GRBackPro for Windows 10/8.1/8/2012/7 and 2008/Vista/2003/XP x86 and x64

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GRBackPro for Windows 10/8.1/8/2012/7 and 2008/Vista/2003/XP x86 and x64

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GRBackPro 10.0

GRBackPro for © Windows 11,10, 8.1, 8, 7, Vista, XP, Server 2022, 2016, 2012, 2008, 2003. Both 32-bits and 64-bits packages are available.
GRBackPro is the fast and secure way to backup your computer data.

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If something in this help file is not clear or it is missing or in case you have any questions, please contact us. See: Contact Information for our mailing address.

A special thank you to Dallas HInton for his work on the beta team, plus his input regarding the help and documentation files.

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GRBackPro Manual

Part II

2   General Information

2.1   What's new in Version 10.x

GRBackPro version 10.x introduces many new features and bug fixes.

Major Version 10.x new features.

- Windows 11 compatible.
- New customizable colors with effects.
- New customizable text font selection.
- Completely new User Interface
- New: Backup OnChange will monitor selected folders/files and back them up within seconds of changes.
- New Add/Edit Job dialog.
- New Job option to specify a login/pwd to connect to a network share.
- New Interface dialog to specify files to include or exclude
- New Interface dialog to specify folder names to skip.
- New feature to add a Task in the Windows Task Scheduler to start at Windows start elevated (i.e. as Administrator) without the UAC prompt.
- Minimum Windows version supported is XP SP3 (for 32 bit versions only).

2.2   Program Description

GRBackPro is a professional backup utility designed to maintain one or more copy of your vital data as safely as possible.
The program is flexible enough to let you select the source files, directories or whole disks you want to back up and list them in a convenient and easy-to-use Job list. Your backup destination may be a local drive, a removable drive, a writable Blue-Ray, a DVD-ROM, a network drive or anything that Windows sees as a drive letter. Tapes are not supported unless they are visible as a drive letter.

GRBackPro supports the use of Drive letters as well as UNC names so that you can connect to any local or network shared folder. Starting from version 10 you can also specify for each backup Job a user name and password to connect to protected network shares. As the cost of a hard drives is relatively inexpensive, the best way to protect your data is to install at least two physical hard drives, and then use **GRBackPro** to back up selected data from one hard drive to the other. This way, if one of your hard drives dies, you will have a safe copy of your data on the other.
To be even safer you can use a removable hard drive and still have two physically distinct drives. This simplifies off site protection from fire or theft by making it easy to store your backup in a vault or other secure location. System files can easily be reinstalled but not your data, your valuable work!

The major feature of this backup software is that it runs in the background with minimal user intervention, so that you can "set it up and forget about it" and then continue to work while the backup takes place. All backup activity is conveniently stored in a log file with user selectable detail levels. You can also setup the program to send you an email message in case of errors.

GRBackPro, starting from version 10, supports an OnChange feature that allows you to save your modified or new files just few minutes after you have changed them, **automatically**. This allows you to save a lot of backup time and constantly have an up to date copy of your work.

GRBackPro support standard zip compression, Zip64 for big files and a Winzip compatible AES256 encryption mode. This will allow your to create backup archives that can be easily extracted with other zip utilities without to being forced to relay on **GRBackPro** alone.

GRBackPro offers an integrated scheduler that lets you time your backup to happen when it is most convenient for you. The scheduler has an advanced feature: if you have at least one scheduled event defined and you put your PC on sleep to save energy, then GRBackPro will wake-up your PC a few minutes before the scheduler needs to start your backup. This is a very valuable feature that helps you save energy. You can also specify scheduler event condition in order to start a backup if you are not using the computer or if the computer is not busy executing other processes. Another condition you can specify is a check that all defined job source and destination paths are ready or reachable. This condition is very helpful to start a backup only when an external disk or a remote computer is connected.

GRBackPro allows you to perform a Full, Incremental or Differential Backup (see Configuring your backup for more details).
GRBackPro can create a unique large archive file with stored path names, but the best way to use it is to transfer to the destination drive an exact copy of the source directory tree structure with a ZIP archive for each directory. This strategy lets you easily find a file for a selective restore because the destination folder tree is the same as your source tree.
GRBackPro offers an integrated restore facility so that you do not need another program to restore the backup archives. This allows you to keep two or more computers synchronized using just a single program. Moreover, in case you simply want to restore a single file, then **GRBackPro** offers you a Restore explorer facility so that restoring even just a single file will be easy.
GRBackPro allows you to enable the history backup. This backup mode allows you to store more copy of your data in different folders so that you can go back to few days or weeks (all depends on how many destination disk space you have to save multiple copy of your data).
GRBackPro is completely configurable and allows you to select the files you want to include or to exclude from any backup Job. You can also skip folder names in order to skip the folders that doesn't contains valuable data (like for example Temp folders) and save backup execution time.
GRBackPro can be run as a service even if no user is logged on. This will allow the backup to run under a specified user account you need to define on the Service Option and reach your network drives. You must use this feature when it is absolutely necessary to run a backup even if no user is logged in. Running as a service is a must for Windows Server. On Workstations in almost all cases this is not required (an exception might be for a shared computer that is logged off at night when backups are to be run).
GRBackPro can be used to shutdown your computer. Using this mode you are sure to backup your data first and then power off your computer only if there are no errors.
GRBackPro stores all its options and backup/restore specifications in a text file (INI file) with a ".grb" extension. See the Configuration file for more details about this important topic. A copy of this file is ALWAYS copied to the destination disk.
During the backup **GRBackPro** switches to the Progress page and shows the backup progress details. A convenient progress bar lets you see how much time has been used and what percentage of the job is completed.

Installing GRBackPro

Run the "Install" package program. This program will guide you through the setup process. It will copy all the necessary **GRBackPro** files and also make the appropriate registry entries on your system. The setup program allows you to add a desktop icon, list the program in the "Start Menu", and/ or list the program in the "Start Menu \ Programs" menu. If re-installing, you will be given an opportunity to change settings (e.g., from "Run as a Service" to "Run as a program"). The Install program also registers **GRBackPro** in the Control Panel (Programs and Features or Add/Remove Programs) to allow quick and complete Removal.

Removing GRBackPro

From the "Control Panel" - "Programs and Features" or "Add/Remove Programs" you can quickly remove the program (completely) from your system.

2.3   How to Buy a License

Evaluation Version

The evaluation version of the program lets you TEST and evaluate the program functionalities for 30 days. After this trial period, if you want to continue to use the program you need to buy a license. The licensed version can be installed over the demo version and you will not lose your settings.

Why buy the program license?

Buying the license for this software provides you the following advantages:

- You get one year's FREE upgrades to minor and major versions.
- You will get support for the version you buy until that version becomes obsolete.
- You qualify for First-class technical support. Our technical support staff sets the standard for quick and efficient resolution to a customer's issue.
- You will be offered a discount price for any major upgrade after the first year.
- You will be added to our e-mail list and alerted when minor and major new releases will become available.

NOTE: Installing the full version over the demo version will not lose your demo settings.

The license agreement (see License/Copyright) allows the use of the licensed software both at your home and at your office (but not simultaneously). You support the development of updates and you may help to refine the program with your suggestions.

GRBackPro has three kind of licenses: Workstation, Server and Site. The Workstation version is suitable for use on a single computer. The Server license is suitable for up to 5 Single users on a Workstation or for one Server and can be installed as a Service. The Site license is an extension of the Server license that allow you to install the program on all computers of your company.

What do you get after you buy the program license?

The evaluation version has limited functionality and cannot be converted to a fully functional version. After you have bought a license you will get an URL to download the full program version. Then you will have to activate this full version by entering your personal license data. It is very important that you complete the order form with all the required personal data otherwise the license can not be prepared.

How to buy the license

We sell using the reseller "Verifone - Avangate". You can easily and with security buy online using our Secured Online Store.
Please complete all parts of the order form because we need your personal data in order to build your personal license file. Without your full data we will not be able to build your license file and we will need to contact you. This will make the license delivery longer than strictly needed.
NOTE: In case of any special order needs, please contact us.

IMPORTANT NOTE:

If you want any information about the program, please only contact GRSoftware (see Contact Information). Please, be sure to include all your personal data in your order form so that we can build your personal program license key file!

2.4   License / Copyright

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Evaluation Version.

You have a right to test this program for a period of one month (30 days).
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You are allowed to copy the Demo/Evaluation Version and give it to any other person, as long as it is not modified in any way. Modification is understood to mean changing, adding or removing any files in this package without our written permission.

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We offer a Single User License, a Server License, and a Site License.

Single User license.

The single user license can be installed and used on multiple personal computers as long as you will be the only user. The simultaneous use of this product by multiple personnel requires additional licenses.

Server license.

If you install the software on a Windows Server edition you need a Server license (a Single User license it will not work on Windows Server). This license will enable you to install the software on a Windows Server and will permit you to use up to five (5) connected workstations. If you have, for example, 30 workstations connected then you need to buy 30 / 5 = 6 Server licenses. This approach is convenient for small/medium size companies up to 50 workstations. Once you have more than 50 workstations the Site License will be more economical for you.

Site license.

A Site license allows an institution, company or school to install this product on aùny combination of multiple computers or on servers. The Site license gives you the right to use the program inside a single Organization. All licenses will be issued in the name of the institution, company or school. Outside the Organization, if a single user wants to use the program an additional single user license is required.

Liability.

We try to keep our software as bug free as possible. However, it is a general rule, Murphy's Law, that no software is ever error free, and the number of errors increases with the complexity of the program. We cannot guarantee that this software will run in every environment, on any Windows compatible machine, or

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The GRSoftware legal domicile is Torino, Italy.

2.5   Language Translations

Starting from version 5.0 GRBackPro has been translated into languages other than English.

You can check our web site https://www.grsoftware.net to see if your native language version is already available.

How to install a language translation.

In order to install a language version of the program, you need to download both the standard International program package and your native language add-on package. You must execute this add-on setup and it will take care of the rest.

Does the program support more than one language simultaneously?

The program checks, at every run, to see if there is an installed language translation. If it finds a language translation DLL file it loads and uses it. We suggest installing ONLY ONE language at a time. In case you need to have two or more languages installed, we suggest installing the program many times in different folders. Be aware, however, that the last program version you run will be the default program the next time you will double click over a .grb backup description file.

How can I make a translation for my native language?

If you want to collaborate with us to create a new translation or to correct an existing one please contact us. We will supply you all the details you need to start.

GRBackPro Manual

Part III
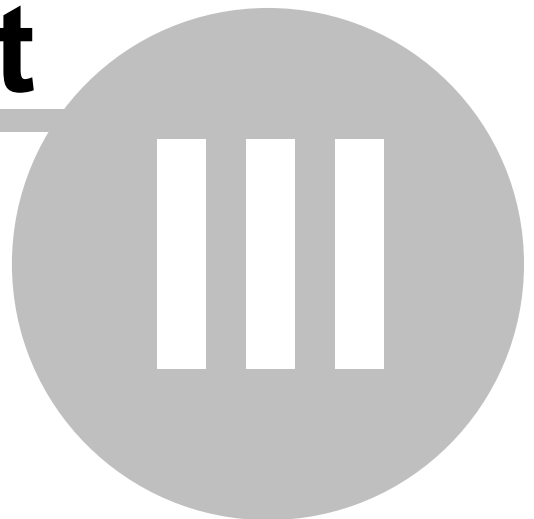
3 User Guide

3.1 Program Usage

GRBackPro uses a series of panels to allow easy configuration of all options. On the program left you have a menu composed of buttons and on the right you see the panel you select using the menu buttons. Each panel can have, when required, one or more tabs to better separate the options.

The **Jobs** panel lets you define your backup jobs, while the **Backup** and **Restore** panels allow you to specify the backup and restore options. The **Schedule** panel lets you plan the execution of the backup at a specified time. The **Tasks** panel allow you to do some actions both before and after the backup. The **Options** panel holds the global program options, while the **Reports** panel allows you to handle the log file where all backup and restore activities are reported. It also includes a **Progress** tab that lets you see how your backup or restore operations are proceeding.

Learn more about these panels:

- Jobs
- Backup
- Tasks
- Restore
- Options
- Schedule
- Report

Under the left menu the user interface has some buttons that let you control the main program activity. The **Flag** button (the button with a flag inside) is the message center. The icon inside this button changes color based on what kind of messages are waiting there: red for alerts, yellow for warnings and white for information. Clicking on this button you will see the list of all messages and by clicking on one of them you will see all the details.
The **Hide** button lets you put the program into your shell Tray Icon bar. In this way the program does not occupy desktop space but it is still running in the background.
There is a zone named **Backup** and a zone named **OnChange**. Each one of these zones has a Start button. On pressing the **Start** button immediately starts the backup for the current selected session (Backup) or starts the OnChange backup engine. This **OnChange** engine is automatically started when you define one or more Jobs that have the option to backup on every file or folder change. Once the **Start** button is pressed it is renamed to **Stop** so by pressing it again you will stop that backup or the OnChange engine.
The **About** button lets you see the program version number and your license information.
The **Help** button lets you consult the program documentation (this one) for the tab that is currently active.
The **Exit** button allows you to exit the program. (Note – if the option **Warn if the scheduler needs the program running** is active (found in the Schedule tab) you will be prompted if the scheduler needs to keep GRBackPro in memory). On Windows 10 this will appear in the notification window.

3.2 Command Line Options

The program has been designed in a way that it can be launched from the cmd prompt or from another application and work in the background.

Usage:
GRBakPro [Options] backup_description_file.grb

the square brackets indicate that the Options are optional.

Options

Here is a list of currently supported command line options. Note that there must be a space after each option delimiter (e.g., /S Test not /STest).

/S session_name

Specify a session to select as the current working session. If your session name has spaces, you must enclose the whole name in quotes (example "long name with spaces"). Also keep in mind that **session_name** is case sensitive (i.e., "name" is different from "Name").

/B

Start a backup for the current or specified session.

/DC

Disable the Close and Exit buttons. This way the program can be exited only by right clicking the tray icon bar menu and selecting Exit.

/DR

Disable the restore confirmation dialog (the one you get when you press the Restore button).

/DSY

Disable the restore file delete dialog when synchronization is on and answer Yes to all delete confirmation requests so that all files will be automatically deleted in the restore destination folder.

/DSN

Disable the restore file delete dialog when synchronization is on and answer No to all delete confirmation requests so that no files will be deleted in the restore destination folder.

/M

Run minimized.

/MH

Run minimized and hidden in the tray icon bar.

/P password

Enable Zip password protection and specify it.

/PQ

Enable Zip password protection (program will ask for a password).

/R

Start a restore for the current or specified session.

/Q

Quit at the end of the backup or restore if no errors.

/QE

Quit even if errors.

/QS

Shutdown if no errors.

/QSE

Shutdown even if errors.

/QSP

Shutdown and power down if no errors.

/QSPE

Shutdown and power down even if errors.

/QP

Power down if no errors.

/QPE

Power down even if errors.

/QL

Logoff if no errors.

/QLE

Logoff even if errors.

/WSS

Set the program to start at Windows Start.

/WSR

Reset the program to start at Windows Start.

/H
/?

Displays this help page.

If the parameter **backup_description_file.grb** is not specified GRBackPro will try to find an existing GRBakPro.grb file in a user depended folder and it will create a new file with the GRBakPro.grb name if none exists. The user depended folder path changes depending on the currently logged in user.

Keep in mind that the **GRBackPro** will automatically quit if you try to run a second copy that is using the same .grb file. This is to prevent file corruptions.

Error Level at program termination:

After the backup is complete and the program terminates it will return a code that can be used (for example inside a batch file) to check if there were errors or not.
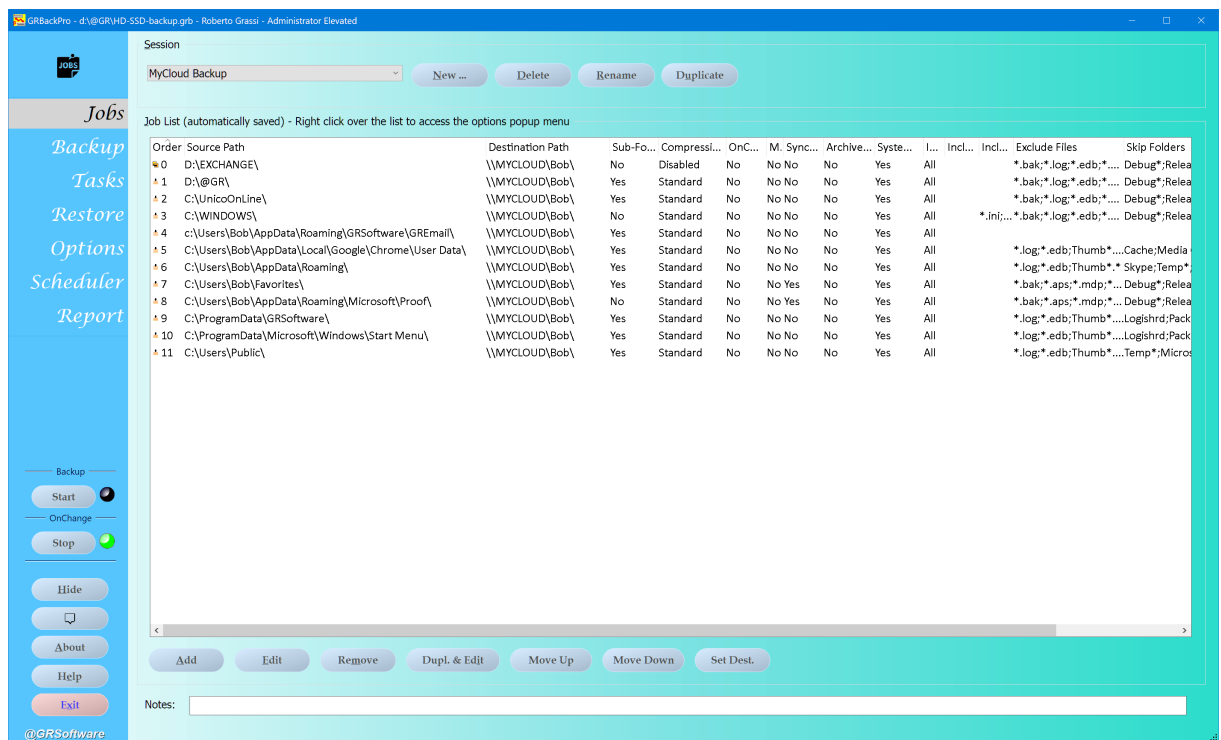
Possible return codes are:

0 = No errors. All was executed OK.

1 = One or more errors in the backup execution. Check the log file (Report tab) to have more details about the specific errors.

2 = Command line parameter error

3.3   Jobs

This panel allows you to define precisely what to backup.

GRBackPro lets you define many backup sessions (see Configuring your backup for more details on how to better use them) and for each session you can define many backup Jobs. A backup Session is a list of Jobs, each with its own set of backup choices that are visible on the columns tabs. Then there are some options that are valid for all Jobs, i.e. they are applied per Session and are in the Backup and Adv. Backup tabs. In synthesis each Job defines a source folder and a destination folder plus some additional options.

Handling Sessions.

From the **Session** group box if you press the **New** button you can define a new session giving it a name (which may include spaces but see the caution under Command Line Options). At any time you can rename your backup session by pressing the **Rename** button and typing the new name. When you no longer need a backup session you can delete it by pressing the **Delete** button. On pressing the **Duplicate** button will clone the actual session with all defined Jobs and all Backup, Tasks, Restore and Schedule options. You will be prompted for a new Session name.
For each session you can also enter text into the **Notes** field. This field is not used by GRBackPro, and is just for your convenience.

Handling Jobs.

On pressing the **Add** button near the bottom you will get the Add/Edit Job dialog box that allows you to define your backup Jobs. You can get the same effect by clicking on the Job list and then pressing the **Ins key** (insert key) on the keyboard.

On pressing the **Edit** button, when a single Job is selected, you will get the Add/Edit Job dialog box that will allows you to modify the Job. You can get the same effect if you **double click** a Job item in the Job list.

On pressing the **Dup. & Edit** button duplicates the currently selected Job and automatically you will open the Add/Edit Job dialog box that allows you to modify this duplicated Job. Note that the program will not allow you to have two identical Jobs in the same Session.

On pressing the **Remove** button will delete all selected Jobs. You can get the same effect by pressing the **Del** key on the keyboard.

On pressing the **Move Up** and **Move Down** buttons you can change the Job order. First select one or more Jobs and then press the wanted button.

On pressing the **Set Dest.** button you get a Select path dialog box that allows you to change the destination path for all the selected Jobs (or All Jobs if no Job is selected) in the current session at the same time. To take advantage of this option we recommend you define each backup session to consist of multiple Jobs with a common destination path. In this way you can change the backup destination with a simple button press.

The **Job List** column header positions are automatically saved, so you can change the **Job List** layout and get these positions permanently stored. These settings are usually different from one session to another so each session stores its settings separately.

Sorting Jobs.

You can sort the Job list by pressing on the header of the list. A small triangle is shown to indicate in what order the list is sorted. If the triangle points upward the list is sorted in descending order, while if the triangle points downward the list sorted in ascending order. The order of this list has no significance in terms of the backup or restore process, it's simply a visual convenience. The column Order indicate the order number these Jobs will be executed at backup time.

Moving column tabs.

You can move the columns using drag and drop so you can define the layout of this list.

Pop up menu.

When your mouse cursor is on the Job list, by pressing the mouse right button displays a popup menu that almost replicates the buttons just under the Job list with some additional and unique commands.
The first two commands: "Copy Job to clipboard" and "Paste Job from clipboard" allows you to easily copy backup Job between sessions and even between multiple copies of the program running (each one on a different setting file GRBakPro.grb - see Configuration File for more details).

Next options are simply a duplicate of the buttons you have under the Job list.

Another two options are:

Backup selected Job(s)
Restore selected Job(s)

These options are useful when you want to execute one or more backup Jobs for test or because you are sure that all others Jobs' sources were not modified since your last backup execution. These options are enabled only when one or more Jobs are selected.

The **Set the destination path of All or Selected Jobs** option will display an edit box where you can edit the destination path and then this path will be set to all selected Jobs or to all Jobs if you don't have any

selected Job. This is the same dialog you will see if you press the **Set Dest.** button that is placed under the Job list.

