts). Thus they require SFTP clients to set retry times at specific intervals, commonly at least 120 seconds between each attempt to connect. Most SFTP sites can also monitor for devices that hammer, and once detected the server will ban access to the offending IP address either permanently or for a limited amount of time. Thus, when you set the retry times intervals in **File->Options->SFTP, you should use 60 seconds or more**.
3) If you backup important data to a remote location using SFTP, encrypt the zip files for increased security. In this case, even if another person manages to gain unauthorized access to the SFTP, your files will still be protected.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.9   How to Backup to Azure?

Backup4all supports backing up to Azure server. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection.

<u>**Defining Azure configuration**</u>

Before using Azure as a destination for backing up, you should define a new Azure configuration using the **File->Options->Azure** window. Once defined, you will be able to apply this Azure configuration to individual backup jobs.

Press the **Add** button once in **File->Options->Azure** to add a new Azure connection. The **New Azure configuration** name will appear in the list and you can enter the other settings for this connection:
- **Configuration name** - Enter here an arbitrary name for the connection.
- **Account name** - In this field you have to enter the name of the Azure account.
- **Key** - In this field you have to enter the key for your Azure account. If the key is a Shared Access Signature (SAS), you must select the "Key is Shared Access Signature" option. A shared access signature provides delegated access to resources in your storage account. This means that you can grant a client limited permissions to your blobs, queues, or tables for a specified period of time and with a specified set of permissions, without having to share your account access keys.
- **Container** - Here you have to enter the container's name.
- **Folder** - If you want to use a specific folder, type here its name.

In the **When Azure server is not ready** section you can enter the number of attempts and time between those attempts to connect to the SFTP server. By default, if the SFTP server is not reachable, Backup4all will try 3 times at a 5 seconds delay before aborting the backup. You can increase or decrease these values using the **Retry** and **wait** fields.

Once you have finished defining the connection, press the **Test** button to check if the Azure details you have entered are correct. If the test was successful, **The Azure connection was tested successfully** message will be displayed.

Setting the destination to Azure

When defining a new backup job using the **New Backup Wizard**, select the **Azure** option in the d estination section (1st page of the wizard). If you already have a backup job defined and want to change the destination to Azure, select that backup job, open the **Properties** window (Ctrl+P), go to the **Destination** page and select **Azure**. After that, go to **Azure** page and specify an existing Azure configuration or create a new one.

From the **Use existing configuration** select an already defined Azure configuration (given that you added one in the **File->Options->Azure** window). The description of the selected Azure configuration will be listed bellow.

You can change the defined settings by selecting the **Custom configuration** option and pressing the **Edit configuration** button. Here you can modify the data in the fields and press **OK** to save. However, if you do changes, it is recommended to use the **Test Azure connection** button to see if the Azure settings are correct.

Once you press the **OK** button, Backup4all will try to connect to the Azure server to see if a backup catalog already exists on the destination. If the Azure destination is not available, a **Cannot connect to the Azure server** message is displayed in the status bar (bottom of the main window).

In the **File->Options->Backup** window you can set the number of retries and the time between the retries when the Azure server is unavailable (the **When destination not ready** section).

Recommendations for backing up to Azure
1) After each change to the Azure configuration be sure to use the **Test** function.
2) If you backup important data to a remote location using Azure, encrypt the zip files for increased security. In this case, even if another person manages to gain unauthorized access to your Azure account, your files will still be protected.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.10 How to Backup to Amazon S3?

Backup4all supports backing up to Amazon S3. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection.

Defining Amazon configuration

Before using Amazon as a destination for backing up, you should define a new Amazon configuration using the **File->Options->Amazon S3** window. Once defined, you will be able to apply this Amazon S3 configuration to individual backup jobs.

Press the **Add** button once in **File->Options->Amazon S3** to add a new Amazon connection . The **New Amazon S3 configuration** name will appear in the list and you can enter the other settings for this connection:
- **Configuration name** - Enter here an arbitrary name for the connection.
- **Access Key ID** - In this field you have to enter the key for your Amazon account.
- **Secret Access Key -** In this field you have to enter the secret key for your account.
- **Bucket**- Here you have to enter the name of the bucket.
- **Folder** - If you want to use a specific folder, type here its name.

In the **When Amazon S3 server is not ready** section you can enter the number of attempts and time between those attempts to connect to the Amazon S3 server. By default, if the Amazon S3 server is not reachable, Backup4all will try 3 times at a 5 seconds delay before aborting the backup. You can increase or decrease these values using the **Retry** and **wait** fields.

Once you have finished defining the connection, press the **Test** button to check if the Amazon S3 details you have entered are correct. If the test was successful, **The Amazon S3 connection was tested successfully** message will be displayed.

Setting the destination to Amazon S3

When defining a new backup job using the **New Backup Wizard**, select the **Amazon** option in the d estination section (1st page of the wizard). If you already have a backup job defined and want to change the destination to Amazon S3, select that backup job, open the **Properties** window (Ctrl+P), go to the **Destination** page and select **Amazon S3**. After that, go to **Amazon S3** page and specify an existing Amazon S3 configuration or create a new one.

From the **Use existing configuration** select an already defined Amazon S3 configuration (given that you added one in the **File->Options->Amazon S3** window). The description of the selected Amazon S3 configuration will be listed bellow.

You can change the defined settings by selecting the **Custom configuration** option and pressing the **Edit configuration** button. Here you can modify the data in the fields and press **OK** to save. However, if you do changes, it is recommended to use the **Test Amazon S3 connection** button to see if the Amazon S3 settings are correct.

Once you press the **OK** button, Backup4all will try to connect to the Amazon S3 server to see if a backup catalog already exists on the destination. If the Amazon S3 destination is not available, a **Cannot connect to the Amazon S3 server** message is displayed in the status bar (bottom of the main window).

In the **File->Options->Backup** window you can set the number of retries and the time between the retries when the Amazon S3 server is unavailable (the **When destination not ready** section).

<u>**Recommendations for backing up to Amazon S3**</u>
1) After each change to the Amazon S3 configuration be sure to use the **Test** function.
2) If you backup important data to a remote location using Amazon S3, encrypt the zip files for increased security. In this case, even if another person manages to gain unauthorized access to your Amazon S3 account, your files will still be protected.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.11   How to Backup to Google Drive

Backup4all supports backing up to Google Drive. This is a very used cloud storage location as it offers a lot of disk space for free.

<u>**Defining Google Drive configuration**</u>

Before using Google Drive as a destination for backing up, you should define a new Google Drive configuration in **File->Options->Google Drive** page. Once defined, you will be able to apply this Google Drive configuration to individual backup jobs.

Press the **Add** button once in **File->Options->Google Drive** to add a new Google Drive connection . After you press **Add** button, the **New Google Drive configuration** name will appear in the list and you can enter the other settings for this connection:
- **Authentication** - pressing the "Choose account" button will open the log in page to your Google account.
- **Folder** - If you want to use a specific folder, press Browse button to select it or create a new one.

In the **When Google Drive server is not ready** section you can enter the number of attempts and time between those attempts to connect to the Google Drive server. By default, if the Google Drive server is not reachable, Backup4all will try 3 times at a 5 seconds delay before aborting the backup. You can increase or decrease these values using the **Retry** and **wait** fields.

Once you have finished defining the connection, press the **Test** button to check if the Google Drive details you have entered are correct. If the test was successful, **The Google Drive connection was tested successfully** message will be displayed.

<u>**Setting the destination to Google Drive**</u>

When defining a new backup job using the **New Backup Wizard**, select the **Google Drive** option in the destination section (1st page of the wizard). If you already have a backup job defined and want to change the destination to Google Drive, select that backup job, open the **Properties** window (Ctrl+P), go to the **Destination** page and select **Google Drive**. After that, go to **Google Drive** page and specify an existing Google Drive configuration or create a new one.

From the **Use existing configuration** select an already defined Google Drive configuration (given that you added one in the **File->Options->Google Drive** window). The description of the selected Google Drive configuration will be listed bellow.

You can change the defined settings by selecting the **Custom configuration** option and pressing the **Edit configuration** button. Here you can modify the data in the fields and press **OK** to save. However, if you do changes, it is recommended to use the **Test Google Drive connection** button to see if the Google Drive settings are correct.

Once you press the **OK** button, Backup4all will try to connect to the Google Drive server to see if a backup catalog already exists on the destination. If the Google Drive destination is not available, a **Cannot connect to the Google Drive server** message is displayed in the status bar (bottom of the main window).

In the **File->Options->Backup** window you can set the number of retries and the time between the retries when the Google Drive server is unavailable (the **When destination not ready** section).

<u>**Recommendations for backing up to Google Drive**</u>
    1) After each change to the Google Drive configuration be sure to use the **Test** function.
    2) If you backup important data to a remote location using Google Drive, encrypt the zip files for increased security. In this case, even if another person manages to gain unauthorized access to your Google Drive account, your files will still be protected.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.12   How to Backup to OneDrive

Backup4all supports backing up to OneDrive. This is a very used cloud storage location as it offers enough free disk space for normal use.

<u>**Defining OneDrive configuration**</u>

Before using OneDrive as a destination for backing up, you should define a new OneDrive configuration in **File->Options->OneDrive** page. Once defined, you will be able to apply this OneDrive

configuration to individual backup jobs.

Press the **Add** button once in **File->Options->OneDrive** to add a new OneDrive connection . After you press **Add** button, the **New OneDrive configuration** name will appear in the list and you can enter the other settings for this connection:

- **Authentication** - pressing the "Choose account" button will open the log in page to your OneDrive account.
- **Folder** - If you want to use a specific folder, press Browse button to select it or create a new one.

In the **When OneDrive server is not ready** section you can enter the number of attempts and time between those attempts to connect to the OneDrive server. By default, if the OneDrive server is not reachable, Backup4all will try 3 times at a 5 seconds delay before aborting the backup. You can increase or decrease these values using the **Retry** and **wait** fields.

Once you have finished defining the connection, press the **Test** button to check if the OneDrive details you have entered are correct. If the test was successful, **The OneDrive connection was tested successfully** message will be displayed.

Setting the destination to OneDrive

When defining a new backup job using the **New Backup Wizard**, select the **OneDrive** option in the destination section (1st page of the wizard). If you already have a backup job defined and want to change the destination to OneDrive, select that backup job, open the **Properties** window (Ctrl+P), go to the **Destination** page and select **OneDrive**. After that, go to **OneDrive** page and specify an existing OneDrive configuration or create a new one.

From the **Use existing configuration** select an already defined OneDrive configuration (given that you added one in the **File->Options->OneDrive** window). The description of the selected OneDrive configuration will be listed bellow.

You can change the defined settings by selecting the **Custom configuration** option and pressing the **Edit configuration** button. Here you can modify the data in the fields and press **OK** to save. However, if you do changes, it is recommended to use the **Test OneDrive connection** button to see if the One Drive settings are correct.

Once you press the **OK** button, Backup4all will try to connect to the OneDrive server to see if a backup catalog already exists on the destination. If the OneDrive destination is not available, a **Cannot connect to the OneDrive server** message is displayed in the status bar (bottom of the main window).

In the **File->Options->Backup** window you can set the number of retries and the time between the retries when the OneDrive server is unavailable (the **When destination not ready** section).

Recommendations for backing up to OneDrive

1) After each change to the OneDrive configuration be sure to use the **Test** function.

2) If you backup important data to a remote location using OneDrive, encrypt the zip files for increased security. In this case, even if another person manages to gain unauthorized access to your OneDrive account, your files will still be protected.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.13 How to Backup to Box

Backup4all supports backing up to Box. This is a cloud storage location and it offers enough free disk space for normal use.

Defining Box configuration

Before using Box as a destination for backing up, you should define a new Box configuration in **File->Options->Box** page. Once defined, you will be able to apply this Box configuration to individual backup jobs.

Press the **Add** button once in **File->Options->Box** to add a new Box connection . After you press **Add** button, the **New Box configuration** name will appear in the list and you can enter the other settings for this connection:
- **Authentication** - pressing the "Choose account" button will open the log in page to your Box account.
- **Folder** - If you want to use a specific folder, press Browse button to select it or create a new one.

In the **When Box server is not ready** section you can enter the number of attempts and time between those attempts to connect to the Box server. By default, if the Box server is not reachable, Backup4all will try 3 times at a 5 seconds delay before aborting the backup. You can increase or decrease these values using the **Retry** and **wait** fields.

Once you have finished defining the connection, press the **Test** button to check if the Box details you have entered are correct. If the test was successful, **The Box connection was tested successfully** message will be displayed.

Setting the destination to Box

When defining a new backup job using the **New Backup Wizard**, select the **Box** option in the destination section (1st page of the wizard). If you already have a backup job defined and want to change the destination to Box, select that backup job, open the **Properties** window (Ctrl+P), go to the **Destination** page and select **Box**. After that, go to **Box** page and specify an existing Box configuration or create a new one.

From the **Use existing configuration** select an already defined Box configuration (given that you

added one in the **File->Options->Box** window). The description of the selected Box configuration will be listed bellow.

You can change the defined settings by selecting the **Custom configuration** option and pressing the **Edit configuration** button. Here you can modify the data in the fields and press **OK** to save. However, if you do changes, it is recommended to use the **Test Box connection** button to see if the Box settings are correct.

Once you press the **OK** button, Backup4all will try to connect to the Box server to see if a backup catalog already exists on the destination. If the Box destination is not available, a **Cannot connect to the Box server** message is displayed in the status bar (bottom of the main window).

In the **File->Options->Backup** window you can set the number of retries and the time between the retries when the Box server is unavailable (the **When destination not ready** section).

Recommendations for backing up to Box
1) After each change to the Box configuration be sure to use the **Test** function.
2) If you backup important data to a remote location using Box, encrypt the zip files for increased security. In this case, even if another person manages to gain unauthorized access to your Box account, your files will still be protected.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.14   How to Backup to Dropbox

Backup4all supports backing up to Dropbox. This is a very cloud used storage location as it offers enough free disk space for normal use.

Defining Dropbox configuration

Before using Dropbox as a destination for backing up, you should define a new Dropbox configuration in **File->Options->Dropbox** page. Once defined, you will be able to apply this Dropbox configuration to individual backup jobs.

Press the **Add** button once in **File->Options->Dropbox** to add a new **Dropbox** connection . After you press **Add** button, the **New Dropbox configuration** name will appear in the list and you can enter the other settings for this connection:
- **Authentication** - pressing the "Choose account" button will open the log in page to your Dropbox account.
- **Folder** - If you want to use a specific folder, press Browse button to select it or create a new one.

In the **When Dropbox server is not ready** section you can enter the number of attempts and time between those attempts to connect to the Dropbox server. By default, if the Dropbox server is not

reachable, Backup4all will try 3 times at a 5 seconds delay before aborting the backup. You can increase or decrease these values using the **Retry** and **wait** fields.

Once you have finished defining the connection, press the **Test** button to check if the Dropbox details you have entered are correct. If the test was successful, **The Dropbox connection was tested successfully** message will be displayed.

Setting the destination to Dropbox

When defining a new backup job using the **New Backup Wizard**, select the **Dropbox** option in the destination section (1st page of the wizard). If you already have a backup job defined and want to change the destination to Dropbox, select that backup job, open the **Properties** window (Ctrl+P), go to the **Destination** page and select **Dropbox**. After that, go to **Dropbox** page and specify an existing **Dropbox** configuration or create a new one.

From the **Use existing configuration** select an already defined Dropbox configuration (given that you added one in the **File->Options->Dropbox** window). The description of the selected Dropbox configuration will be listed bellow.

You can change the defined settings by selecting the **Custom configuration** option and pressing the **Edit configuration** button. Here you can modify the data in the fields and press **OK** to save. However, if you do changes, it is recommended to use the **Test Dropbox connection** button to see if the Dropbox settings are correct.

Once you press the **OK** button, Backup4all will try to connect to the Dropbox server to see if a backup catalog already exists on the destination. If the Dropbox destination is not available, a **Cannot connect to the Dropbox server** message is displayed in the status bar (bottom of the main window).

In the **File->Options->Backup** window you can set the number of retries and the time between the retries when the Dropbox server is unavailable (the **When destination not ready** section).

Recommendations for backing up to Dropbox
1) After each change to the Dropbox configuration be sure to use the **Test** function.
2) If you backup important data to a remote location using Dropbox, encrypt the zip files for increased security. In this case, even if another person manages to gain unauthorized access to your Dropbox account, your files will still be protected.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.15 How to Backup to USB or Firewire drives?

You can backup your data to an USB or Firewire drive and from an USB or Firewire drive using Backup4all. This is a practical backup destination as it allows you to store important files to external devices, offering increased portability. It can be considered as an additional protection against data

loss as the result of hardware failure or other disasters.

There are external USB hard drives with performance comparable to conventional hard drives. These portable drives (called enclosures) are composed of devices that connect through USB on one side and to conventional hard drives on the other side. A hard drive is installed into the enclosure and then the enclosure is plugged into the computer, thus creating a normal USB backup device. Given the size of nowadays hard drives, this can be considered a mass storage device for backup purposes.

There are external hard drives that beside the USB technology use also Firewire as a connection port. On one side Firewire hard drives tend to have increased speed over USB, but on the other side USB ports are more common on computers.

Steps in backing up to USB drive with Backup4all:

1) **Start your USB device**. Before starting the backup process make sure that the USB drive is started and working. Usually the enclosure should have a start button and display the status of the drive using led displays. When it is started a green led should be lighted.
2) **Make sure your drive is formatted**. If you have just purchased the drive and didn't use it yet, you might have to format it (only if you didn't use it before, since formatting will erase everything from it). Formatting the USB drive in Windows Vista:
   - Go to Start->Settings->Control panel->System and Maintenance->Administrative Tools->Computer Management
   If you are prompted for an administrator password or confirmation, type the password or provide confirmation.
   - Under **Storage** click **Disk Management**
   - To format the volume with the default settings, in the **Format** dialog box, click **OK**, and then click **OK** again.
   - **Test** to see if the drive is now recognized by going to **Windows Explorer** (a new drive letter should appear)
3) **Configure Backup4all**. If the drive is formatted and recognized by Windows, it will be recognized by Backup4all too. Now, to backup to the USB drive you should define a backup job in Backup4all that has the destination set to the USB drive. To ensure this, please select the backup job you want to run, press **CTRL+P** in order to open the **Backup Properties** window and select the **USB and Firewire** page under **Destination**. Select a drive from the **External hard drive** drop down list. You can also define a new backup job and in the "Where do you want to save your backup" section, select the USB drive.

Some USB drives have a button to start the execution of an associated program. If you have such a device you can configure Backup4all to execute a backup job or a backup tag when the button is pressed. After the USB drive is ready, go to the **File->Options->Backup** menu of Backup4all, select **Backup on demand** and press **Detect** to check if the USB drive is compatible with the **One Touch Backup** feature of Backup4all.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.16   How to Send Email Notifications?

Send Email notifications is a very useful feature that enables Backup4all to send an email with information about the status of the performed backup job upon its completion.

<u>Enabling email notifications</u>

1) Open **File->Options->Email**
2) Check the **Enable email notifications** box
3) Enter the following details:
  - **SMTP Server** - specify the name or IP address of the SMTP server used for sending the mail (example: smtp.novapdf.com) in the **Server name or IP** field and a Port number for it (usually is 25); you can also use **Secure Socket Layer** when connecting to the SMTP server.
  - **Email addresses** - you must specify the email address used to send the email (From field) and optionally a Reply To email address
  - **Authentication** - if the SMTP server requires authentication check the **Server requires authentication** box and enter an user name and a password.
  - **Dial-up connection** - if you are using a dial-up connection select from the drop-down box a method that Backup4all should use to be able to send emails: automatically connect (it will connect without user assistance) or manually connect (it will require user assistance to enable the connection).
4) Click on the **Send test email** button from the SMTP Server section and enter the email address where you want to receive the notification. Once you press **OK** you should receive a test email. If you didn't receive it, you must revise the settings you configured.
5) Press **OK** to save your settings

<u>Sending email notifications</u>

You have to enable separately for each backup job the option to send emails. To do so follow these steps:
1) Select a backup job and open the **Backup Properties** window (right click and select **Properties** or **Ctrl+P**)
2) Go to the **Email** page and check the **Enable email notifications** option.
3) Optionally you can edit the default emails sent and also to attach the backup log to the email
4) Press **OK** to save your changes.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.17   How to Configure One Touch Backup?

Some USB enclosures have a button to start the execution of an associated program. If you have such a device, you can configure Backup4all to execute a backup job or a backup tag when this button is pressed. If your **One Touch Backup** device is not detected by Backup4all (Backup4all is not natively

compatible with the device), you could use the command line parameters to create a command that can be associated to the One Touch button of your device.

If the One Touch Backup option is enabled when the application starts and there is no backup job or backup tag set to be executed when the One Touch button of the USB enclosure is pressed, the user will be asked to choose one from the options displayed in the One Touch Backup dialog:

- Create a new backup job for **One Touch Backup**. If you select this, the **New Backup Wizard** will start and you can create a new backup job to be used with the **One Touch Backup** feature
- Select an existing backup job or backup tag for **One Touch Backup**. If you select this, the **Backup on demand** page of the **Options** window will open and you can select the backup job or tag you want to use. This option is disabled when there is no backup job to select.
- Disable this feature (you can activate it back at any time from **Options**). This will disable the **One Touch Backup** feature. You can activate it again from the **Backup on demand** page of the **Options** window.

If you press **Cancel**, Backup4all will open, but when you will press the **One Touch** button of the USB device the same dialog will be displayed. This dialog will appear again if the backup job (executed when the One Touch button is pressed) was deleted.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.18   How to Use One Touch Backup?

You enable the **One Touch Backup** support from **Options->Backup on demand** page. At first run there is no backup job configured to execute when the **One Touch** button is pressed, so you will have to configure it as explained in the How to Configure One Touch Backup? tutorial.

Once everything is configured, you will just have to push the **One Touch** button and the selected backup job or backup tag will be executed.

If Backup4all is not started, it will start automatically. If it is already started, but minimized it will show a pop-up window or the main window while backing up (depending on the settings from the Options window).

When the backup finishes Backup4all is minimized, if the **Hide when finished** option is checked. If the main window of the application was already open when the One Touch button was pressed, the **Hide when finished** option will be ignored.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

2.19 How to Enable Detailed Logging?

Backup4all allows you to log detailed information about the operations executed (backup, restore or test). Practically, this means that beside the warnings and errors, the log file will contain detailed information about all files handled by the backup, restore or test process.

To enable detailed logging:
    1) Go to **File** menu and open the **Options** window
    2) Switch to the **Logs and history** page
    3) Check the **Log detailed information** option
    4) Check the **Include summary in log** option (this will include in the log file all the information available from the **Summary** view)
    5) Additionally you can limit the size of the log folder too. Just select in the **Restricted to** section the maximum values you want to allow the log folder to grow to.
    6) From the **Log Viewer** section, you can change the program to open the log files. From the drop down list you can select Notepad or Wordpad. You can also browse the computer to select another text editor.
    7) From the log file extension list, you can select the extension of the generated log file: .log or .txt
    8) Click **OK** to close the window and save the changes

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

Part III

Backup Types

3 Backup Types

3.1 Backup Types

Backup4all stores a summary snapshot of the file information into a backup catalog file (".bkc") each time a backup is executed. For every file backed up, the snapshot contains the file name, size and attributes as well as the date and time of creation, latest modification and latest access.

Legacy backup applications inspect each file's archive flag to identify which files have been changed. Backup4all will not interfere with any other backup software, because it does not read or change the archive flag, it uses the catalog file to decide which files have to be backed up and which not.
Backup4all implements the fundamental backup types: smart backup, full backup, differential backup, incremental backup and mirror backup. Below you can find an overview of these types.

Smart Backup

Smart backup is the default backup type. It will start with a full backup type and then it decides what backup type should be performed: full, differential or incremental, merge the backups, delete older versions, according with the options you configured, in order to efficiently use the destination free space.

Full Backup

Full backup is the starting point for all other backups and contains all the data in the folders and files that are selected to be backed up. Because full backup stores all files and folders, frequent full backups result in faster and simpler restore operations. Remember that when you choose other backup types, restore jobs may take longer.

Differential Backup

A differential backup contains all files that have changed since the last full backup. The advantage of a differential backup is that it shortens restore time compared to an incremental backup. However, if you perform the differential backup too many times, the size of the differential backup might grow to be larger than the baseline full backup.

Incremental Backup

An incremental backup stores all files that have changed since the last full, differential or incremental backup. The advantage of an incremental backup is that it takes the least time to complete. However, during a restore operation, each incremental backup must be processed, which could result in a lengthy restore job.

Mirror Backup

A mirror backup is identical to a full backup, with the exception that the files are not compressed in zip files and they cannot be protected with a password. A mirror backup is most frequently used to create an exact copy of the backup data. It has the benefit that the backup files can also be readily accessed using tools like Windows Explorer.
Using the mirror backup type, you can also choose to zip each file individually, preserving the folder structure. This allows you to use the zip compression and encryption features.

Block backup

You can use block backup option to copy only the modified parts of the source files. This is useful for large files (as .PST or database files) as only the modified part of the file will be backed up instead of backing up the whole large file. You can use automatic block size or you can manually set the block size.
Note: The block backup option must be enabled from the first backup execution, otherwise you won't be able to use it on that backup job. If you already have a backup job and want to use block backup, you'll have to create a new backup job.

Save storage space

In Backup4all you have two options for saving the storage space. You can use the **Yes, limit number of file versions** and **Yes, limit maximum number of stored backups to** options to reduce the backup size. When you limit the number of backups, you can also use the **Merge backups** option to perform an internal merge operation between backups to maintain the maximum limit. These options can be used only for Full, Differential and Incremental backup type.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

3.2   Smart Backup

What is Smart Backup?

Smart backup is a backup type that combines the full, differential and incremental backup types with cleanup operations in order to efficiently manage the backups according with the backup settings and the free disk space in destination. The Smart backup type starts with a full backup. The advantage is that you don't need to worry about the number of backups to store in order to fit on the destination drive, which backup version to clean or merge, as Backup4all will take care of that.

Description of the Smart Backup Type

It would be ideal to make full backups all the time, because they are the most comprehensive and

are self-contained. However, the amount of time it takes to run full backups often prevents us from using this backup type. Full backups are often restricted to a weekly or monthly schedule, although the increasing speed and capacity of backup media is making overnight full backups a more realistic proposition.

Full backups, if you have the time to perform them, offer the best solution in data protection. In effect, a single backup can provide the ability to completely restore all backed-up files.

However, you should be aware of a significant security issue. Each full backup contains an entire copy of the data. If the backup media were to be illegally accessed or stolen, the hacker or thief would then have access to an entire copy of your data.

The algorithm takes in consideration the *type switch configurations* and the *destination size*.
The type switch configurations will perform:
- Full backup - if the sizes of last differential and all incremental backups since last full/ differential exceeds 80% of the full backup size.
- Differential backup - if there isn't a last differential and the size of all incremental backups since last full exceeds 30% of the full size, a differential backup will be executed.
- Differential backup - if there is a last differential and the size of all incremental backups since last differential exceeds 50% of the last differential size, a new differential will be executed.

The destination allowed size can be expressed in absolute value or as a percent of the destination size.

Advantages
- It automatically decides the best backup type to be executed
- The free disk space in destination is properly managed, so you won't get out of space errors

Disadvantages
- You cannot select how many backup/file versions to be saved
- Backup4all will use all the given space in destination

Smart Backup Type in Backup4all

Backup4all supports the smart backup type and offers a solution for the storage space requirement issue. The output of a smart backup is a container file, which is created with zip compression. You can select the zip compression ratio from the **Compression** page in **Backup Properties**. Backup4all also offers an option to encrypt your backup. This gives you the option to protect your important backed up data in case a backup got lost or stolen.
The following options can be used to limit the maximum space in destination occupied by the backup:
- **Limit backup size to ... % of destination size** (default is 80%)
- **Limit backup size to ... KB/MB/GB** (default is 50 GB)

Note: Some of the features mentioned on this page might not be available in your edition. The

Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

3.3   Full Backup

What is Full Backup?

Full backup is the starting point for all other backups, and contains all the data in the folders and files that are selected to be backed up. Because the full backup stores all files and folders, frequent full backups result in faster and simpler restore operations. Remember that when you choose other backup types, restore jobs may take longer.

Description of the Full Backup Type

It would be ideal to make full backups all the time, because they are the most comprehensive and are self-contained. However, the amount of time it takes to run full backups often prevents us from using this backup type. Full backups are often restricted to a weekly or monthly schedule, although the increasing speed and capacity of backup media is making overnight full backups a more realistic proposition.

Full backups, if you have the time to perform them, offer the best solution in data protection. In effect, a single backup can provide the ability to completely restore all backed-up files.

However, you should be aware of a significant security issue. Each full backup contains an entire copy of the data. If the backup media were to be illegally accessed or stolen, the hacker or thief would then have access to an entire copy of your data.

Advantages
- Restore is the fastest

Disadvantages
- Backing up is the slowest
- The storage space requirements are the highest (compared to incremental or differential backups)

Full Backup Type in Backup4all

Backup4all supports the full backup type and offers a solution for the storage space requirement issue. You can use the **Yes, limit number of file versions** and **Yes, limit number of backups** options to reduce the backup size. The output of a full backup is a container file, which is created with zip compression. You can select the zip compression ratio from the **Compression** page in **Backup Properties**. Backup4all also offers an option to encrypt your backup. This gives you the option to protect your important backed up data in case a backup got lost or stolen.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check

feature matrix topic.

3.4 Differential Backup

What is Differential Backup?

A differential backup contains all files that have changed since the last full backup. The advantage of a differential backup is that it shortens restore time compared to a full backup or an incremental backup. However, if you perform the differential backup too many times, the size of the differential backup might grow to be larger than the baseline full backup.

Description of the Differential Backup Type

There is a significant, but sometimes confusing, distinction between differential and incremental backup.
Incremental backup stores all the new and modified files since the last **full, differential or incremental backup**.
Differential backup offers a middle ground by backing up all the new and modified files since the last **full backup**. That is where it gets its name: it backs up everything that's different since the last full backup.

Restoring a differential backup is a faster process than restoring an incremental backup because only two backup container files are needed: the latest full backup and the latest differential backup.

Backup4all uses the information it has recorded in its catalog file (".bkc") to determine whether a file has changed since the last full backup or not.

Use differential backup if you have a reasonable amount of time to perform backups. The upside is that only two backup container files are needed to perform a complete restore. The downside is if you run multiple differential backups after your full backup, you're probably including some files in each differential backup that were already included in earlier differential backups, but haven't been recently modified.

Advantages
- Restore is faster than restoring from incremental backup
- Backing up is faster than a full backup
- It uses less storage space than full backup

Disadvantages
- Restore is slower than restoring from full backup
- Backing up is slower than incremental backup
- It uses more storage space than incremental backup

Differential Backup Type in Backup4all

Backup4all supports the differential backup type and offers a solution for the slow backup issue.

In time, the differential can grow to a size that is equal or larger than the full version. Therefore the following options can be used to trigger the creation of a new full backup:

- **Automatically make full backup if the differential exceeds ...% of full backup size** (default is 50%)
- **Automatically make full backup if the differential exceeds ...** (default is 100 MB)

The system calculates the backup size for the differential backup and if the selected condition is met it performs a full backup.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

3.5 Incremental Backup

What is Incremental Backup?

An incremental backup stores all files that have changed since the last full, differential or incremental backup. The advantage of an incremental backup is that it takes the least time to complete. However, during a restore operation, each incremental backup must be processed, which could result in a lengthy restore job.

Description of the Incremental Backup Type

Incremental backup provides a faster method of backing up data than repeatedly running full backups. During an incremental backup only the files that have changed since the most recent backup are included. That is where it gets its name: each backup is an increment since the most recent backup.

The time it takes to execute the backup may be a fraction of the time it takes to perform a full backup. Backup4all uses the information recorded in its catalog file (".bkc") to determine whether a file has changed since the most recent backup.

The advantage of reduced backup duration comes with a price: increased restore duration. When restoring from incremental backup, you need the most recent full backup as well as every incremental backup you've made since the last full backup.

For example, if you did a full backup on Friday and incremental on Monday, Tuesday and Wednesday, and the PC crashes Thursday morning, you would need all four backup container files: Friday's full backup plus the incremental backup for Monday, Tuesday and Wednesday. By comparison, if you had done differential backup on Monday, Tuesday and Wednesday, then to restore on Thursday morning you'd have needed Friday's full backup plus Wednesday's differential backup.

Advantages
- Backing up is the fastest
- It uses the least storage space

Disadvantages
- Restore is the slowest

Incremental Backup Type in Backup4all

Backup4all supports incremental backup type and offers a solution for the slow restore issue.
To keep the number of stored backups to a reasonable number and reduce the size of the backups, Backup4all provides three options: **Yes, limit number of file versions, Yes, limit number of backups** and **Merge backups**. These options will perform an internal merge to keep the number of stored backups under the selected limit.
The following options can be used to trigger the creation of a new full backup:
- **Automatically make full backup if all increments exceed ... % of full backup size** (default is 50%, not checked)
- **Automatically make full backup if all increments exceed ...** (default is 100 MB, not checked)

The system calculates the file sizes for the incremental and if the selected condition is met, it performs a full backup.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

3.6   Mirror Backup

What is Mirror Backup?

A mirror backup is identical to a full backup, with the exception that the files and folders are not compressed in zip files and they cannot be protected with a password. A mirror backup is most frequently used to create an exact copy of the backup source data. It has the benefit that the backup files can also be readily accessed using tools like **Windows Explorer**.

Description of the Mirror Backup Type

A mirror backup is an exact copy of the selected folders and files at a given time. Mirror backup is the fastest backup method because it copies files and folders to the destination without any compression. However, the increased speed has its drawbacks: it needs larger storage space and it cannot be password protected.

While the other backup types collect all the files and folders being backed up each time into a single compressed container file, a mirror backup keeps all the individual files separately in the destination. That is, the destination becomes a mirror (exact copy) of the source. You can even directly access files in the destination without needing to use Backup4all's restore feature, because each file is just an exact copy of the original.

One handy feature of mirror backup is Backup4all's **Fast mirror** option. When this option is selected,

any mirror operation after the first will only copy new and modified files, making the operation very fast.

Another important feature is that users can choose to zip each file individually using the **Zip the files** option. In this case, the compression and encryption options can be used.

A mirror backup cannot keep track of different versions of files. However, Backup4all provides an option to customize destination folder names using user-defined parameters, giving you the ability to save each mirror backup in a different folder location. Restore using Backup4all is possible only from the latest mirror backup, but all previous mirror backups remain available in the destination and can be accessed manually.

Advantages
- The fastest backup type, especially in conjunction with the **Fast mirror** option
- It creates a snapshot of the selected files and folders in the destination which you can browse and access later without needing to run Backup4all
- If used with **Zip the files** option, a selective restore is faster than in any other backup type with zip.

Disadvantages
- If not zipped, it needs more storage space than any other backup type
- Cannot track different versions of files

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

3.7   Backup Types in Backup4all

How are the Backup Types Implemented in Backup4all?

Backup4all creates two main types of backups:
- Backup types with zip compression
- Mirror backup type

User can change the backup type from the **Type** page in **Backup Properties**, or from a specific type page, by checking the box to select that type as default backup type.

Backup Types with Zip Compression

Full, differential and incremental backup use zip compression to reduce the size of the stored backup versions. To keep the number of stored zip files at a reasonable number, the application provides three options: **Yes, limit number of file versions**, **Yes, limit number of backups** and **Merge backups**. These options either delete older stored backups or perform an internal merge to keep the number of stored backups or file versions under the selected limit.

The **Yes, limit number of file versions, Yes, limit number of backups** and **Merge backups** options

cannot be used when the backup destination is on a removable media: floppy disk, CD, DVD, Blu-ray disc etc.

Customize zip name prefix
Typically the name of the zip file is something like: "1_C.zip", "1_D.zip" etc. (one zip for each drive). The names of these zip files do not make much sense for the user but they can be customized by pressing the **Insert tag** button. Following tags are predefined:
- Backup Name (<BACKUP NAME>)
- Backup Number (<BACKUP NUMBER>)
- Backup Type (<BACKUP TYPE>)
- Backup Date (<DATE>)
- Backup Time (<TIME>)
- Backup Hour (<HOUR>)
- Backup Minute (<MINUTE>)
- Backup Second (<SECOND>)
- Backup Year (<YEAR>)
- Backup Month (<MONTH_MMM>)
- Backup Month - numeric (<MONTH_MM>)
- Backup Week (<WEEK>)
- Backup Day of Week (<DAY OF WEEK>)
- Backup Day (<DAY>)

You can also add your text in the edit tag field. Use the **Preview** button to see how the names of the zip files will look like.
Windows does not allow the following characters in the file name: / \ * ? : " < > |
Therefore Backup4all will prompt you to change these characters if present in the **Customize prefix of backup files** field.

Smart backup type

The smart backup type will perform full, differential or incremental backups, depending on the destination free disk space or the limit size you set in Backup Properties. The smart backup type will automatically decide which is the best action to perform by combining the backup types.

Full Backup Type

The full backup type will always backup all the files defined in the sources. Incremental and differential backups will create a full backup first, because they will back up the new files (all files are new if the backup was never executed).

Differential Backup Type

For a differential backup the system will always backup the differences from the last full backup, regardless of the intermediate versions between the latest full and the current differential backup.

The first execution of a differential backup is a full backup, because it backs up the new files (and all the files are new if the backup was never executed).

Incremental Backup Type

In case of incremental backups only the new and the modified files since last backup (differential, incremental or full backup) are added to the backup. Each file can have many versions stored in the backup files..

Backup4all can generate custom zip file names, set a size limit for zip files and encrypt them. For more details look at the **Compression** page from the **Backup Properties** window.

If a new backup job is created and the backup type is set to incremental or differential, then when the backup job is first run, the application will perform a full backup. This also happens when the catalog (".bkc") file is not found in the destination folder or the **Clear backup** action was executed before backup (see the **Advanced** page of the **Backup Properties** window).

Mirror Backup Type

The mirror backup implementation provides some useful options to improve the backup quality.

Since the mirror backup keeps only one version of each file, you can use the **Create subfolder(s) in destination with following name** option to copy the files to customized subfolders, therefore keeping more versions of the files. Backup4all can only use the latest version for the **Restore** or **Test** operations. You can restore older versions manually.

If the **Copy files in a subfolder** option is checked, the files will be copied in a subfolder of the destination folder (typically you will see a ".bkc" file and a folder with the same name). If the option is not set, the files (and folder structure) will be copied directly into the destination folder.

When the **Fast Mirror (copy only new or modified files)** option is used, Backup4all uses the information stored in ".bkc" files to copy only new or modified files to the destination. If this option is not set, the system will copy all files each time the backup is executed.

Using the mirror backup type, you can also choose to **Zip the files**. This option will zip each file individually, preserving the folder structure. In this case, you can use the zip compression and encryption.

When changing the backup type between Smart, Full, Incremental or Differential the older backups are not deleted, only the type of the next backup is changed. If the **Yes, limit number of file versions, Yes, limit number of backups** and **Merge backups** options are used, the application will delete or merge older backups so that the number of versions is less or equal to the specified limit. However when changing between Mirror and Smart, Full, Incremental or Differential, the older versions are deleted.

By default the **Yes, limit number of file versions** and the **Yes, limit number of backups** options are not enabled. This means that the system will keep all the stored backup versions. If you choose to enable the **Merge backups** option, when the limit is reached the system will perform an internal merge between the older versions keeping the number of stored backups equal to the specified limit (the merge between zip files is necessary to keep at the latest file version from each zip file to be merged).

However when changing between Mirror and Smart, Full, Incremental or Differential, the older versions are deleted.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

Backup to CD, DVD or Blu-ray

Part IV

4 Backup to CD, DVD or Blu-ray

4.1 Backup to CD, DVD or Blu-ray

Backing up to CD, DVD or Blu-ray media has become increasingly common due to mature technology and cheap CD, DVD or Blu-ray burners.
If you plan to do a backup to a CD, DVD or Blu-ray disc, please consider our recommendations:

- Do not use the same CD, DVD or Blu-ray disc to store consecutive backup versions. It's better to use different CD, DVD or Blu-ray media for each backup version (change the CD, DVD or Blu-ray disc at each backup run). Use a set of CD, DVD or Blu-ray media and rotate them periodically (e.g.: take 7 CD media, one for each week day; start with the first CD again every 7 days). The reason for this is that in case the burn process fails or the CD, DVD or Blu-ray data becomes corrupted, you still have the previous backup version on a different disc.
- Rewritable CD, DVD or Blu-ray media can be burned only a limited number of times. When strange errors happen you should consider that the CD, DVD or Blu-ray disc might be over-burned (worn out).
- Always test the backed up data after burning. Backup4all has a special option to automate the test after backup and also in case you are spanning multiple CD, DVD or Blu-ray discs , Backup4all test each CD, DVD or Blu-ray disc before writing the next one.

Backup4all makes the backup to CD, DVD or Blu-ray disc process to be easy to perform: just set the backup destination to the CD, DVD or Blu-ray burner drive and run the backup. By default Backup4all uses its own built-in burning engine to backup to CD, DVD or Blu-ray media (you do not need third party drivers or burning software to be installed).

If you prefer packet writing (using third party software) you can select it in the **Write method** section.

If the backup does not fit onto one CD, DVD or Blu-ray disc, Backup4all will automatically span the backup over multiple media. Each disc is assigned a different label for future identification. We recommend marking the CD, DVD or Blu-ray disc with this label.

A few recommendations before backing up to CD, DVD and Blu-ray discs:

- Before backup execution, be sure to insert the CD, DVD or Blu-ray disc containing the latest ".bkc" file if you have the option **Use local catalogs** unchecked (in **Backup Properties->Advanced->Backup options** section, default is checked)
- On backups to hard disk, you can limit the number of stored zip backups by using the **Yes, limit number of file versions, Yes, limit number of backups** and **Merge backups** options. These options do not apply to CD, DVD or Blu-ray media, you cannot limit the number of stored backups on removable media.
- A mirror backup copies every file matching the sources and the file filter to CD, DVD or Blu-ray disc. On a mirror backup to hard disk, files that are deleted and excluded from sources can be deleted from destination too if you want so. This is not possible on the CD, DVD or Blu-ray disc, so deleted and excluded files are just left there as they were burned before, but the catalog (".bkc") file is updated and the restore operation will not copy these files back.
- When backing up to CD, DVD or Blu-ray discs Backup4all requires additional free space on the drive where the **Temporary Folder** is located (at least 700Mb when backing up to CDs, or 4.7Gb when backing up to DVDs)

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

4.2   Use Built in Driver

Backup4all does not need third party drivers or other CD, DVD or Blu-ray burning software to be installed (like ActiveX, ASPI, etc) to be able to burn a CD, DVD or Blu-ray. Backup4all has a built-in CD, DVD or Blu-ray burner to backup to CD, DVD or Blu-ray disc directly.

Set Up Internal CD, DVD or Blu-ray Burner

There are three simple steps to set up the internal CD, DVD or Blu-ray burner:
1) Open the **Backup Properties** window and go to the **Destination** page.
2) Select the drive letter for the CD, DVD or Blu-ray burner device you want to use. If the CD, DVD or Blu-ray device is compatible with the built-in burner, you will see the following message: **[Device name] Using internal burner**
3) In the same page, you can:
  - configure the burn speed
  - set the **Erase disk before writing** option
  - switch the write method between build-in driver and UDF file system
  - use a custom prefix

You can use two burners for UDF disc format: **Use SCSI Pass Through Direct layer (SPTD)** and **Use native Win32 interface (SPTI).** This format can be used to write on CD-R/CD-RW/DVD-R/DVD+R/DVD-RW/DVD+RW/DVD-DL/HD-DVD/Blue-ray/Blu-ray DL.

Use internal CD, DVD or Blu-ray burner

Typically, a backup to CD, DVD or Blu-ray disc performs additional steps shown in the status bar at the bottom of the main window: **burning**, **finalizing**, and **loading disc**. During the last operation, the CD, DVD or Blu-ray disc is ejected and reloaded. After this step the backup is tested and the CD, DVD or Blu-ray disc ejected again (if these options are set).
Backup4all can also perform an additional **Erase CD/DVD/Blu-ray...** action for appropriate media (rewritable CD, DVD or Blu-ray discs)

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

4.3   Use Packet Writing

If you do not wish to use the built-in burner or your CD, DVD or Blu-ray device is not compatible, you can use third party packet writing software.

Packet Writing Software

Packet writing software can write only to CD-RW, DVD-RW or DVD+RW if the disks are formatted using the **Universal Data Format (UDF)** file system.

The advantage of packet writing is that your rewritable media can be used like a floppy or zip disk (drag and drop from **Windows Explorer** is also possible). The disadvantage of using packet writing is that CD, DVD or Blu-ray discs written with this method are recognized on other computers only if the same third party packet writing software is installed there too.

Here are the most important free packet writing applications:
1) DELL DLA, distributed by **DELL** (free) (for Windows XP)
2) IBM DLA , distributed by **IBM** (free) (for Windows XP)

Set Up Packet Writing

There are three simple steps to set up the packet writing to work with Backup4all:
1) Open **New Backup Wizard** or **Backup Properties** and go to the **Destination** page.
2) Select the drive letter for the CD, DVD or Blu-ray burner device you want to use.
3) You must select **Use UDF file system**. Here you can also set the **Erase disk before writing option**. Press the **OK** button.
4) If packet writing is set, you will see the following message on the **Destination** page: **[Device name] Writing method is UDF**

Use Packet Writing

Backup4all detects if the CD-RW, DVD-RW, DVD+RW or Blu-ray RW disc is UDF formatted. If the disc is not UDF formatted it will show the following message: **Disk in drive [drive letter] is not UDF formatted. Please insert a UDF formatted disc.**

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

4.4   Writing to CD, DVD or Blu-ray disc

By default, the backup catalog (.bkc) is stored both on the destination CD, DVD or Blu-ray disc and locally. To see if the catalog will be stored locally too, select **Backup Properties** for a backup job, go to **Advanced** and see if the **Use local catalogs (.bkc)** option is checked.
If it is unchecked the backup catalog is stored only on the destination. The recommended option is to leave it checked.

When the backup process starts, Backup4all searches for the ".bkc" file locally (by default, assuming that you didn't uncheck the option **Use local catalogs),** then:

- If the catalog file is found, Backup4all will make a new version for the backup job. If you wish to write the new backup version on a separate CD, DVD or Blu-ray disc (this is recommended) then you should set the **Ask for a new disk before backup** option.
- If the backup catalog is not found locally (was deleted by mistake) or if the **Use local catalogs** option is unchecked, Backup4all will ask for the last CD, DVD or Blu-ray disc used for the backup. When it finds the backup catalog, Backup4all will make a new version for the files in the backup job.
- If the catalog file is not found on the destination either, Backup4all will start with a new full backup

Backup4all will automatically span the backup over multiple media if the size of the backup job does not fit on a single CD/DVD/Blu-ray disc. For each disc Backup4all will assign a different label for future identification. We recommend marking the CD, DVD or Blu-ray disc with this label.
When spanning multiple CD, DVD or Blu-ray discs, Backup4all will create independent zip files, meaning that if you have a backup that spans over 3 CDs and if one of the CDs becomes unreadable, you will still be able to access and recover the data on the other 2 CDs.

It is recommended to always leave the **Test after backup** option (**Backup Properties- >Advanced**) checked, especially if your backup is written on CD, DVD or Blu-ray disc. In case of disk spanning, Backup4all will test your backed up data after each individual written disc. This way if one of the discs has errors you know before the backup job is finished and you can interrupt the backup process in time.

Note that when backing up to CD, DVD or Blu-ray disc Backup4all requires additional free space on the drive where the Temporary Folder is located (at least 700Mb when backing up to CDs, 4.7Gb when backing up to DVDs or 25GB when backing up to Blu-ray discs).

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

4.5   Other CD/DVD/Blu-ray Settings

The **File->Options->CD, DVD or Blu-ray** window contains various settings related to the burn process.

CD, DVD or Blu-ray

Use SCSI Pass Through Direct Layer (SPTD)
Selected by default. Backup4all uses this internal burning engine to write CD, DVD, HD-DVD or Blu-ray discs. SPTD is a new method of access to storage devices and has the ability to provide direct control of devices without risk of compromising it by some malicious 3rd party filter drivers or other "rootkit" applications.
SPTD is currently supported only on Microsoft OS Windows XP and above. SPTD (similar to other access layers) is not removed from your system after Backup4all uninstall, in order not to disrupt other applications that may use it.

Use native Win32 Interface (SPTI)
If you have problems backing up using the SPTD method, we recommend you to use this option.

Load CD, DVD or Blu-ray before backup
Check this option if you want the CD, DVD or Blu-ray to be loaded before backup execution.

Eject CD, DVD or Blu-ray disc After Backup
You can leave the CD, DVD or Blu-ray disc ejected after the backup is finished (and tested). To do so, go to **File**->**Options->Backup** and check the **Eject CD, DVD or Blu-ray after backup** option.

Note:
- The **Use SCSI Pass Through Direct Layer (SPTD)** and **Use native Win32 interface (SPTI)** burning methods use the UDF disc format.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

Main Window

Part

V
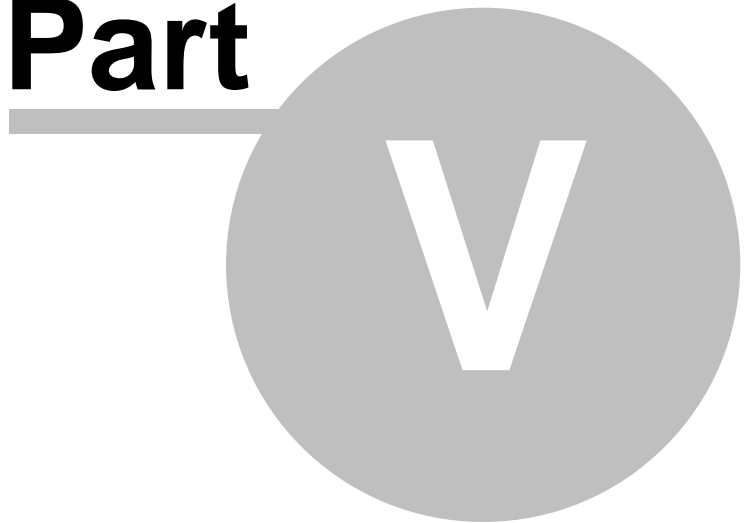
5 Main Window

5.1 Commands

<u>File</u>

New Backup - creates a new backup job
- **Open Backup** - creates a new backup job from the opened ".bkc" or ".ini" file
- **Open Backup From -** creates a new backup job from the opened ".bkc" or ".ini" file, and user can select to open the catalog from multiple locations as: local hard drive, network, FTP, SFTP, Azure, Amazon S3, Google Drive, Dropbox, Box or OneDrive.
- **Tools**
  - **Plugins** - opens the **Manage Plugins** window
  - **Erase disc -** opens the **Erase CD, DVD or Blu-ray** window
  - **Getting Started -** opens the **Getting Started** window
  - **Import from version 6 -** imports ".ini" files from version 6 of Backup4all
  - **Import from version 5 -** imports ".ini" files from version 5 of Backup4all
  - **Import from version 4 -** imports ".ini" files from version 4 of Backup4all
  - **Import from version 3 -** imports ".ini" files from version 3 of Backup4all
  - **Import from version 2 -** imports ".ini" files from version 2 of Backup4all

Help
  - **Backup4all Help** - opens the Help file
  - **Support Request -** starts a new email message that will be sent to the support team
  - **How to Order** - provides information about where and how to buy the application
  - **Options** - opens the Options window
  - **Check for Updates -** displays a window with the available updates
- **Options** - opens the Options window
- **Exit -** exits the application, same as the keyboard shortcut **Alt+F4**

<u>Jobs</u>

The Jobs toolbar contains the most important Backup4all buttons which can be applied on backup jobs.

Manage - this group includes the buttons necessarily to manage the backup jobs.

- **New backup -** starts the New Backup Wizard
- **Properties -** opens a dialog to edit the backup job configuration
- **Open backup** - creates a new backup job from the opened ".bkc" or ".ini" file
  - **Open backup from** - creates a new backup job from the opened ".bkc" or ".ini" file, and user can select to open the catalog from multiple locations as: local hard drive, network, FTP, SFTP, Azure or Amazon S3 server.
- **Delete backup** - removes the current selected backup, same as the toolbar button **Delete** or the keyboard shortcut **Ctrl+Del**
- **Duplicate backup** - duplicates the selected backup job, same as pressing the keyboard shortcut **Ctrl+L**
- **Create Shortcut...** creates a shortcut to a backup job or tag (for easy backup execution from

outside the program) on your desktop, quick launch or other location
- **Destination Folder** - opens the backup destination folder
- **Scheduler -** opens the scheduler page, showing all scheduled tasks for the selected job
- **Refresh** - reloads the selected backup job
  - **Refresh all jobs -** reloads all backup jobs

Execute - this group includes the buttons for all actions that can be executed on a backup job

- **Backup**
  - **Backup** - performs the backup type defined in Backup Properties
  - **Full** - performs a full backup regardless of the backup type defined in Backup Properties
  - **Differential** - performs an incremental backup regardless of the backup type defined in Backup Properties
  - **Incremental** - performs a differential backup regardless of the backup type defined in Backup Properties
- **Restore**
  - **Restore** - starts the Restore wizard
  - **Latest version** - restores the latest version to its original location without showing the Restore wizard
  - **Latest version to...** - restores the latest version to a specified location without showing the Restore wizard
- **Repair**
  - **Repair -** starts the backup repair
  - **Repair catalog only -** starts the repair of the backup catalog
- **Test -** opens the Test backup window
- **Clean** - opens the Clean backup window

Views

- **Explore -** switches to Explore View
- **Backup -** switches to Backup View
- **Statistics -** switches to Statistics View
- **Progress -** switches to Progress View

Explore View
Files & Folders
- **Restore**
  - **Latest version** - restores the latest version of the selected file/folder to its original location without showing the Restore wizard
  - **Latest version to...** - restores the latest version of the selected file/folder to a specified location without showing the Restore wizard
- **Exclude from Sources -** excludes from backup sources the selected file/folder
- **Expand Folder -** expands the selected folder
- **Expand all -** expands all folders

- **Collapse all -** collapse all folders

File versions

- **Restore Version**
  - **Restore Version -** restore the selected file version to the original location
  - **Restore To -** restore the selected file version to a specified location
- **Open** - open the selected file version
- **View with Notepad -** open the selected file version with Notepad
- **Compare with Source** - compare the selected file version with the current source file
- **Compare Versions -** compare two file versions

Layout

- **Versions Pane:** if pressed, will display the version pane on the bottom of the Explore view

Filter

➕ - show/hide the new files to be backed up

🟰 - show/hide the unchanged files

🟦 - show/hide the modified files

➖ - show/hide the excluded files

❌ - show/hide the deleted files

Backup View

Backups

- **Restore**
  - **Restore -** restore the selected version to the original location
  - **Restore To -** restore the selected version to a specified location
- **Test -** test the selected backup version
- **View Backup Log** - open the backup log for that backup execution

Files & Folders

- **Restore**
  - **Restore -** restore the selected file to the original location
  - **Restore To... -** restore the selected file to a specified location
- **Open** - open the selected file
- **View with Notepad -** open the selected file with Notepad
- **Full Expand -** expands all folders from the selected backup
- **Expand all -** expands all folders
- **Collapse all -** collapse all folders

Layout

- **Versions Pane:** if pressed, will display the version pane on the bottom of the Explore view

Filter

➕ - show/hide the new files to be backed up

🟦 - show/hide the modified files

➖ - show/hide the excluded files

🔻 **Filter files -** open the Filters window

History

- **View Log**
    - **Last Backup Log** - shows the latest backup log for the selected backup job. If there is no log file, the menu is disabled.
    - **Last Restore Log** - shows the latest restore log for the selected backup job. If there is no log file, the menu is disabled.
    - **Last Test Log** - shows the latest test log for the selected backup job. If there is no log file, the menu is disabled.
    - **Last Cleanup Log** - shows the latest cleanup log for the selected backup job. If there is no log file, the menu is disabled.
    - **Last Statistics Log** - shows the latest statistics log for the selected backup job. If there is no log file, the menu is disabled.
- **History -** opens the history page for that job
- **Open Log Folder** - opens the folder where all log files are stored
- **Messages -** opens the application messages popup. If there are no messages, the button is disabled.

Tags
The Tags toolbar contains all the Backup4all buttons which can be applied on backup tags.

Manage
New - creates a new tag in the left side list
- **Rename** - renames a tag from the left side list
- **Delete** - deletes a tag from the left side list

Execute
Backup
- **Backup -** performs the backup type defined in Backup Properties for all jobs containing that tag
- **Full -** performs a full backup for all jobs containing that tag, regardless of the backup type defined in Backup Properties
- **Differential -** performs a differential backup for all jobs containing that tag, regardless of the backup type defined in Backup Properties
- **Incremental -** performs an incremental backup for all jobs containing that tag, regardless of the backup type defined in Backup Properties
- **Backup all jobs** - will back up all jobs with the backup type defined in Backup Properties
- **Restore**
    - **Restore -** restores the latest version to its original location without showing the Restore wizard, for all jobs containing that tag
    - **Restore to...** - restores the latest version to a specified location without showing the Restore wizard, for all jobs containing that tag

- **Repair**
  - **Repair -** starts the backup repair for all jobs containing that tag
  - **Repair catalog only -** starts the repair of the backup catalog for all jobs containing that tag
- **Test**
  - **Test latest version -** starts the test for the latest backup version of all jobs containing that tag
  - **Test all versions -** starts the test for all backup versions of all jobs containing that tag
- **Clean -** opens the Clean tag window

Layout

This page contains the buttons for the Backup4all interface.

General

- **Navigation Pane** - indicate how the left side navigation pane is displayed
  - **Expanded -** shows the navigator pane expanded
  - **Collapsed -** shows the navigator pane collapsed
  - **Off -** hides the navigator pane
- **Restore Default Layout -** restores the default layout of Backup4all

Jobs

- **Position** - indicate how the job view pane is displayed
  - **Right -** shows the job view pane on the right
  - **Bottom -** shows the job view pane on the bottom
  - **Off -** hides the job view pane
- **Mode -** indicate how backup jobs are displayed
  - **Card -** shows the backup jobs as cards
  - **List -** shows the backup jobs in a list

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.2 Getting Started

This window is displayed when you first run Backup4all. You can also access this window if you select **Getting Started** from the **File->Tools** menu.

There are two large buttons for backup and restore and a list of articles about Backup4all.
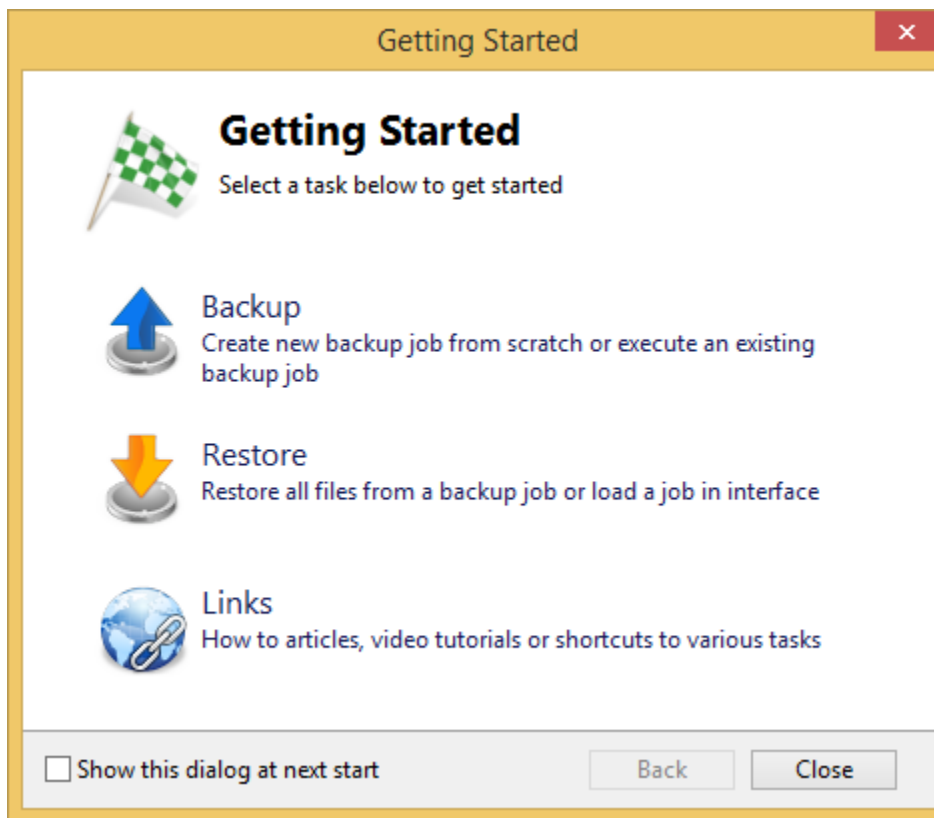
Backup

Press this button to create or run backup jobs.

Backup - Run selected backup job
Select an existing backup job from the list and press **Backup** to run the selected job.
If you want to run this job when the backup device is plugged in, check the **Use the selected job for plug and backup.**

Create - Create new Backup job
Press the **New** button to start creating a new backup job using the New Backup Wizard.
If you want to run this job when the backup device is plugged in, check the **Use the new job for plug and backup.**

Restore

Restore - Restore from selected backup
Select an existing backup job from the list and press **Restore** to open the Restore Wizard.

Open - Load backup jobs
Use the **Open** button to recreate a backup job from the backup catalog (.bkc) or from the

initialization file (.ini).
The recreated backup job will be added to the backup list.

If you don't want to show the **Backup4all Startup** window next time you open Backup4all, uncheck the **Show this dialog at next start** option.
By default this option is checked.

Links

Shows a list of the most popular articles from our knowledge base.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.3   Backup List

Backup list, visible in the middle column of the main window, contains all the backup jobs defined. The backup jobs can be are grouped into tags, for easy handling.
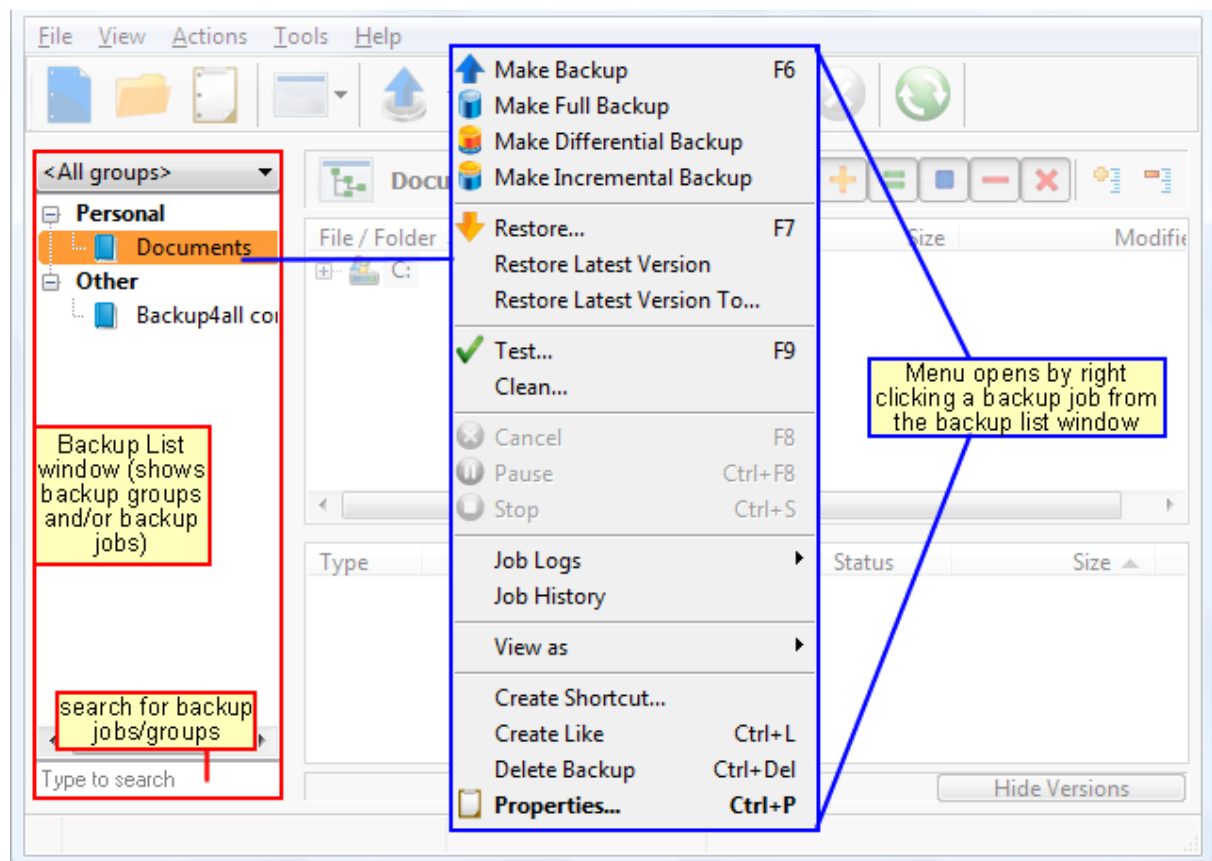
To configure a backup job's appearance (icon and label) in the backup list, you have to open the **Backup Properties** window, switch to the **General** tab, change the name of the backup job, assign it to an existing tag or create a new tag and select a backup job icon. When you backup a tag, the

backup jobs (containing that tag) are <u>backed up in the order they are displayed in the tag list</u>.

