GBM User Manual

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Product Overview

Product Overview

Genie Backup Manager™ (GBM), is a very easy to use yet powerful and flexible software that can backup and restore files, documents, emails, settings, programs and more, to virtually any local or remote location, including internal and external hard disks, FTP locations, across network, optical media, removable media, memory sticks, and Amazon S3 storage.

GBM is the only backup software on the market that offers unlimited FREE Plugins, which the user can download or create to extend the capabilities of Genie Backup Manager™ .

GBM is perfect for users of all computer comfort levels. Novice users will find it easy to create their first backup job in matter of minutes after installing the software, thanks to its intuitive wizard-based user interface, while advanced users will appreciate the software's extended scalability and flexibility, with features such as preserving NTFS Alternative Data Streams, Email notification, and scripting capabilities.

GBM also caters for the data protection needs of business enterprises, by offering features that ensure a reliable backup mechanism for mission critical data, such as backing up using Open File Backup (OFB), for businesses operating around the hour that cannot afford to shutdown its running applications during backup, highly secure encryption, for sensitive documents that must not fall into the wrong hands and scheduling unattended backup tasks for regularly safeguarding constantly changing data.

As we introduce GBM, we are confident that it can efficiently and effectively address all your data protection needs. Let GBM work for you and never again worry about losing what you have spent years building or collecting.

Feature Matrix

Genie9 offers a variety of backup and recovery products, each priced and carrying a set of features tailored to cater for the needs of different categories of users. Genie Backup Manager comes in three editions: Server, Pro and Home.

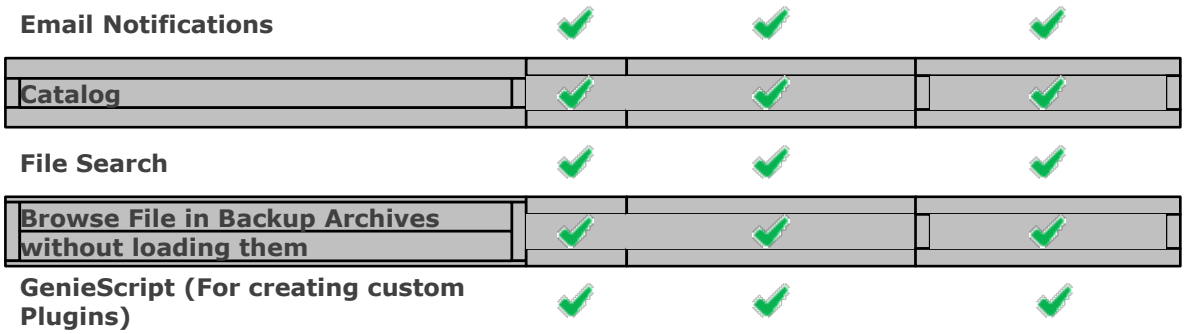
Below you can find a comparison of the features available in each edition.

Feature	GBM Home 9	GBM Pro 9	GBM Server 9
MS Exchange backup 2003-2007	-	-	✔
MS SQL Server backup (2000-2012)	-	-	✔
System State Backup	-	-	✔

CPU Affinity Control	-	-	✓
Amazon S3 Support	-	✓	✓
Differential Backups	-	✓	✓
Multi-Drive Spanning	-	✓	✓
Pre & Post Commands	-	✓	✓
Preserve NTFS Alternative Data Streams	-	✓	✓
Advanced Scheduling	-	✓	✓
Backup Performance Control	-	✓	✓
GRunScript (For creating Shareable backup jobs)	-	✓	✓
Clone backup jobs	-	✓	✓
Military Grade 256-bit AES Encryption	-	✓	✓
Military Grade 192-bit AES Encryption	-	✓	✓
Military Grade 128-bit AES Encryption	✓	✓	✓
Cloning Backups	✓	✓	✓
Full Backups	✓	✓	✓
Incremental Backups	✓	✓	✓
Open File Backup (VSS)	✓	✓	✓
Wizard Based Interface	✓	✓	✓
Easy Backup Wizard Layout	✓	✓	-
Jobs Manager	✓	✓	✓
Report Manager	✓	✓	✓
Time Stamps	✓	✓	✓

Quick Backup Desktop Shortcuts	✔	✔	✔
Editing Previous Jobs	✔	✔	✔
Duplicate Backup Jobs	✔	✔	✔
Backup Summary	✔	✔	✔
Outlook (2000-2010)	✔	✔	✔
Outlook Express	✔	✔	✔
Registry	✔	✔	✔
Windows Settings	✔	✔	✔
Internet Explorer	✔	✔	✔
Favorites	✔	✔	✔
Windows Address Book	✔	✔	✔
Desktop	✔	✔	✔
Windows Fonts	✔	✔	✔
Media Playlists	✔	✔	✔
Files	✔	✔	✔
Folders	✔	✔	✔
Auto Exclude	✔	✔	✔
Plugin Support (Search & Download)	✔	✔	✔
My Photos	✔	✔	✔
My Media	✔	✔	✔
Disaster Recovery	✔	✔	✔
Backup to Hard Drives (External & Internal)	✔	✔	✔
Backup Over Network (LAN, SAN, NAS, Etc.)	✔	✔	✔

Backup to Flash drives	✔	✔	✔
Backup to Removable Media Devices	✔	✔	✔
Backup to FTP	✔	✔	✔
Backup to SFTP	✔	✔	✔
Built in CD/DVD/Blu-ray Burning Engine	✔	✔	✔
CD/DVD (3rd Party Packet Writing Software)	✔	✔	✔
Purging Backups	✔	✔	✔
Rollback	✔	✔	✔
Rotating Backups	✔	✔	✔
Modified Date/Time Stamp use in Backup	✔	✔	✔
Zip Password Protection	✔	✔	✔
10 levels of Compression	✔	✔	✔
Backup Without Compression	✔	✔	✔
Self-restorable Backup Sets (SwiftRestore)	✔	✔	✔
Power Saving Options	✔	✔	✔
Schedule Backups	✔	✔	✔
Backup While Logged Off		✔	✔
GBM Agent	✔	✔	✔
Power Options	✔	✔	✔
Snooze the Backup	✔	✔	✔
Incremental Testing of Only new and changed files	✔	✔	✔
File Filtering (By file type, size, and date)	✔	✔	✔
Backup Logs	✔	✔	✔



Unavailable features

Genie Backup Manager is packaged in 3 different versions to meet various markets. Some features might not be available, depending on the product you are using. However, all features are documented. For a feature comparison of the versions, please refer to the feature matrix. If a feature is not accessible in the product user interface, it is likely not included with your version of the product.