3.4   Backup

This panel allows you to define your backup basic options.
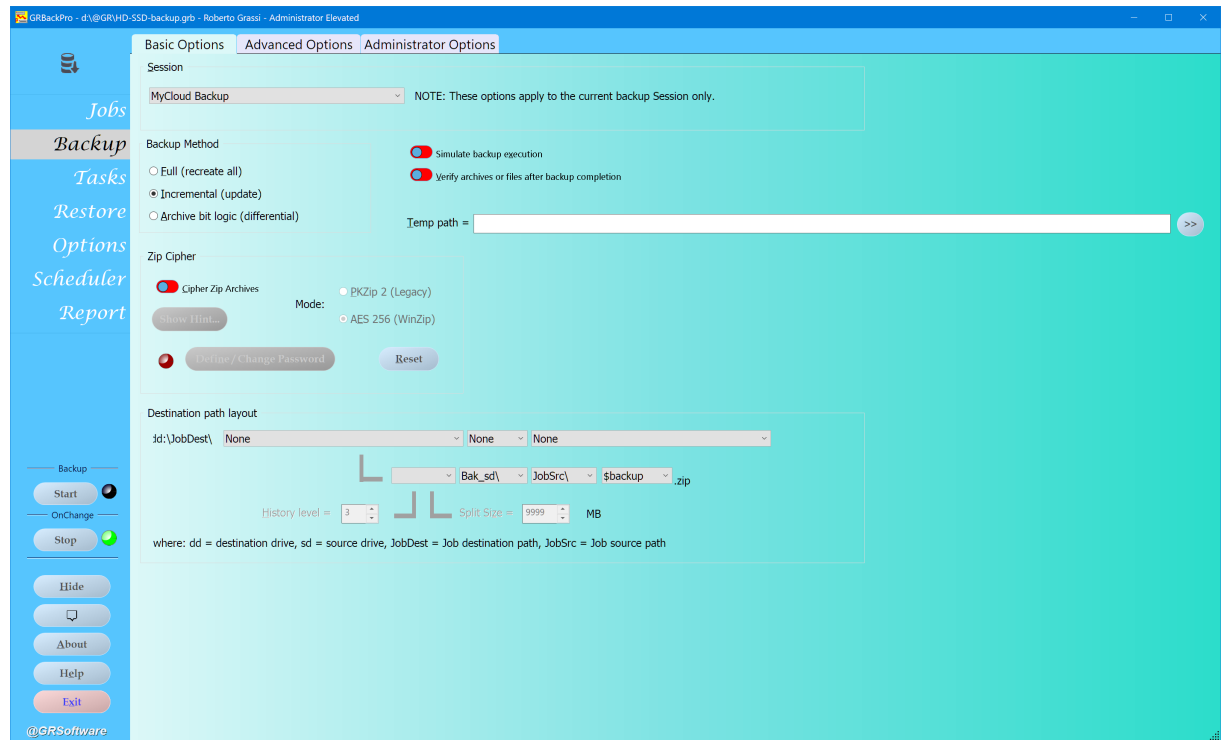
Session.

For each session you can have different backup options to better match your needs. When you change the session the new backup options will be automatically saved and the new session options loaded.

Following is a list of the options you find in this tab with a description of them.

Backup Method.

You can execute your backup session using one of the following methods:

1. Full (re-create all). This method will re-create your backup archives. The program will first delete any previous existing backup compressed archive or file from the Job specified destination paths. After this delete operation has been completed, the backup is started and creates your backup from scratch. You may have the program prompt you before deleting your existing files (from the Options tab you can enable or disable this prompt). This way you can also transform, on the fly, a full backup into an incremental (update) backup by simply skipping the delete phase.

2. Incremental (update). This method will update your existing backup archives or files. It works by directly comparing the current backup files against the source files. This is the normally preferred backup method because it saves time. Only the folders that have changed since the last full backup will be updated. Any new file will also be backed up. If you run an Incremental backup without first running a full backup, a full backup will automatically take place because no files exist in the destination disk yet. We want emphasize that this backup method requires your previous backup because the program has to compare the source files against the already backed up ones. If you do not have the **Synchronize destination archive with source folder** option active in the **Job** then in case you delete a source file your backup archive will maintain a copy of that file, resulting in the backup ever increasing in size (but

conceptually this is safer). If you want to reduce the size of your backup you need from time to time run a Full backup.

3. Archive bit logic (differential). This method is based on the archive attribute bit of the source files. Before using this method you must do a **Full** backup with the **Job** option **Clear archive attribute bit on source file** checked. Any source file will be backed up and will have the archive attribute bit set to OFF. Your full backup can be stored on a set of removable disks if your data does not fit into a single disk. After the full backup is completed and every backed up file in your source directories has the archive bit set to OFF, then any file modification you will do causes the operating system to set the archive attribute bit to ON again. This task is done automatically by the operating system (Windows) for you. At this point you can save a lot of time and space if you use the differential backup method on a new destination disk. This method stores on the destination disk only the files that have the archive attribute bit ON. You can continue to use this backup method until you get a destination disk full or a specified amount of time has been passed. At that time you can change your disk set, redo a full backup on a new media and repeat the whole process. When you employ the archive bit logic backup method there's not much sense in transcribing a large number of empty folders so it is better to enable the **Do not create empty destination folders** option in the Backup / Advanced Options tab.
This backup method doesn't require your previous backup because the program doesn't have to compare the source files against the already backed up ones.

Simulate backup execution.

By enabling this option the backup will execute normally (including the Zip compression operation, if enabled) but nothing will be saved in the destination disk. This option is useful in order to precisely estimate the backup size and also to verify that there are no errors in the backup Job specification.
Important: Remember to disable this option after your tests have been completed, otherwise you may be convinced that you have backed up your files while this is not the case!

Verify archives or files after backup completion.

This option lets you have a safer backup because it starts a backup verification process after the backup is completed (if it is completed without errors). Using this option will add a considerable amount of time to the entire process. The verify process can be also started manually pressing the **Verify** button you find on the Restore panel. Note that the backed up files are being tested for validity, they are not compared to the original (source) files

Temp path.

You can specify in the **Temp path** edit box the path of a quick disk (e.g., a RAM disk), which will shorten execution time. Keep in mind that the size of this temporary storage area must be at least great as the greater zip archive you produce because the program always create the zip archive in the temporary storage area first and then it moves the resulting archive to the destination disk. In case you have to handle big files it is better to have the temporary path on the destination disk. To do this simply leave this edit box empty.
GRBackPro has been optimized to have the temporary files on the destination path and this is the default behaviour if this option is left blank.

Zip Cipher.

This option lets you define if you want to cipher your backup archives (valid only of the Zip compression is enabled in the backup Job).
If you enable the cipher then you have two choices (**Mode**):

1. **PKZip 2** (legacy)
2. **AES 256** (WinZip)

The first mode is the classic PKZip encryption. This is a simple one that can be easily broken unless you choice a very long and complex password. There are many tools that do exhaustive tentative trying all passwords in sequence or taking them from a dictionary of most common used passwords. We suggest to

use this option ONLY if you define a long and complex password (longer than 16 characters and with punctuation signs inside it).

The second mode is a more modern one and uses AES encryption. Also in this case is very important to use a long and complex password but you can limit it to 6-12 characters being almost sure it will not be broken.

When you enable this option the buttons **Show Hint**, **Define / Change Password** and **Reset** will become active.
The Reset button allows you to delete a previously defined password. To define a new password press the **Define / Change Password** button. A new dialog will be shown that request you to enter your password twice in order to be sure you have typed it correctly. You can also define an Hint whose scope is to remind you how you have defined your password. Of course you need to pay attention on how you define this hint because you could give your attacker too much information on how to discover your password (for example if you define an hint like birth date). In this dialog there is a control named Password Strength that should help you to define a sufficient complex password marked with a green bar.
Once you have defined the password by pressing the **Show Hint** button will show you the hint you have defined in order to help you to remind your password.

Destination path layout.

This is a very powerful set of options even if they are somewhat complex to understand. With these options you can easily customize the backup destination path to better satisfy your needs and you can also enable special backup modes.
The better way to go with this option is to test it to figure out what are the real folder names that will be generated.

1. Additional folder name.

After the user specified Job destination path (which you select when you define the backup Job in the Jobs tab) you can add a predefined path name, which is chosen from the **first 3 combo boxes**. The first and third combo boxes are the same while the middle one add some signs you can use to separate the other options selected. This way you can really compose very complex situations. This additional path name (resulting from the above 3 combo box selections) is added at backup start. When this option is used the Additional Folder Name will become part of the destination path. If you select date and time option as the additional folder name, then the backup start timestamp will be used and this will be constant for all backup run.

Here is a short list of some of the available options:

1. Blank
2. Date and/or time (long and short versions)
3. Date and/or time & backup method
4. Weekday
5. Backup method
6. Weekday & backup method
7. Day
8. Day & backup method
9. Week number
10. Session name
11. Hour
12. Hour & backup method
13. Month
14. Year

Each one of these options comes with variants, in short or long strings. The date and time options are available in various data modes so that you can select the one that you like most.You will be able to see the effect of your option selection when you change the destination path layout box.

About Date and Time options:

If you choose an option with the date or the time or "the day of the week", be aware that the resulting folder name will change every time a backup is started. This means that GRBackPro will create a new backup set every time because the destination path will change. You must also consider that the number of folders will be created this way can be high and you can easily reach the "destination disk full" condition. Note that when you restore your files you will need to select the correct date and time folder from among those available.

Special modes.

From the **fourth combo box** in the Destination path layout (the leftmost one under the first three), you can select one of these special backup modes:

    1   Blank   disable this option
    2   History   History mode
    3   Split   Split mode

The **History** mode lets you have into the destination disk a set of backups. With this special backup mode you can store multiple versions of your source files. This is particularly useful when you work on file changes that you want to reverse back to a previous starting point. You can control how many of them you want to keep using the History Deep option, where you can set a number from 1 to 99. The program automatically creates a folder whose name is Hist_nn where nn is a progressive number. The program first checks all existing Hist_nn folder names, determines the highest existing number and starts from the successive one. When the number of folders reaches 99 then the folder numbering will restart from 1. An example of the convenience of this feature is in software development. With this special backup mode you can employ the backup method Full or Incremental so that when the history recycles your backups will be updated. For example if you set a deep of 3 then you will have Hist_01, Hist_02, Hist03 after the first 3 runs. The next run will rename Hist_01 to Hist_04 and then it will update this backup now named Hist_04. This way the bigger number is always the last backup.
This option is also supported by the OnChange backup. In this case all daily changes are stored in the folder HIST_XX to don't mix with the other backup set.
This gives you the maximum flexibility and security.

Differential backup in History mode is particularly useful if the option **Synchronize destination archive with source folder** of the backup Job is checked. When starting with the first backup run, this will be a full backup that will copy (compressed or uncompressed, as selected) all of the files and sub-folders specified for that backup session in sub-folder Hist_01. Backups 02, 03 etc., will be differential backups, for which only those files that have been changed since the last backup run will be recorded (assuming that the option **Clear archive attribute bit on source file** in the backup Job has been checked). If the History deep is set to 1 then every backup is a full backup, so better to avoid this case.
By using Differential backup in History mode, the user has NN (History deep) opportunities to restore files that might have been deleted in error before the cycle repeats and a full backup is made again.
Restoration from this cycle of backups is not a problem and can be done in any sequence order if the option **Replace only newer files** on the Restore tab is active. In this case to have a complete restore ALL HIST_nn folders need to be restored in order to have all the source file again.

The **Split** mode lets you split your backup into predefined blocks so that you can easily fit them into a media. A classical example is when you want to create a set of CD-R disks for your backup. You can specify in the **Split Size** option the media size (for example 700 MB if you want to backup to 700MB CD-R). The program will automatically create a set of folders named Disk_nn where nn is a number that automatically increments by 1. At backup completion you can burn your CD/DVDs, selecting Disk_nn folders one by one. This approach is also valid for a DVD, Blue Ray or any other removable media.
If the Zip compression is active then every big file is automatically split into smaller pieces that fit the specified size. This means that the zip archive is distributed on more than one destination disk. GRBackPro automatically handles this situation. If, instead, the zip compression is disabled and you are performing a copy of your files then the split size you are going to set has to be bigger than largest file. For example if your largest file is 200MB then the smallest split file size should be 205MB to allow for some extra space.
Important: In this special backup mode the backup method is forced to full backup because if you try to update an existing backup set already done in a previous run, then the program will not be able to fit the

specified size again if it needs to update a file whose size has grown. It is best to create a full backup from scratch every time to avoid these problems.

Identify the source disk.

From the **fifth combo box** in the Destination path layout, you can select the pre-defined folder name that identifies the source disk drive. You can select one of the following options:

1 Blank   disables this option.
2 Bak_sd   where 'sd' will be replaced at run time by the source drive letter.

This option is very important if you want to restore to the exact source location. The preferred option is **Bak_sd** but you can choose not to add this folder and restore the files/archives by manually specifying the destination folder for the restoration (see Restore).

Add the Source path.

From the **sixth combo box** in the Destination path layout, you can choose one of the following options:

1 Blank   to add nothing to the folder name that identifies the source disk folder.
2 JobSrc   to add the Job source folder path.

Important: If you select the **Blank** option your backup will be flattened into the destination disk (dumping everything into the same destination folder) because any source folder name will be removed and all the files placed into a single destination folder. This can be dangerous if you have the same file name in two different sub folders. In this case only one of them will be available in the backup disk (the last one backed up).

Customizing the compressed archive name.

The **seventh combo boxes** allow you to specify how GRBackPro builds the backup archive file name. These options is taken into consideration are only if the compression option is enabled in the backup Job. This combo box lets you choose one of several options for the main part of the archive file name.

3.5   Backup Advanced Option

This panel allows you to define advanced backup options.
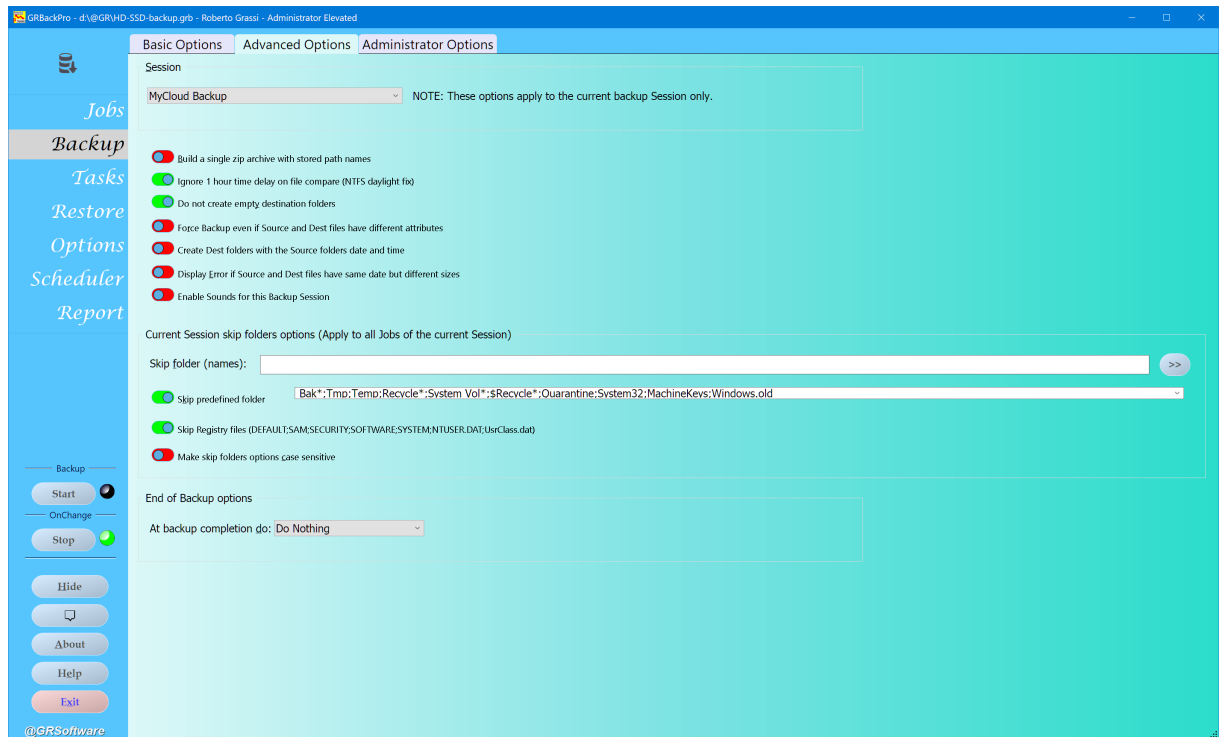
Session.

For each session you can have different advanced backup options to better match your needs. When you change the session the actual advanced backup options will be automatically saved and the new session options will be loaded.

Following is a list of the options you find in this tab with a description of them.

Build a single zip archive with stored path names.

This option lets you create a single zip archive with all your source folders stored within it. This option is taken into consideration only if zip compression has been enabled in the backup **Job**.
This option always stores the full path names (without the drive or network share specification) in the zip archive. This option is safe and allows you to completely restore to the original source disk. Note that you will need to specify which is the restore destination disk because this information is not stored inside the zip archive.

NOTE: General considerations about using single zip archives.

Having big zip files with everything inside them can be an attractive feature but it is less safe because a little damage to the zip file can lose all your backup data or most of them. Moreover handling a big zip archive is a time consuming activity because at every file change the program must read the existing zip archive structure, replace a file and then rebuild it all. This procedure leads to big execution times. A better approach is to have your destination folder tree match your source folder tree and have a single, smaller zip archive for each folder. This will save you a lot of backup running time and also will give you a safer backup archive. Having a directory structure backup also makes it easier to restore one or a few files without having to do an actual "Restore" from GRBackPro.

Ignore 1 hour time delay on file compare (NTFS daylight fix).

This option lets GRBackPro ignore 1 hour difference in the time stamp during backup analysis and execution.
Reason: When using Windows it's possible to use two different file systems, for example FAT32 and NTFS. While FAT32 stores the local time of files, NTFS stores the GMT (English standard time) of the files. When going from Summer (daylight saving) time to Winter (Standard) time, the local timestamps on

FAT32 will remain the same, while files on NTFS drives will have the time changed by 1 hour because the time zone difference to GMT changes by one hour. Therefore files on FAT32 and NTFS drives which had identical times before the time change will suddenly be different. Thanks to this option, the files can still be detected as identical avoiding an extra backup operation. This one hour difference can also occur within ZIP files.

Do not create empty destination folders.

This option helps you to keep the size of your archive to a minimum. When enabled, every time the program finds an empty destination folder, it will avoid creating it. You may want to leave empty folders in the destination disk in order to keep track of the source's folder structure. In that case, do not check this option.

Force Backup even if Source and Destination files have different attributes.

GRBackPro will compare each already existing backup file against the current source file. If it finds that the source and the already backed up files have the same date and time it will also check the file attributes. If they are different and this option is enabled, then the source file will be backed up (just as if it had a more recent date and time).

Create Dest folders with the Source folder date and time.

This option will force each destination folder to have the same date and time as the corresponding source folder.
This function is primarily of use in moving data from one drive to another. It ensures that your source and destination files will have the same date and time. This is rarely of importance to most people.

Display Error if Source and Destination files have same date but different sizes.

Check this option to enable a special consistency check. If a backup file already exists, GRBackPro will compare that file against the current source file. If it finds that the source and the backed up files have the same date and time it will also check the file size. If the two files' sizes are different it will issue an error message. In fact if the two files have the same date and time but different sizes, it means that you cannot establish which is the correct copy of the file and this requires a user manual intervention and verification. This problem can be fixed by running a full backup, i.e., recreating the whole backup set after deletion (assuming that normally the source file is the right one). This error may indicate, for example, a virus in the file or a disk corruption problem.

Enable Sounds for this backup session.

This option will let you enable the sound's events that are defined in the Options tab. You can do this session by session.

Current Session Skip Folders Options (Apply to all Jobs of the current Session).

These options are by session. Each session will have different settings.

Skip (folder names).

This edit box allows you to insert folder names that you want to skip during your backup. These names are not full path names, but simply folder names separated by a semicolon or a colon. If you type here, for example, "Debug;Release" then every time the program finds one of these folder names that folder will be skipped. The folder names can end with an asterisk, which indicates that the program will match every folder name that starts with the specified name (e.g., Debug* could indicate Debug Program or Debugger). Spaces in folder names are permitted and do not need to be surrounded with quotation marks. If you have a colon or a semicolon in your folder name then surround it with quotes. Example: "hello,world",Debug;Release.
At the end of this edit box you will also have a **>>** button. By pressing it you get a Dialog box that help you handle this edit box in a simplified way. See the Edit the folders to Skip topic for more details.

Skip predefined folder names.

This option is useful to automatically exclude common folder names. You have a combo box where you can enable or disable names chosen from a predefined folder names list. When this option is enabled, the folder names you have checked are joined with the folder names specified in the **Skip folders** edit box.

NOTE: From the available predefined names we want to underline the Bak* option. This option is particularly helpful when you do a cross backup: one disk to another and vice-versa. in this case you do not want to do the backup of the backup archives already there and thus skipping just all Bak* folder solves easily this problem. Of course this is only a simple example of what you can do using this option.

Skip registry files (DEFAULT;SAM;SECURITY;SOFTWARE;SYSTEM;NTUSER.DAT;UsrClass.dat).

This option is useful to automatically exclude registry files. When this option is checked, these default files names are automatically skipped during the backup. If you try to backup the Windows folder you need to enable this option in order to avoid error messages when trying to backup the registry files unless you have the Volume Shadow Copy Service active. in this case the backup will be done without errors.

Make skip folders options case sensitive.

When checked, this option lets you make the **Skip folders names** and the **Skip standard folder names** options case sensitive.

At backup completion do.

With this option you can define what the program will do when a backup is completed.
If more than one backup is scheduled this action will be delayed until all backups in the internal queue are executed. In this case the action done will be the most important one between all sessions defined.

You can select one "action" of the following:
- Quit   Exit from the program
- Shutdown   Shutdown the computer
- Shutdown & Power Off   Shutdown and Power Off the computer
- Suspend   Suspend the computer (power save mode)
- Hibernate   Hibernate the computer
- Hide   Hide the program main window
- UnHide   Un-hide the program main window
- Do Nothing   No action will be executed
- Restart   Restart the computer

The best way to use this option is at the end of your workday. Instead of directly shutting down Windows you can, after you have closed all running applications (and you can instruct GRBackPro to do this for you from the Tasks panel), run GRBackPro, select the correct backup Session and then press the **Backup** button. When the backup is completed GRBackPro will shutdown your computer (if the option is enabled and properly setup). This strategy has the advantage that GRBackPro will run safely with all system resources available and all other applications closed. This option is valid only for the current backup Session so you could, for example, have a Session with this option enabled (an "end of the day" backup) and another with it disabled (a "noon" backup).

3.6   Backup Administrator Options

This panel allows you to define administrator backup options.
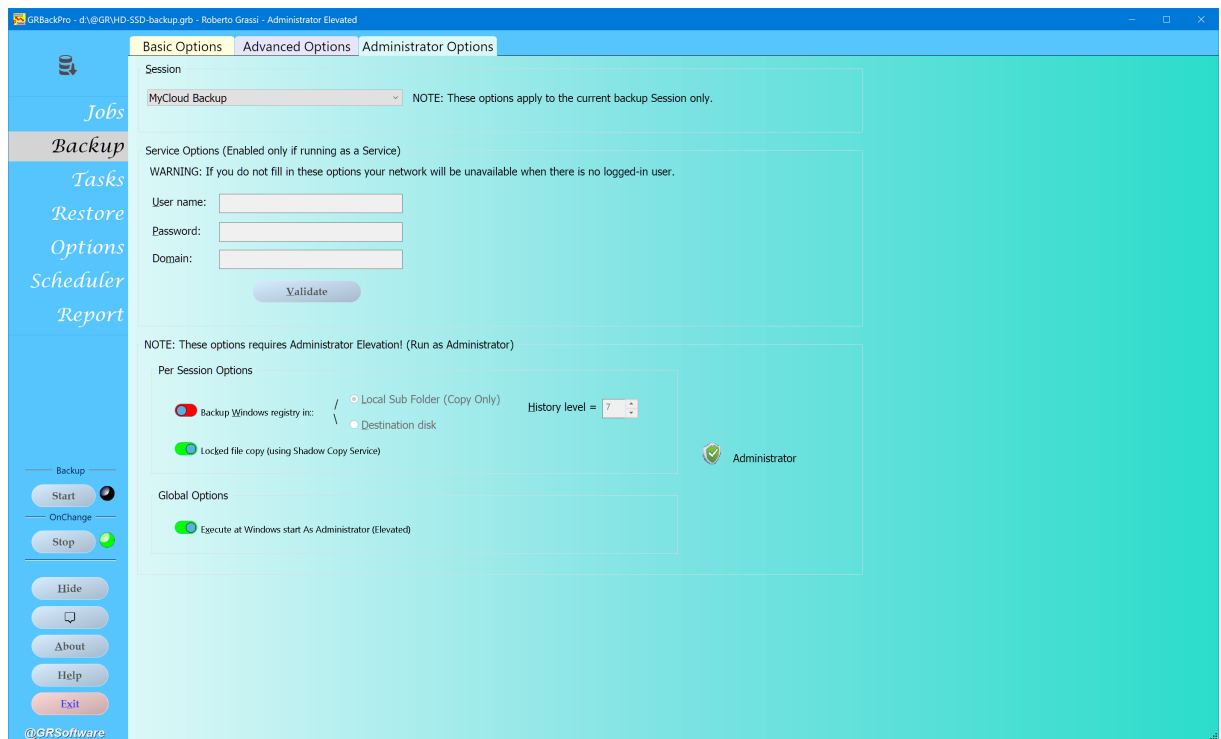
Session.