When right clicking a backup job, a menu is displayed giving the following options:
- **View as:**
  - **Card** - will display all jobs as cards
  - **List** - will display all jobs as list
- **Backup** - starts the backup process for the selected backup job
- **Full** - performs a full backup regardless of the backup type
- **Differential** - performs a differential backup regardless of the backup type
- **Incremental** - performs an incremental backup regardless of the backup type
- **Restore** - opens the **Restore Wizard** window for the currently selected backup job
- **Restore Latest Version -** starts the latest version restore process for the selected backup job
- **Restore Latest Version To -** opens a window to select the folder were you want the backup to be restored
- **Test...** starts the test process for the currently selected backup job
- **Repair** - use this option to repair the backup job in destination and re-copy all missing or corrupted files, based on the existing information in the backup catalog.
  - **Repair catalog only -** use this option to remove from the backup catalog the missing or corrupted files in destination.
- **Clean** - opens the **Clean Backup** window for the selected backup job
- **Cancel** - aborts current backup process
- **Pause -** pause the current backup/test/cleanup/restore process
- **Stop -** stops the current backup/test/cleanup/restore process
- **Job Logs** - lets you open and view the **Last Backup Log**, **Last Restore Log, Last Test Log , Last Cleanup Log** and **Last Statistics Log**
- **Duplicate** - duplicates a backup job
- **Delete** - deletes a backup job
- **Properties...** opens the **Backup Properties** window

Backup4all can <u>process multiple backup jobs at the same time</u>. You can filter the backup list to see which backup jobs are executed at a certain time.
From the left side column of the main application you can filter the backup jobs in list. You can choose to see all jobs, only the running jobs, failed jobs or only the jobs containing a specific tag.
If there are many backups listed, you can search for a backup job by typing its name in the **Type to search** box on the bottom of the **Backup List**.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.4   Manage Backup Tags

<u>Create a new backup tag</u>

1) When creating (or editing) a backup job using the **New Backup Wizard** in **Advanced mode** (or **Backup Properties**), press Add new tag and type a new name (that does not exist) for the backup

tag.
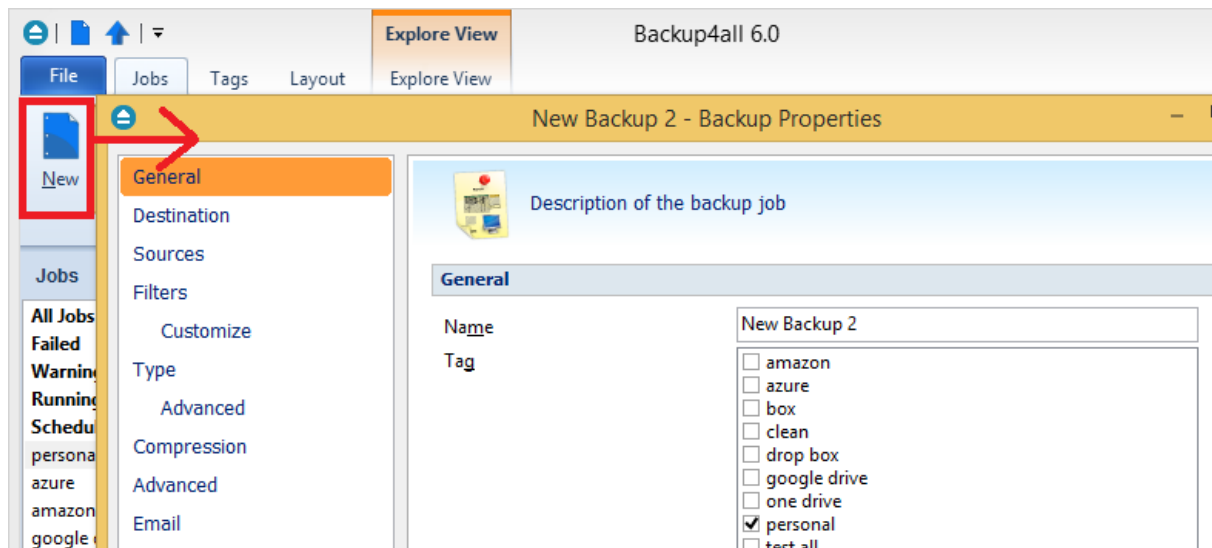
2) Right click on the left side list (left panel of the main window) and choose **New Tag**. The **Create a new tag** window will appear and you can enter the name of the tag. A new empty tag will be created (which can be selected later from the Tags list of the **New Backup Wizard** or from the **Backup Properties** window).
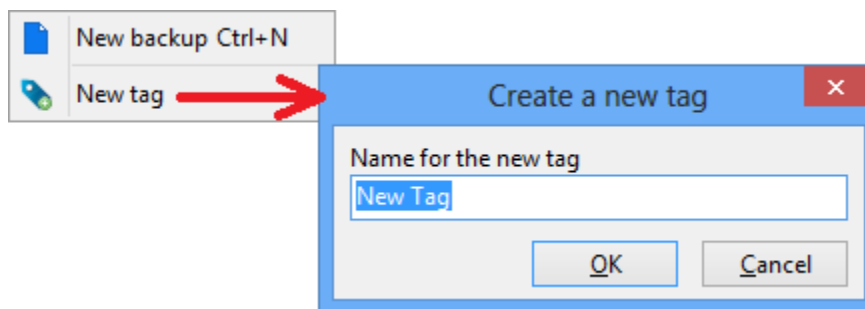
Rename a backup tag

Select the backup tag from the left side list. Open the **File** menu or right click it on the backup list and choose **Rename Tag**. A window similar with the one for **Create a new tag** will appear. You can enter the new name and press **OK**. The tag will be renamed and it will keep all the backup jobs it had.

Delete a backup tag
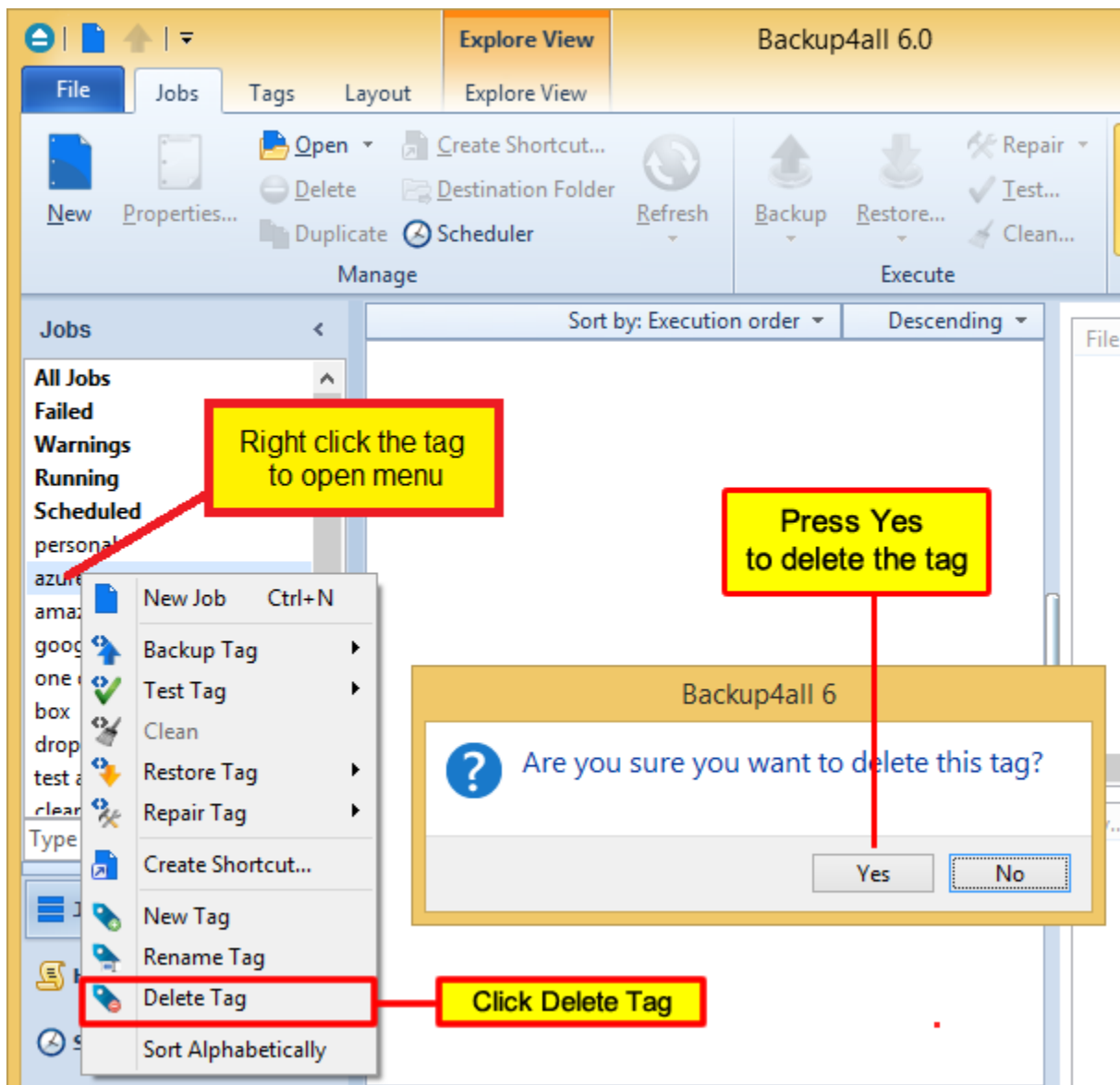
Select the backup tag from the left side list. Go to **File** menu or right-click in the backup list and choose **Delete Tag**. A warning message will appear before the deletion. If you choose **Yes**, only the backup tag will be deleted, the backup jobs will remain in the backup list. To move backup jobs to a different backup tag, you must edit the backup job's properties and select a different tag for them or drag and drop the job on the tag you want to be assigned.

To assign a tag to a backup job, just drag and drop the tag from the left side list of tags to the backup job name in the main window, or open Backup Properties->General and check the tag name.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.5   Explore View

You can activate **Explore** view by:
- pressing the **Explore** button from the **Jobs** tab
- pressing **F2** keyboard shortcut
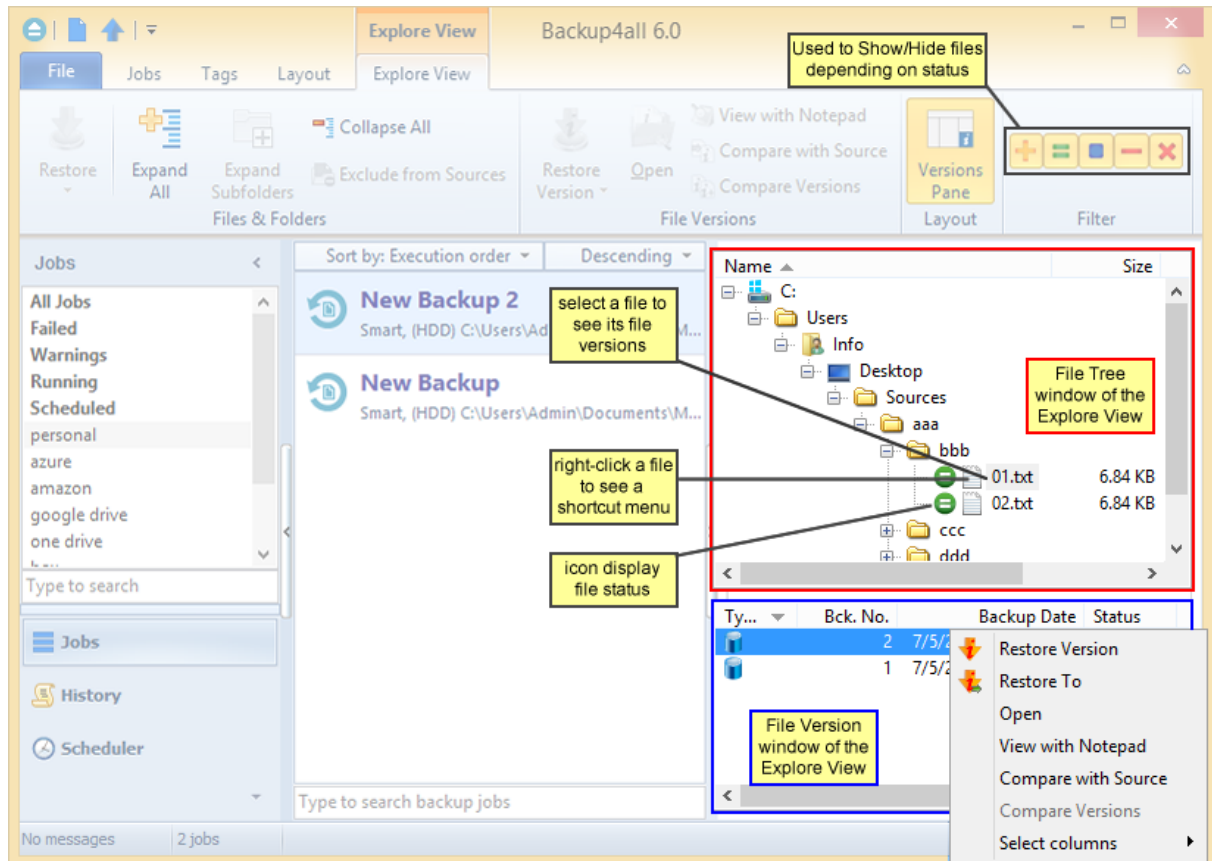
The **Explore View** consists of a File Tree on top and a File Version List at the bottom.

File Tree

The file tree content depends on the backup sources and file filters defined for the selected backup job. You can right-click on the folders and files in the tree to open the same context menu that is available from **Windows Explorer** if the option **Show context menu** from **File- >Options->Preferences** is checked. If that option is unchecked, the right-click operation will display only the **Restore Latest Version** and **Restore Latest Version to**... You can select multiple files.

Be careful about handling files in the **Explore** view with the **Show context menu** option checked: all actions are performed on the hard disk and any deletion will actually remove the file from your hard disk!

Beside the **Windows Explorer** context menu items, there are also two custom menu items, which

enable the restore of the last version of a file: **Restore Last Version** and **Restore Last Version To...**

If you want to exclude a file/folder from the backup sources, you can right-click that file/folder and choose **Exclude from backup sources** option. This action will uncheck the file/folder in Backup Properties->Sources.

The file tree shows the last modified date, size and attributes for each file in additional columns. This information is the same as shown in **Windows Explorer**. You can sort the files by name, date, size or attributes by simply clicking on the appropriate column header. The files are sorted within their folders. **Size**, **Modified** and **Attributes** columns can be hidden if you right click on the column header and uncheck the names of the columns that you want to remove.

There are seven buttons on top of the file tree that help you show/hide files depending on their status:

If pressed, files that will be added to the backup are shown in the tree. All files with this status will have picture in front of them.

If pressed, files that have not been changed since last backup are shown in the tree. All files with this status will have picture in front of them.

If pressed, files that have been changed since last backup are shown in the tree. All files with this status will have picture in front of them.

If pressed, files that are already present in backup and are now excluded by new changes in file filter are shown in the tree. All files with this status will have picture in front of them.

If pressed, files that have been deleted from hard disk are shown in the tree. All files with this status will have picture in front of them.

If pressed, all directories in the tree will be expanded. For a large number of files and directories, this operation can take a longer time. Press the ESC key to stop the process.

If pressed, all directories in the tree will be collapsed.

If you do not want to see empty folders when clicking on **Expand all**, check **Hide empty folders on expand all** in the **File->Options->Preferences** window and check **Hide empty folders on expand all**. The tree will show only folders containing at least one file.

There is an easy way to search for a file in the files and folder tree: <u>simply start typing the file's name and the matching file name will be selected</u>. Only files that are visible in the tree are found, so if you want to search in all files, you have to do an **Expand all** first.
If you want to see <u>only the backed up files</u> press these buttons:
For the <u>files that will be added to the next backup</u> press:

File Version List

If a file is selected in the tree, at the bottom of the view, you can see the list of the file's versions from the backup. Information provided for each version:
- **Type** - Type of the Backup. Each of the backup types is represented by a descriptive icon:

Full, Incremental, Differential, Mirror
- **Ver.** - File version number
- **Bck. No.** - Number of the backup
- **Backup Date** - Date and time when the version was added to the backup
- **Status** - Status of operation performed on that file version (added, excluded...)
- **Size** - Size of the file version
- **Modified** - Date and time when the file version was last modified (at backup execution)
- **Attributes** - Attributes of the file version at backup execution (read-only, hidden, archive). This column is hidden by default
- **Bkc. Label** - Label of the backup increment. This column is hidden by default

The file versions in the list can be sorted by clicking on the column headers. The right-click menu on the column header provides a handy way to show/hide unnecessary columns (except the **Version** column which is grayed out).

Backup4all provides an easy way to restore any file version. Just right-click on the file version you want to restore and:
- choose **Restore version** if you want to restore the version in the original location
- choose **Restore to** if you want to restore the version in another location
- choose **Open** if you want to open/view that version of the file with the associated **Windows** application
- choose **View with Notepad** if you want to open/view that version of the file with **Notepad**
- choose **Compare with source** if you want to compare the selected version with the existing source
- choose **Compare versions** if you want to compare the selected versions
- choose **Select columns** to enable/disable the columns displayed

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.6 Backup View

You can activate **Backup** view by:
- pressing the **Backup** button from the **Jobs** tab
- pressing **CTRL + F2** keyboard shortcut
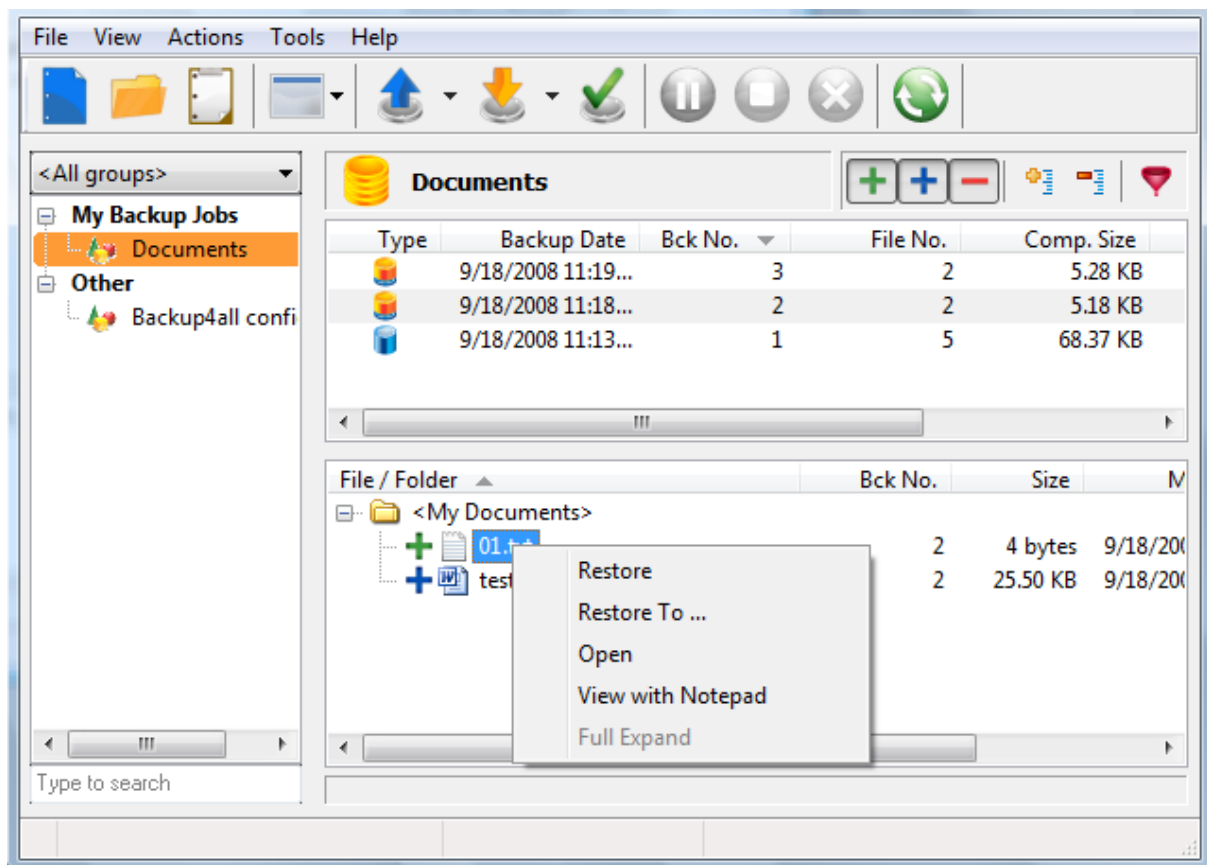
The **Backup View** consists of a <u>Backup Version List on top</u> and a <u>File Tree at the bottom</u>.
Above the Backup versions list, there is a "search for files" field. Here you can type the name of the file/folder you are looking to restore, in order to easily find its location.

<u>Backup Version List</u>

If a backup version is selected, at the bottom of the view, you can see the list of the files in that backup and their status before that backup. Information provided for each version:

- **Type** - Type of the Backup. Each of the backup types is represented by a descriptive icon: Full, Incremental, Differential, Mirror
- **Backup Date** - Date and time when the backup was created
- **Bck No.** - Number of the backup
- **File No. -** Number of files in that backup
- **Folder No. -** Number of folders in that backup
- **Comp. Size -** Compressed size of the file version
- **Uncomp. Size -** Uncompressed size of the file version
- **Label** - Label of the backup increment.

The backup version list can be sorted by clicking on the column headers. The right-click menu on the column header provides a handy way to show/hide unnecessary columns (except the **Type** column which is grayed out).

Backup4all provides an easy way to restore or test a backup version. Just right-click on the backup version and:

- choose **Restore Latest Version** if you want to restore the version in the original location
- choose **Restore Latest Version To...** if you want to restore the version in another location
- choose **Test** if you want to test that backup version
- choose **View Backup Log** if you want to open/view that log with the selected log viewer. Initially the default text editor is used.

File Tree

The file tree content depends on the files from the selected backup version. You can right-click on the folders and files in the tree to open a menu that allows you to choose the following options:

- **Restore** if you want to restore the version in the original location
- **Restore to...** if you want to restore the version in another location
- **Open** if you want to open/view that version of the file with the associated **Windows** application
- **View** with **Notepad** if you want to open/view that version of the file with **Notepad**
- **Full expand** to expand all the tree

The file tree shows the file/folder name, bck no. size, last modified date, attributes and status for each file in additional columns. You can sort the files by simply clicking on the appropriate column header. The files are sorted within their folders. Except **File/Folder**, each column can be hidden if you right click on the column header and uncheck the names of the columns that you want to remove.

There are seven buttons on top of the file tree that help you show/hide files depending on their status:

 If pressed, files that were added to the backup as new are shown in the tree. All files with this status will have picture in front of them.

 If pressed, files that were added to the backup as modified are shown in the tree. All files with this status will have picture in front of them.

 If pressed, files that had been in backup and were excluded by new changes in file filter are shown in the tree. All files with this status will have picture in front of them.

 If pressed, all directories in the tree will be expanded. For a large number of files and directories, this operation can take a longer time. Press the ESC key to stop the process.

 If pressed, all directories in the tree will be collapsed.

 If pressed, the Filter window will be shown. Use this option to filter the files displayed in the tree.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.7 Statistics View

You can activate **Statistics** view by:

- pressing the **Statistics** button from the **Jobs** tab

- pressing the **F3** keyboard shortcut
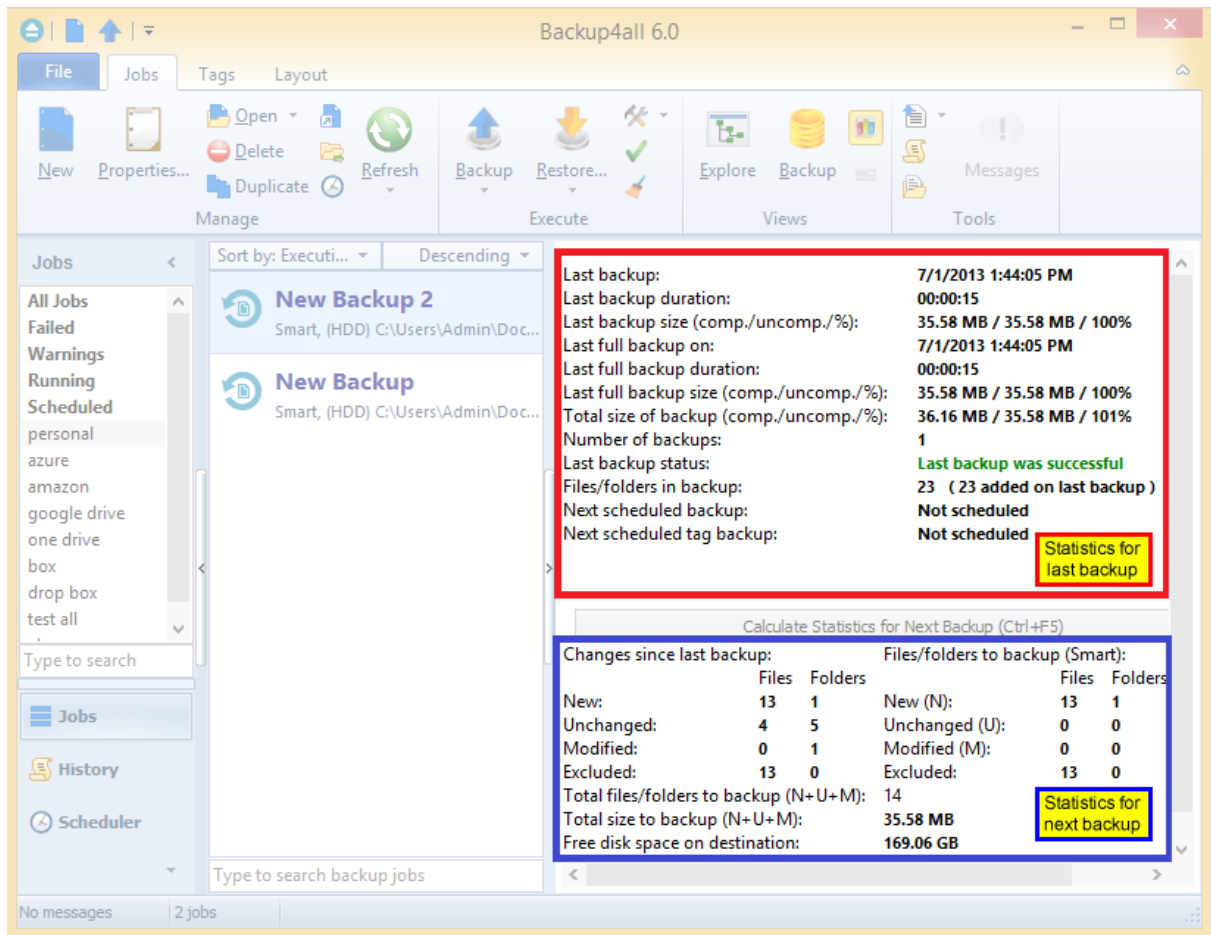
This view provides statistical information about the last backup performed and calculates statistics about the next backup, based on the current backup job configuration.

Information list:

Last backup on
Date and time of the last backup

Last backup duration
Shows the duration of the last backup execution

Last backup size
Shows the size of the last backup (compressed) / size of all files present in backup (uncompressed) / compression percentage

Last full backup on (not displayed for mirror backup type)

The date and time when the last full backup was executed. Note that the first backup is always a full backup, even if the backup type is set to incremental or differential.

Last full backup duration (not displayed for mirror backup type)
Shows the duration of the last full backup execution

Last full backup size (not displayed for mirror backup type)
Shows the size of the last full backup (compressed) / size of all files present in backup (uncompressed) / compression percentage.
For example 10 MB/30 MB/33% means that the size of the last full backup was 10 MB, the uncompressed size of the files backed up was 30 MB and the compression ratio was 33%.

Total size of backup (not displayed for mirror backup type)
Total size of the backup takes into consideration all backup increments, ".bkc" file and any folders that might have been created. It shows the total size after compression / without compression / compression percentage For mirror backup the compressed values are not shown, because there is no compression.

Number of backups
Number of times the backup job was executed

Last backup status
Displays the following information:
- **Last backup** was successful when everything went OK
- **Last backup failed** when the backup was aborted due to an error
- **Last backup had <X> warnings when the backup was done, but <X> files could not be backed up**
- **Last backup was canceled** when the user canceled the backup execution

Files/folders in backup
Shows the number of files in the backup. The number between the brackets is for the files added at the last backup. For full backup the number of files added to the last backup will be always the same with the total number of files. The same for mirror backup without the **Fast mirror** option activated.

Statistics for next backup:

The **Calculate Statistics for Next Backup (Ctrl+F5)** button will start counting the new, modified, unchanged and excluded files since the last backup execution. The counters will be shown in the labels below, divided into two sections: Files to backup containing the counters for the files that will be added to the next backup, and Changes since last backup containing the counters for the files changed since the last backup. For a large number of files, counting can be time consuming. If you want to stop the counting process press the Cancel button from the toolbar. **Calculate Statistics for Next Backup (Ctrl+F5)** uses the catalog file (".bkc"). If this catalog is on a CD, DVD or Blu-ray disc and you enter a previous backup version, the counters will be different. Files to backup counters are calculated depending on the backup job settings: backup type, <Clear backup> action etc. Changes since last backup counters are always the same no matter the backup job settings.

Files/Folders to backup
For full and differential backup types these counters are calculated based on the changes since the last full backup.For the incremental backup type, the counts are based on the changes since the last backup (differential, full or incremental).

New files/folders
The number of new files/folders that will be added to backup. For mirror backup (with the Fast mirror option unchecked), the new files/folders counter equals the total number of files/folders.

Unchanged files/folders
Shows the number of unchanged files/folders to be added to backup. For differential, incremental and mirror backup with **Fast mirror** option unchecked, this number will always be 0.

Modified files/folders
Shows the number of modified files/folders to be added to backup. For mirror backup (with the "Fast mirror" option unchecked), this number will always be 0.

Excluded files/folders
Shows the number of excluded files/folders, which will be removed from the backup.

Changes since last backup
Counts the changes since the last backup, regardless of the backup settings

New files/folders
Shows the number of new files/folders since last backup.

Unchanged files/folders
Shows the number of unchanged files/folders since last backup.

Modified files/folders
Shows the number of modified files/folders since last backup.

Excluded files/folders
Shows the number of excluded files/folders. A file/folder gets excluded because of the changes in file/folder filter or because it was deleted or moved from the backup sources.

Total files/folders to backup
Shows the total number of files and folders that will be added to backup next time. This should be the sum of the new, modified and unchanged file and folder counters.

Total size (uncompressed) to backup
Shows the sum of all file sizes to be included in the backup next time it is executed.

Free disk space on destination
Shows the available free disk space on the destination drive.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.8 Progresss View

You can activate the **Progress** view by:
- pressing the **Progress** button from the **Jobs** tab
- pressing the **CTRL+F3** keyboard shortcut

Please note **Progress** view is active only when the backup is running. When the backup is not running, that option is grayed out.
When the backup is started, Backup4all will switch automatically to **Progress** view and after the backup is done it will switch back to your previous view.
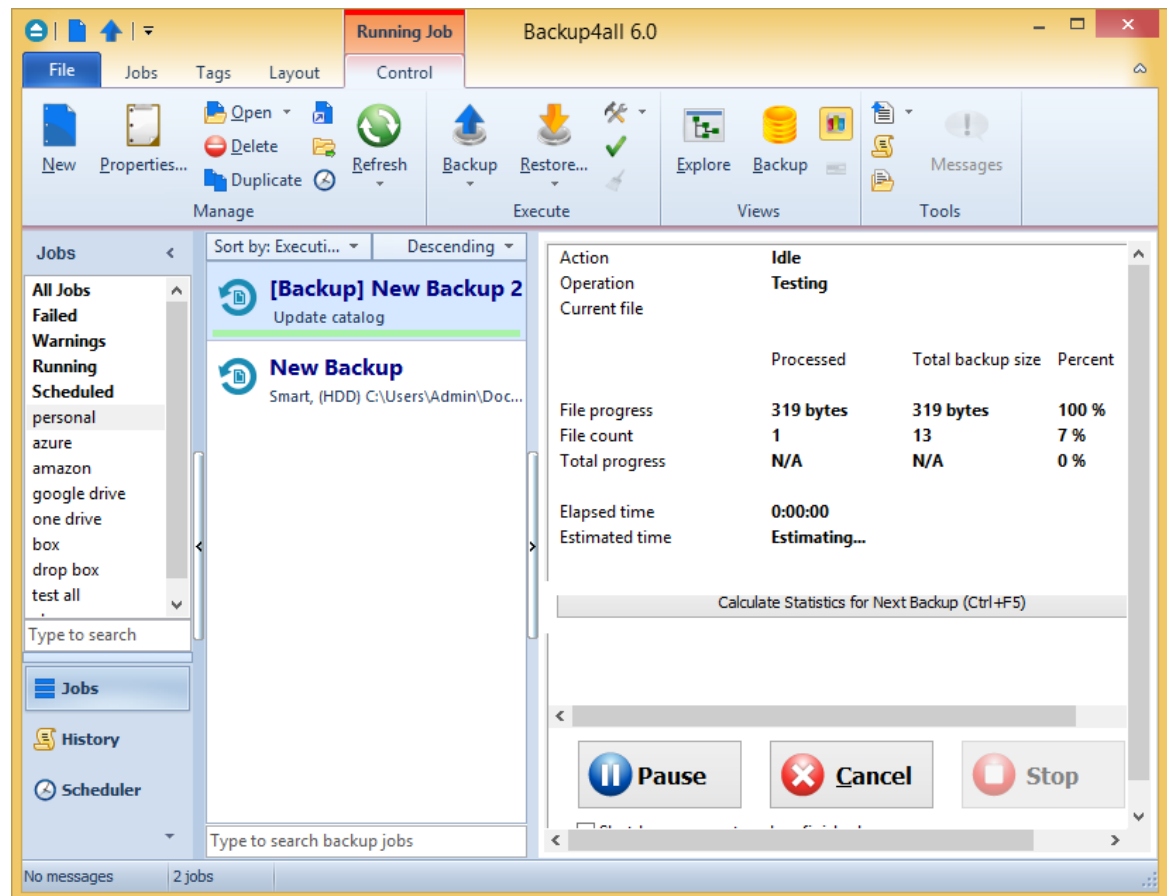
Action: Indicate the action in progress: Backup, Restore, Test, Clean

Operation: Indicate the operation in progress: Creating file list, Updating catalog, Testing backup etc

Current file: Displays the current file processed

On the Progress view page you can also see the file progress, file count, total progress, elapsed time

and estimate time.
The Pause, Cancel and Stop buttons at the bottom of Progress view can be used for a better control of the backup jobs.

Shutdown computer when finished
If checked, at the end of the backup/test/repair/restore execution, the computer will shutdown. It is useful for longer backups when the user does not want to wait til the end of the process.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.9 Open backup

There are two ways to open a backup job in Backup4all.
- You can open the backup catalog (.bkc) or ini file using the **Open** command from **Files** menu. You just need to browse your computer and indicate the catalog or ini file location.

You can open the backup catalog (.bkc) or ini file using the **Open From** command from **Files** menu. This option is recommended to be used if the catalog is located on a network location or on an FTP/SFTP/Azure/Amazon S3 server/Google Drive/OneDrive/Box/Dropbox, but can also be used for local hard drives.

Open from a local hard drive

Use this page if the catalog is on a local hard drive. Browse your computer and indicate the folder containing the catalog(s) or ini file(s).
Press **Show** to display the folders and selected file types (.bkc or ini). Press **Scan** to display a list of only .bkc/ini files from all folders and subfolders in that location.

Open from a network drive

Use this page if the catalog is on a network drive. Select the network location and enter the username/password if necessarily.
Press **Show** to display the folders and selected file types (.bkc or ini). Press **Scan** to display a list of only .bkc/ini files from all folders and subfolders in that location.

Open backup from an FTP server

Use this page if the catalog is on an FTP server. Configure the FTP server or choose an existing configuration.
Press **Show** to display the folders and selected file types (.bkc or ini). Press **Scan** to display a list of only .bkc/ini files from all folders and subfolders in that location. Here you can see how to configure the FTP server.

Open backup from an SFTP server

Use this page if the catalog is on an SFTP server. Configure the SFTP server or choose an existing configuration.
Press **Show** to display the folders and selected file types (.bkc or ini). Press **Scan** to display a list of only .bkc/ini files from all folders and subfolders in that location. Here you can see how to configure the SFTP server.

Open backup from Azure storage

Use this page if the catalog is located on Azure server. Configure Azure or choose an existing configuration.
Press **Show** to display the folders and selected file types (.bkc or ini). Press **Scan** to display a list of only .bkc/ini files from all folders and subfolders in that location. Here you can see how to configure Azure.

Open backup from Amazon S3 storage

Use this page if the catalog is located on Amazon S3. Configure the Amazon S3 storage or choose an existing configuration.
Press **Show** to display the folders and selected file types (.bkc or ini). Press **Scan** to display a list of only .bkc/ini files from all folders and subfolders in that location. Here you can see how to configure the Amazon S3 storage.

Open backup from Google Drive

Use this page if the catalog is located on Google Drive. Configure Google Drive or choose an existing configuration.
Press **Show** to display the folders and selected file types (.bkc or ini). Press **Scan** to display a list of only .bkc/ini files from all folders and subfolders in that location. Here you can see how to configure Google Drive.

Open backup from OneDrive

Use this page if the catalog is located on OneDrive. Configure OneDrive or choose an existing configuration.
Press **Show** to display the folders and selected file types (.bkc or ini). Press **Scan** to display a list of only .bkc/ini files from all folders and subfolders in that location. Here you can see how to configure OneDrive.

Open backup from Box

Use this page if the catalog is located on Box. Configure Box or choose an existing configuration.
Press **Show** to display the folders and selected file types (.bkc or ini). Press **Scan** to display a list of only .bkc/ini files from all folders and subfolders in that location. Here you can see how to configure Box.

Open backup from Dropbox

Use this page if the catalog is located on Dropbox. Configure Dropbox or choose an existing configuration.

Press **Show** to display the folders and selected file types (.bkc or ini). Press **Scan** to display a list of only .bkc/ini files from all folders and subfolders in that location. Here you can see how to configure Dropbox.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

Related Topics:

FTP - Edit Configuration
SFTP - Edit Configuration
Azure - Edit Configuration
Amazon - Edit Configuration

5.10   Test

The backup test is meant to ensure the validity and the integrity of the backup files and the backup catalog. During test, all files and folders from destination will be tested to make sure they were safely copied. The files in destination are not compared with the backup sources but with the information stored in backup catalog.

The **Test** window can be opened from the **Jobs** tab, by pressing the **Test...** button or by pressing the F9 keyboard shortcut. It lists all the available information about the backup versions of the current backup job.
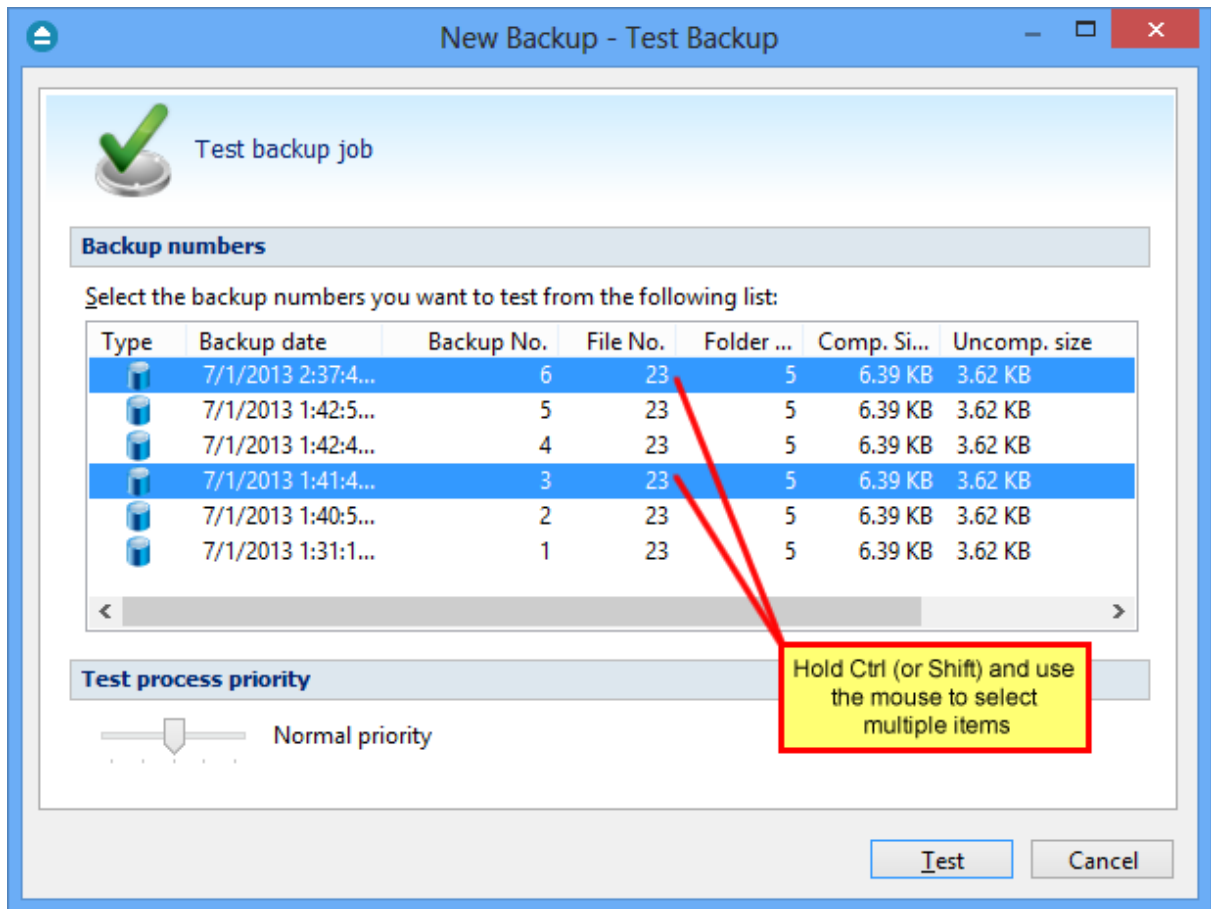
When you open the window all the backup versions that can be tested are selected. You can select/deselect multiple backup versions you want to be tested using batch selection on that list. To define the selection, keep the **Shift** key pressed and use the up and down arrow keys from your keyboard or the mouse. If you want to select multiple individual items, press and hold the **Ctrl** key and select using the mouse the items you want tested.

There are several columns in the **Test** window that provide information for each backup version:

- **Type** - Type of the backup. Each of the backup types is represented by a descriptive icon: Full, Differential, Incremental, Mirror
- **Backup date** - Date and time when the version was added to the backup
- **Backup No.** - Number of the backup
- **File No. -** Number of files included in that backup
- **Folder No. -** Number of folders included in that backup
- **Comp. Size -** The compressed size of the backup
- **Uncomp. Size -** The uncompressed size of the backup
- **Label** - Label of the backup increment.

The backup versions in the list can be sorted by clicking on the column headers. The right-click menu on the column header provides a handy way to show/hide unnecessary columns (except the **Type** column which is grayed out).

Using the **Priority** slider you can set the test execution speed compared to the rest of the running processes on your computer. Default is **Normal priority**, but there are other 4 priority levels: **Lowest priority**, **Low priority**, **High priority** and **Highest priority**. On Lowest priority the test process will consume the minimum amount of computer resources but will take the longer to complete, while **Highest priority** will consume the highest amount of computer resources but will take the least to complete.

To test the selected backup versions press the **Test** button, or press **Cancel** (or the **Escape** key) to close the window.

After finishing the test, a pop-up message is displayed with the test results:
- **Testing <backup name> found no errors** - means that there are no corrupted/missing files in the backup
- **Testing <backup name> found error(s). Do you want to see the log file?** - means that some files are corrupted or missing from the backup; you should press **Yes** to see the test log file (also available from the **Jobs** tab, **History** section, **View Log->Last Test Log**)

Backup4all has also the option to test the files automatically after backup. This option is checked by default and it is recommended to leave it this way. However, if you want to modify it, you can find the Test after backup option in the Backup Properties- >Advanced window for the selected backup job.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.11   Clean backup

The **Clean backup** window can be opened from the **Jobs** tab by pressing the **Clean** button. It gives options to delete backup numbers based on certain criteria.
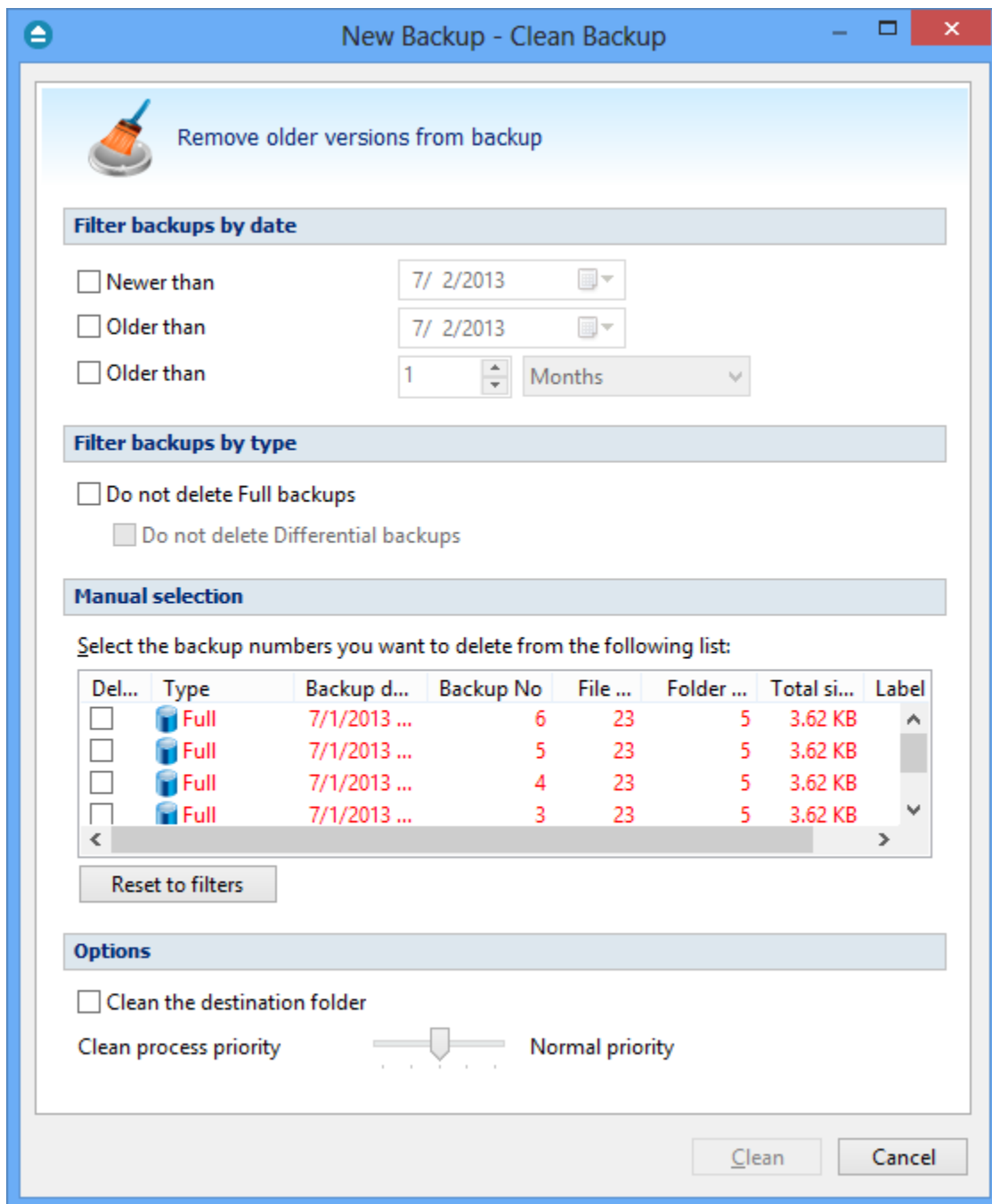
When you open the window all the backup numbers are displayed. You can either manually check multiple backup numbers you want deleted or use the filter options to have them automatically selected if they match a certain criteria. Once you select a type of backup, if there are other backup numbers depending on it, they will be selected too. For instance, selecting a Full Backup (marked with red in the list) will also batch select the other incremental or differential backup numbers that depend on the selected full backup (to keep some of the backup numbers that depends on the full backup, you will have to start unselecting them in the order they were created).
Please note that when you delete a certain backup number using the Clean Backup tool, all the files in the destination that were created for that backup number will be removed.

There are several columns in the **Clean Backup** window that provide information for each backup number:

- **Delete** - Shows if a backup number is selected for deletion. You can manually check/uncheck the backup numbers you want deleted. Once selecting a backup number all the other backup numbers that depend on it will also be selected.
- **Type** - Type of the backup. Each of the backup types is represented by a descriptive icon and text: 📦 Full, 📦 Incremental, 📦 Differential, 📦 Mirror. Additionally, full backups are marked with red.
- **Backup No.** - Number of the backup
- **Backup date** - Date and time when the backup was executed
- **File No.** - Number of files included in that backup
- **Folder No.** - Number of folders included in that backup
- **Total size** - Size of the backup
- **Label** - Label of the backup increment.

The backup numbers in the list can be sorted by clicking on the column headers. The right-click menu on the column header provides a handy way to show/hide unnecessary columns.

You can select a backup number by right-clicking it and choosing **Check Selected** (or uncheck it using **Uncheck Selected**). The right-click menu also allows selecting all backup numbers (**Check all**) or unselecting them (**Uncheck all**).

Using the **Priority** slider you can set the execution speed compared to the rest of the running processes on your computer. Default is **Normal priority**, but there are other 4 priority levels: **Lowest priority**, **Low priority**, **High priority** and **Highest priority**. On **Lowest priority** the process will consume the minimum amount of computer resources but will take the longer to complete, while **Highest priority** will consume the highest amount of computer resources but will take the least to complete.

Filter backups by date

Newer than
If checked backup numbers that are newer than the selected date will be removed when the Clean operation is executed.

Older than
If checked backup numbers that are older than the selected date will be removed when the Clean operation is executed.

Older than (fixed date)
The backup numbers that are Older than a certain fixed date will be deleted when the Clean operation is executed.

Filter backups by type

Do not delete Full backups
If this is checked, the full backups will be kept even if they fall into the range of files filtered for deletion.

Do not delete Differential backups
If this is checked, the differential backups will be kept even if they fall into the range of files filtered for deletion. Note that this option is available only when **Do not delete full backups** is checked, because differential backups depend on full backups.

<u>**Manual selection**</u>

In this section you can manually select the backup versions you want to delete by clicking the checkbox in front of the backup version.

Reset to filters
Pressing this will ignore any manual selection done and restore the default selection based on the filters applied.

<u>**Options**</u>

Clean the destination folder
Deletes any files and folders inside the destination folder even if they are not related to the backup job.

Clean process priority
Using the **Priority** slider you can set the test execution speed compared to the rest of the running processes on your computer. Default is **Normal priority**, but there are other 4 priority levels: **Lowest priority**, **Low priority**, **High priority** and **Highest priority**. On Lowest priority the test process will consume the minimum amount of computer resources but will take the longer to complete, while **Highest priority** will consume the highest amount of computer resources but will take the least to complete.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.12   Erase CD/DVD/Blu-ray

The **Erase CD/DVD/Blu-ray** window can be opened from the **File->Tools->Erase disc** menu item.
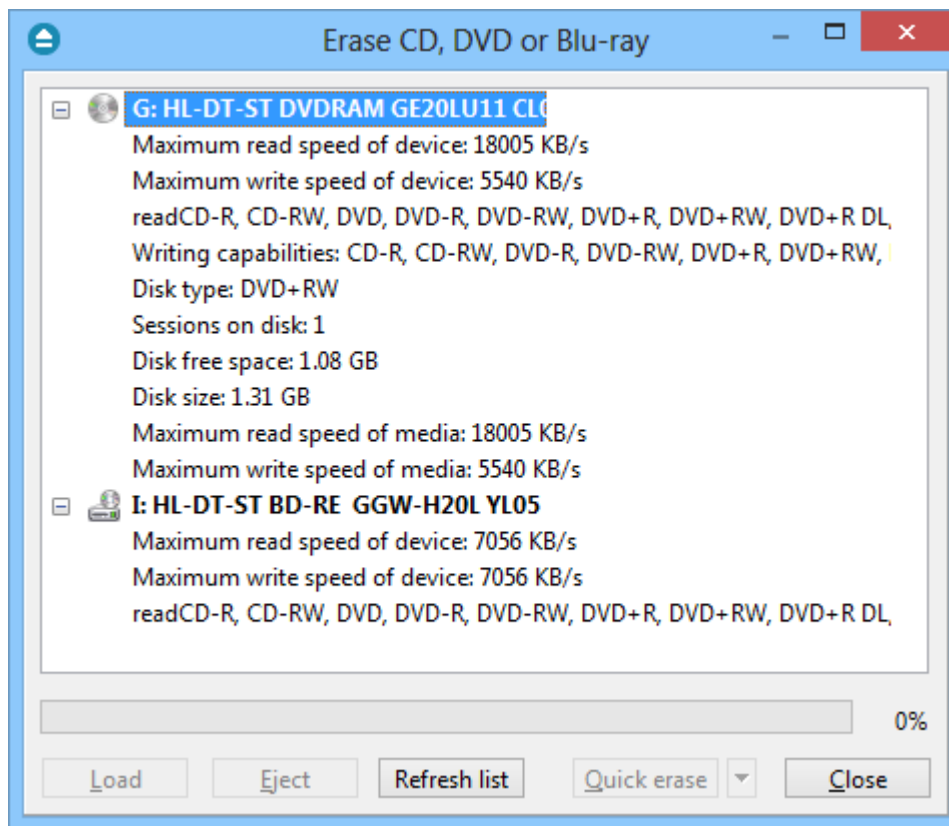
When the window is shown, devices capable of writing to CD, DVD or Blu-ray disc are listed in it. The first device from the list is selected by default.

A summary of properties is shown for each device (calculated by Backup4all's internal burner):

- **Maximum read speed of device** - shows the maximum reading speed of the device (kb/s)
- **Maximum write speed of device** - shows the maximum writing speed of the device (kb/s)
- **Reading capabilities** - displays a list of media the device can read from
- **Writing capabilities** - displays a list of media the device can write to
- **Disk type** - shows the type of media inserted
- **Sessions on disk** - number of sessions on the disk
- **Disk free space** - free space on disk
- **Disk size** - total size of disk
- **Maximum read speed of media** - maximum reading speed of media
- **Maximum write speed of media** - maximum writing speed of media

When an erase is performed, the progress bar shows the percentage of the operation completed.

Options

Load

Closes the CD/DVD/Blu-ray tray. The button is enabled only when a device is selected.

Eject

Opens the CD/DVD/Blu-ray tray. The button is enabled only when a device is selected.

Refresh list
Will reload all information about the CD/DVD/Blu-ray burners.

Quick erase
Erases the CD/DVD/Blu-ray disc. Additional options are available in the combo:
- **Quick erase** - disk appears to be empty, but the data is not physically erased (selected by default)
- **Full erase** - will physically erase all data on disk. Takes longer to perform

Close
Closes the Erase CD/DVD/Blu-ray window.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.13   Plugins

Backup4all includes a plugin manager that can be found in **File->Tools->Plugins.** The Manage Plugins window allows you to download, add, remove, enable or disable the Backup4all plugins.
After installing a plugin, you can use it on the **What do you want to backup page** when creating a new backup job using the **New Backup Wizard** or on the **Sources** page using **Advanced mode** (Backup Properties).
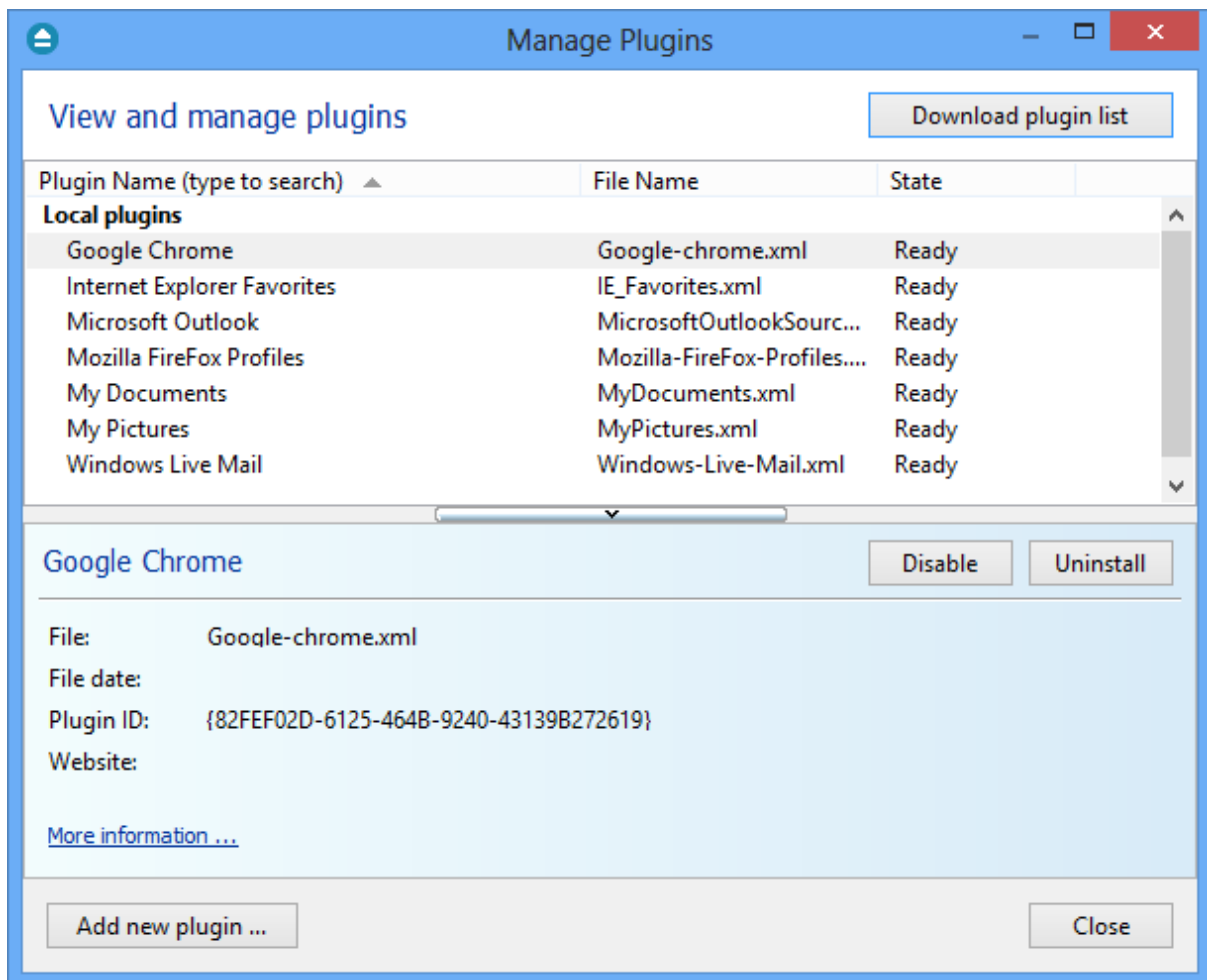
Download plugin list
Pressing this button will download and show the list of all available plugins available on our website.

Install
This button appears when you select a plugin which is not installed on your computer. Pressing the **Install** button will download and enable the selected plugin.

Uninstall
This button appears when you select a plugin which is installed on your computer. Pressing the **Uninstall** button will delete the selected plugin from your computer.
If you try to uninstall a backup plugin which is in use by any of the backup jobs from Backup4all, you will get a warning message that the plugin cannot be deleted as it is used in backup jobs.

Disable
This button appears when you select a plugin which is installed and enabled on your computer. Pressing the **Disable** button will disable the plugin, it will not appear in the backup wizard anymore, but the plugin remains on your computer.

Enable

This button appears when you select a plugin which is installed but not enabled on your computer. Pressing the **Enable** button will activate the selected plugin on your computer so it will be visible in the backup wizard.

Add new plugin ...
Press this button to install a new backup plugin.
You will be asked to select the plugin file location from your computer. Multiple plugin files can be selected and open.

Close
Press this button to close the Manage Plugins window.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.14 Logging

Backup4all provides a log engine that helps you track the backup, restore, test, clean and calculate statistics operations. It is composed of four subsystems: backup logging, restore logging, test logging and cleanup logging. Log files are accessible from the **Jobs** tab, **History** section.

For each operation the system logs:
- start time and date
- the operation
- errors or warnings
- end time and date

The **File->Options->Logs and history** configuration window provides additional options that you can select to further customize the logging process.

Content

Log detailed information
If this option is enabled, the logs will contain information about every file used in the backup, restore or test process.

Include summary in log
If this option is checked, the logs will include all the text available in the **Summary** view.

Log folder

After a long period the application will generate a large number of log files. Since all the log files are stored in the same folder, the system has an option to limit the size of the log folder. Just select **Restricted to** and choose a **Size** and **Unit** for the log folder (default is 10MB). If the log file of the running backup job is larger than the limit, it will still be stored in the log folder. When the same

operation will run again, the previous log file will be deleted.

If you want to keep all log files no matter the size, select the **Unlimited size** option.

Backup Logging

- Checking sources/destination
- Creating file list
- Archiving files
- Merging files
- Burning CD, DVD or Blu-ray
- Saving catalog

Other information added to the logs: the total number of files added to backup, the total size of files added to backup and the number of files excluded.

Restore Logging

Logged operations:

Logged operation (except mirror backup): **Processing zip file**. The total number of restore files is logged and the start/end time of restoring.

Test Logging

Logged operations: **Testing zip file** or **Testing files** (for mirror backup without zip). The result of the operation is also logged.

Cleanup Logging

Logged operations: **Cleanup**. Shows the backup numbers that are deleted and logs the result of the operation.

Calculate statistics logging
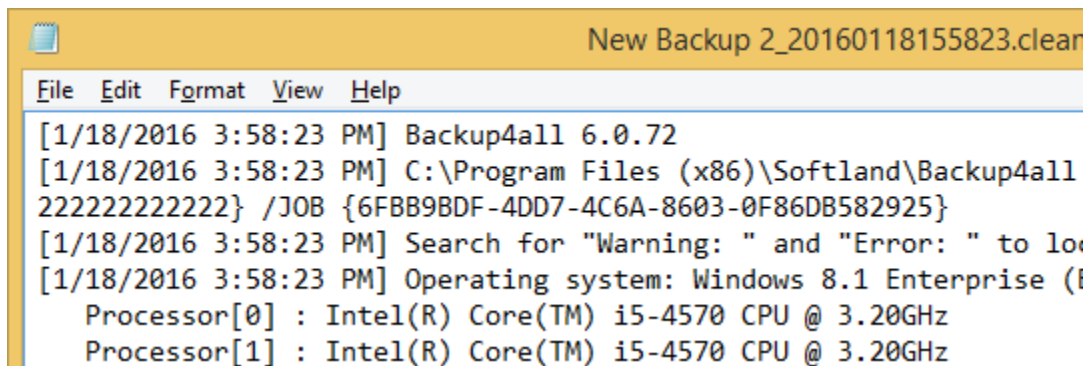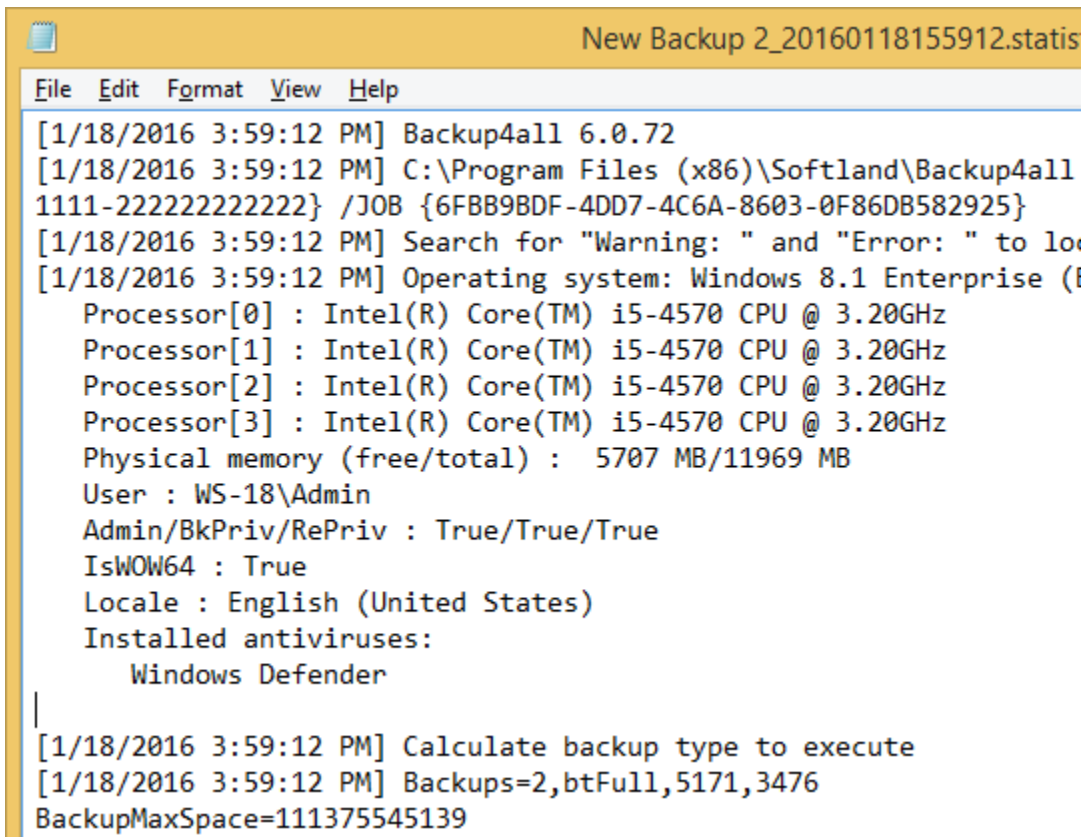
```
New Backup 2_20160118155912.statis

File  Edit  Format  View  Help

[1/18/2016 3:59:12 PM] Backup4all 6.0.72
[1/18/2016 3:59:12 PM] C:\Program Files (x86)\Softland\Backup4all
1111-222222222222} /JOB {6FBB9BDF-4DD7-4C6A-8603-0F86DB582925}
[1/18/2016 3:59:12 PM] Search for "Warning: " and "Error: " to lo
[1/18/2016 3:59:12 PM] Operating system: Windows 8.1 Enterprise (
    Processor[0] : Intel(R) Core(TM) i5-4570 CPU @ 3.20GHz
    Processor[1] : Intel(R) Core(TM) i5-4570 CPU @ 3.20GHz
    Processor[2] : Intel(R) Core(TM) i5-4570 CPU @ 3.20GHz
    Processor[3] : Intel(R) Core(TM) i5-4570 CPU @ 3.20GHz
    Physical memory (free/total) :  5707 MB/11969 MB
    User : WS-18\Admin
    Admin/BkPriv/RePriv : True/True/True
    IsWOW64 : True
    Locale : English (United States)
    Installed antiviruses:
        Windows Defender
|
[1/18/2016 3:59:12 PM] Calculate backup type to execute
[1/18/2016 3:59:12 PM] Backups=2,btFull,5171,3476
BackupMaxSpace=111375545139
```

Logged operations: **Calculate statistics**. Shows the number of files/folders modified since the last backup and also the number of files/folders to be backed up, according with the selected backup type.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.15   System Tray

When is Backup4all shown in the system tray?