What's New In Version 9.0

- Enhanced Performance: Faster and uses less resources.
- Enhanced Graphical User Interface
- New CD/DVD Engine
- Blu-ray support
- Outlook 2010 Support
- Microsoft SQL 2008-2012 support
- The ability to backup to Amazon S3 Cloud storage
- Amazon S3 bandwidth throttling
- The ability to backup to secure FTP locations (SFTP)
- Added RAW image support in backing up photos
- Enhanced Volume Shadow Copy support
- Added social media elements
- Added swift restore to GBM Server
- Added Windows 8 support
- Improved Disaster Recovery engine

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Installation

Genie Backup Manager

GBM System Requirements

GBM Server

- Windows® 2003 Server, Windows® 2008 Server,Windows® 2011 Server, Windows® SMB Server, Windows® Advanced Server
- 32 and 64-bit platforms
- Microsoft® Internet Explorer™ 6.0.0 or later
- Intel Pentium® III processor or above, AMD Athlon™
- 512 MB RAM (1 GB RAM recommended)
- 200 MB free hard drive space

GBM Pro/Home

- Windows® XP, Windows® Vista, Windows® 7
- Microsoft® Internet Explorer™ 6.0.0 or later
- Intel Pentium® III processor or above, AMD Athlon™
- 512 MB RAM (1 GB RAM recommended)
- 200 MB free hard drive space

How to: Install Genie Backup Manager

Installing from the downloaded file:

Run the downloaded .exe file and follow the on-screen instructions to install GBM.

To install from CD:

1. Insert the CD into your CD-ROM drive. Setup.exe will automatically be run. (If this fails to work, double click the .exe setup file on the CD).
2. Follow the on-screen instructions.

How to: Register Your Copy of GBM

Upon purchasing a GBM license, the user will receive an email containing a serial number for unlocking the software and removing the trial period limitation.

To register GBM before the end of the trial period:

1. Start GBM.
2. From the toolbar, click **Help** then select **Registration** .
3. Type or copy-paste the serial number into its designated field then click **OK**.

To register GBM at a later date (30+ days after installation):

1. Start GBM.
2. A dialog will appear instructing you to register your software. Select **Enter Serial Number** then insert your registration code..

How to: Check for updates

The Genie9 support team regularly post updated builds of GBM with minor enhancements and fixes for known issues. Registered users of GBM can use the Genie-Update tool to download the latest updates for the software free of charge.

To check for updates:

1. From the Tools menu in the main screen, select **Genie Update**.
2. Select **Next**.
3. Follow the on-screen instructions.

Upgrade to the New Version of Genie Backup Manager

Upgrade to the New Version of Genie Backup Manager

If you already own an older version of Genie Backup Manager and wish to purchase the latest, or if you wish to upgrade to a more powerful edition, you are entitled to an "upgrade discount". Please follow the link below for more information about upgrading options and pricing.

http://www.genie9.com/store/upgrades.aspx

How to: Install GBM as an Upgrade

When installing Genie Backup Manager as an upgrade, there is no need to uninstall previous versions first; GBM files will be copied to a different directory as an independent product, without causing any conflicts.

How to: Import Backup Jobs from Previous Versions

The First time you run GBM 9.0 it will scan for Backup jobs from older versions and will prompt the user whether or not would like to import. However, you can manually import from selecting **Import Previous Jobs** from the **File** menu in the toolbar, then follow the on-screen instructions. This imports job configurations, settings, and unattended scheduled tasks.

How to: Restore Backups Created Using Older Versions

GBM provides backward compatibility with the previous versions. Therefore, you can restore any backup created in the older version without any problems.

GBM Basics

What Can GBM Do?

Genie Backup Manager is a powerful backup and restore utility designed to backup your personal files, folders and settings. To recover your entire system, users must create a Disaster Recovery backup to restore the system to a working state.

Although Genie Backup Manager can reset the archive bit/flag of copied files during backup, determining which files have been modified since the last backup run is done using the file's last modified date and time attribute. This ensures that backup jobs are mutually independent, i.e. backing up a certain file with one backup job does not prevent it from being backed up again by another.

Managing Backup Jobs

Copying an Existing Backup Configuration

Duplicate existing backup job and then easily modify its configuration. To do so, click **Tools** from the application's toolbar, select **Jobs Manager**, select a backup job, then click **Clone job**.

Editing a Backup Job Configuration

You can use the **Edit Previous Jobs** button in the application's main window, then select a backup job to modify its configuration. Another possibility would be to click **Backup** from the main window, and go to the **Job info** page, select **Edit Job**, select a backup job from the list and click **Load**.

When the Properties window opens, go to the page with the settings you want to modify.

Deleting a Backup Job

Click **Tools** from the application's toolbar, select **Jobs Manager**, select a backup job, then click **Remove**. The catalog entries for deleted backup jobs will be removed, but files and folders from the source and destination will not be deleted.

Rename a Backup Job

Click **Tools** from the application's toolbar, select **Jobs Manager**, select a backup job, then click **Rename...**

Data Backup Types

There are four basic types of backup supported by GBM. Selecting the best backup type for your purposes depends on the storage media used, disk space considerations, and file versioning needs. Note that these backup types do not apply to Microsoft Exchange Server and SQL Server, both of which have separate backup types of their own. For more information please refer to SQL Backup Types and Exchange Backup Types.

Full

Backup all selected files and folders every time backup is executed. A new independent backup set will be created replacing files from older runs, unless the user explicitly opts to keep them by changing file purging settings.

- Full backup takes the longest time among all backup types.
- Best used for one-time backups, such as for migrating personal files to a new computer.

Incremental

Backup only files that have been added or modified since the last backup. Files that were deleted, renamed or moved from the source machine will not be deleted from the backup archive.