For each session you can have different administrator backup options to better match your needs. When you change the session the actual administrator backup options will be automatically saved and the new session options will be loaded.

Following is a list of the options you find in this tab with a description of them.

Service Options (Enabled only if running as a Service).

These options are active only if GRBackPro has been installed as a service and thus they will no longer be grayed out. When GRBackPro is installed as a service it will run either on the currently logged in user or (if no one is logged in) on the System account (the one Windows automatically creates to run all services and system tasks). Due to the way Windows operates the System account will not see any network drives. To see these drives (also called "Network Shares") you must supply login credentials (User Name and Password) that have sufficient permissions to reach your network resources. Typically this will be a user who has Administrative privileges. You can enter this login data here and by pressing the **Validate** button you can verify them. If the entered data are valid they will be accepted, otherwise the old values will be retained. The Domain field is optional and thus, if you do not have a domain server, leave it empty.

Important Install note: (does not apply to Windows XP and Windows Server 2003) When installing GRBackPro as a service on Windows 11, 10, 8.x, 7, Vista or Windows Server 2008, 2012, 2016 and 2022, you must have the current logon and the "service option" logon the same in order to avoid strange behaviors. This is due to the way in which Windows implements elevated and non-elevated login. For GRBackPro to work smoothly, both the user and the service option credentials must be of the same level (i.e. both elevated or both non-elevated) or there will be a problem caused by the UAC (User Access Control). All of this Service Options material can be ignored if you have UAC turned off (not recommended by Microsoft).

Starting with Windows Vista and Windows Server 2008 a new login status has been added: Elevation. Normally any user other than the built-in Administrator starts with a NOT elevated status. This allows Windows to be more protected from malware and viruses limiting the damage they could do to your system. Thus even if a user is in the Administrator group the account will start not elevated (fewer permissions are active). Windows UAC will prompt you if you try to do an action that requires Elevated permissions. If you specify the built-in administrator login in the Service Options then GRBackPro will login

Elevated. This is the only user that automatically starts elevated. All other accounts even if on the Administrators group will start NOT elevated. If the currently logged in user is not the built-in administrator and you specify the built-in Administrator login in the Service option then you will not be allowed to login because you are asking GRBackPro to do a transition from not elevated to elevated status and this is disallowed by Windows. This problem does not happen if the backup is started from the SYSTEM account when no user is logged in because the SYSTEM account is an elevated one and thus is not required to make any transition from not elevated to elevated.

To summarize this is how GRBackPro interacts with UAC:
1. A non-elevated user cannot impersonate an elevated account (i.e. Administrator).
2. If an Administrator (thus elevated) is logged on, runs GRBackPro, and specifies nothing in Service Options the backup will run and the log will say you are ELEVATED.
3. Logging on as a regular user won't work if GRBackPro runs as a Service because UAC is enabled and the currently logged in user is not elevated.
4. If you want to keep UAC then you CANNOT install the program as a Service but you must install it as a normal application (optionally enabling the option to start at windows start so that GRB always runs and thus can execute scheduled events).

As a general rule, we suggest to make use of UNC names (e.g., \\server\share\folder) rather than mapped drives. While it is not essential to do this, using UNC drive names will usually result in smoother operations.
Note that USB drives do not have UNC names and therefore GR must use the drive letter. Be aware that the drive letter for a USB drive may change when it is unplugged and plugged in again.

As a final step you must verify that all computers you want to connect to have your administrative login and password so that GRBackPro can log on on all them using always the same credentials. You might consider creating a Backup account with administrative permissions on each computer to make the backup process easier.

NOTE: Some options requires Administrator Elevation! (Run as Administrator).

Per Session options.

Backup Windows registry in:

This option lets you save your registry hives either locally or on to the backup destination disk.
The registry hives (parts) are backed up creating replacement files that can be used in case of Windows problems (see Registry Restore for more details about restoring your registry).

You can select from the following destinations:

1. **Local Sub folder.** In this case the registry is backed up into a sub folder of the folder where the registry hives exist. A local sub folder is created so that you can have an history of your registry backups (see below).

2. **Destination disk.** In this case the registry is backed up into the destination disk. A folder tree is created in the destination disk so that you can easily find the registry backup in case you need it.

The option **History level:** lets you define how many backup copies of your registry to keep. This is a very helpful option because, when your registry get corrupted, often you back it up when you are not aware of this and you only discover the corruption when your computer won't start. So if you only have a single backup of your registry you have only one chance to restore a good registry. Having a registry history lets you go back to a stable situation and recover your system.

NOTES for Windows 7 and above:
Under Windows 7 and above the term ELEVATED means that the current account is running at system level and has no limitations.
A normal user, even if in the Admin group, starts not elevated and thus with some limitations. When a program needs elevation (i.e. needs to avoid those limitations) to do some system protected task then Windows issues the UAC prompt asking the user to go elevated. When a function requires elevation

Microsoft suggests to add to the button a shield icon. So, when you press the backup button, this will force GRBackPro to restart elevated. This can be easily done if the program is running as a normal application, but not if the program is running as a Service. The problem thus appears if you are running as a Service because GRBackPro cannot restart elevated!

In this case the only option you have is to specify the Service Options using the Windows built-in Administrator account .

Specifying a different user account even if it is inside the Administrators group doesn't work! You must be the "built-in" Windows Administrator account (so be sure that this account hasn't been disabled)!

If any other account is specified in the "Service Options" then GRBackPro will fail and you will find in the log an error line that tells you are not elevated and an error line that tells you that the registry backup failed.

Locked file copy (using Shadow Copy Service).

This option enables the Windows Shadow Copy services to back up locked files (for example the Outlook .pst files).

When you enable this option GRBackPro will ask you if you want to restart elevated. If you answer yes then a Windows Scheduler Task will be created and then run so that GRBackPro will immediately restart elevated. On the right of the Per session Options you will see an icon that will indicate if you are running as User or as Administrator (Elevated).

With this option enabled you will no more need to create a Windows Task yourself.

Global Options.

Execute at Windows start As Administrator (Elevated).

This option allows you to start elevated without the UAC prompt. To accomplish this GRBackPro will use the Windows Task Scheduler.

GRBackPro will create a new Task named GRBackPro that will start the program Elevated on the next reboot.

This way GRBackPro will always run elevated. This is required in order to be able to backup the registry and to use the Windows Shadow Copy services to back up locked files (li,e for example the Outlook .pst files).

When you enable this option GRBackPro will ask you if you want to restart elevated. If you answer yes then the Windows Task will be created and then run so that GRBackPro will immediately restart elevated. On the right of the Per session Options you will see an icon that will indicate if you are running as User or as Administrator (Elevated).

With this option enabled you will no more need to create a Windows Task yourself.

3.7   Tasks

This panel allows you to define one or more tasks to be executed before or after the backup.
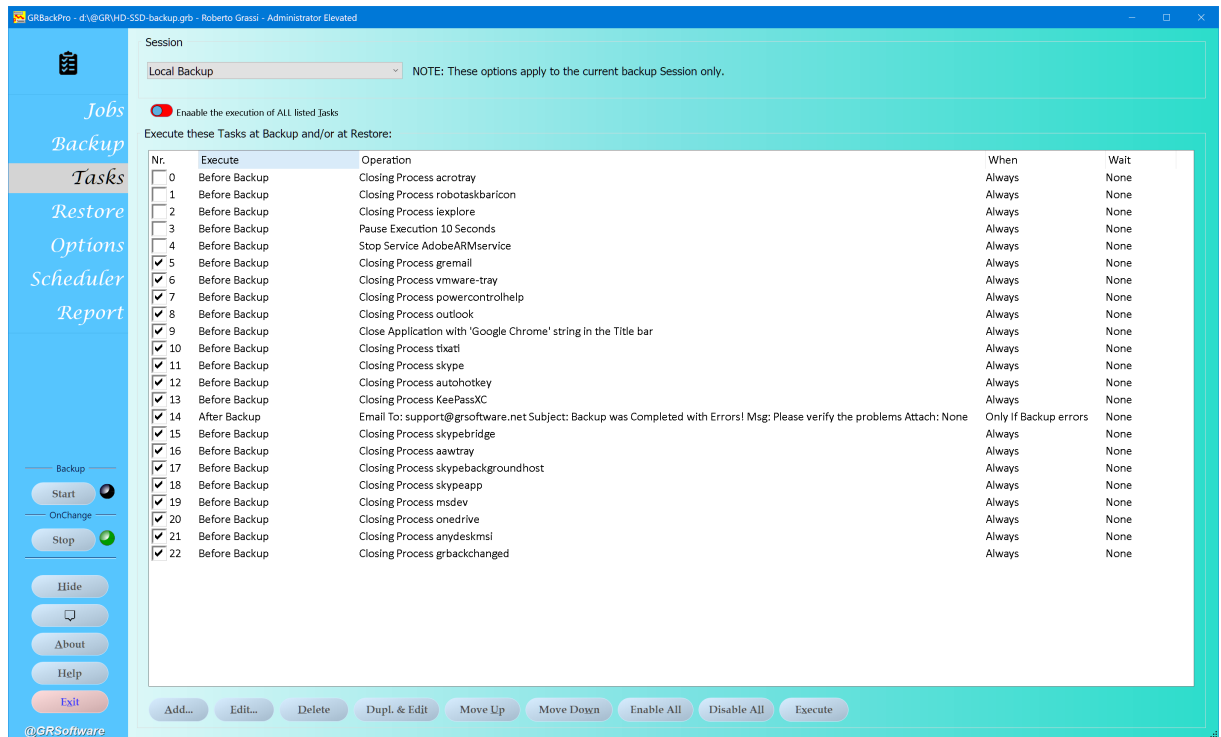
Session.

You can have different tasks for each backup session. When you change the session, the program will save the tasks for the current session and load the tasks for the new session.

Enable the execution of ALL listed Tasks.

With this checkbox you can enable (On) or disable (Off) the listed and checked Task in the next list at once.

Execute these Tasks at Backup and/or at Restore:

This list lets you define one or more Tasks that you want to execute before or after the backup or before or after the restore.
You can only select a single Task in this list, so you can act on one Task per time.

On the bottom of the list you have some buttons that help you manage your Tasks.
Pressing the **Add...** button lets you to define a new Task.
Pressing the **Edit ...** button (or double clicking your mouse on a listed Task) allows you edit the currently selected Task .
The **Delete** button lets you delete the currently selected Task. No confirmation is required so pay attention when you click on this button.
Pressing the **Dupl. & Edit** button the currently selected Task will be duplicated and then you enter in Edit mode so that you can slightly modify it and then save.
The **Move Up** and **Move Down** buttons let you change the execution order of your Task. You first select one Tasks and then you press the wanted button to move it up or down.
Pressing the **Enable All** button lets you enable all the Tasks with a single click.
Pressing the **Disable All** button lets you disable all the Tasks with a single click.
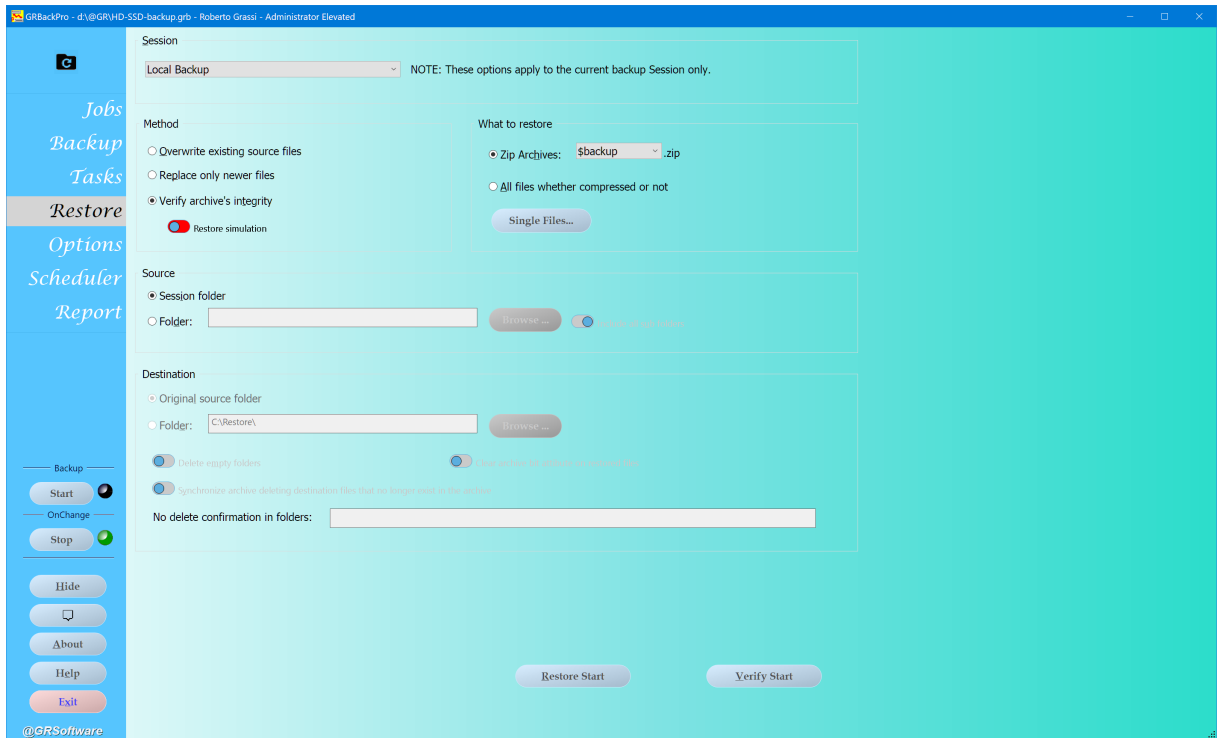Pressing the **Execute** button let you test the currently selected Task.

See Add/Edit Task for more details about the available Tasks.

The first column of the list let you quickly enable or disable a Task without to have to edit it.
The other columns try to summarize the Task at glance.

3.8   Restore

This panel allows you to define your restore options.

Session.

For each session you can have different restore options to better match your needs. When you change the session the actual restore options will be automatically saved and the new session options will be loaded.

Following is a list of the options you find in this tab with a description of them.

Method.

You can specify the restore method by selecting one of the following options:

1. Overwrite existing source files.

This option lets you replace any file in your restore destination folder. Practically speaking, this means that any file in your backup archive will be written to the restore destination you have selected. This is true also if the files in the restore destination folder are more recent than the ones into the backup archive, so pay attention when selecting this option.

2. Replace only newer files.

This option is more conservative and will extract from the backup archive only the files that are newer than the existing files. If you do not have any file in the specified restore destination folder, this option behaves as the previous one and extracts all files.

3. Verify archives integrity.

This option allows you to verify your backup archive state without restoring any file. When you press the **Restore** button the program will check every file in every archive (traversing all sub-directories). This procedure also verifies if any file is usable (i.e., fully readable). The results will be shown on the Report/Progress panel and stored in the log file.

Restore simulation.

This check box lets you examine the specified Restore destination path without actually writing any data. All restore source files will be checked and verified but no writing will take place.

What to restore.

From this group box you can select the backup archives or files you want to restore. You can select one of the following options:

1. Zip Archives:

This option restores any file that matches the specified file name. You can select the archive name from the combo box at right. This list is pre-loaded with the Backup tab options and initialized to the currently used zip file name in the Backup panel (see Destination Path Layout).

2. All files whether compressed or not.

This option restores any file that is found in the restore source folder. If you select this option than any zip file within a restore source folder is not decompressed but only copied into the restore destination folder.

Single Files...

On pressing this button opens the **Restore Explorer**. This is a Windows Explorer-like dialog box that lets you navigate to your backup. Initially the dialog box opens in the backup destination folder of the first backup Job you have defined in the Jobs panel. Next you can employ the left pane tree to browse your destination disk for folders and zip archives. The right pane, instead, lists the files inside the selected folder or the files inside the zip archive depending on what you have selected on the left tree. If you move your cursor to the right pane and select a file then you can double click on it or click your mouse right button to open a popup menu. Double clicking on a file lets you open the **Restore to Folder** dialog box that allows you to specify a folder where to copy/extract the selected files. The popup menu has a **Restore...** option that is the same one as reached with the double click. There are options to allow you to select more files. To extract multiple files, first select one or more files and then select the **Restore...** option from the menu.

Source.

From this group box you can define the restore source.

1. Session.

Using this option lets you reverse your backup Jobs so that your Job backup destination folder will be the restore source folder.

Important: we suggest using this option only if you have specified the **Bak_sd** option in your **Destination path layout** (see the Backup panel for more details) otherwise the restore procedure cannot determine the correct restore destination disk because the original source drive is missing. Pay attention if you are using the current date or time in your **Destination path layout** because, in this case, the restore source folder name can change. A better choice, in this case, would be to directly specify the **Folder** option.

2. Folder.

With this option you can specify any folder as your restore source. You can manually write in the edit box the path name or press the **Browse** button to select one of the existing one. The program will not verify the folder existence and it will create the folder if missing. If you specify the **Include all sub folders** option, the program will go into any sub folder it finds in the specified path during the restore process.

Tip: If you lose the Configuration file (the file that holds all the program options) and thus you are not able to restore all files into the original source path, then you can select this option in order to restore a single path or a path tree (if the **Include all sub folders** option is checked) somewhere else.

Destination.

From this group box you can define your restore destination.

1. Original source folder.

Using this option lets you reverse your backup Jobs so that your Job backup source folder will be the restore destination folder.

2. Folder.

You can restore to any specified path by selecting this option. You can directly write your path name into the edit box or press the **Browse** button to navigate to the right folder.

Synchronize archive deleting destination files that no longer exist in the archive.

This option is very helpful when you need to synchronize two PC's. When you execute your backup with the **Synchronize destination archive with source folder** option enabled (see the Backup panel), the program will delete from the backup archive any file and/or folder that no longer exists in the restore source folder. During the backup run your backup archive will be made in sync with the source files on the source PC. This means that if you delete a file from the source disk then your backup archive will lose this file (i.e., it is in sync). Suppose now that you need to restore the backup archive to another PC. If you execute a normal restore then it is possible that there will be some files in the restore destination folder that do not exist in the backup archive. If this is the case, when you execute the backup from this PC, these files will go into the backup archive and a successive restore to the first PC will create these files also. The problem is now clear: you have deleted some files from the first PC and when you go to the other computer those files are back there. This option is intended to solve this problem. Every time the restore procedure needs to delete a file from the restore destination folder, a message box will appear asking you to confirm the delete operation. This enables you to check if these files must really be deleted. To ensure data safety this message box cannot be disabled.

If you have many files to delete, there is an option in this message box that allows you to specify a starting path name to match. All files that have a path name that begins with a string that matches this specified path name will automatically be deleted. This limits the number of message boxes that will appear. The option **No delete confirmation in folders** can also help you save more of these message boxes (see below).

Very Important: Make sure you do not use this option when restoring from a **Differential** backup archive. In this case your backup does not have all the source files and you risk deleting important files from your source folder.

Delete empty folders.

This option lets GRBackPro delete empty folders from the restore destination disk.

Clear archive bit attribute on restored files.

This option is very useful when you use the differential backup method because it lets you control the archive bit of the restored files. Clearing the archive bit attribute of restored files lets you skip these files the next time you start the differential backup.

### No delete confirmation in folders.

This edit box can help you limit or eliminate the restore confirmation dialog boxes if you have enabled the **Synchronize archive deleting destination files that no longer exist in the archive** option. Here you can specify folder names only separated by a semicolon(";"). For example "Debug;Release". Every

time the program needs to delete files in folders whose name matches these ones then it will avoid asking you for a confirmation and will proceed with the delete operation.

Be careful what you specify here, because not having a confirmation dialog box could delete important files. We suggest that you put something in this edit box only if you repeatedly get the confirmation dialog box and you always want the deletion to take place.

3.9   Options

This tab allows you to set some global program options.
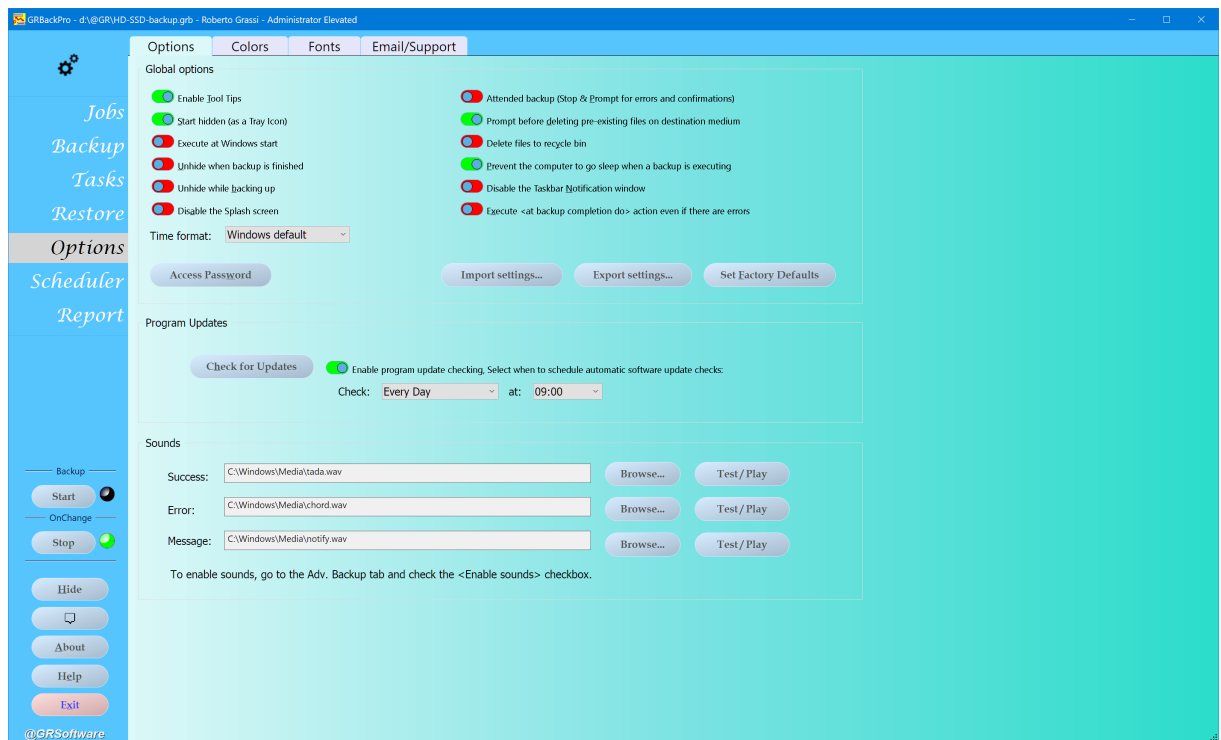
Here are listed the program options.