Backup4all icon is also shown in tray if the **Show tray icon** option from **File->Options->Startup** is checked. If this option is selected, the tray icon will remain in taskbar after you close the main interface. This way you can easily open the main interface.
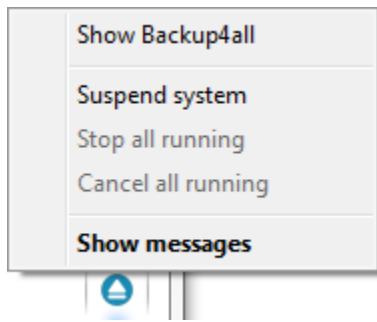
The right-click menu of the tray icon allows to:
- **Show** Backup4all - shows Backup4all's main window
- **Suspend system** - will pause all the Backup4all activity
- **Stop all running** - will stop all running actions
- **Cancel all running** - will cancel all running actions
- **Show messages** - will display all active notification messages

The left click menu of the tray icon displays the following options:
- **Backup4all** - will open the main interface. If there are backup jobs in progress, there is be a message indicating how many jobs are active.
- **Suspend sustem** - will suspend all the application activity
- **Cancel all running** - will stop all running actions
- **Stop all running** - will cancel all running actions
- **Show messages** - will display the **Notifications** window

If the system is suspend, a message will appear on the Backup4all interface: **Backup system is paused.** No actions will be executed while the system is paused.

Tray Icon Hint:
   When backups are executed, restored or tested, the tray icon is animated and the name of the backup jobs are shown in the hint along with the current operation.
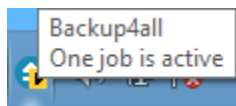
Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

5.16   Keyboard Shortcuts

Keyboard shortcuts configured in Backup4all:

 New backup wizard - **CTRL + N**

Open backup - **CTRL + O**

Backup job properties - **CTRL + P**

- Explore - **F2**
- Backup view - **CTRL + F2**
- Statistics - **F3**

Refresh - **F5**

Execute backup - **F6**

Restore - **F7**

Pause - **CTRL + F8**

Stop - **CTRL + S**

Cancel - **F8**

Test - **F9**

Show New Files - **CTRL + 1**
Show Unchanged Files - **CTRL + 2**
Show Modified Files - **CTRL + 3**
Show Excluded Files - **CTRL + 4**
Show Deleted Files - **CTRL + 5**
Expand All - **CTRL + 6**
Collapse All - **CTRL + 7**
Focus menu - **F10**

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

New Backup Wizard

Part VI

6 New Backup Wizard

6.1 Overview

Using the **New Backup Wizard** you can easily create a new backup job. The steps in wizard must be followed in the given order.

If you want to create a new backup job using advanced options, you can do that by pressing the **Advanced mode** button that will open the **Backup Properties** window. All settings from the **New Backup Wizard** are included in the **Backup Properties**.

The **New Backup Wizard** will be used to create new backup jobs, if the **Use New Backup Wizard to create backup jobs** option (from the **Other** section in **File->Options->Preferences**) is checked. If that option is not checked, the **Backup Properties** will be used to create new backup jobs.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

6.2 Name and destination

In the first step of the **New Backup Wizard** you can configure the backup name and the backup destination.
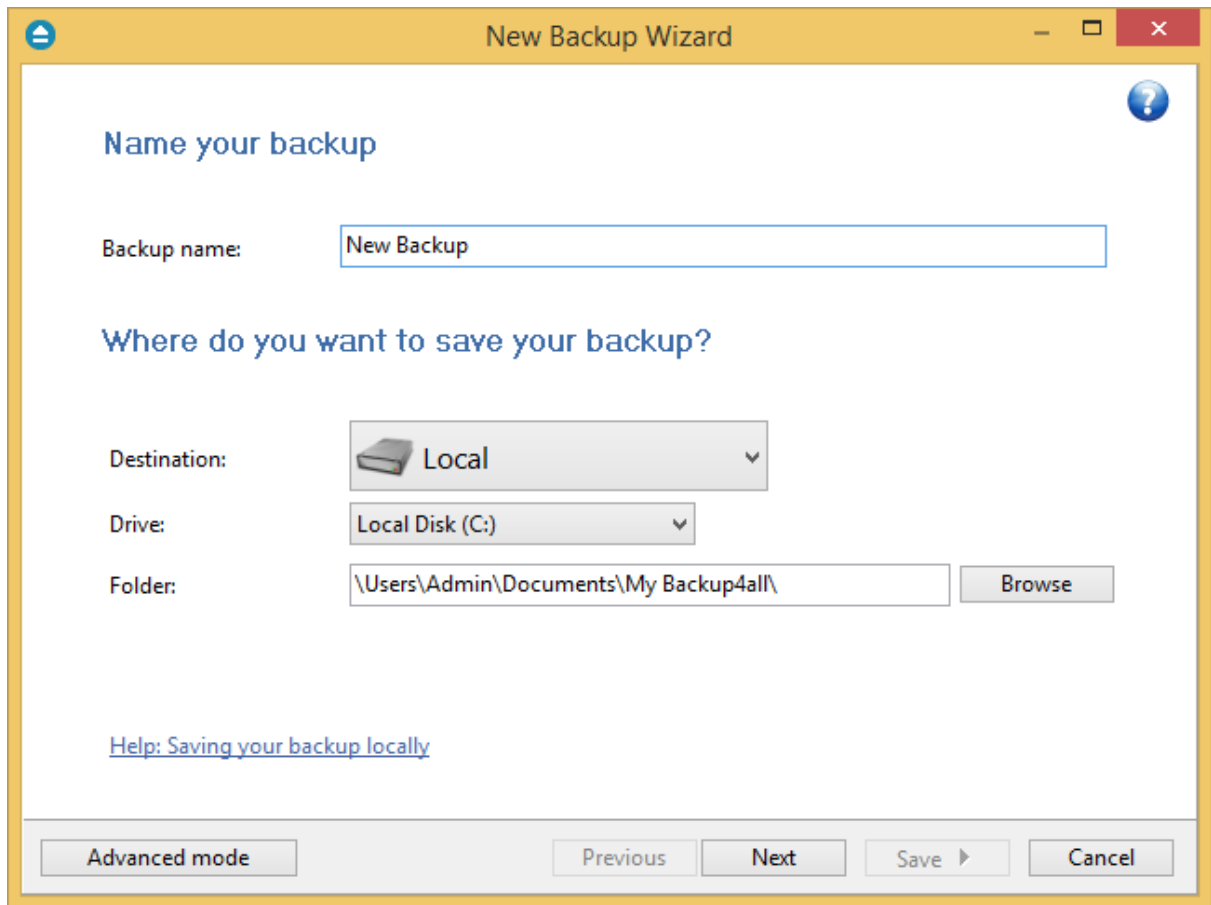
Name your backup

Backup Name
Enter the name of the backup job. This name will appear in the backup list, right under the chosen picture. This field is mandatory.
The name of the backup job is closely related to the name of the subdirectory in destination that contains zipped and mirrored files and to the name of the catalog. That is why when you rename the backup job, the name of the catalog and the name of the subdirectory from destination are also changed if possible.
If the destination is on HDD (local), LAN (network) FTP, SFTP, Azure, Amazon, DropBox, Google Drive, Box or OneDrive (cloud) the name of the subdirectory and the name of the catalog can be changed, except for the case when you do not have enough permissions to rename it, or some files are locked.
If the destination is on a removable disk CD, DVD or Blu-ray disc, floppy disc and you have run the backup job, the catalog and the subdirectory in destination are already created and they will not be changed. If the backup job has not been run yet, then the catalog and the subdirectory will be created with a name similar to the backup job at first backup run.

Where do you want to save your backup

User can select one of the available destinations:
- **Local**: hard disk drive, floppy drive, zip drive, CD/DVD/Blu-ray drive, USB drive, mapped

network drive

- **Network**: UNC network drive
- **FTP**: remote FTP locations
- **SFTP**: remote SFTP locations
- **Azure**: remote Azure location
- **Amazon**: remote Amazon location
- **Google Drive**: cloud Google Drive account

- **OneDrive**: cloud OneDrive account
- **Box**: cloud Box account
- **Dropbox**: could Dropbox account

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

6.2.1 Local

You can use a valid local destination for your backup: hard disk drives, floppy disk drives, zip drives, CD, DVD or Blu-ray drives, USB drives or other removable media.
The **Local** option is selected by default when you define a new backup. From the **Drive** list, you can select either one of your hard disk partitions, mapped network drives, the floppy disk, CD/DVD/Blu-ray drive or other removable drive. By default, the first partition is selected (usually **C:**).
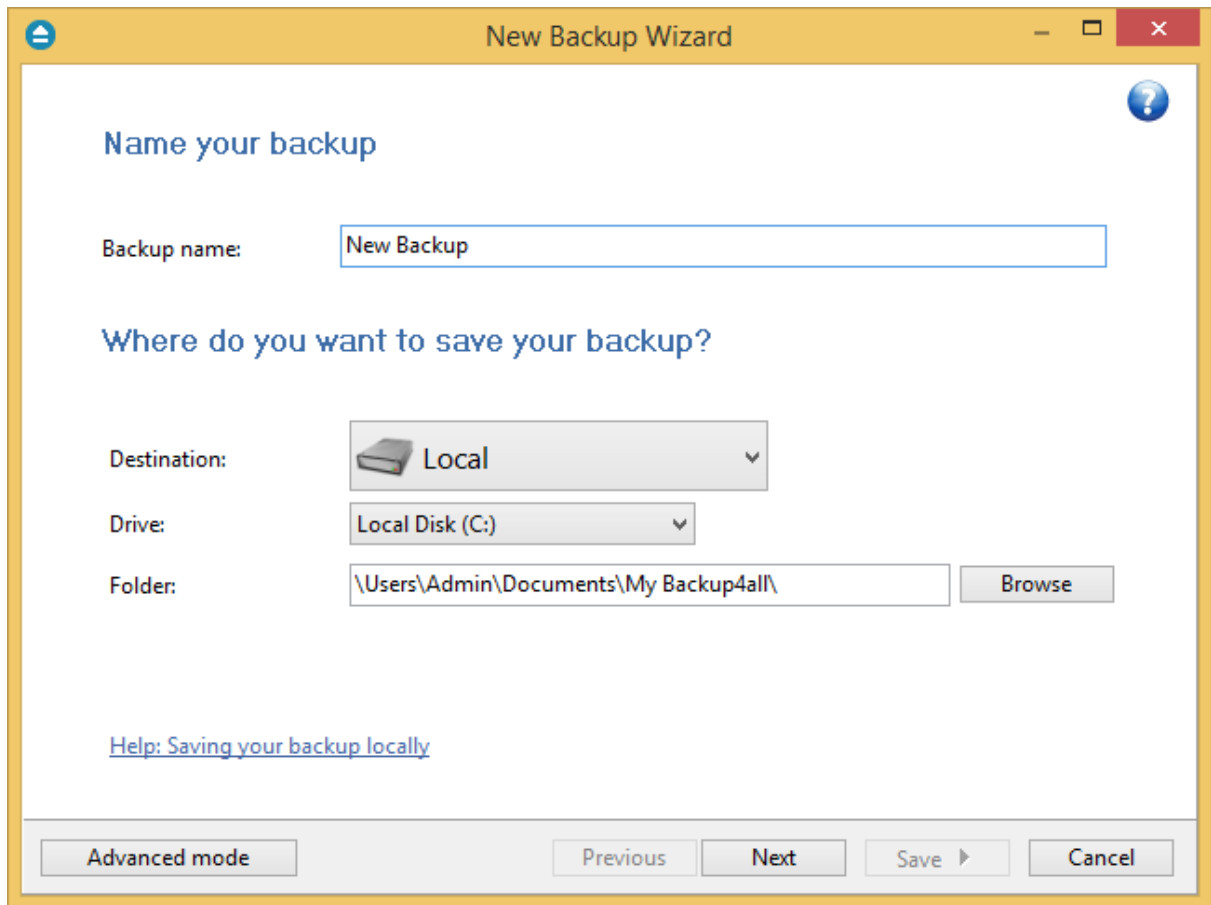
In the **Folder where to perform the backup** field by default it is the path to the **My Backup4all 6** folder (\Users\<user name>\Documents\MyBackup4all 6). You can click the **Browse** button and select a destination folder of your choice where the backup will be stored.

If the destination drive is missing (when the network is disconnected for instance or floppy, CD, DVD or Blu-ray is missing), an error message is shown containing the list of missing drives. The user can choose **Cancel** to stop the backup process or **Retry** to check the drive again.

If an external or removable hard drive is selected as backup destination, in New Backup Wizard near the drive name will appear a new checkbox: **Rotate disks.** That option is used if you want to rotate the destination drives, backing up alternatively on them. Selecting that option will automatically disable the **Use local catalogs** option from Backup Properties->Advanced.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

6.2.2   Network

You can use a network destination for your backup by selecting the **Network** option in the **Where do you want to save your backup?** section.

Click the **Browse** button and go through the **My Network Places** to select a destination where the backup will be stored.

You can also enter network paths in the **Folder** field. Only a full path is allowed. For example, suppose **\\Backup_Server\PC1** is mapped on your workstation as drive **X**, then the following paths are both valid and indicate the same folder: **\\Backup_Server\PC1\Backup** or **X:\Backup**.

Make sure you can write in the destination and in the selected folder (you have the proper rights and the media is not write-protected) before finishing the backup configuration. You can enter an **User name** and **Password** to access the network destination if it requires authentication. If you are logged in as an user that has rights to write to the specified network destination, you can check the **First use Windows auth.** option. What this option does is that it checks on the network destination if the logged in user has rights to access it.

After entering the path and eventually the username and password, use the Test button to see if the destination is reachable and that you have sufficient rights to access it. The **network connection was tested successfully** pop-up message means that the network destination was accessible. In case of insufficient rights the following error message will appear: **Network connection error. Access is denied**. In this case you have to either make sure that the entered username and password values are correct, or contact the network administrator to obtain the necessary rights.

If the destination is missing (when the network is disconnected), an error message is shown.
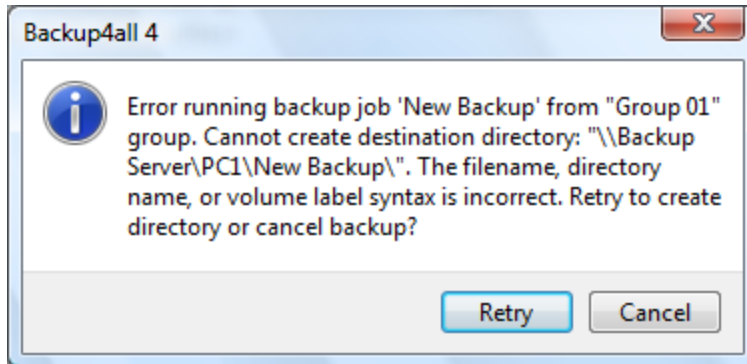
The user can choose **Cancel** to stop the backup process or **Retry** to check the network connection again.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

6.2.3 FTP

Backup4all supports backing up to a remote computer or device using FTP (File Transfer Protocol) connection. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection. Select the **FTP** option from the **Where do you want to save your backup?** section to be able to configure the backup to FTP.

Use configuration
You can select an already defined FTP configuration given that you added one in the **File->Options->FTP** window. All the fields will be filled with the information from the configuration file. If no configuration was previously defined, you will have to enter the other details.

Host / Port
In this field you have to enter the name or IP address for the FTP server and a port if different than the default FTP port (21). The format is host:port; e.g. ftp.Backup4all.com:1002 will backup to ftp. Backup4all.com connecting through port 1002.

Folder
Enter a folder name where the backup files will be stored on the remote computer via FTP. If the folder does not exist, a new one is created with that name. If that field is left blank, Backup4all will automatically create a folder using the name of the backup job and place the backup files in there.

User
In this field you can enter the user name for the FTP server.

Password
Type the password used for FTP server access.

There are FTP servers that allow anonymous access (public FTP servers). You can connect to these types of FTP servers using as user name Anonymous and your email address as password. It is not recommended to backup important files to public FTP servers.

By pressing the **Test** button you can check to see if the settings you have entered are correct. If the test was successful, The ftp connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

6.2.4 SFTP

Backup4all supports backing up to a remote computer or device using SFTP (SSH File Transfer Protocol) connection. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection. Select the **SFTP** option from the **Where do you want to save your backup?** section to be able to configure the backup to SFTP.

Use configuration
You can select an already defined SFTP configuration given that you added one in the **File->Options-**

>SFTP window. All the fields will be filled with the information from the configuration file. If no configuration was previously defined, you will have to enter the other details.

Host / Port
In this field you have to enter the name or IP address for the SFTP server and a port if different than the default SFTP port (22). The format is host:port; e.g. ftp.Backup4all.com:1002 will backup to ftp. Backup4all.com connecting through port 1002.

Folder
Enter a folder name where the backup files will be stored on the remote computer via SFTP. If the folder does not exist, a new one is created with that name. If that field is left blank, Backup4all will automatically create a folder using the name of the backup job and place the backup files in there.

User
In this field you can enter the user name for the SFTP server.

Password
Type the password used for SFTP server access.

There are SFTP servers that allow anonymous access (public SFTP servers). You can connect to these types of SFTP servers using as user name Anonymous and your email address as password. It is not recommended to backup important files to public SFTP servers.

By pressing the **Test** button you can check to see if the settings you have entered are correct. If the test was successful, The SFTP connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

6.2.5   Azure

Backup4all supports backing up to Azure remote server. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection. Select the **Azure** option from the **Where do you want to save your backup?** section to be able to configure the backup to Azure.

Use configuration

You can select an already defined Azure configuration given that you added one in the **File->Options->Azure** window. All the fields will be filled with the information from the configuration file. If no configuration was previously defined, you will have to enter the other details.

Account name

In this field you have to enter the Azure account name.

Key

Type the key for your Azure account
If the key is Shared Access Signature, you need to also select that option.

Container

In this field you can type the Azure container name where the backup files will be uploaded.

Folder

Enter a folder name where the backup files will be stored on the Azure server. If the folder does not exist, a new one is created with that name. If that field is left blank, Backup4all will automatically create a folder using the name of the backup job and place the backup files in there.

By pressing the **Test** button you can check to see if the settings you have entered are correct. If the test was successful, The Azure connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

6.2.6   Amazon

Backup4all supports backing up to Amazon S3. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection. Select the **Amazon** option from the **Where do you want to save your backup?** section to be able to configure the backup to Amazon.

Use configuration
You can select an already defined Amazon configuration given that you added one in the **File->Options->Amazon** window. All the fields will be filled with the information from the configuration file. If no configuration was previously defined, you will have to enter the other details.

Access key ID

In this field you have to enter the access key ID for your Amazon account.

Secret Access key
Type here the secret access key for your account.

Bucket
Type the bucket name you want to use as backup destination.

Folder
Enter a folder name where the backup files will be stored on Amazon. If the folder does not exist, a new one is created with that name. If that field is left blank, Backup4all will automatically create a folder using the name of the backup job and place the backup files in there.

By pressing the **Test** button you can check to see if the settings you have entered are correct. If the test was successful, The Amazon connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

6.2.7 Google Drive

Backup4all supports backing up to Google Drive. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection. Select the **Google Drive** option from the **Where do you want to save your backup?** section to be able to configure the backup to Google Drive.

Use configuration
You can select an already defined Google Drive configuration given that you added one in the **File->Options->Google Drive** window. All the fields will be filled with the information from the configuration file. If no configuration was previously defined, you will have to enter the other details.

Authentication - press "Choose account" button to log in to your Google Drive account. Here you need to authorize Backup4all application to view and manage files in your Google Drive account.

Folder - In this field you have to select the folder where you want to store the backups. If no folder is selected the backup will be stored in the root of your Google Drive account.

By pressing the **Test** button you can check to see if the settings you have entered are correct. If the test was successful, The Google Drive connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

6.2.8   OneDrive

Backup4all supports backing up to OneDrive. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection. Select

the **OneDrive** option from the **Where do you want to save your backup?** section to be able to configure the backup to OneDrive.

Use configuration

You can select an already defined OneDrive configuration given that you added one in the **File->Options->OneDrive** window. All the fields will be filled with the information from the configuration file. If no configuration was previously defined, you will have to enter the other details.

Authentication - press "Choose account" button to log in to your OneDrive account. Here you need to authorize Backup4all application to view and manage files in your OneDrive account.

Folder - In this field you have to select the folder where you want to store the backups. If no folder is selected the backup will be stored in the root of your OneDrive account.

By pressing the **Test** button you can check to see if the settings you have entered are correct. If the test was successful, The OneDrive connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check

feature matrix topic.

6.2.9   Box

Backup4all supports backing up to Box. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection. Select the **Box** option from the **Where do you want to save your backup?** section to be able to configure the backup to Box.

Use configuration
You can select an already defined Box configuration given that you added one in the **File->Options->Box** window. All the fields will be filled with the information from the configuration file. If no configuration was previously defined, you will have to enter the other details.

Authentication - press "Choose account" button to log in to your Box account. Here you need to authorize Backup4all application to read and write files/folders in your Box account.

Folder - In this field you have to select the folder where you want to store the backups. If no folder is selected the backup will be stored in the root of your Box account.

By pressing the **Test** button you can check to see if the settings you have entered are correct. If the test was successful, The Box connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

6.2.10 Dropbox

Backup4all supports backing up to Dropbox. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection. Select the **Dropbox** option from the **Where do you want to save your backup?** section to be able to configure the backup to Dropbox.

Use configuration
You can select an already defined Dropbox configuration given that you added one in the **File->Options->Dropbox** window. All the fields will be filled with the information from the configuration file. If no configuration was previously defined, you will have to enter the other details.

Authentication - press "Choose account" button to log in to your Dropbox account. Here you need to

authorize Backup4all application to read and write files/folders in your Dropbox account.

Folder - In this field you have to select the folder where you want to store the backups. If no folder is selected the backup will be stored in the root of your Dropbox account.

By pressing the **Test** button you can check to see if the settings you have entered are correct. If the test was successful, The Dropbox connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

6.3   What do you want to backup?

In the second step of the **New Backup Wizard**, you must select the files and folders to be used by Backup4all for the backup.
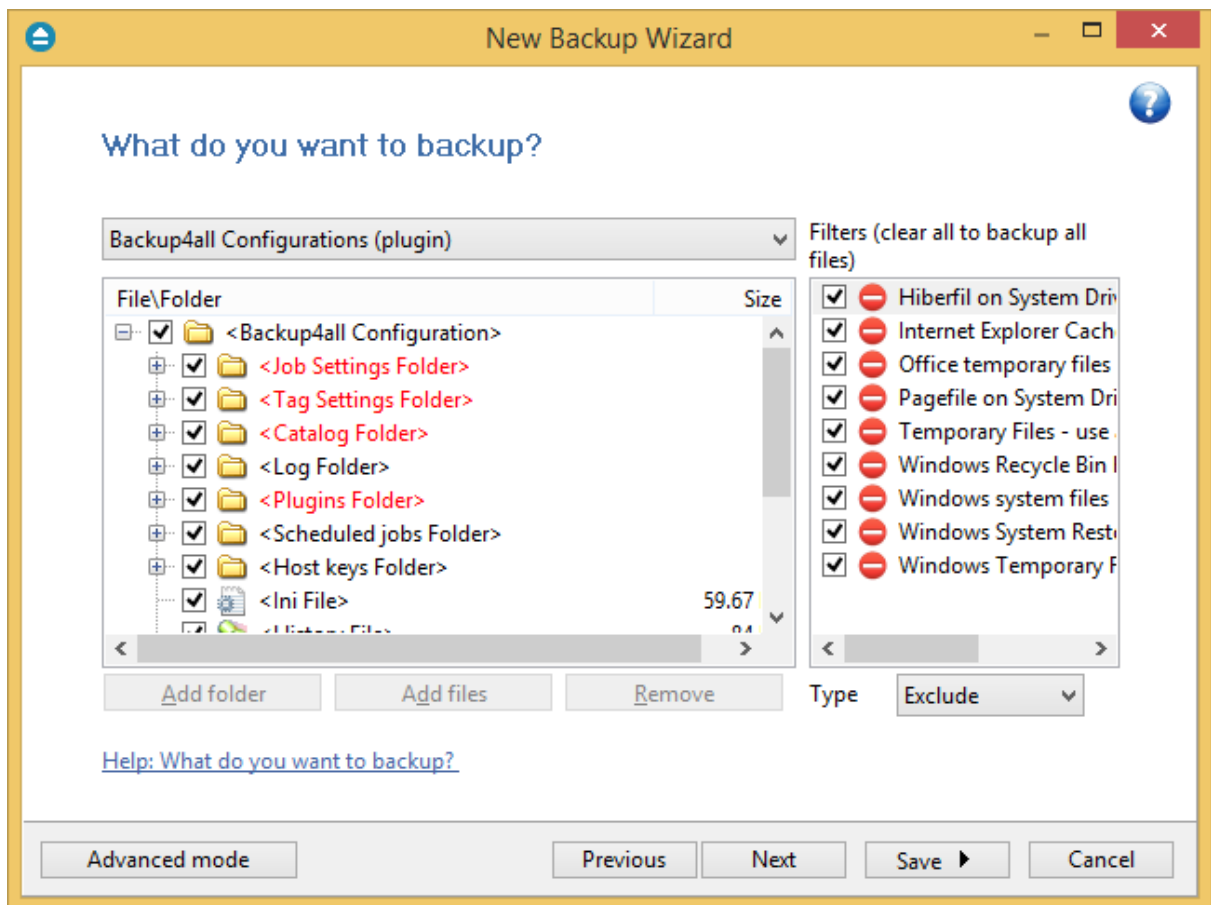
You can:
- add a whole folder by pressing the **Add folder** button
- add one or several files by pressing the **Add files** button
- remove any file or folder by selecting it and pressing the **Remove** button

- exclude subdirectories and files from backup by un-checking the thickbox ☑

You must add at least one file or directory in order to continue with the next step of the wizard.

During backup, if the source drive is missing (when the network is disconnected for instance or CD/ DVD/Blu-ray is missing), a warning message is shown containing the list of missing drives. The user can choose **Abort** to stop the backup process, **Retry** to check the drive again, **Ignore** to mark the source folder as deleted and continue with the next sources.

If you have filters defined in Tools->Options->Filters, they will be listed in the **Filters** list. You can use this filters to customize the backup sources selection. All filters listed are include filters. Do not select any filter if you want to backup all files.

Filters list

In the right side of the New Backup Wizard window there is the Filters list. You can use these filters to customize the file selection.

The filters are defined in **File->Options->Filters**. Only the filters that have "**Show filter in New Backup Wizard**" option set are shown. Filters can be of type include (backup files that match the filter) or exclude (do not backup files that match the filter).

By default, the list contains filters to exclude temporary and system files/folders such as: hiberfil.sys, pagefile.sys, System Volume Information, Temp, etc. If you don't want to use a filter from that list, simply clear (un-check) it. Clear all filters if you want to backup all files.

Tips:
- try to keep the number of checked files and folders greater than the number of unchecked files and folders - backup process will run faster this way.
- you can add files/folders to the **Sources** window by dragging and dropping them from **Windows Explorer**.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

6.4   How do you want to backup?

In the third step of the **New Backup Wizard** you can choose the backup type.

How do you want to backup?

From the drop-down list, you can choose one of the available options:

- Smart
- Make full
- Make differential
- Make incremental
- Make mirror

Smart
The smart backup type will combine full, differential and incremental types with cleanup actions in order to efficiently manage the stored backups according with the free disk space in destination or the maximum allowed space set by the user. This backup type will automatically decide which is the best action to perform when a new backup will be executed.
By default, 80% of the destination size is used by the smart backup. If you want to use the full size of the destination drive for backup storage, you can select the **Use the entire available destination space** option.

Make full

Full backup is the starting point for all other backups and contains all the data in the folders and files that are selected to be backed up. Because full backup stores all files and folders, frequent full backups result in faster and simpler restore operations. Remember that when you choose other backup types, restore jobs may take longer.

Make differential

A differential backup contains all files that have changed since the last full backup. The advantage of a differential backup is that it shortens restore time compared to an incremental backup. However, if you perform the differential backup too many times, the size of the differential backup might grow to be larger than the baseline full backup.

Make incremental

An incremental backup stores all files that have changed since the last full, differential or incremental backup. The advantage of an incremental backup is that it takes the least time to complete. However, during a restore operation, each incremental backup must be processed, which could result in a lengthy restore job.

Make mirror

A mirror backup is identical to a full backup, with the exception that the files are not compressed in zip files and they cannot be protected with a password. A mirror backup is most frequently used to create an exact copy of the backup data. It has the benefit that the backup files can also be readily accessed using tools like Windows Explorer.

If you choose the **Make mirror** option, you can also check the **Zip the files** option to zip each file individually, preserving the folder structure. This allows you to use the zip compression and encryption features.

<u>**Encrypt?**</u>

Use this option if you want to add zip protection to your backups. Type the password you want to use for this backup.

The default encryption used is Advanced Encryption Standard (AES), the best choice in zip protection, but recognized only by the latest version of third party zip applications. The default size of the encryption key is 128 bits. If you want to configure more encryption settings or choose a stronger encryption key, press the **Advanced mode** button.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

Backup Properties

Part VII

7   Backup Properties

7.1   Overview

The **Backup Properties** window can be used to create new backup jobs in the advanced mode, or to edit an existing backup job.

By default, the **New Backup Wizard** will be used to create new backup jobs. To use the **Backup Properties** when creating new jobs, uncheck the **Use New Backup Wizard to create backup jobs** option from the **Other** section in **File->Options->Preferences**.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.2   General

The **General** page defines the appearance of the backup job in the backup list.
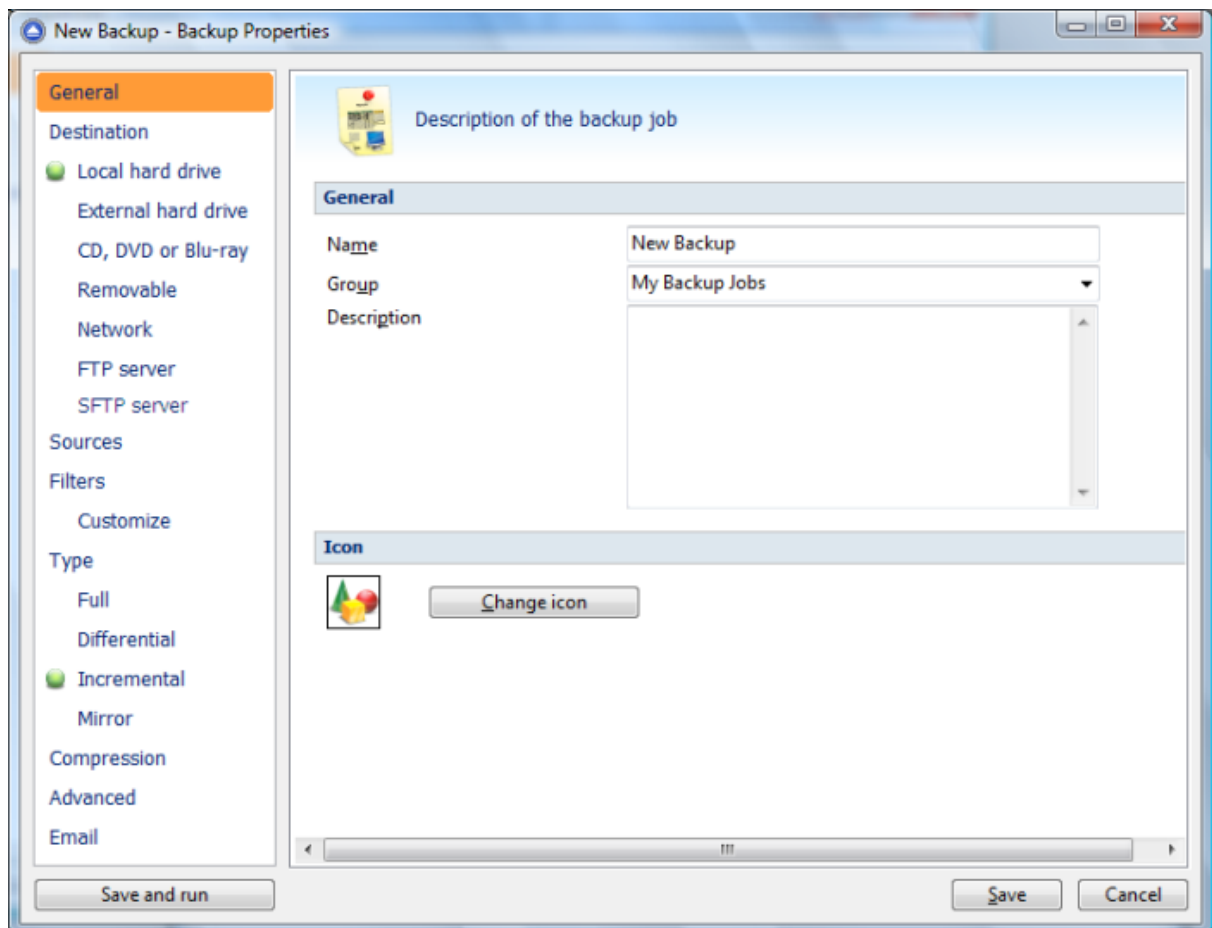
General

Name

Enter the name of the backup job. This name will appear in the backup list, near the chosen picture. This field is mandatory.

The name of the backup job is closely related to the name of the subdirectory in destination that contains zipped and mirrored files and to the name of the catalog. That is why when you rename the backup job, the name of the catalog and the name of the subdirectory from destination are also changed if possible.

If the destination is on HDD (local), LAN (network) FTP, SFTP, Azure, Amazon S3, Google Drive, OneDrive, Box or Dropbox the name of the subdirectory and the name of the catalog can be always changed, except for the case when you do not have enough permission to rename or some files are locked.

If the destination is on a removable disk, CD, DVD or Blu-ray disc, floppy disc and you have run the backup job, the catalog and the subdirectory in destination are already created and they will not be changed. If the backup job has not been run yet, then the catalog and the subdirectory will be created with a name similar to the backup job at first backup run.

Tag

Select the tag where you want the backup job to appear. If no tag is available or you want to define a new tag, just press **Add new tag** and type the name of the tag to create it. The new tag will be automatically assigned to the current backup job.

Description

You can write in here a text describing the backup job defined.

<u>Icon</u>

Press the **Change Icon** button to manage the backup job icons. This icon will be shown in the **Backup List**. You can add a new icon by clicking on the **Add** button. Only Windows icons (files with ".ico" extension) or bitmaps (files with ".bmp" extension) can be added to the list. To remove an icon from the list, you have to select it and then click on the **Delete** button. By default, each new backup job icon will be the first icon from the **Change Icon** list.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3 Destination

The **Destination** page defines where the backup archive will be stored.
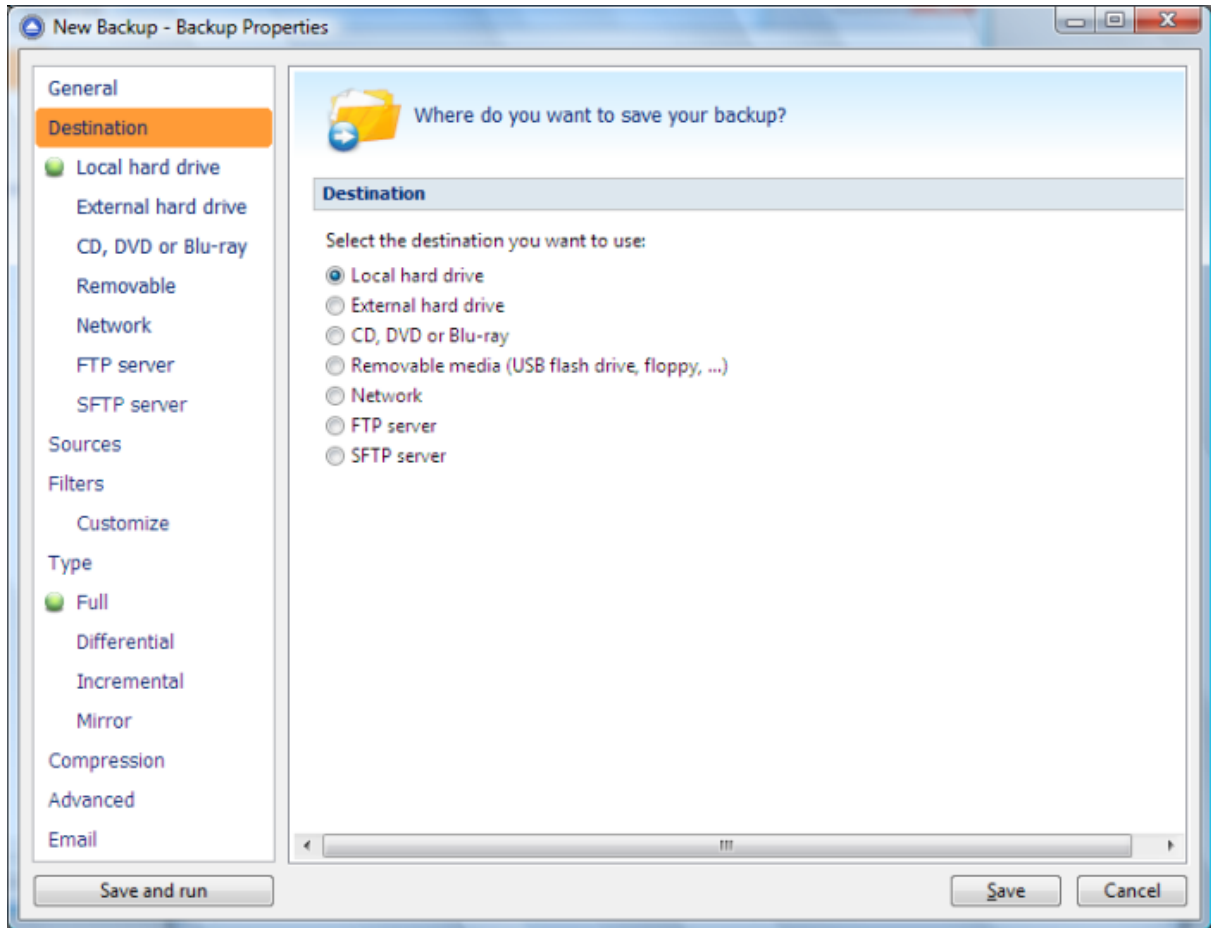
Destination

Valid destination types:
- **Local hard drive**
- **External hard drive**
- **Optical**
- **Removable media (USB flash drive, floppy)**
- **Network**
- **FTP**
- **SFTP**
- **Azure**
- **Amazon S3**

- **Google Drive**

- **OneDrive**

- **Box**
- **Dropbox**

Selecting a backup destination type on the **Destination** page, will enable the advanced options on the same page bellow.

If you lost your backup job from the backup list and you want to recreate it, you can do so by using the **File->Open backup** option and selecting an existing ".bkc" or ".ini" file. The same action takes place if you double click on the ".bkc" file. If the backup destination is on a remote location, you can use **File->Open from** window to easily locate and retrieve the backup catalog/ini file. A new backup job configuration will be added to the backup list and the configuration of the new backup job is copied from the ".bkc" file.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.1   Local hard drive

You can use a valid local hard disk destination for your backup. The **Local hard drive** option is selected by default when you define a new backup.
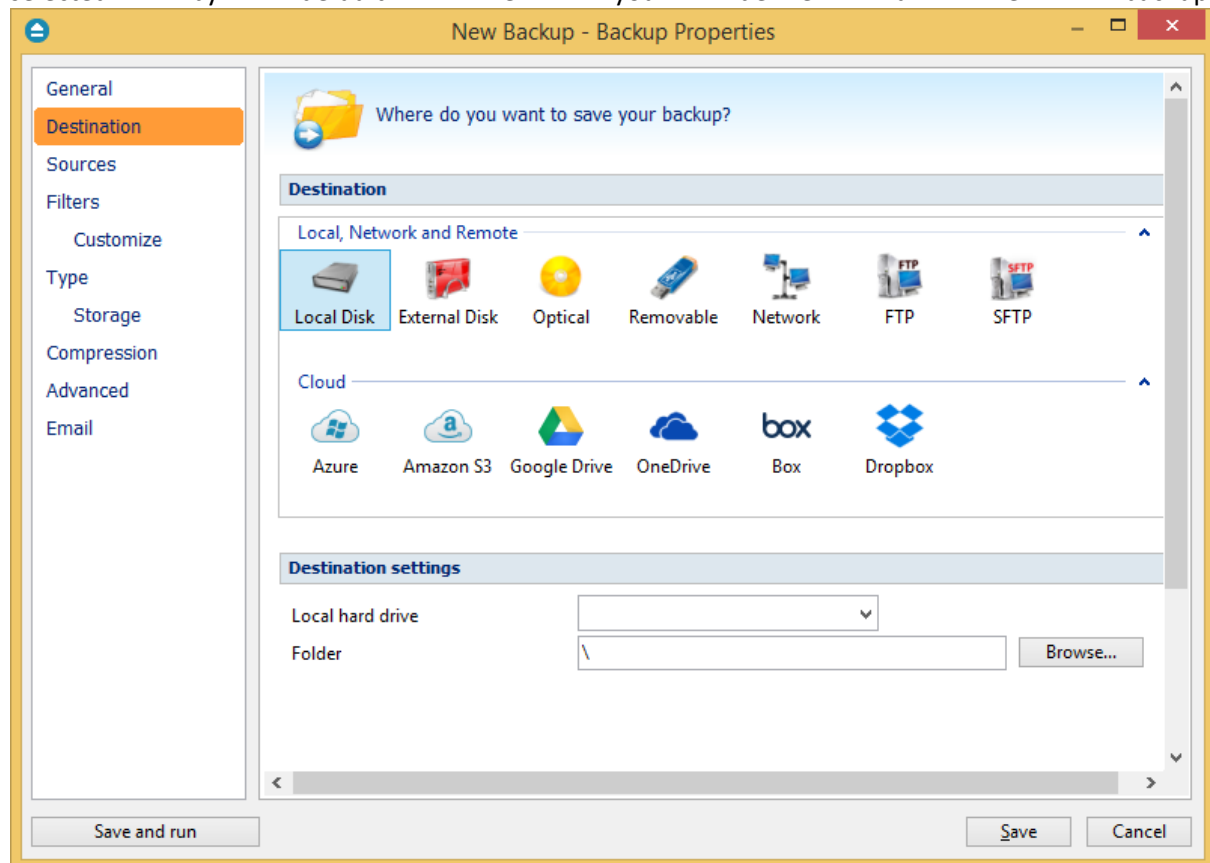
<u>Destination settings</u>

In **Local hard drive** field, select the destination drive you want to be used.

In the **Folder** field by default it is the path to the **My Backup4all 6** folder (\Users\<user name>\My Documents\My Backup4all 6). You can click on the **Browse...** button and select a location of your choice where the backup will be stored.
In destination folder field, you can use Environment Variables as %Computername%, %SystemDrive %, %UserName% etc.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.2 External hard drive

You can select an external hard drive as destination for backup.
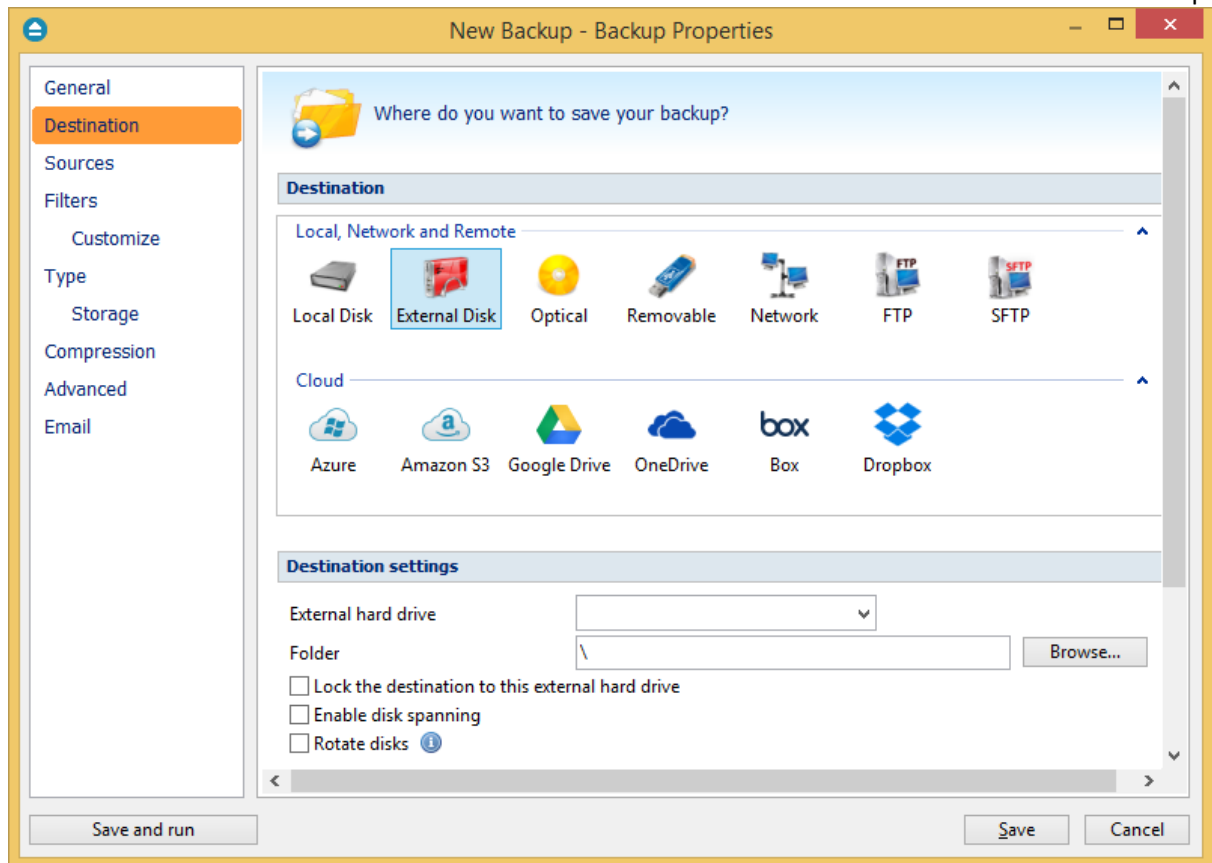
<u>Destination settings</u>

From the **External hard drive** list, you can select either an USB or a Firewire external hard drive.
You can type a folder name in the **Folder** field or you can click the **Browse** button to choose another folder where the backup will be stored.

In destination folder field, you can use Environment Variables as %Computername%, %SystemDrive%, %UserName% etc.

Lock the destination to this external hard drive
When disconnecting and reconnecting an external drive, your computer may not assign it the same drive letter. If the drive letter was changed, the backup might fail because Backup4all is trying to backup to the same old drive letter which probably does not exist.
Use this option if you want Backup4all to detect the external drive after its own serial number and automatically change the backup destination according with the new drive letter.
You should not check this option if you use a rotation backup scheme with two or more external hard drives.
By default, this option is not checked.

Enable disk spanning
The option is effective when there is not enough space to copy all files in the external drive destination. If checked, the application will copy files to the destination until a file will not fit. Then it will ask you for another drive to continue with the rest of the files. If the option is not set, Backup4all will stop when the destination drive is full.
By default, this option is not checked.

Rotate disks
Select this option if you want to set up a rotation scheme. Selecting this option will disable the "Use local catalog" option from Backup Properties->Advanced page.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.3   Optical

You can select a CD, DVD or Blu-ray drive as destination for backup.
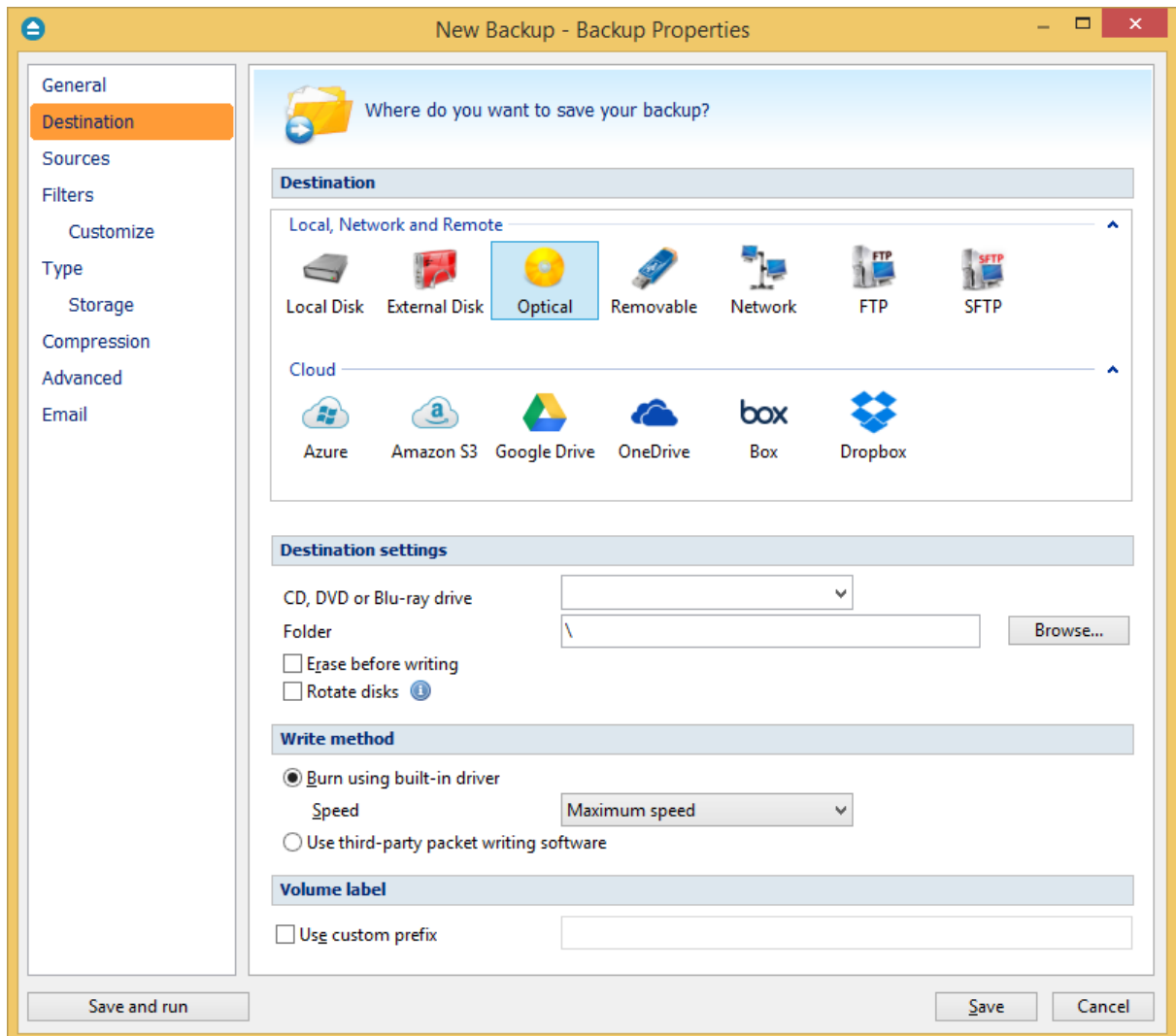
 If the Smart backup type is selected, you cannot use CD, DVD or Blu-ray as backup destination. In this case, you have to select another backup type.

Destination settings

From the "CD, DVD or Blu-ray drive" drop down list you can select the optical drive you want to use. You can type a folder name in the **Folder** field or you can click the **Browse** button to choose another folder where the backup will be stored.
In destination folder field, you can use Environment Variables as %Computername%, %SystemDrive%, %UserName% etc.

Erase before writing
When this option is checked, the rewritable CD, DVD or Blu-ray disc is erased before burning the backup files. By default this option is not checked.

Rotate disks
Select this option if you want to set up a rotation scheme. Selecting this option will disable the "Use local catalog" option from Backup Properties->Advanced page.

Write method

Burn using built-in driver
Backup4all has built-in burning capabilities. Depending on the option selected in CD, DVD or Blu-ray (from Tools->Options->Backup), one of the internal burners will be used to write the CD, DVD or Blu-ray disc. This option is checked by default.

Speed
Use this option to specify a different speed for burning the CD, DVD or Blu-ray disc. By default this option is set to **Maximum** speed.

Use third-party packet writing software
UDF is a platform-independent file system; the same media can be written and read by any operating system or vendor. Each CD, DVD or Blu-ray disc must be UDF formatted before burning otherwise the backup will fail. The limitation of this type is that you must have an UDF reader installed on each computer you wish to use the CD, DVD or Blu-ray disc.

Volume label

Use custom prefix
You can type your own volume label prefix to customize the backups.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.4   Removable

You can save your backup to a removable drive (USB flash drive, floppy etc) as destination for backup.
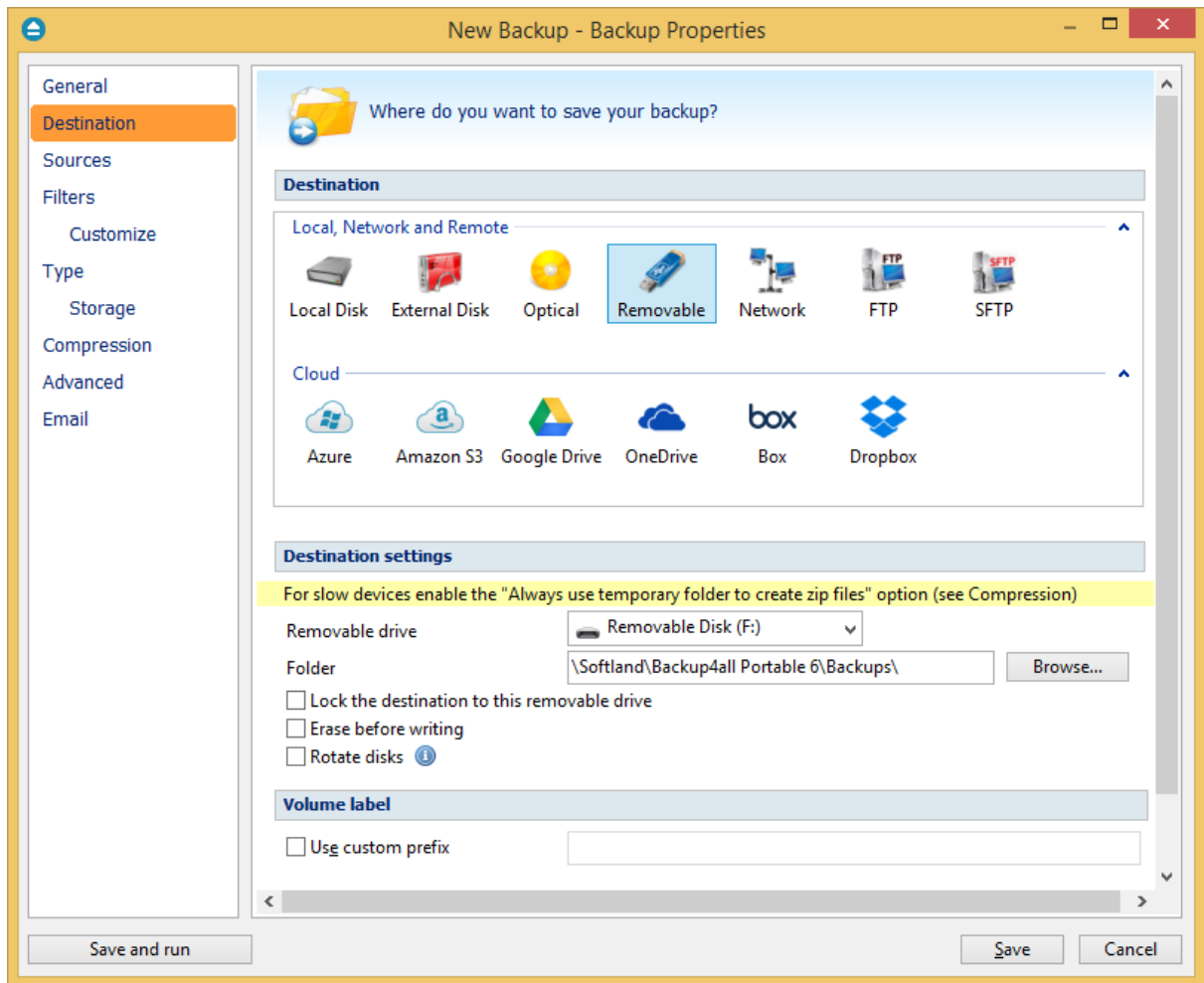
Destination settings

Select from the drop down list the removable drive you want to use as backup destination.
You can type a folder name in the **Folder** field or you can click the **Browse** button to choose another folder where the backup will be stored.
In destination folder field, you can use Environment Variables as %Computername%, %SystemDrive%, %UserName% etc.

Lock the destination to this removable drive
When disconnecting and reconnecting a removable drive, your computer may not assign it the same drive letter. If the drive letter was changed, the backup might fail because Backup4all is trying to backup to the same old drive letter which probably does not exist.
Use this option if you want Backup4all to detect the removable drive after its own serial number and automatically change the backup destination according with the new drive letter.
You should not check this option if you use a rotation backup scheme with two or more removable hard drives.
By default, this option is not checked.
Erase disk before writing
When this option is checked, the removable disk is erased before burning the backup files. By default

this option is not checked.

Rotate disks
Select this option if you want to set up a rotation scheme. Selecting this option will disable the "Use local catalog" option from Backup Properties->Advanced page.

Volume label

Use custom prefix
You can type your own volume label prefix to customize the backups.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.5   Network

You can choose to save your backup to a shared network drive (another computer or NAS).
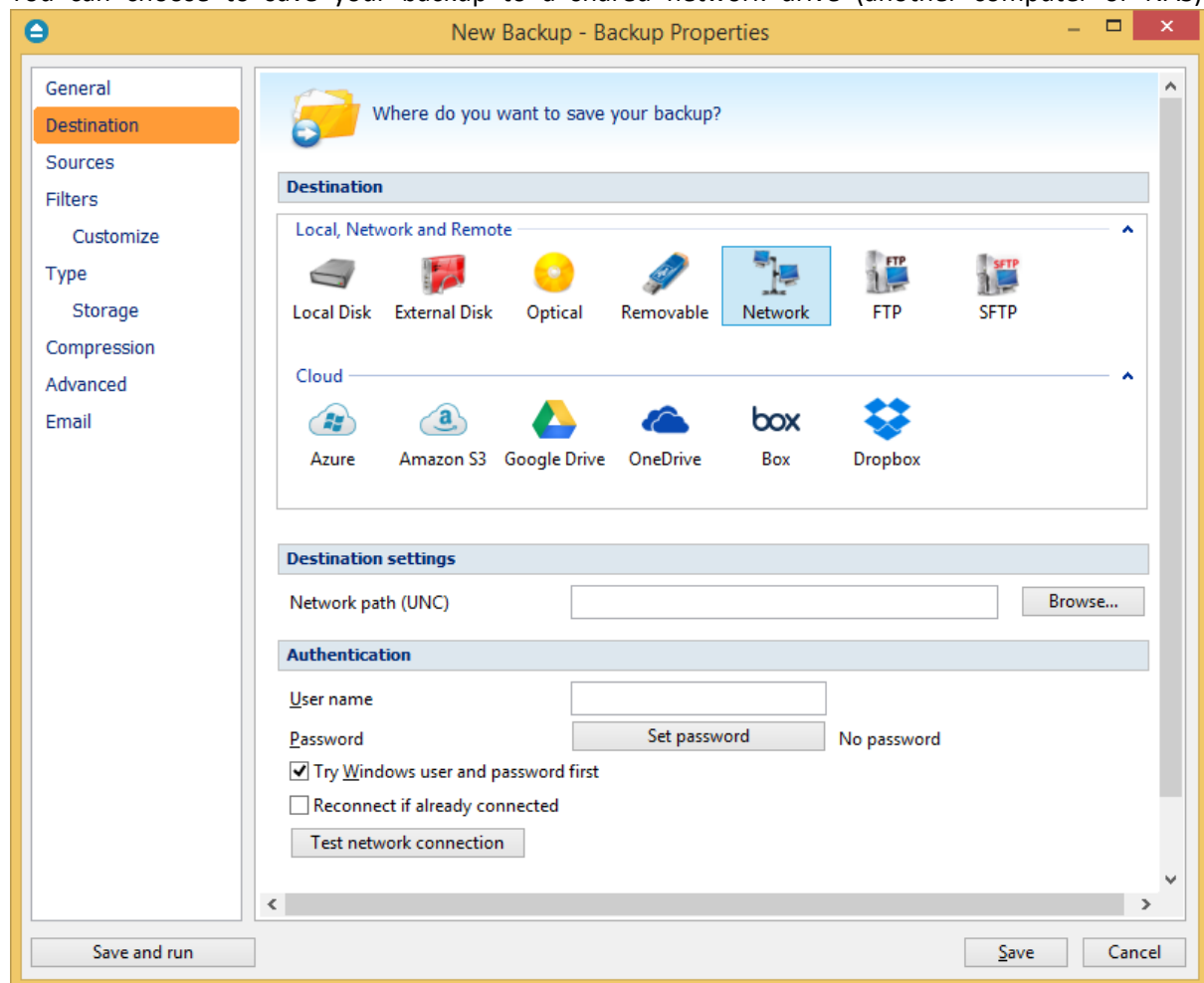
<u>**Destination settings**</u>
Click the **Browse** button to open **My Network Places** and select a destination where the backup will be stored.
You can also enter network paths in the **Network path (UNC)** field. Only a full path is allowed. For example, suppose **\\Backup_Server\PC1** is mapped on your workstation as drive **X**, then the following paths are both valid and indicate the same folder: **\\Backup_Server\PC1\Backup** or **X:\Backup**.

<u>**Authentication**</u>

Make sure you can write in the destination and in the selected folder (you have the proper rights and the media is not write-protected) before finishing the backup configuration. You can enter an **User name** and **Password** to access the network destination <u>if it requires authentication</u>. If you are logged in as an user that has rights to write to the specified network destination, you can check the **Try Windows user and password first** option. What this option does is that it checks on the network destination if the logged in user has rights to access it.

You can set Backup4all to disconnect and reconnect the network drive if already connected by checking the **Reconnect if already connected** option. By default, this option is not checked.
After entering the path and eventually the username/password, use the **Test network connection** button to see if the destination is reachable and that you have sufficient rights to access it. The **network connection was tested successfully** pop-up message means that the network destination was accessible. In case of insufficient rights the following error message will appear: **Network connection error. Access is denied**. In this case you have to either make sure that the entered username/password values are correct, or contact the network administrator to obtain the necessary rights.