- The first backup run will automatically backup all selected files and folders (i.e. run as if full backup was selected).
- Incremental backup with the rollback option enabled is best for spanning backed up data over multiple storage volumes, such as CDs and DVDs, and for FTP backup.
- Over time, incremental backup requires less space and time than differential backup, however, it requires more time during restore, and all volumes containing previous increment versions and the most recent full backup must be available.

Mirror

Backup only files that have been added or modified since the last backup. Old versions of files will be replaced with newer ones and missing files will be deleted from the backup set.

- The first backup run will automatically backup all selected files and folders.
- Mirror backup is best for keeping an exact "mirror" copy of the original data on external hard disks, or on a file server, and when access to old versions of files is not required.

Differential

Backup only files that have been added or modified since the most recent normal (full) backup.

- The first backup run will automatically backup all selected files and folders.
- Over time, differential backup requires more space and time than incremental backup, however, restore takes less time, and only the volumes containing the last differential backup and the most recent normal backup are required.
- Best for spanning backed up data over multiple storage volumes, such as CDs and DVDs.

Note:

Home version does not offer Differential Backup type. For a complete list of differences between versions, please check the Feature Matrix page.

Data Verification

Verification ensures that backed up data was successfully written on the storage media and that it can be restored reliably. Genie Backup Manager will by default verify backed up data immediately after the backup task is completed. Users can also choose to test data integrity of a backup archive at a later time using the Testing Data Integrity tool.

File Versioning in Genie Backup Manager

Genie Backup Manager is great tool for maintaining numerous versions of backed up files; selecting incremental backup with rollback or differential backup will ensure that each time the backup job is run, updated files are appended to the backup set instead of replacing older versions.

The catalog feature allows users to browse through all versions for any given backup job, sorted by date, and enables them to restore (rollback) all or some of their files to the state they were in, at the point in time that backup was executed.

Users can also limit the number of backup versions Genie Backup Manager should keep per backup job, in order to preserve disk space. This is done by configuring Purging settings.

Security in Genie Backup Manager

Genie Backup Manager offers multiple levels of protection to ensure that backed up data is not accessible to unauthorized persons. ZIP passwords offer moderate protection for compressed backups, with the added flexibility of being compatible with most compression utilities, to allow users to manually restore data from backup archives, while AES (Advanced Encryption Standard) encryption has the advantage of being highly secure, as it is adopted by NIST(National Institute of Standards and Technology) as an FIPS-approved (Federal Information Processing Standard) symmetric encryption algorithm that may be used by U.S. Government organizations (and others) to protect sensitive information

Compression in Genie Backup Manager

Genie Backup Manager uses non-proprietary ZIP64 compatible compression to reduce backed up data size and save space, supporting up to 264 -1 files within a zip archive as well as files that have a size greater than 4GB, for a zip file size that can reach up to about 18 million terabytes (more precisely, 2^64-1 bytes).

The Genie Backup Manager compression engine offers fast performance and low memory usage. Speed improvements reach 25%-75% in certain contexts. It also provides 15 to 20% better compression than other formats on many popular file types, especially XML data.

Users can choose between 10 levels of compression starting from no-compression, which packs the entire backup neatly within a single file, but without the overhead to the backup speed added by compression.

Backup without Compression

Choosing to backup data without compression causes GBM to copy the data to a single folder on the storage device while preserving the original folder tree structure, this makes data more accessible and less susceptible to corruption.

Files and Folders Created by GBM

Files Created by GBM Locally

Genie Backup Manager creates a variety of temporary and permanent files and folders on the machine on which its running during its various operations that are either intended to be used by the user or for the program's internal use.

Job-related files and folders

When a new backup job is configured, the wizard creates a "JobSettings.dat" file in a folder carrying the same name as the backup job (usually in C:\Documents and Settings\<user>\Application Data\Genie-Soft\GBMAPPLICATION).

In addition, GBM also creates subfolders in the same location for each backup execution starting with a folder named "00000000" for the first backup run, and a new folder with the name incremented by one for each subsequent execution. Each folder contains catalog information for the corresponding backup run.

Temporary folders

Genie Backup Manager creates a temporary folder at the start of each session to store transient files and folders that are created during the program's operations, such as data waiting to be written to CD or DVD, or data being encrypted or compressed etc.

- Temporary session folder will be deleted when the session is closed (upon exiting main application).
- Unless otherwise specified by the user, GBM will look for the local drive with the most free disk space and select it for storing its temporary folders and files.
- Temporary files created during a backup run will be deleted when backup is complete.

Logs

Genie Backup Manager provides a log engine that helps you track backup, restore and test operations. It also offers advanced logs for tracking and debugging backup operations and volume shadow copy snapshots. For more information on each of these logs and how to access them, please refer to the Logs and Reports section.

Files Created on the Backup Destination

This is a list of the most important files that Genie Backup Manager might create on the backup destination, along with a description of what each folder/file type signifies:

.gbp

The .gbp file type is associated in Windows with Genie Backup Manager, and it represents the file that the user needs to select in order to load the backup for restore. This file is recreated at each backup execution. When backup is executed with compression enabled, the file with the extension ".gbp" will represent the main backup output file containing the entire backup archive along with GBM's internal use files. If data was forced to split, such as in the case of multiple media spanning, this will be the last file in the set.

In case of backup with compression disabled, GBM will create a file called Main.gbp in the uncompressed backup folder at each backup execution, which will only serve as a link to the index.gix catalog file, located in the same folder, that holds the necessary information for restoring the data from the backup archive.

.c00<X>

This file type represents a split in a compressed backup archive; this occurs when a single compressed archive is divided into multiple linked portions, sequentially numbered starting with .c000 to c00X, where **X** is the number of split compressed file parts. The last file in the set is always the file {backup job name}.gbp.

.n00<x>

This extension represents a source file that has been split during a backup execution with compression disabled.

.exe

This file is created when the Self-Restorable backup option is selected in the backup job's configuration. If this file is present, Genie Backup Manager does not need to be installed on the target machine in order to restore data from the archive.