Global options.

Here are listed the global program options, i.e. valid for all backup sessions.

Enable Tool Tips.

This check box allows you to enable or disable the tool tips help messages that appears every time you move your mouse cursor over an item (button, check box, list ...). The first times you use the program these messages can be very useful but, after you become an expert, they could become annoying.

Start hidden (as a Tray Icon).

If this option is checked, the program's main window will be hidden every time the program starts. The program is still running in the background and can be activated from the tray icon bar. Clicking the right mouse button when the cursor is on the program icon will display a pop-up menu from which you can **Open** the program main window, display the **About** dialog box or **Exit**.

Execute at Windows start.

This option lets you override what you have defined when you have installed the program. If the option is enabled then GRBackPro will run every time Windows starts.

To change this option the program requires Administrative permission and thus you will be asked to restart the program elevated.

Enable program update checking.

If checked, this option lets you enable an automatic check for new program versions. By pressing the >> button you can define when to execute this check. Available options are:

- At program start
- Every day at specified time
- Every Sunday at specified time
- Every Monday at specified time
- Every Tuesday at specified time
- Every Wednesday at specified time
- Every Thursday at specified time
- Every Friday at specified time
- Every Saturday at specified time

You can select the time when you want the automatic update check to run.

IMPORTANT NOTE: The program update check requires that you are connected to the Internet.

Unhide when backup is finished.

With this option enabled, if the program starts an operation while hidden (e.g., from the scheduler) then, when the backup operation has been completed, the program will be automatically unhidden to indicate that the operation was completed.

Unhide while backing up.

If the program is minimized or hidden, this option allows you to unhide the main window when the scheduler starts a backup. This makes the user aware of the fact that a backup has started and thus that some computer resources are required in order to process it.

Disable the Splash screen.

If checked, this option lets you disable the splash screen that is displayed by default when the program starts.

Attended backup (Stop & Prompt for error and confirmations).

If an error occurs during program execution or the program needs a confirmation, you will either be advised (option checked) or the error will simply be logged in the log file (option unchecked). The unchecked option is particularly useful when running in unattended mode or as a service.

Prompt before deleting pre-existing files on the destination medium.

When the full backup option is selected, you will be advised (option checked) or not (option unchecked) before the current backup archives are deleted in the destination medium. The unchecked option is particularly useful when running in unattended mode or as a service.

Warn if a backup was executed more than N days ago.

Check this option to enable a program start up check that verifies all backup sessions to check for backups that have not been executed since N days ago. N is a user specified number ranging from 1 to 365 days.

Delete files to recycle bin.

Check this option to place any deleted file in the recycle bin. This allows you to recover your files in case they were deleted in error. This delete mode is a little slower, but it provides greater safety. Of course the recycle bin has a limited size so if the program needs to delete many files you are not assured that all the deleted files will be recoverable.

Allow GRBackPro to control the screen saver.

If checked, this option lets GRBackPro disable the screen saver when a backup is started.

Disable the Taskbar Notification window.

If checked, this option lets you disable the taskbar notification window that appear when a backup is completed. When a long backup operation starts, this notification window lets you **Hide** the program while the backup is running and then be advised when it will be completed. Starting with Windows 10 you will see them in the notification window.

Execute the <at backup completion> action even if there are errors.

If checked, this option lets you execute the <at backup completion> action (see the Schedule tab) even if there are backup errors.

Access Password.

By pressing this button lets you open the **Create supervisor password** dialog box. From there you can define a password to access the program.
No one will be able to open the program without the correct password.
This password is asked at program start and after you press the Hide button.
After you click on the **Hide** button the program will minimize to the tray icon bar. From this point on if you double click on the tray icon or you right click and select **Open** or **Quit** the program will ask you for the password you have defined. This way only users who know the password will be able to change the program settings or quit the program. If the user doesn't supply the correct password the program will announce the password is wrong. By pressing the Cancel button will close this password request dialog and leave the program running.
Once defined, if you want to disable this access password you need to click again on the "Access Password" button and check the box that will disable this feature.

Import settings.

If you have saved your settings with the **Export settings** button you can lately import them using this button.

Export settings.

You can export the current program settings in a file for your convenience.

Set Factory defaults.

This button will reset all options to factory default. A message confirmation box will appear asking you if you want to change the options in all backup Sessions or just in the current session. Of course you can press Cancel to abort the option and leave all as is.

Program Updates.

Check for Updates.

By pressing this button lets you check our web site to verify if there is a new version to install.
You can enable automatic checks for program updates and also define the frequency of these checks.
If the new version is checked while the program is hidden then it will first un-hide and then a message issued.

If "Check for Updates" is checked and the program is in hidden mode, then when a new version is found GR will unhide and issue a message.

Sounds.

Success.

By pressing the **Browse** button let you select a sound to play when a Backup or a Restore completes without errors. You can test the sound using the **Test / Play** button.

Error.

By pressing the **Browse** button let you select a sound to play when a Backup or a Restore completes with errors. You can test the sound using the **Test / Play** button.

Message.

By pressing the **Browse** button let you select a sound to play when a Message Box appear. You can test the sound using the **Test / Play** button.

3.10   Options Colors

This panel allows you to customize the program user interface colors.

From this panel you can define almost all program colors.

Each color has an associated color combo box. When you click the down arrow you open a color selection tool. Here you have the **Automatic** option that sets the default value (a predefined value), some standard colors boxes and the **More Colors...** option that let you precisely define a color of your own. Each color option has three basic color. Their usage is controlled by the **Effect** you select. There are some effects that use one color, other two and others three.
We suggest to experiment a little to better understand how to modify the program appearance.

Tab.
These colors control the Tab background colors.

Main.
These colors control the Main dialog background colors. The ones that appear under the Tabs,

Dialogs.

These colors control all program Dialogs background colors.

Button colors.

From this group box you can control how the buttons will appears.

A button can heave these states:
- Normal
- Pressed
- Hover
- Focused
- Disabled

For each button state you can define the color of the button area and the color of the text inside it.
We suggest to experiment a little to better understand how to modify the program appearance.
The option **Pulse the focused** button let you blink the button that has the focus.

Background Colors.

From this color group you can define the Panels and Dialogs colors and effects.

Panel Tabs.

From this color group you can define the Panels Tabs colors.

Button Colors.

From this color group you can define the Buttons colors and effects.
You can also define if you want to see the button pulsing when it gain the focus.

Left Menu.

From this color group you can define the Left Menu buttons colors.
You can also define the menu area background color.

Progress Report Panel <Size> column zone limits and colors

Here you define the color of the Report / Progress Report size column that helps you

3.11   Options Fonts

This panel allows you to customize the program user interface fonts and text size.
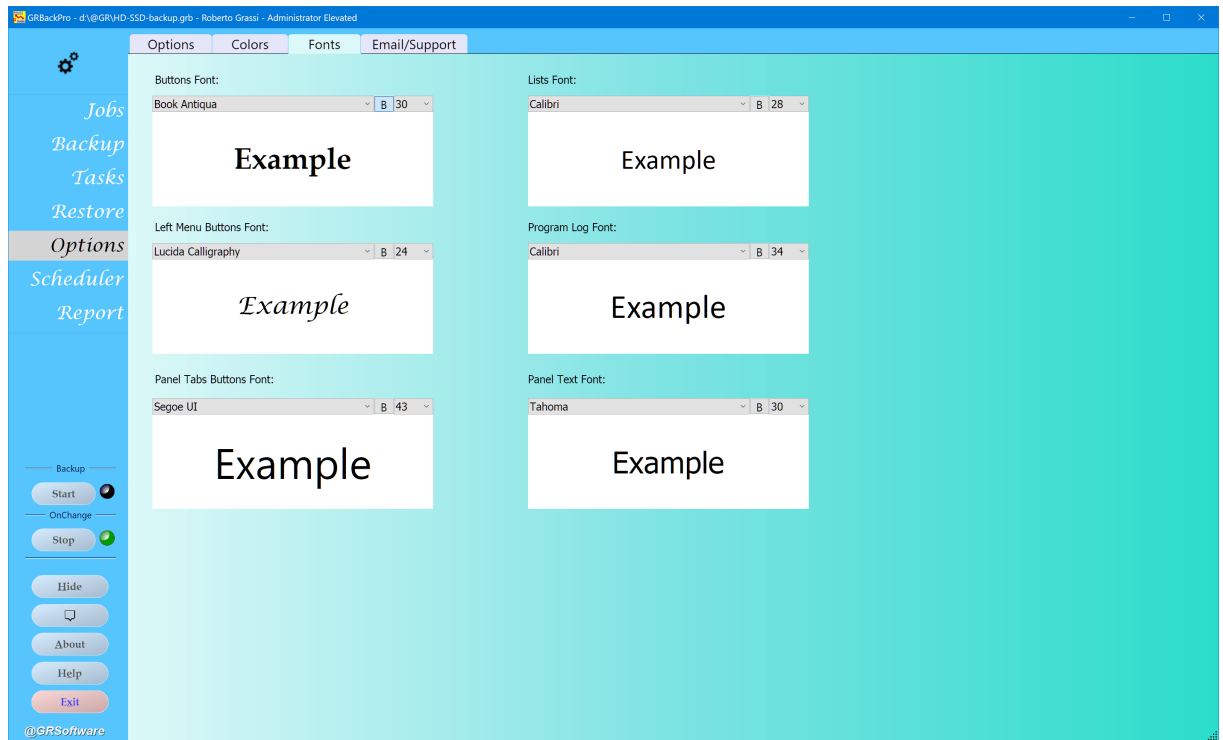
The same elements you find in the Colors panel are present here.
You can define the font you prefer for each program item and also define the size.
NOTE: If you set a too large size then some items will be truncated because they don't fit the available space.

Buttons Font

Here you can define the button text font and size. An example of the result text is shown in the text are of the font control.
You can also define if you want a bold text or not using the **B** button.

Left Menu Buttons Font

Here you can define the button text font and size. An example of the result text is shown in the text are of the font control.
You can also define if you want a bold text or not using the **B** button.

Panel Tabs Buttons Font

Here you can define the button text font and size. An example of the result text is shown in the text are of the font control.
You can also define if you want a bold text or not using the **B** button.

Lists Font

Here you can define the list controls text font and size. An example of the result text is shown in the text are of the font control.
You can also define if you want a bold text or not using the **B** button.

Program Log Font

Here you can define the program log text font and size. An example of the result text is shown in the text are of the font control.
You can also define if you want a bold text or not using the **B** button.

Panel Text Font

Here you can define the panel text font and size. An example of the result text is shown in the text are of the font control.
You can also define if you want a bold text or not using the **B** button.

3.12 Options Email Support

This panel allows you to set the email options or to ask support using the email setting you have entered.

Are you having problems? Do you wish to ask support?
From this panel you can setup your email sending options, also helpful to receive backup failures, and be able to send us a complete report of the situation you have encountered to our tech support team.
We encourage to use this method to report any problem to us so that we automatically receive sufficient material to start working on your problem and quickly solve it.

Please leave all options active so that we will have all the details. Omitting the files could led to subsequent requests by our support Team in order to better understand the problem and have further details.

Email Options

On the left you have to setup your SMTP server options in order to be able to send out email messages from inside the program.
You can easily copy these settings from your email client account options.

SMTP server.

Define your SMTP (Simple Mail Transfer Protocol) email server. This is the server you want to use to send email messages. If this field is empty the program will try to directly contact the destination email server using the Internet DNS (Domain Name System) services and then send the email directly to the

destination mailbox. This may not work depending on your local Internet service provider settings, so it is better to use a defined SMTP server here.

SSL Security.

This option lets you select the **SSL security** option you want to enable. If you are not sure about what to select here then select **None**.
Available options are:

- None
- Native
- TLS

None disable this option and communication takes place without ciphering protection (said in other words your message will be sent in clear text).
The **Native** option enable SSL ciphered connection. This is the option required to connect to some email accounts (Gmail.com for example). The Default port for this mode is 465.
The **TLS** option is a mode where the connection take place in clear form and then enables the SSL ciphering so that all successive communication is protected. Default port for this more is 587.

Port.

This option should be set to 25 which is the standard SMTP port. If your email server uses a different port you can put it there.
The **Default** button sets the port value to a default based on what you select in **SSL Security**.

Sender email address.

Define your email address. Sending an email message without your address or using an invalid email sender address can fail. We suggest that you enter a valid email address here.

Login Method.

Some SMTP servers require that you login to let you send your email messages. You can select from here the right login method. Please refer to your ISP in order to select the appropriate one or experiment until you find the right one.

User Name.

Your SMTP server user name.

Password.

Your SMTP server password.

Send Email Test.

Press this button to send yourself a test email message in order to verify that your email settings are good.

Email Send Progress / Results.

Here is shown the progress of the email sending. When the email has been sent you will see a message of success or failure.

Ask Support

Your Email address.

If you are using a license version then this field will be automatically filled with data from the license itself. If you do not have a license yet, please put in your email address so that we can reply to your request.

Your Name / Surname.

If you are using a license version then this field will be automatically filled with data from the license itself. If you do not have license yet, please put in your full name.

Attachments:

Here you have two check boxes. the first one is named **Settings files: GRBakPro.grb, GRBakPro.log**. These files are your backup configuration file and your backup run details (including errors if any). These files are very helpful in order to have more technical details about your problems. Be sure to always check this box (default state). The second check box is named **Log Files: Program.log, GRSrv.log**. These files are an internal report of the program and the Service log file if you have installed the program as a Service. These files don't hold any user detail but can be very helpful in finding a problem, so also leave this option checked (default value). These files are compressed into a zip archive before to be attached to the email message. There is an internal limit of the resulting zip archive size to avoid email sending problems. If the zip archive size is over 5MB it will not be attached, and we will need to discuss in email how to get the necessary information (if needed) to us for support.

Problem description:

Here you can put your comments. Be sure to describe what you were doing when the problem occurred. It is essential that you list every step so that we can try to repeat what you did and thus cause the same problem for us to study and, if possible, resolve.

Email Send Progress / Results.

Here is shown the progress of the email sending. When the email has been sent you will see a message of success or failure.
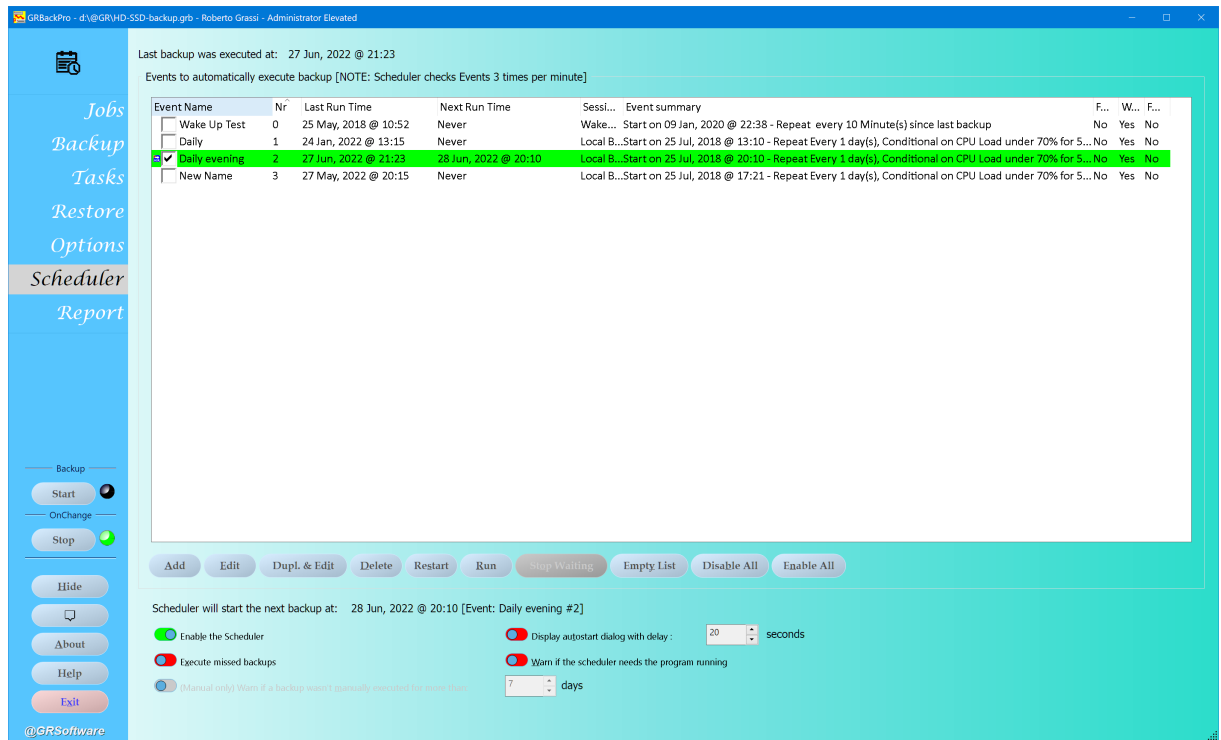If you see any error sending the email message, please send us a regular email message (i.e., using your regular email program) containing the information requested in the windows so we can address the problem.

Send Email.

Press this button when you are ready to send your message.

3.13   Schedule

This panel allows you to define your backup schedule options.

The Scheduler can control any or all backup sessions. You have a list of Scheduler's Events and each Event is able to start a backup in one or more specified Sessions (optionally on all sessions altogether) under with or without conditions. You can define an Event that controls one or more backup sessions.

The **Last backup was executed at** shows when the last backup execution was started for all the listed Events.

The Scheduler is able to execute one backup at a time. If you have multiple events scheduled for the same time, the scheduler will automatically execute them one after the other (i.e., sequentially) from the lowest numbered event to the highest. Said in other words the Events are put in a queue for execution.
The Scheduler tab is enabled also when a backup in under execution but all items will be disabled. This will allow you to monitor your Events. In this case you have access to few options.

Events to automatically execute backup.

This group box lets you define when the program will automatically start a backup operation. Restore operations can only be executed manually and thus the scheduler works only for the backups.
The Event list shows the scheduler events and the buttons below the list shows some possible operations with the selected event.
For example you can add, edit, delete, restart, run an event. You also have special buttons to empty the event list or to enable or disable all events with a single click. To enable or disable a single event you have a check box on the left of each defined event.
On pressing the **Add** button lets you to define a new scheduler event. On pressing the **Edit** button (or double clicking your mouse on a listed event) allows you to edit an existing event. The **Delete** button lets you delete the selected event (No confirmation is required so please be careful). The **Restart** button lets you reset an event's "Last Run Time" to "never executed" so that it will be as though the event never took place. The **Run** button, instead, lets you simulate an event trigger and the backup will immediately start.
The **Stop** button is only enabled when an Event is waiting a condition to be met. You can abort the wait and clear the Event by pressing the **Stop** button. As you can see from the picture above when an Event is waiting a condition there is an animated icon on the Event row and the whole row is painted in red so that it is clearer that the program is waiting for a condition to be satisfied before starting the backup.
On pressing the **Empty list** button you will delete all the events with a single click. A confirmation message box is displayed this time in order to verify if this is really the operation you want to perform. The **Disable**

All button lets you disable all listed events with a single click, while the **Enable All** button lets you enable them all.

Each Event is defined by a **Event Name** on the left, just after the check box. This name can be changed by editing (double click) the event. The name has no significance in terms of program operation and is just for your convenience. Then each event is assigned by the program a progressive **Nr** number shown in the second column. The third column displays the **Last Run Time**. That is the last time the event has started and a corresponding backup has been executed. This column is also updated when you manually execute a backup to indicate that a backup for the selected session has been executed. This also means that if you have more Events that are scheduled for the same session then you will see the column updated on only the Event lines that have not been executed. The **Next Run Time** column displays what is the next time the event will be executed. The **Session** column indicates which sessions the Scheduler will run. The **Event summary** column shows the start date and time for the event and how often it is to be repeated. The **Force Full** column indicates with a Yes or No if a full backup will be forced by this event. The **Wake Up** column indicates if the computer will be woken up (if sleeping) in order to execute the backup.

See Add/Edit Scheduler Event for more details about the available scheduler event options.

Scheduler will start the next backup at.

The text that follows indicates when the next backup is programmed to start.

Disable the Scheduler (no sessions will run).

This option lets you completely disable the scheduler. The fact that the scheduler is disabled is indicated in the **Scheduler will start next backup at** line with "The scheduler is disabled!".

Execute missed backups.

If your backup has been scheduled for a certain time and at that time the computer was powered off or GRBackPro was closed (not running) then this option lets your backup start the next time you will power up your computer. You **MUST NOT** exit the program if you want your scheduled events to be executed. You can leave the program open or HIDE it and the scheduler will keep running

Display autostart dialog with delay sss seconds.

If this option is selected, you will see the AutoStart dialog box every time the backup is scheduled to run. This dialog box allows you to stop, start, pause or disable the scheduled event. This option is useful if the backup is scheduled to start when the computer is in use and may thus interfere with user operations.

**Warn if the scheduler needs the program running.**

If checked, this option lets the program advise if you try to exit and a scheduled event has been added to the Scheduler. If you exit from the program the scheduler cannot start any event. If you still want to have the scheduler work you have to click on the Hide button instead of the Exit button. This notification will appears in the tray icon bar or in the notification window on Windows 10.

(Manual only) Warn if a backup wasn't manually executed for more than x days.

This option will issue a warning if a backup wasn't executed for more than the specified number of days.

3.14 Report Progress Report

This panel shows you information regarding how the Backup, Verify or Restore is proceeding.
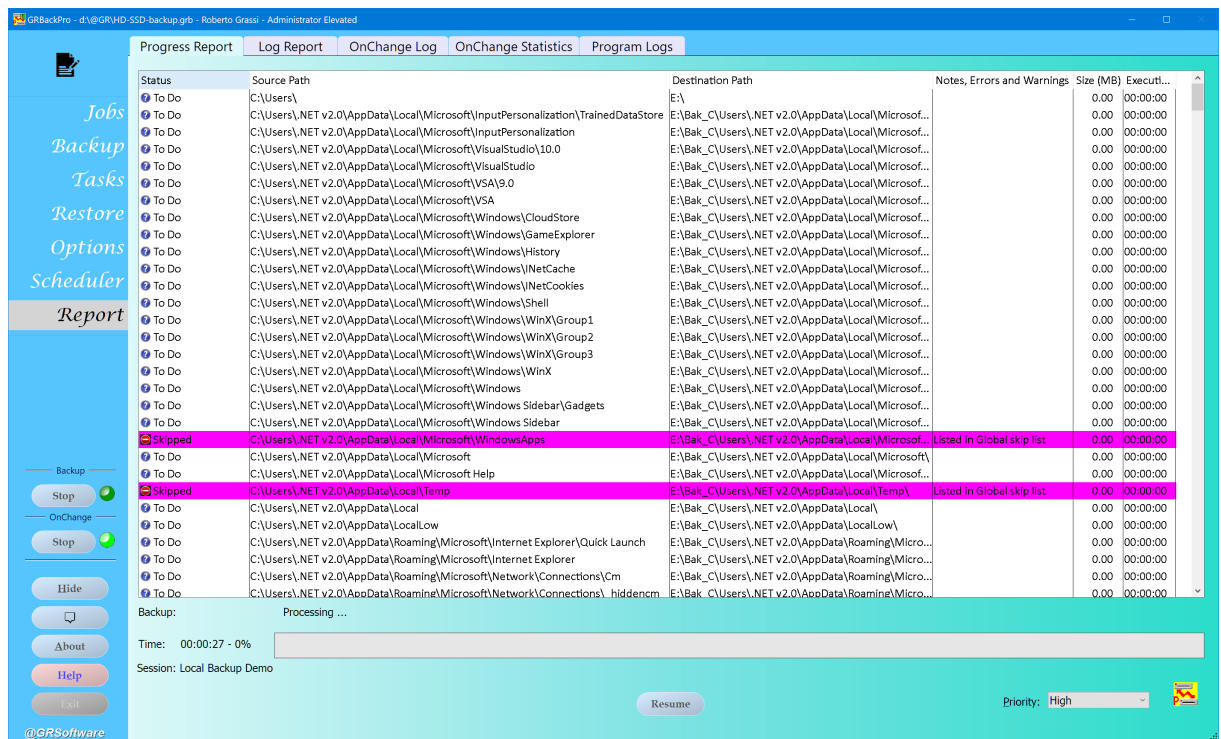
You automatically come to this panel every time an operation (Backup, Verify or Restore) is started. This panel has a list that shows all operations that the program will do during the run.