If the destination is missing (when the network is disconnected), an error message is shown.
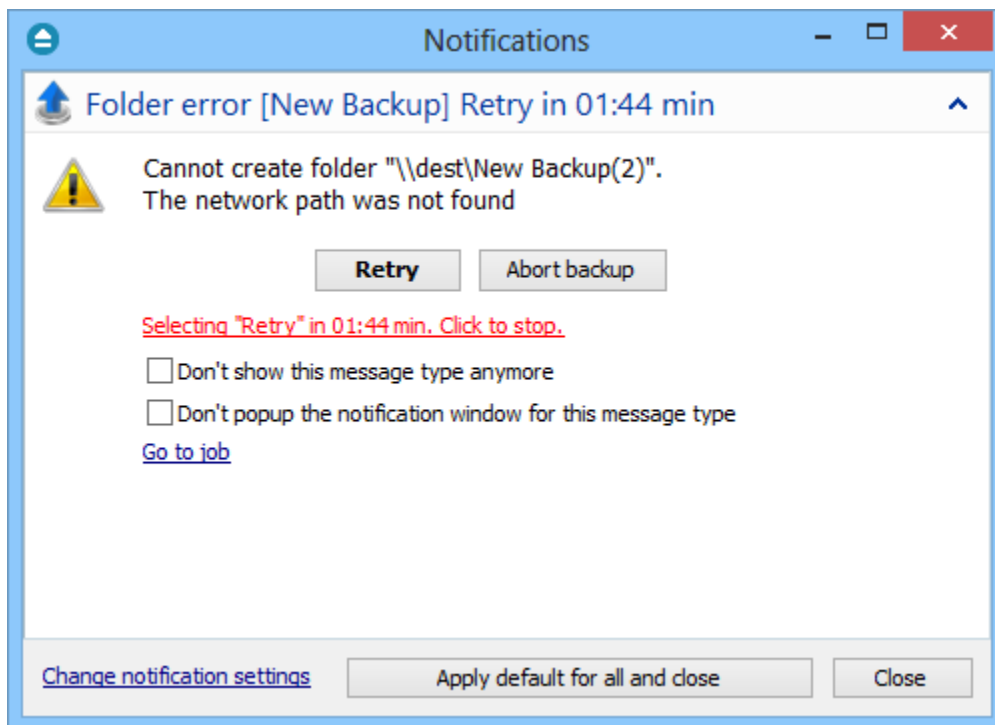
The user can choose **Cancel** to stop the backup process or **Retry** to check the network connection again.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.6 FTP server

Backup4all supports backing up to a remote computer or device using FTP (File Transfer Protocol) connection. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection.
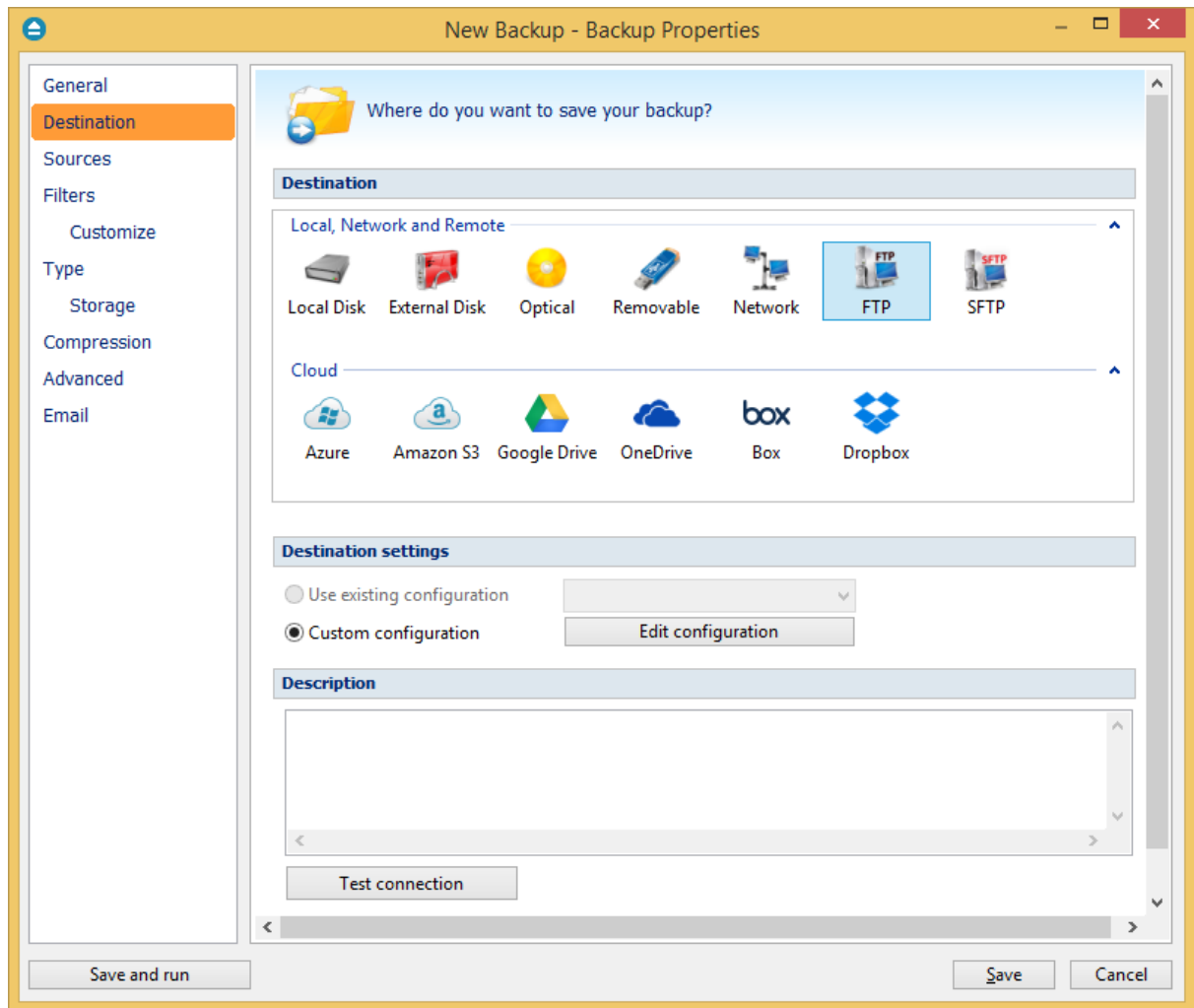
Destination settings

Use existing configuration
Use this option if you want to use an already defined FTP location in **File->Options->FTP**. From the drop-down list, select the FTP location you want to use.
The advantage is that if you use the same FTP destination for multiple backup jobs and a modification is needed for destination, you can change only the FTP configuration from File->Options->FTP and all backup jobs destinations will be updated.

Custom configuration
Use this option to add a new FTP location or to edit an existing one by pressing the **Edit configuration** button.

Description

Here you can see a listing of the FTP settings.
If you configured a new FTP location or you edit an existing one, you should use the **Test connection**

button to see if the FTP settings are correct. If the test was successful, The FTP connection was tested successfully message will be displayed.

Once you press the **OK** button, Backup4all will try to connect to the FTP server to see if a backup catalog already exists on the destination. If the FTP destination is not available, a **Cannot connect to the FTP server** message is displayed in the status bar (bottom of the main window).

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.6.1   Edit configuration

This window is shown when selecting **Edit configuration** from the **Destination->FTP** window.

General

Existing configuration
If you want to add a new FTP location, the <New> option should be selected. To edit an existing FTP location, select it from the drop-down list. All fields will be filled with the values of the selected FTP.

FTP server

- **Server name or IP** - In this field you have to enter the name or IP address for the FTP server
- **Transfer mode -** Here you can select the transfer mode: Binary, ASCII or Auto.

- **Binary:** it refers to transferring files as a binary stream of data. The binary mode transmits the raw bytes of the file being transferred. In this way, the file is transferred in its exact original form.
- **ASCII:** it stands for American Standard Code for Information Interchange, and is a type of character encoding based on the English language used on devices that handle information stored in text. It includes 33 non-printed control characters and 94 printed characters such as letters and punctuation.
- **Auto:** according to the list of ASCII files defined in File->Options->FTP, the files will be uploaded in ascii or binary mode, depending on their extension.
  By default, binary mode is selected and it applies only to Mirror backup type. That is useful if you have a Linux FTP server as backup destination and want to download the backed up files with another application which uses the Auto transfer mode. Uploading the files to a Linux server in binary mode and downloading them in Auto mode, causes the files to be modified by adding a new empty line at the end of each file.
- **Port** - In this field you have to enter the port number if different than the default FTP ports (21).
- **Destination folder** - Here you can enter the destination path if different than root.
- **User name** - If this is a private FTP server (no anonymous access allowed) enter the user name for your account.
- **Password** - In this field enter the password for the FTP server.

Bandwidth limitation

In this section you can set different limitations for upload/download speed:
- **Limit upload speed** - if checked you can set a maximum upload speed for the FTP transfer
- **Limit download speed** - if checked you can set a maximum upload speed for the FTP transfer

Advanced

SSL encryption level - indicates the level of Transport Layer Security (TLS) required for control channel and data channel connections to the FTP server:
- **No SSL** - the server does not require Secure Socket Layer transport
- **Implicit SSL** - implies that Secure Socket Layer is in use
- **Only explicit SSL** - allows the connection to the FTP server only if TLS is available.
- **Explicit SSL, if available** - when SSL is available, uses explicit security by default. The server allows regular FTP sessions without encryption as well as encrypted FTP sessions using SSL.

Use passive mode for transfers (like WWW browsers) - each file transfer (upload or download) needs an additional connection for the data stream. Normally (in active mode), the server establishes this connection. In passive mode, however, the client establishes the connection. This may be necessary through some firewalls, which do not allow connections from outside.

Use extended passive mode - the FTP Server operates exactly the same as passive mode, however it only transmits the port number (not broken into high and low bytes) and Backup4all is to assume that it connects to the same IP address that was originally connected to. Use this option if the normal

passive mode connection failed.

Use XCRC when testing (if available) - if the server supports the XCRC extension Backup4all can verify that files transferred to the server have been transmitted correctly using the CRC information received from the FTP server. This results in faster testing, as the files will not be downloaded to perform the CRC testing.

Resume upload/downloads (if available) - it resume the backup upload if the server supports resume command.

Limit file size to - specify the maximum file size you want to have. Larger files will be split. Please note that many FTP servers does not allow you to upload files larger than 2 GB.

Timeout - you can set the time interval (in seconds) that is allowed for no data transfer before the transfer operation is interrupted and must be resumed. Default is 15 seconds.

<u>**Firewall**</u>

Proxy type - select one of the options below (supported by your firewall) if you use a proxy to connect to the FTP:
- **None** - Sends the User name and optional Password for the FTP server as entered in the FTP window
- **Send command USER** - Sends the User name and optional Password defined in the proxy settings, followed immediately by the User name and optional Password for the FTP server.
- **Send command SITE** - Sends the User name and optional Password defined in the proxy settings, the SITE command with the Host value, and the User name and optional Password for the FTP site.
- **Send command OPEN** - Sends the User name and optional Password defined in the proxy settings, sends the OPEN command with the Host value, and the User name and optional Password for the FTP site.
- **USER user@firewalluser@hostname / PASS pass@firewallpass** - Sends the command USER user@proxyuser@host, then the command PASS pwd@proxypwd, or optionally PASS pwd.
- **Transparent** - Sends the User name and optional Password defined in the proxy settings, followed immediately by the FTP server User name and optional Password.

Host name or IP - In this field you have to enter the name or IP address for the proxy server (firewall).
Host port - Type the port number if different than the default port (80).
User name - This field is used to enter the proxy user name.
Password - In this field you can enter the password for the specified user name.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.7 SFTP server

Backup4all supports backing up to a remote computer or device using SFTP (SSH File Transfer Protocol) connection. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection.
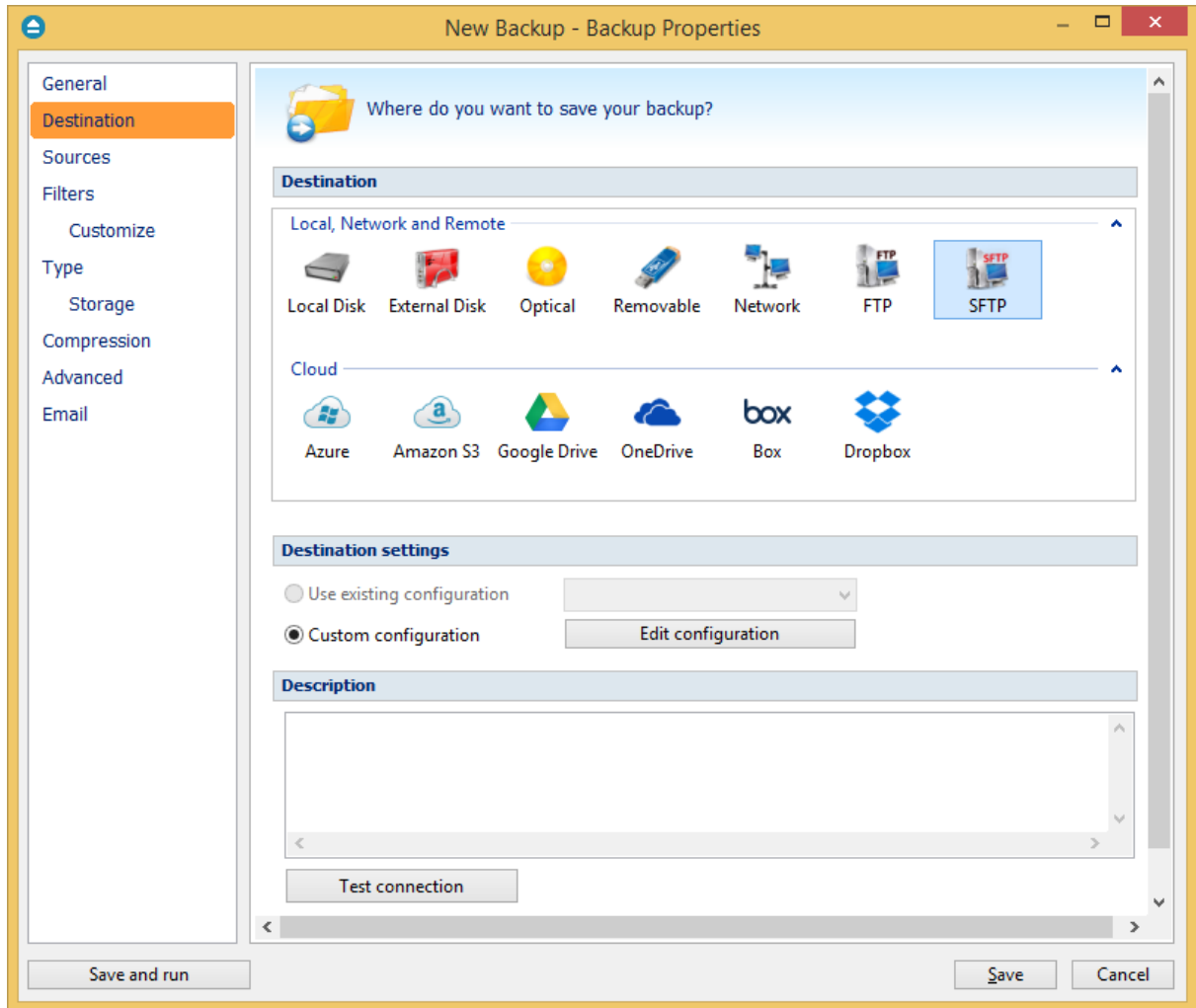
Destination settings

Use existing configuration

Use this option if you want to use an already defined SFTP location in **File->Options->SFTP**. From the drop-down list, select the SFTP location you want to use.

The advantage is that if you use the same SFTP destination for multiple backup jobs and a modification is needed for destination, you can change only the SFTP configuration from **File->Options->SFTP** and all backup jobs destinations will be updated.

Custom configuration

Use this option to add a new SFTP location or to edit an existing one by pressing the **Edit configuration** button.

Description

Here you can see a listing of the SFTP settings.
If you configured a new SFTP location or you edit an existing one, you should use the **Test connection** button to see if the SFTP settings are correct. If the test was successful, The SFTP connection was tested successfully message will be displayed.
Once you press the **OK** button, Backup4all will try to connect to the SFTP server to see if a backup catalog already exists on the destination. If the SFTP destination is not available, a **Cannot connect to the SFTP server** message is displayed in the status bar (bottom of the main window).

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.7.1   Edit configuration

This window is shown when selecting **Edit configuration** from the **Destination->SFTP** window.

General

Existing configuration
If you want to add a new SFTP location, the **<New>** option should be selected. To edit an existing SFTP location, select it from the drop-down list. All fields will be filled with the values of the selected SFTP.

SFTP server

- **Server name or IP** - In this field you have to enter the name or IP address for the SFTP server
- **Port** - In this field you have to enter the port number if different than the default SFTP ports (22).
- **Destination folder** - Here you can enter the destination path if different than root.
- **User name** - If this is a private SFTP server (no anonymous access allowed) enter the user name for your account.
- **Password** - In this field enter the password for the SFTP server.

Private key

- **None -** no private key is used
- **Key file -** allows user to specify a key file that will be used
- **Personal certificate store -** allows user to import and use different certificate formats

Bandwidth limitation

In this section you can set different limitations for upload/download speed:

- **Limit upload speed** - if checked you can set a maximum upload speed for the SFTP transfer
- **Limit download speed** - if checked you can set a maximum upload speed for the SFTP transfer

Advanced

☐ Verify host key
☑ Limit file size to   2027 ⇕   MB   ▼   Larger files will be split
Timeout (seconds)   15   ⇕

Authentication

Authentications
☑ publickey
☑ password
☑ keyboard-interactive

Encryption

Ciphers
☑ aes128-ctr
☑ aes192-ctr
☑ aes256-ctr
☑ arcfour256
☑ arcfour128

MACs
☑ hmac-sha1
☑ hmac-md5
☑ umac-64@openssh.com
☑ hmac-ripemd160
☐ none

Compression

Compressions
☑ none
☐ zlib

Advanced

- **Verify host key:** If checked, the host key will be verified each time
- **Limit file size to** - specify the maximum file size you want to have. Please note that many SFTP servers does not allow you to upload files larger than 2 GB.
- **Timeout** - you can set the time interval (in seconds) that is allowed for no data transfer before the transfer operation is interrupted and must be resumed. Default is 15 seconds.

Authentication

You can select which authentication methods will be used when backing up. Available options: publickey, password and keyboard-interactive.
The priority of these options can also be changed.

Encryption

- **Ciphers:** clear or select the check boxes to specify which ciphers you want to allow for encrypting SFTP sessions. A Cipher is the algorithm(s) used for symmetric session encryption. To give a cipher a lower priority rating, select it with the mouse and then click the Down button.
- **MACs:** clear or select the check boxes to specify which MACs you want to allow for encrypting SFTP sessions. A MAC (Message Authentication Code) is the algorithm(s) used for data integrity verification. To give a MAC a lower priority rating, select it with the mouse, and then click the Down button.

Compression

SFTP supports the use of data compression to reduce the amount of data that is transmitted. Both the client and server agree on a compression algorithm. They then compress data before sending and decompress data when it is received.
Typically, zlib compression is the compression algorithm most commonly supported in SFTP servers. No compression is set as the default, and zlib is specified as an option. If the server forces use of zlib compression it will happen automatically

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.8 Azure

Backup4all supports backing up to Azure storage. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection.
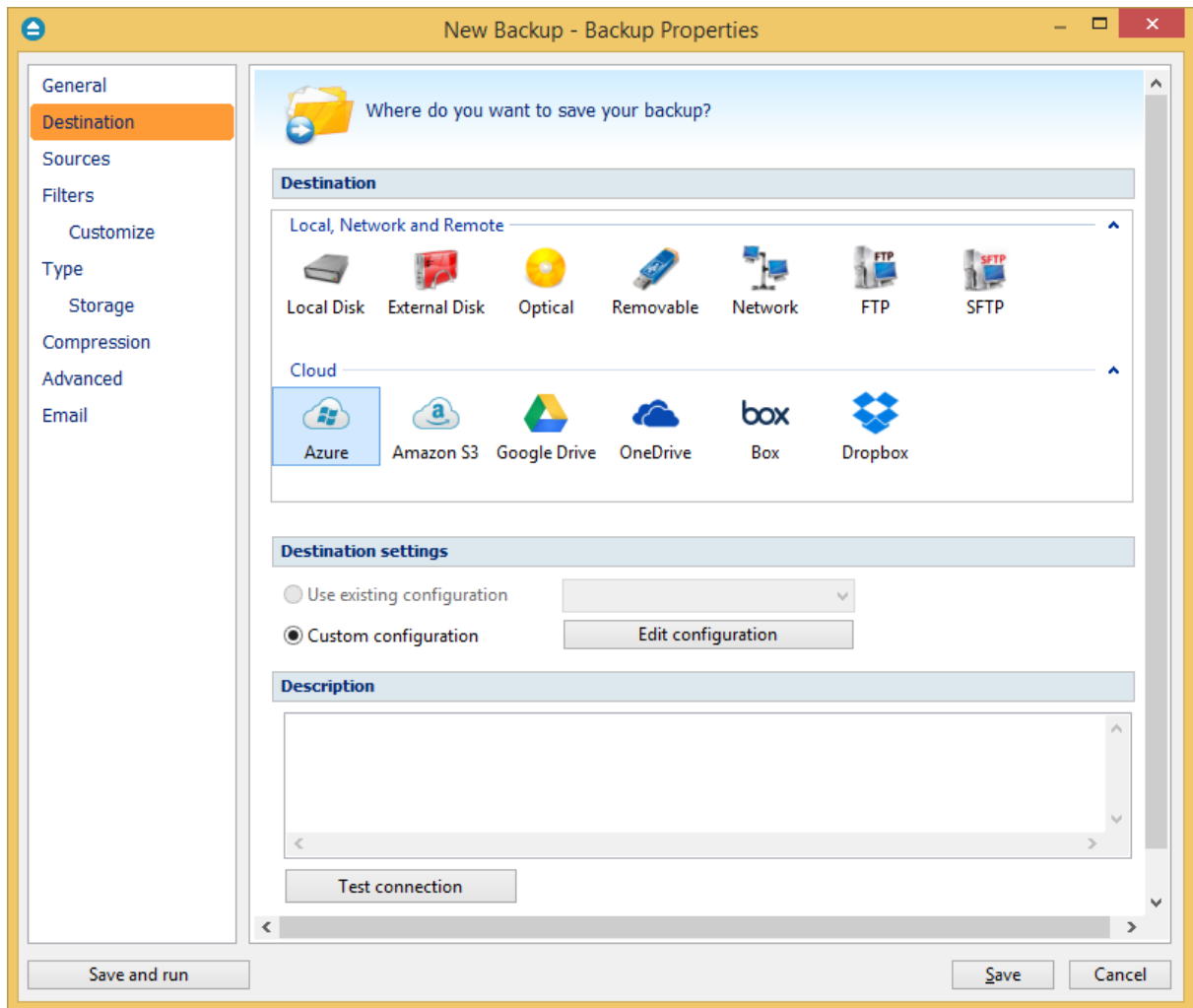
Destination settings

Use existing configuration
Use this option if you want to use an already defined Azure location in **File->Options->Azure**. From the drop-down list, select the Azure location you want to use.
The advantage is that if you use the same Azure destination for multiple backup jobs and a modification is needed for destination, you can change only the Azure configuration from **File->Options->Azure** and all backup jobs destinations will be updated.

Custom configuration
Use this option to add a new Azure location or to edit an existing one by pressing the **Edit configuration** button.

Description

Here you can see a listing of the Azure settings.
If you configured a new Azure location or you edit an existing one, you should use the **Test**

connection button to see if the Azure settings are correct. If the test was successful, The Azure connection was tested successfully message will be displayed.

Once you press the **OK** button, Backup4all will try to connect to the Azure server to see if a backup catalog already exists on the destination. If the Azure destination is not available, a **Cannot connect to the Azure server** message is displayed in the status bar (bottom of the main window).

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.8.1   Edit configuration

This window is shown when selecting **Edit configuration** from the **Destination->Azure** window.

General

Existing configuration
If you want to add a new Azure location, the **<New>** option should be selected. To edit an existing Azure location, select it from the drop-down list. All fields will be filled with the values of the selected Azure configuration.

Settings

- **Account name -** In this field you have to enter the name of your Azure account
- **Key -** In this field you have to enter the key for your Azure account
  Key is shared Access Signature - check this option if the key is shared access signature. A shared access signature provides delegated access to resources in your storage account. This means that you can grant a client limited permissions to your blobs, queues, or tables for a specified period of time and with a specified set of permissions, without having to share your account access keys.
- **Container -** In this field you have to enter the container you want to use as destination
- **Folder -** In this field you have to enter the folder where you want to store the backups. If the folder does not exist, it will be created.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.9   Amazon S3

Backup4all supports backing up to Amazon S3 storage. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection.
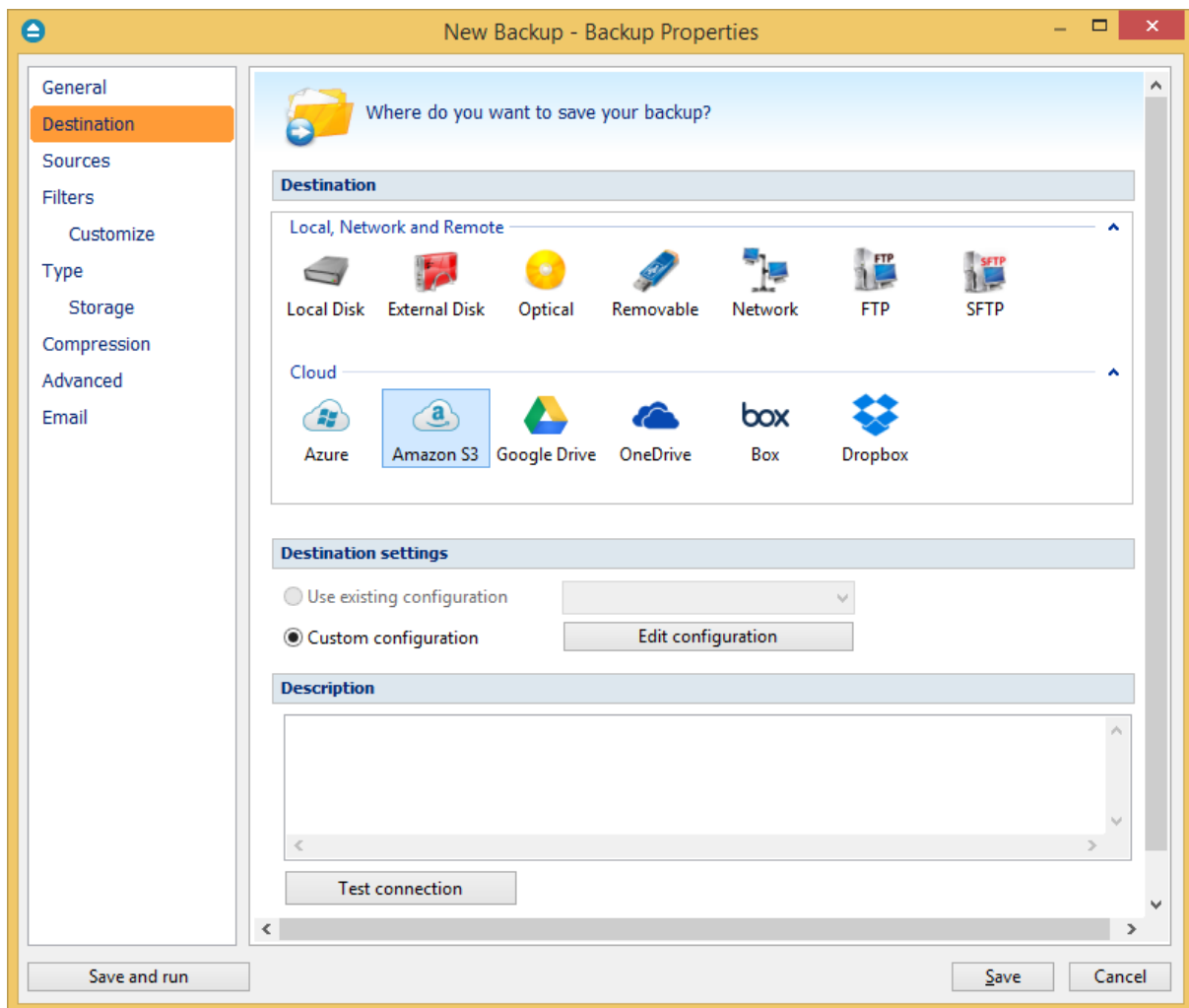
Destination

Use existing configuration
Use this option if you want to use an already defined Amazon S3 location in **File->Options->Amazon S3**. From the drop-down list, select the Amazon S3 location you want to use.
The advantage is that if you use the same Amazon S3 destination for multiple backup jobs and a modification is needed for destination, you can change only the Amazon S3 configuration from File->Options->Amazon S3 and all backup jobs destinations will be updated.

Custom configuration
Use this option to add a new Amazon S3 location or to edit an existing one by pressing the **Edit configuration** button.

Description

Here you can see a listing of the Amazon S3 settings.
If you configured a new Amazon S3 location or you edit an existing one, you should use the **Test**

connection button to see if the Amazon S3 settings are correct. If the test was successful, The Amazon S3 connection was tested successfully message will be displayed.

Once you press the **OK** button, Backup4all will try to connect to the Amazon S3 server to see if a backup catalog already exists on the destination. If the Amazon S3 destination is not available, a **Cannot connect to the Amazon S3 server** message is displayed in the status bar (bottom of the main window).

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.9.1 Edit configuration

This window is shown when selecting **Edit configuration** from the **Destination->Amazon S3** window.

<u>**General**</u>

Existing configuration
If you want to add a new Amazon S3 location, the **<New>** option should be selected. To edit an existing Amazon S3 location, select it from the drop-down list. All fields will be filled with the values of the selected Amazon S3 configuration.

<u>**Settings**</u>

- **Access Key ID -** In this field you have to enter the access key ID for your Amazon S3 account
- **Secret Access Key -** In this field you have to enter the Secret Access Key for your Amazon S3 account
- **Bucket -** In this field you have to enter the bucket you want to use as destination. You can also create a new bucket if you type its name and press Create button. If you already have the bucket created outside Backup4all, please make sure it is located in US region. At this moment, the buckets created in other regions than US, will not work with Backup4all.
- **Folder -** In this field you have to enter the folder where you want to store the backups. If the folder does not exist, it will be created.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.10 Google Drive

Backup4all supports backing up to Google Drive storage. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection.
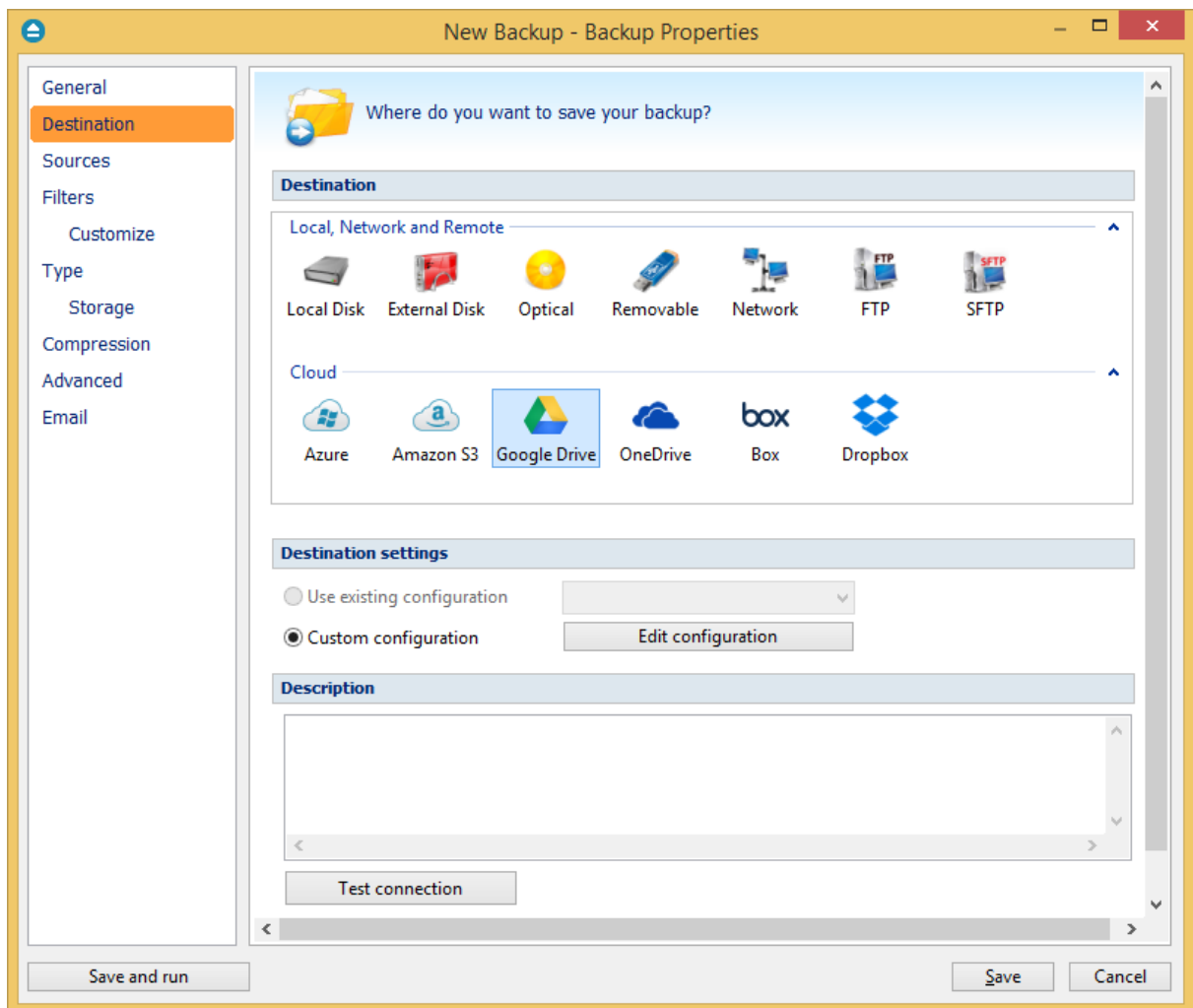
Destination

Use existing configuration
Use this option if you want to use an already defined **Google Drive** location in **File->Options->Google Drive**. From the drop-down list, select the Google Drive location you want to use.
The advantage is that if you use the same Google Drive destination for multiple backup jobs and a modification is needed for destination, you can change only the Google Drive configuration from File->Options->Google Drive and all backup jobs destinations will be updated.

Custom configuration
Use this option to add a new Google Drive location or to edit an existing one by pressing the **Edit configuration** button.

Description

Here you can see a listing of the Google Drive settings.

If you configured a new Google Drive location or you edit an existing one, you should use the **Test connection** button to see if the Google Drive settings are correct. If the test was successful, The Google Drive connection was tested successfully message will be displayed.

Once you press the **OK** button, Backup4all will try to connect to the Google Drive server to see if a backup catalog already exists on the destination. If the Google Drive destination is not available, a **Cannot connect to the Google Drive server** message is displayed in the status bar (bottom of the main window).

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.10.1 Edit configuration

This window is shown when selecting **Edit configuration** from the **Destination->Google Drive** window.

General

Existing configuration
If you want to add a new Google Drive configuration, the **<New>** option should be selected. To edit an existing Google Drive configuration, select it from the drop-down list. All fields will be filled with the values of the selected Google Drive configuration.

Settings

- **Authentication -** press "Choose account" button to log in to your Google Drive account. Here you need to authorize Backup4all application to view and manage files in your Google Drive account.

- **Folder -** In this field you have to select the folder where you want to store the backups. If no folder is selected the backup will be stored in the root of your Google Drive account.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.11 OneDrive

Backup4all supports backing up to OneDrive storage. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection.
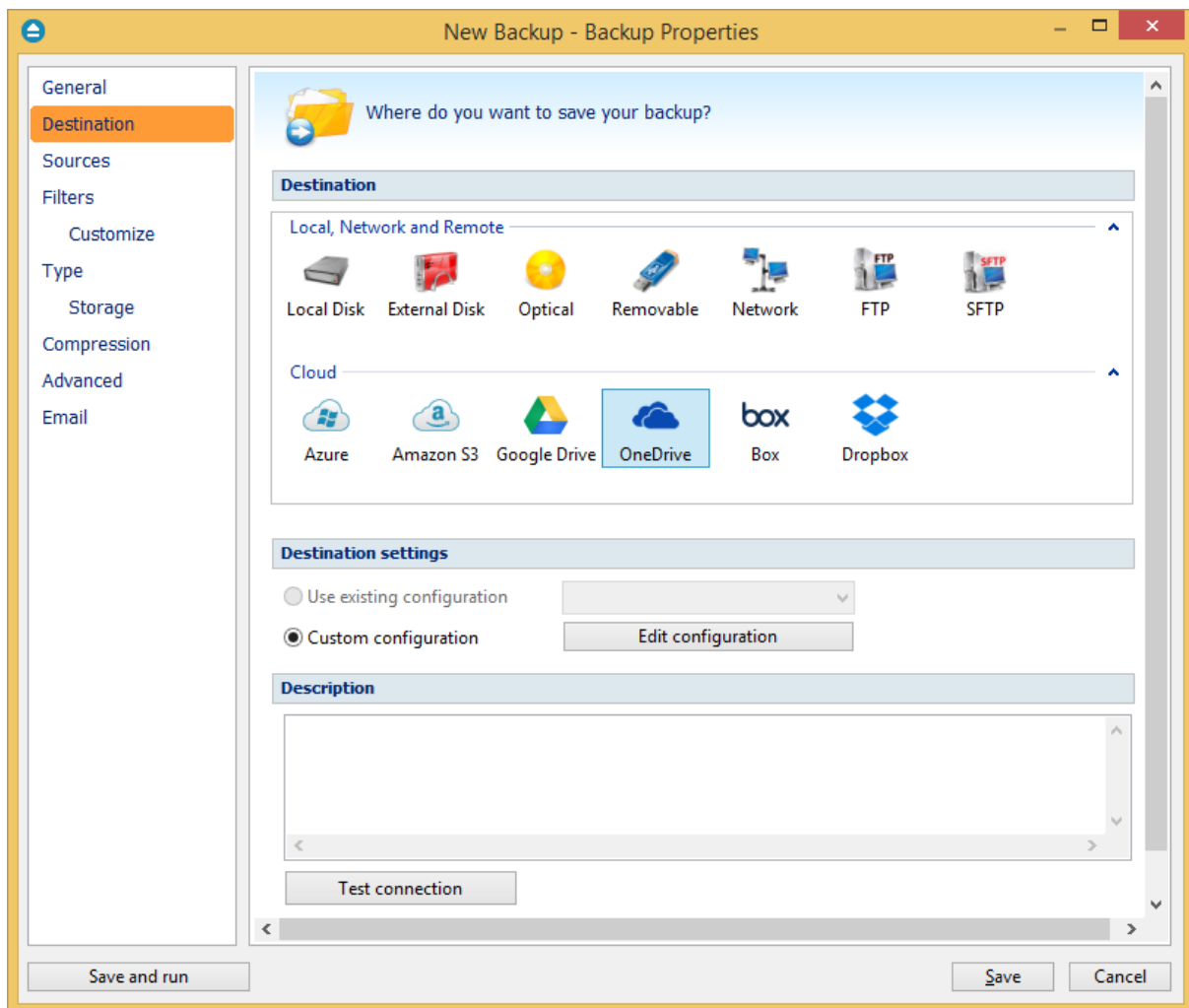
Destination

Use existing configuration
Use this option if you want to use an already defined OneDrive location in **File->Options->OneDrive**.
From the drop-down list, select the OneDrive location you want to use.
The advantage is that if you use the same OneDrive destination for multiple backup jobs and a modification is needed for destination, you can change only the OneDrive configuration from File->Options->OneDrive and all backup jobs destinations will be updated.

Custom configuration
Use this option to add a new OneDrive location or to edit an existing one by pressing the **Edit configuration** button.

Description

Here you can see a listing of the OneDrive settings.

If you configured a new OneDrive location or you edit an existing one, you should use the **Test connection** button to see if the OneDrive settings are correct. If the test was successful, The OneDrive connection was tested successfully message will be displayed.

Once you press the **OK** button, Backup4all will try to connect to the OneDrive server to see if a backup catalog already exists on the destination. If the OneDrive destination is not available, a **Cannot connect to the OneDrive server** message is displayed in the status bar (bottom of the main window).

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.11.1 Edit configuration

This window is shown when selecting **Edit configuration** from the **Destination->OneDrive** window.

General

Existing configuration
If you want to add a new OneDrive location, the **<New>** option should be selected. To edit an existing OneDrive location, select it from the drop-down list. All fields will be filled with the values of the selected OneDrive configuration.

Settings

- **Authentication -** press "Choose account" button to log in to your OneDrive account. Here you need to authorize Backup4all application to view and manage files in your OneDrive account.

- **Folder -** In this field you have to select the folder where you want to store the backups. If no folder is selected the backup will be stored in the root of your OneDrive account.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.12 Box

Backup4all supports backing up to Box storage. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection.
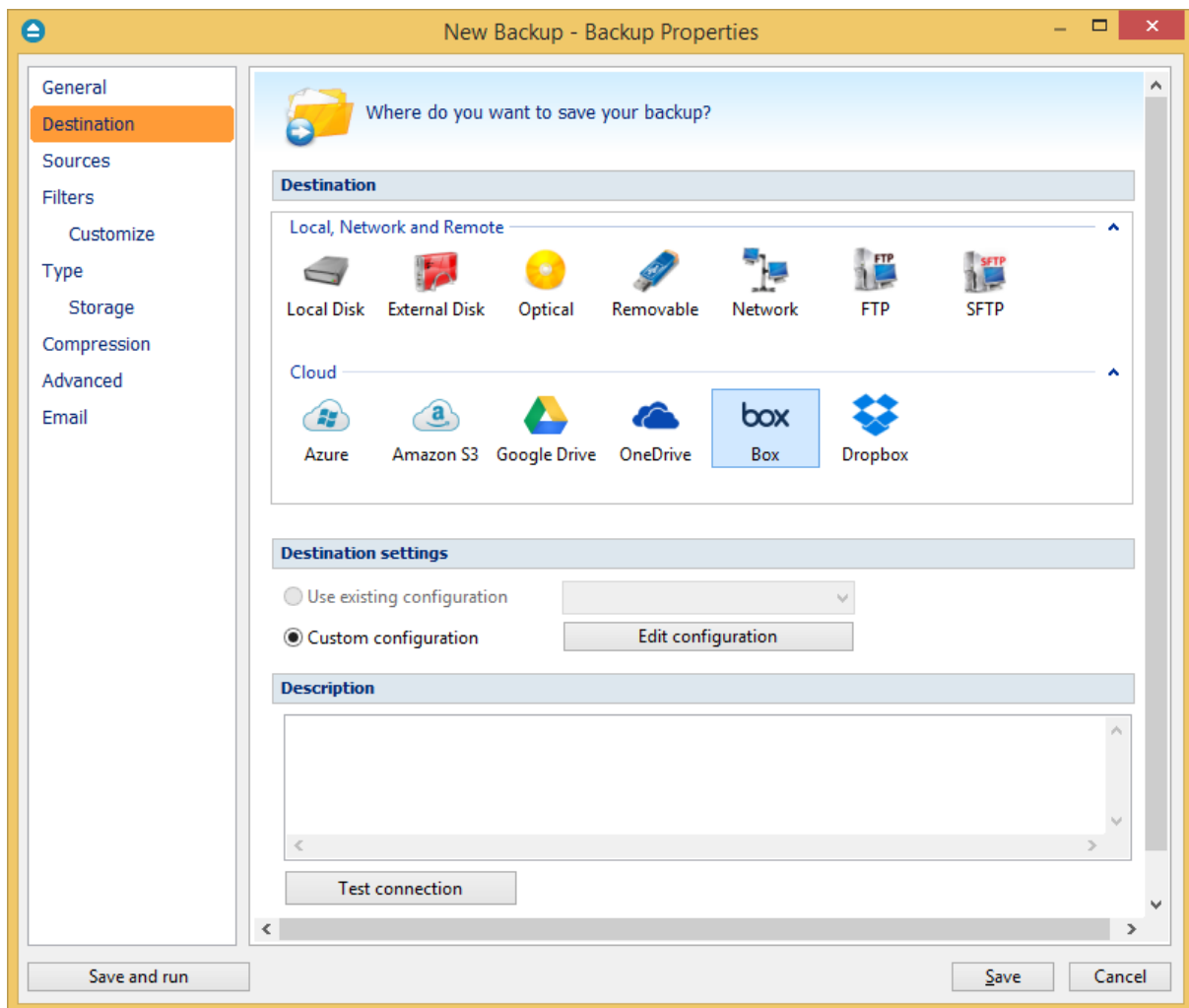
Destination

Use existing configuration
Use this option if you want to use an already defined Box location in **File->Options->Box**. From the drop-down list, select the Box location you want to use.
The advantage is that if you use the same Box destination for multiple backup jobs and a modification is needed for destination, you can change only the Box configuration from File->Options->Box and all backup jobs destinations will be updated.

Custom configuration
Use this option to add a new Box location or to edit an existing one by pressing the **Edit configuration** button.

Description

Here you can see a listing of the Box settings.

If you configured a new Box location or you edit an existing one, you should use the **Test connection** button to see if the Box settings are correct. If the test was successful, The Box connection was tested successfully message will be displayed.

Once you press the **OK** button, Backup4all will try to connect to the Box server to see if a backup catalog already exists on the destination. If the Box destination is not available, a **Cannot connect to the Box server** message is displayed in the status bar (bottom of the main window).

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.12.1 Edit configuration

This window is shown when selecting **Edit configuration** from the **Destination->Box** window.

General

Existing configuration
If you want to add a new Box location, the **<New>** option should be selected. To edit an existing Box location, select it from the drop-down list. All fields will be filled with the values of the selected Box configuration.

Settings

- **Authentication -** press "Choose account" button to log in to your Box account. Here you need to authorize Backup4all application to read and write files/folders in your Box account.

- **Folder -** In this field you have to select the folder where you want to store the backups. If no folder is selected the backup will be stored in the root of your Box account.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.13 Dropbox

Backup4all supports backing up to Dropbox storage. This is a practical backup destination because the backed up data can be easily accessed from any other computer with an Internet connection.
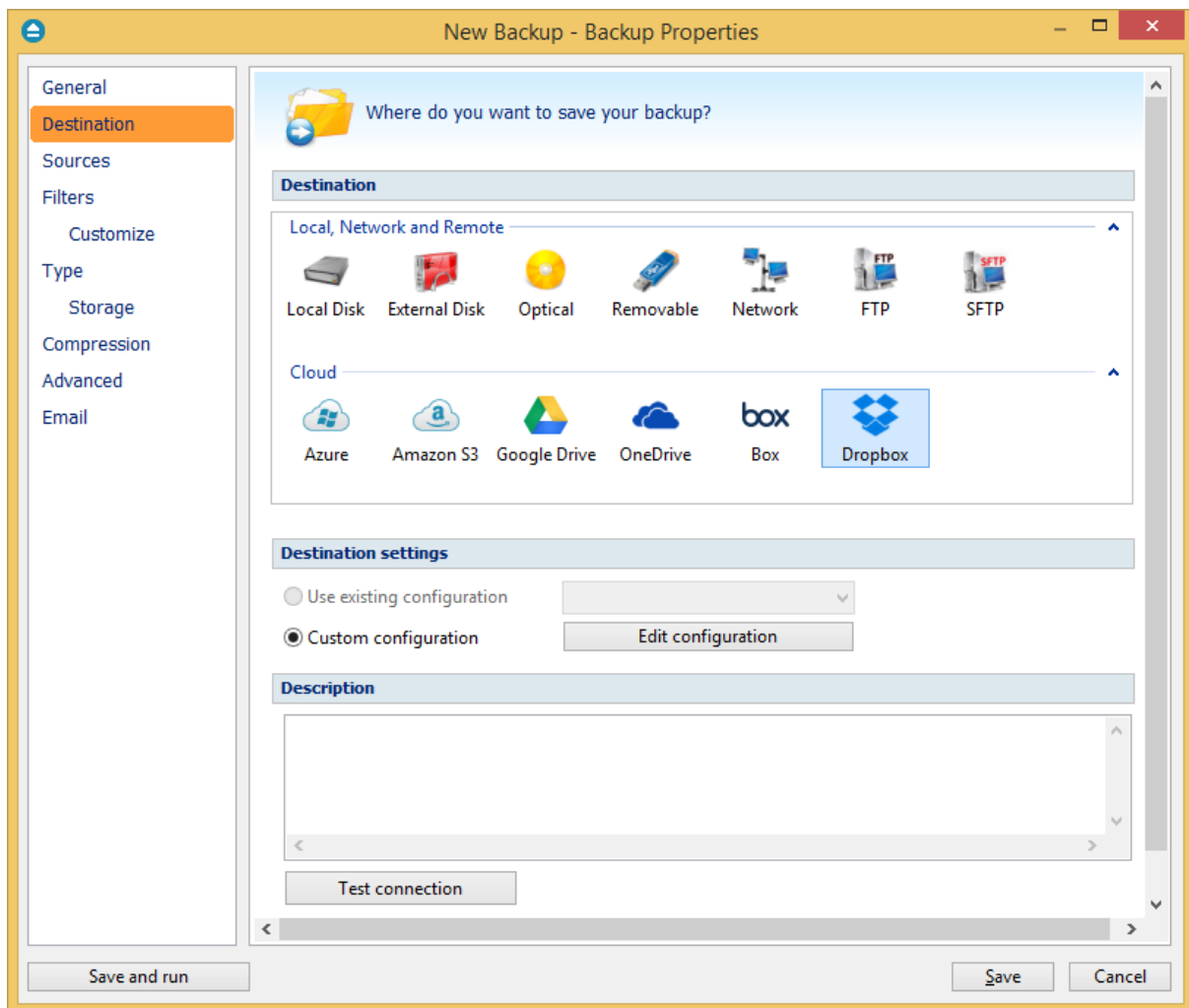
Destination

Use existing configuration

Use this option if you want to use an already defined Dropbox location in **File->Options->Dropbox**. From the drop-down list, select the Dropbox location you want to use.

The advantage is that if you use the same Dropbox destination for multiple backup jobs and a modification is needed for destination, you can change only the Dropbox configuration from File->Options->Dropbox and all backup jobs destinations will be updated.

Custom configuration

Use this option to add a new Dropbox location or to edit an existing one by pressing the **Edit configuration** button.

Description

Here you can see a listing of the Dropbox settings.

If you configured a new Dropbox location or you edit an existing one, you should use the **Test connection** button to see if the Dropbox settings are correct. If the test was successful, The Dropbox connection was tested successfully message will be displayed.

Once you press the **OK** button, Backup4all will try to connect to the Dropbox server to see if a backup catalog already exists on the destination. If the Dropbox destination is not available, a **Cannot connect to the Dropbox server** message is displayed in the status bar (bottom of the main window).

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.3.13.1 Edit configuration

This window is shown when selecting **Edit configuration** from the **Destination->Dropbox** window.

<u>**General**</u>

Existing configuration
If you want to add a new Dropbox location, the **<New>** option should be selected. To edit an existing Dropbox location, select it from the drop-down list. All fields will be filled with the values of the selected Dropbox configuration.

<u>**Settings**</u>

- **Authentication -** press "Choose account" button to log in to your Dropbox account. Here you need to authorize Backup4all application to read and write files/folders in your Dropbox account.

- **Folder -** In this field you have to select the folder where you want to store the backups. If no folder is selected the backup will be stored in the root of your Dropbox account.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.4   Sources

The **Sources** page defines what files and folders will be used by Backup4all for the backup.
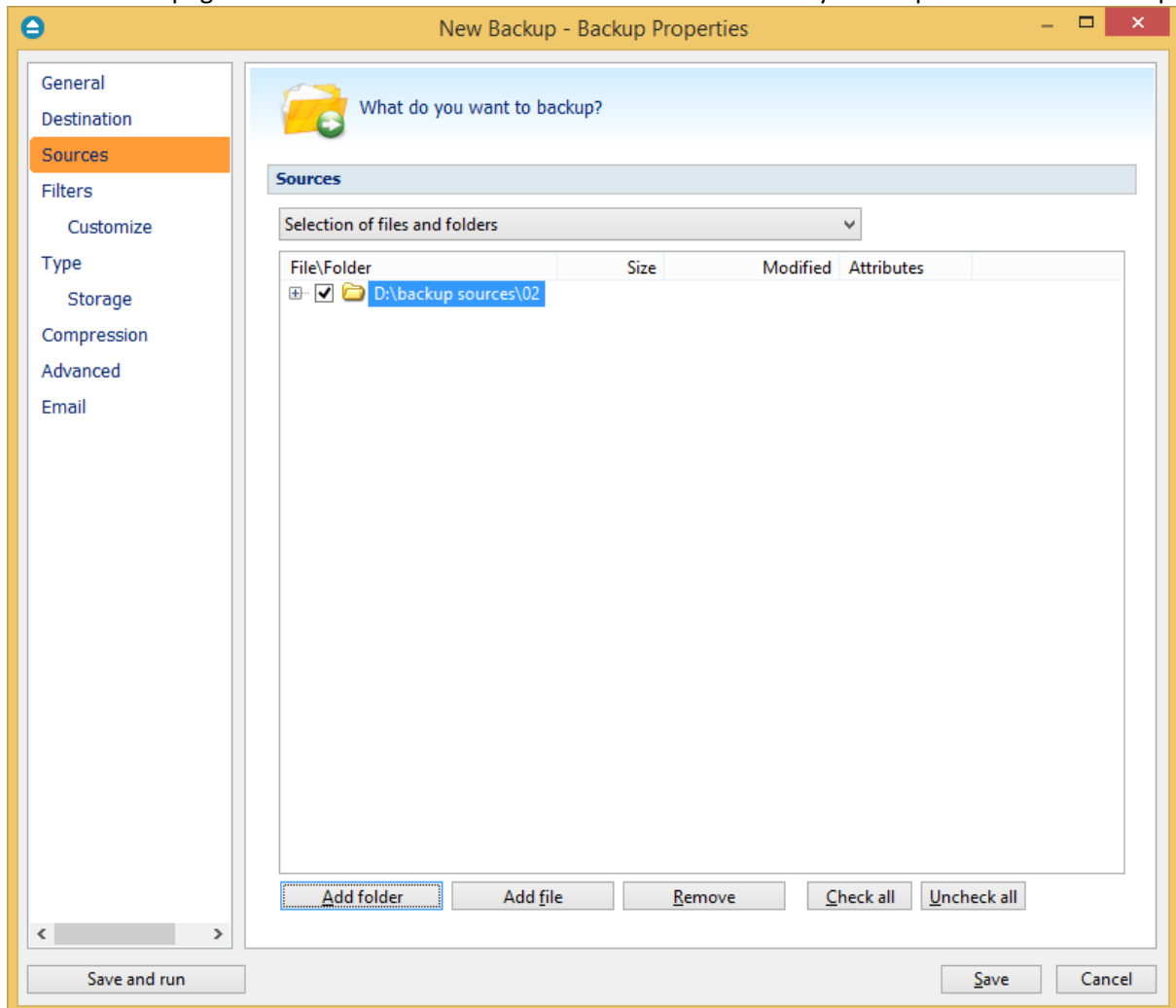
You can:
- add a whole folder by pressing the **Add folder** button
- add one or several files by pressing the **Add files** button
- remove any file or folder by selecting it and pressing the **Remove** button
- exclude subdirectories and files from backup by un-checking the thickbox ☑
- select all files and folders by pressing the **Check all** button
- unselect all files and folders by pressing the **Uncheck all** button

At least one source must be added to the backup job.
If the source drive is missing (when the network is disconnected for instance or CD/DVD/Blu-ray is missing), a warning message is shown containing the list of missing drives. The user can choose **Abort** to stop the backup process, **Retry** to check the drive again, **Ignore** to mark the source folder as deleted and continue with the next sources.

Tips:

- try to keep the number of checked files and folders greater than the number of unchecked files and folders - backup process will run faster this way.
- you can add files/foders to the **Sources** window by dragging and dropping them from **Windows Explorer**

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.5   Filters

The **Filters** page defines files and folders filters to be applied to backup sources. Only files and folders that match the filters will be added to backup.
You can use the **Add include** and **Add exclude** buttons to add filter rules for the current backup job.
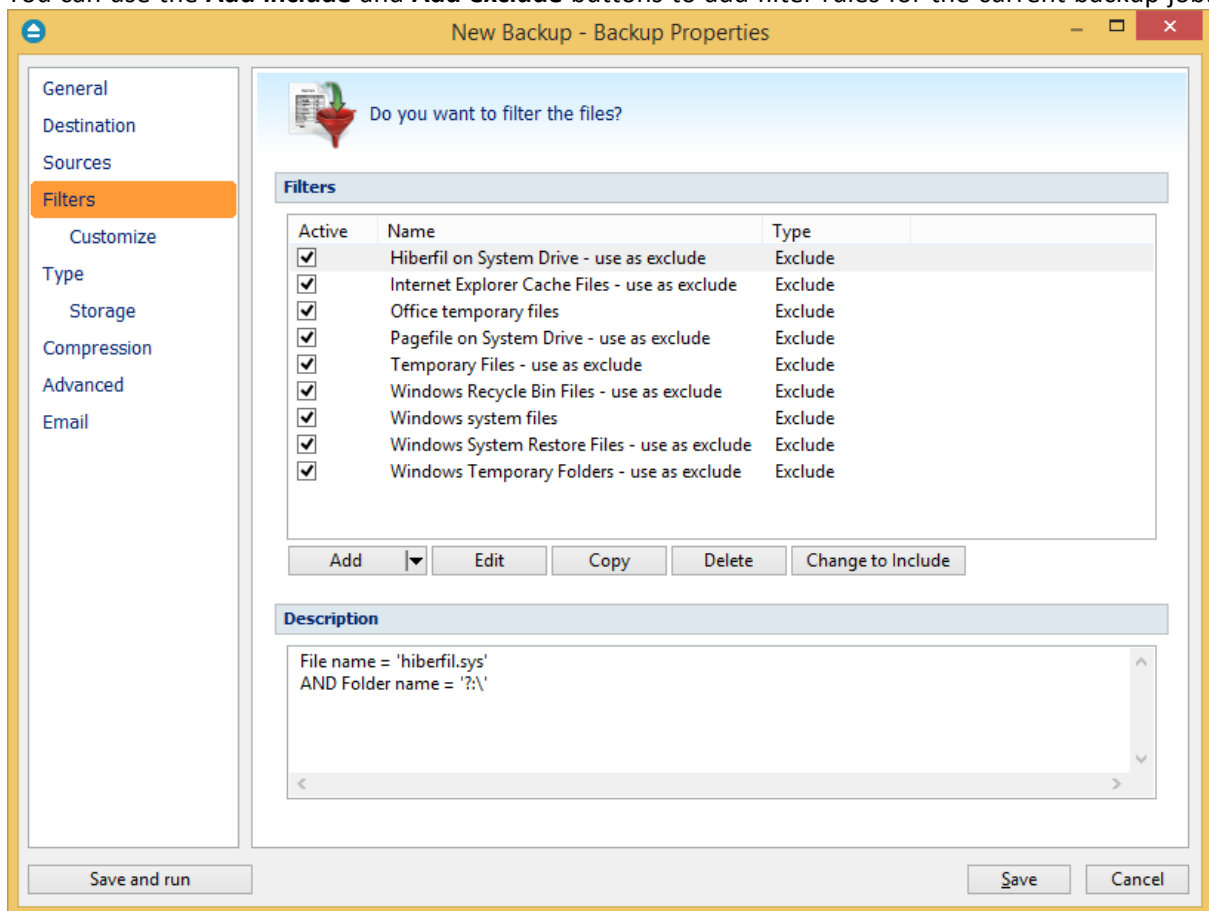
The system selects only files that match the include filter and do not match the exclude filter. This means the exclude filter is more powerful: if a file satisfies both include and exclude filters, it will be excluded.

Include and exclude filters are composed from filter restrictions. Two or more filter restrictions in the

include filter means that a file must satisfy at least one restriction to be included in the backup. Two or more filter restrictions in the exclude filter means that a file must satisfy any restriction to be excluded.

All filters with the **Active** box checked will be used by the current backup job. To disable a filter, just uncheck the **Active** box.

Note:
Filters on files and filters on folders must be created individually. If you use a file and a folder filter condition in the same filter, files will be filtered only if both filter conditions were met.

Example:
If you use a single filter for .jpg files and Temp folder, only the .jpg files from Temp folder will be filtered. If you use separate filters for files and folders, all .jpg files and whole Temp folder will be filtered.

You can manage filter restrictions using the buttons:
- **Add include** - this will open a new Filter Properties window from where you can add a new include restriction to the filters list.
- **Add exclude -** this will open a new Filter Properties window from where you can add a new exclude restriction to the filters list.
- **Edit** - will open the selected filter's properties window. You will be able to modify the selected restriction.
- **Copy** - this will create a copy of the selected filter.
- **Delete** - will remove the selected filter from the list of include or exclude filters.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.5.1   Customize

On the **Customize** page you can override the main backup filter. It will show a tree with all selected sources for the backup job.
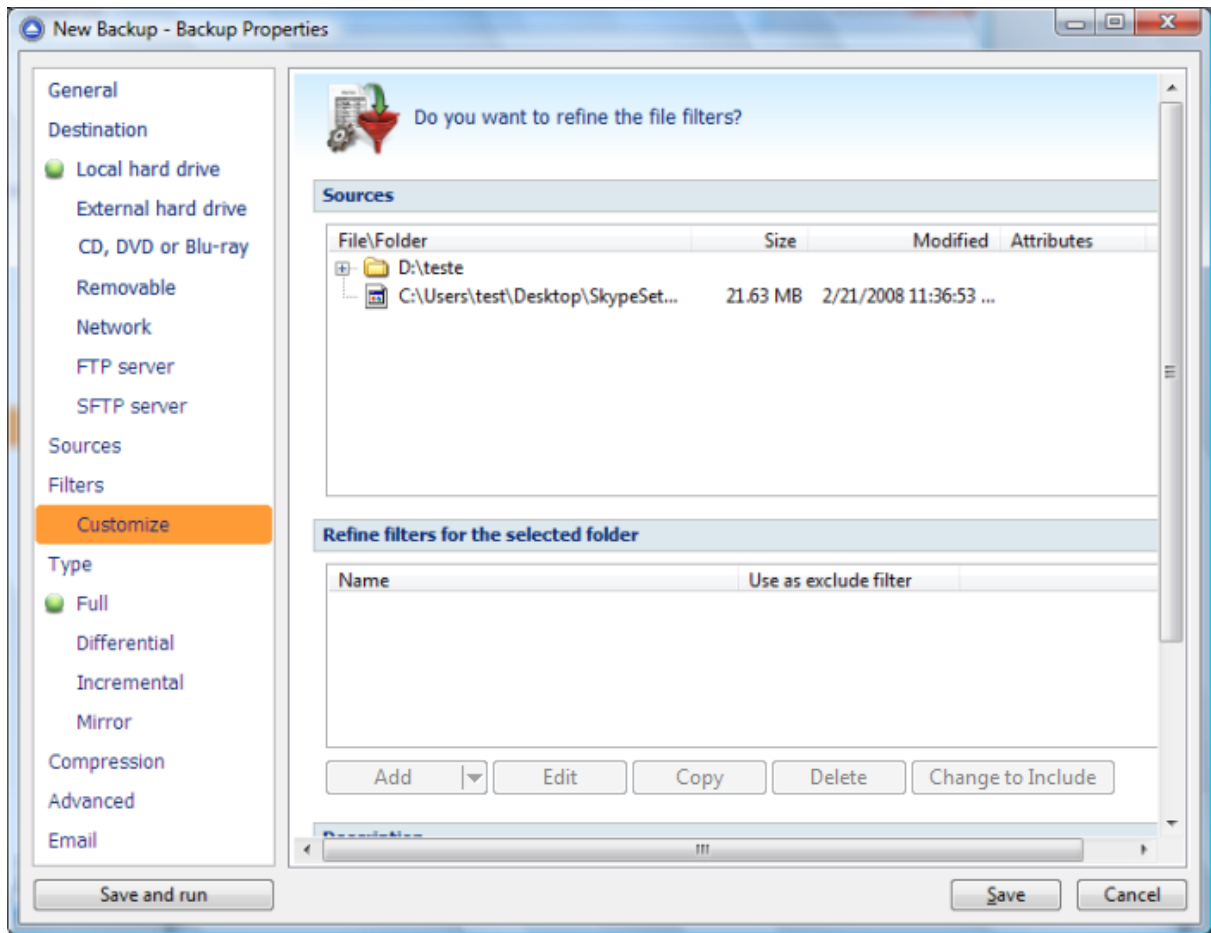
The customized filter can be defined only for folders. That is why add button is not enabled for files.