If compression was enabled, this file will contain the entire backup archive as long as the size of the data in its compressed form is less than the number specified for the Enable one-file self-restorable backups option; however if this size limit was exceeded, or if the backup was uncompressed, Genie Backup Manager will create a file called "Swift_restore.exe", which will only contain a self-executable version of the restore functionality.

Using GBM

How to: Start Genie Backup Manager

Before you start, make sure that your backup devices have been detected and are configured correctly without conflicts.

To start Genie Backup Manager...

- Click Start , point to **Programs** > **Genie9**, and then click **Genie Backup Manager 9.0**.
- If you have selected the option to add an icon to your Quick Launch bar when you installed the software, you can click that icon to start Genie Backup Manager.
- Double click the Genie Backup Manager system tray icon  .

Shortcuts

The most important functions in GBM are assigned keyboard shortcuts for increased accessibility.

Backup Wizard Shortcuts

Next	Alt+Right Arrow
Previous	Alt+Left Arrow
Ctrl+1	Job Info
Ctrl+2	Where to Backup
Ctrl+3	What to Backup - My Profile
Ctrl+6	What to Backup - MY Folders
Ctrl+7	What to Backup - My Plug-ins
Ctrl+4	Settings
Ctrl+S	Save
Ctrl+8	Schedule the backup job to run unattended
Ctrl+5	Start Backup

Main Window Shortcuts

Alt+B Backup

Alt+R Restore

Alt+C Catalog

Alt+E Edit

Alt+Q Run Backup

Miscellaneous Shortcuts

F1 Help

Ctrl+P Preferences

Ctrl+T Test Data Integrity

Ctrl+G Update

Selection Panes

Selecting data for backup or restore in GBM is done using a Windows-Explorer-like interface. Selection panes are used to select or deselect files, folders, and various items and settings.

When an item from the left pane is highlighted its contents will be displayed in the right pane, to refine the selection if necessary.

	A plus sign means that the listing can be expanded to display additional items.
	A minus sign means that the listing can be collapsed to hide displayed items beneath it.
	An empty check box means that the item can be selected but is currently not.
	A check box with a blue or green check mark means that the item is selected with all its contents.
	A gray check mark means that some but not all of the item's contents have been selected.
	A grayed out check box means that the item is not available or not selectable; if the item has an Expand/Collapse box then the user needs to expand the listing to be able to select its contents.

My Folders Selection Options

Right-clicking on any item (file or folder) in the right-hand pane in My Folders tab and selecting **Selection Options** presents the user with several options for selecting files and folders, these are:

- **Select All:** Select all items in the pane
- **Clear All:** Deselect all items in the pane
- **Select Files Only:** Only select files appearing in the current view
- **Select Folders Only:** Only select folders appearing in the current view
- **Invert Selection:** Invert the selection in the current view (unselected items will be selected, and selected items will be deselected)

Accessibility

Microsoft Windows offers "Accessibility Options" that make it more eye-friendly for people with visual disabilities. They allow you to modify the display to make it easier to work with the computer.

GBM supports visual accessibility options; changing Windows appearance will change GBM's user interface making the software more readable for people with color blindness, weak vision etc...

- GBM needs to be restarted before changes in visual accessibility options are applied.

Windows and Dialogs

Most windows and dialogs in Genie Backup Manager can be resized to fit the users preference. The minimum dimensions for the main window is 740X570, hence it is recommended to set the display resolution to 800X600 or more in order to be able to see the entire contents of any window.

When a pane or window is not resizable and part of its contents is hidden, scroll bars will appear enabling the user to view the concealed parts.

GBM by default remembers the location and size of the main window upon exiting the application so that these attributes would be retained the next time GBM is started. To disable this feature, click the **Tools** menu command, select **Global Preferences**, select **General**, then remove the checkmark next to **Save window location on exit**.

Job Summary

During the creation or modification of a backup job, the lower-left corner of the backup wizard will provide a summary of the backup job's settings, this include:

- **Job name:** Name assigned to the backup job.
- **Media Type:** Media selected for storing the backup.
- **Backup Type:** Full, increment, mirror or differential (backup all selected files or new and changed files).
- **Compression:** Compression setting (with or without compression).
- **Security Type:** Type of security setting used (None, zip password protection or encryption).
- **Estimated size:** The total estimated size of selected items.
- **Estimated items:** The estimated number of files selected for backup.

Wizards Overview

GBM adopts wizard-like interfaces for its three main functions: Backup, Restore, and Scheduling unattended backups. Each of these will be described in details later on.

Each wizard is comprised of a series of dialog boxes guiding the user through the steps required to perform the task, all the user has to do is choose the appropriate options in each dialog and then click **Next** to proceed to the following step. At any point, the user can click the **Previous** button to correct or modify selections made in previous dialogs.

Getting Help

GBM users can seek assistance regarding the use of the various functions and features of the software using several different help resources, which include:

- Offline Help

  GBM's desktop help documentation provides assistance in using the many functions of the software in the form of detailed descriptions and step-by-step tutorials.

  To access GBM's help documentation do one of the following:

  - From the toolbar click **Help**, then select **Contents.**

- Press <F1>.

Using Help

The following is an explanation of the help window interface

- The Contents tab displays a list of categorized help topics
- The Index tab lists help-related keywords alphabetically; enter a keyword for a help topic, as you type the letters, the highlight will close in on the closest match, once you reach the desired topic double click it
- The Search tab provides a full-text search utility for any word or phrase in the GBM help window. Enter the string you wish to find and press search, a list of topics containing that string will be displayed in the pane below.
- A book  represents a topic category, you can double-click the book or click the plus sign box next to it to expand the list of topics it holds.
- An open book  represents a topic category with its topic list expanded, double-click the book or press the minus sign box to hide the topic list.
- A page represents a help topic select the page to display the topic in the right-hand pane.

- Online Technical Support

Although Genie Backup Manager can be effortlessly installed and has unprecedented user-friendly features, we have a highly-skilled technical support team, geared up to answer any inquiry users may have.

You can contact the technical support team at Genie9 using the helpdesk call tracking system. Users must be signed up with **My Account** in order to send inquiries (available for free for both registered and non registered users). Sign up with My Account.

For more information on using Genie9's helpdesk call tracking system, see Contacting Support.