The list has the following columns:

- Status
- Source Path
- Destination Path
- Notes, Errors and Warnings
- Size (MB)
- Execution time

The **Status** column has an icon and a short description that indicates if a folder has been updated, created or there are No New Data (i.e., up-to-date). In case of a restore test operation, this icon will indicate if the compressed archive corresponding to the Job is OK or has errors.

The **Source Path** and **Destination Path** columns will show the Job's path names.

The **Notes, Errors and Warnings** column will show a detailed explanation of any error or warning found other than the number of files that have been created, updated or tested.

The **Size (MB)** and **Execution time** columns indicate the Job total source size and how much time GRBackPro has taken to execute this Job backup. The items in these columns are colored as specified in the Options / Options Colors panel to indicate the Jobs that have a big size or that take long to be backed up.

The column header positions are automatically saved, so you can change the column size and get these positions restored at each program run.
You can also use drag and drop to move the columns around.

When an operation is started, the program will perform a first preliminary analysis phase. This phase is shown on the first line just after the list box. During this analysis, all complex Jobs will be split into simpler Jobs. If a Job has been specified to include sub folders then it will split in many additional Jobs - one for each sub folder found. After the analysis phase is completed, the real operation execution begins. The

kind of operation is always shown on the first text line under the list box, along with the current file name and size.

Time.

This line shows the elapsed time in the format "hh:mm:ss" and a **progress bar** that shows, in graphical form, how the execution is proceeding.

Abort.

This button is visible only when an operation is running. By clicking it, you can abort the operation being executed. A confirmation dialog will appear. This event will be also reported on the Log file.

Pause, Resume.

This button is visible only when an operation is running (and it does not appear when the analysis phase is running). Clicking this button once will pause the operation and change the button's name to **Resume**. Clicking it a second time will resume the operation that was paused and the button name will reverse back to **Pause**.

Priority.

This option lets you change the GRBackPro process priority at run time. This is helpful when the backup procedure takes a lot of CPU and you still want to get some free CPU to continue your current task. In this case you can set the priority to Low for example.

Here are the available options:

Low.
This is the least intrusive option. Select this priority level if you are working on the PC while the program executes in the background.

Below Normal.
This priority value is suggested if you have other tasks running and you want to reserve an amount of your CPU to current operations still leaving GRBackPro a chance to run.

Normal.
This is the standard option that lets other programs run normally. This priority level allows you to use the PC, although it will run slowly. This mode can be handy if you are editing a file. At this level GRBackPro executes at the same priority level of all other tasks.

Above Normal.
At this priority level GRBackPro will execute above all other task that will be slow. You can employ this level if you are running another operation and you want the backup to complete quickly.
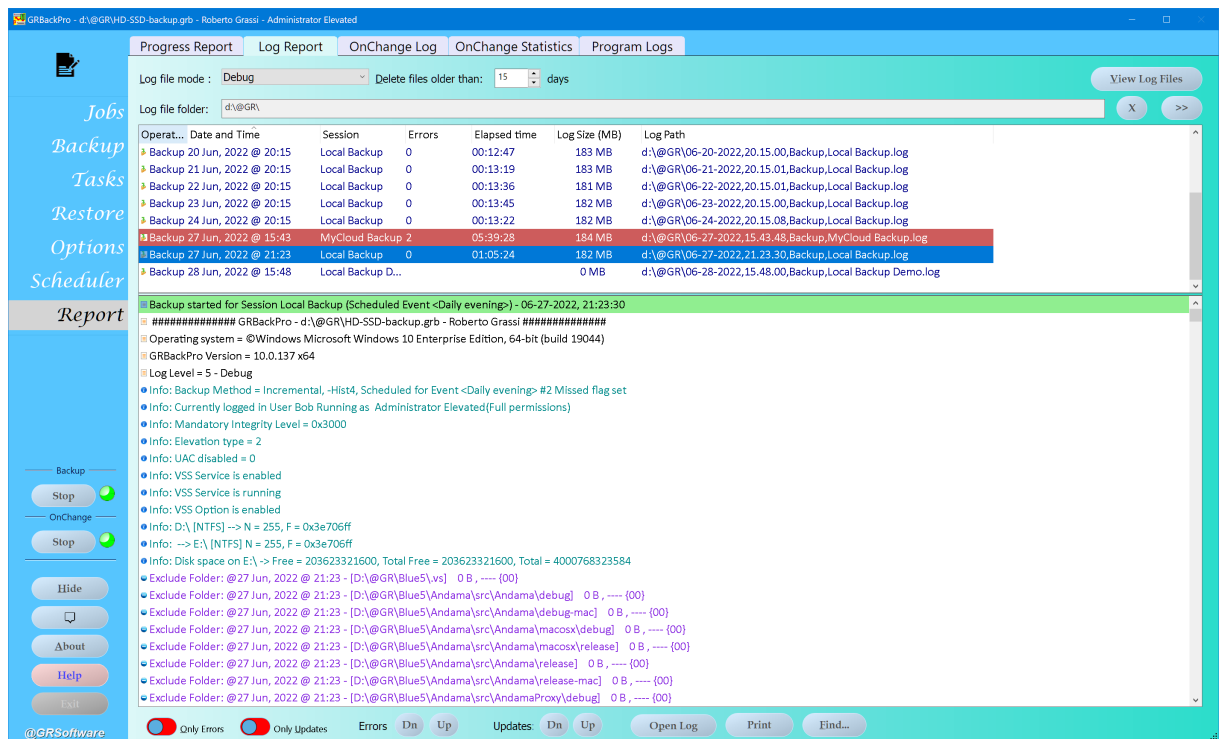
High.
This option permits the program to take much of the processor time and makes other programs execute slowly. You can have the impression that your PC has frozen.

The priority setting is remembered on a per session basis.

3.15   **Report Log Report**

This panel allows you to define your log tracking options and view any already executed activity.

From this panel you can easily view your backup, verify or restore activities.

The log files are automatically created and handled by the program. You can select the folder where to store the log files using the option **Log file folder**. The log file name is automatically composed using the current date and time, the operation type (backup, restore or verify) and the session name. This is a big change compared to previous versions of the program. The main reason is to have a fixed place where to store all log files and also to better handle big log files. On top of the tab you have two options: the **Log file mode** that allows you to define the deep level of what you want to store inside the log file and the option **Delete files older than X days** to define how many log files you want to keep. This last option is based on days: you define how much old the log can be. The program will automatically delete all older files.

You have two lists: the upper one is the operation list that can also be think as the log file list. The next one is the operation activities.
Said in other words the first list show you the log files, while the second one show the current selected file contents.
Every time you select a different log file then the operation activities list will update accordingly.
Every time you enter into the **Report** panel, the program automatically selects the last activity that was executed, i.e. the most recent log file.
The operation activities list displays the details currently stored in the selected log file. If you have a large log file it can take a while to load the file and to search for a particular line or lines within the log. This can happen, for example, when you scroll through the log using the scroll-bar. If there is going to be a delay while the log file is repositioned, then the program will show a rotating icon in place of the log lines. It is possible to abort this load operation simply by going out of this panel.
Between the two lists you have a splitter line that allow you to resize one list respect to the other. The position you define will be automatically saved by the program.

When the focus is on the backup log you can right click with your mouse and a popup menu will appears. From this menu you have access to some useful functions.
This is a smart menu that will show different menu options depending on the log row you have selected.
If the row is showing a folder path then you are allowed to copy the entire folder path or even a folder name inside the path. Moreover you have the option to automatically add to the skip folder name option on your backup setting one of the folders that compose the folder path. This last option is very handy when you hit a problem and you want to avoid that folder because doesn't hold useful information that you must back up.
If the currently selected log row lists a file name then you will see a menu option to copy the file name.
The option to copy the current log line is always present.

This could be helpful when you want to report a problem or a detail to the customer support without to have to send the whole log.

GRBackPro stores all options and backup and restore specifications in a file with the .grb extension. See Configuration file for more details about it.
Thus the configuration file and the log file can be in different places.

Log file mode.

This combo box lets you define the level of detail you want in your operation reports.
The available options are:

1. None.

No details shown. Only errors will be stored.

2. Minimal.

This option will log any error, the operation elapsed time, the final operation statistics and the backup archive final state (for example ' Backup created' or ' Backup tested').

3. Standard.

This option adds to the previous **Minimal** information some details regarding any skipped folders or folder creation/deletion.

4. Advanced.

This option adds to the previous **Standard** information the file names involved in the operations.

5. Detailed.

This option adds to the previous **Advanced** information such file details as length, date and time and attributes. This option is a must if you want to trace your operations in detail. Every time a backup, restore or test operation starts, the program will place into the log file the date, the time and the kind of operation. After this header, the selected details will be appended.

6. Debug.

This option adds to the previous **Detailed** information and error detail. Always enable this mode when you have some problem so that you can read more possible error details in the log file. This mode will include some additional information needed by our support team to better help you solve any problem.

Delete files older than nn days.

In order to don't store too many log files, you can specify how much old the file can be by specifying the number of days. This number can vary from 1 to 999 days.
Log deletion is based on the log file date and time.
The delete operation is done when an activity starts and a new log file needs to be created.

View Log Files.

This button will open Windows Explorer or File Explorer on the folder where the log file are stored.

Log file folder.

If you don't want your log file stored in the default folder, then you can use this option. On pressing the >> button lets you browse for a folder. At any time, by pressing the X button you will revert back to the Default location.

After the two lists you have some other controls.

Only Errors.

You can use this toggle button to filter out all the information lines from the current **Operation activities**, leaving only the error lines.

Only Updates.

You can use this toggle button to filter out all the information lines from the current **Operation activities**, leaving only the lines related to file update activities.

Error: (down, up).

Clicking the arrow buttons allows you to go to the next or previous error line (if any) in the **Operation activities** list box. An error line is shown in red.

Updates: (down, up).

Clicking the arrow buttons allows you to go to the next or previous update activity line in the **Operation activities** list box. An update activity line is shown in green.

Print.

Clicking this button prints the contents of the **Operation activities** list box. A dialog box lets you select the destination printer.

Find.

By pressing this button activates the search function. Alternatively you can press the **CTRL-F** keys of your keyboard to activate the search function. A dialog box will appear asking for a search string. After you hit the OK button the program will select the **Operation activities** line that has the specified string. From this point on you can simply press **F3** or **F4** in order to go to the next line that has the specified string. To change the string to search for you have to press the button again or press the **CTRL-F** keys.

3.16   Report OnChange Log

This panel shows the OnChange backup activities.
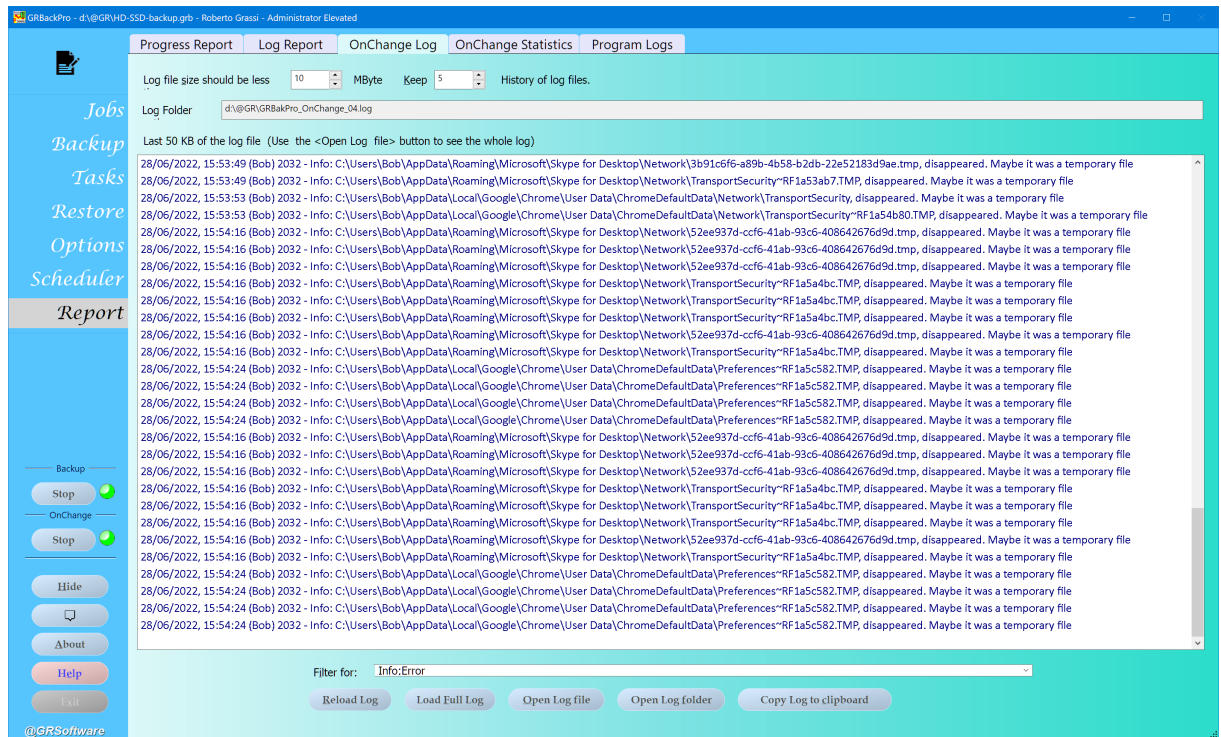
The log shows only the last 50 KB of the whole log.
If you want to see the whole log you must use the **Load Full Log** button.
You can also open the whole log file using the **Open Log File** button. GRBackPro will open the file using the predefined text editor.
If you press the **Open Log folder** button then the Windows File Explorer will be opened showing you the folder where all the OnChange log are stored.
Each time you stop and star the OnChange engine a new log will be created and updated.

You can define the amount of line that are shown in the list using the **Filter for** option.
Here are the possibilities:

- Check all items
- Info
- Warnings
- Errors
- Skip
- Jobs
- Updates
- Debug
- Delete

The first will enable or disable all options at once.
Each of the other options define what lines will be shown.
In any case the log file will contain ALL the details. Here you are going to define only what you see not what is logged.

Reload Log

By pressing this button you will force the reload of the current log view.

Load Full Log

By pressing this button you will force the reload of the whole current log file into the list.

Open Log File

By pressing this button the current log file will be opened with the currently set default text editor.

Open Log Folder

By pressing this button the Windows File Explorer will open on the folder where the OnChange log files are stored.

Copy Log to the clipboard

By pressing this button you will copy the current log view (the whole list you are seeing) into the clipboard.

3.17   Report OnChange Statistic

This panel allows you see the OnChange Jobs and statistics.
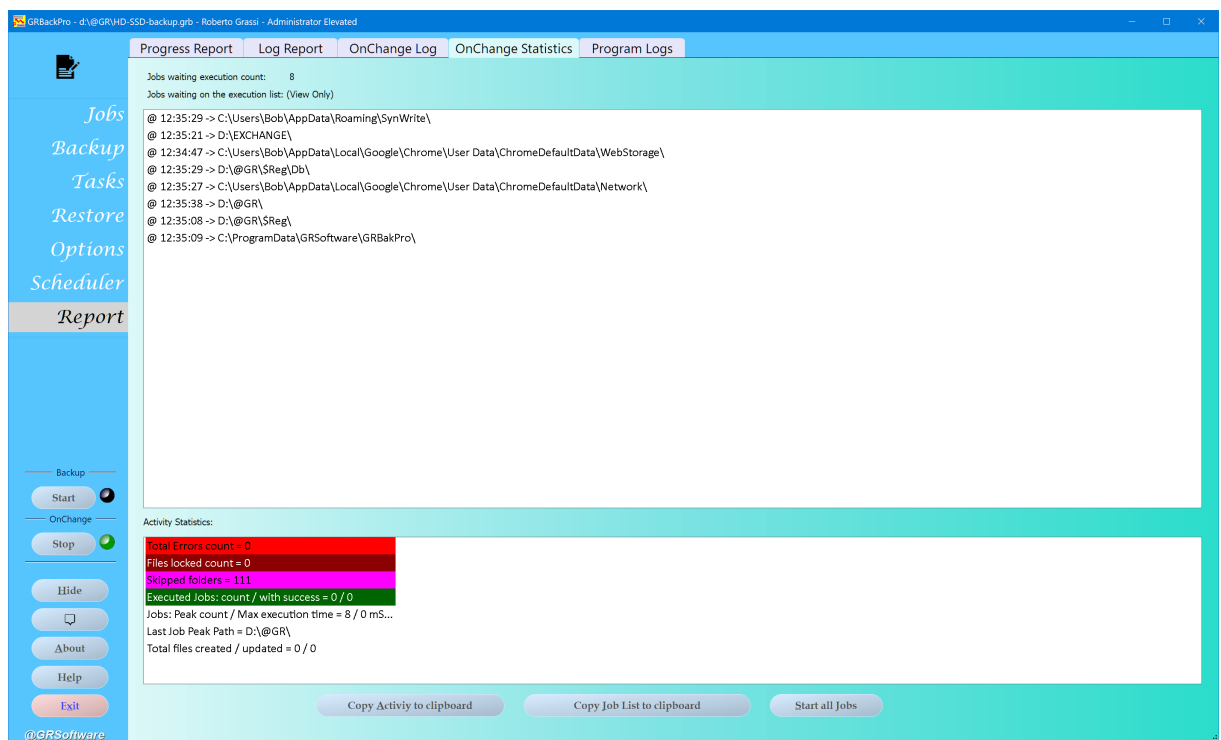
On top of the panel you can see how many Job are waiting for execution.
The OnChange engine doesn't immediately back up the changed files but waits about 2 minutes after the change is detected.
If there is another change on the same file during these 2 minutes the timer will reset.
You can force the immediate execution of all the listed Job by pressing the **Flush all Jobs** button.
The statistic list shows you the OnChange engine activities.

The fist list show you the Jobs waiting for execution. For each Job you see the time the Job backup will start and next the source folder path that will be backed up.

Activity Statistics

In this list you can find some statistic data:

- Total Error count
- Files locked count
- Skipped folder
- Executed Jobs count / with success
- Jobs peak count / Max execution time
- Last Job Peak Path
- Total files created / updated

Copy Activity to clipboard

By pressing this button you will copy the **Activity Statistics** content to the clipboard as text.

Copy Job List to clipboard

By pressing this button you will copy the current **Job list** to the clipboard as text.

Start all Jobs

By pressing this button you will force the execution of the listed Jobs. The execution is serialized, i.e. each Job is executed once the previous one has been completed.

3.18   Report Program Log

This panel shows the program log.

The program log is maintained in order to have a track of the program internal operations.
This can be very handy in case of problem because allow us to understand the internal operation sequence.

Paths

Selecting this item you can see a list of files that the program manage.

For example you can see where your settings file (.grb) is located. This information is also visible on the program title bar.
Here are also listed the log files both for the OnChange engine and the normal backup, crash dump files, ini file and so on.
When you ask for support you may be asked to send us one or more of these listed files.

Program Log

Selecting this item you can see a list of the program internal operations.

Reload

By pressing this button you will reload the program log even if you have selected the Paths option.

3.19   AutoStart

This dialog box allows you to control a scheduled backup which is about to start.
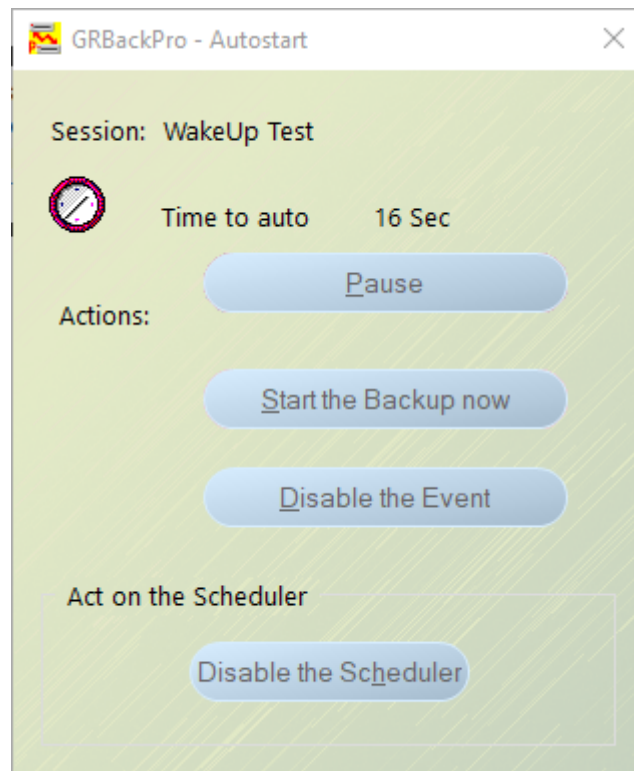
This dialog box is shown only if the option **Display Autostart dialog with delay sss seconds** has been enabled in the Scheduler panel when the scheduler has reached a backup start event. Before to execute the backup this dialog ask you a confirmation to effectively start the backup. Normally you need this extra step if you plan to execute your backup when you are working on your files. If the moment is not appropriate you can delay the backup execution by pressing the **Pause** button. The scheduler will stop until you press the **Resume** button again.

Session:

The backup session that should be started is displayed here.

Time to Autostart:

Here are shown how many seconds remain before the backup starts. This counter will count down until it reaches zero. When this counter is zero or when you press the **Start the Backup now** button, the backup operation will immediately start.

If you press the **Pause** button then you stop the time counter. After you have pressed the **Pause** button, the button itself will change name and become **Resume**. If you press this button again the time counter will start again from the preciously reached value.

If you press the **Disable the Event** button you will abort the scheduled backup and the Event is also disabled to disallow an immediate restart. You will have to enable it again later when the backup can be executed.
The **Disable the Scheduler** button lets you stop the backup and also to disable the scheduler. This choice will also prevent any other Event to be executed. You will have to manually enable the Scheduler again when you can allow the scheduler to automatically start the programmed Event as it was programmed.

3.20   Add/Edit Scheduler Event

This dialog box allows you to add or edit a scheduler event. It is called from the Edit button under the Scheduler tab.

From this dialog box you can specify a Scheduler Event in order to automatically start a backup and when to repeat it. Additionally you have options to force a full backup execution or to disable the event without having to delete it.

The scheduler has an advanced feature: if you have at least one scheduled event defined and you put your PC on stand-by (sleep) to save energy, then GRBackPro can wake-up your PC a few minutes before the scheduler needs to start your backup if the option **Wake up the computer to run this event** is enabled.

The option **Force Verify backup execution** will force a verify operation after the backup associated with this Event has been completed.

Event Name.

You can assign each event a name or just leave the default name. You already have a default name automatically added composed by Event plus a progressive number. You can easily change it from this edit box.

Sessions.