Any customized filter completely replaces the main filter. Once defined, the customized filter applies on the current folder and recursively on all its subfolders until another customized filter is met. The behavior is the same for include and exclude filters.
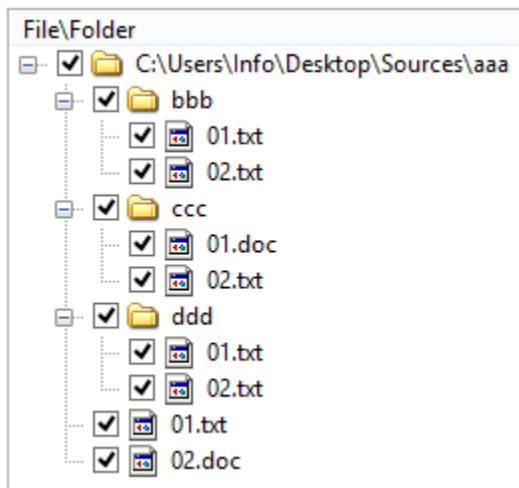
Suppose we have the folder structure in the picture above. Backup source is "D:\Backup sources". A main filter is defined to include all .txt and .doc files. Suppose we do not want to backup .txt files from "ccc" folder. For this we define a customized filter on "ccc" that includes only .doc files.

The result is that all .txt and .doc files will be included except the .txt files inside "ccc" folder as in the picture bellow:
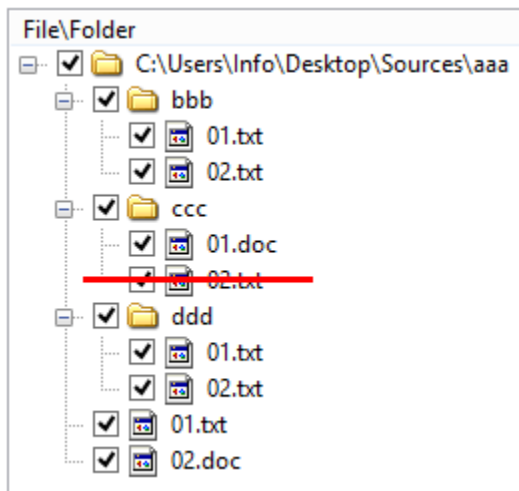
When a folder is selected, the **Add include** and **Add exclude** buttons from the bottom are activated (these are activated only for folders, not for individual files). That means you can replace the main filter with a different one. The <u>customized filter is valid only for the selected folder and its descendants</u>. Click the **Add include** or **Add exclude** button to define the customized filter. This will open a Filter Properties window. You can define include or exclude filters in this window just as you do in the **Filter** page.

All files and folders for which a customized filter is applied are shown in red color. You can **Edit**, **Copy** or **Delete** a customized filter by selecting the folder and clicking one of the buttons bellow.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.5.2   Filter Properties

When you add or edit a filter, the following options will appear:

What do you want to do?

If the Add include or Add exclude button was pressed, the following options will be show:
User can **Create new** filter, **Create new starting from existing** filter or **Use existing** filter. The existing filters are listed in the drop down list and they can be added, edit or deleted from **File->Options->Filters**

If the edit button was pressed, the Edit filter properties window will show the following options:
   Customize filter - allows you to edit the current filter
   Reset to filter - allows you to reset the current filter to a predefined filter from the dropdown list
   Lock to filter - allows you to lock the current filter to a predefined filter from the dropdown list

General

In the **Filter name** field you can type the name of the created filter. By default, the "New filter configuration" name is assigned. If you use an existing filter, the name of that filter is used.

File name

Enabling this will allow defining filters based on file name pattern.
Press **Add** and select an existing file extension from the **Filter** combo (*.doc, *.pdf, *.zip etc.). If the extension does not exist in the combo, just type it in and press OK. You can use the **Edit** or **Delete** buttons to modify/remove the file name filters defined.

File name patterns can include:

- ***** - it matches one or more letters. For example **a*.doc** matches all files that start with **a** and have **.doc** extension
- **?** - it matches only one letter. For example **a*.do?** matches all files that start with **a** and have any extension composed of three letters, the first two being **do**

Folder name

Enabling this will allow defining filters based on folder name pattern.
Enter the directory name that you want to filter in the following format: *\directory_name* (leading *\ and ending * are required). Backup4all will apply the filter to all the directories that are called directory_name. If you want to apply the filter to directories containing a specific word, you must enter it in the following format **keyword**. Now Backup4all will apply the filter to all the directories that have the word keyword in their names. You can use the Edit or Delete buttons to modify/remove the folder name filters defined.
You can also use environment variables when creating filters: %temp%, %SystemRoot% etc.

File attributes

Enabling this section allows the user to specify file filters depending on the file attributes.
There is a list of quick sets to choose for predefined filter criteria:
- **Custom** - this is the default option and allows you to check whatever attributes you want
- **None** - if this is selected all the file attributes check boxes are unchecked
- **FAT attributes** - if this is selected, a set of **File Allocation Table attributes** will be used for file filtering.
- **NTFS attributes** - if this is selected, a set of NTFS (New Technology File System) attributes will be used for filtering. Note that these attributes are available only on Windows XP and above.

File attributes available for file filters:
- **Read-Only** - if checked files with **read-only** attribute will be selected
- **Archived** - if checked files with archived attribute will be selected
- **Hidden** - if checked files with hidden attribute will be selected
- **System** - if checked files with system attribute will be selected
- **Compressed (only NTFS)** - if checked files with compressed attribute will be selected
- **Temporary (only NTFS)** - if checked files with temporary attribute will be selected
- **Encrypted (only NTFS)** - if checked files with encrypted attribute will be selected
- **Not indexed (only NTFS)** - if checked files with "not indexed" attribute will be selected
- **Offline (only NTFS)** - if checked files with offline attribute will be selected
- **Reparse point (only NTFS)** - if checked files with **reparse point** attribute will be selected
- **Sparse file (only NTFS)** - if checked files with **sparse file** attribute will be selected

For example, if you want to include files with **read-only** and **archived** attributes set, you have to check both attributes checkboxes in a single restriction. If you want to include files with **read-only** or **archived** attributes set, you have to make two separate restrictions: one for **read-only** and another for **archived**.

File dates

This section allows the user to build restrictions based on file dates and times. To enable options in this section, check the **Filter by date** option.
Filters in this section can be applied by selecting one of the available date filters:
- **date accessed**
- **date and time accessed**
- **date modified**
- **date and time modified**
- **date created**
- **date and time created**

You can compare these dates and times with a **fixed date** or a relative date: **today**, **yesterday**, **one week ago** or **one month ago**.
Comparison operators available:
- < > date (and time) not equal to fixed or relative date
- < = date (and time) less than or equal to fixed or relative date
- > = date (and time) greater than or equal to fixed or relative date
- < date (and time) less than fixed or relative date
- > date (and time) greater than fixed or relative date
- **in interval** - date (and time) in a particular time interval between the **Start date** and **End date**

File size

This section provides the possibility to build restrictions based on the file size. To enable the options

in this section, check the **Filter by size** option. You can enter a file size in the **Size** field and select a measurement **Unit**. The filter will compare the file size on disk with the size you enter using the comparison filters you selected:

- < > file size on disk not equal to the value in the **Size** field
- < = file size on disk less than or equal to the value in the **Size** field
- > = file size on disk greater than or equal to the value in the **Size** field
- < file size on disk less than the value in the **Size** field
- > file size on disk greater than the value in the **Size** field

Note:
Filters on files and filters on folders must be created individually. If you use a file and a folder filter condition in the same filter, files will be filtered only if both filter conditions were met.

Examples
- If you use a single filter for .jpg files and Temp folder, only the .jpg files from Temp folder will be filtered. If you use separate filters for files and folders, all .jpg files and whole Temp folder will be filtered.
- Suppose you want to backup (or restore) all **.pdf** files accessed in the last month and all **.doc** files modified in the last week, but you don't want to backup (or restore) system or hidden files.

Here are the steps to define this filter starting from the default filter:

1) Add a new restriction in the include filter: enable **File name**, add ***.pdf** file pattern and set date accessed to be **greater than or equal to fixed date one month ago**; click **OK**

2) Add a new restriction: add ***.doc** file pattern and set date and time modified to be **greater than or equal to fixed date one week ago**; click **OK**

3) Add a new restriction: enable **File attributes** and the **System** checkbox, then click **OK**

4) Add a new restriction: enable **File attributes** and the **Hidden** checkbox, then click **OK**

5) For the last two restrictions, check the **Use as exclude filter** boxes.

7.6   Type
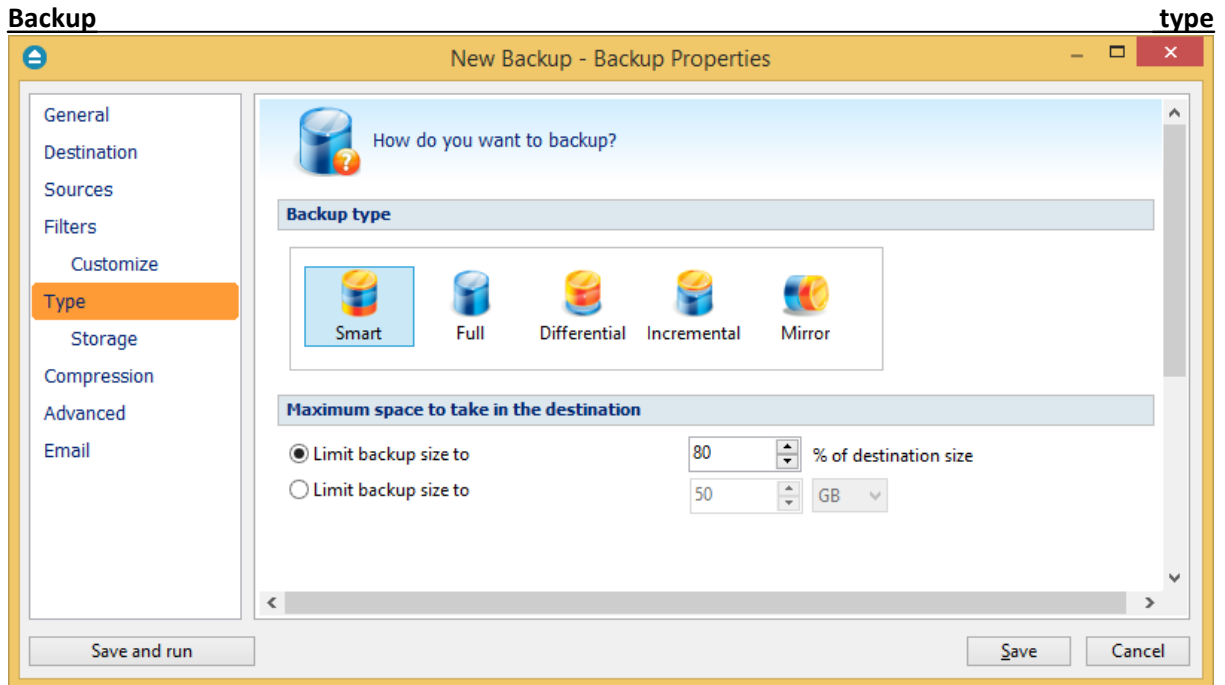
Backup   **type**

User can select one of these backup types:

- Smart
- Full
- Differential
- Incremental
- Mirror

The backup type can be changed from the **Type** page in **Backup Properties**, by selecting the icon for the desired backup type.
The smart, full, differential and incremental backup types use zip compression to reduce the size of the stored backup versions.
The mirror backup type creates in destination an exact copy of the source file without zipping them.

Smart
Smart backup is a backup type which combines the full, differential and incremental backup types with cleanup operations in order to efficiently manage the backups according with the backup settings and the free disk space in destination. The Smart backup type starts with a full backup. The advantage is that you don't need to worry about the number of backups to store in order to fit on the destination drive, which backup version to clean or merge, as Backup4all will take care of that. Click here to see all options available for Smart type.

Full
Full backup type will create in destination a zip file with all source files and folders. There are no

other options available for Full type.

Differential
The Differential backup will create in destination a zip file containing all new and modified files since the last full backup. Click here to see all options available for Differential type.

Incremental
The Incremental backup type will create in destination a zip file containing all new and modified files since the last backup. Click here to see all options available for Incremental type.

Mirror
The Mirror backup will create in destination an exact copy of the source files, without zipping them. Click here to see all options available for Mirror type.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.
   Backup Properties - Storage

7.6.1   Smart
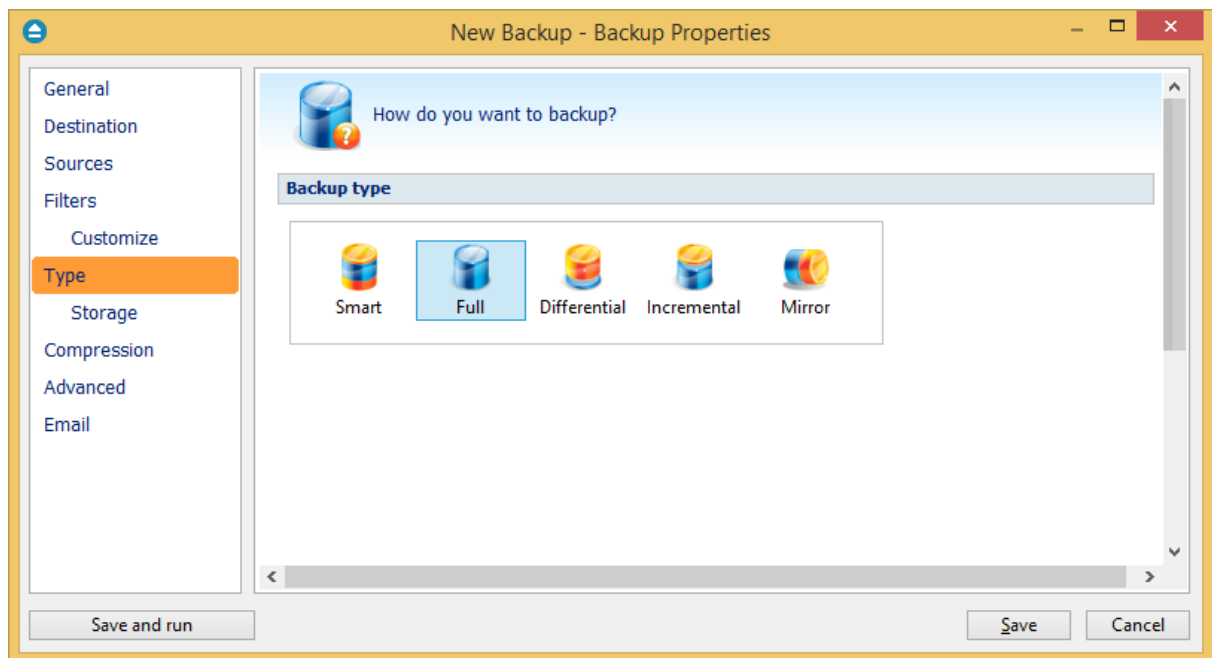
Smart

Maximum space to take in the destination

In time, the disk space occupied by the backups will grow. You can select the maximum size of the destination drive to be used for backups. You can set the limit in percents or in MB/GB. If you want to use the entire destination drive only for backups, set the limit to 100%. By default the limit is set

to 80% of the destination size.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.6.2   Full

Full backup is the starting point for all other backups, and <u>contains all the data in the folders and files that are selected to be backed up</u>. Because the full backup stores all files and folders, frequent full backups result in faster and simpler restore operations. This backup type is slow on large volumes of data, so it is recommended to be done periodically (each Week/Month) and in between to use other backup types like **Incremental** or **Differential**. The advantage is that you only need the result of one backup execution to make a full restore.
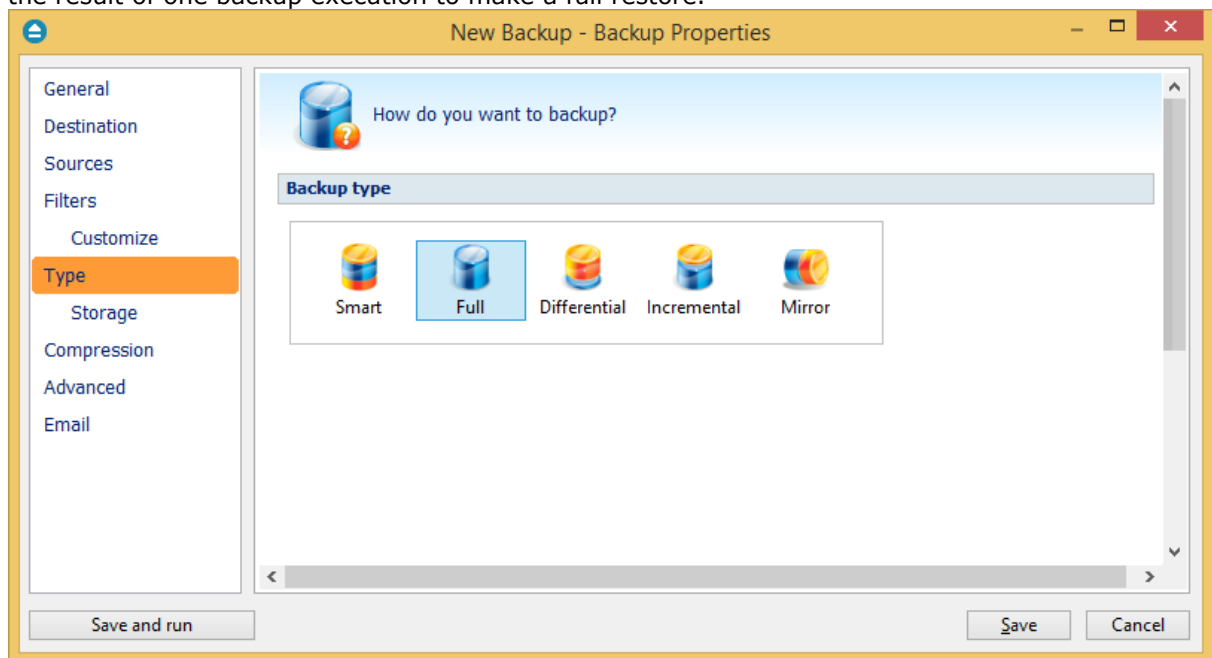
<u>Full</u>

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.6.3   Differential

A **differential backup** contains <u>all files that have changed since the last full backup</u>. The advantage of a differential backup is that it shortens restore time compared to a full backup or an incremental backup. However, if you perform the differential backup too many times, the size of the differential backup might grow to be larger than the baseline full backup. At the first backup execution the catalog was not created yet, so the application will perform a full backup. The rest of the backups contain   only   the   files   that   differ   from   the   latest   full   backup.
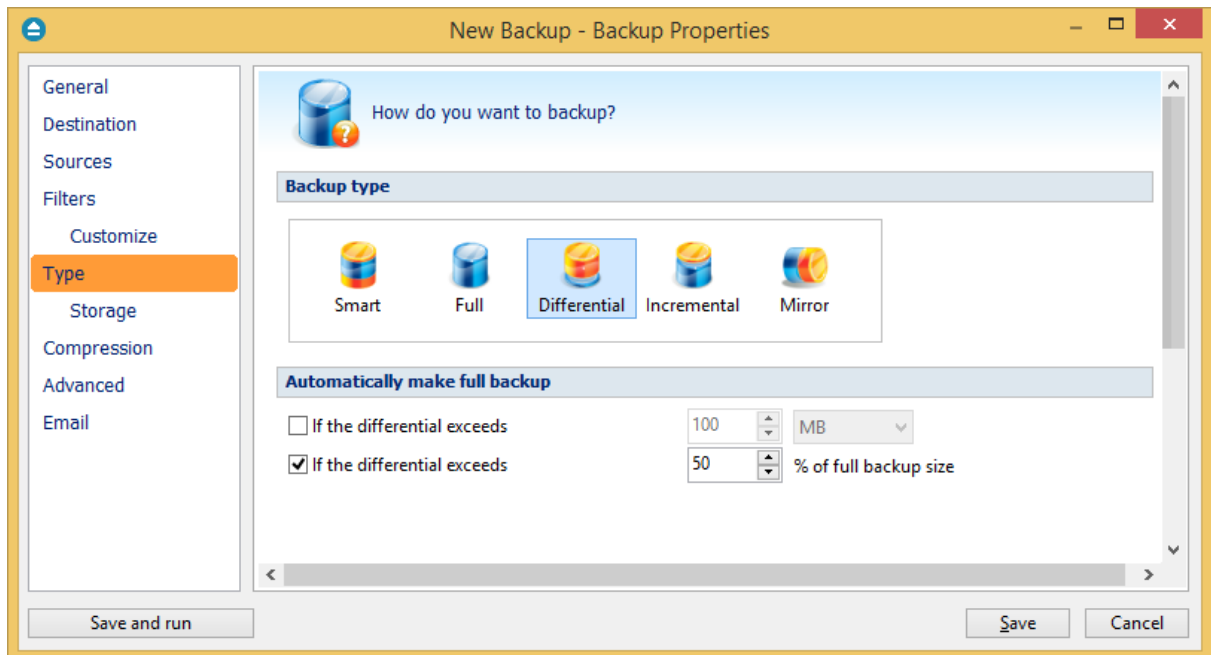
Differential

Automatically make full backup

If the differential exceeds % of full backup size
In time, the size of the differential can outgrow the full version. For maximum efficiency, the size of the differential should be kept as small as possible. This option will trigger the creation of a full backup when a certain percentage of the full backup will be exceeded (default is 50%).

Make full backup when the differential exceeds
If this is checked, Backup4all will trigger the creation of a full backup when that custom size is reached (default is 100 MB).

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.6.4   Incremental

An **incremental backup** stores <u>all files that have changed since the last full, differential or incremental backup</u>. The advantage of an incremental backup is that it takes the least time to complete. However, during a restore operation, each incremental backup is processed, which could result in a lengthy restore job.
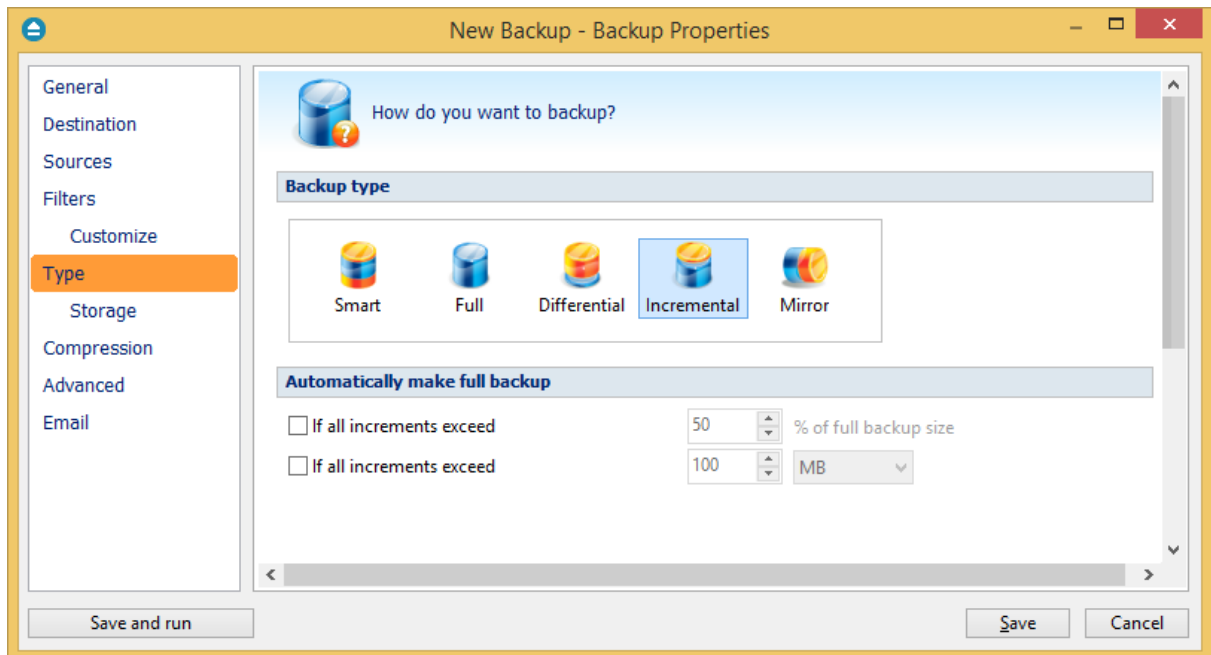
Incremental

Automatically make full backup

Make full backup when all increments exceed % of full backup size
In time, the size of the incremental can outgrow the full version. For maximum efficiency, the size of the incremental should be kept as small as possible. This option will trigger the creation of a full backup when a certain percentage of the full backup will be exceeded (default is 50%).

Make full backup when all increments exceed
If this is checked, Backup4all will trigger the creation of a full backup when that custom size is reached (default is 100 MB).

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.6.5   Mirror

A **mirror backup** is identical to a full backup, with the exception that the files and folders are not compressed in zip files and they cannot be protected with a password. A mirror backup is most frequently used to create an exact copy of the backup source data. The sources folder tree will be recreated in the destination.
This backup type is the fastest, provided that **Fast mirror** option is checked.
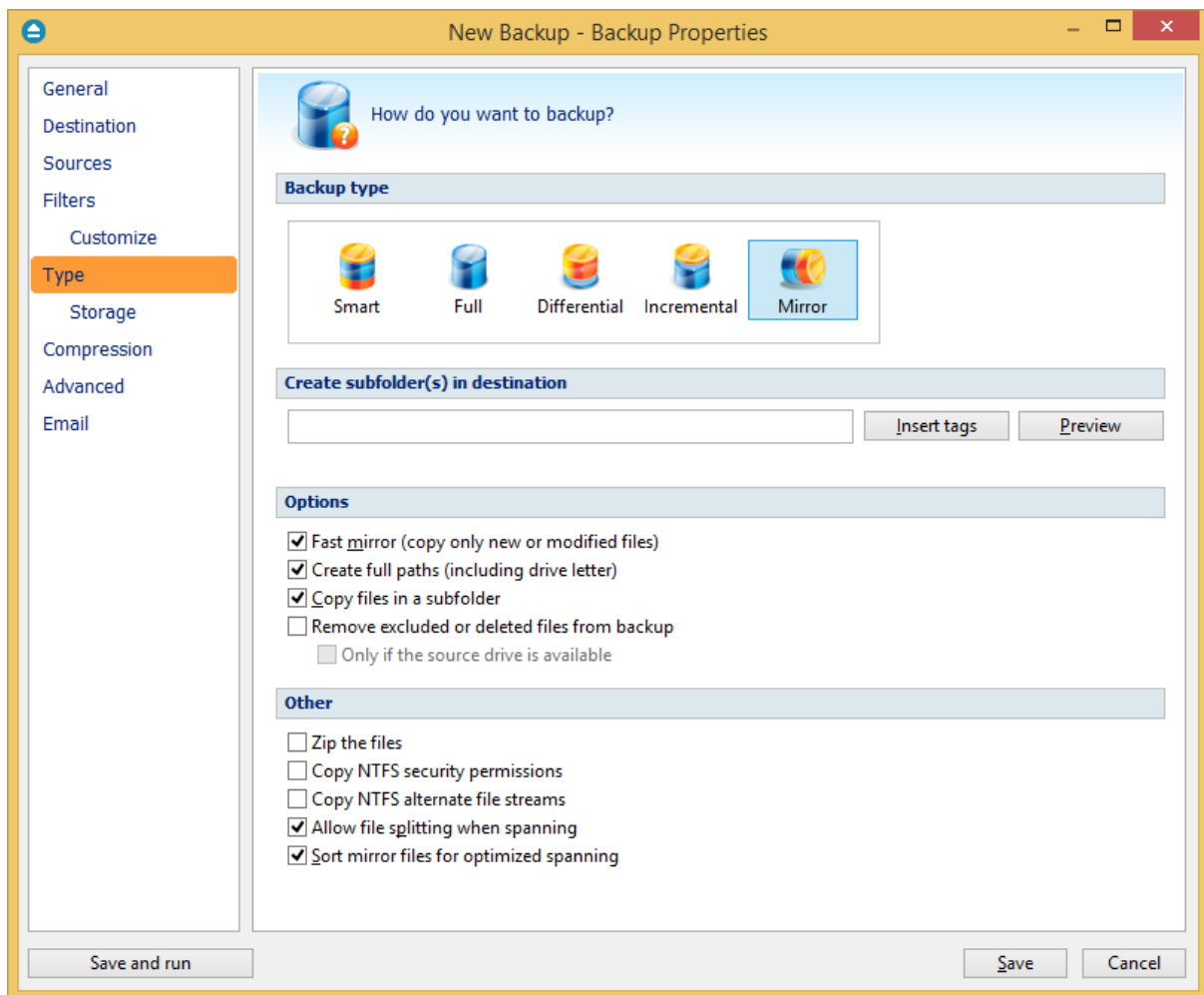
Mirror

Create subfolder(s) in destination

Use this option to create a subfolder in the destination. The name of the folder can be customized by pressing the **Insert tags** button. Following tags are predefined:
- Backup Name (<BACKUP NAME>)
- Backup Number (<BACKUP NUMBER>)
- Backup Type (<BACKUP TYPE>)
- Backup Date (<DATE>)
- Backup Time (<TIME>)
- Backup Hour
- Backup Minute
- Backup Second
- Backup Year (<YEAR>)
- Backup Month (<MONTH_MMM>)
- Backup Month - numeric (<MONTH_MM>)

- Backup Day (<DAY>)
- Backup Week (<WEEK>)
- Backup Day of Week (<DAY OF WEEK>)
- Backup Day of Week (locale)
- Backup Day of Week (numeric)

You can also add your text in tag field. Use the **Preview** button to see how the name of the subfolder will look like.

Note that the **Fast mirror** option will be ignored if you choose to create subfolders in the destination with a different name each time.

Options

Fast mirror (copy only new or modified files)
Use this option to make mirror backups even faster. When this option is set, Backup4all uses the information stored in ".bkc" files to copy only new or modified files to the destination. If this option is not set, the system will copy all files each time the backup is executed. By default this option is checked.

Create full paths (including drive letter)
Sometimes there can be sources with the same names. The system will detect this conflict situation and will show a warning message.
To avoid files to be overwritten check the **Save full folder info** option. This will create the full path of the source in the destination.
For example, suppose we have the backup source "C:\My Documents\My Pictures". Without this option, only the **My Pictures** folder will be created and its subfolders. With this option set, the destination will contain the **C** folder, **My Documents** inside **C** folder, **My Pictures** inside **My Documents** folder and so on. By default this option is unchecked.

Copy files in a subfolder
If checked, the files will be copied in a subfolder of the destination folder (typically you will see a ".bkc" file and a folder with the same name). If the option is not set, the files (and folder structure) will be copied directly into the destination folder. By default this option is checked.

Remove excluded or deleted files from backup
Use this option to remove from the backup the files that were deleted (or excluded) from the backup sources. This option is not selected by default.

Only if the source drive is available
Use this option to avoid removing your files from backup if the sources are not available all the time.
If you don't use this option, when the source files are not reachable, Backup4all will consider them as being deleted or excluded.
The deleted or excluded files will be removed from the backup.

<u>**Others**</u>

Zip the files
Use this option to zip each file individually. The folder structure will be preserved, only the files will be zipped.

Copy NTFS security permissions
Use this option to copy the files NTFS security permissions

Copy NTFS alternate file streams
Use this option to copy the NTFS alternate file streams

Allow file splitting when spanning
The option is effective only when there is not enough space in the destination to copy all files (removable media is full, USB drive is full, etc.). If checked, the application will copy files to the destination until a file will not fit. Then it will split that file and continue with the rest of it on the next disk. If the option is not set, files are not split. If you are backing up media files (music, videos) you should uncheck this option so that you will not have any melody/movie split. By default this option is checked.

Sort mirror files for optimized spanning
This option is useful when spanning the backup over multiple removable drives. If this is checked, Backup4all will sort the files by size (descending) before copying them on the removable drive. This way it will start with the larger files and put the smaller ones towards the end of the backup (optimizing the space used on the removable drive). By default this option is not checked.

Be aware that you can restore only from the latest version of a mirror backup from the Backup4all interface. You can restore however manually previous versions as they are accessible from any file manager, like **Windows Explorer**.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.6.6   Storage
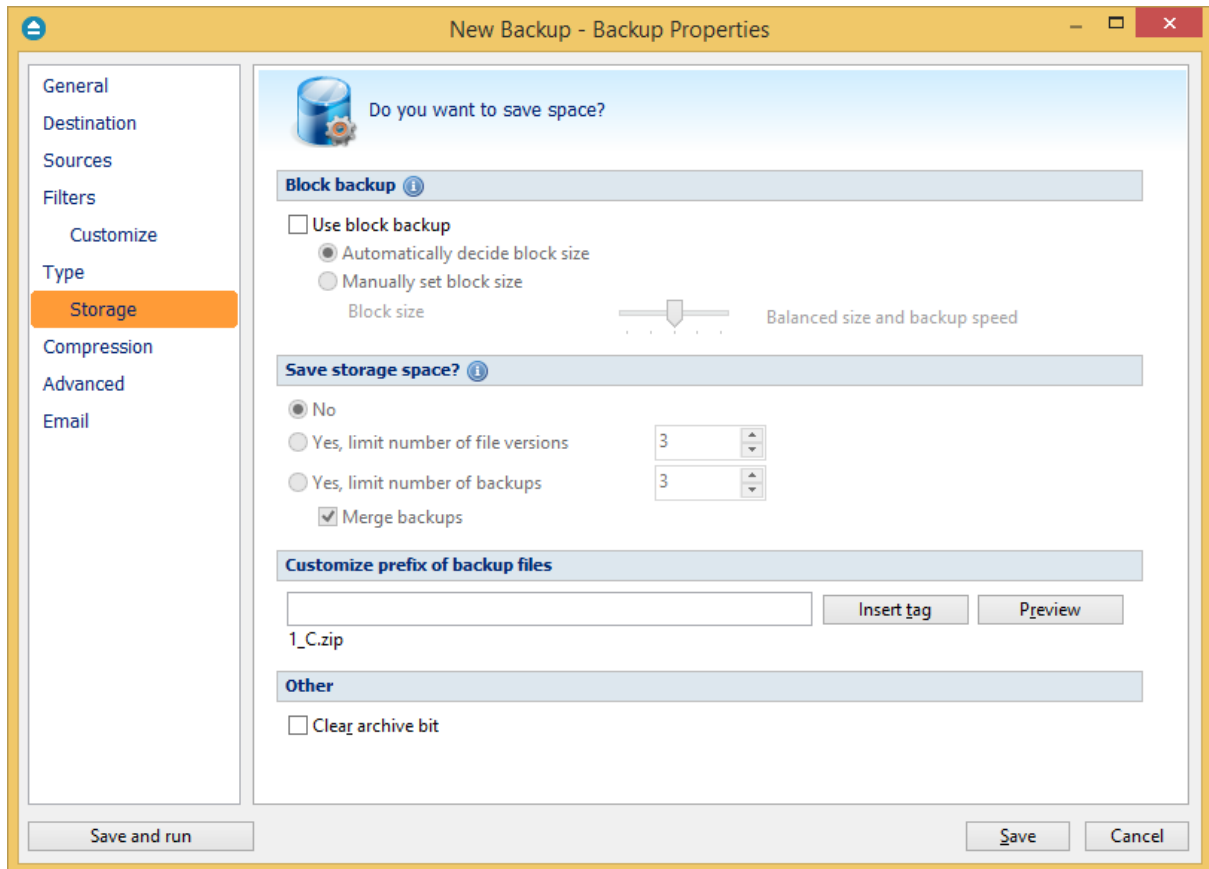
Block backup

Use block backup
When backing up large files which are modified in small parts (as database files), it is useful to back up only the modified part (block) of the file, without backing up the entire file every time. This way you will get smaller and faster backups.

Automatically decide block size
If this option is selected, the size of the block will be determined automatically.

Manually set block size
If this option is selected, the size of the block will be set manually by moving the slider to a larger or smaller size.
The slider steps are: 5 MB (smallest size), 25 MB (smaller size), 50 MB (default), 62.5 MB (larger size) and 75 MB (largest size). For files smaller than the size of a block, this feature won't be applied.

Block backup feature can be used in Backup4all only if it was enabled before the first execution of the backup job. That is because the blocks must be identified during the backup and used later when the source files are modified. If no previous blocks exists, there are no blocks to compare for later executions. After the first execution of the backup job without the block backups option selected, the

"Use block backup" option is disabled and cannot be enabled for that job.

Save storage space?

To keep the number of stored zip files at a reasonable number, the application provides three options: **Limit number of file versions**, **Limit number of backups** and **Merge backups**. These options either delete older stored backups or perform an internal merge to keep the number of stored backups or file versions under the selected limit.

The **Limit number of file versions, Limit number of backups** and **Merge backups** options cannot be used when the backup destination is on a removable media, CD, DVD or Blu-ray disc etc.

By default the **Limit number of file versions** and the **Limit number of backups** options are not enabled. This means that the system will keep all the stored backup versions. If you choose to enable the **Merge backups** option, when the limit is reached the system will perform an internal merge between the older versions keeping the number of stored backups equal to the specified limit (the merge between zip files is necessary to keep at the latest file version from each zip file to be merged).
However when changing between Mirror and Full, Incremental or Differential, the older versions are deleted.

The **Limit number of file versions** option will delete from the backups only the files that have more versions than the maximum allowed limit, to keep the number of versions under the specified limit.
The **Limit number of backups** option will delete the backups to maintain the maximum limit.

Customize prefix of backup files

Typically the name of the zip file is something like: "1_C.zip", "1_D.zip" etc. (one zip for each drive). The names of these zip files do not make much sense for the user but they can be customized by pressing the **Insert tag** button. Following tags are predefined:
- Backup Name (<BACKUP NAME>)
- Backup Number (<BACKUP NUMBER>)
- Backup Type (<BACKUP TYPE>)
- Backup Date (<DATE>)
- Backup Time (<TIME>)
- Backup Hour
- Backup Minute
- Backup Second
- Backup Year (<YEAR>)
- Backup Month (<MONTH_MMM>)
- Backup Month - numeric (<MONTH_MM>)
- Backup Day (<DAY>)
- Backup Week (<WEEK>)
- Backup Day of Week (<DAY OF WEEK>)

- Backup Day of Week (locale)
- Backup Day of Week (numeric)

You can also add your text in the edit tag field. Use the **Preview** button to see how the names of the zip files will look like.

Windows does not allow the following characters in the file name: / \ * ? : " < > |

Therefore Backup4all will prompt you to change these characters if present in the **Customize zip name prefix** field.

Other

If the **Clear archive bit** option is checked, the application will remove the Archive flag of the files that were added to the backup. By default Backup4all uses the current comparison criteria and the information from catalog file to detect if a file was modified or not since the last backup, which is more accurate than using only the Archive bit (as other backup programs do). However, if you want to backup files based only on the Archive bit attribute, you can change the comparison criteria from the **Backup Properties->Advanced** window.

7.7   Compression

On the **Compression** page, you can configure the compression and encryption settings.
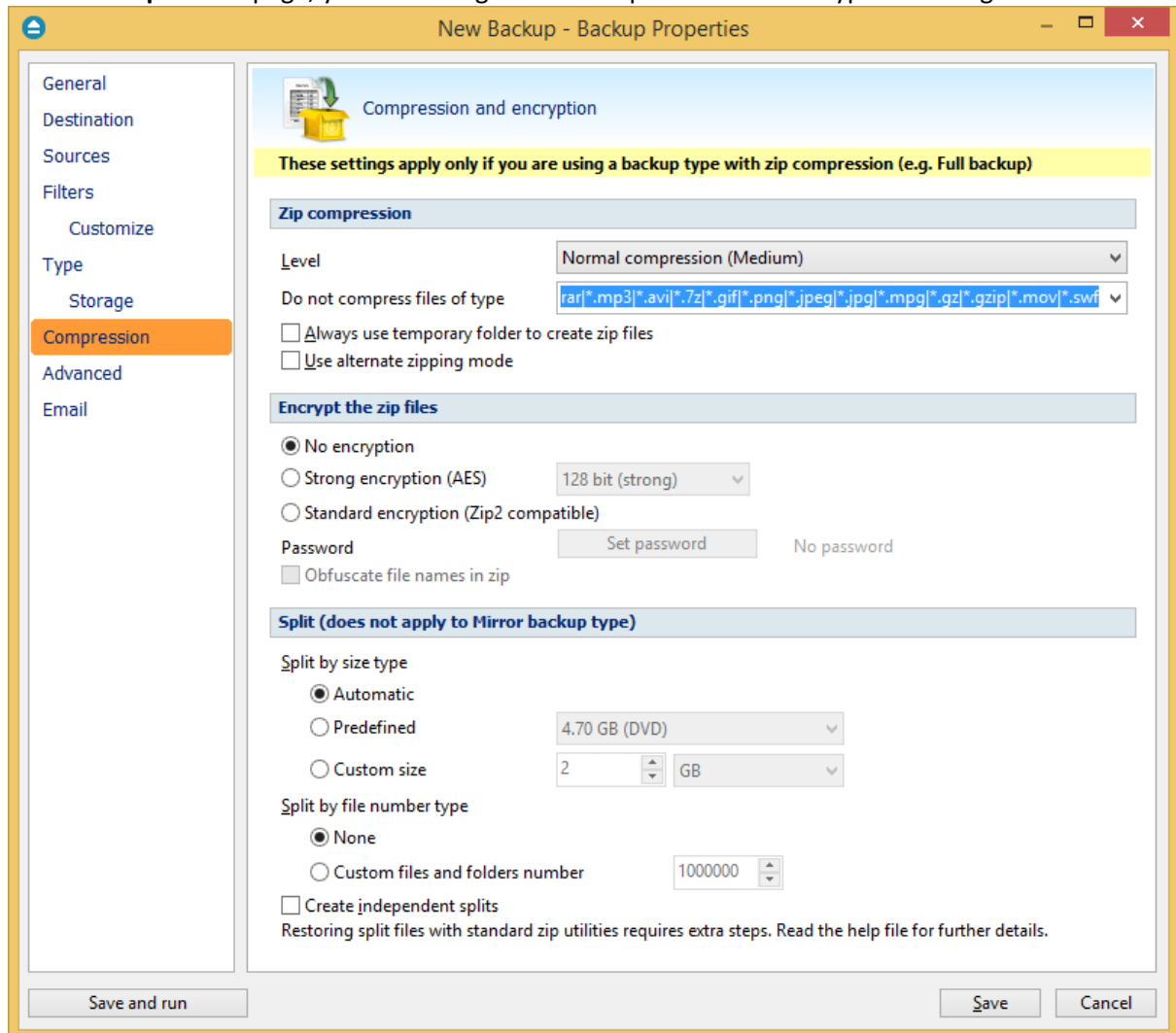
Zip compression

Level
You can set different compression levels for the backup:
- **Zip without compression (Fastest)** - files are just copied inside the zip archive, without any compression
- **Low compression (Fast)** - select this option if the size of the zip archive is not important, but the speed of the backup is
- **Normal compression (Medium)** - this is usually the best choice because it provides the optimum rate between zip archive size and the backup speed
- **Best compression (Slow)** - use this compression level to reduce the zip archive size as much as possible (the backup speed is reduced)

Use **No compression** or **Low compression** if you backup large files to speed up the backup process.

Use **High compression** when you want to create the smallest archive possible. This option takes more time if the files included in archive are large.

Do not compress files of type
The filter can be applied to increase the compression performance. It defines what types of files to be stored uncompressed in the zip file. These are files that are already compressed (e.g. zip, rar, mp3 or avi) and using the zip compression on them wouldn't result in a smaller sized backup. You can use the already defined file types or you can add others using the **Default compression filter list** in **File->Options->Backup**. The result will be that the backup will take less time when using compression.

Always use temporary folder to create zip files
If checked, the zip files are created in the temporary folder and then moved to the destination folder. This means that there should be enough free disk space on the drive where the temporary folder is located.

When backing up to removable media (CD, DVD or Blu-ray disc, floppy, zip disk, etc.) this option is ignored, the zip files are always created in the temporary folder and then copied to the destination. When backing up to internal hard drives or LAN, you should uncheck this option to speed up the backup execution. By default this option is not checked.

Use alternate zipping mode
If not checked (default zipping mode), each file is compressed in blocks that are immediately added to the final zip file. If checked (alternate zipping mode), each file is compressed in blocks in a temporary file. When the whole file is compressed in the temporary file, it is added to the final zip file.
This option has effect only when backing up to internal hard drives and LAN. In all other cases this option is ignored. When backing up to LAN drives, it is recommended to check this option and uncheck **Always use temporary folder to create zip files** option. When backing up to internal hard drives, it is recommended to uncheck both options. By default this option is not checked.

<u>**Encrypt the zip files**</u>

No encryption
The zip files created are not protected by password for unauthorized access.

Strong encryption (AES)
This is the Advanced Encryption Standard, the best choice in zip protection, but recognized only by the latest version of third party zip applications.
Backup4all supports AES encryption in three different strengths:
- **128 bit (strong)** - size of the encryption key is 128 bits. This provides significantly better security than standard zip 2.0 encryption.
- **192 bit (stronger)** - size of the encryption key is 192 bits
- **256 bit (strongest)** - size of the encryption key is 256 bits. This is the strongest encryption method for zip files and it provides the best security.

Standard encryption (Zip2 compatible)

This is the standard Zip 2.0 encryption: an older encryption technique that provides relatively weak security compared to AES encryption. Zip 2.0 encryption format cannot provide protection from individuals with access to specialized password recovery tools. Its advantage over AES encryption is the compatibility with all third party zip applications.

Set password
After you press this button, a windows with the following fields will appear:
- **New password**
  Manually enter the password you want to use for your zip files in this field
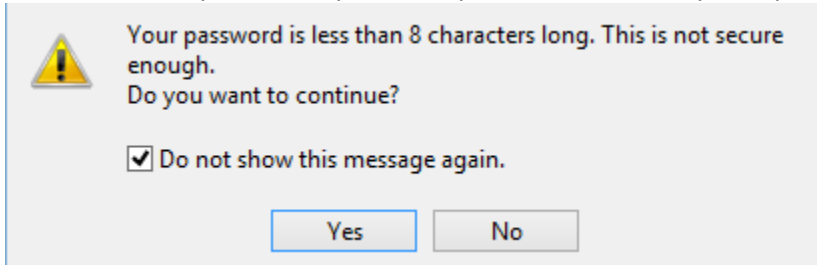
- **Confirm new password**
  Re-enter the password in this field to avoid typing errors.
- **Old password**
This field is enabled only when the backup job already has a password. You can change the password only if you enter the old one in this field. This way only the owner of the backup will be allowed to change the password.
The system makes it possible to set different passwords for the same backup job, so the backup may contain zip files with different passwords.

Obfuscate file names in zip
Using this option, all file names will be obfuscated and they will have in zip new names as numbers. This way you will get in destination a zip file with the source real names changed in order to get a higher protection. Normally, in zip file only the file content is protected, but anyone can see the name of the files. When the obfuscate option is used, even if the real names of the files in zip are replaced with numbers, you can still restore the files with the original names if the correct zip password is used.

Tips:
- when choosing a password, it is recommended that you use a <u>combination of letters and numbers and at least 8 characters</u>.
- make sure that you remember all passwords that have been used for a backup job, or <u>you will not be able to restore your files</u>.

<u>**Split (does not apply to Mirror backup type)**</u>

Split by size type
- **Automatic**
  This is the default split option, meaning that the size of the zip is limited to the maximum file size allowed by the file system.

- **Predefined**

The predefined values are provided for floppy disks, zip disks and different CD media types.
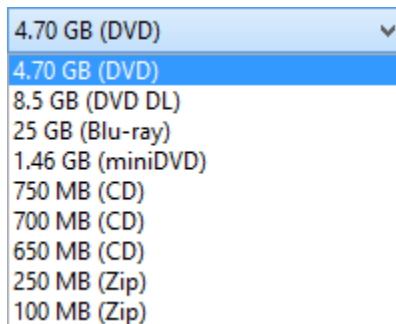
- **Custom size**

Sometimes these predefined values are not enough. Therefore you can select **Custom** size in the combo and specify the maximum archive size you want. The minimum span size is 512 kilobytes. The value in the **Size** field means that each span should not exceed this value. However, because of the zip algorithm limitation, the system might create spans with size up to 32-64 kilobytes smaller than this value.

Split by file number type

- **None -** The split by file number option is disabled
- **Custom files and folders number -** Specify the maximum number of files and folders to be included in a zip file. This option is useful if the application is using a lot of computer memory

Create independent splits

Using this option, each backup split can be independently restored.

If you have a large backup that spans over several removable media (CD/DVD/Blu-ray, floppy) each spanned backup can be independently restored. Thus, if one of the spanned backup disks is corrupted you can still restore the other files.

Example: you have a backup that was spanned over 20 CDs, and you didn't leave the **Create independent splits** option checked. If you need to do a restore and one of the zip files is damaged, you lose all the data from the 20 CDs. Now, if the **Create independent splits** would have been checked, even if one zip file would have been damaged, the data from the other 19 could have been recovered.

Each zip file created with Backup4all can be extracted with standard zip utilities. However, when using the **Create Independent Splits** option and backing up a file big enough to be split into more than one zip file, you will need to perform an additional operation if you want to restore that file manually (without using Backup4all).

Here are the steps for restoring a split file from independent zip archives:

1. Unzip the archives that were created by Backup4all. Assuming that the initial file was called music.wav, if the file was split in 2 parts the problem is that both will have the same name, music.wav. Thus, when un-zipping the archive that contains the second part of the original music. wav, you'll get a message that a file with the same name already exist - you need to press Rename and name it music2.wav. Also, to make things easier, you need to rename the first part of the split file to music1.wav. The files you have renamed, music1.wav and music2.wav, need to be combined so that you have the entire original file, music.wav.

2. Open the Windows command prompt (Start->Run, type cmd and press Enter). Using the command copy (write copy/? and press Enter to see the help for this function) write copy music1.wav /b + music2.wav /b music.wav (first two files are the sources, last file is the destination) and press Enter. Note that you have to be in the folder where the source files are in order for it to work.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.8   Advanced

Options on this page affect the way a particular backup job is executed. Options that are marked with (*) might not be available in your edition - check Feature Matrix for detailed information on differences between editions.

Backup options

☑ Use local catalogs
  ☐ Compress catalog in destination
☑ Test after backup
  ☑ Remove from catalog all files with errors
  ☐ Delete sources after successful backup
☐ Verify backup integrity before execution
☐ Ask for backup label before execution
☐ Backup open files
☑ Store temporary catalog data in memory
☑ Smart file scanning mode ⓘ
Backup priority   Normal priority

Run action before backup

☐ Run program or action   <Clear backup>
  ☐ Run only once
  ☐ Abort backup when action fails

Run action after backup

☐ Run program or action ⓘ
  ☐ Run only once
  Run program or action on:
  ☑ Success
  ☐ Warnings
  ☐ Errors

Backup options
Use local catalogs (.bkc)
If this option is checked, Backup4all will keep a local copy of the backup catalog for the current backup job. Keeping a local copy of the catalog is recommended in most cases, except when using a backup rotation scheme to back up to CD, DVD or Blu-ray disc, USB or external drives.

Example: the option **Use locals catalogs** is unchecked and you are performing an incremental backup to DVD, but on each working day you're changing the DVD so that if one DVD fails you'll still be able to recover most of your files. So on Monday you insert DVD 1, Backup4all runs and performs a full backup. On Tuesday you insert DVD 2 (which is empty) and Backup4all performs a full backup that includes all the data that's on DVD 1 plus the data that was added in between.
Now, if the Use local catalogs option would have been checked, Backup4all would have executed on DVD 2 an incremental backup because of the full backup already executed on DVD 1.

Compress catalog in destination
If this option is checked, the .bkc catalog file in destination will be compressed. This is required if you use the obfuscate option from the Compression page and it's also useful for large catalogs to save the storage space.

Test after backup
If this option is set Backup4all will test the resulting backup for data integrity after every backup process. Only the latest backup number will be tested after the backup execution. If you wish to test other backup numbers you can do so from the Test Backup window.
If this option is selected, the backup catalog will be also repaired after the current backup version is tested if there were files not correctly backed up or missing from the backup destination. Those files will be removed from the backup catalog and they will be backed up again next time the backup is

executed.

Remove from catalog all files with errors
This option, selected by default, is used to also repair the backup catalog during the test after backup. If there are files backed up with problems and the test on those files fails, they will be removed from the backup catalog. Next time you run the backup, Backup4all will try to back up those files again.

Delete sources after successful backup
If this option is checked the backup sources will be deleted after performing the backup.
This option is disabled if the **Test after backup** option is not enabled.

Verify backup integrity before execution
If this option is selected, the backup integrity will be verified before running the new execution.

Ask for backup label before execution
If this option is set a window will be shown and will prompt the user to enter the label description of the backup increment.
If you do not want to give a label to the current backup, leave the edit control empty. Check the **Don't label next backups** if you do not want to see this window when the current backup job is executed in the future. This feature is particularly useful for incremental backup types, when the label can be seen as a milestone for all files backed up. These labels are visible on the **Versions** page of the **Restore Wizard** and in the list of file versions in the **Explore view**.

Backup open files
If checked, the application will back up open files. Please note backing up open files is possible only on Windows XP or higher, if the file is stored on a local NTFS hard drive and the VSS service is running and properly configured.

Store temporary catalog data in memory
If checked, the catalog file will be stored in RAM memory. If you receive an "Out of memory" warnings or you have a large catalog file, we recommend you to uncheck that option. If unchecked, the catalog file will be stored in a temporary file on your hard drive.

Smart file scanning mode
Backup4all can use the USN journal to get a faster detection of the modified source files. The USN Journal (Update Sequence Number Journal), or Change Journal, is a feature of NTFS which maintains a record of changes made to the volume.
Since version 5.4 of Backup4all, this option is activated by default for all new jobs. It can be activated manually for jobs created with an older version of Backup4all.

The "Smart file scanning mode" option is used in all cases with the following exceptions:
1. User is not an administrator and the sources are on local drives. For standard users this option works only for external drives.
2. The source drive is not NTFS formatted.
3. Sources are not on local drives (ex: network drives). This option also works for local removable

NTFS drives (stick, external hard drive, removable drives)
4. Backup job has relative file date filters are (ex: "older than x days").
5. If the file/folder filter has changes since the previous backup.
6. The journal will not be used at first backup (all sources are newly added).
7. The journal will not be used for full backup executions.
8. The journal will not be used when a source is newly added to backup
9. The journal will not be used when the source is changed by including other subfolders/files that were previously excluded
10. Because parsing the NTFS journal can be slower in some cases than parsing the files, the option will not be used if there are less than 20,000 files & folders in the backup. The 20,000 count is calculated as sum of all files and all folders already present in backup catalog, before the current backup execution.

Backup priority

Using the slider you can set the backup execution priority compared to the rest of the running processes on your system. Setting it to **Highest priority**, for instance, will determine the system to allocate most of its resources for this backup execution.

Run action before backup

Run program or action

Check this option and select one of the predefined actions or choose a different executable file. You can either enter directly the path to the program (has to be between quotes) or click the 📂 button to browse for the file. Backup4all waits until the action is finished before proceeding with the actual backup process.

The **<Clear backup>** predefined action deletes the ".bkc" file and all zip files associated with the current backup job. If this action is set, then the backup performed is a full backup, even if the backup type is set to incremental or differential . You can customize it with the following parameters (numbers can be changed as necessary):

- **<Clear backup d=7>** - Clear backup is executed only if 7 days have passed since the first backup increment (the full backup).
- **<Clear backup n=10>** - Clear backup is executed only if the number of file versions is 10.
- **<Clear backup d=7 n=10>** - Clear backup is executed if 7 days have passed since the first backup increment (the full backup) or if the number of file versions is 10.
- **<Clear backup dw=1,2,7>** - Clear backup is executed only in the first, second and seventh day of the week (Monday, Tuesday and Sunday in the given example). Valid values: 1-7 (if a parameter outside of these values is set, it will be ignored).
- **<Clear backup dm=23, 30>** - Clear backup is executed only in the 23rd and 30th day of the month. Valid values: 1-31 (if a parameter outside of these values is set, it will be ignored, same as using the value 31 for a month having only 30 days).

Run only once

If this option is set, the action will run only once at the next backup execution and the **Run program/ action** option will be reset and disabled afterwards.

Abort backup when action fails
User can check this option to abort the backup if the action ran before the backup failed.
Backup4all uses the exit codes returned by the applications.
If the exit code is 0 (zero), it means the action was successful.
If the exit code is different than 0 (zero), the action was not successful and the backup will be aborted.

Run action after backup

Run program or action
Check this option and select one of the predefined actions or choose a different executable file. You can either enter directly the path to the program (has to be between quotes) or click the 🗁 button to browse for the file. Backup4all does not wait for the action to be finished before proceeding.

Available predefined actions:
- **<Stand by>** - The computer will enter in the **Stand by** state after the backup is executed.
- **<Hibernate>** - Computer enters in **Hibernate** (if available) after the backup execution.
- **<Log off>** - Closes all applications and **logs off** current user. When force parameters is set (example: <Log off /f>), the system will force applications to be closed. Force parameter might cause some applications to loose unsaved data.
- **<Shut down>** - **Shuts down** the computer. When force parameters is set (example: <Shut down /f>), the system will force applications to be closed. Force parameter might cause some applications to loose unsaved data.

Run only once
If this option is set, the action will run only once at the next backup execution and the **Run program/ action** option will be reset and disabled.

Run program or action on
You can set conditions to run the action after the backup: on **Success**, on **Warnings** or on **Errors**. You can check multiple options or a single one, but at least one option must be checked.

Comparison

Criteria
This section contains special settings for advanced file comparison. You can set what properties of a file will be used when deciding if a file was modified or not.

There is a list of quick sets to choose for predefined comparison criteria:
- **None** - if this is selected, a warning window is shown asking you to confirm if you want the **Date modified** criteria disabled or not. If this criterion is disabled, Backup4all will only backup files that have the size changed.
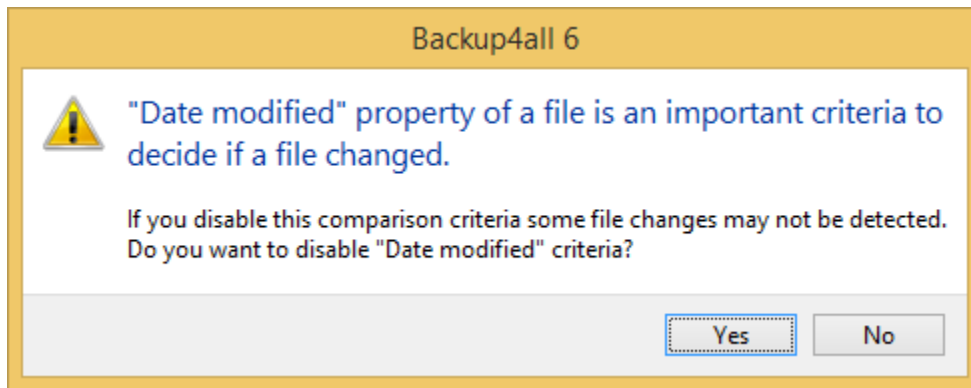
- **Custom** - this is the default option and has several important file properties and attributes selected as comparison criteria (Size, Date modified, Date created, Archived, Hidden, System, Read-Only).
- **Archive attribute only** - if this is selected, a warning window is shown asking you to confirm if you want the **Date modified** criteria disabled or not. If this criteria is disabled, Backup4all will only backup files that have the archive attribute changed.
- **FAT attributes** - if this is selected, a set of File Allocation Table attributes will be used for comparison
- **NTFS attributes** - if this is selected, a set of NTFS (New Technology File System) attributes will be used for comparison. Note that these attributes are available only on Windows XP, and above.

Available file properties are:
- **Size** - file size (it is mandatory)
- **Date modified** - the latest date and time when the file was modified (a warning message is displayed if you uncheck it)
- **Date created** - the date and time when the file was created
- **CRC32** - the most comprehensive criteria because it calculates a checksum based on file contents and compares it with the checksum from the backup (this slows the process)

Available file attributes are:
- **Read-Only** - file can be read, but not modified or deleted
- **Archived** (unavailable when the **Clear archive bit** option is checked from the **Backup Properties->Type** window) - file attribute used for backup. When a file is created, the archive bit is turned on. When a backup program copies the file, it turns off the archive attribute.
- **Hidden** - files marked Hidden do not normally display unless the file manager option to display them is selected
- **System** - files marked System do not normally display unless the file manager option to display them is selected
- **Compressed (only NTFS)** - file that is made generally much smaller than the original size of file. Decompression occurs automatically when the file is read. The file is compressed again when it is closed or saved.
- **Temporary (only NTFS)** - the file is being used for temporary storage.
- **Encrypted (only NTFS)** - file is encrypted on a NTFS volume to protect it from unauthorized access

- **Not indexed (only NTFS)** - file not indexed by the content indexing service
- **Offline (only NTFS)** - content of the file is not immediately available. This attribute indicates that the file data has been physically moved to an offline storage.
- **Reparse point (only NTFS)** - reparse points are used as building blocks by Microsoft and third-parties to enhance NTFS file system behavior.
- **Sparse file (only NTFS)** - in a sparse file, large ranges of zeroes may not require disk allocation. Space for nonzero data will be allocated as needed as the file is written.

If you select more than one attribute, Backup4all will consider the file for backup <u>if any of the attributes selected is changed</u>.

Legacy (use archive bit)
If this is selected, Backup4all will determine which files will be backed up by verifying if the archive bit attribute is set. If the archive bit attribute for a file is not set, that file will be ignored (even if its size was modified for instance). Our recommendation is to use the **Criteria** option since it's more accurate than using the archive bit alone.

Play sounds after backup

Use this section to set sound notifications to be played when the backup is finished. There are three types of sound notifications depending on the backup status: success, warning and error.

Play sounds
If checked then success, warning and error sounds will be played at the end of the backup. By default this option is not checked.

On success
It indicates the sound that will be played when the backup is finished with success. The default sound is **<Default beep sound>**, but you can change it using the **Open** button 📂. If you press the **Play** button ▶ you can hear the selected sound file. To disable this sound you can select from the drop-down box **<No success sound>**.

On warning
It indicates the sound that will be played when the backup is finished with warnings. The default sound is **<Exclamation sound>**, but you can change this using the **Open** button 📂. If you press the **Play** button ▶ you can hear the selected sound file. To disable this sound you can select from the drop-down box **<No warning sound>**.

On error
It indicates the sound that will be played when the backup has failed because of an error. The default sound is **<Asterisk sound>**, but you can change this using the **Open** button 📂. If you press the **Play** button ▶ you can hear the selected sound file. To disable this sound you can select from the drop-down box **<No error sound>**.

Open sounds

This button will open the standard **Sounds and Multimedia Properties->Sounds** window of the operating system (that can also be opened from the Control Panel). You can use this to configure or troubleshoot your sounds settings.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

7.9 Email

Use this section to set email notifications to be sent when the backup is finished. There are three types of email notifications depending on the backup status: success, warning and error email notifications.
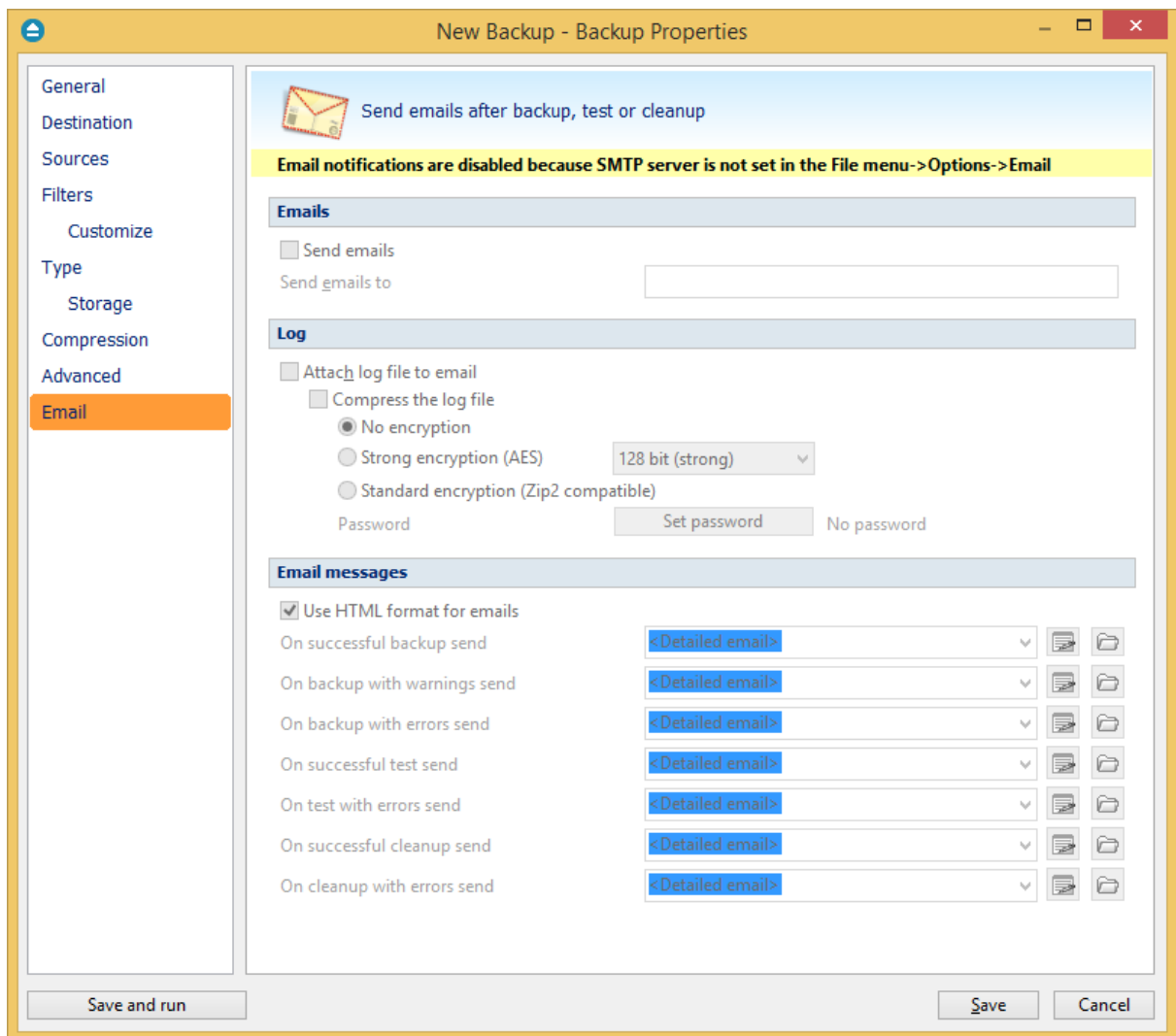
Emails

Send emails:
If checked then notification emails will be sent at the end of the backup, test or cleanup operation to the specified email addresses (email addresses must be separated by comma to be recognized). This option can be checked/unchecked <u>only if</u> the **File->Options->Email** window has the **Enable email notification** option checked.