- The Knowledge Base

A growing searchable database of questions and answers about Genie9's software. The Genie9 support team regularly updates this online database with new articles.

Click to visit the Genie9 knowledge base page.

Exiting GBM

To exit GBM do one of the following:

- From the File menu in the toolbar select **Exit**.
- Press <ALT + F4>.
- Click the **X** button on the top right corner of the program.

Attempting to exit will open a dialog asking the user to confirm the request

Suppressing the quit confirmation dialog

Registered users can suppress the quit confirmation dialog, to do so:

1. From the toolbar, select **Tools**, then select **Global Preferences.**
2. Select **General**.
3. Remove the checkmark next to **Confirm quit dialog box**.

The System Tray Agent

The System Tray Agent

The System Tray Agent is a service that runs in the background and displays an icon  in Windows System Tray to allow quick access to the following Genie Backup Manager functions:

- Starting Genie Backup Manager.

  Double Click on the System Tray Agent to open Genie Backup Manager

- Creating a new backup job.

  Right-click the System Tray Agent, Select Create Backup Job... the backup wizard will appear.

- Editing an existing backup job by selecting one from a list.

  Right-click the System Tray Agent, point to Edit Job and select the backup job you wish to edit

- Silently running a backup job (Run Backup).

  Right-click the System Tray Agent, select Quick Backup, and select the backup job you wish to run.

- Running a backup job and shutdown the computer automatically immediately after backup is completed.

Right-click the System Tray Agent, select Shutdown... a list of your backups will appear Select the backup you wish to run and check "Remember shutdown settings" if you wish to keep shutdown settings for the backup.

- Checking for updates for Genie Backup Manager.

  Right-click the System tray Agent and Select Check for Updates

To start the GBM System Tray Agent, click **Start**, point to **Genie9**, point to **Genie Backup Manager 9.0 Tools**, then click **Genie Agent**.

How to: Set the Genie System Tray Agent to Run at Startup

1. Go to Start > Genie9 > Genie Backup Manager 9.0 Tools > then click Genie Agent.
2. Right click the Genie Agent icon in the system tray  then select **Settings**.
3. Make sure **Start agent when my computer starts** is checked.

System Tray Agent Settings

To open the GBM agent settings dialog right click on the Genie Backup Manager icon in the system tray then select **Settings**.

- **Show notifications:** Display GBM agent notifications.
- **Start agent when my computer starts:** Run the GBM system tray agent as a process at startup.

How to?

Genie Backup Manager

How to: Install Genie Backup Manager

How to: Register Your Copy of GBM

How to: Check for updates

How to: Install GBM as an Upgrade

How to: Import Backup Jobs from Previous Versions

How to: Restore Backups Created Using Older Versions

How to: Start Genie Backup Manager

The System Tray Agent

How to: Set the Genie System Tray Agent to Run at Startup

Catalog

How to: Back up the Catalog

Local/LAN

How to: Restore from a Local Drives

How to: Restore Data Stored on Network Locations

FTP/FTPS

How to: Restore Data Backed Up Using FTP

Amazon S3

How to: Backup to Amazon S3

How to: Restore/View Online Backups

How to: Delete Online backups

Optical Media

How to: Restore from Optical Media

Removable Media

How to: Restore from Removable Media

System State

How to: Backup System State

How to: Restore System State

How to: Restart the Domain Controller in Services Restore Mode

Outlook

How to: Backup MS Outlook Data

How to: Backup While MS Outlook is Running

How to: Restore Outlook Data

Outlook Express

How to: Backup Outlook Express

How to: Backup while Outlook Express is running

How to: Restore Outlook Express Data

How to: Synchronize Outlook Express Mail Folders

How to: Synchronize Outlook Express Settings

How to: Extract mail folders directly from a backup

How to: View Backed Up Emails

Windows Mail

How to: Backup Windows Mail Data

How to: Restore Windows Mail Data

Windows Registry

How to: Back Up the Entire Registry

How to: Back Up Selected Registry Keys

How to: Restore Windows Registry

Desktop

How to: Back up Desktop Items

How to: Restore Desktop Items

My Documents

How to: Back Up My Documents

How to: Restore My Documents Folder

Windows Address Book

How to: Back Up Windows Address Book

How to: Restore Windows Address book

How to: Synchronize Windows Address Book Contacts

Windows Contacts

How to: Backup Windows Contacts

How to: Restore Windows Contacts

Windows Favorites

How to: Back Up Windows Favorites

How to: Restore Windows Favorites

Windows Fonts

How to: Back Up Windows Fonts

How to: Restore Windows Fonts

My Media

How to: Use playlists to backup media files

How to: Automatically scan for media files

How to: Restore Media Files

My Photos

How to: Back Up Images and Photos

How to: Restore Images and Photos

Windows Settings

How to: Back Up Windows Settings

How to: Restore Windows Settings

My Folders

How to: Create New File Filters

How to: Import and export file filters

How to: Restore Files and Folders

How to: Restore to a Different Location

My Plugins

How to: Back Up Programs and Program Settings

How to: Compile a Plugin Script

Settings

How to: Create a Quick-Backup Shortcuts on the Desktop

Scheduler

How to: Rotate Backups using Advanced Scheduling

SQL

How to: Register MS SQL Plugin

How to: Backup SQL Server Data

How to: Connect to the Database

How to: Start the Database in Single-User Mode

How to: Restore a Transaction Log Backup

How to: Restore a Differential Database Backup

Exchange

How to: Register MS Exchange Plugin

How to: Backup Exchange Server Data

How to: Restore an Incremental or Differential Backup

Restore

How to: Load Backup from the Archive

How to: Load Backup from the Catalog

How to: Restore/View Online Backups

How to: Restore Data

Disaster Recovery

How to: Create Genie Disaster Recovery Bootable CD/DVD disc

How to: Create Genie Disaster Recovery Backup

How to: Restore Disaster Recovery Job

E-mail Notification

How to: Activate E-mail Notification

How to: Send Email Notifications

Genie Script

How to: Create a Plugin using XML tags

How to: Create a Plugin using Plugin Creator

GRunScript

How to: Create a Backup Job Script

How to: Run a Scripted Backup

The Main Window

Main Window Commands

The main window contains a selection of the most important Genie Backup Manager functions.