From this combo box you can select one or more backup sessions you want to run (you have check boxes to facilitate your selection). When you click on the right down arrow the list of available sessions is shown. The first item is always named **Check All Sessions**. Checking this item will automatically check all backup sessions, and clicking on it again will uncheck them all. This is a special selection because if you check all sessions then the Sessions field will be set to * meaning all Sessions currently defined and future. So checking the option **Check All Sessions** or checking any session name could seem equivalent but it isn't. If **Check All Sessions** is active then any new session you create will automatically become active. If **Check All Sessions** is not checked (even though every individual session is checked) new sessions will NOT be automatically made active.

Trigger (Start At).

You have the following options to start your backup:

- Program run
- Specified date

Program run.

With this option the backup will start every time you run GRBackPro. For example, if you have installed GRBackPro to execute at Windows startup, it will load after Windows starts and begin the designated backup(s) after the specified delay (up to 120 minutes).

Specified date and time.

The backup will start on the first available minute AFTER the specified date and time. When you select this option the Repeat group will be enabled.
Example: Suppose that the current date and time is 15 August @ 06:30 PM.
• If the Specified Start date and time is set to 15 August @ 03:00 AM. The first available date at the given time will be 16 August @ 03:00 AM, because time cannot flow backward.
• Conversely, if the Specified Start date and time had been set to 15 August @ 06:40 PM, then the backup would occur at that date and time.

Repeat.

You have the following options:

- One Time
- Every
- Daily, Recur every:
- Weekly, Recur every:
- Monthly. Months:

Following is a brief description of them.

One Time.

Execute the backup only once at the specified start date and time.

Every.

Execute the backup starting from the last executed date and time.
If no backup has been executed then the first run will be immediately.
You can then select an interval from the combo box, and a value within that interval. The backup will begin every N minutes, or hours, or days, or weeks, or months, according to the interval and value selected. The reference point is the last executed date and time instant.
For every interval N varying from 1 to 99.
Each option defines how many "units" of time should pass between two backups. All these options take the last backup run time as a reference from which to calculate the time lag. In summary the first time the backup will start at the specified date and time and all subsequent backups will be relative to this first time.

Daily, Recur every.

Execute the backup at the specified start date and time.
Then it will repeat it every N days. You can specify a recurrence value in days. This means that if you specify 1 then the backup will be executed every day. if you specify 2 then the backup will be executed every 2 days: run one day and skip the next day. In the same way, a value of 3 would run a backup every 3rd day, and so on. The maximum value allowed is 365.

Weekly, Recur every.

Execute the backup at the specified start date and time.
You can specify a recurrence value in weeks. This means that if you specify 1 then the backup will be executed every week. If you specify 2 then the backup will be executed every 2 weeks: run one week and skip the next week. The maximum allowed is 52.
In this option you can also specify what days of the week the backup must run. By clicking on the down arrow you will open a list of days of the week. The first selection is named **Check all weekdays**. clicking on it will check all other options and clicking on it again will do the opposite. This is a quick way to enable all or disable all weekdays.

Monthly, Months.

Execute the backup at the specified start date and time.
In this option you can specify the month when to execute the backup. You have a combo box that list all months plus the option **Check all months** that allow you to enable or disable all months with a single click. Then you can specify two operational modes:

- Days
- On

Days mode allows you to run the backup on any combination of days within the specified month. As before, the first option is named **Check all days** which allows you to quickly enable or disable all days.
On mode let you specify **Last, First, Second, Third or Fourth** weekday of the month. For example you can specify the Last Sunday of the specified months.

Execution Conditions.

In this text box are summarized the currently selected Event conditions. Click on the **Edit conditions** button if you want to edit them.

Edit Conditions.

When you click on this button the Event Execution Conditions dialog will open.

Force a Full backup execution.

This is an option to let you force a full backup even if the session backup method has been set to differential or incremental. It will cause the session to be executed as if you had set the "FULL" option in the Backup Method (Backup tab). By using the option here, you can schedule an event to force a full backup without having to change the backup session settings. What is the purpose? Well, when you execute incremental backups, for example, you may want to periodically refresh the backup set re-creating all. This serves to clean up the backup set by deleting files that no longer exist in the source disks. An easy way to do this without having to duplicate the backup session (that would mean maintaining two backup sessions) is to add a new scheduler event with the "Force full backup" option enabled. For example, suppose that you have a daily incremental backup and you want to run a full backup monthly. Well, all you need to do is to add a new event that runs the monthly backup with the option "Force full backup" enabled.

Wake-up the computer to run this event.

If this option is enabled and your computer is in Stand-By (Suspended mode or Sleep) then GRBackPro will be able to wake-up the computer few minutes before the scheduled backup start. After the backup is completed the computer will return into the Stand-By mode automatically.

Force Verify backup execution.

This is an option to let you automatically start a verify destination archives operation at backup completion.

Disable this Event.

This option lets you disable this event without requiring you to delete it from the event list.

3.21   Event Execution Conditions

Edit Conditions.

This dialog allows you to define the conditions at witch the Event should execute.
This is the dialog image:
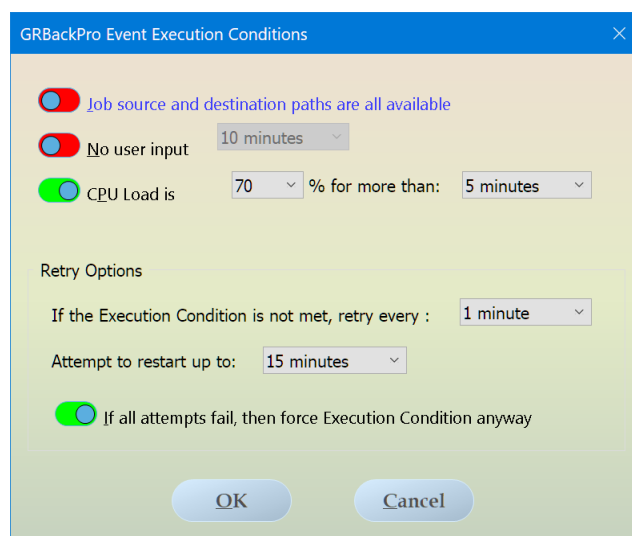
If no options are set then no condition will apply and the Event will be executed at specified date and time only.

The available conditions you can set are the following:

1. Job source and destination paths are all available
2. No user input for
3. CPU Load is under x % for more than

1. The first condition will test all Jobs to verify that all source and destination paths are reachable (or ready). This condition is helpful when you want to start a backup to an external removable drive and you want to wait that the drive is inserted. A typical example is an external USB drive. Once the drive is connected to a USB port then, after few minutes, the backup will start.

2. The second condition is helpful if you are typing or moving the mouse and then you don't want a backup to start because it will slow down your computer. You can specify here for how long the computer must not see any mouse or keyboard activity before starting the backup. The combo box offers a range of selections from one minute to two hours.

3. The third condition checks the CPU load level. The percentage of CPU load, and a time interval during which the CPU must remain at or less this level, are specified. The backup operation will begin once these conditions are met. This option prevent to initiating a backup operation if other processes require the CPU. It is an alternative to "No user input for" option, but it is smarter as the CPU load can be high even when you don't use your mouse or keyboard. The combo box offers a load settings that is a multiple of 10%, and a selection of inactivity settings from one minute to two hours.
When one of these conditions is enabled the bottom options named **If the Execution is not met, retry every** and **Attempt to restart up to** are enabled allowing you to program how often to test the condition and the duration of these attempts, after which GRBackPro will give up.

If all attempts fail, then force Execution Condition anyway

This option let you force the event execution in case the above conditions are not satisfied for the specified period of time.

3.22   Add/Edit Job

This panel let you specify the backup Job properties like the source path, the destination path, if you want to compress your files and more.

Source.

This group box allows you to define the source of your backup Job and specify if all the sub folders must be included or not.

You have an edit box where you can type a path manually. If you want a more user friendly help selecting a folder path then press the **>>** button on the right.

A folder selection dialog will appears to let you navigate on your system and select a local path or a network path.

Once you select a folder then hit Ok and you are done.

Include all sub-folders when backing up

This option automatically selects all sub folders of all checked folders. This option works at backup time. When you need to also include all sub-folders you can define a Job for the root only and then check this option. This will save you a lot of time and also will give you a backup Job that automatically will add any sub-folder you will create in the future.

Said in other words you only need to define a root path and with this option active all sub-folders will be automatically added at backup analysis time.

Clear archive attribute bit on source files

With this option enabled GRBackPro will clears the archive attribute bit of any source file that is backed up. This option must be activated when you select the archive bit logic (or Differential) method so that the program clears the archive attribute bit of any source file that is backed up. Because the operating system changes this archive attribute bit every time you modify a source file, GRBackPro can use this bit to select the changed files on the next backup. This option is useless if you select the Incremental or Full backup mode.

Include System/&Hidden files

You can include system or hidden files in your backup if you check this option. Hidden and System files are normally not user data files and often you can simply skip them. Use this option with caution because some hidden file could be locked and thus will generate backup errors.

Move files to the destination folder (DELETE source files and folders)

This option lets you move your files to the destination disk instead of copying them. **Exercise caution** when using this option because, if enabled, there will be only one copy of your files at backup end. This option can be useful if you want to move into a backup archive old files that you no longer need on the source disk.

Backup security attributes (NTFS only)

For NTFS drives you could be interested to also back up the file security attributes. Enable this option to do that.

These security attributes hold user permissions and are only valid for NTFS formatted file system disks. This feature should usually be left off, as it can cause problems when the backed up files or directories have permissions set which could prevent GRBackPro from operating on them properly when it try to update them. The exception to this would be if you are doing a one-time backup (usually a copy) in readiness to copy an entire drive to a new computer. If you are planning this operation, however, it might be better to consider the use of drive imaging software.

Watch this Job changes and backup it automatically

This option when active automatically starts the OnChange backup for this Job. The Job source is constantly and automatically checked for any change. When a change is detected after a time of about 2 minutes the Job backup is started. For changes we mean: an added file, a changed file or a deleted file. The whole Job source is backed up in incremental mode.

Network login (if needed)

There are occasions when you need to back up a folder that is on another computer and that computer doesn't have your same login/password. In this case in order to access that folder you need to supply different credentials. This option should solve the problem. You can specify here the user name and the password in order to be able to access that folder.

Destination.

This group box allows you to define the destination of your backup Job.
You have an edit box where you can type a path manually. If you want a more user friendly help selecting a folder path then press the **>>** button on the right.
A folder selection dialog will appears to let you navigate on your system and select a local path or a network path.
Once you select a folder then hit OK button and you are done.

Enable Zip compression:

Here you define if you want to activate the GRBackPro Zip compressor or not. If enabled you can choose between 3 compression levels: Standard, Medium or High.
Sometimes you have files in a source folder that are big in size or already compressed. In this case you can create a single backup Job that doesn't compress this big files but only copy them (quicker operation). If this folder is already included in another backup Job all you have to do is to edit this Job and insert this "copy only" folder name in the skip folder names edit box. This method will save you a lot of time compressing files that cannot be made smaller than they already are.

Synchronize destination archive with source folder

Check this option if you want to synchronize your backup archives/files with your source. This option tries to align the destination folder with the source folder and thus can act on already present destination files. For example, if you rename a source directory or delete a source file, your backup will be updated accordingly, so that it matches your source.
Important: Exercise caution when using this option because it can delete files in the backup archive.

Network login (if needed)

There are occasions when you need to back up to a folder that is on another computer and that computer doesn't have your same login/password or to an external NAS device. In this case in order to access that folder you need to supply different credentials. This option should solve the problem. You can specify here the user name and the password in order to be able to access that folder.

Include.

From this group box you can specify what files include in your backup Job.
You can select if you want to include **All** files or include files **Older equal than** N days or include files **Younger than** N days respect to the current date.
You can also specify the file specification of the files to include. If you do not define anything, the default will be *.* (i.e., all files). In this edit box you can for example include all file with a specified extension (e.g., "*.txt") or a specific file name (e.g., "myfile.ext"). You can specify many file extensions or file names, each separated by a semicolon.
If you want a more user friendly way to add them you can click on the **>>** button and a dialog box will appear that will help you easily define what to include. In this dialog you can specify a name and then select a prefix and an extension and the click Add to add it.
See Edit the folders to skip topic to lean more.

Exclude.

Here you have two edit boxes.

The first one let you specify specific file names to exclude from your backup Job. As specified for the Include option you can use the wild character like * (MSDOS style) to define a class of files or directly type specific file names. If you want a more user friendly way to add them you can click on the **>>** button and a dialog box will appear that will help you easily define what to include. In this dialog you can select an existing item, modify it and then press the Cahnge button or simply type in a new name and then select a prefix and/or an extension from the combo boxes and then press the Add button.
See Edit the folders to skip topic to lean more.

On the second edit box you can specify the folder names that must be skipped. Also in this case by pressing the **>>** button you will be able to browse your folders and select the folder name to skip.
See Edit the folders to skip topic to lean more.

3.23   Add/Edit Task

This dialog box allows you to add or edit a Task to be executed before and/or after a backup execution.

The **Select Task** group allows you to specify the kind of task to execute.
Here is a list of them:

- Execute Application   Name is the application name, Param. are the parameters
- Close Application   Name is a text string to find in the application title bar
- Start Service   Name is the service name, Param. are the parameters
- Stop Service   Name is the service name
- Pause   Specify the number of seconds in Param.
- Email Message   (Name is the destination email, Param. is the Subject
- Display Message Box   Name is the message title, Param. is the message text
- Terminate Process   Name is the process name
- Run Pause   Param. is start time HH:MM, duration time in minutes

The options are almost self-explanatory. As you can see, the parameters you have to specify for each option can be put in one or more of these edit boxes:

- Name / To:
- Param. / Subject:
- Message Text:

The task names clearly explain where to put the task parameters in these edit boxes.
In the cases when the **>>** button is enabled will let you quickly select an item. For example in case you have selected to Terminate a Process then by pressing the **>>** button you will be prompted with a list of currently running processes.
If you select the **Execute an application** task, then you will also have the option **Wait execution completion**. This option allow you to define if the application must terminate before to proceed and thus GRBackPro should wait the application completion before to execute the next Task, if any, or the backup itself.

Add Email message at backup end example.

You can ask the program to send you an email message at backup end if there are errors. The following dialog box is an example:

Run.

This option group lets you define if to run the Task **Before** or **After** a **Backup** or a **Restore**.

Execute.

This option group lets you define when to execute the task.

- **Always** means that the task is always executed.
- **Only if there are errors** means that the task is executed only in presence of errors.

- **Only if there aren't errors** means that the task is executed only if no backup errors will be present.

Attach the last run log file.

When you select to email a message, this option is active and lets you attach the backup log report to your email message.
Due to email server limitations the log file will not be sent completely if bigger than 10MB.
Instead the first 10MB of it will be send plus some lines that states that some parts are missing.

NOTE: Even if you do not select **Attach log Report** GRBackPro will place the list of errors in the email body.

Disable this Task.

If checked this Task will be disabled.

3.24 Service Admin

This dialog box allows you to control the backup execution when you logon and GRBackPro is running as a Service and a backup is executing.
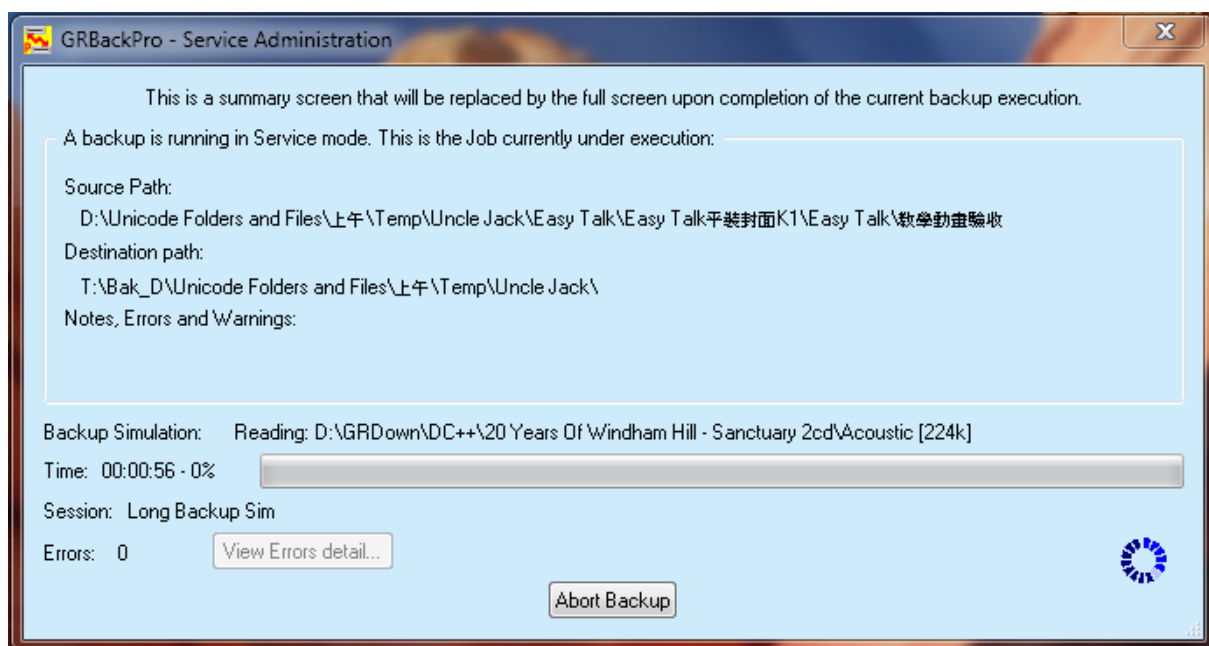
When **GRBackPro** is installed as a Service (usually used for Server installations) it normally runs when no user is logged in. So if you log in when a backup is under way you would not see the **GRBackPro** icon in the tray icon bar as usual. This is because **GRBackPro** cannot restart on the currently logged in user session as it is busy running a backup which must complete before **GRBackPro** will restart.
So the Administrator's problem is that he/she doesn't see anything about what **GRBackPro** is doing and how much time is required to complete the current backup. Also he/she has no way to abort the current backup if required. To solve this problem we have added the dedicated dialog that you see above.

In order to see this dialog you need to run a second copy of **GRBackPro** from the Start menu or from a Desktop shortcut without supplying any .grb file on the command line. If you have created an icon on the desktop that works on a different .grb file than the currently running copy, a second copy of **GRBackPro** will be executed and you will be using local settings instead of the Service one. The same is true if you click on any file whose extension is .grb. When a second copy starts without any supplied .grb file then **GRBackPro** will check if a backup is running on a Service copy and then will activate this dialog.
The access to this dialog can be defined using Service Customization options.

From this dialog you can monitor what the **GRBackPro** Service copy is doing. This dialog mimics what you normally see on the Progress tab but in order to limit the quantity of information transferred between the second copy of **GRBackPro** and the Service running, only the current Job is shown. The progress bar and other information is displayed as you see above.

Job currently Executing.

In this group **GRBackPro** replicates what is the currently under execution Job. You will see the current source path, destination path and the notes, error and warnings columns that are in the Service **GRBackPro** Progress tab. If you want to see long paths you can resize this dialog horizontally. Vertical resize is not allowed.

Errors.

This allows the user to see if there were backup errors and to see how many errors there were. Near this information there is a button named View Error details that is enabled only if there are errors. The implementation for this button is not yet completed. It will be in a future version.

Abort Backup.

This button lets you abort the backup currently under execution. You will be asked to confirm that you really want to do this as a protection against an inadvertent button press. When a backup is aborted or completes naturally then this dialog will automatically close because **GRBackPro** will automatically restart (after a few minutes) so that you can view the backup Report and/or change the program options.

3.25   Service Customization

You can customize the service installation using the file GRSrv.ini.

When **GRBackPro** is installed as a Service (usually used for Server installations but not limited to a Server) it normally runs without having a user logged in.
By default the service will restart **GRBackPro** in the current user session if it is not already running on another user session. This restart is to ensure that at least one user can see the user interface and change its options.
The network administrator can restrict the program visibility and/or access by creating the file GRSrv.ini.
This file should be created in the folder where you already have the file GRSrv.log (for Windows 2008 Server it is in this folder c:\ProgramData\GRSoftware\GRBakPro\).
GRSrv.ini is a simple text ASCII file that can have these lines:

OnlyRestartOnElevatedAccounts=Yes
OnlyRestartOnGroup=Administrators
OnlyRestartOnAccount=Administrator
OnlyRestartOnAccount=John Smith

the word on the left of the = sign is a keyword and should not be changed, while on the right you can place your strings.
No validity checking is performed; it is the administrator's responsibility to ensure these strings are valid.

You can put up to 10 lines of kind:

OnlyRestartOnAccount=

That can also be written as

OnlyRestartOnAccount1=
OnlyRestartOnAccount2=
OnlyRestartOnAccount3=

And so on. Adding a number could facilitate to keep track of how many users you are defining and keep in mind that you can add max 10 of them.
These 10 options let you specify the users that are allowed to see the **GRBackPro** user interface.
The user priority is top listed will be the first checked.

The other two options (**OnlyRestartOnElevatedAccounts** and **OnlyRestartOnGroup**) should be present one time only!
If there are multiple statements of these options only the last one in the file will be used.

The option **OnlyRestartOnElevatedAccounts** accepts the string "Yes" and it is case sensitive. Any string other than "Yes" will be considered as No. If you want to disable this option set it to anything different from "Yes" or remove or comment it.

The option **OnlyRestartOnGroup** will accept a valid user group name.
In all options if there is no equal sign the option is ignored. If the equal sign is present but there is nothing after it then the option is considered empty.

Putting an extra character in column 1 will void the option. For example:
;**OnlyRestartOnAccount**=John Smith
Or
z**OnlyRestartOnAccount**=John Smith
Or
abc**OnlyRestartOnAccount**=John Smith

So you can leave all options there and comment the ones you don't want active.

In order to have the **GRBackPro** service (GRSrv.exe) read the modified INI file again after a change, you need to Restart the Service.
While the Service is running you can modify the GRSrv.ini file as it is not left open nor read in any way until you restart the **GRBackPro** service.
Of course in this way your changes are not immediately implemented.
To restart the service, open the Administrative Tools / Services and locate the service **GRBackPro**. At this point right click and select Restart.
If Restart is not available or it is disabled select first Stop and when the service is stopped then right click again and select Start.
Note that to prevent users from changing GRSrv.ini, you will need to change the file's security settings.

The service will check the options in a particular order. The first one to be checked is **OnlyRestartOnElevatedAccounts**. If this option is verified then the user is granted access and no other options will be checked. If, for example, all options are specified and your current user is not elevated then the Service will check the option **OnlyRestartOnGroup** to verify that the current user belongs to this group. If this is true then the access is granted and again no other options will be checked. Finally if the above two options are not present or not verified then the Service will check the specified user list. The first listed user will be checked first, so it has higher priority over others. If the current user is listed here then access will be granted.

When access is granted as per the above sequence of checks, then the **GRBackPro** user interface can be seen ONLY if a backup is not running at that moment. If a backup was not started when no user was logged in then it will take up to one minute before the program icon will show on the tray icon bar. To check how the backup is proceeding you can start a second copy of the program from the start menu.
GRBackPro will engage a communication with the running Service copy and will allow you to see the Service Admin dialog that summarizes the running backup but only if are granted the access to it. From this Administrative dialog you could choose to abort the current backup in order to quickly gain the user interface control. In this case the Administrative dialog will close, and after a delay of up to 1 minute the regular **GRBackPro** logo will appear in the task bar. At this point, the user can open the program user interface and proceed as usual.

3.26   Edit the folders to Skip

This dialog try to simplify the definition of file names or folder names inside a path.