Send emails to:
Specify the email address where the notification emails will be sent. You can enter multiple email addresses separated by comma.

Log

Attach log file to email
If this option is checked, the backup log file will be attached to the email.

Compress the log file
Option is active only if **Attach log file to email** option is checked. If this option is enabled, Backup4all will zip the log file before sending it. Additionally you can encrypt the log file.

No encryption
The zipped log file created is not protected by password for unauthorized access.

Zip(2) compatible encryption
This is the standard Zip 2.0 encryption: an older encryption technique that provides relatively weak security compared to AES encryption. Zip 2.0 encryption format cannot provide protection from individuals with access to specialized password recovery tools. Its advantage over AES encryption is the compatibility with all third party zip applications.

AES encryption(*)
This is the Advanced Encryption Standard, the best choice in zip protection, but recognized only by the latest version of third party zip applications. Backup4all supports AES encryption in three different strengths:
- **128 bit (strong)** - size of the encryption key is 128 bits. This provides significantly better security than standard zip 2.0 encryption.
- **192 bit (stronger)** - size of the encryption key is 192 bits

- **256 bit (strongest)** - size of the encryption key is 256 bits. This is the strongest encryption method for zipped log file and it provides the best security.

Set password

After you press this button, a windows with the following fields will appear:

- **New password**
  Manually enter the password you want to use for your zipped log file in this field. If you enter a password with less than 8 characters, a warning window will be displayed when you click **OK** notifying that the password is not secure enough.
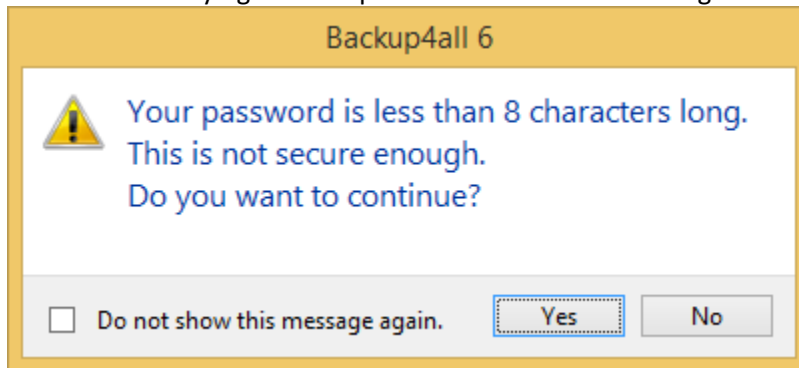
- **Confirm new password**
  Re-enter the password in this field to avoid typing errors.

- **Old password**
  This field is enabled only when the log file encryption already has a password. You can change the password only if you enter the old one in this field. This way only the owner will be allowed to change the password.

Tips:
- when choosing a password, it is recommended that you use a combination of letters and numbers and at least 8 characters.
- make sure that you remember the password used, or you will not be able to extract the log file.

Email Messages

Use HTML format for emails

If this option is selected, the email template used will be sent as html. This way, the notification emails can be customized in many ways.

On successful backup send

It indicates the email that will be sent when the backup is finished with success. The default email is **<Default email>**, but you can change it using the **Open** button . If you press the **Edit** button you can modify the selected email file (except the default email). Also there is the option to choose

<No email> if you don't want Backup4all to send an email if a backup was successful.

On backup with warnings send
It indicates the email that will be sent when the backup is finished with warnings. The default email is **<Default email>**, but you can change this using the **Open** button . If you press the **Edit** button you can modify the selected email file (except the default email). Also there is the option to choose **<No email>** if you don't want Backup4all to send an email if a backup was completed and there were warnings during execution.

On backup with errors send
It indicates the email that will be sent when the backup has failed because of an error. The default email is **<Default email>**, but you can change this using the **Open** button . If you press the **Edit** button you can edit the selected email file (except the default email). Also there is the option to choose **<No email>** if you don't want Backup4all to send an email if there were errors during the execution of the backup.

On successful test send
It indicates the email that will be sent when the test operation is finished with success. The default email is **<Default email>**, but you can change it using the **Open** button . If you press the **Edit** button you can modify the selected email file (except the default email). Also there is the option to select **<No email>** if you don't want Backup4all to send an email if a test operation was successful.

On test with errors send
It indicates the email that will be sent when the test operation failed because of an error. The default email is **<Default email>**, but you can change this using the **Open** button . If you press the **Edit** button you can modify the selected email file (except the default email). Also there is the option to select **<No email>** if you don't want Backup4all to send an email if there were errors during the test operation.

On successful cleanup send
It indicates the email that will be sent when the cleanup operation is finished with success. The default email is **<Default email>**, but you can change it using the **Open** button . If you press the **Edit** button you can modify the selected email file (except the default email). Also there is the option to select **<No email>** if you don't want Backup4all to send an email if the cleanup operation was successful.

On cleanup with error send
It indicates the email that will be sent when the cleanup operation failed because of an error. The default email is **<Default email>**, but you can change this using the **Open** button . If you press the **Edit** button you can modify the selected email file (except the default email). Also there is the option to select **<No email>** if you don't want Backup4all to send an email if there were errors during the cleanup operation.

<u>Customizing emails</u>

If you want to create a customized email to be sent (on success/warning/error), the email template will have to include special tags that Backup4all will recognize and replace according to the description (note that the format of the tag must be <#tag_name>):

- **<#BACKUP_NAME>** - will insert the name of the executed backup job
- **<#TAG_NAME>** - will insert the name of the backup tag
- **<#SOURCES>** - will insert the sources of the executed backup
- **<#DEST_DRIVE>** - will insert the destination drive letter
- **<#DEST_DRIVE_TYPE>** - will insert the destination drive type
- **<#DEST_FOLDER>** - will insert the name of the destination folder
- **<#DEST_CATALOG_FILE>** - will insert the name of the catalog file created
- **<#BACKUP_TYPE>** - will insert the backup type that was performed
- **<#BACKUP_START_TIME>** - will insert the start time of the backup executed
- **<#BACKUP_END_TIME>** - will insert the end time of the backup executed
- **<#TEST_START_TIME>** - will insert the start time of test
- **<#TEST_END_TIME>** - will insert end time of test
- **<#LAST_BACKUP_SIZE_COMPR>** - will insert the resulted size of the last backup
- **<#TOTAL_BACKUP_SIZE>** - will insert the total backup size
- **<#REMAINING_DISC_SPACE>** - will insert the remaining space on the destination drive
- **<#NBR_FILES_ADDED>** - will insert the number of files added to the backup
- **<#SIZE_FILE_ADDED>** - will insert the size of the added files
- **<#NBR_FILE_WARNINGS>** - will insert the number of warnings
- **<#NBR_ERRORS>** - will insert the number of errors
- **<#LAST_LOG_NAME>** - will insert the name of the last log file
- **<#EXCLUDED_SOURCES>** - will insert the list of sources excluded
- **<#TESTED_VERSIONS>** - will insert the list of tested backup numbers
- **<#TEST_SUMMARY>** - will insert the detailed list of test backup numbers
- **<#REMOVED_VERSIONS>** - will insert the list of backups removed after cleanup
- **<#CLEANUP_SUMMARY>** - will insert the detailed list of backup numbers removed
- **<#CLEANUP_START_TIME>** - will insert the start time of cleanup
- **<#CLEANUP_END_TIME>** - will insert the end time of cleanup
- **<#PROCESSED_SIZE>** - will insert the total size of the files removed

For an example of tag usage, open one of the 5 default emails. The emails are stored in text format in application's directory (i.e. "C:\Program Files\Softland\Backup4all 6\") with the following filenames: **SuccessFullEmail.txt**, **WarningFullEmail.txt**, **ErrorFullEmail.txt** for backup emails, **TestSuccessFullEmail.txt** and **TestErrorFullEmail.txt** for test emails.

The subject line of the email sent can be customized too by adding the following line at the beginning of the customized file that will be used by Backup4all as an email: **<! Subject of the email !>**

Here is an example of a customized email that can be sent when a cleanup operation is successful (note that the first line of this will be used as the subject line of the email):

<!Cleanup for <#BACKUP_NAME> finished successfully at <#CLEANUP_END_TIME>!>
Cleanup for backup job <#BACKUP_NAME> at <#CLEANUP_START_TIME> finished successfully.
See log file <#LAST_LOG_NAME> for more information.
Removed backups : <#REMOVED_VERSIONS>
Removed version details:
<#CLEANUP_SUMMARY>

Total removed file size : <#PROCESSED_SIZE>
Free space on destination: <#REMAINING_DISC_SPACE>
Cleanup started at: <#CLEANUP_START_TIME>
Cleanup finished at: <#CLEANUP_END_TIME>

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

Restore Wizard

Part VIII
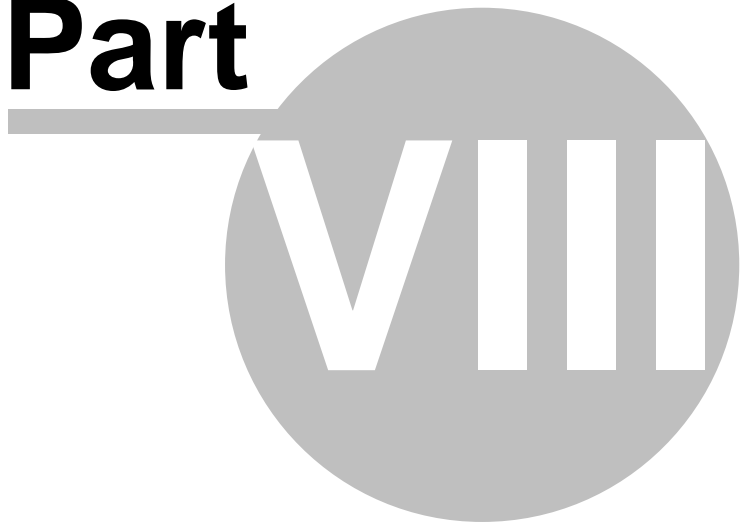
8   Restore Wizard

8.1   Where and how to restore

Using the **Restore Wizard** you can restore from a backup job. In the first step you can choose the destination, the priority of the execution and customize the restore operation if you wish.
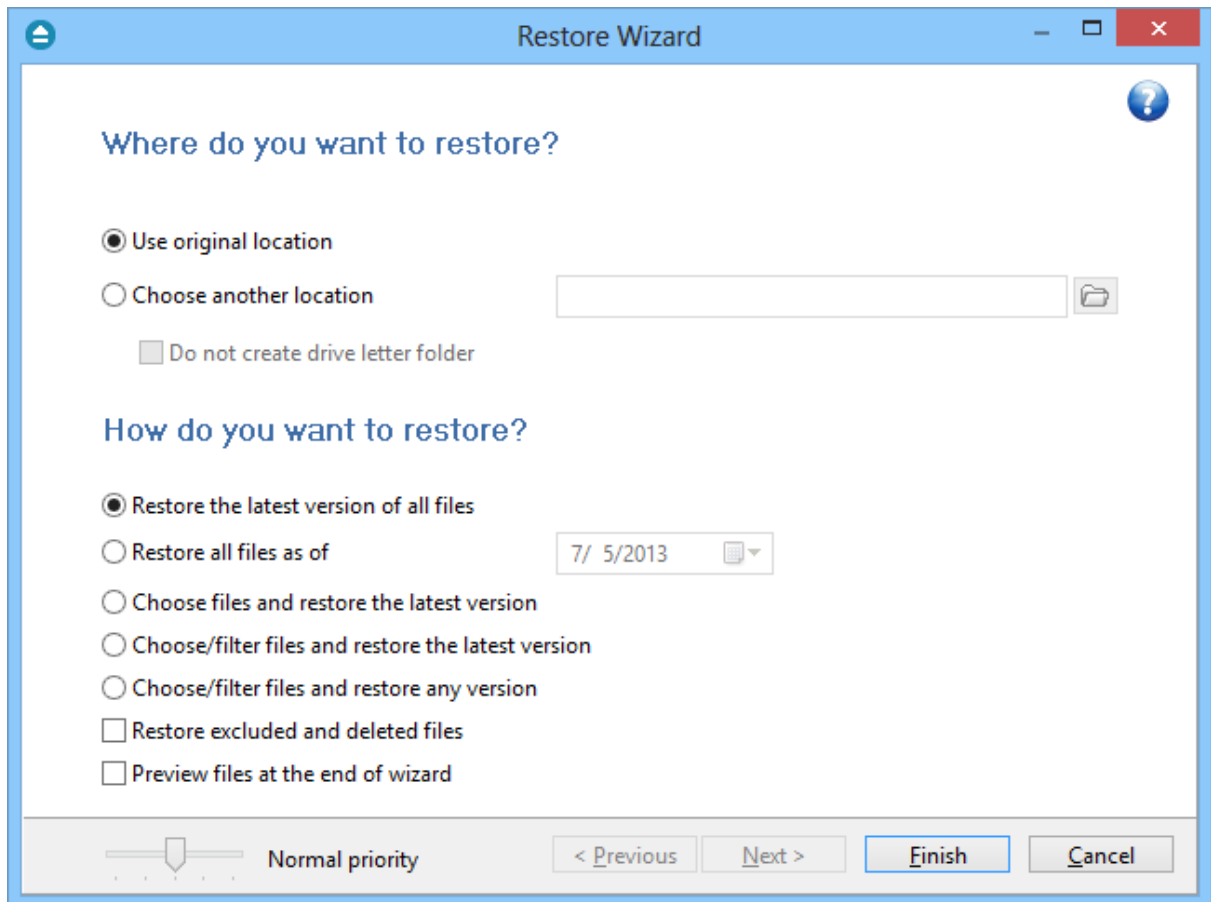
Where do you want to restore?

Use original location
Copies the files from the zip backup into the original location. If a file with the same name already exists, a dialog will be shown prompting for an action before the restore can continue.
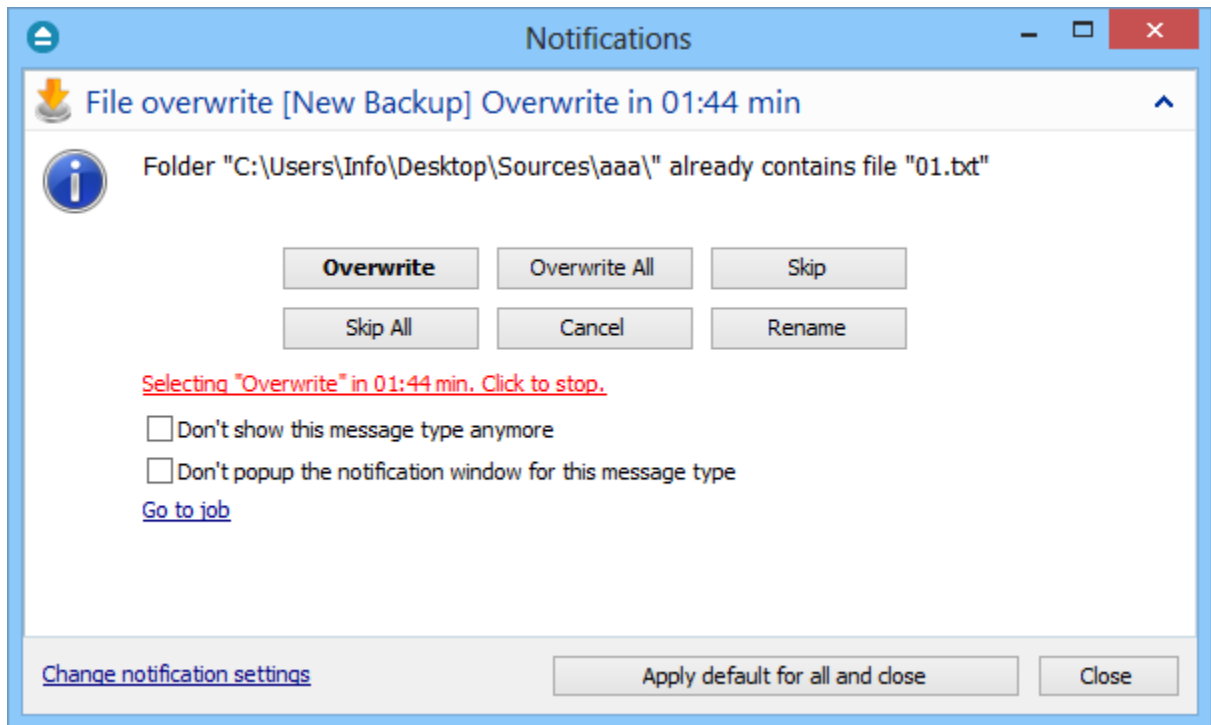
Choose another location
Copies files from the zip backup to a different folder. If selected, you can choose a different folder to restore files from the backup.

Do not create drive letter folder
If checked, Backup4all will restore the files in the designated location using the original directory structure. If you select this option and you have files from multiple drives, some files might get overwritten. For example, if you backed up your **Users** folder from your **C** drive, when you restore it to a different location having the **Do not create drive letter folder** unchecked, Backup4all will first create a folder named **C** and in it place the **Users** folder. If you would have checked the **Do not create drive letter folder** option, the folder named **C** wouldn't have been created.

How do you want to restore?

Restore the latest version of all files
Backup4all will restore the latest version for all the files in the backup.

Restore all files as of
Choose the date to which you want to restore the files. The restored files will be exactly as they were on the selected date.

Note: If you used the **Limit number of file versions** option, restoring the files as of a specified date could not restore all your files if some of them were deleted by the file version limitation.

Choose files and restore the latest version

Backup4all will restore the latest version for all the files in the backup. You will be able to filter the files using the **Preview** page.

Choose/filter files and restore the latest version
Backup4all will restore the latest version of the files. Files that are excluded from backup are not restored. Check the status of the files in the **Explore** view of the main screen.

Choose/filter files and restore any version
Lets you specify which version of the files will be restored. For example, you might restore all files in their original state from the first backup number.

Restore excluded and deleted files
If this option is checked, the latest version of all files will be restored, even if these files were excluded from the backup.

Preview files at the end of wizard
If checked, a preview page with the files to be restored will be shown at the end of wizard.

Using the slider from the bottom of the Restore Wizard window, you can set the restore execution priority compared to the rest of the running processes on your system. For example, setting the priority to **Highest priority**, will determine the system to allocate most of its resources for the restore execution.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

8.2   What do you want to restore

This is the second step of the **Restore Wizard**. It appears only for **Choose files and restore from the latest version**, **Choose/filter files and restore the latest version** and **Choose/filter files and restore from any version** options.
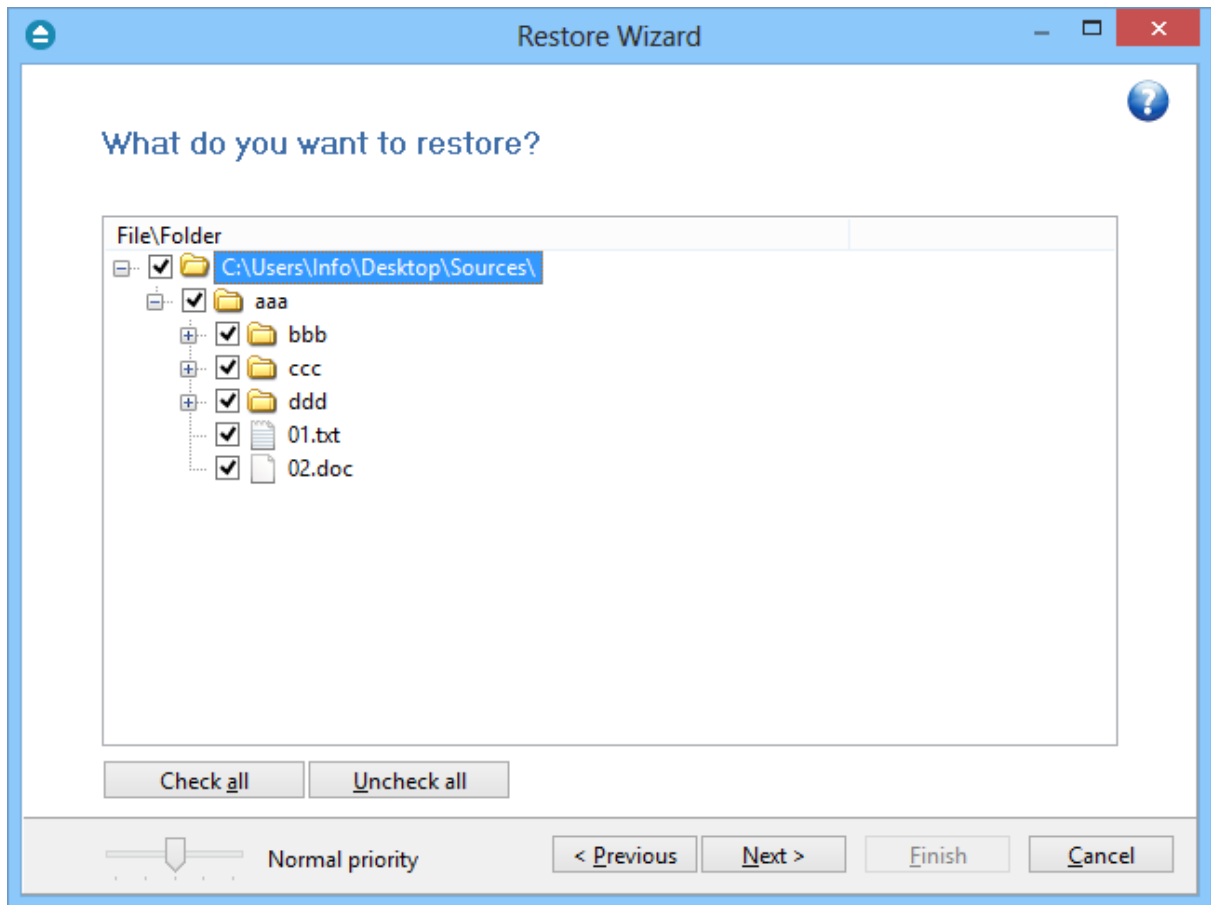
You can uncheck the files you don't want to restore. By default, all files are checked.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

8.3   To what date do you want to restore

This is the third step of the **Restore Wizard** if the **Choose/filter files and restore any version** option was chosen.
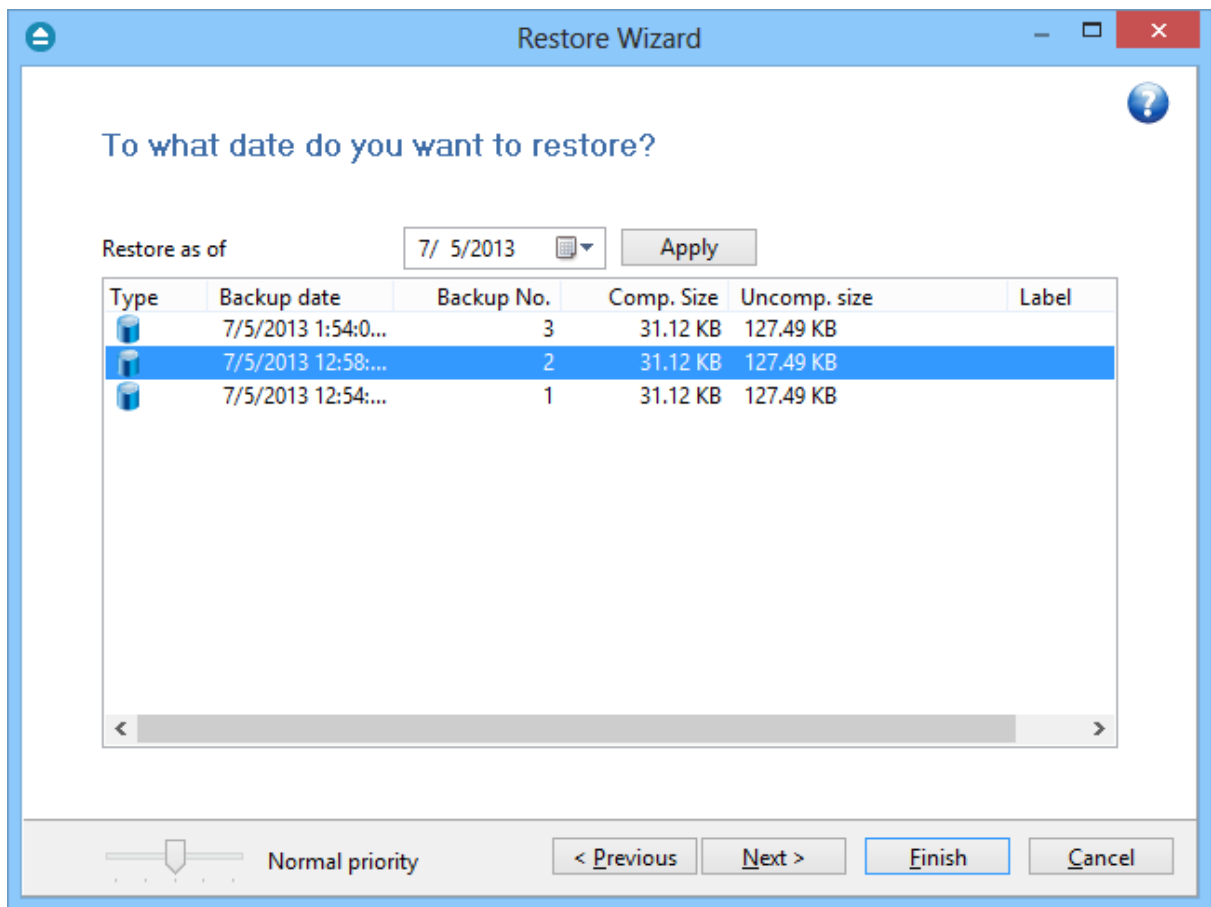
Restore as of
This option allows you to restore your files and folders to a specified date. Just select the data, press **Apply** and then press **Finish.**

The purpose of this step is to let you select versions to restore. Use left mouse clicks together with SHIFT and/or CTRL keys to select several backup numbers to restore. The most recent version of a file in the selected backup number will be restored. If you select all backup numbers, then a full restore is performed just as the **Choose/filter files and restore the latest version** restore option.

Note: If you used the **Limit number of file versions** option, restoring the files as of a specified date could not restore all your files if some of them were deleted by the file version limitation.

If you use the Mirror backup type, the **Restore as of** feature is not available. The Mirror backup type does not keep track of file versions. Only the last version is available for restore.

Information provided for each version:
- **Type** - Type of the Backup. Each of the backup types is represented by a descriptive icon: Full, Incremental, Differential, Mirror
- **Backup Date** - Date and time when the version was added to the backup
- **Backup No.** - Number of the backup increment

- **File No.** - Number of files in the backup
- **Folder No.** - Number of folders in the backup
- **Comp. Size** - Size of the file version (compressed)
- **Uncomp. Size** - Size of the file version (uncompressed)
- **Label** - Label of the backup number. This column is hidden by default

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

8.4 Do you want to filter the files

This is the third step of the **Restore Wizard** for **Choose/filter files and restore the latest version** restore type. For **Choose/filter files and restore any version** restore type, this is the fourth step. You can filter the files to be restored.
Its behavior is the same as the **Filters** page of the **New Backup Wizard** or the **Backup Properties** window, except that the process is restore and not backup.

The **Filters** page defines files filters to be applied to files that are going to be restored. Only files and folders that match the filters will be restored.

You can add include or exclude filters. By default all files are included in the list to be restored.
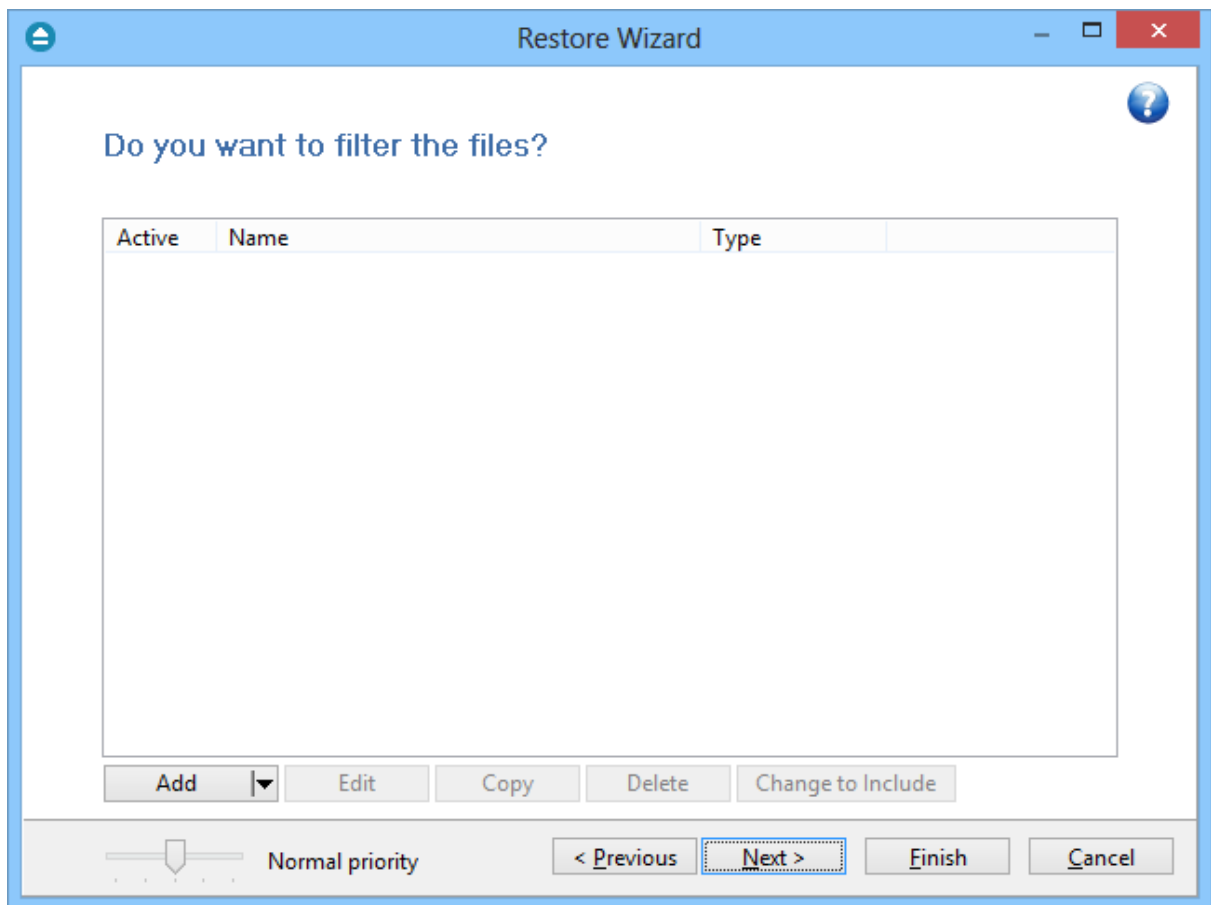
The system selects only files that match the include filter and do not match the exclude filter. This means the exclude filter is more powerful: if a file satisfies both include and exclude filters, it will not be processed by the system.
Include and exclude filters are composed from filter restrictions:
- two or more filter restrictions in the include filter means that a file must satisfy at least one restriction to be restored.
- two or more filter restrictions in the exclude filter means that a file must satisfy any restriction to be excluded.

In the **Type** column you can see if the filter is for include or exclude. To change the filter type, press the "Change to Include" or "Change to Exclude" button.

You can manage filter restrictions using the buttons:
- **Add include** - this will open a new window from where you can add a new restriction to the list of include filters.
- **Add exclude** - this will open a new window from where you can add a new restriction to the list of exclude filters.
- **Edit** - will open the same window as **Add**, with the selected filter's properties. You will be able to modify the selected restriction.
- **Copy** - will create a copy of the selected filter.
- **Delete** - will delete the selected filter from the list.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

8.5 Preview the files to be restored

This page is the final step of the **Restore Wizard**. It appears only if the **Preview files at the end of wizard** option is checked. The purpose of this step is to show a preview of the files that will be restored. If any other customization is required, user must go back and reselect the files to be restored.
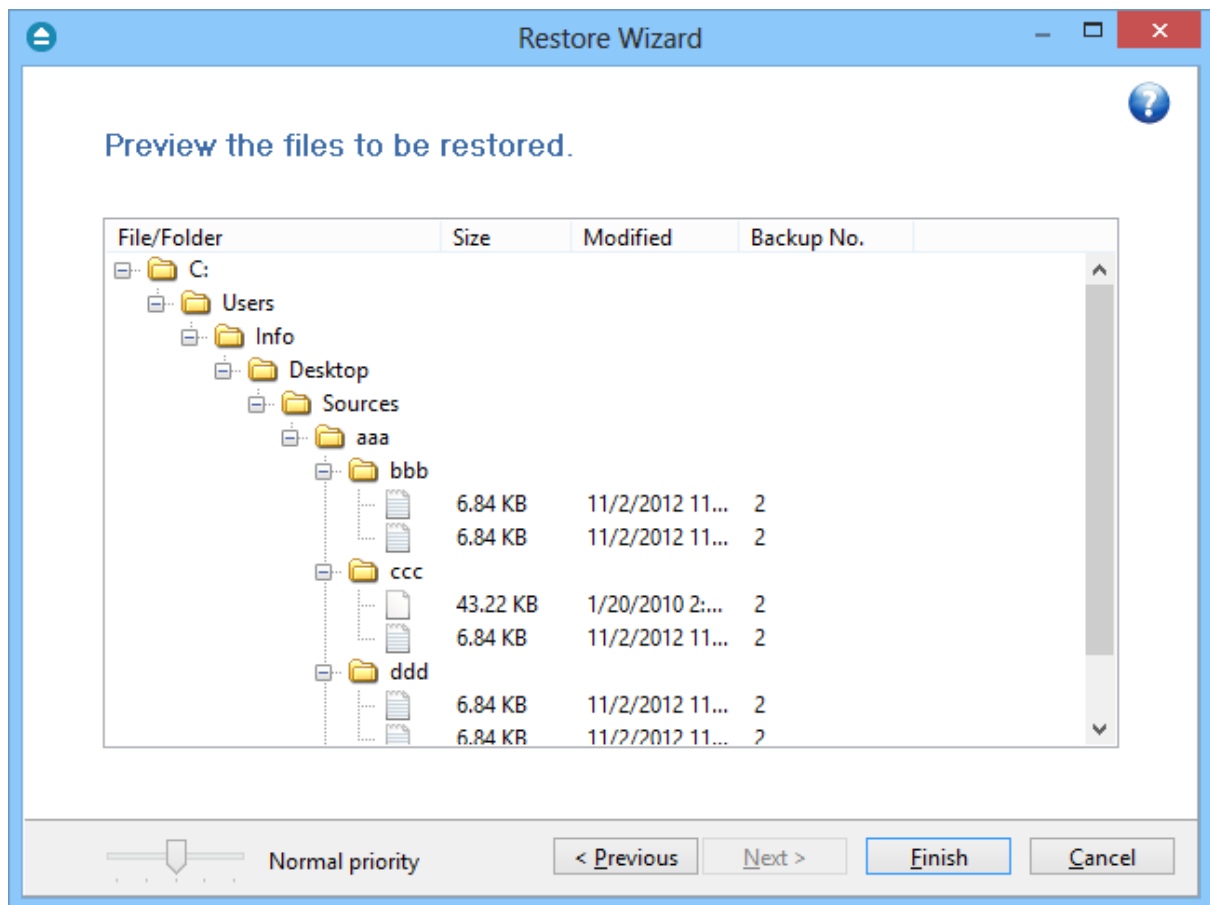
For the **Choose/filter files and restore any version** restore type, files and folders shown in the tree are calculated based on selected backup versions. Files that have not been backed up in the selected backup versions or were filtered will not be shown in the tree. Selecting all backup versions in the **Choose/filter files and restore any version** restore type is the same as using the **Choose/filter files and restore the latest version** type.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

File Filtering

Part IX
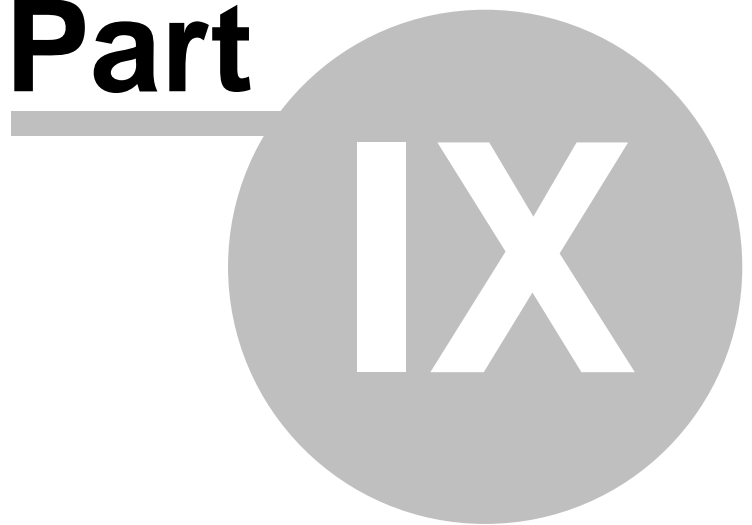
9   File Filtering

9.1   Overview

File filtering in Backup4all provides an intuitive way to define what files and folders to back up or restore.

Select Folders and Files for filtering

The files can be filtered when added to backup. On the "What do you want to backup" page, from the Backup Wizard or **Backup Properties->Sources** page each file and folder is shown in the tree with a checkbox in front of it. If you uncheck it, the file or folder will be excluded from the backup or restore process.

After applying filters, each file and folder is shown in the tree with a checkbox in front of it. If you uncheck it, the file or folder will be excluded from the backup or restore process.

Filter

The role of the filter is to restrict the files from the sources or destination that will participate in the backup or restore process. The filter actually consists of two filters: the include filter and the exclude filter.

Include filter shows which files will be included in the backup or restore process. If the filter type is "Include", it means the files which match the filter will be included in backup.
Exclude filter shows the files that will be excluded from the backup or restore. If the filter type is "Exclude", it means the files which match the filter will be excluded from backup.
You can change the filter type from Include to Exclude or from Exclude to Include if you press the "Change to Include"/"Change to Exclude" button. If no filters are defined, then all the files and folders from sources will be backed up or restored.

Users can define their own filters in **File->Options->Filters** to be used any time they need. The defined filters can also be used in the **New Backup Wizard**.

Customize

There are special situations when the main filter is not enough to define the files to be backed up or restored. In this case, you can refine the filters adding individual filters for folders. The refined filter applies to all the files and subfolders of that folder. All files and folders for which a refined filter is applied are marked with red.
To remove a refined filter, select the folder, select the filter and press the **Delete** button.

Note: Some of the features mentioned on this page might not be available in your edition. The

Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

9.2   File Filter

The **Edit file filter item** window is shown every time a file filter restriction is added or modified. It can be opened by pressing the **Add** button from the **Filters** page (New Backup Wizard, Backup Properties, Restore Wizard window or Files->Options) or the **Edit** button (if filters are already defined).

What do you want to do?

User can **Create new** filter, **Create new starting from existing** filter or **Use existing** filter. The existing filters are listed in the drop down list and they can be added, edit or deleted from **File->Options->Filters**

General

In the **Filter name** field you can type the name of the created filter. By default, the "New filter configuration" name is assigned. If you use an existing filter, the name of that filter is used.

File name

Enabling this will allow defining filters based on file name pattern.
Press **Add** and select an existing file extension from the **Filter** combo (*.doc, *.pdf, *.zip etc.). If the extension does not exist in the combo, just type it in and press OK. You can use the **Edit** or **Delete**

buttons to modify/remove the file name filters defined.

File name patterns can include:
- ***** - it matches one or more letters. For example **a*.doc** matches all files that start with **a** and have **.doc** extension
- **?** - it matches only one letter. For example **a*.do?** matches all files that start with **a** and have any extension composed of three letters, the first two being **do**

Folder name

Enabling this will allow defining filters based on folder name pattern.
Enter the directory name that you want to filter in the following format: *\directory_name* (leading *\ and ending * are required). Backup4all will apply the filter to all the directories that are called directory_name. If you want to apply the filter to directories containing a specific word, you must enter it in the following format **keyword**. Now Backup4all will apply the filter to all the directories that have the word keyword in their names. You can use the Edit or Delete buttons to modify/remove the folder name filters defined.
You can also use environment variables when creating filters: %temp%, %SystemRoot% etc.

File attributes

Enable	Custom
	☐ Read-Only (FAT/NTFS)
	☐ Archived (FAT/NTFS)
	☐ Hidden (FAT/NTFS)
	☐ System (FAT/NTFS)
	☐ Compressed (only NTFS)

File dates

☐ Enable	date modified	>=	today
	Custom date		End date
	7/ 5/2013 ▼	0:00:00	7/ 5/2013 ▼	0:00:00

File size

☐ Enable	<=	50	MB

File attributes

Enabling this section allows the user to specify file filters depending on the file attributes.
There is a list of quick sets to choose for predefined filter criteria:
- **Custom** - this is the default option and allows you to check whatever attributes you want
- **None** - if this is selected all the file attributes check boxes are unchecked
- **FAT attributes** - if this is selected, a set of **File Allocation Table attributes** will be used for file

filtering.
- **NTFS attributes** - if this is selected, a set of NTFS (New Technology File System) attributes will be used for filtering. Note that these attributes are available only on Windows XP and above.

File attributes available for file filters:
- **Read-Only** - if checked files with **read-only** attribute will be selected
- **Archived** - if checked files with archived attribute will be selected
- **Hidden** - if checked files with hidden attribute will be selected
- **System** - if checked files with system attribute will be selected
- **Compressed (only NTFS)** - if checked files with compressed attribute will be selected
- **Temporary (only NTFS)** - if checked files with temporary attribute will be selected
- **Encrypted (only NTFS)** - if checked files with encrypted attribute will be selected
- **Not indexed (only NTFS)** - if checked files with "not indexed" attribute will be selected
- **Offline (only NTFS)** - if checked files with offline attribute will be selected
- **Reparse point (only NTFS)** - if checked files with **reparse point** attribute will be selected
- **Sparse file (only NTFS)** - if checked files with **sparse file** attribute will be selected

For example, if you want to include files with **read-only** and **archived** attributes set, you have to check both attributes checkboxes in a single restriction. If you want to include files with **read-only** or **archived** attributes set, you have to make two separate restrictions: one for **read-only** and another for **archived**.

File dates

This section allows the user to build restrictions based on file dates and times. To enable options in this section, check the **Filter by date** option.
Filters in this section can be applied by selecting one of the available date filters:
- **date accessed**
- **date and time accessed**
- **date modified**
- **date and time modified**
- **date created**
- **date and time created**

You can compare these dates and times with a **fixed date** or a relative date: **today**, **yesterday**, **one week ago** or **one month ago**.
Comparison operators available:
- < > date (and time) not equal to fixed or relative date
- < = date (and time) less than or equal to fixed or relative date
- > = date (and time) greater than or equal to fixed or relative date
- < date (and time) less than fixed or relative date
- > date (and time) greater than fixed or relative date
- **in interval** - date (and time) in a particular time interval between the **Start date** and **End date**

<u>**File size**</u>

This section provides the possibility to build restrictions based on the file size. To enable the options in this section, check the **Filter by size** option. You can enter a file size in the **Size** field and select a measurement **Unit**. The filter will compare the file size on disk with the size you enter using the comparison filters you selected:

- < > file size on disk not equal to the value in the **Size** field
- < = file size on disk less than or equal to the value in the **Size** field
- > = file size on disk greater than or equal to the value in the **Size** field
- < file size on disk less than the value in the **Size** field
- > file size on disk greater than the value in the **Size** field

Note:
Filters on files and filters on folders must be created individually. If you use a file and a folder filter condition in the same filter, files will be filtered only if both filter conditions were met.

Examples
- If you use a single filter for .jpg files and Temp folder, only the .jpg files from Temp folder will be filtered. If you use separate filters for files and folders, all .jpg files and whole Temp folder will be filtered.
- Suppose you want to backup (or restore) all **.pdf** files accessed in the last month and all **.doc** files modified in the last week, but you don't want to backup (or restore) system or hidden files.

Here are the steps to define this filter starting from the default filter:

1) Add a new restriction in the include filter: enable **File name**, add ***.pdf** file pattern and set date accessed to be **greater than or equal to fixed date one month ago**; click **OK**

2) Add a new restriction: add ***.doc** file pattern and set date and time modified to be **greater than or equal to fixed date one week ago**; click **OK**

3) Add a new restriction: enable **File attributes** and the **System** checkbox, then click **OK**

4) Add a new restriction: enable **File attributes** and the **Hidden** checkbox, then click **OK**

5) For the last two restrictions, check the **Use as exclude filter** boxes.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

Command Line

Part

X
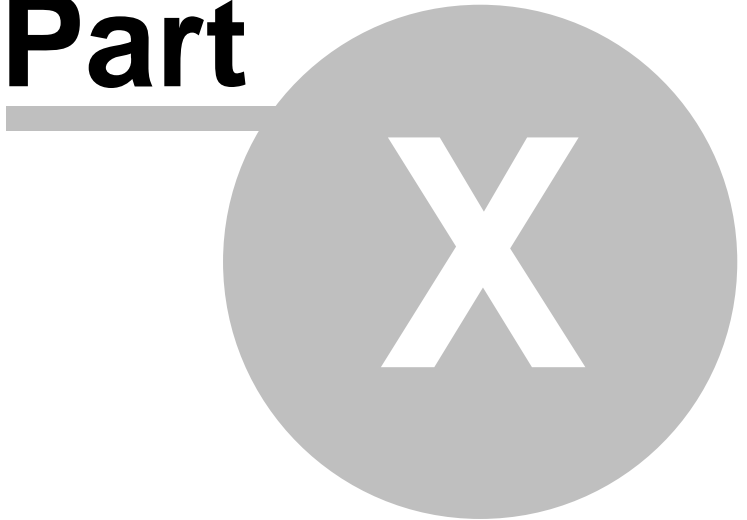
10 Command Line

10.1 Backup

Backup4all uses for each action a small application that runs independently from the main application. They can be used to create batch files.
The command line parameters for backup action are described bellow.

<u>**Backup jobs**</u>

Syntax

bBackup [{/f|/d|/i|/r}] *job_name* [/e][/c] [-Priority{1|2|3|4}]

Formatting legend

Italic - Information that must be supplied by the user

Bold - Elements that the user must type exactly as shown

/ - Switches are preceded by slash

[] - Elements between square brackets are optional

| - Vertical line separates possible choices

{} - Items between braces are a set of choices from which the user must choose only one

Command line backup can have as parameters an ".ini" file (with its full path), a ".bkc" file (with its full path) or the name of the backup job. The ".ini" or ".bkc" file must exist in the specified path, the backup job must be defined in Backup4all or otherwise the backup will not run.

Switches that apply to this parameter (case insensitive, preceded by "/" or "-"):

- **/f** - force the execution of a full backup
- **/d** - force the execution of a differential backup
- **/i** - force the execution of an incremental backup
- **/r** - execute the backup with its defined type (this is the default behavior when the backup name is specified without switches)
- **/e** - erase the disc(Floppy/CD/DVD/Blu-ray) before backup
- **/c** - deletes the **.bkc** file and all zip files associated with the named backup job

If the backup job to be executed has the backup type set to Mirror, then a mirror backup will be performed and the "/f", "/d", "/i" switches will be ignored even if they are set.
For the priority level you can select a value between 1-4, as 1 is the lowest priority and 4 is the highest priority.

<u>**Tags**</u>

Syntax

bTagBackup [/G] *tag_name* [-Priority{1|2|3|4}]

You can also have as parameter an existing tag. This tag must be defined in Backup4all, otherwise the backup will not run.
Switch to apply to this parameter (case insensitive, preceded by "/" or "-"):

- **/G** - execute the jobs containing that tag with their defined types (the switch is mandatory if you want to execute a backup tag)

For the priority level you can select a value between 1-4, as 1 is the lowest priority and 4 is the highest priority.

Examples
To force a full backup on the backup job associated with the **IE Favorites.bkc** located in the "E:\Backup Destination" folder, use:
        bBackup /f "E:\Backup Destination\IE Favorites..bkc" -Priority 2

To force an incremental backup on the **My Documents** backup job, use:
        bBackup /i "My Documents" -Priority 2

To execute all backup jobs from the **Samples** tag, use:
        bBackup /g Samples -Priority 2

Backup4all returns exit codes after each task execution (backup, independent test or cleanup).
As a general case, if the backup was successful, the exit code is 0, otherwise is different.
Here are the possible exit codes:
- 0 : action was successful
- 1 : action has not started, parameter errors, syntax errors, other errors
- 2 : action finished with errors
- 3 : action was finished with warnings
- 4 : independent test was finished with errors
- 5 : independent test was finished with warnings

Backup job definitions (".ini" files) are saved separately for each Windows user. These files can be found in the "AppData\Softland\Backup4all 6\IniFiles" folder of your user profile (if it's not changed in the File->Options->File locations window). Backup catalogs (".bkc" files) are saved locally and in the backup destination together with the backup files. When a backup job is executed for the first time, a .bkc file is created. There is only one .bkc file for each backup job.

The command line application uses the same engine, same configuration files and the same log files as the main application. It always performs an unattended backup. You can use Backup4all's interface to define backup jobs and backup tags which can be used later as parameters for the command line application. You can create a shortcut to a backup job or to a backup tag so you won't have to use complicated paths. To create a shortcut, use the **Create Shortcut** menu item from the **File** menu.

Note: Some of the features mentioned on this page might not be available in your edition. The

Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

10.2   Test

Backup4all uses for each action a small application that runs independently from the main application. They can be used to create batch files.
The command line parameters for test action are described bellow.

<u>**Backup jobs**</u>

Syntax
>   **bTest** [/t] *job_name* [-Priority{1|2|3|4}]

Formatting legend
>   *Italic* - Information that must be supplied by the user
>   **Bold** - Elements that the user must type exactly as shown
>   / - Switches are preceded by slash
>   [] - Elements between square brackets are optional
> | - Vertical line separates possible choices
>   {} - Items between braces are a set of choices from which the user must choose only one

- **/t** - tests the named backup job. Supports also an additional parameter [**/TN** 1,2,5..20|*|#] - if no TN is set then it will test all backup jobs same as using *; if **#** is used it will test only the last backup job (# can be used in the same time with other numbers too).

For the priority level you can select a value between 1-4, as 1 is the lowest priority and 4 is the highest priority.

<u>**Tags**</u>

Syntax
>   **bTagTest** [/G] *tag_name* [-Priority{1|2|3|4}]

You can also have as parameter an existing tag. This tag must be defined in Backup4all, otherwise the backup will not run.
Switch to apply to this parameter (case insensitive, preceded by "/" or "-"):

- **/G** - execute the jobs containing that tag with their defined types (the switch is mandatory if you want to execute a backup tag)

For the priority level you can select a value between 1-4, as 1 is the lowest priority and 4 is the highest priority.

Examples:

To execute a test for all backup numbers of the **My Pictures** backup job
> **bTest** /t "My Pictures" **/tn *** -Priority 2

To execute a test for first two and last backup number of the My Pictures backup job
> **bTest** /t "My Pictures" **/tn 1,2,#** -Priority 2

Backup4all returns exit codes after each task execution (backup, independent test, repair, restore or cleanup).
As a general case, if the action was successful, the exit code is 0, otherwise is different.
Here are the possible exit codes:

- 0 : action was successful
- 1 : action has not started, parameter errors, syntax errors, other errors
- 2 : action finished with errors
- 3 : action was finished with warnings
- 4 : independent test was finished with errors
- 5 : independent test was finished with warnings

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

## 10.3   Repair

Backup4all uses for each action a small application that runs independently from the main application. They can be used to create batch files.
The command line parameters for repair action are described bellow. The repair action is composed by a test action followed (or not - it depends if you want to repair only the catalog) by a backup action.

Backup jobs

Syntax
> **bTest** [[/T] *job_name* /RP /RPWB] [-Priority[{1|2|3|4}]]

Formatting legend
> *Italic* - Information that must be supplied by the user
> **Bold** - Elements that the user must type exactly as shown
> / - Switches are preceded by slash
> [] - Elements between square brackets are optional
> | - Vertical line separates possible choices
> {} - Items between braces are a set of choices from which the user must choose only one

- **/t** - tests the named backup job to find the problems in backup.
- **/RP** - repairs the backup catalog only. All files and folders added in the last backup execution will be tested. Those not found in destination will be also removed from the backup catalog so they will be backed up on the next backup execution.

- **/RPWB** - repairs the backup in destination. All files and folders added in the last backup execution will be tested. Those not found in destination will be backed up again in order to reflect the backup catalog.

If only the catalog needs to be repaired, use only the /RP switch.
For the priority level you can select a value between 1-4, as 1 is the lowest priority and 4 is the highest priority.

Tags

Syntax

> **bTagTest** [[/G] *tag_name* /RP /RPWB] [-Priority{1|2|3|4}]

- **/G** - execute the jobs containing that tag with their defined types (the switch is mandatory if you want to execute a backup tag)
- **/t** - execute the test for the the named backup jobs to find the problems in backup.
- **/RP** - execute the repair for the backup catalogs only. All files and folders added in the last backup execution will be tested. Those not found in destination will be also removed from the backup catalog so they will be backed up on the next backup execution.
- **/RPWB** - execute the repair for the backups in destination. All files and folders added in the last backup execution will be tested. Those not found in destination will be backed up again in order to reflect the backup catalog.

For the priority level you can select a value between 1-4, as 1 is the lowest priority and 4 is the highest priority.

Examples:
To execute a repair for **My Pictures** backup job

> **bTest** /t "My Pictures" **/RP /RPWB** -Priority 2

To execute only a catalog repair for **My Pictures** backup job

> **bTest** /t "My Pictures" **/RP** -Priority 2

To execute a repair for **Samples** tag

> **bTagTest** /t "Samples" **/RP /RPWB** -Priority 2

Backup4all returns exit codes after each task execution (backup, independent test, repair, restore or cleanup).
As a general case, if the action was successful, the exit code is 0, otherwise is different.
Here are the possible exit codes:
- 0 : action was successful
- 1 : action has not started, parameter errors, syntax errors, other errors
- 2 : action finished with errors
- 3 : action was finished with warnings
- 4 : independent test was finished with errors
- 5 : independent test was finished with warnings

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

10.4   Restore

Backup4all uses for each action a small application that runs independently from the main application. They can be used to create batch files.
The command line parameters for restore action are described bellow.

Backup jobs

Syntax
   bRestore [/RE] *job_name* [/DEST path] [/NDL] [/DATE] [/RNC] [/RDE] [-Priority[{1|2|3|4}]

Formatting legend
   Italic - Information that must be supplied by the user
   Bold - Elements that the user must type exactly as shown
   / - Switches are preceded by slash
   [] - Elements between square brackets are optional
   | - Vertical line separates possible choices
   {} - Items between braces are a set of choices from which the user must choose only one

- **/RE** - execute the restore for the named backup job
- **/DEST** - execute the restore into the specified destination. You also need to enter the path for restore.
- **/NDL** - execute the restore without creating the drive letter folder
- **/DATE** - execute the restore of all files as of a specified date
- **/RNC** - execute the restore of the specified backup numbers
- **/RDE** - execute the restore including excluded and deleted files

Tags

Syntax
   bTagRestore [/G] *tag_name* [-Priority[{1|2|3|4}] }]

- **/G** - execute the jobs containing that tag with their defined types (the switch is mandatory if you want to execute a backup tag)
- **/t** - tests the named backup jobs to find the problems in backup.
- **/RP** - repairs the backup catalogs
- **/RPWB** - repairs the backups in destination

For the priority level you can select a value between 1-4, as 1 is the lowest priority and 4 is the highest priority.

Examples:
To execute a restore for **My Pictures** backup job
  bRestore /**RE** "My Pictures" -Priority 2

To execute a restore for **My Pictures** backup job to another destination as of a specified date
  bRestore /**RE** "My Pictures" /**DEST** "C:\Restore" /**DATE** 12.30.2011 -Priority 2

To execute a restore for **Samples** tag
  bTagRestore /**G** "Samples" -Priority 2

Backup4all returns exit codes after each task execution (backup, independent test, repair, restore or cleanup).
As a general case, if the action was successful, the exit code is 0, otherwise is different.
Here are the possible exit codes:

- 0 : action was successful
- 1 : action has not started, parameter errors, syntax errors, other errors
- 2 : action finished with errors
- 3 : action was finished with warnings
- 4 : independent test was finished with errors
- 5 : independent test was finished with warnings

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

10.5   Cleanup

Backup4all uses for each action a small application that runs independently from the main application. They can be used to create batch files.
The command line parameters for cleanup action are described bellow.

Backup jobs

Syntax
  bCleanup [/**X**] *job_name* [-Priority[{1|2|3|4}]

Formatting legend
  Italic - Information that must be supplied by the user
  Bold - Elements that the user must type exactly as shown
  / - Switches are preceded by slash
  [] - Elements between square brackets are optional
  | - Vertical line separates possible choices
  {} - Items between braces are a set of choices from which the user must choose only one

- **/x** - cleans the backup. Supports additional parameters:
    - [/**IE** mm.dd.yyyy] - clean the backups older than the specified date

- [**/IS** mm.dd.yyyy] - clean the backups newer then the specified date
- [**/OT** n **/OTU** {D|W|M|Y}] - n is the number of days (D), weeks (W), months (M) or years (Y)
- [**/KD**] - keep Differential backups
- [**/KF**] - keep Full backups

<u>**Tags**</u>

Syntax
> **bTagCleanup** [**/G**] *tag_name* [-Priority[{1|2|3|4}]

Additional parameters can be used:
- [**/IE** mm.dd.yyyy] - clean the backups older than the specified date
- [**/IS** mm.dd.yyyy] - clean the backups newer then the specified date
- [**/OT** n **/OTU** {D|W|M|Y}] - n is the number of days (D), weeks (W), months (M) or years (Y)
- [**/KD**] - keep Differential backups
- [**/KF**] - keep Full backups

The mirror backup jobs will be ignored when running a cleanup for a tag including mirror backup jobs.

Examples:

To clean all backup versions older than two weeks and keep the full and differential backups of the **My Pictures** backup job, use:
> **bCleanup /x** "My Pictures" **/OT 2 /OTU W /KF / KD** –Priority 2

To execute a cleanup for **Samples** tag
> **bTagCleanup /G** "Samples" **/OT 2 /OTU W** –Priority 2

Backup4all returns exit codes after each task execution (backup, independent test, repair, restore or cleanup).
As a general case, if the action was successful, the exit code is 0, otherwise is different.
Here are the possible exit codes:
- 0 : action was successful
- 1 : action has not started, parameter errors, syntax errors, other errors
- 2 : action finished with errors
- 3 : action was finished with warnings
- 4 : independent test was finished with errors
- 5 : independent test was finished with warnings

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

Options

Part

XI
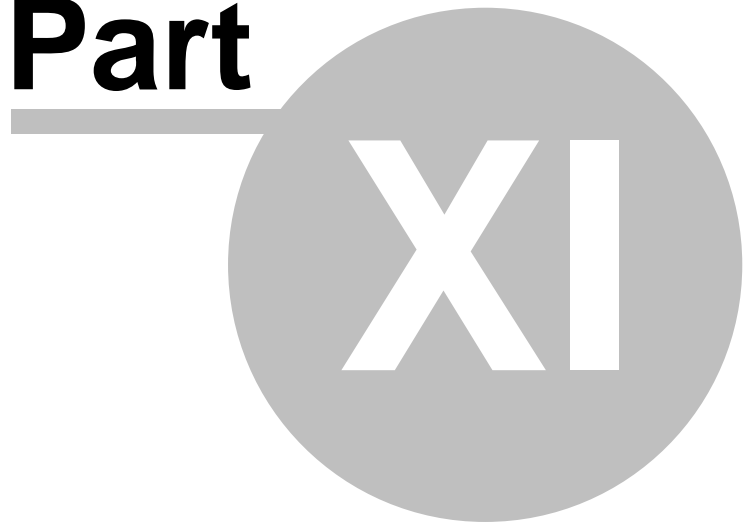
11 Options

11.1 General

The **General** page of the **Options** window (accessible from the File, Options menu item) contains general settings of the program.
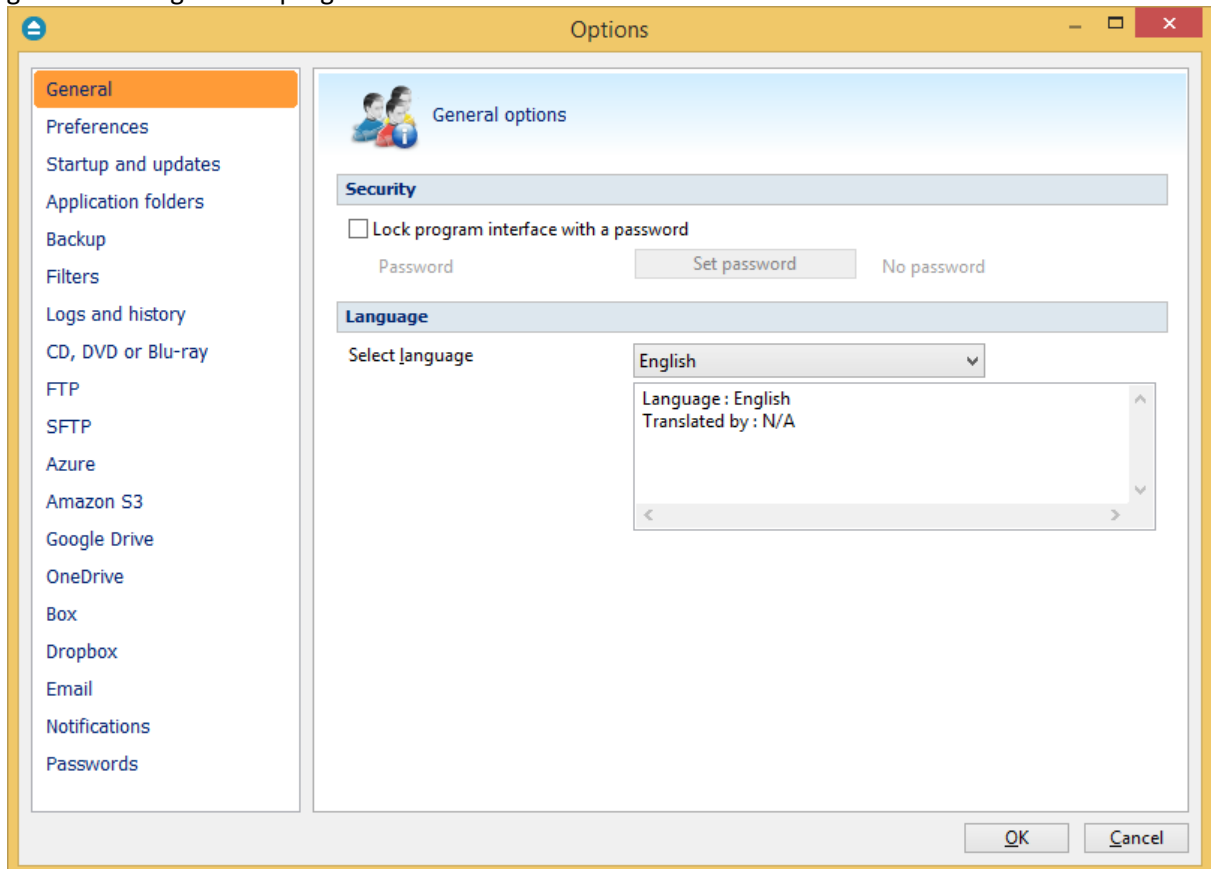
Security

Backup4all allows you to lock the program interface, using a password.
Press the **Set password** button to add or change the password. Near this button, the security status is displayed: "No password" or "Password protected".
When opening the program's interface, if the interface is locked, you will be asked for the password.
To remove the password, press the **Set password** button, type the old password and press **OK**.

Language

In the **Language** section you can select the language of the program interface by choosing another one from the drop down list. Only the languages that were installed with the program are displayed. The language of the interface changes only after the **Options** window is closed by pressing the **OK**

button. The selected language is kept as long as you don't change it or it becomes invalid due to software updates.

The text box below the **Language** field shows details about the selected language (like translator name and contact information).