Main Commands

Backup

Starts the new backup wizard.

Restore

Starts the restore wizard.

Disaster Recovery

Starts the disaster recovery wizard

Catalog

Starts the backup catalog; a complete index of backups.

Edit Previous Jobs

Opens a list of available backup jobs which the user can choose from to edit a backup job's configuration.

Tools

Run Backup: Opens a list of available backup jobs which the user can from to quickly execute a backup.

Global Preferences- Opens Genie Backup Manager's preferences dialog.

Test Data Integrity- Opens the Test Data Integrity window.

Genie Update- Opens the GBM automatic update window.

Quick Links

Buy Now- Direct link for purchasing GBM online.

My Account-Direct link to My Account for online registered users

Online Registration- Register your copy of GBM online.

Online Support- Contact information for the Genie9 technical support team.

Home Page- Opens the Genie9 home page in your default Internet browser.

Free Plugins- Opens the Genie9 Plugins database page to download free GBM Plugins.

Menu Commands

Menu	Item	Function
File	Backup Wizard	Open the backup wizard.
	Restore Wizard	Open the restore wizard.
	Cataloging	Open the backup Catalog library.
	Default Backup Folder	Browse the default location used by GBM for storing backups.
Tools	Test Backup	Test a backup set's data integrity to ensure it can be restored reliably.
	Advanced Search	Search the catalog library or a backup archive for previously backed up files.
	Jobs Manager	Open the backup jobs manager window.
	Logs Manager	View, print and manage your backup logs and reports.
	Start GBM Agent	Run the Genie Backup Manager monitoring agent in the system tray.
	Format Re-Writable CD/DVD	Quick-erase or fully format CD/DVD media.
	Undo Plugin Restore	Uninstall programs previously restored using My Plugins.
	GenieScript Compiler	Open the GenieScript script compiling utility.
	Global Preferences	Open the Global Preferences window to edit general and advanced Genie Backup Manager settings.
Help	Contents	Open the Genie Backup Manager help documentation.
	Welcome Screen	Open the welcome screen.

Supported Recorders	
Genie9 Home Page	Opens your default internet browser to the Genie-Soft web site.
Check for Updates	
About	Credits and basic information about the product.
Registration	Open the Genie Backup Manager registration dialog to enter your serial number and unlock the software.
How to register	Open help page on how to register your copy of GBM.
Technical Support - Contact Us	Contact information for getting in touch with Genie-Soft support team to receive technical assistance.
How-To	A list of links to the most important how-to help pages.

To access a program menu item using the keyboard

1. Press <ALT>. This will highlight the **File** menu in the toolbar.
2. Use the right and left arrow keys to move horizontally between menus and the up and down arrow keys to move between items inside each menu.
3. Press <ENTER> to activate the selection.

Backup Summary

The backup summary panel displays a summary report for the most recently performed backup. It also offers quick access links for viewing the complete backup report as well as re-running the backup.

The Backup Wizard

Users can create backup jobs in Genie Backup Manager using

These are the steps that you must confirm in the backup wizard:

Backup Category: Choose what type of data you Wish to backup; data, Microsoft SQL, or Microsoft Exchange Server

Jobs info: Enter the name of the backup in the **Backup Job Name** field. You can select **Edit existing backup job** to select a previously created backup job and modify its configurations. To create a shortcut on the Desktop area for quickly running a backup job, select **Create quick backup shortcut on desktop**. Click **Backup Filename Options** if you wish to append a time stamp to the end of the output backup archive. Click **Next** to go to the following step.

Where to backup: Select the storage device on which you wish to store your backup. Checking the radio button next to the desired backup destination option will display a group of settings

related to that destination in the lower box. Click **Next** to go to the following step. See Backup Devices.

What to backup: Select the files and folders you wish backup. User data is divided into three categories to make it more manageable during backup and restore: **My Profile**, **My Folders**, **My Plugins, My SQL,** and **My Exchange**. Click **Next** to go to the following step. See Data, Microsoft SQL, and Microsoft Exchange Server.

Backup Settings: Sets advanced options, including: data backup type, compression, security, purging, email notifications, self-restorable backups, pre and post job commands etc. Click **Next** to save the configurations and start backup.

Scheduling or CDP: At any point during backup job creation, you can click **Schedule** step 5, to schedule the backup job for unattended executions. See Scheduler, CDP for SQL, and CDP for Exchange.

Backup Progress: In this screen, backup progress displays the status of the backup job. See Backup Progress

Genie Backup Manager provides a dynamic summary of information about the backup job at the bottom-left corner of the backup wizard, which can be consulted before the backup execution.

Clicking the **Main page** button returns the user to the main application window without saving the backup job configuration progress; a warning message will be displayed to the user..

To save the configuration during backup job creation without exiting the wizard or starting backup, click **Save Job**.

Opening the Backup Wizard

- From the startup screen click the **Backup** button.
- From the **Files** menu, select **Backup Wizard**.

For each backup job you must specify at least the source files, folders, or other data items that you want to backup (third wizard step), the rest of the options are not mandatory as they are set to default values, but can be changed by the user.

The user can move between the wizard screens using one of the following ways:

- Clicking the **Next** button in the lower right corner, to go through all the wizard screens one at a time. Clicking the **Previous** button takes the user one step back.
- By choosing the desired wizard screen from the **Backup Steps** menu on the left side of the screen. This allows the user to skip steps that have been set before.

The Restore Wizard

Using the **Restore Wizard** you can restore from a backup job. The restore wizard consists of two steps (pages), from which users can configure what and how to restore. To open the restore wizard select click the **Restore** button from the main window, or select the **Files** menu, then select **Restore Wizard**.

These are the steps that you must confirm in the restore wizard:

1. **Select a file to restore (loading the backup):** Select the backup archive you wish to restore data from.
2. **Data Selection:** Select the files and folders you wish restore.
3. **Next:** On the data selection page, click Next to start restore.

The Disaster Recovery Wizard

Users can create Disaster Recovery in two main steps:

1. Create Disaster Recovery Bootable Disk (One time only)
2. Create Genie Disaster Recovery Backup

Opening the Disaster Recovery Wizard

- From the startup screen click the **Backup** button.
- From the **Files** menu, select **Disaster Recovery Wizard**.