The common problem that this dialog try to solve is to specify a folder or file name that you want to include or exclude from a backup.
There are folders or files that could be temporary or that doesn't contains any user related data. Backing up them is a waste of time and also could generate errors in case they are temporary (GRBackPro see them in the analysis phase but when it comes to back up them no more find them).

The name specification can contain the * to indicate all text.
For example: if you want to skip all files that contains the word cache then you can specify *cache*.*

You can easily do this using the two combo boxes named **Prefix** and **Extension**. So you only need to type a name in the **Name alone** edit box and then select an option on the combo boxes if needed.
When you have done this you can press the Add button to add your specification string on the list below.
If you need to modify an item of the list you have to select it and the prefix, name alone and extension will be filled automatically. Then you can change a combo box or the name and then press the **Change** button to apply your changes.
With the same approach you can select an item from the list and then press the **Delete** button to remove that specification.

When you are done press the **OK** button to confirm your changes or the **Cancel** button to discard them.

GRBackPro Manual

Part IV

4   How-To Topics

4.1   Configuring Your Backup

GRBackPro has been designed to let you define many backup sessions. A backup session is a collection of backup Jobs each one specifying a backup task. Each backup Job has the following elements:

- A source path (containing the files for backup)
- A destination path (where to put the backup files or archives)
- A list of files or file extensions to include or exclude
- An option to backup all the sub folders of the source path (at backup time)
- An option to add this Job to the OnChange engine
- An option to define the zip compression level
- A list of folder names to exclude

The source and destination path names can be a disk root (drive letter followed by the ':' and the '\' characters) if you want to back up a whole drive, a normal path name or a network UNC path name. The program also gives you the flexibility to include in your backup Job a simple file name or a file extension in order to back up only selected files (for example *.txt). GRBackPro supports Unicode folder names and long path names up to 1024 characters.

The backup modes

You have three backup modes:

1. Full (re-create all)
2. Incremental (update)
3. Archive bit logic (differential)

See the Backup panel for a detailed description of them.
If you want to maintain (i.e., update) a single backup set then you have to employ the **Incremental** backup mode. This mode requires that the destination disk is always reachable so that **GRBackPro** can compare the current source files against the current backed-up ones. Then you can employ the scheduler to force, say once a month, a full backup in order to re-create all and eliminate from the backup all files that no longer exist in the source.
You can employ an **Archive bit logic** backup mode when, for example, your backup spans multiple media. In this case you have to first do a full backup in a set of media with the option **Clear archive attribute bit on source file** enabled. This will mark all your source files as already backed up. From now on, every time you change a file, Windows will set the archive bit attribute again. At this point you can execute a differential backup in another destination media and go on with this mode till a disk full condition is reached or until a sufficient amount of time is passed. At this point you can restart a full backup again. The disadvantage of this method is that when you want to restore you have to first restore your full backup disk set and then restore your differential backup disk.

The destination backup ZIP archive.

From the Adv. Backup tab, you can specify if you want to create a single compressed archive file or if you want to create the exact directory tree of your source disk and a single ZIP compatible archive for every source folder.
The most powerful option of the **Backup** tab is the **Destination path layout**. Using this option you can define how your destination disk will be organized. For example, you can let the program to place a sub folder named "Bak_sd" where the symbol 'sd' (stand for source drive) is replaced, at backup time, with the source drive letter. This option is needed in order to be able to restore to the same source disk drive. If you haven't this "Bak_sd" directory you must specify the restore destination path name by hand. You can also specify an additional path name that will be placed before the "Bak_sd" folder. You can use this option to make different copies of your sources at different times (see the Backup tab for more details). Note that if the destination path changes at every run (for example using the options that involve the time), the program will always perform a full backup instead of updating only the changed files. These timed options

can be used when you make a differential backup as this kind of backup selects the files to back up by scanning the source folders only.
For every source folder, if the compression is enabled, **GRBackPro** will create a ZIP archive normally named $backup.zip (but you can customize this compressed archive name). If the compression is disabled the files will simply be copied to the destination path.

How do I make a single backup archive?

You can enable, from the Adv. Backup tab, the option **Build a single zip archive with stored path names** that lets you have a single compressed file in a single destination folder. All source folders names will be replicated into the zip archive. This option is affected by the fourth combo box of the destination layout option of the Backup tab that specify if you want to include the Job source path or not. We do not suggest that you leave this option blank. By omitting the source path you may cause a duplicate file name error unless all your source files have different names.

How to create a split backup

When you want to create a backup set that you want to manually copy to CD-R or DVD to have a safe copy far away from your PC (to have a backup in case of fire for example) then you can activate the Split mode (see the Backup tab under the **Destination path layout**, third combo box). Using this mode you can specify a split size. When you execute the backup **GRBackPro** will create as many Disk_nn folders as required every time the backup size reaches the specified size. For example if you specify 700MB then you can have at backup completion the folders Disk_01 and Disk_02 in the destination disk that fit the specified size. You can easily burn these folders in two CD-R media one by one quickly. When the burning process is completed you can manually delete these folders and all sub folders or they will be automatically deleted on the next backup run because enabling the split mode will also force the full backup mode.

How to create a backup history

If you want to save a certain number of backup sets into the same destination disk the **History** option (Backup tab) will solve your problem. For those that work on many cross-related files and that make many changes every day, it is important to be able to go back to a previously stable situation or simply undo the last changes. This can be done using the backup history function (see the Backup tab under the **Destination path layout**, third combo box).
You can specify the number of backup copies to keep (history deep). **GRBackPro** will delete older copies and create new ones. The folders are named Hist_nn and nn is a number that starts from 1 and goes to 99 then restarts from 1 again. If you specify an history deep of 3 then you will have 3 full backup runs. Next, only update backups will take place because destination files already exists. If you will increase the History value then full backups will be executed for a number of times that is the difference between the new history value and the old one.

Why the destination directory must start with "Bak_sd"

This folder name is needed by the restore procedure to know from which source drive this backup archives comes. The other purpose of this folder is to have a well-defined way to identify the root folder of any backup archive (if you do not use any additional path name in your destination path layout). For example, if you have 2 drives and back up each one to the other (ie. C -> D and D -> C), when the backup starts the second time it will also back up the directory created by the first backup run if there is no way to distinguish it. If you do the backup of the previous backup you will waste useful disk space. **GRBackPro** can automatically skip all the directories that start with the string "Bak". If you enable the option **Skip standard folder names: Bak*;Tmp;Temp;Recycle*;System Vol*** in the Options tab the program will skip these commonly used directory names that do not contain useful data. The directory skip match can be case insensitive if you disable the option: **Make skip folders options case sensitive**. As explained, putting a Bak_sd folder in your destination disk will ensure that you don't back up any folder that already contains backup archives.

A Simple Backup Example.

To better explain how the program works, let's take a look at this simple example.
Suppose you have two drives: C: and D:. Also suppose you have the following directory structure you want to back up:

```
c:\win
c:\win\system
c:\win\system\DirectX
d:\works
d:\works\project1
d:\works\project1\res
```

Suppose you have not selected any additional folder name to add except the standard one (Bak_sd). Suppose you have inserted the following two Jobs (with the include all sub-folders option enabled):

```
c:\ ----> d:
d:\ ----> c:
```

GRBackPro will back up all files in all directories. It will create the following destination folders:

```
c:\Bak_D
d:\Bak_C
```

Inside each folder you will find the exact disk structure of the respective source drives:

```
c:\Bak_D\works
c:\Bak_D\works\project1
c:\Bak_D\works\project1\res
d:\Bak_C\win
d:\Bak_C\win\system
d:\Bak_C\win\system\DirectX
```

In each folder you will find the file $backup.zip (or a different name if you have selected a customized name in the Backup tab, destination path layout options).

Backup problems you can find.

Examples of problems that you can find while backing up your files are:

- Already opened files (for write) that cannot be read
- Network drives that do not have the write permission.

When you try to back up opened files in write mode you will get an error message with the option to retry. The program will automatically retry every 10 seconds. if you have the Windows Shadow Copy service enabled then the program will automatically try to create a snapshot of the source disk in order to backup the locked file. If all will go well you will not notice about this extra step and your backup will be completed without errors. If the windows Shadow Copy service is not active you will get an open error with the retry option. If you will press the Cancel button your backup archive will not have the current file or it will maintain an older copy of it.

These errors and all other program errors will be displayed in a message box ONLY if you have enabled the option **Attended backup (Stop & Prompt for error and confirmations)** (see Options tab). In any case all errors found will be collected into the Log file.

Running the backup as a Service.

This run mode makes the program a server application. Running the program as a service lets you run a scheduled backup even if no users are logged in. You have to specify the user credentials that **GRBackPro** will use to login in order to reach all the network resources it may need to complete the backup Jobs. These login credentials must give the program sufficient permissions to complete the backup operations.
When the program runs as a service it can't be closed but must be stopped from the control panel / Service options.
When a user login then GRBackPro is restarted in order to run on the current user login session and credential. So, if you run the backup while a user is logged in, the backup will be executed using the current user credentials.

When you back up to networked drives it can happen that the currently logged in user doesn't have sufficient permission to write files. In this case you have to modify the shared resource permission in order to enable the currently logged-in user. This problem often occurs when the program is running "as a service". In this case, if no user is logged on, GRBackPro runs on the system account and thus doesn't have permission to reach any network share. To access your network you must open the Adv. Backup tab and define the **Service Options**. Here you can put a valid login name and password (and optionally a Domain name) so that **GRBackPro** can impersonate that user and gain access to your network shares. If you are not running as a Service then you need to disable password protection on the shared folders you want to backup or alternatively always use the same account to access all shares. This means that you must login as "Backup User" and make your shared folder always available to the "Backup User".

4.2   Configuration Wizard

On this page we explain the main steps you must do in order to configure the program to backup your data.

1) Define a session name.

You must define a backup session where to insert your backup Jobs. This can be done from the Jobs panel by clicking on the **New** button.

2) Add your backup Jobs.

You can add as many backup Jobs as you need by pressing the **Add** button in the Jobs panel. You will get the Add/Edit Job dialog box when you can define the Job specific options and details.

Tip: The option **Include all sub-folders** allows you to insert only a root source folder and have all the sub folders automatically included at backup time. This will allow you to automatically include new sub folders you will create after you have created the backup Job.

3) Define your backup and/or restore options.

When the list of your backup Jobs is completed you must define the backup options for all your Jobs. You must go to the Backup and Advanced Backup or Restore panel to complete this operation. Remember that the backup and restore options are stored for each session and thus different sessions can have different backup and restore options.

4) Define your session scheduling.

By default your session will not be scheduled. If you want your backup to start automatically at a predefined time or every specified period you must go the Scheduler panel. The scheduler options let you specify for any defined Scheduler Event the sessions that must be executed.

5) Define your Global options.

You can define the global program options from the Options panel. These options do not depend on what backup session is selected so they are always valid.
Tip: if you run your backup overnight in unattended mode, disable the option **Attended backup (Stop & Prompt for errors and confirmations)**.

6) Define your Report options.

The program stores all the backup and restore activities in a Log file. You can define the Log options from the Report panel. When first using the program it is better to have the **Detailed** or **Debug** log mode enabled so that you can track all operations in any detail or report to us any problem you may find. In this optic you could also find very helpful the **Simulate Backup Execution** (Backup panel) and **Restore simulation** (Restore panel) options that allow you to verify your backup and restore options without writing to the destination disk.

7) Start the operation.

At this point you have configured your backup and restore so that you are ready to press the **Backup/Start** or the **Restore** panel **Restore Start** button to build your first backup or restore.

4.3   Backup Strategies

The effectiveness of **GRBackPro** depends on your approach to file backup management. The following are key considerations:

- How valuable are your files?
- What would be the consequences of losing these files?
- Could you replace them?
- If so, what would be the time and cost required?
- How often do these files change?
- Do you need to keep older versions of files?
- Does the destination device you use have any limitation of time, media capacity, or expense?
- Do you need to transport or distribute your backed-up files?
- Once backed-up, how important is immediate access to these files?

These issues can be divided into some basic categories: value, change, performance, media capacity, and portability. Strategies are usually based on a combination of these considerations and you should develop a plan that is appropriate for your needs.

Value: when you devise a strategy, consider your cost in time and money to replace lost files. For example, if you work for an insurance company managing client information and claims, then you would probably consider file loss disastrous. The consequence of losing irreplaceable files makes it desirable to back up your files every day to different media.

Change: how often your files change is another key element to consider when planning an effective strategy. For example, losing even part of one day's input at a mail-order house would result in many lost orders and lost revenue. Your strategy might be to back up any changed files periodically throughout the day to ensure that a recent copy of all files exists.

Media capacity and device performance: you should back up completely once a day but this is not always possible due to time, media, or device restrictions. To effectively plan a strategy, you must assess your physical setup (for example, type and size of the available backup device). Your strategy depends upon the kind of backup device you use, just as you may choose a device in response to the kind of strategy you consider necessary.

Portability: media portability may also influence the strategy you implement. For instance, in situations where files must be circulated within your department or sent to another site, you would want to use a backup device to physically transport your media. You must also choose a device with media compatible with other devices and with the environments to which you send the data.

Media.

Use only high-quality media for your backups. GRBackPro is careful to check that each media is reliable but you can increase your long-term reliability of the backup when you use high-quality media.

Hardware.

Ensure that your hardware is fully operational. A backup program cannot operate effectively if the drive is not perfectly working. Faulty disk controllers and other circuitry can also cause information to be written incorrectly to the media compromising existing files.

Labeling.

Clearly label all backup media. This will allows you to easily retrieve them when you have lost a file.

Media Rotation.

There are two types of backups:

• Full
• Modified (which may be an incremental or a differential type)

Compared to the Modified mode, the Full backup of your files requires more time and media. A Full backup however, should be performed regularly (probably at least once a week, depending on your work volume). A Modified backup saves time and media. Usually, only a few files on your hard disk are new or have been changed each week. The Incremental mode backs up any files that have changed or been created since the most recent Full or Incremental backup. The Differential mode backs up all files that have changed or been created since the most recent Full backup.

Basics of a Good Strategy.

Regardless of which approach and media you choose, there are several elements fundamental to all good strategies.

• **Secure Off-site storage.** If your business were struck by fire, flood, or theft, you could still restore it from a recent copy of your files kept off-site.
• **Secure On-site storage.** Store your media in a fireproof safe to enhance security. Remember that you want to have easy access to your most vital backed-up files.
• **Write protection.** Backup copies may be the only way to re-create files in case of loss or damage. Write-protecting your backup media ensures that they cannot be accidentally overwritten.

NOTE: you should write-protect media even if it is password-protected since a password does not prevent media from being erased or overwritten.

Backup Strategy.

To minimize data loss and computer downtime when a hard disk crash occurs, you should follow these rules when backing up your data:

1. Perform a Full backup of your hard disk, and make sure that the option **Clear archive attribute bit on the source file** on your backup Job is checked. Place this backup in a safe place.
2. Perform Modified backups as a part of your future backup strategy rather than backing up your entire system. This method saves time and media. When you select the Differential mode GRBackPro backs up only those files that have been modified or created since the last Full backup. This means that the Incremental backup method will not work with this strategy. If you use the Differential mode you still need to periodically do a full backup.
3. Maintain at least two sets of backups with Modified backups, and rotate these sets to be prepared for a system crash. Restoring the latest backup set updates your system to its latest (hopefully stable) state.

Strategy Implementation.

You should consider how often you want to back up your files and which files you should back up. A regular Full Backup and Restore verification is recommended but whether you supplement that with Incremental or Differential backups depend on your needs.

These questions may help clarify your situation:

• If your files are damaged or deleted, how many days of work will it take to re-create them?
• What is the oldest version of a file that you anticipate you may ever need?

Rotate a minimum of three sets so you always have a recent Full Backup and two alternating sets of media, which contain specified backed-up files. If either of these sets becomes damaged, you have another recent copy on hand.

4.4 Restoring your data

To start go to the Restore panel. By pressing the **Restore** button on the bottom you can only restore complete folders. In order to restore single or selected files you must press the **Single Files** button. This button allows you to browse your backup archives and optionally restore some selected files only. If you are already accustomed to other zip archive handling programs (such as Total Commander) you may find it more convenient to use that tool. The **Single Files** button is just an integrated facility to assist you. The option **Source / Session folder** in the Restore panel, sets the program to automatically detect the correct restore path. If you instead select the **Source / Folder** option then you can define the folder you want to restore to. The option **Include all sub-folders** lets you specify if you want to restore the source folder only or also include all sub-folders.

The **Destination / Original source folder** option can only be selected if you have backed up with the option **Bak_sd** active (see the Backup panel). In this case the program can extract the original source drive letter and rebuild the complete original source path name. In all other cases you must use the option **Destination / Folder** and specify the root of your sub-folder tree backup archives.
Using the option **What to Restore**, you can optionally use the Restore feature to decompress all files that match a specified zip file name or decompress all files (including the case where more compressed archives exist in a single folder) whose extension is .zip. You can thus employ **GRBackPro** to decompress any PKZip compatible archive in a selected destination. Alternatively, if you do not use the compression, you can simply copy all files.

The restore procedure lets you also synchronize two machines and delete source files that no longer exist in the backup archive enabling the option **Synchronize archive deleting destination files that no longer exist in the archive**. If this option is active, the program will ask you, with a specific dialog box, if it can proceed to delete the source file(s) or not. This additional dialog box is required for safety reasons and you must agree to the delete operations because you are deleting your source files. If you are sure that some folders never require this confirmation you can simply list these folder names (but not full path names) into the **No delete confirmation in folders** edit box. Separate folder names with a semicolon or a colon.

4.5 Registry Restore

If your system does not boot due to a registry file failure you need to restore a registry backup. To do this, you need to start the Windows Recovery Console, create a temporary folder, back up the existing registry files to a new location, delete the registry files at their existing location, and then copy the registry files from the backup folder to the C:\Windows\System32\Config folder. When you have finished this procedure, you can restart the computer. To create a registry backup see the Backup panel. Be warned that any changes you have done on your system since last backup run are lost. This means that you have to restore the latest backup registry first and then, if your system still doesn't boot you will have to repeat this process, going back through earlier and earlier backups until your system boots up again.

To start the Windows Recovery Console, follow these steps:

Insert the Windows installation CD/DVD/USB pen drive and then restart the computer.
Click to select any options that are required to start the computer from the CD/DVD/USB pen drive if you are prompted to do so.
When the "Welcome to Setup" screen appears, press R to start the Recovery Console.
If you have a dual-boot or multiple-boot computer, select the installation that you want to access from the Recovery Console.
When you are prompted to do so, type the Administrator password. If the administrator password is blank, just press ENTER.

The following procedure assumes that Windows was installed to the C:\Windows folder. Make sure you change C:\Windows to the appropriate windows folder if it is a different location.

Also we assume that the backup of the registry was done locally so that it is located in one of the Baknn folders. For the following example we suppose that you want to restore the Bak12 folder.

At the Recovery Console command prompt, type the following lines, pressing ENTER after you type each line:

cd c:\windows\system32\config
md backup
copy system backup
copy software backup
copy sam backup
copy security backup
copy default backup

delete system
delete software
delete sam
delete security
delete default

copy bak12\system .\
copy bak12\software .\
copy bak12\sam .\
copy bak12\security .\
copy bak12\default .\

if you have backed up using zip compression then you have to decompress the $backup.zip file first in order to expand the above files. To do this you need a pkunzip utility or any other command line utility that is able to unzip. Instructions on how to do this can vary depending on the unzip utility you will use.

Type exit to quit Recovery Console. Your computer will restart.

If your system boots but your user settings are corrupted then you can restore only the user settings in a similar way but changing the folders where the registry hives are located.
There are two folders where the user registry has been backed up. These files are user settings and thus are located in (Windows XP) C:\Documents and Settings. Here are listed all computer users, so you have to choose for which user you want to restore the registry settings. Assuming you are interested in the Administrator user for example give us these two folders:

1. c:\Documents and Settings\Administrator
in which is stored the registry hive NTUSER.DAT

2. c:\Documents and Settings\Administrator\Local Settings\Application Data\Microsoft\Windows
in which is stored the registry hive UsrClass.dat

If you want to restore the settings for the user Administrator and you are currently logged in as Backup User then you can handle these files from Windows Explorer because they are not locked. If, instead, you are logged in as Administrator you cannot manipulate these files because they are locked by Windows as they are in use. In this case you must log out and then login using a different user name (with sufficient rights, i.e., from the Administrators group) or run the recovery console as explained above logged in as Administrator.

GRBackPro Manual

Part

V
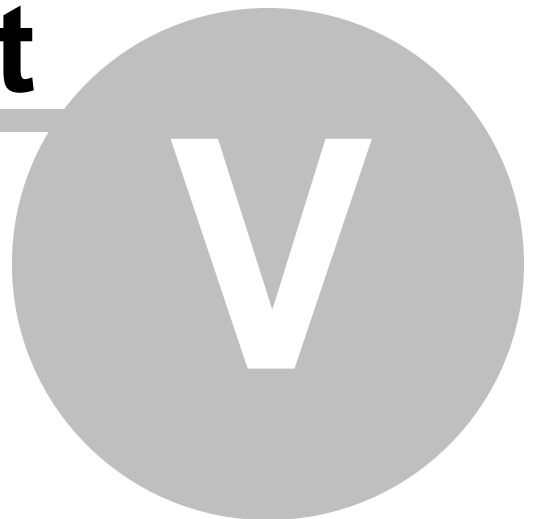
5 Advanced Techniques

5.1 Configuration File

GRBackPro automatically stores all the program options in a text Unicode file (Windows INI file) that by default is named GRBakPro.grb. You can override this file by specifying another one on the command line. This file is very similar to a Windows .ini file and is constantly updated by the program without your intervention (i.e., you don't have to remember to save it because it will be automatically saved when necessary e.g. a change is made).

When **GRBackPro** is executed without any file specified on the command line, the program loads (or creates if the file does not yet exist) a default file named GRBakPro.grb. This file is stored on the current user data folder as specified by the Windows rules.

When you exit the program, you can rename the default file GRBakPro.grb and copy it where you want, but remember to leave the .grb extension. The setup program registers the .grb file extension into the Windows shell so that every time you double click on a file with the .grb extension, **GRBackPro** will be automatically executed and it will load that file.

Keep in mind that the **GRBackPro** will automatically quit if you try to run a second copy that is using the same .grb file. This is to prevent file corruptions.

You can employ this technique to have different backup configurations to accommodate different backup situations. Having different configuration files allows you to have different backup setups, one for each configuration file, and each with its associated log file (because the log file take its name from the configuration file).
Example: suppose you do a daily backup to an USB external hard disk and a weekly backup to a DVD-RW. You would have two .grb files and could place a shortcut to each on your desktop. Every time you want to run your backup, all you have to do is double click the appropriate backup icon. When the program opens, simply click the Backup button and your backup will start. There's no need to choose a session first in this case. The alternative is to have all options into a single configuration file but in different backup sessions. In this case you always run the program, then select the backup session you want to execute and finally press the Backup button.

GRBackPro keeps track of all its activities in a log file whose name is GRBakProProgram.log.

The file GRBakPro.grb is stored in a folder that depends on the current user. To know where it is located you need to go to the Report / Program Logs panel and then click on **Paths**. Here are listed all files that program handles.

5.2 Volume Shadow Copy Service

How to start the Volume Shadow Copy Service:

1. Click on the Windows Start logo in the lower left hand corner
2. Click "Run"
3. QUICK ALTERNATIVE (necessary on Windows 8 that is missing the Start logo) for steps 1 and 2: pres the Windows button and then the 'R'.
4. Type services.msc and press <Enter>
5. A window will open titled "Services"
6. If necessary, double click on "Services (Local)" to view the list. You may also need to select "Standard" before the list is displayed.
7. Scroll down to near the bottom and find "Volume Shadow Copy" (You may need to widen the column to see the name clearly)
8. Double click "Volume Shadow Copy" (or right click and choose "properties")
9. If the startup type is set to "Automatic" or "Automatic delayed start" you're done, otherwise set the startup type to "Automatic".