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.2   Preferences

The **Preferences** page of the **Options** window (accessible from the File, Options menu item) contains settings related to the display of the **Toolbar** menu.
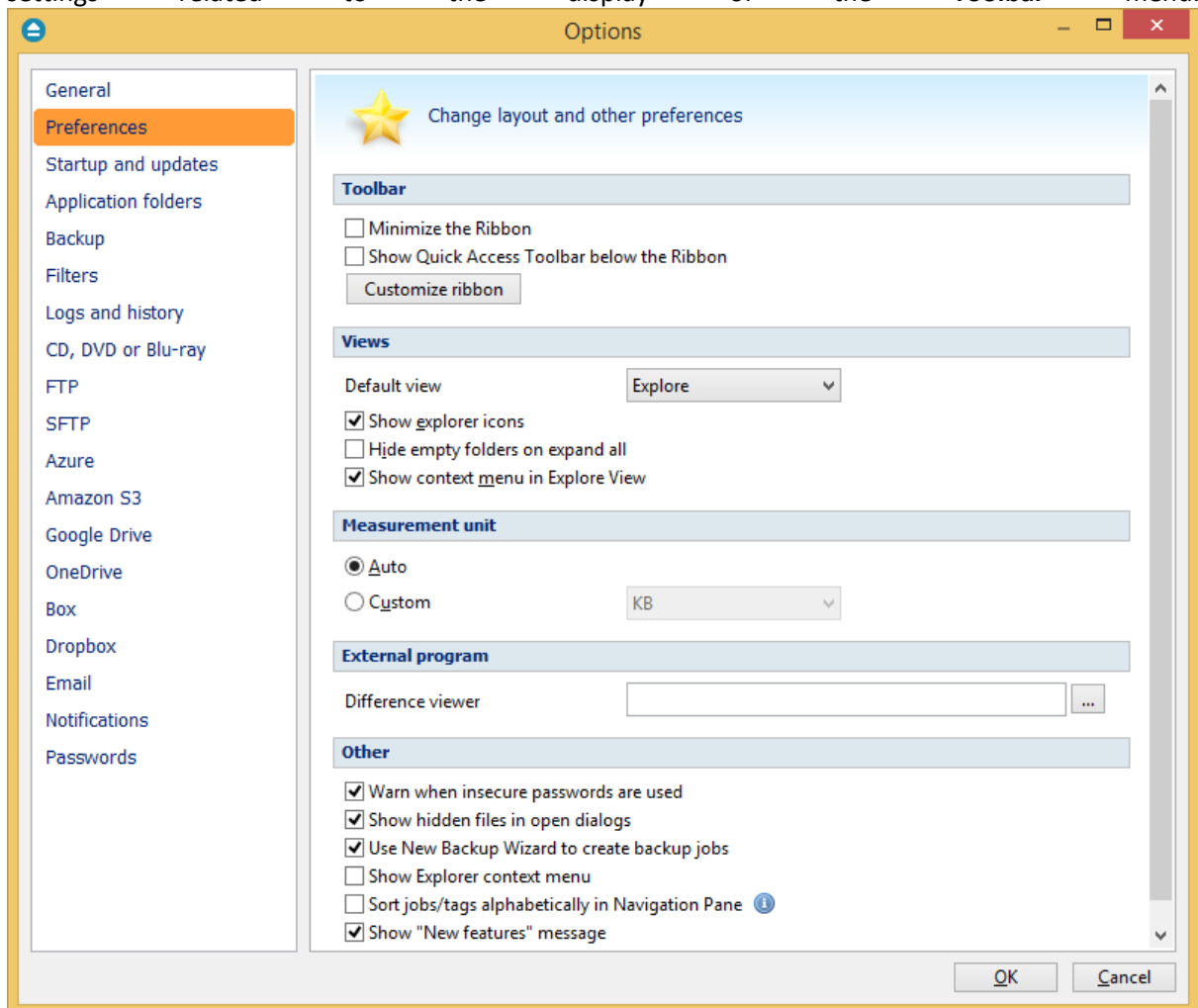
Toolbar
Minimize the Ribbon
If checked, the ribbon menu will be minimized. By default it is not checked.

Show Quick Access Toolbar bellow the Ribbon
If checked, the Quick Access Toolbar will be shown bellow the ribbon menu. By default it is not checked.

Customize ribbon
This option allows you to customize the toolbars, commands and options.

Views

Default view
The selected view will be assigned as default to the **Views** button from the application toolbar.
The possible views are: **Explore**, **Backup** and **Statistics**.

Show explorer icons
If checked a small icon is shown for each file in the Explore view. The icon is the standard icon associated with the type of the file. You will see the same icons as in **Windows Explorer**. If the Explore view contains a large number of files, you can uncheck this option to show files faster. By default this option is checked.

Hide empty folders on expand all
If checked the folders that do not show any file in the **Explore** view will be automatically hidden when pressing the **Expand All** button. By default this option is not checked.

Show context menu
If checked it will display the context menu when right clicking on a file or folder in the main window's **Explore** view or the **Sources** page of the **Backup Properties** and **New Backup Wizard** windows. By default this option is checked.

Measurement unit

Auto
If checked the file sizes are shown like in Windows Explorer. By default this option is checked.

Custom
If checked you can see all file sizes in the same unit. You can set the desired unit from the drop down list. Possible choices are: Bytes, KB (kilobytes), MB (megabytes) or GB (gigabytes). Be advised that if you select GB as a unit, for files under 10MB the size will be shown as 0GB. By default this option is not checked.

External program
Difference viewer: Choose an application to compare the selected file version with the source file in Explore View. You can also use parameters for difference viewer application.

Other

Warn when insecure passwords are used
If checked Backup4all will display a warning window when you enter passwords for zip encryption that contain less than 8 characters.

Show hidden files in open dialogs
If checked files marked as hidden will be displayed in **Open** dialogs. This is very useful if you want to add hidden files to your backup sources. By default this option is checked.

Use New Backup Wizard to create backup jobs
If checked, when pressing the **File->New Backup** button, the **New Backup Wizard** will be open.
If unchecked, the **Backup Properties** will be used to create the new job.

Show Explorer context menu
If selected, the backup options (add to job, add to new job) will appear in Explorer context menu of Windows, when you right-click a file/folder. When changing this option you will be prompted by the UAC to confirm the modification.

Sort jobs/tags alphabetically in Navigation Pane
Select this option if you want to sort jobs/tags alphabetically in Navigation Pane.

Show "New features" message
Select this option if you want to be informed by a message about the new features in Backup4all.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.3   Startup and updates

The **Startup** page of the **Options** window (accessible from the File, Options menu item) contains startup related settings of the program.
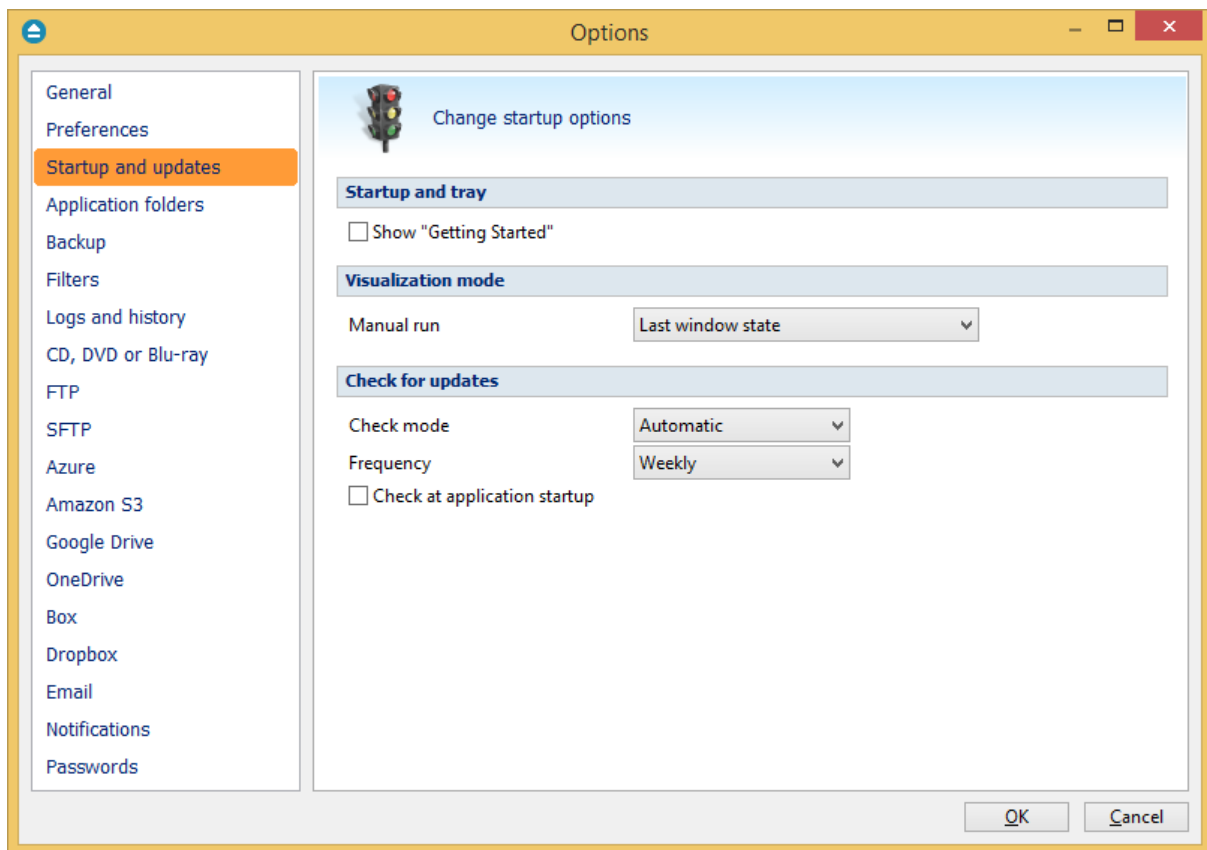
Startup and tray

Show "Getting Started"
If checked, the "Getting Started" window is displayed when you start Backup4all.

Visualization mode

Manual Run - You can select the way Backup4all's main window will be displayed after a normal startup. The options are: Last window state, Normal and Maximized.

Scheduled Startup - You can select the way Backup4all's main window will be displayed when a scheduled backup starts it. The options are: Last window state, Minimized, Normal and Maximized.

Check for updates

Check mode
User can choose one of these modes:
- **Manual** - user will manually check for new updates. This option is selected by default.
- **Reminder** - the program will remind you with the selected frequency to check for new updates

- **Automatic** - the program will automatically check for new updates with the selected

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frequency.

Frequency

User can set the frequency for Backup4all to remind or to automatically check for new updates.

Check at application startup

If checked, the program will check for new updates at application startup.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.4 Application folders

The **Application folders** page of the **Options** window (accessible from the File, Options menu item) contains general settings of the program.
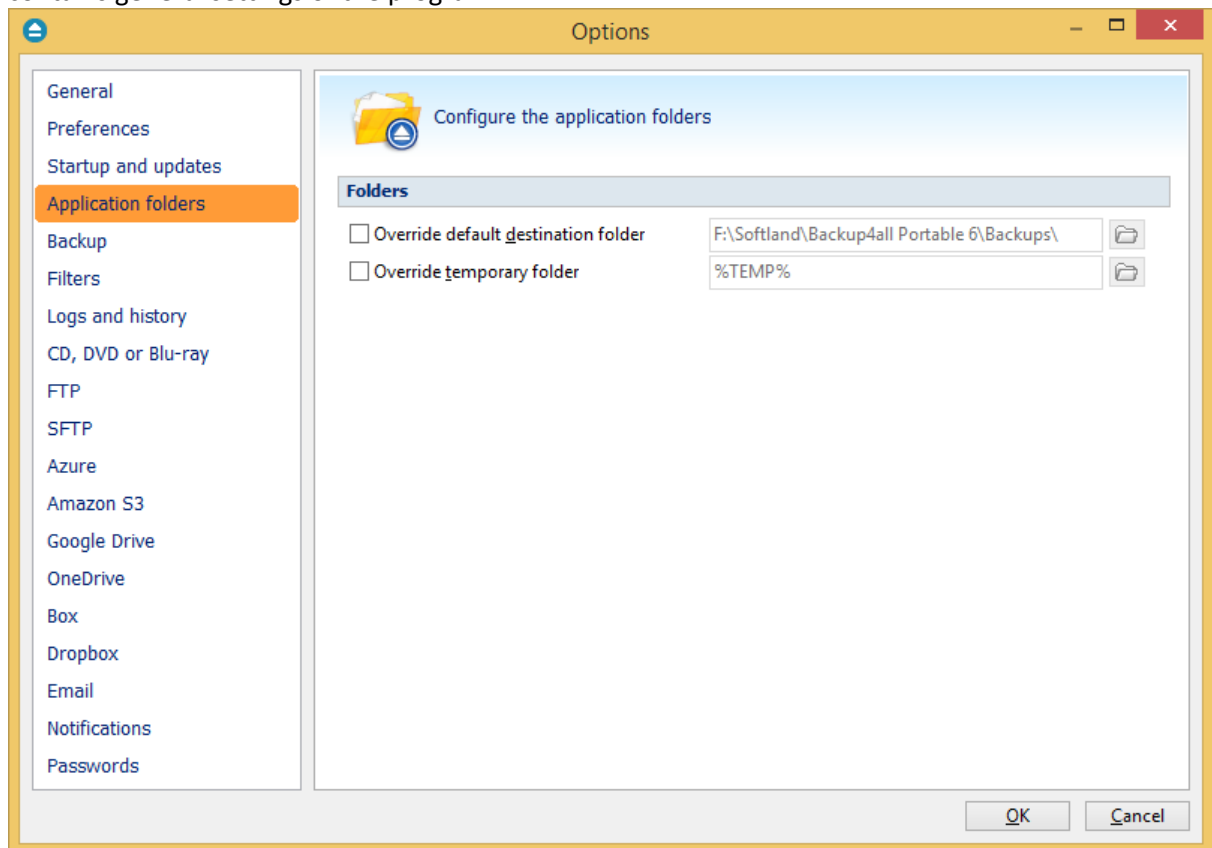
Override SFTP host key folder

This is the folder where the SFTP host keys are kept. You can use the **Browse** button to select an existing folder. By default this option is set to the "AppData\Softland\Backup4all 6\" folder of your Window login account profile.

Override default destination folder

This is the folder used as destination for the newly created backup jobs. The existing backup job

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destinations will not be affected if you change this option (you have to manually change the destination for them). You can use the **Browse** button 📁 to select an existing folder. By default this option is set to the "My Documents\MyBackup4all 6\" folder of your Window login account profile.

Override temporary folder
This folder is used by the compression engine to handle compressed files (.zip). Only a full path is allowed. The recommendation is to set the temporary directory on the hard disk partition with the most free space available. You can use the **Browse** button 📁 to select an existing folder. By default the option is set to the operating system's temporary folder.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.5   Backup

The **Backup** page of the **Options** window (accessible from the File, Options menu item) contains settings related to the backup operations.
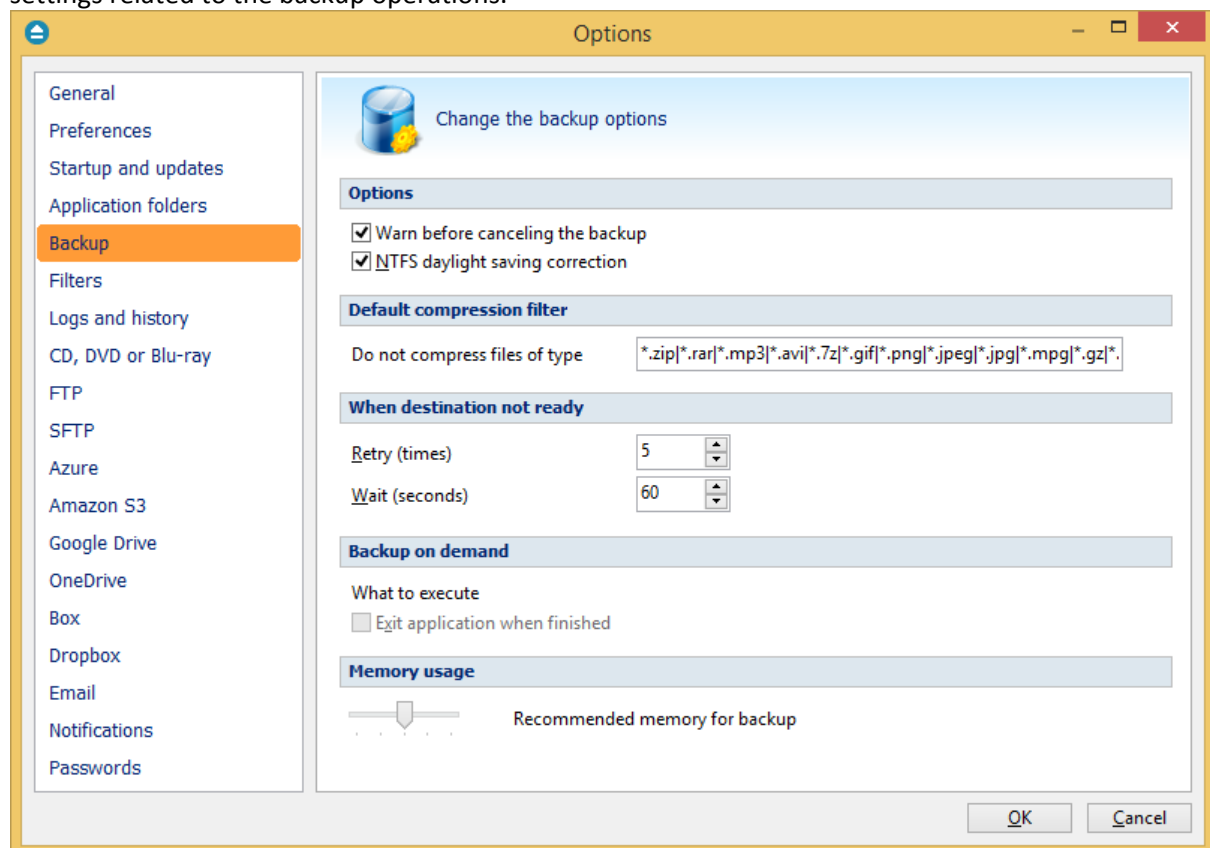
Confirmations

Warn before canceling the backup - If checked a confirmation message will be displayed when a backup is canceled before being completely executed. By default this option is checked.

NTFS daylight saving correction - The Windows NT File System (NTFS) reports wrong file times after the clock changes according to daylight saving time rules. As a consequence, the program sees these files as changed and backs them up. When you check this option these files will not be reported as modified. By default this option is checked.

Default compression filter

This default filter is applied to new backup jobs by default, to increase the compression performance. It defines what types of files to be stored uncompressed in the zip file. These are files that are already compressed (e.g. zip, rar, mp3 or avi) and using the zip compression on them wouldn't result in a smaller sized backup. This can also be modified individually from each backup job's **Properties->Types->Advanced** window in the **Filters** box.

When destination not ready

The first number (Retry option) indicates how many times the application tries to access the destination location if it is not available. By default this option is set to 3 attempts. The second number (Wait option) indicates how many seconds to wait between two consecutive attempts to access the destination location. By default this option is set to 5 seconds.

Backup on demand
Enable Plug-and-Backup support
Use this option to enable the **Plug-and-Backup** functionality. If the option is set, you can choose which **Backup job** or **Backup tag** will be executed when the portable drive is plugged in. Sometimes (when the backup job or the backup tag is deleted or renamed) the target backup cannot be executed. In this case a dialog will be shown asking you to either create a new backup, select another backup or disable the **Plug-and-Backup** functionality.

What to execute
- **Backup job**
Use this option to select a backup job.

- **Backup tag**
Use this option to select a backup tag.

Exit application when finished - use this option to close the application when the above selected action is finished.

Memory usage

This option allows you to change the memory usage level. You can move the memory indicator to a lower or a higher level.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.6   Filters

On the Filters page of the **Options** window (accessible from the File, Options menu item) you can add, edit or delete filters. The filters created here can be found as global filters all over the application: in New backup wizard or in Backup Properties.

<u>**General**</u>

Filter name
Type a name for the filter to be recognized when you want to use it later.

<u>**File name**</u>

Enabling this will allow defining filters based on file name pattern.
Press **Add** and select an existing file extension from the **Filter** combo (*.doc, *.pdf, *.zip etc.). If the extension does not exist in the combo, just type it in and press OK. You can use the **Edit** or **Delete** buttons to modify/remove the file name filters defined.

File name patterns can include:
- ***** - it matches one or more letters. For example **a*.doc** matches all files that start with **a** and have **.doc** extension
- **?** - it matches only one letter. For example **a*.do?** matches all files that start with **a** and have any extension composed of three letters, the first two being **do**

<u>**Folder name**</u>

Enabling this will allow defining filters based on folder name pattern.
Enter the directory name that you want to filter in the following format: ***\directory_name*** . Backup4all will apply the filter to all the directories that are called **directory_name**. If you want to apply the filter to directories containing a specific word, you must enter it in the following format ****keyword****. Now Backup4all will apply the filter to all the directories that have the word **keyword** in their names. You can use the **Edit** or **Delete** buttons to modify/remove the folder name filters defined.
You can also use environment variables when creating filters: %temp%, %SystemRoot% etc.

<u>**File attributes**</u>

This section allows the user to specify file filters depending on the file attributes. To enable the filter options in this section you have to check the **Filter by attributes** option.

There is a list of quick sets to choose for predefined filter criteria:
- **None** - if this is selected all the file attributes check boxes are unchecked
- **Custom** - this is the default option and allows you to check whatever attributes you want
- **FAT attributes** - if this is selected, a set of **File Allocation Table attributes** will be used for file filtering
- **NTFS attributes** - if this is selected, a set of NTFS (New Technology File System) attributes will be used for filtering. Note that these attributes are available only on Windows XP and above.

File attributes available for file filters:
- **Read-Only** - if checked files with **read-only** attribute will be selected
- **Archived** - if checked files with archived attribute will be selected
- **Hidden** - if checked files with hidden attribute will be selected
- **System** - if checked files with system attribute will be selected
- **Compressed (only NTFS)** - if checked files with compressed attribute will be selected
- **Temporary (only NTFS)** - if checked files with temporary attribute will be selected
- **Encrypted (only NTFS)** - if checked files with encrypted attribute will be selected
- **Not indexed (only NTFS)** - if checked files with "not indexed" attribute will be selected
- **Offline (only NTFS)** - if checked files with offline attribute will be selected
- **Reparse point (only NTFS)** - if checked files with **reparse point** attribute will be selected
- **Sparse file (only NTFS)** - if checked files with **sparse file** attribute will be selected

For example, if you want to include files with **read-only** and **archived** attributes set, you have to check both attributes checkboxes in a single restriction. If you want to include files with **read-only** or **archived** attributes set, you have to make two separate restrictions: one for **read-only** and another for **archived**.

File dates

This section allows the user to build restrictions based on file dates and times. To enable options in this section, check the **Filter by date** option.
Filters in this section can be applied by selecting one of the available date filters:
- **date accessed**
- **date and time accessed**
- **date modified**
- **date and time modified**
- **date created**
- **date and time created**

You can compare these dates and times with a **fixed date** or a relative date: **today**, **yesterday**, **one week ago** or **one month ago**.
Comparison operators available:
- < > date (and time) not equal to fixed or relative date
- < = date (and time) less than or equal to fixed or relative date
- > = date (and time) greater than or equal to fixed or relative date
- < date (and time) less than fixed or relative date

- > date (and time) greater than fixed or relative date
- **in interval** - date (and time) in a particular time interval between the **Start date** and **End date**

File size

This section provides the possibility to build restrictions based on the file size. To enable the options in this section, check the **Filter by size** option. You can enter a file size in the **Size** field and select a measurement **Unit**. The filter will compare the file size on disk with the size you enter using the comparison filters you selected:

- < > file size on disk not equal to the value in the **Size** field
- < = file size on disk less than or equal to the value in the **Size** field
- > = file size on disk greater than or equal to the value in the **Size** field
- < file size on disk less than the value in the **Size** field
- > file size on disk greater than the value in the **Size** field

Settings

Show filter in the New Backup Wizard
If checked, the current filter can be selected from the **Filters** list in **New Backup Wizard**.

Automatically add filter to new backup jobs
If checked, the current filter will be automatically added to backup jobs you create. You can specify the default type as: include filter or exclude filter.
Using this option you can automatically exclude specific file types from your backups.

Example
Suppose you want to backup (or restore) all .**pdf** files accessed in the last month and all .**doc** files modified in the last week, but you don't want to backup (or restore) system or hidden files.
Here are the steps to define this filter starting from the default filter:

1) Add a new restriction in the include filter: enable **File name**, add ***.pdf** file pattern and set date accessed to be **greater than or equal to fixed date one month ago**; click **OK**
2) Add a new restriction: add ***.doc** file pattern and set date and time modified to be **greater than or equal to fixed date one week ago**; click **OK**
3) Add a new restriction: enable **File attributes** and the **System** checkbox, then click **OK**
4) Add a new restriction: enable **File attributes** and the **Hidden** checkbox, then click **OK**
5) For the last two restrictions, check the **Use as exclude filter** boxes.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.7   Logs and history

On the **Logs and history** page of the **Options** window (accessible from the File, Options menu item) you can change log and history options.
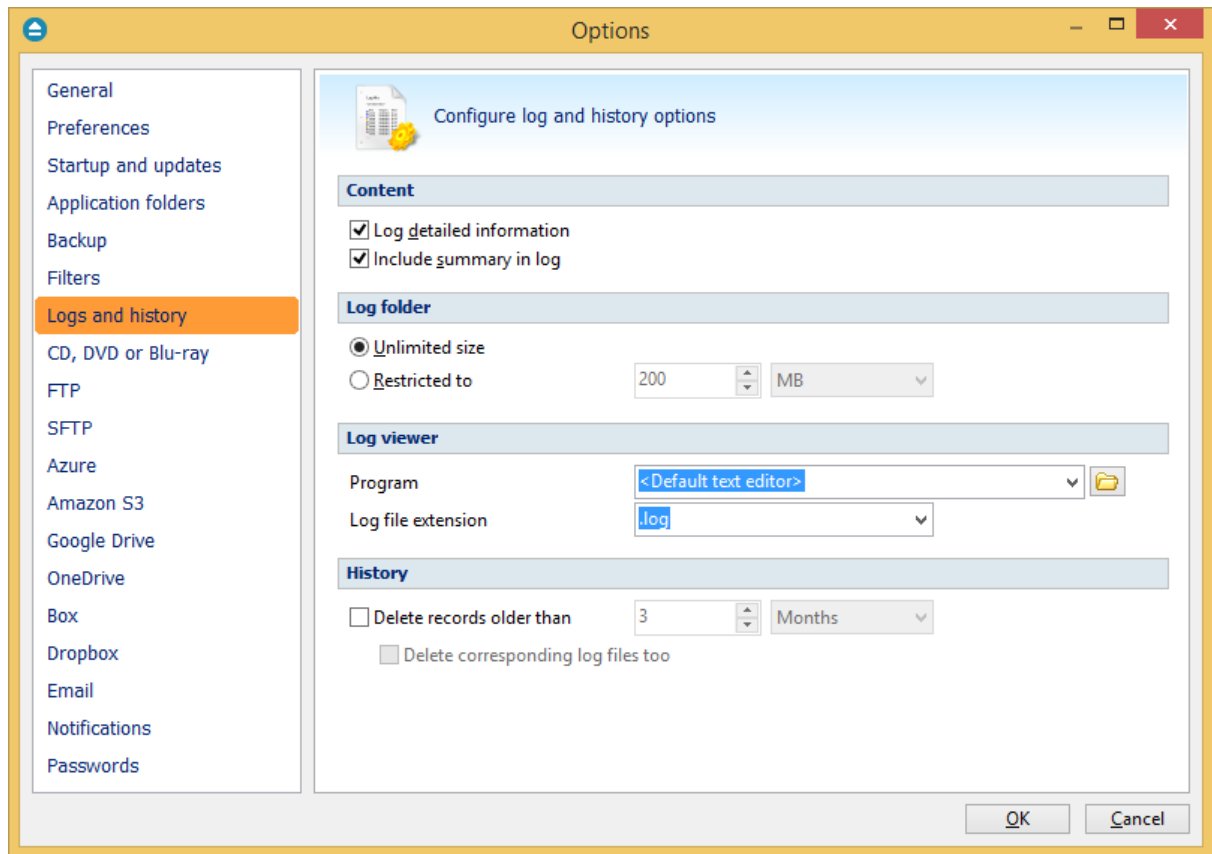
<u>Content</u>

Log detailed information
If checked the program will log detailed information about all files handled by the backup, restore or test process. By default this option is not checked.

Include summary in log
If checked the logs will contain all the text available in the main window's **Summary** view. By default this option is not checked.

<u>Log folder</u>

In this section you can set the size limits for the folder where the logs are stored. The path to the logs is set on the **File Locations** page of the **Options** window.

Unlimited size
If checked the log folder size is not limited, and its size will increase as needed. After a long period the program will generate a large number of log files, so you might want to clean up the log folder manually. By default this option is not checked.

Restricted to
If checked the log folder size is limited to the value set in the Size field below. If the log file of the

running backup job is larger than the limit, it will still be stored in the log folder. When the same operation will run again, the previous log file will be deleted. By default this option is checked.

The log folder size will be less or equal then the selected value. By default this option is set to 50 MB. You can set the desired unit from the drop down list. Possible choices are: **Bytes**, **KB** (kilobytes), **MB** (megabytes) or **GB** (gigabytes). By default this option is set to MB.

Log Viewer

Program
User can choose which program to be used when opening the log files with Backup4all. The available options are: <Default text editor>, <Notepad> or <Wordpad>. User can also browse the computer to choose another program.

Log file extension
User can change the extension of log files. The available options are: **log** and **txt**.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.8 CD, DVD or Blu-ray

The **CD, DVD or Blu-ray** page of the **Options** window (accessible from the File, Options menu item) contains the settings of the CD, DVD or Blu-ray burners.

Engine

Use SCSI Pass Through Direct Layer (SPTD)
Selected by default. Backup4all uses this internal burning engine to write CD, DVD, HD-DVD or Blu-ray discs. SPTD is a new method of access to storage devices and has the ability to provide direct control of devices without risk of compromising it by some malicious 3rd party filter drivers or other "rootkit" applications.
SPTD is currently supported only on Microsoft OS Windows XP and above. SPTD (similar to other access layers) is not removed from your system after Backup4all uninstall, in order not to disrupt other applications that may use it.

Use native Win32 Interface (SPTI)
If you have problems backing up using the SPTD method, we recommend you to use this option.

Other

Load CD, DVD or Blu-ray before backup
If checked, the CD, DVD or Blu-ray media is loaded before the execution of a backup. This option is useful when the CD, DVD or Blu-ray disc was previously ejected by another process.

Eject CD, DVD or Blu-ray after backup
If checked, the CD, DVD or Blu-ray media is ejected, but not reloaded after burning process is

finished. By default this option is not checked.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.9   FTP

The **FTP** page of the **Options** window (accessible from the File, Options menu item) contains FTP settings.

When FTP server not ready

The first number (Retry option) indicates how many times the application tries to access the destination server if it is not available. By default this option is set to 5 attempts. The second number (wait option) indicates how many seconds to wait between two consecutive attempts to access the destination location. By default this option is set to 60 seconds. This option is useful when the destination FTP server has restrictions (i.e. only 2 users logged in the same time, no. of accesses etc.) and insures that if the FTP server cannot accept your connection, it will not be "hammered" by sending log-in requests frequently.

Configurations

The **File->Options->FTP** window allows you to define FTP configurations that can be used on the **Destination** page in the **New Backup Wizard** or **Backup Properties** windows. You can add, edit, copy or delete an FTP connection using this window.
In order to add a new FTP connection press the **Add** button. The **Define FTP configuration** window will appear in the list and you can enter the other settings for this connection.

General

Configuration name
Enter here an arbitrary name for the connection. By default the **New FTP configuration** name is assigned.

FTP Server

Server name or IP
In this field you have to enter the name or IP address for the FTP server

Transfer mode - Here you can select the transfer mode: Binary, ASCII or Auto.
- **Binary:** it refers to transferring files as a binary stream of data. The binary mode transmits the raw bytes of the file being transferred. In this way, the file is transferred in its exact original form.
- **ASCII:** it stands for American Standard Code for Information Interchange, and is a type of character encoding based on the English language used on devices that handle information stored in text. It includes 33 non-printed control characters and 94 printed characters such as letters and punctuation.
- **Auto:** according to the list of ASCII files defined in File->Options->FTP, the files will be uploaded in ascii or binary mode, depending on their extension.

By default, binary mode is selected and it applies only to Mirror backup type. That is useful if you have a Linux FTP server as backup destination and want to download the backed up files with another application which uses the Auto transfer mode. Uploading the files to a Linux server in binary mode and downloading them in Auto mode, causes the files to be modified by adding a

new empty line at the end of each file.

Port

In this field you have to enter the port number if different than the default FTP ports (21).

Destination folder

Here you can specify a destination folder on the remote FTP server where the backup will be stored. If the entered folder does not exist, it will be created on the server. If no destination folder is set, Backup4all will automatically create a folder using the name of the backup job.

User name

If this is a private FTP server (no anonymous access allowed) you have to enter the user name for your account.

Password

In this field you can enter the password for the FTP server. There are FTP servers that allow anonymous access (public FTP servers). You can connect to these types of FTP servers using as user name Anonymous and your email address as password. It is not recommended to backup important files to public FTP servers.

Bandwidth limitation

This section allows setting different limitations for upload/download speed:
- **Upload speed** - if checked you can set a maximum upload speed for the FTP transfer
- **Download speed** - if checked you can set a maximum upload speed for the FTP transfer

Advanced

SSL encryption: No SSL

☑ Use passive mode for transfers (like WWW browsers)
   ☐ Use extended passive mode
☑ Use XCRC when testing (if available)
☑ Resume uploads/downloads (if available)
☑ Limit file size to   2027   MB   Larger files will be split
Timeout (seconds)   15

Firewall

Proxy type: None
Host name or IP
Host port   80
User name
Password   Set password   No password

Advanced

SSL encryption
Indicates the level of Transport Layer Security (TLS) required for control channel and data channel connections to the FTP server:
- **No SSL** - the server does not require Secure Socket Layer transport
- **Implicit SSL** - implies that Secure Socket Layer is in use
- **Only explicit SSL** - allows the connection to the FTP server only if TLS is available.
- **Explicit SSL, if available** - when SSL is available, uses explicit security by default. The server allows regular FTP sessions without encryption as well as encrypted FTP sessions using SSL.

Use passive mode for transfers (like WWW browsers)
Each file transfer (upload or download) needs an additional connection for the data stream. Normally (in active mode), the server establishes this connection. In passive mode, however, the client establishes the connection. This may be necessary through some firewalls, which do not allow connections from outside.

Use extended passive mode
The FTP Server operates exactly the same as passive mode, however it only transmits the port number (not broken into high and low bytes) and Backup4all is to assume that it connects to the same IP address that was originally connected to. Use this option if the normal passive mode connection failed.

Use XCRC when testing (if available)
If the server supports the XCRC extension Backup4all can verify that files transferred to the server have been transmitted correctly using the CRC information received from the FTP server. This results in faster testing, as the files will not be downloaded to perform the CRC testing.

Resume upload/downloads (if available) - it resume the backup upload if the server supports resume command.

Limit file size to - specify the maximum file size you want to have. Larger files will be split. Please note that many FTP servers does not allow you to upload files larger than 2 GB.

Timeout (seconds)
You can set the time interval (in seconds) that is allowed for no data transfer before the transfer operation is interrupted and must be resumed. Default is 15 seconds.

Firewall

Proxy type
Select one of the options below (supported by your firewall) if you use a proxy to connect to the FTP:
- **None** - Sends the User name and optional Password for the FTP server as entered in the FTP window
- **Send command USER** - Sends the User name and optional Password defined in the proxy

settings, followed immediately by the User name and optional Password for the FTP server.

- **Send command SITE** - Sends the User name and optional Password defined in the proxy settings, the SITE command with the Host value, and the User name and optional Password for the FTP site.
- **Send command OPEN** - Sends the User name and optional Password defined in the proxy settings, sends the OPEN command with the Host value, and the User name and optional Password for the FTP site.
- **USER user@firewalluser@hostname / PASS pass@firewallpass** - Sends the command USER user@proxyuser@host, then the command PASS pwd@proxypwd, or optionally PASS pwd.
- **Transparent** - Sends the User name and optional Password defined in the proxy settings, followed immediately by the FTP server User name and optional Password.

Host name or IP
In this field you have to enter the host name or IP address for the proxy server (firewall).

Host port
Enter the host port number in this field. By default, the port number is set to 80.

User name
This field is used to enter the proxy user name.

Password
In this field you can enter the password for the specified user name.

<u>**ASCII file types**</u>

It includes the list of all file extensions that will be transfered as ASCII when using Auto transfer mode for FTP uploads. You can filter, add, edit or delete the file extensions listed here.
Please note: if you add non-ASCII file types in this list, when you back up such files in ASCII mode they will get corrupted and you won't be able to use them.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.10 SFTP

The **SFTP** page of the **Options** window (accessible from the File, Options menu item) contains SFTP settings.

When SFTP server not ready

The first number (Retry option) indicates how many times the application tries to access the destination server if it is not available. By default this option is set to 5 attempts. The second number (wait option) indicates how many seconds to wait between two consecutive attempts to access the destination location. By default this option is set to 60 seconds. This option is useful when the destination FTP server has restrictions (i.e. only 2 users logged in the same time, no. of accesses etc.) and insures that if the FTP server cannot accept your connection, it will not be "hammered" by sending log-in requests frequently.

Configurations

The **File->Options->SFTP** window allows you to define SFTP configurations that can be used on the **Destination** page in the **New Backup Wizard** or **Backup Properties** windows. You can add, edit, copy or delete an SFTP connection using this window.

In order to add a new SFTP connection press the **Add** button. The **Define SFTP configuration** window will appear in the list and you can enter the other settings for this connection.

General

Configuration name   New SFTP configuration

SFTP server

Server name or IP

Port   22

Destination folder

User name

Password   Set password   No password

Private key

◉ None

○ Key file

    Password   Set password   No password

    Key management   Export public key   Create key pair

○ Personal certificate store   2673d1b4abae704a

    Certificate management   Certificate manager   Export public key

Bandwidth limitation

☐ Upload speed   200   KBytes/s

☐ Download speed   200   KBytes/s

<u>General</u>

Reset to configuration
If you want to add a new SFTP location, the <New> option should be selected. To edit an existing SFTP location, select it from the drop-down list. All fields will be filled with the values of the selected SFTP.

<u>SFTP server</u>

- **Server name or IP** - In this field you have to enter the name or IP address for the SFTP server
- **Port** - In this field you have to enter the port number if different than the default SFTP ports (22).
- **Destination** - Here you can enter the destination path if different than root.
- **User name** - If this is a private SFTP server (no anonymous access allowed) enter the user name for your account.
- **Password** - In this field enter the password for the SFTP server.

Private key

- **None -** no private key is used
- **Key file -** allows user to specify a key file that will be used
- **Personal certificate store -** allows user to import and use different certificate formats

Bandwidth limitation

This section allows you to set different limitations for upload/download speed:
- **Upload speed** - if checked you can set a maximum upload speed for the SFTP transfer
- **Download speed** - if checked you can set a maximum upload speed for the SFTP transfer

Advanced

☐ Verify host key

☑ Limit file size to   2027   ▲▼   MB   ⌄   Larger files will be split

Timeout (seconds)   15   ▲▼

Authentication

Authentications
☑ publickey
☑ password
☑ keyboard-interactive

Encryption

Ciphers
☑ aes128-ctr
☑ aes192-ctr
☑ aes256-ctr
☑ arcfour256
☑ arcfour128

MACs
☑ hmac-sha1
☑ hmac-md5
☑ umac-64@openssh.com
☑ hmac-ripemd160
☐ none

Compression

Compressions
☑ none
☐ zlib

Advanced

- **Verify host key:** If checked, the host key will be verified each time
- **Maximum file size** - specify the maximum file size you want to have. Please note that many SFTP servers does not allow you to upload files larger than 2 GB.
- **Timeout** - you can set the time interval (in seconds) that is allowed for no data transfer before the transfer operation is interrupted and must be resumed. Default is 15 seconds.

Authentication

You can select which authentication methods will be used when backing up. Available options: publickey, password and keyboard-interactive.
The priority of these options can also be changed.

Encryption

- **Ciphers:** clear or select the check boxes to specify which ciphers you want to allow for encrypting SFTP sessions. A Cipher is the algorithm(s) used for symmetric session encryption. To give a cipher a lower priority rating, select it with the mouse and then click the Down button.
- **MACs:** clear or select the check boxes to specify which MACs you want to allow for encrypting SFTP sessions. A MAC (Message Authentication Code) is the algorithm(s) used for data integrity verification. To give a MAC a lower priority rating, select it with the mouse, and then click the Down button.

Compression

SFTP supports the use of data compression to reduce the amount of data that is transmitted. Both the client and server agree on a compression algorithm. They then compress data before sending and decompress data when it is received.
Typically, zlib compression is the compression algorithm most commonly supported in SFTP servers. No compression is set as the default, and zlib is specified as an option. If the server forces use of zlib compression it will happen automatically.

Hot keys

Host keys folder - Clear cache - press this button if you want to delete the host keys stored in the keys folder.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.11 Azure

The **Azure** page of the **Options** window (accessible from the File, Options menu item) contains Azure settings.
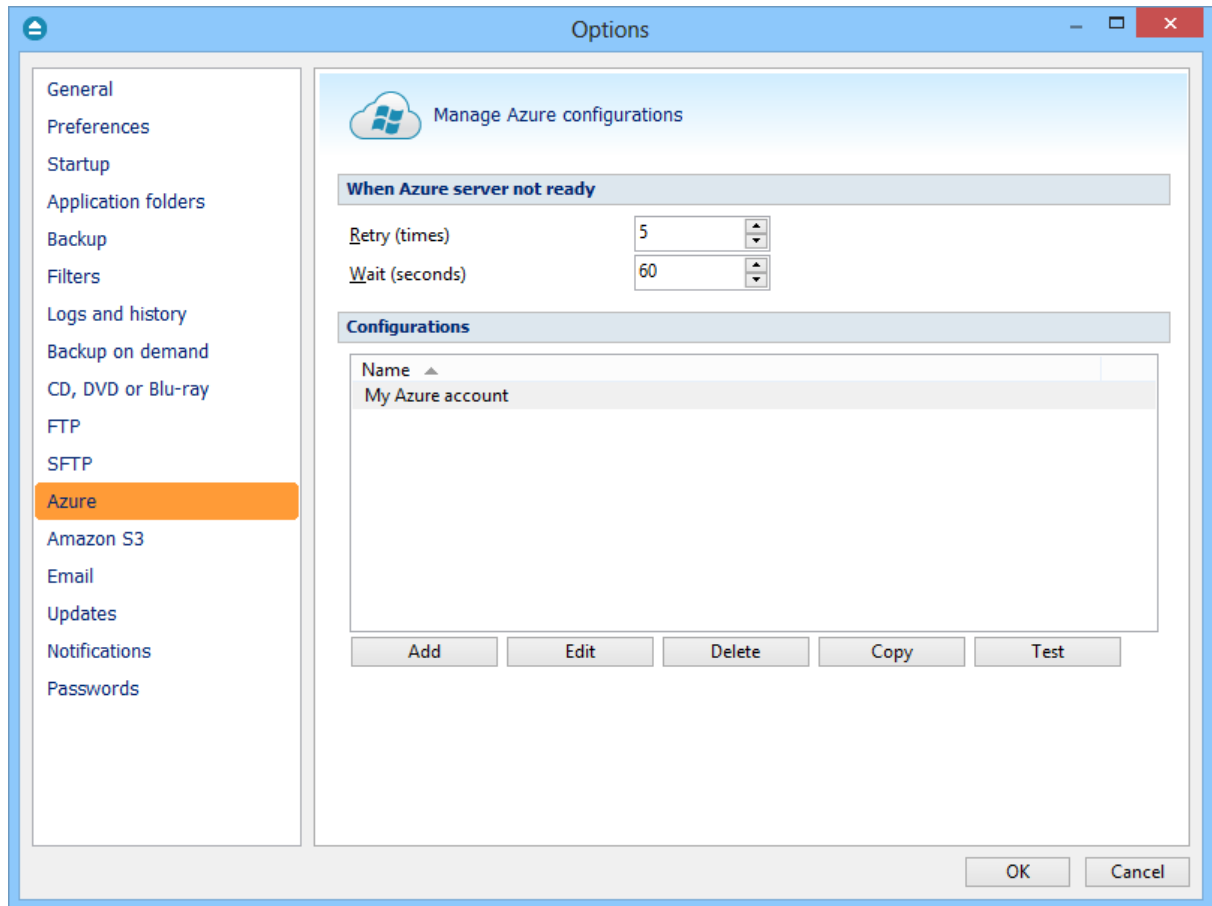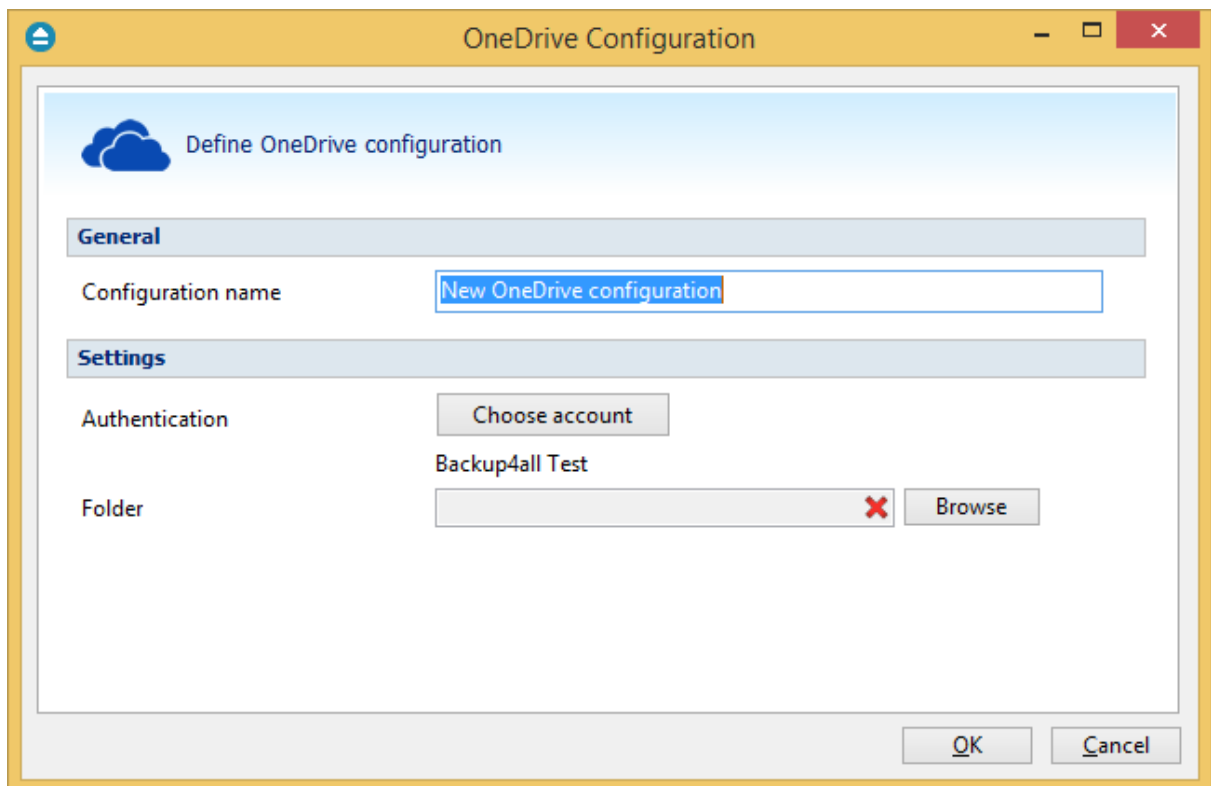

When Azure server not ready

The first number (Retry option) indicates how many times the application tries to access the destination server if it is not available. By default this option is set to 5 attempts. The second number (wait option) indicates how many seconds to wait between two consecutive attempts to access the destination location. By default this option is set to 60 seconds. This option is useful when the destination Azure server has restrictions (i.e. only 2 users logged in the same time, no. of accesses etc.) and insures that if the Azure server cannot accept your connection, it will not be "hammered" by sending log-in requests frequently.

Configurations

The **File->Options->Azure** window allows you to define Azure configurations that can be used on the

Destination page in the **New Backup Wizard** or **Backup Properties** windows. You can add, edit, copy or delete an Azure connection using this window.

In order to add a new Azure connection press the **Add** button. The **Define Azure configuration** window will appear in the list and you can enter the other settings for this connection.

General

Configuration name
Enter here an arbitrary name for the connection. By default the **New Azure configuration** name is assigned.

Settings

- **Account name -** In this field you have to enter the name of your Azure account
- **Key -** In this field you have to enter the key for your Azure account
        Key is shared Access Signature - check this option if the key is shared access signature
- **Container -** In this field you have to enter the container you want to use as destination
- **Folder -** In this field you have to enter the folder where you want to store the backups. If the folder does not exist, it will be created.

Note: If you configured a new Azure location or you edit an existing one, you should use the **Test** button to see if the Azure settings are correct. If the test was successful, The Azure connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.12 Amazon S3

The **Amazon S3** page of the **Options** window (accessible from the File, Options menu item) contains Amazon settings.
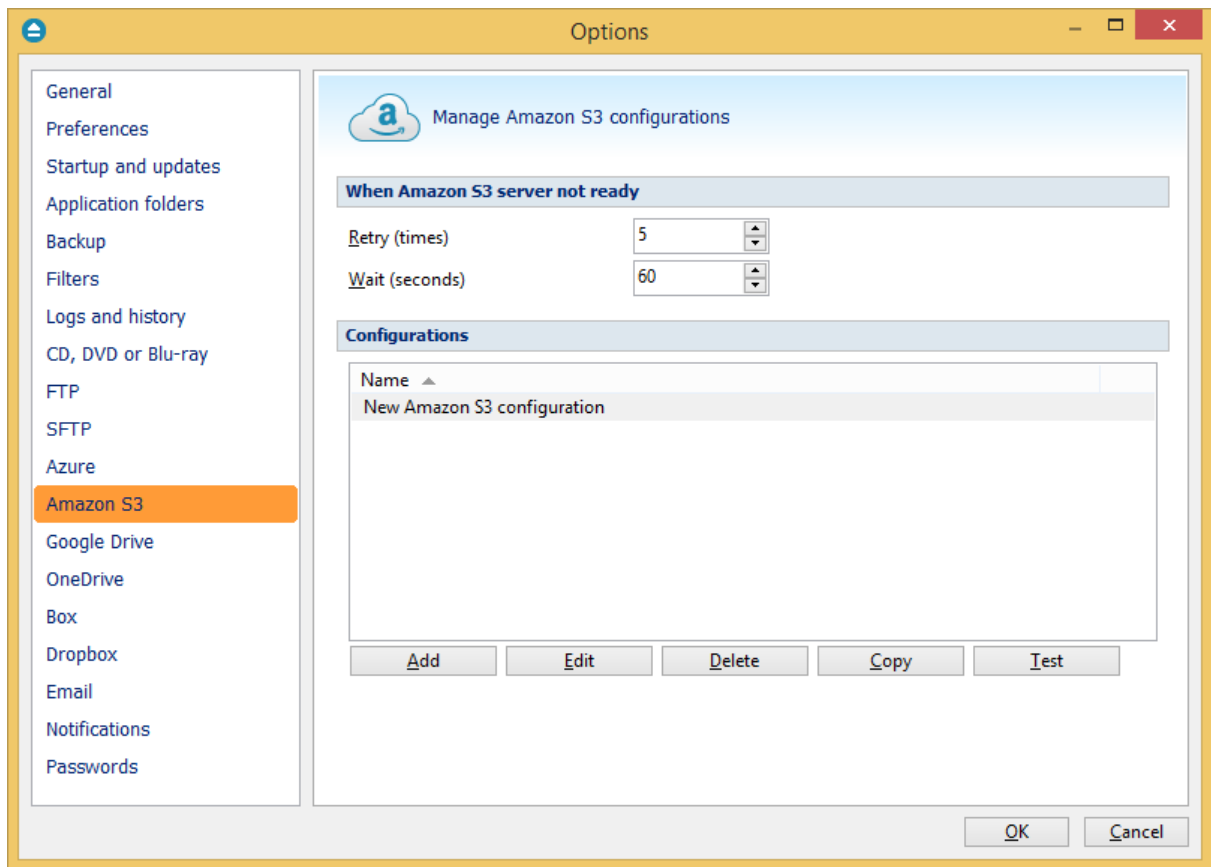
When Amazon S3 server not ready

The first number (Retry option) indicates how many times the application tries to access the destination server if it is not available. By default this option is set to 5 attempts. The second number (wait option) indicates how many seconds to wait between two consecutive attempts to access the destination location. By default this option is set to 60 seconds. This option is useful when the destination Amazon S3 server has restrictions (i.e. only 2 users logged in the same time, no. of accesses etc.) and insures that if the Amazon S3 server cannot accept your connection, it will not be "hammered" by sending log-in requests frequently.

Configurations

The **File->Options->Amazon S3** window allows you to define Amazon configurations that can be used on the **Destination** page in the **New Backup Wizard** or **Backup Properties** windows. You can add, edit, copy or delete an Amazon S3 connection using this window.

In order to add a new Amazon S3 connection press the **Add** button. The **Define Amazon S3 configuration** window will appear in the list and you can enter the other settings for this connection.

General

Configuration name
Enter here an arbitrary name for the connection. By default the **New Amazon S3 configuration** name is assigned.

Settings

- **Access Key ID -** In this field you have to enter the access key ID for your Amazon S3 account
- **Secret Access Key -** In this field you have to enter the Secret Access Key for your Amazon S3 account
- **Bucket -** In this field you have to enter the bucket you want to use as destination. You can also create a new bucket if you type its name and press Create button.
  - **Folder -** In this field you have to enter the folder where you want to store the backups. If the folder does not exist, it will be created.

Note: If you configured a new Amazon S3 location or you edit an existing one, you should use the

Test button to see if the Amazon S3 settings are correct. If the test was successful, The Amazon S3 connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.13 Google Drive

The **Google Drive** page of the **Options** window (accessible from the File, Options menu item) contains Google Drive settings.
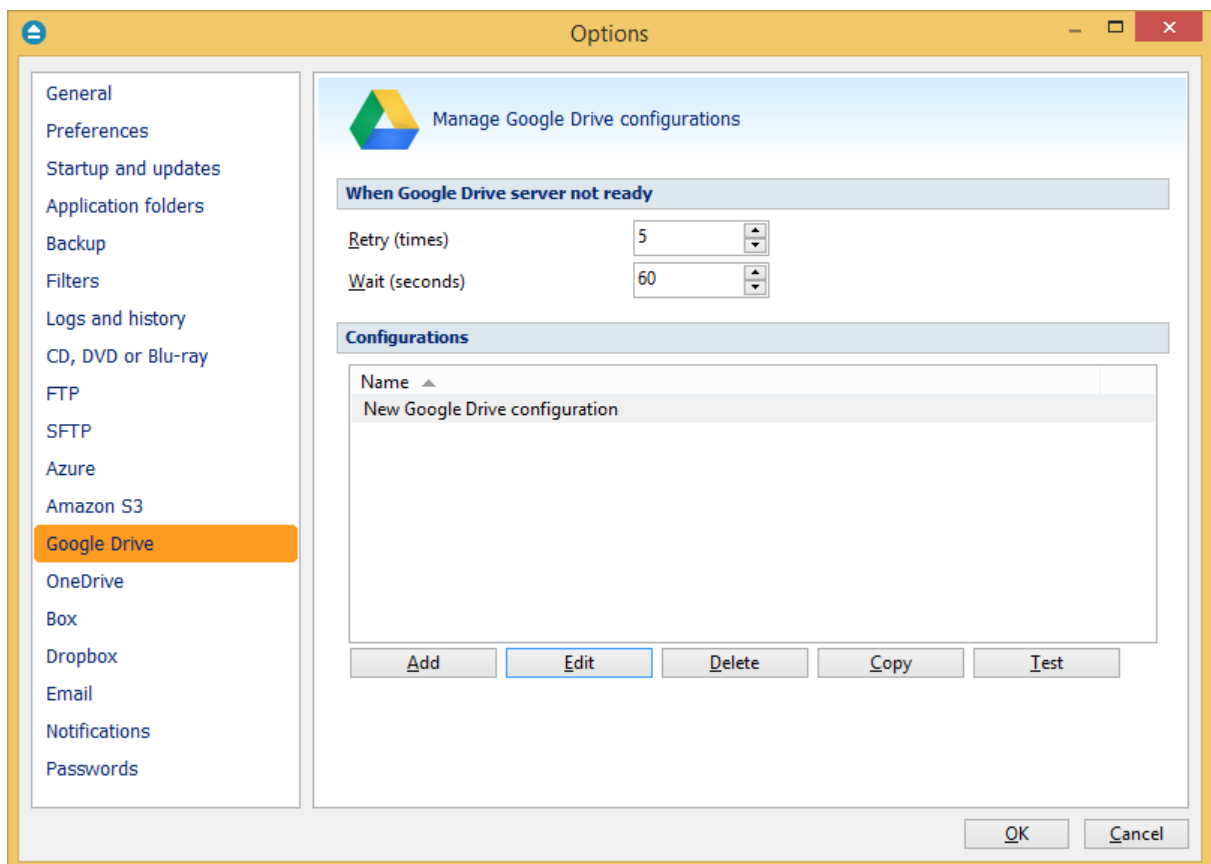
When Google Drive server not ready

The first number (Retry option) indicates how many times the application tries to access the destination server if it is not available. By default this option is set to 5 attempts. The second number (wait option) indicates how many seconds to wait between two consecutive attempts to access the destination location. By default this option is set to 60 seconds. This option is useful when the destination Google Drive server has restrictions (i.e. only 2 users logged in the same time, no. of accesses etc.) and insures that if the Google Drive server cannot accept your connection, it will not be "hammered" by sending log-in requests frequently.

Configurations

The **File->Options->Google Drive** window allows you to define Google Drive configurations that can be used on the **Destination** page in the **New Backup Wizard** or **Backup Properties** windows. You can add, edit, copy or delete a Google Drive connection using this window.
In order to add a new Google Drive connection press the **Add** button. The **Define Google Drive configuration** window will appear in the list and you can enter the other settings for this connection.
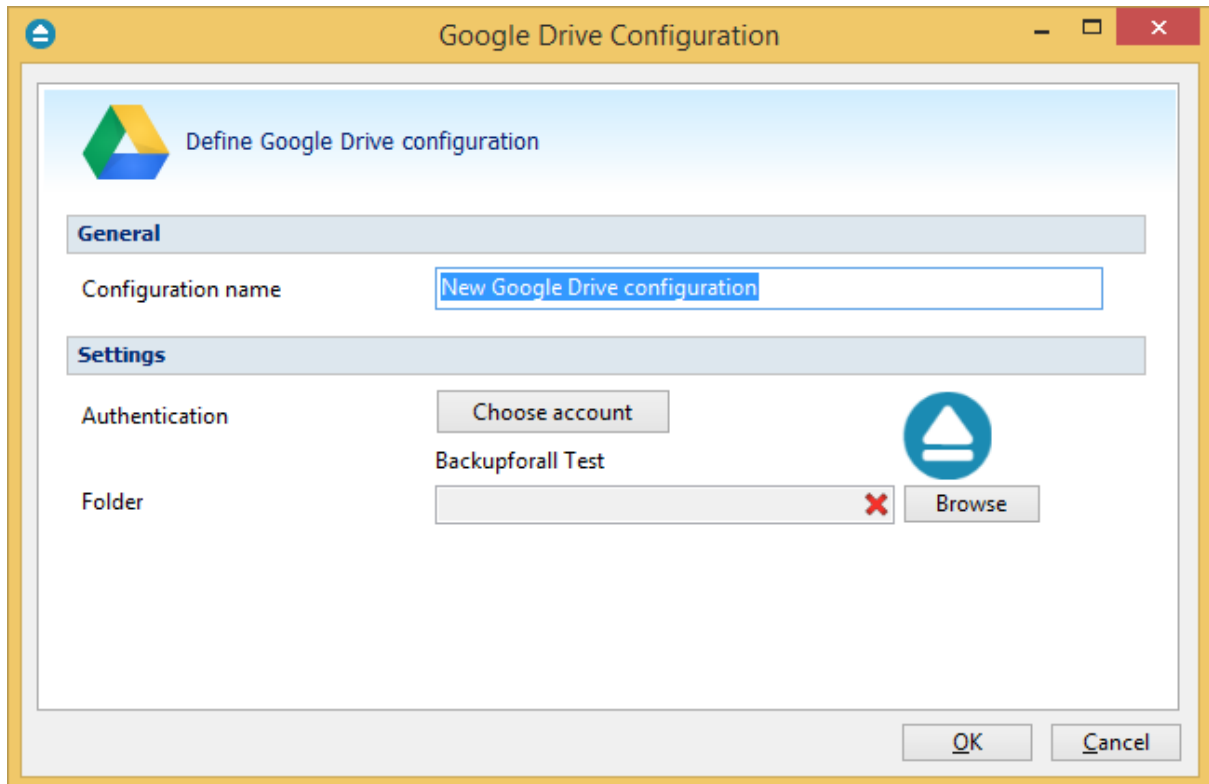
General

Configuration name
Enter here an arbitrary name for the connection. By default the **New Google Drive configuration** name is assigned.

Settings

- **Authentication -** press "Choose account" button to log in to your Google Drive account. Here you need to authorize Backup4all application to view and manage files in your Google Drive account.

- **Folder -** In this field you have to select the folder where you want to store the backups. If no folder is selected the backup will be stored in the root of your Google Drive account.

Note: If you configured a new Google Drive location or you edit an existing one, you should use the **Test** button to see if the Google Drive settings are correct. If the test was successful, The Google Drive connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.14 OneDrive

The **OneDrive** page of the **Options** window (accessible from the File, Options menu item) contains OneDrive settings.
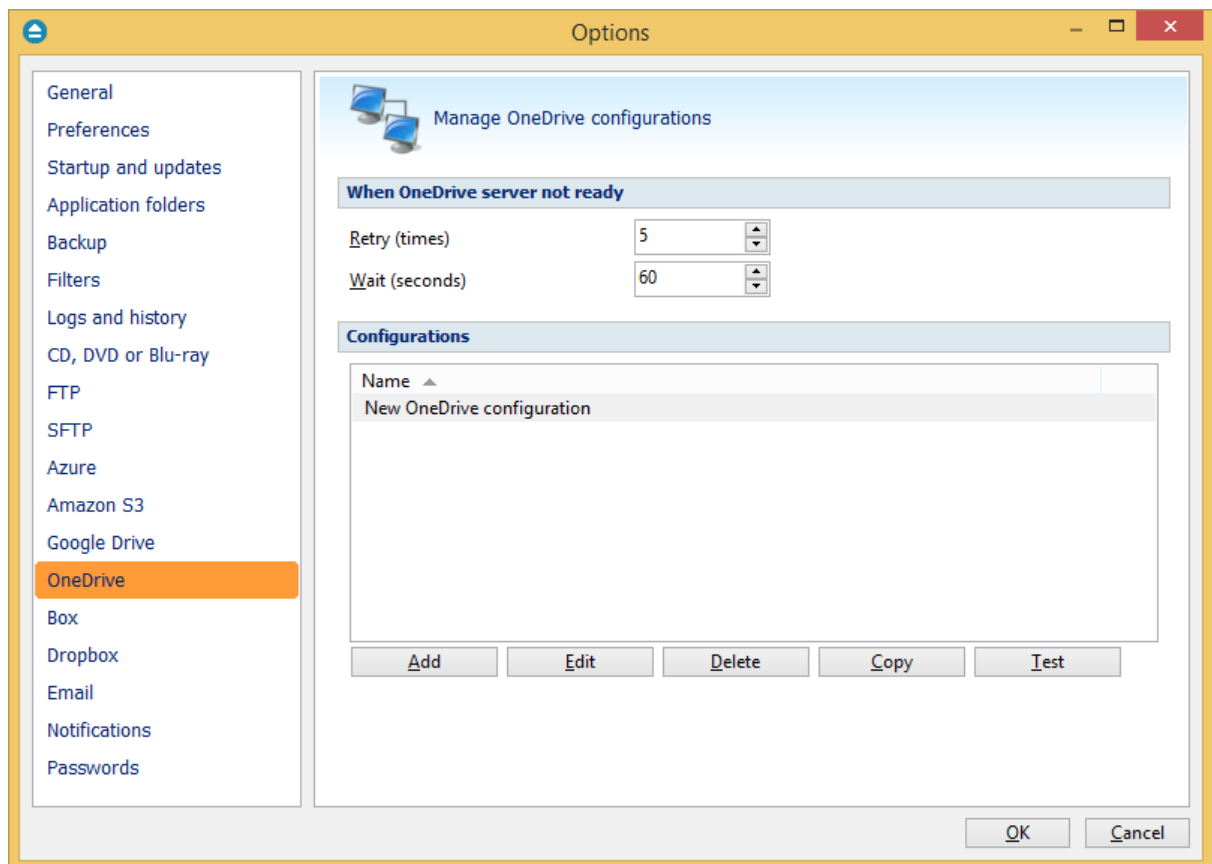
When OneDrive server not ready

The first number (Retry option) indicates how many times the application tries to access the destination server if it is not available. By default this option is set to 5 attempts. The second number (wait option) indicates how many seconds to wait between two consecutive attempts to access the destination location. By default this option is set to 60 seconds. This option is useful when the destination OneDrive server has restrictions (i.e. only 2 users logged in the same time, no. of accesses etc.) and insures that if the OneDrive server cannot accept your connection, it will not be

"hammered" by sending log-in requests frequently.