The user can move between the wizard screens using one of the following ways:

- Clicking the **Next** button in the lower right corner, to go through all the wizard screens one at a time. Clicking the **Previous** button takes the user one step back.
- By choosing the desired wizard screen from the **GDR Steps** menu on the left side of the screen in the Disaster Recovery backup job. This allows the user to skip steps that have been set before.

Global Preferences

Global Preferences

The Preferences window houses the settings, preferences and configurations for GBM.

To open the Preferences window, do one of the following:

- From the toolbar click **Tools**, then select **Global Preferences.**
- From the **Tools** left-hand menu in the main screen, select **Global Preferences**.

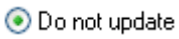
Note: Settings selected from the preferences dialog will apply to all created backup jobs.

Preferences: General

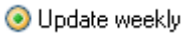
The **General** page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains general settings of the program.

Auto Update

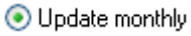
Select the frequency at which GBM should automatically check for software updates. (This option is only available for registered users). (Settings)



Do not automatically check for updates, the user will do so manually.



Check for updates every week.



Check for updates every month.

Confirm quit dialog box

Causes GBM to prompt the user to confirm before closing the main application. This option is only available for registered users.

Associate the extension "gbp" with GBM in Windows

Associate the extension (.gbp) with Genie Backup Manager in Windows; clicking a file with ".gbp" extension will automatically load the backup and open the restore wizard within Genie Backup Manager.

Save Window location on exit

Remember the size and location of the GBM main window the next time it is run.

Temporary files folder

Specify a local folder for storing temporary files created by GBM during its various operations, See Files Created by GBM Locally. (Settings)

Auto select temporary location

GBM will scan local drives for the drive with the most free disk space and select it for storing temporary files.

Use the following temporary location

Select a custom temporary folder (Make sure the drive contains enough free disk space).

Global Preferences: General - Advanced

The **Advanced** page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains advanced settings for the program.

Backup Performance

Change Backup performance for jobs to either run Faster backups or reduce impact of backup on your computer

Enable Advanced logging for debugging

Enable advanced logging. Used for trouble shooting purposes by the Genie9 technical support team.

Open GBM advanced logs folder

Open the folder containing Genie Backup Manager's advanced debugging logs.

Global Preferences: General - Sound Alerts

The **Sound Alerts** page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains settings related to attaching sounds to various events in the program.

Enable Sound Alerts: Enable associating sounds with Genie Backup Manager events.

Events: List of GBM events that the user can add sound alerts to.

Attach sound to selected event: Enable sound alert for the selected event.

Browse: Browse your computer to select a sound file to be associated with the selected event.

Play: Listen to selected sound file.

CPU

The **CPU** page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains settings related to CPU utilization management.

When you launch Genie Backup Manager, the system by default enables all processors (CPUs) for its execution. CPU Affinity allows you to select what CPU(s) Genie Backup Manager can use while running.

If you notice that Genie Backup Manager uses CPUs a lot, you can limit its execution to only one processor for example. To do this, select/deselect desired processor(s) with checkboxes in the dialog. Execution of GBM on all non-selected CPUs will be disabled.

CPU Affinity is available on multiprocessor systems only.

Preferences: Backup Settings

The **Backup Settings** page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains settings related to backup operations.

Always display backup log: Automatically display the backup activity log after each backup run.

Always display backup summary: Automatically display summary of results after each backup run.

Automatically close Outlook Express before backup: Close Outlook Express before each backup run, to avoid running into locked files during backup. (Settings)

Keep trying for X mins

Specify how long GBM should wait for Outlook Express to close before aborting backup.

Reopen Outlook Express after backup

Reopen Outlook Express when backup is complete.

Automatically close Outlook before backup: Close Outlook before each backup run, to avoid running into locked files during backup. **(**Settings**)**

Keep trying for X mins: Specify how long GBM should wait for Outlook to close before aborting backup.

Reopen Outlook after backup: Reopen Outlook when backup is complete.

Show hidden files/folders in "My Folders": Display and allow selection of files with hidden/system attribute in the file selection panes in My Folders.

After verification wait X secs then start backup automatically: After GBM confirms selections, wait X seconds before starting backup.

Default backup destination: The default folder used for storing backups when a new backup job is created.

Preferences: Backup Settings - Advanced Settings

The **Advanced Backup Settings** page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains advanced backup-related settings.

Preserve Alternative Data Streams (ADS): Preserve NTFS Alternative Data Streams even when data is backed up to a non-NTFS partition.

Enable one file self-restorable backup: When self-restorable backup sets is enabled with compression and the size of the data after compression is less than the amount specified, the entire backup set will be contained within a self-executable file (.exe). Otherwise, the self executable file will be copied as a separate file on the backup destination.

Rename unicode files: When a filename is in unicode, rename the file using a unique GUID, to avoid problems restoring the data on platforms that do not support unicode character sets. GBM will rename the file to its original name upon restore.

Backup ACL (Access Control List): Backup Access control list that specifies permissions when sharing.

Global Preferences: CD/DVD Settings

The **CD/DVD Settings** page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains options pertaining to writing to optical media.

Cache disc image before burning : This option increases the reliability of backup to CD media by creating a temporary file on the hard disc that is then written at once to disc. Caching, however, means that GBM will first copy the data to a temporary local drive and then onto the CD, which adds a few minutes to the total running time for each disc.

- Caching is not supported on DVD or blu-ray
- If GBM doesn't detect enough space to perform caching, data will be copied directly to the CD.

Finalize disc (No further writing to the disk is possible): Close the CD/DVD media so that further writing to it is not possible. This is done by not recording the next writable address in the last session's lead-in, so that in the next time the recorder attempts to write, it has no way of knowing where to begin writing. Only finalize CDs if you are sure that you will not be appending new backup versions to it.

Import previous sessions on disc: If the CD contains more than one session, the most recent session is automatically imported so that it could be updated with the new data.

Each time data is written to a CD/DVD disk a table of contents is written at the end of the session in order to make the disk readable. This procedure is called session closing; data can still be appended to the disk after a session is closed.