10. Click "Start" if it is not already running
11. Click "OK" to exit the properties page.
12. Click the X to close the Services window.

Volume shadow Copy services will now run automatically and should need no further attention.

GRBackPro Manual

Part VI

6　Support

6.1　Email To Support

Are you having problems? Do you wish to ask support?

From inside the program go to the Options panel and then click on the **Email Support** tab.

In case the email options doesn't work in your case you can always send us a normal email message to: support@grsoftware.net

In order to allow us to investigate immediately on the problem you have found we ask you to precisely describe the program and, if possible, state the steps you have done to excite it. We also require the you send us some files: **GRBakPro.grb, GRBakPro.log, GRBakProProgram.log, GRSrv.log.**

Where do I find the required files on my computer?

This is easy. Go to the **Report** / **Program Logs** panel and then click on **Paths**.
You will see there the list of the files that GRBackPro has managed or updated recently.
Just copy the file path from here and then attach that file to your email message.

6.2　Update / Support

Are you having problems? Do you wish to ask support?

From inside the program go to the Options tab and then click on the **Email To Support** button to leave a message for tech support.

Demo Version.

Unlicensed users can download the latest demo version from our web site: https://www.grsoftware.net

Upgrades.

Licensed users are entitled to one-year free upgrades (minor and major versions). To get the update please email your request to support@grsoftware.net. Please include in your email message your license data: user name, email address and license number so that our support team can easily verify your record in our database. After the first year any user will get free minor updates and will be entitled to discounted upgrade to a new major version. You can use the **Check for Updates** button in the About dialog or from the Options panel to check for upgrades.

Question: Can I install a new version over the existing one?

When you upgrade to a new version you can install the new version over the existing one. The setup program will detect an existing version and by default, will run in upgrade mode, maintaining your current options and only upgrading the program files to the new version. If required your options will be converted to a new format or layout. No action is required on your side. Of course you can also remove (uninstall) the current version and then install the new one, but in this case you must pay attention to also don't remove your settings or you will restart from scratch.
If you use the "Check for Updates" button in the Options tab to check for upgrades and begin the install you will be prompted to mark a check box in order to see all the setup options. You can leave the box unchecked if you don't need to change any of your settings. If the setup program detects a running program it will try to terminate it safely (even if it's in service mode) before doing the upgrade.
If you choose to remove the old version you will lose your current program settings so that you restart from a fresh situation. In this case you will need to configure the program again before using it.

For your security and comfort, you can manually copy the configuration file to a safe place so that you can easily restore it in case something doesn't go as expected.
See Configuration file for more details. When the new version is up and running you can safely delete this old version backup folder.

Support.

If you have problems please first read the Frequently Asked Questions for a possible solution. Please be sure you have installed the latest version before asking for technical support. However we suggest that you use the Email To support feature inside the program so that our support team can receive your details and quickly solve your problem.

If you still have questions or bug reports, you can reach us at the addresses listed in: Contact Information.

Reporting Bugs.

If you find a bug in the program, you are invited to report this problem to us. We will be happy to assist you, understand the problem and try to resolve it if we can.
In case of a program crash we ask you to send us the crash report so that we can try to solve the problem as quickly as possible. The crash reporting facility will try to directly deliver the crash report to our support team and will display an error message if it was not able to do so. If you do not have a crash but you see a problem, please email us a detailed description. The best way to report a problem to us is by using the **Email To Support** button in the Options tab. From this error reporting facility it will be very easy to email us and also include your backup settings so that we can start working on the problem immediately. If this email facility will not work for you, first check the Email Options and verify that you have specified a valid email server and valid credentials. If all else fails then please email us using your regular email client and include the following details:

- An exact and detailed description of the bug and how it can be reproduced.
- The program version number. The version number can be obtained by pressing the program **About** button.
- The Windows version you have (for example, Windows 7 Ultimate). You can see the Windows version number in the backup log at the beginning.
- Attach to the email message your backup configuration file (normally named GRBakPro.grb).
- Attach to the email message your Log file (normally named GRBakPro.log).

You can find the path to these files from the **Report** / **Program Logs** panel and then click on **Paths**. Remember to compress all files before including them in your email message and be sure that the final zip doesn't overcome the 10MB of size.

6.3   Frequently Asked Questions

1) Where are my backup options saved?
2) How can I include or exclude some files from my backup?
3) Is it possible to store folders and path information in Zip files?
4) Why must the destination directory start with "Bak_sd"?
5) After I install a program update do I need to install the license again?
6) When I install a Site license do I have to install it on every PC of my company?
7) Should I have a main hard drive failure, what would need to be loaded on the new drive to accomplish a complete Restore?
8) Can GRBackPro back up a file that is opened by another application?
9) Does GRBackPro ask me another removable media if the first one becomes full?
10) Can I synchronize my source files with the stored backup archive?
11) Why, while backing up big files, does the program takes so long to compress?
12) I have lost my Job list. How can I restore my backup archives?
13) I want to start my backup overnight. How can I disable any error dialog box that stops the backup procedure if errors occur?
14) I want my backup to run even if no user is logged on. How can I accomplish this?
15) I experience read and write errors backing up to a USB hard drive connected to my computer through a USB hub. What can I do to solve this problem?

16) Will GRBackPro back up to my CD/DVD drive?
17) What if I can't back up to my CD/DVD directly?
18) Why does my backup just dump everything into one folder?
19) I keep getting the following error message : missing end zip signature. What does this mean and how do I fix it?
20) Why does the program executes a full backup when my system change to or from daylight saving time?
21) Why does doesn't GRBackPro execute a real source file compare against the destination ones?
22) Why does GRBackPro seem slow when compressing files onto a networked drive?
23) What is the difference between "Backup" (on the bottom bar), "Restart" in the Scheduler Tab, and "Run" in the Scheduler Tab?

1) Where are my backup options saved?

GRBackPro automatically stores the entire program options into a text file that, by default, is named GRBakPro.grb if nothing was specified in the command line.
This configuration file is very similar to a Windows .ini file and is constantly updated by the program itself without your intervention (i.e., you don't have to remember to save it).
Any time you want to start the program, all you have to do is double click over the file GRBakPro.grb.
When the program opens, you can quickly run your backup by clicking the Backup button. There's no need to choose a session first in this case because the program remembers the last one you have used.

2) How can I include or exclude some files from my backup?

When you add or edit a backup Job you can define in the **Skip folders:** edit box the names of the folders you want to skip. You cannot place here full path names but only folder names (as for example Windows or System). To specify the folder names you can employ the well-known MS-DOS wild characters ('*' and '?') to represent more matching files. In particular the * character means all letters or sequence of letters, while the '?' character means one letter.

3) Is it possible to store folders and path information in Zip files?

GRBackPro fully supports and effectively re-creates directory structure outline many levels deep in Zip files if you enable the **Build a single Zip archive with stored path names** (see the Adv. Backup tab) feature. This feature, however, will make your backup run more slowly because there is a single big zip file to manage and, moreover, some Zip file viewers may not display folders inside the Zip files correctly. Windows, starting from XP, support folders in Zip files and shows them just fine.
This option lets you have a single compressed file or a single destination folder where to copy all your source files. We suggest you to experiment with the destination layout option of the Backup tab to see how many other possibilities you have.

4) Why must the destination directory start with "Bak_sd"?

This root folder (that you can create or not depending on the **Destination path layout** options of the Backup tab) is needed by the restore procedure in order to know from which source drive a backup archive is coming. The other purpose of this folder is to have a well-defined means to identify the root folder of any backup archive (if you do not use any additional path name in your destination path layout). For example, if you back up one drive into another and vice versa when the second backup starts it will backup also the directory created by the first backup run if there is no way to distinguish it. If you do the backup of the previous backup you will waste useful destination disk space. GRBackPro can automatically skip all the directories that start with the string "Bak". If you enable the option **Skip standard folder names: Bak*;Tmp;Temp;Recycle*;System Vol*** in the Options tab the program will skip these commonly used directory names that do not contain useful data. The folder skip match can be case insensitive if you disable the option: **Make skip folders options case sensitive**. By naming your backup root folder with a starting Bak string you will not back up any folder that contains backup archives.

5) After I install a program update do I need to install the license again?

If you install a new version over an existing one then your settings and license will be preserved. In any case, for safety, we suggest that you store somewhere both the latest version installation package along

with your license information so that in case you lose the program you can quickly install it again. If you want to save the program settings you can also put in the same destination the file GRBakPro.grb. If you have definitely lost your license information you can email your user name and email or a copy of your order to our support team so that we can locate your record in our database and send you the license again.

6) When I install a Site license do I have to install it on every PC of my company?

Yes, the license needs to be installed on every PC where you have installed the program. If you order our surface mailed latest version CD-ROM both the latest version and your Site license will be installed in a single step.

7) Should I have a main hard drive failure, what would need to be loaded on the new drive to accomplish a complete Restore?

The safest way to restore your drive is to install Windows. After your Windows setup is complete you can install GRBakPro and then run your restore. Another solution is to employ the WinPE DVD (Windows Pre-installation Environment). This is a bootable system DVD that lets you see your current NTFS and FAT hard disk drives content and run some system check utilities on them. This can be a solution if your system is only corrupted (i.e., you do not have an hardware failure) or if you simply want to restore all your files to your new hard disk drive or if you want to restore an older version of your registry.

8) Can GRBackPro back up a file that is opened by another application?

Yes. GRBackPro starting from version 7 supports Windows Volume Shadow Service (VSS) and if this service is active on your system then any locked or system file can be backed up without problem. If the Windows Shadow Copy service is not active then only files not locked and opened for not-exclusive write can be backed up. An example of a file opened in exclusive mode is the Outlook database file .pst. You must skip these files or schedule your backup when these files are closed (over night for example). The virtual memory or swap files are automatically skipped by GRBackPro.

9) Does GRBackPro ask me for another removable media if the first one becomes full?

Yes. You will have the option to insert another disk media when the previous one becomes full. There are, however, a few notes about this process. If compression is disabled, the program is not able to put on the destination disk a file that is bigger that the destination disk itself (i.e., it cannot split that file in smaller pieces). This limitation is not present if you enable the zip compression. The program can create independent destination disks that together form your backup archive. This means that if you lose a single disk of your backup set you will not lose the complete backup (as normally happens when you spilt your files over multiple disks) but you only lose that single disk and you will be able to restore all other files. Another note is about the backup mode. If your backup is on multiple disks you cannot safely run a backup update because it can be that your destination disk is already almost full and cannot store any updated file whose new size is now bigger then before. In other words, if your backup requires many destination disks you need to run FULL backups only.

10) Can I synchronize my source files with the stored backup archive?

Yes. There is a special option both in the Backup and in the Restore tabs that lets you delete any source or destination file that no longer exists. In case of Restore, every time a source file is found that does not exist in the backup archive, a delete confirmation dialog box will appear allowing you to decide if the deletion is correct or not. This is a safe procedure.

11) Why, while backing up big files, does the program takes so long to compress?

When you handle big files (normally over 100MB), the best strategy to use is to disable the compression. Normally big files are already compressed (say for example video files) and thus spending time to compress them further will give you no saving on space and only loses time. You can disable the compression on a single Job by checking the Disable Compression (force copy only) option in your Job from the **Add Job** dialog box.

12) I have lost my Job list. How can I restore my backup archives?

Your backup settings are stored inside the file GRBakPro.grb (the backup configuration file) and includes all the Job list. This file is ALWAYS copied to the destination disk at every backup run. If you have installed the program as a normal application, you can manually restore this file into the current user Application Data / GRSoftware / GRBakPro folder and then run GRBackPro. If, instead, you have installed the program as a Service the location is different and depends on the Windows version you have; for Windows XP it is C:\Documents and Settings\All Users\Application Data\GRSoftware\GRBakPro\Service\ while for Windows Vista/7/8/8.1/10 is C:\ProgramData\GRSoftware\GRBakPro\Service. The best way to discover the correct file location is to check the program TITLE bar or use the Report / Display Debug Logs / Paths buttons in sequence). If you no longer have the backup configuration file then you need to recreate it. In case you only need to do a Restore, then proceed as follows: from the **Restore** tab, select from the **Source** group the **Folder** option and press the **Browse** button to specify the path name where your backup archives reside. In this case you must also specify the **Destination** of the Restore operation to a specified Folder because the program is no longer able to automatically rebuild the original source path.

13) I want to start my backup overnight. How can I disable any error dialog box that stop the backup procedure in case of errors?

In order to avoid any dialog box message that stops the backup process you must uncheck the **Attended backup (Stop & Prompt for errors and confirmations)** option in the Options tab. In this way any error message will be only stored into the log file and the backup will not stop.

14) I want my server backup to run even if no user is logged on. How can I accomplish this?

In order to automatically run your backup when no user is logged on, then you need to install the program "as a service" and add an event in the **Schedule** tab in order to have your backup automatically start at a convenient point in time. If the program is already installed as a normal application just re-install it over as a service. When the program is running as a service you will get the **Service Options** enabled in the Adv. Backup tab. With these options you will be able to define the backup user credentials. This is a required step in order to allow the program to reach your network resources when no user is logged on. If, instead, there is a logged on user then GRBackPro will use the current user credentials to run any backup.

15) I experience read and write errors backing up to a USB hard drive connected to my computer through a USB hub. What can I do to solve this problem?

The symptoms will vary, and may often appear as numerous "read" and/or "write" errors. Windows may easily read and write a few files with no problem, so the problem doesn't normally appear. But in some cases, especially when the USB hub uses a small switching power supply, the reserve capacity of the supply is drained by the heavy load and the supply voltage is no longer regulated properly. This has been observed on one USB hub whose supply could not maintain regulated power under sustained disk access. The solution was to replace the USB hub power supply with one with more power capacity. Of course you can also have an USB port problem; in this case try to change the USB port to see if the problem will disappear. Users who are considering using USB hard disks for backups should make sure their USB ports are adequately powered to support the disk drive. It may even be necessary to use a well-powered USB hub instead of the computer's internal USB ports if the computer's ports are not able to drive the disk directly.

16) Will GRBackPro back up to my CD/DVD drive?

Yes. Writing to CD and DVD discs is supported as long as you have some packet writing software installed on your computer. It usually comes bundled as a part of larger CD/DVD recording software packages and makes your CD or DVD drive act as a standard, transparently write-enabled drive. Packet writing software uses UDF-formatted CD and DVD discs, and allows GRBackPro to write to your CD/DVD drive by treating it like a hard disk or a big floppy, using the regular drive letter. Most CD/DVD writable devices come packaged with software of this type, so you may already have some packet writing software even if you're not aware of it.
Starting from Windows 7 you have the capability to burn a CD/DVD directly from Windows without additional software. **In order to use this feature we suggest to first run a backup having as a destination disk a temporary folder on your hard disk. Then ask Windows to burn that temporary folder on your CD/DVD.**

Many new CD and DVD writing devices are being made using Mount Rainier (Mt. Rainier) technology. Mount Rainier is a new standard being supported by Compaq, Microsoft, Philips and Sony that provides background formatting and defect management for storage on CD and DVD. EasyWrite is the marketing logo for Mount Rainier compliant drives. Mount Rainier and EasyWrite make rewritable discs far easier to use. With EasyWrite, CD and DVD drives work in the same transparent way as a hard disk or a floppy drive. The goal for Mount Rainier is to change the manner in which future CD and DVD recording is done. Mount Rainier native operating system software (like Windows Vista / 7) is expected to format and manage CD and DVD media, just as operating systems currently manage other storage devices like hard disks.

17) What if I can't back up to my CD/DVD directly?

You can back up to your computer's hard drive or if your computer is part of the network, you can back up to a networked drive on another computer. But what if you want external backups and don't have a working packet writing driver installed, or you don't have a CD/DVD drive with integral EasyWrite support? There are three possible workarounds for this case:

1. Simply cease to use CD/DVD as a direct target for your backup operations. Set up GRBackPro to run your scheduled events and let it create backups to your hard drive automatically. At some convenient time (which you could schedule) you can copy the backup copies created with GRBackPro to your CD/DVD device manually, with your favorite CD/DVD recording software or Microsoft supplied CD/DVD recording feature (Windows 7 or upper). To facilitate this process you can use the GRBackPro Split mode to set a maximum backup file size to fit your destination media size limits.
2. Apart from the conservative CD and DVD writing devices, there are a lot of alternative backup storage devices now available, which are often better, faster, more reliable and more affordable! If you need automatic external backups, consider good alternatives to CD/DVD devices. There are inexpensive USB flash memory sticks available on the market today. They are fast, easy, portable and compact and can readily handle up to 256 GB and more of data on chip. For larger quantities of data, consider an external USB hard drives as they have much greater capacity than a single CD or DVD. After all, CD and DVD are great for maintaining a collection of discs, but not for regular backups. For regular backups of critical, important data, USB flash memory sticks (or keys) as above work best.

18) Why does my backup just dump everything into one folder?

Have you created a job that just copies an entire folder and sub-folders to another hard drive and found that your backup just dumped everything into one folder? This is because GRBackPro has an option into the **Backup** tab that allows you to insert the source folder name into the destination disk path . This option is named **JobSrc**. If this option is enabled (you see the **JobSrc** string in the **Destination path layout** sixth combo box - Backup tab) then the source folder name will be placed into the destination path, but if this option is OFF (blank) then no source folder name will be added resulting in all the source files being copied into the same destination folder.

19) I keep getting the following error message : missing end zip signature. What does this mean and how do I fix it?

This message normally appears when there is an error in one of your zip archives. The error has corrupted your archive and the GRBackPro compressor is trying to fix it. If this error message repeats, then GRBackPro was not able to fix the problem. The remedy is to manually delete the zip file that shows the error and then run another backup to let GRBackPro re-create it. An alternative is to run a full backup so that all zip archives are re-created.

20) Why does the program executes a full backup when my system change to or from daylight saving time?

The problem can be easily solved using the option **Ignore 1 hour time delay on file compare (NTFS daylight fix)** in the Options tab.
At time changes, GRBackPro can get fooled when the source and destination file time change is made. With this option set, GRBackPro will realize that the 1 hour difference does not mean the file needs to be backed up again.

21) Why does doesn't GRBackPro execute a real source file compare against the destination ones?

The function is named Verify because it doesn't really compare files. Anyway, even if you do not zip GRBackPro will do a complete read back of the backed up files. This means that the file is verified as completely readable and consistent. This, of course, will not guarantee bit hasn't changed since the write (due to a defective destination media) and in this situation you have less protection. You must know that when the media are broken, often (more than 90% of the times) they are no more able to read back the file and don't simply change a bit. This is due to the hardware and firmware of the devices that for any disk sectors add some redundancy bits in order to correct the whole sector in case of 1-2 bit failures. The firmware also is aware of the problem and normally signals this to the system (for hard disk using S.M.A.R.T.) that some sectors are degrading. Optionally the hard disk is able to mark a whole zone as BAD and relocate it on some free tracks on the disk reserved for this scope.
If you compress your files then a CRC (Cyclic Redundancy Check) is added and you will be warranted that no changes happened to the compressed files. This add more safety in case of bit changes.
Speaking shortly today hard disk is a very reliable device and a real compare function is less necessary then before. I'm not saying that the compare function is useless! The problem is that you are accustomed with it and it seems to you that you cannot live without it.

22) Why does GRBackPro seem slow when compressing files onto a networked drive?

In general, considerable benefits in speed will be seen by compressing your backup onto a local drive and then copying the archives onto a network drive rather than compressing directly to the network. Of course this should be done in two steps (or using two backup Jobs). Your network speed and the speed of the networked drive and CPU will have a big impact on this issue, and we recommend you try for yourself to see which is the fastest and most reliable method.

When creating or editing a backup Job (see Add/Edit Job) you can select the Enable Zip compression. You have 4 options: Disable, Standard, Medium and High.
This option lets you compress your source files and store them in the destination archive $backup.zip (you can change this file name using the Destination Path Layout option - see the Backup tab) instead of simply copying all files to the destination path. If you enable the Zip compression, you can select among 3 levels. A compression level High creates the highest amount of compression at the expense of the execution time.
Our tests suggest that the gain from increasing the compression level is both variable and normally low!
On average, our test data at Level Standard compressed the data 47% while Level High compresses 49% -- but the time to get that extra 5% increased by 40%. The default value of Standard has been chosen because it appears to be a reasonable balance between speed and size. Your figures may vary.

23) What is the difference between "Backup" (on the bottom bar), "Restart" in the Scheduler Tab, and "Run" in the Scheduler Tab?

The **Backup** button across the bottom bar will start a backup of whichever Session is currently selected in the Jobs' tab. Clicking this button has no effect on the scheduling. The **Restart** button on the Schedule tab will change the status of the highlighted event(s) to "Never", so that each event will start calculating it's next run time from this moment. The **Run** button on the Schedule tab will start a backup using the highlighted event(s) and will set the "Last Run Time" to now. This can cause some seemingly strange scheduling. For example, if an event is set to weekly on Monday, and on a Tuesday you click "Run", the scheduler will set the Last Run Time to Tuesday and the next Monday will then be skipped because the backup has been executed this week. The best way to learn what is happening to set up a small job and test it.

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Part VII

7   Distribution

The distribution of outdated versions of this package is prohibited without our written permission. If the software version you have obtained is over twelve (12) months old, please contact us (see Contact Information) to ensure that you have the most current version.

Vendor information.

The Demo/Evaluation version of this program can be copied and given to anyone so long as it is not modified in any way. Modification is understood to mean the changing, adding or removing of any files of this package without our written permission.
This program CANNOT be packaged with any commercial program or book without our written permission.
Please contact us (see Contact Information) if you want to distribute the program with a different installation program, changed files etc.
This package CANNOT be sold as part of some other inclusive package. Also it CANNOT be included in any commercial software-packaging offer, without the written consent of GRSoftware.
All rights not expressly granted here are reserved to Eng. Roberto Grassi.
We would appreciate copies of any articles written about this software package e-mailed to grsoftware@grsoftware.net. Please forward copies of any reviews, articles, catalog descriptions, or other information that is distributed regarding this package.
Thank you for your time and assistance in supporting the shareware marketing concept.

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Part VIII

8   The Shareware Principle

Shareware distribution gives users the chance to try software before buying it. If you try a Shareware program and continue using it after a reasonable and specified evaluation period, you are expected to buy a license for it. This product, for example, requires that you buy a license after a 30 day trial period. Buying the program license entitles you to continue using the program from a downloaded copy or to an updated program with printed manual. A licensed version of this product includes the permanent right to use the product for an unlimited time. The licensed version also disables the "buy now" instruction reminder.

Copyright laws apply to both Shareware and commercial software, and the copyright holder retains all rights, with a few specific exceptions as stated below. Shareware authors are accomplished programmers, just like commercial authors, and the programs are of comparable quality. (In both cases, there are good programs and bad ones!) The main difference is in the method of distribution. The author specifically grants the right to copy and distribute the software, either to all and sundry or to a specific group. For example, some authors require written permission before a commercial disk vendor may copy their Shareware.

Shareware is a distribution method, not a type of software. You should find software that suits your needs and pocketbook, whether it's commercial or Shareware. The Shareware system makes fitting your needs easier, because you can try before you buy. And because the overhead is low, prices are also low. Shareware has the ultimate money back guarantee -- if you don't use the product, you don't pay for it.

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