Configurations

The **File->Options->OneDrive** window allows you to define OneDrive configurations that can be used on the **Destination** page in the **New Backup Wizard** or **Backup Properties** windows. You can add, edit, copy or delete an OneDrive connection using this window.
In order to add a new OneDrive connection press the **Add** button. The **Define OneDrive configuration** window will appear in the list and you can enter the other settings for this connection.

General

Configuration name
Enter here an arbitrary name for the connection. By default the **New OneDrive configuration** name is assigned.

Settings

- **Authentication -** press "Choose account" button to log in to your OneDrive account. Here you need to authorize Backup4all application to view and manage files in your OneDrive account.

- **Folder -** In this field you have to select the folder where you want to store the backups. If no folder is selected the backup will be stored in the root of your OneDrive account.

Note: If you configured a new OneDrive location or you edit an existing one, you should use the **Test** button to see if the OneDrive settings are correct. If the test was successful, The OneDrive connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.15 Box

The **Box** page of the **Options** window (accessible from the File, Options menu item) contains Box settings.
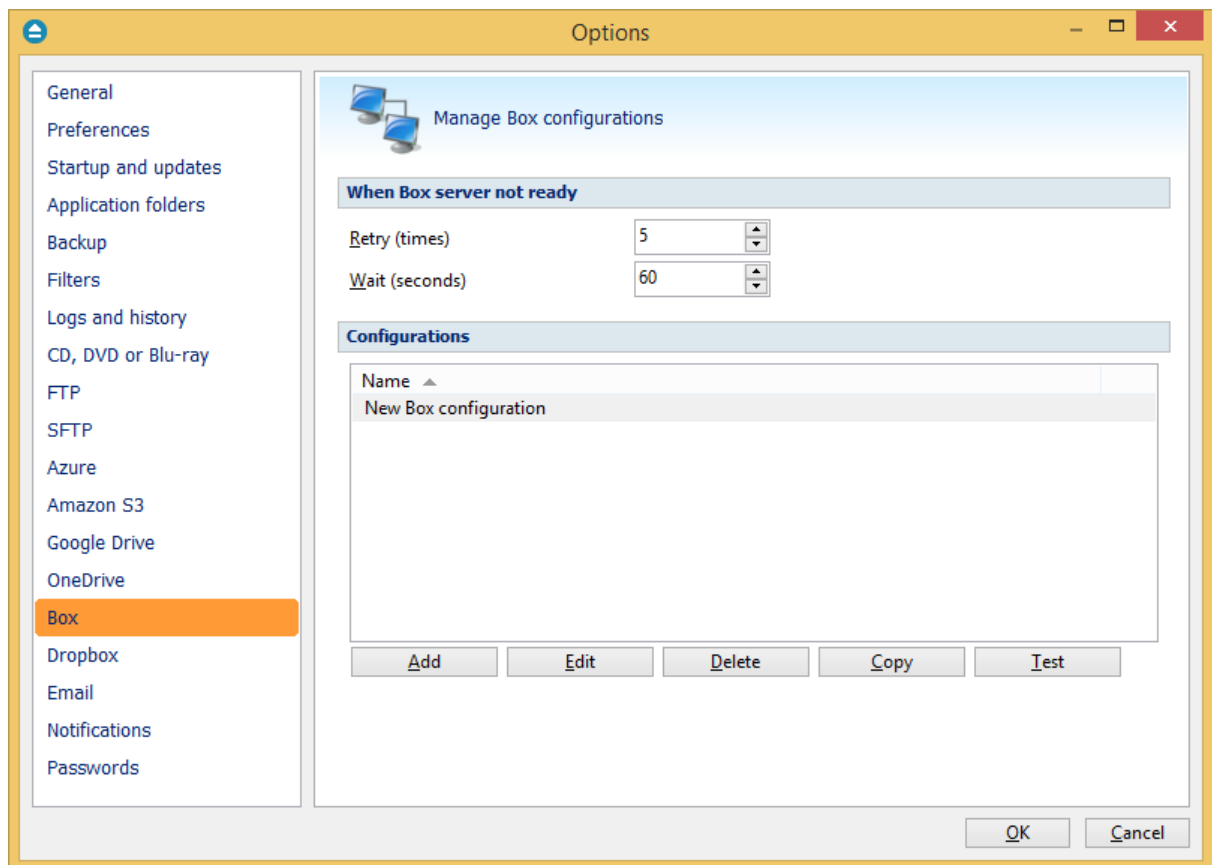
When Box server not ready

The first number (Retry option) indicates how many times the application tries to access the destination server if it is not available. By default this option is set to 5 attempts. The second number (wait option) indicates how many seconds to wait between two consecutive attempts to access the

destination location. By default this option is set to 60 seconds. This option is useful when the destination Box server has restrictions (i.e. only 2 users logged in the same time, no. of accesses etc.) and insures that if the Box server cannot accept your connection, it will not be "hammered" by sending log-in requests frequently.

Configurations

The **File->Options->Box** window allows you to define Box configurations that can be used on the **Destination** page in the **New Backup Wizard** or **Backup Properties** windows. You can add, edit, copy or delete a Box connection using this window.
In order to add a new Box connection press the **Add** button. The **Define Box configuration** window will appear in the list and you can enter the other settings for this connection.

General

Configuration name
Enter here an arbitrary name for the connection. By default the **New Box configuration** name is assigned.

Settings

- **Authentication -** press "Choose account" button to log in to your Box account. Here you need to

authorize Backup4all application to read and write files/folders in your Box account.

- **Folder -** In this field you have to select the folder where you want to store the backups. If no folder is selected the backup will be stored in the root of your Box account.

Note: If you configured a new Box location or you edit an existing one, you should use the **Test** button to see if the Box settings are correct. If the test was successful, The Box connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.16 Dropbox

The **Dropbox** page of the **Options** window (accessible from the File, Options menu item) contains Dropbox settings.
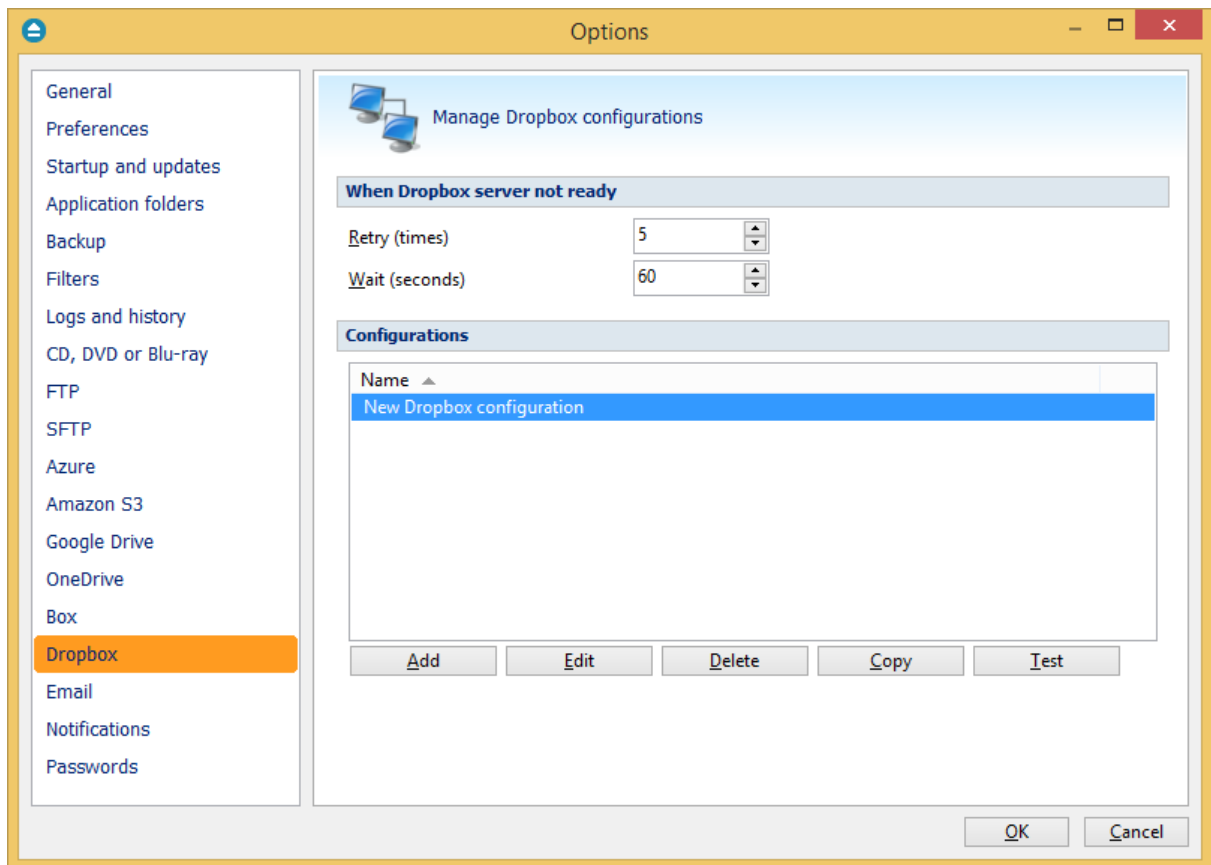
When Dropbox server not ready

The first number (Retry option) indicates how many times the application tries to access the

destination server if it is not available. By default this option is set to 5 attempts. The second number (wait option) indicates how many seconds to wait between two consecutive attempts to access the destination location. By default this option is set to 60 seconds. This option is useful when the destination Dropbox server has restrictions (i.e. only 2 users logged in the same time, no. of accesses etc.) and insures that if the Dropbox server cannot accept your connection, it will not be "hammered" by sending log-in requests frequently.

Configurations

The **File->Options->Dropbox** window allows you to define Dropbox configurations that can be used on the **Destination** page in the **New Backup Wizard** or **Backup Properties** windows. You can add, edit, copy or delete a Dropbox connection using this window.
In order to add a new Dropbox connection press the **Add** button. The **Define Dropbox configuration** window will appear in the list and you can enter the other settings for this connection.
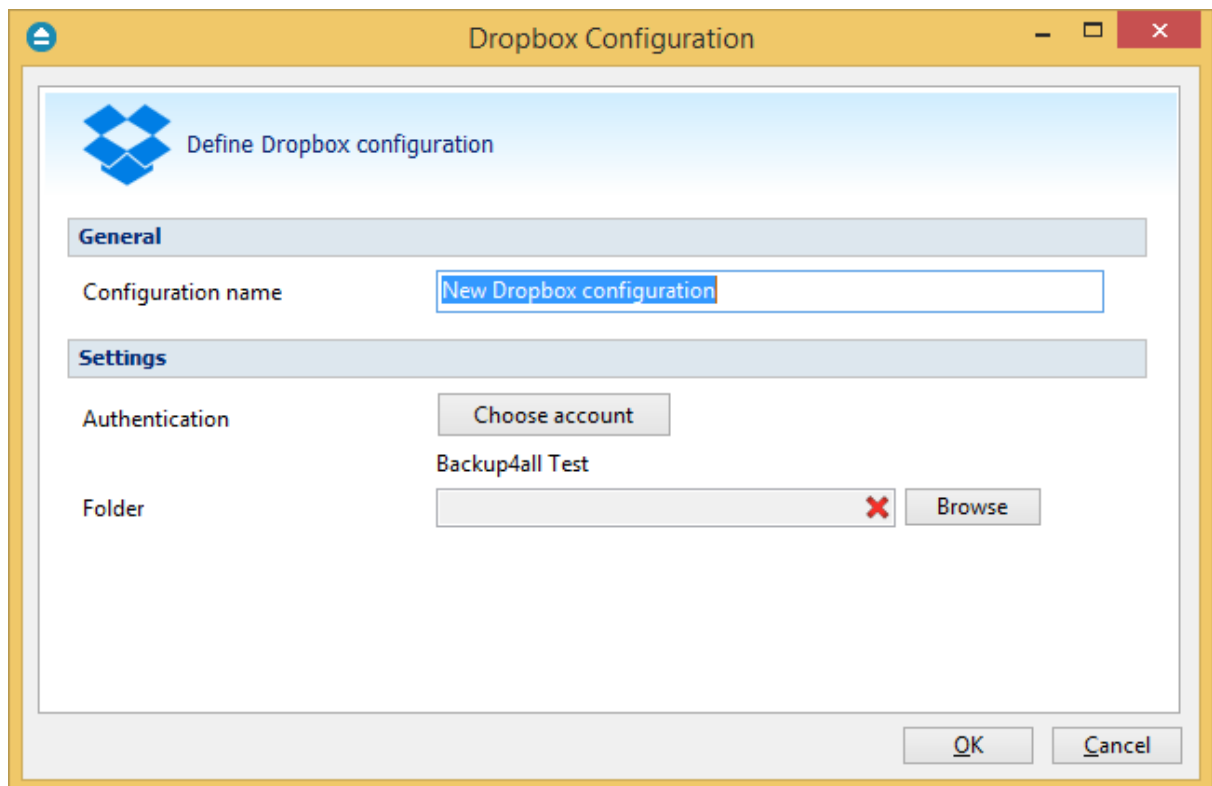
General

Configuration name
Enter here an arbitrary name for the connection. By default the **New Dropbox configuration** name is assigned.

Settings

- **Authentication -** press "Choose account" button to log in to your Dropbox account. Here you need to authorize Backup4all application to read and write files/folders in your Dropbox account.

- **Folder -** In this field you have to select the folder where you want to store the backups. If no folder is selected the backup will be stored in the root of your Dropbox account.

Note: If you configured a new Dropbox location or you edit an existing one, you should use the **Test** button to see if the Dropbox settings are correct. If the test was successful, The Dropbox connection was tested successfully message will be displayed.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.17 Email

On the **Email** page of the **Options** window (accessible from the File, Options menu item) you can set configurations necessary to send emails.

Email notifications

Enable email notifications
If checked the email notifications are available in the backup jobs on the **Advanced\Emails** page in the backup job **Properties** or **New Backup Wizard** (accessible from the File menu). By default this option is not checked.

SMTP server

Server Name or IP
Enter the DNS name or IP address of the SMTP server to be used to send emails (example: mail. yourdomain.com) This field is mandatory.

Port
Enter the port number to be used by the SMTP server to send the emails. The default value is 25.

Connection enctyption
- **None** - if selected, no connection encryption will be used
- **SSL -** if selected the Secure Socket Layer (SSL) will be used for control channel and data channel connections to the SMTP server.
- **TLS -** if selected the Transport Layer Security (TLS) will be used for control channel and data channel connections to the SMTP server.

Send Test Email
Press **Send Test Email** if you want to test the configuration you just entered. In the box that pops-up, enter the email address where you want to receive notifications and press **OK**. If all the settings are correct, a test email should arrive in your specified email account.

Email addresses

From
Enter the sender's email address. If you enter a wrong email address, the email notification will not be sent. This field is mandatory.

Reply To
Optionally you can specify a different reply email address. If no value is entered the From email will be used.

Authentication

Server requires authentication
If checked the SMTP server uses authentication and you will need to supply a user name and a password. By default this option is not checked.

User name
Enter the user name to be used when authenticating on the SMTP server.

Password
Enter the password to be used when authenticating on the SMTP server.

Dial-up connection

In this group you can set how the program should handle dial-up connections. The available options are: **Do not start**, **Automatically start-up**, **Manually start-up**.

Do not start
If selected email notifications are sent only if your computer is already connected to the Internet. If you have a connection but you are not connected the program will not dial for you.

Automatically start-up
If selected and you are not connected to the Internet, the program attempts to make the connection for you automatically.

Manually start-up
If selected and you are not connected to the Internet, the program asks you if it should connect. You can approve or deny the request.

Hang up when finished
If checked the dial-up connection will be closed after the notification email is sent.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.18 Notifications

On the **Notifications** page of the **Options** window (accessible from the File, Options menu item) you can configure the expiration time for each notification message type.
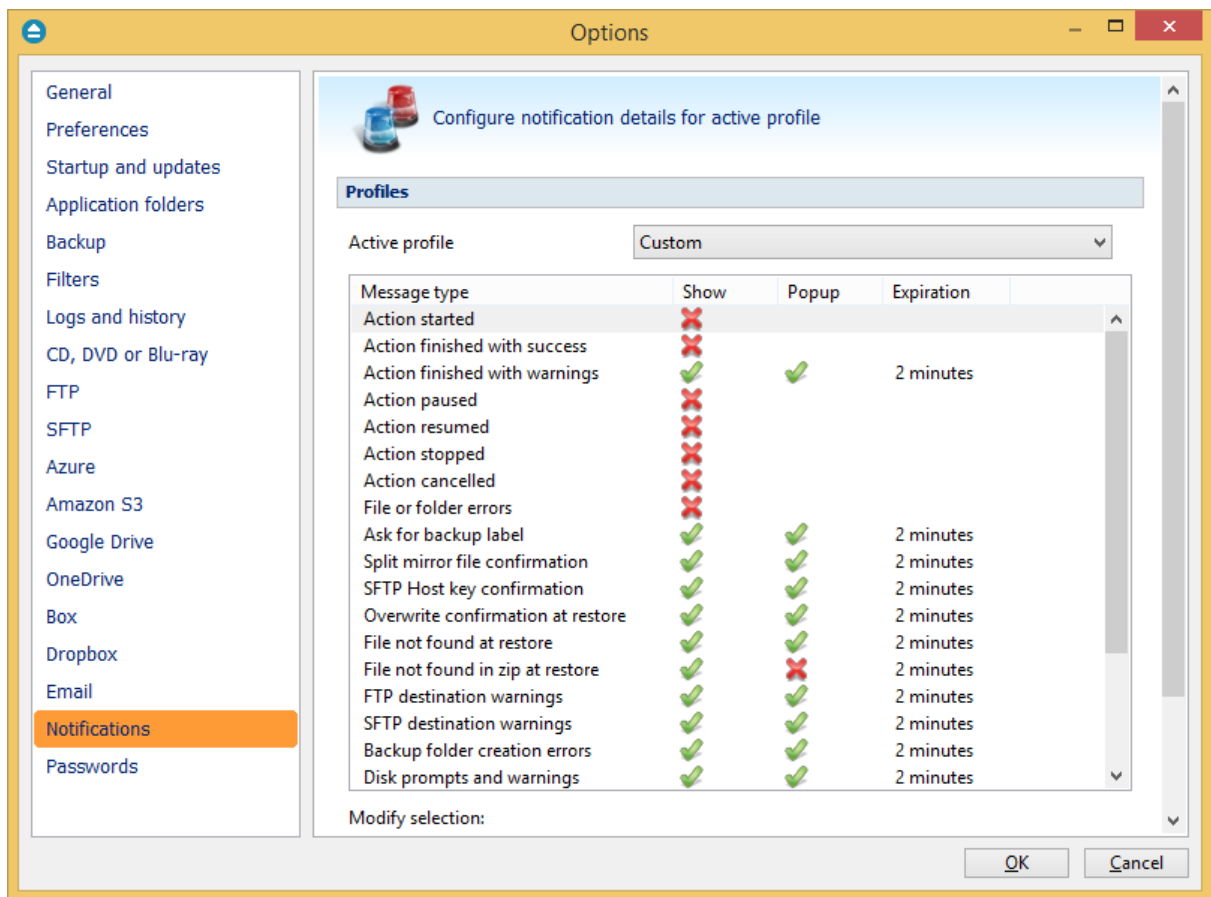
Profiles

Active profile - Here you can select which profile to be used:
- **Silent -** no notifications will be displayed
- **Normal** - notifications will be shown for all basic actions
- **Verbose -** notifications will be shown for all actions
- **Custom -** user defined for which actions to display notifications

Here is the list of all message types:
- Action started
- Action finished with success
- Action finished with warnings
- Action paused
- Action resumed
- Action stopped
- Action canceled
- File or folder errors
- Ask for backup label
- Split mirror file confirmation
- SFTP host key confirmation

- Overwrite confirmation at restore
- File not found at restore
- File not found in zip at restore
- FTP destination warnings
- SFTP destination warnings
- Backup folder creation errors
- Disk prompts and warnings
- CD, DVD or Bluray destination warnings
- Delete confirmation for smart backup
- Azure destination warnings
- Amazon S3 destination warnings
- Google Drive destination warnings
- OneDrive destination warnings
- Box destination warnings
- Dropbox destination warnings
- Force independent split warning
- Backup source not available warning

Select a message type to modify it. Here are the options available for each message type:
- **Show notification** - check this option if you want to see a notification message for the selected action
- **Popup noficiation** - check this option if you want the message to be shown in a popup window. Otherwise it will be shown in the Backup4all status bar.
- **Expires in** - set the expiration time for the selected message type. By default is 2 minutes.

Notifications window
The notifications window shows different messages for user. There could be informal messages or actions required.
At the bottom there are 3 buttons: to show the notifications window from File->Options->Notifications, to expand all notifications and the last button to collapse all notifications.

You can also **Dismiss all** notifications or you can simply press **Close** to hide the notifications window.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

11.19 Passwords

On the **Passwords** page of the **Options** window (accessible from the File, Options menu item) you can configure how the passwords used in Backup4all will be stored.
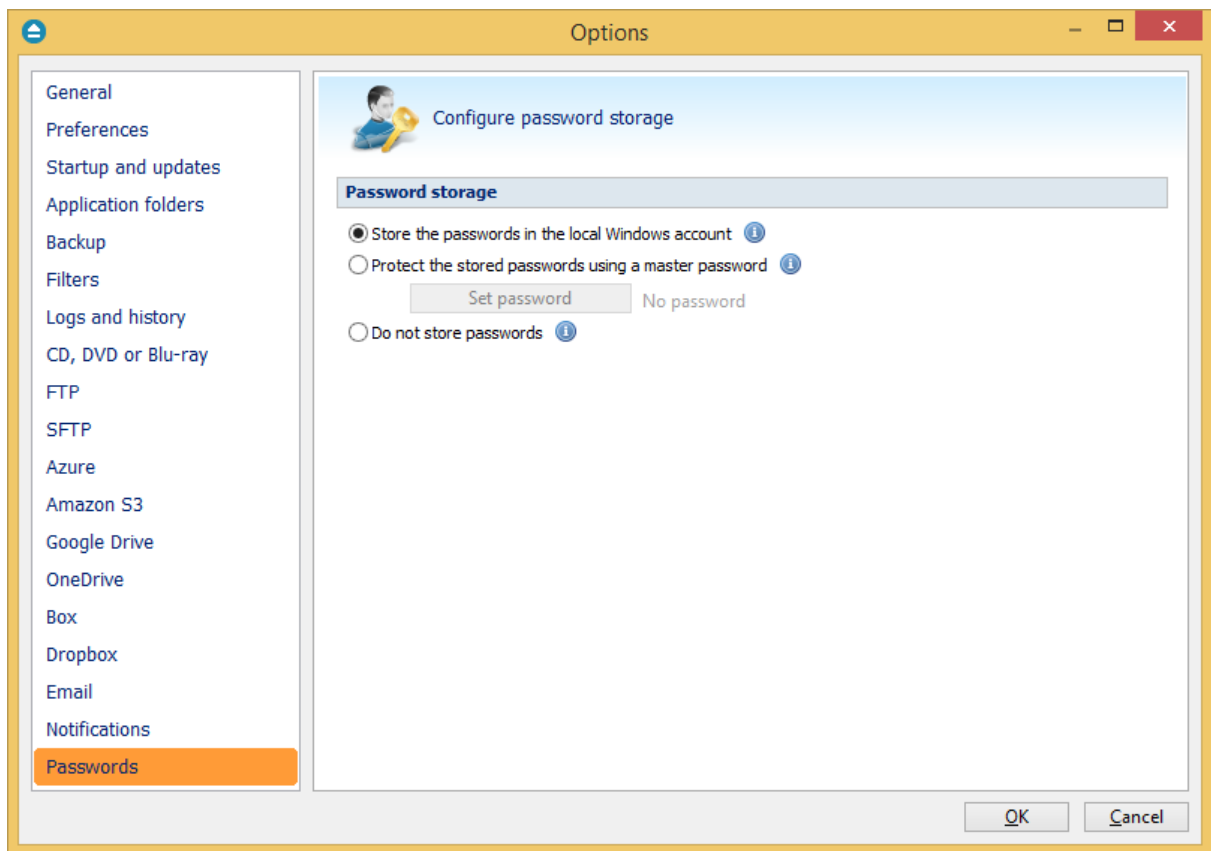
Password storage

Store the password in the local Windows account
The passwords will be stored in local configuration files and retrieved automatically when executing an action. The passwords could be retrieved if your Windows account gets compromised. No passwords are stored in the destination folders.

Protect the stored password using a master password
The passwords will be stored in local configuration files encrypted using a master password and retrieved automatically when executing an action. You will have to enter the master password only when you start the application or when the first backup job starts. No passwords are stored in the destination folder.

Do not store passwords
The passwords will not be stored anywhere. You will have to enter the passwords everytime a job action starts. This is the most secure option.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

Help

Part

XII
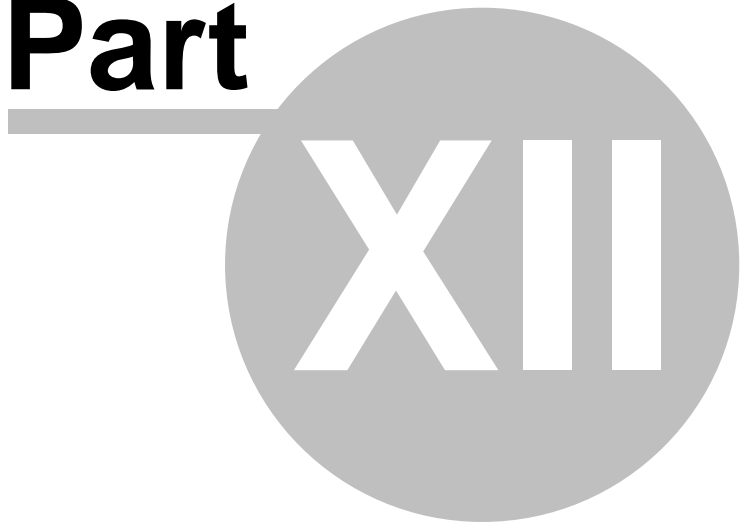
12   Help

The Help page from File menu of Backup4all contains information about the version and edition you have installed, as well as the information about the registration status. If Backup4all is registered, you can see the Registration Name and Registration Key, otherwise it will show as UNREGISTERED and mention the number of days left until the trial version expires.

Support

Backup4all Help
Before asking for support, please make sure you have installed the latest version of Backup4all. Also visit our online **Knowledgebase**, as it contains valuable information and your questions might already be answered there.
Support request
If you can't find an answer to your questions in our Knowledgebase, please go to Backup4all's File->Help menu and click on Support Request. This will open an email and it will include at the bottom some basic information we would need (application build number, operating system and registration details).

Please include in your support request the following details:
- Exactly what did you do?
- Can you reproduce the problem again?
- If possible send us a screenshot of the error message.

We might ask you for additional information, if we cannot reproduce the problem.

If you want to report bugs, feature requests or want to ask general software usage questions, you can contact our support department.
Pressing the **General Support** button, starts a new email message that will be sent to the support team.

Buy Now
Backup4all has a trial period of 30 days. Select the trial for the edition you want to use: Professional edition (fully featured application), Standard or Lite edition (not all features are available). During these 30 days you have access to all application features. After this period, you'll have to decide if you want to purchase the application.
The Feature Matrix section presents in detail the differences between Lite, Standard and Professional edition.

Pressing the "**Buy Now**" button will open the Backup4all website on the buy now page. There you can select the quantity of licenses you need and finish the purchase.

Tools for working with Backup4all

Options...
Pressing this button will opens the **Options** window where you can customize language, display and other settings.

Check for Updates
Pressing the check for updates button will open the updates window showing the available updates.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

12.1 Activation

Activation allows verifying that your copy of Backup4all is genuine and that it hasn't been used on more computers than the number of licenses purchased. It prevents this way software counterfeiting (intentional or unintentional).

Buy Now
If you don't own a product key for Backup4all and want to purchase one, click on the Buy Now button. This will open the browser and allow you to buy a license. To test the application before purchasing it, click on the Free trial button instead, to try it 30 days for free.

Enter key
After purchasing a Backup4all license you will receive an email that contains your Product key. To start using the application you'll have to validate the registration details by clicking on "Enter key" and follow the activation steps, where you will be able to activate online or manually.

Free Trial
Before purchasing a license and activating it online you have the option of running a trial version of Backup4all. The trial version has the same features as the paid version. Click on the Free Trial button to continue with the selection of editions.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

12.1.1 Free Trial

Use Backup4all as trial for 30 days
Before purchasing a license and activating it online you have the option of testing it for free. The trial version has the same features as the paid version and it will work for 30 days. To continue using it after the trial expires, you will have to purchase a license and activate it. Once the program is activated, you will be able to continue using Backup4all without having to reconfigure anything extra. Follow the steps below to start your trial:

1. Open Backup4all. The activation window will appear.
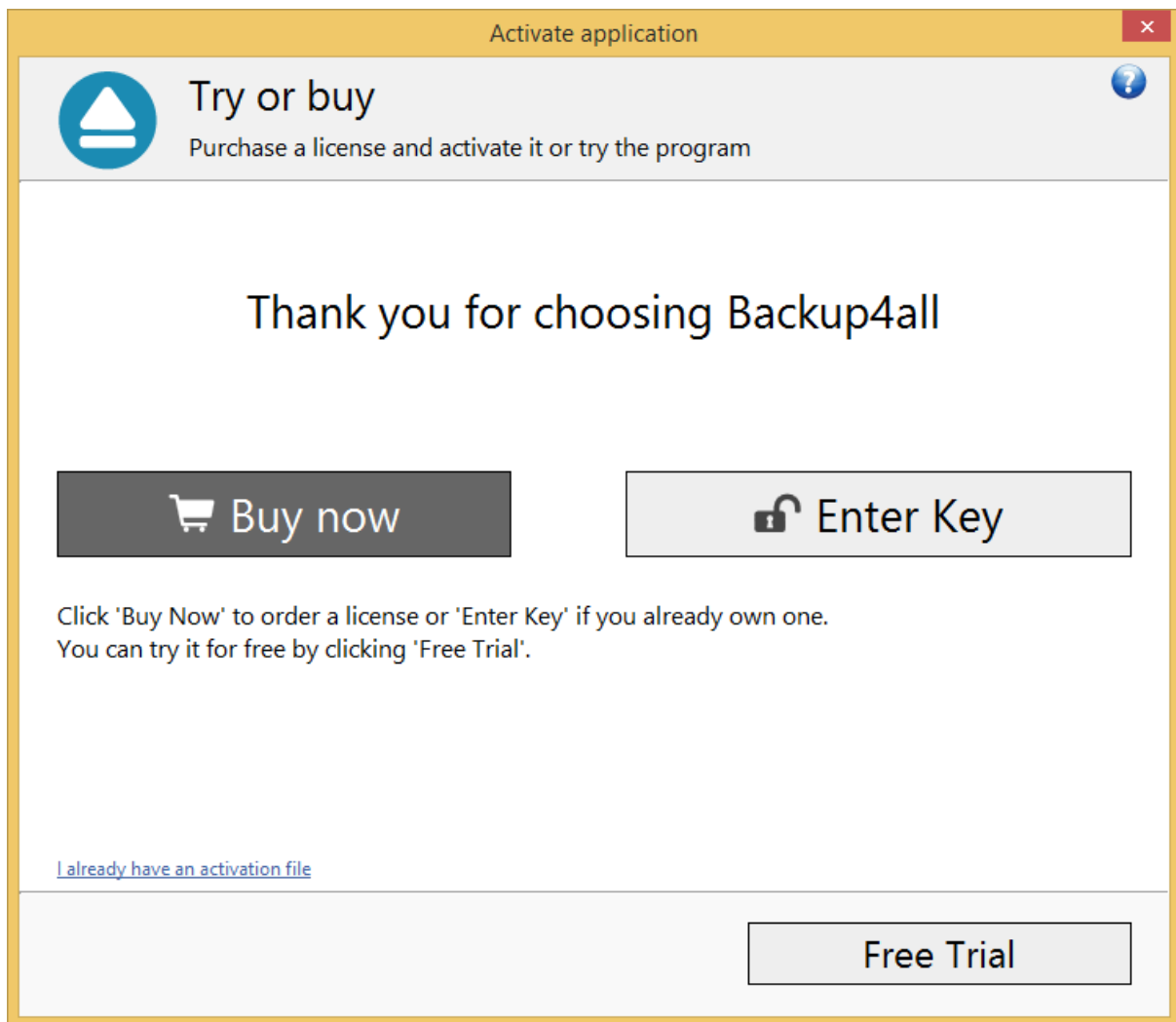
2. Pressing the **Free trial** button opens a new page where you can select which edition you want to use: Professional, Standard or Lite.
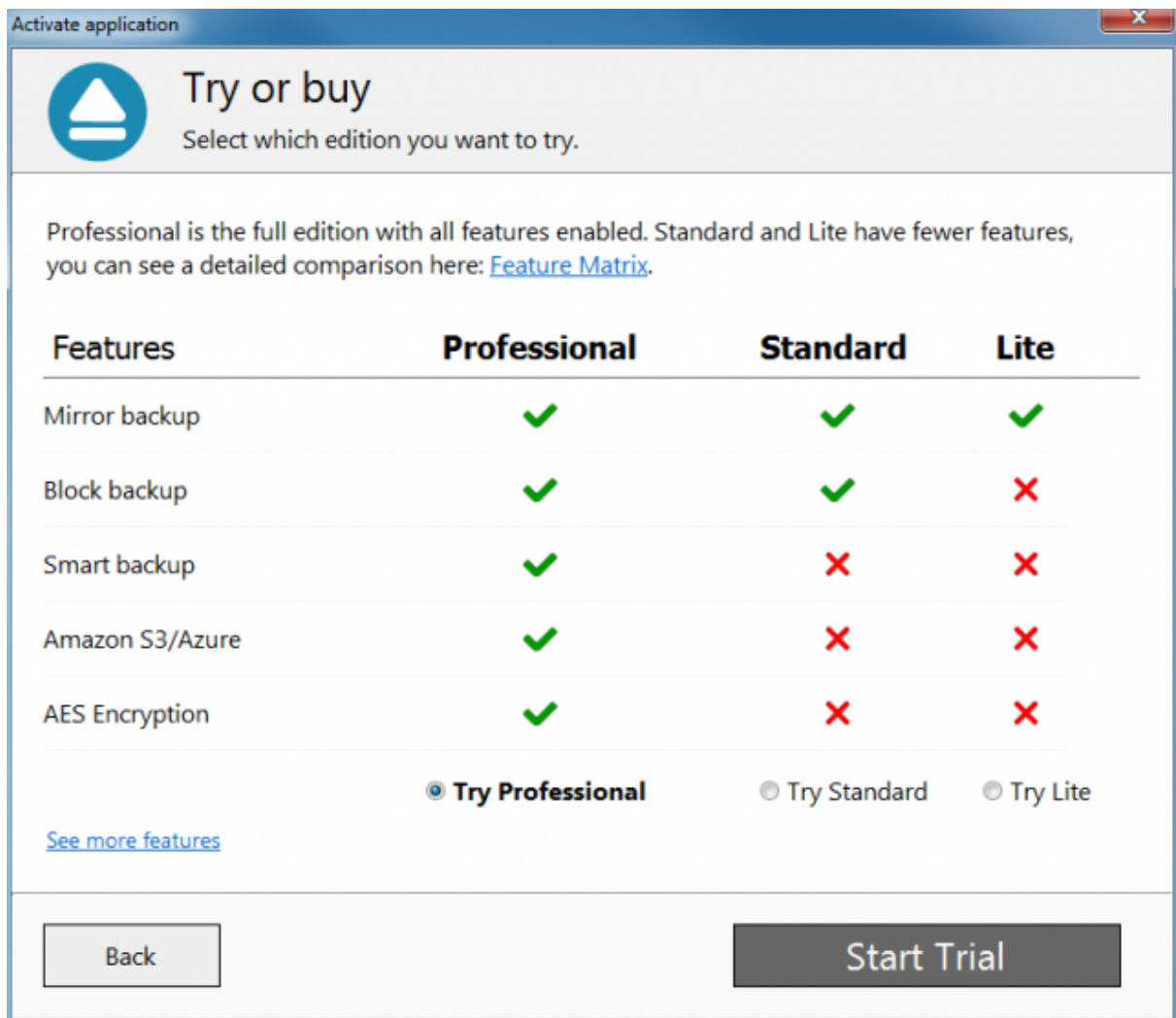
3. Press **Start trial** to restart the application and start using it.
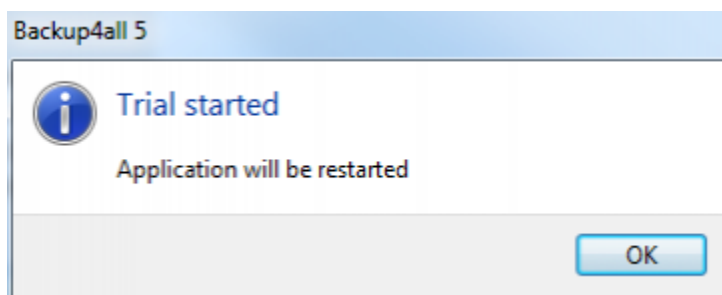
12.1.2 Online Activation

After you purchase a license you will receive an email with your licensing information. Using the license key received via email you can easily activate Backup4all automatically if your computer is connected to the Internet. During the activation process your license key is verified online and after it is detected as valid you can start using Backup4all.

1. Open the activation window from **File->Licensing**, by pressing the **Enter product key** under "Registration information".
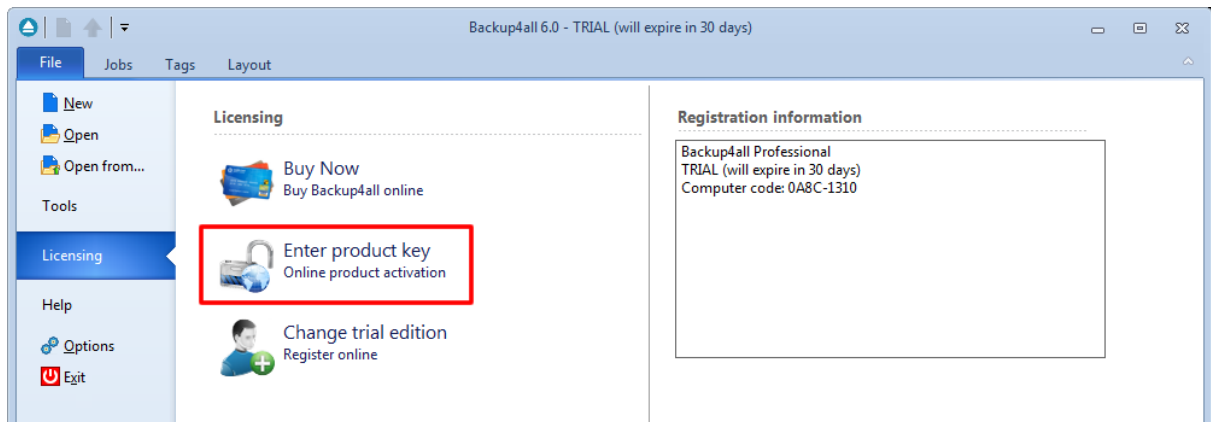
2. In the activation window enter the product key and the registration name, then press **Activate online.**

3. A message appears that the application was activated successfully.

Application was sucessfully activated

Application will be restarted

OK
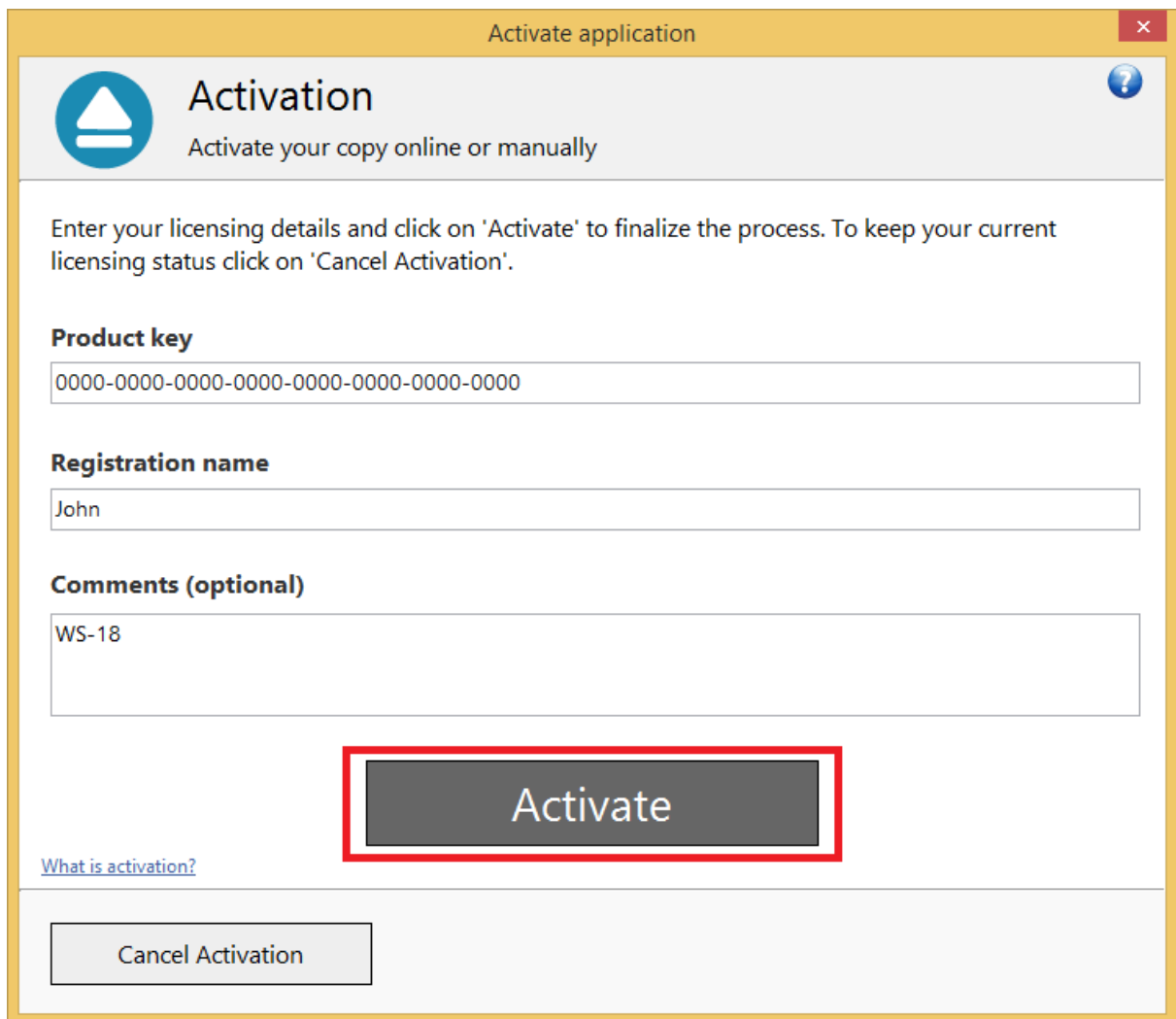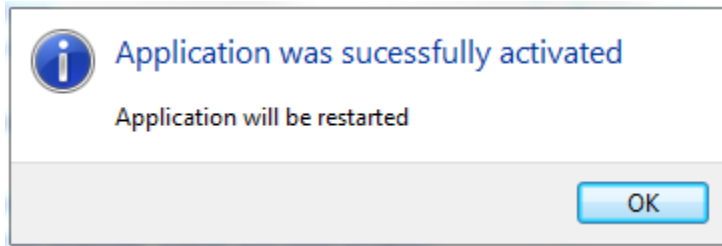
12.1.3   Manual Activation

Online Activation requires a working internet connection to activate the program. However if your computer is not connected to the internet, you can still activate Backup4all manually. You can use manual activation in the rare case when the automatic activation fails due to firewall issues or internet connection.

The manual activation process involves two computers: computer A, where Backup4all is installed, and computer B, the one that has internet access. Follow the steps below to copy the activation file from computer A to computer B from where you can obtain the activation response:

1. Open Backup4all (on computer A). The Activate application window will appear. If you previously used the trial, you need to open the activation window from **File->Licensing**, by pressing the "Enter product key" button.
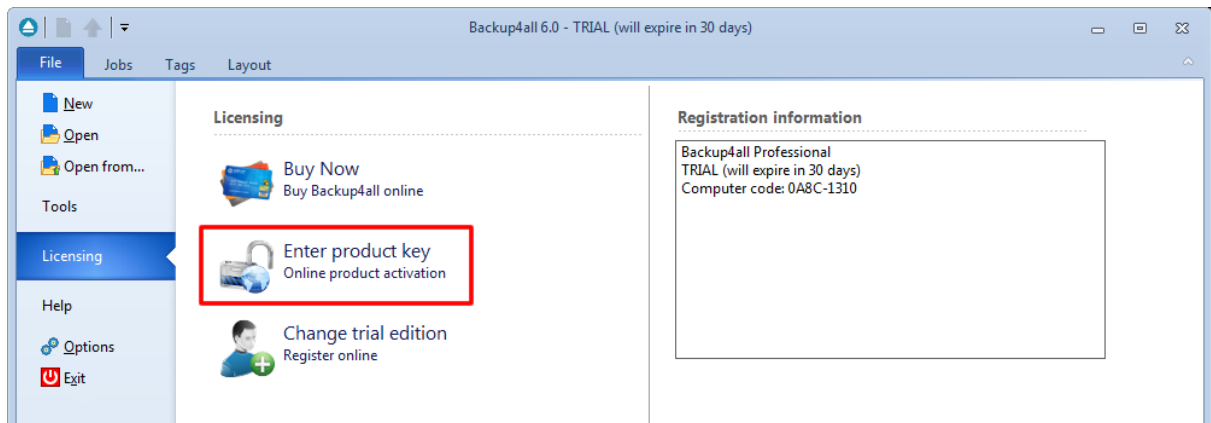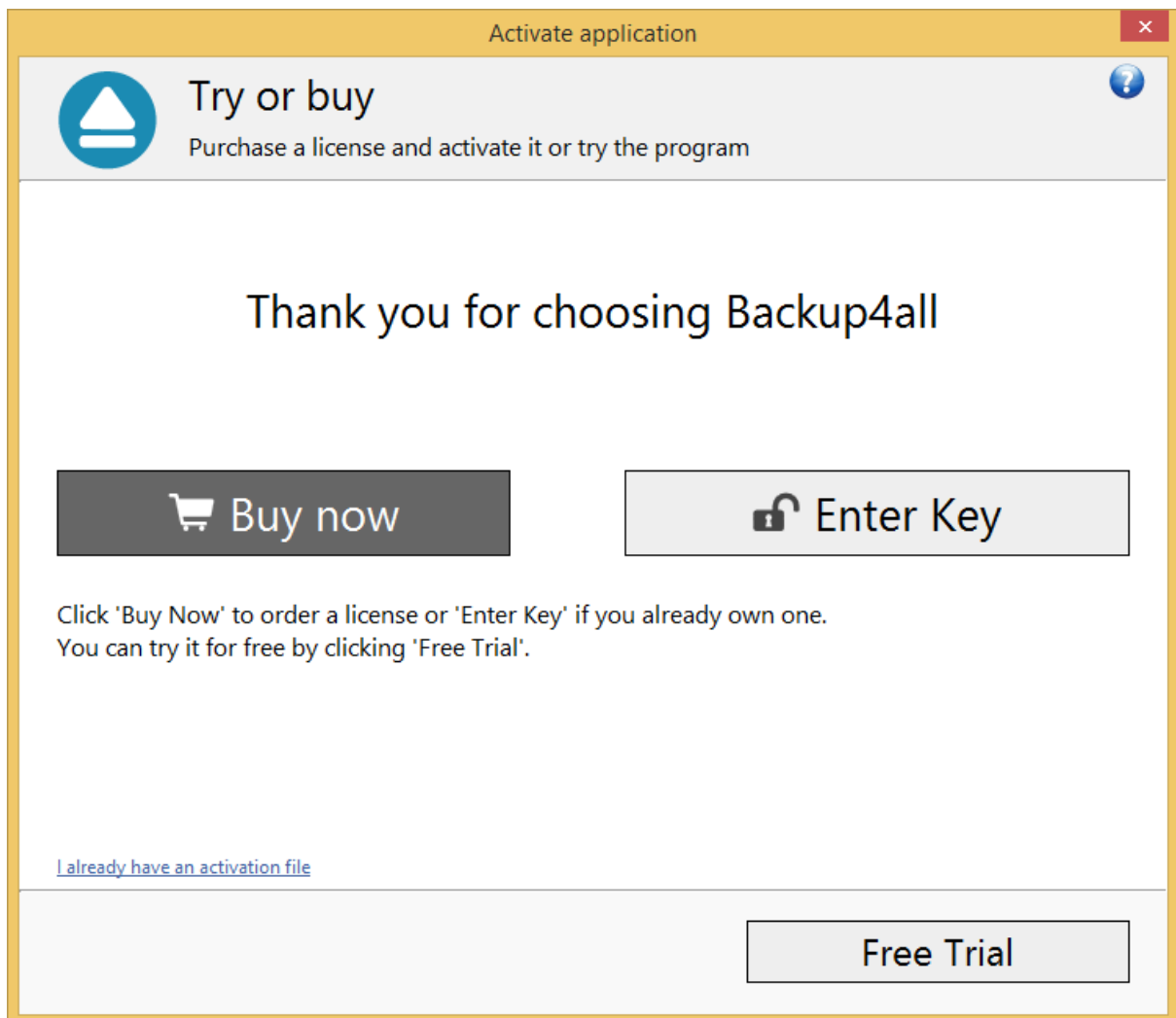
2. Press "Enter key" button. Copy paste or type the key, then press Activate online. If the internet connection cannot be established, a popup message will appear asking you to retry or continue offline. Press the **Continue offline** button.

3. In the email received after you purchased Backup4all, there is also a license .lic file attached. Download that license file and load it in the bellow step:

4. On the second step of the manual activation, you have two options:

- **Email activation request**. Using this option, the default email client will open to send the activation request. After sending the activation request email, in a short moment you will get an email containing the activation file. Please load that file on the next page in order to activate the application.

- **Save activation request**. Using this option, you will be asked to indicate the location where the activation request file will be saved. Take that file and go to Computer B where you have internet access. Load the file on **activate.backup4all.com** and press Activate. You will then have the option to download the activation response file.
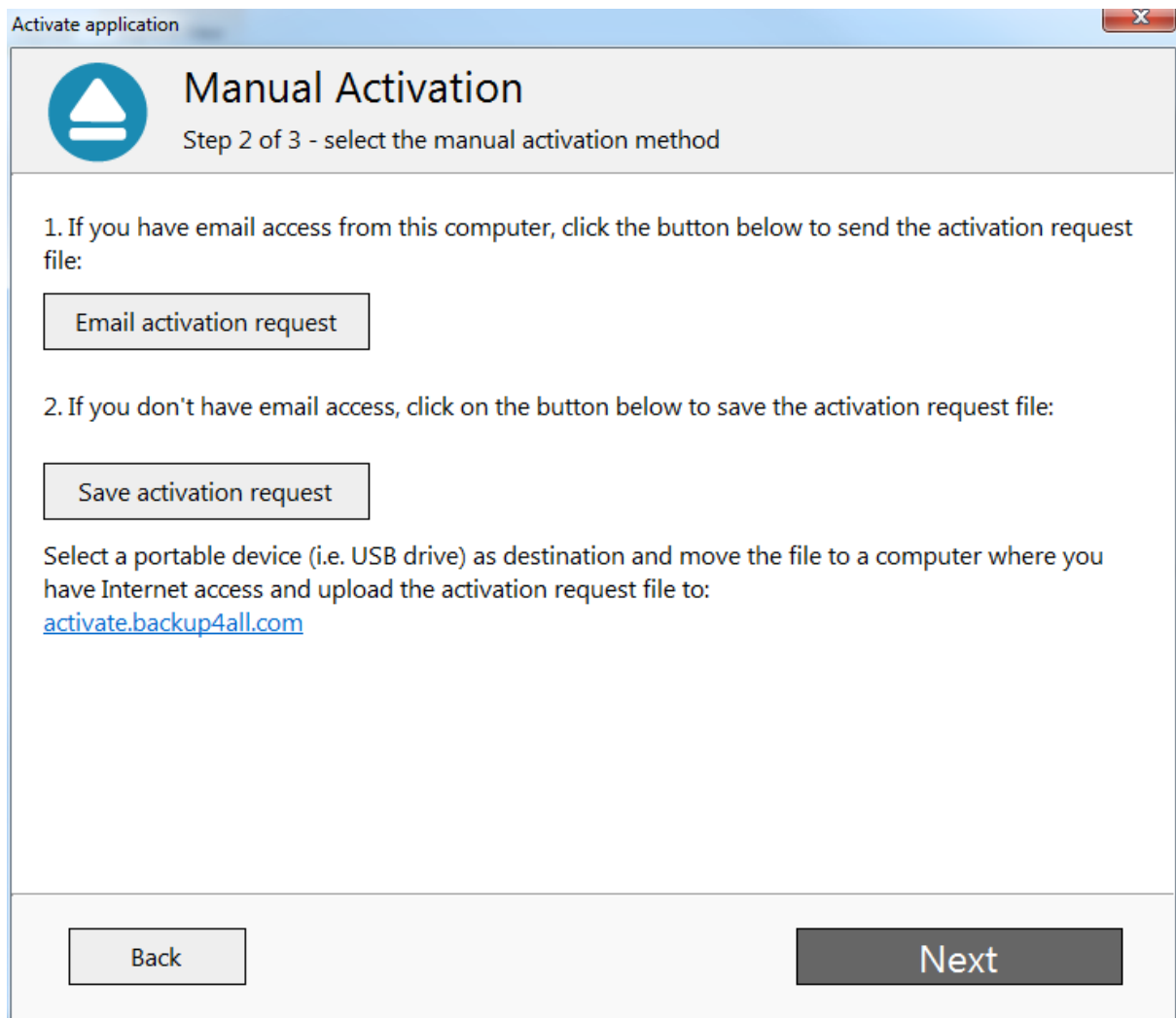
5. In both cases you will get a activation response file that you need to load on the 3rd page of that activation wizard, then press Activate.
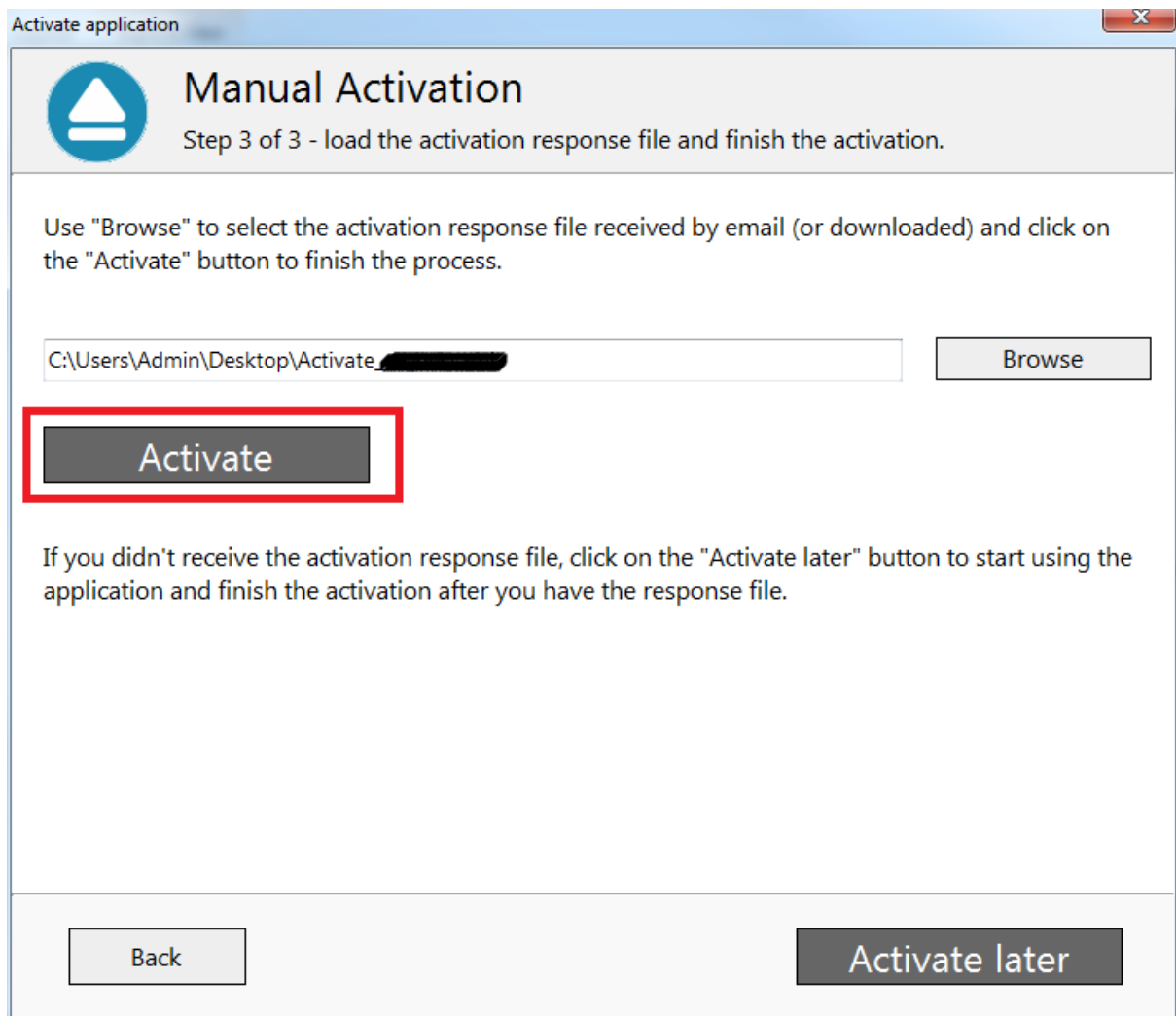
6. A message appears that the application was activated successfully. After finishing the activation wizard, Backup4all will be restarted to apply the changes.
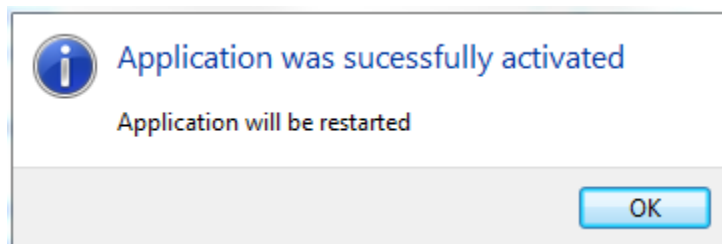
Backup4all will automatically be re-activated every 30 days. As long as you are connected to internet, that will run silently in background. If you are not connected to internet for more than 30 days, you will be asked to re-activate the application within 15 days.

12.2   Deactivation

Deactivate this product key option from the **File->Licensing** page can be used when moving the license to another computer.
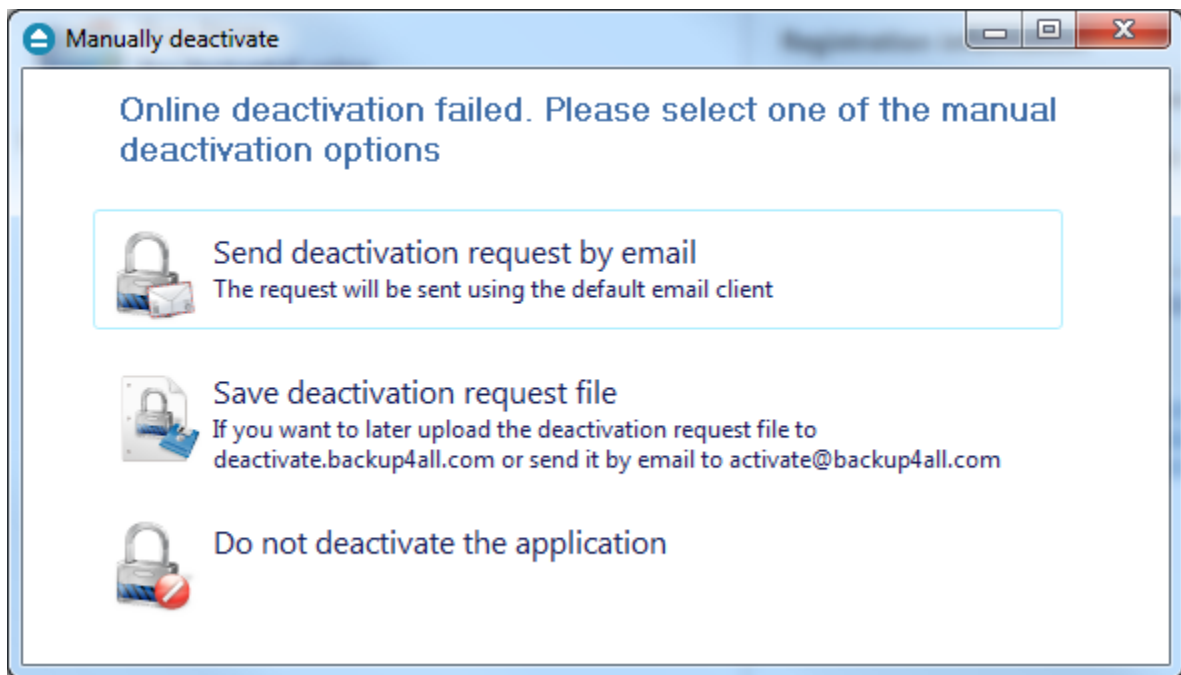
If you lost your registration key, please send us an email to **Sales Support.** You should specify your purchase information (purchase number and approximate date), the name (or company name) and email address you used to buy your copy of Backup4all. We will send to you the registration key again.

If you have questions or you experience problems related to the registration process, you can use the **Support Request** button (from **Help** menu) under **Support** section to contact us. We will be happy to assist you with the registration.

Backup4all is available as Shareware - another way of saying **Try before you buy**. It is fully functional for a period of 30 days. After 30 days, the program will start only if you enter a valid registration key (OEM version users might be asked to enter their registration keys sooner). You can buy Backup4all online if you fill out the online purchase form.

Note: Some of the features mentioned on this page might not be available in your edition. The Professional edition includes all the features. For a comparison between editions, please check feature matrix topic.

12.3 Check for updates
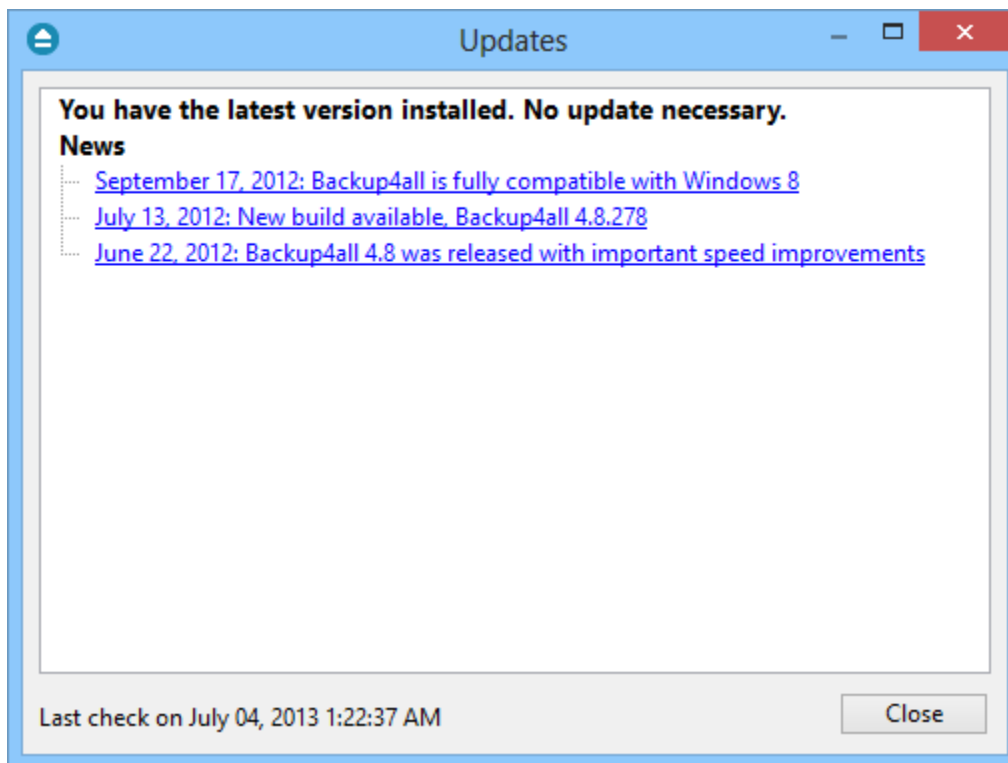
You can manually check for updates from **File**->**Help**->**Check for Updates**.

In the **Updates** window, you can see if there are any updates available and what is new in the update.

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This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

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