Genie Backup Manager will by default import previous sessions on the inserted disc before writing to it so as not to lose existing data.

Disabling this feature causes GBM to write a new table of contents that does not refer to previously written data on the disc, rendering that data hidden and inaccessible, but it will not free the space occupied by it.

If a file with the same name as the backup file already exists on the CD, GBM will rename the new file by appending a trailing number, that is incremented by one for each new version of the file that is added.

Rename archive if a file/folder with the same name exists: This option prevents accidental overwriting of previous backup jobs stored on the CD/DVD in case a file with a similar file name already exists on it.

Eject the last backup disk after finishing

When backup to optical media is performed, eject the last disk in the media set to alert user that backup is finished.

Global Preferences: Open File Backup

The Open File Backup page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains options related to handling open files during backups.

Disable Open File Backup

Disable using Open file backup to handle backing up open files

Use Volume Shadow Copy (fully integrated)

Allow Volume Shadow Copy service to copy open files during backups.

Preferences: Restore Settings

The **Restore Settings** page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains settings related to restore operations.

If a file being restored exists in the destination folder

- **Do not replace existing file**
- **Replace if restored file is new**
- **Always replace files**

Instructs GBM what to do when a file with the same name as the one being restored exists in the destination folder.

Always display log after restore

Automatically open the restore log after each restore job.

Restore file modified dates and attributes

Remember each backed up file's attributes (hidden, read-only, system, archived) and modified date and time stamp, to insure they are retained when files are restored.

Outlook restore settings

Settings to be used when restoring Microsoft Outlook data. (Settings)

Outlook default data files location

Always restore Outlook file to the default Outlook PST storage folder.
(Typically Drive:\Documents and Settings\%User name%\Local Settings\Application Data\Microsoft\Outlook)

Custom location

Restore Outlook files to a folder selected by the user.

Apply to all backup jobs

Apply selections made in this dialog to all restore jobs.

Global Preferences: Testing Data Integrity

The **Testing Data Integrity** page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains settings defining how Genie Backup Manager verifies the reliability of produced archives after backup.

Automatically test data after backup

Run data integrity test automatically after backup is complete.

Ask me

Prompt me for action after backup is finished.

Do not test

Do not perform data integrity testing after backup.

Test only new and changed files

When performing increment, mirror or differential backups, verify only files that have been newly appended to the backup set.

Global Preferences: Email Notification Settings

The **Email Notification** page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains the mail server settings GBM uses for sending notifications of performed backups via email.

SMTP Server

SMTP server hostname or IP address.

Port

SMTP port number. Default value is 25.

SSL

SSL (Secure Sockets Layer) is a security protocol that provides communication privacy. Select this option if your SMTP server supports SSL.

From:

Email address to appear in the sender (From) line.

To:

Email address of the recipient of the notification.

Subject

Text to appear in the Subject line of the notification email

Attach backup log

Select this option to include the backup log with every notification email.

Configuration

Open a dialog for configuring advanced email sending options. (Controls)

Authentication method:

By default, SMTP clients send the password to the server in an insecure format; which may be undesirable in some cases. GBM provides the following secure login options to avoid sending the password insecurely:

- **NONE:** Sends the password to the server in an insecure format.
- **AUTH LOGIN:** Most common authentication method.
- **CRAM MD5:** (Challenge Response Authentication Mode), most secure authentication method.

- **LOGIN PLAIN:** Moderate security.

Auto connect to internet

If no connection to the internet is already active, automatically connect to the Internet using the default connection.

Bind to:

If your email server uses IP Binding, select a specific IP from the list. Default setting is "Any-IP-Address".

Send dummy notification email to test the entered settings

Global Preferences: Auto-Exclude

The **Auto-Exclude** page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains settings for automatically ignoring specific files and folders during backup.

Some system files and folders on the computer are not made to be moved or copied, and are accessed only by the Windows system, trying to backup these files will cause an error in GBM. To avoid running into backup problems, GBM by default skips these files and folders in all the backup jobs created by the user. This preferences window enables the user to add/remove files and folders from the 'Auto-Exclude' list.

Enable auto-exclude

Automatically exclude the files and folders specified in the list whenever a backup is performed.

Remove

Remove an item form the list.

Add...

Add an item to the auto-exclude list.

Global Preferences: Cataloging

The **Cataloging** page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains settings related to the cataloging feature of the program.

Enable Cataloging

Allow GBM to create a library containing history of backup jobs/runs.

Access restore-wizard even when media set is not loaded

Enable user to choose a backup set from the catalog and open it within the restore wizard, to browse and select files for restore, even if the media set is still not loaded.

Read index from catalog (Enable changing storage location)

Allow GBM to do an increment, mirror, or differential backup run by referring to the backup job index saved in the catalog, instead of the one on the storage media. This is needed when the user is trying to store the data from a new backup run on a new media volume, other than the one containing the data from the previous run.

The Catalog

The Catalog

The **Catalog** is a library containing a list of all defined backup jobs and the files backed up during each job's executions. With this utility, users can keep track of file versions, and run, view search for and extract files directly from the backup archive without going through the restore wizard.

For each new execution of a backup job, Genie Backup Manager creates a new subfolder in a folder carrying the same name as the backup job (usually in C:\Documents and Settings\<user>\Application Data\Genie-Soft\GBMAPPLICATION\), starting with a folder named "00000000" for the first backup execution, and a new folder with the name incremented by one for each subsequent run. Each folder contains catalog information for the corresponding backup execution, which Genie Backup Manager refers to, to populate the catalog window.

To access the catalog click the **Catalog** button in the main window, press <Alt+C>, or select **Catalog** from the **File** menu.

Although highly not recommended, users can disable cataloging if they feel that they will not be benefiting from this feature, and wish to spare the small amount of disk space that would otherwise be consumed by the catalog files. This can be done by clicking the **Tools** menu, selecting **Global Preferences**, selecting **Cataloging**, and unchecking the box next to **Enable cataloging**. Note that doing so will prevent Genie Backup Manager from writing catalog information locally, thus loosing all historical data related to backup executions, and the ability to browse, search, extract, view, or run backed up files, unless restored first.

Using the Catalog

Backup jobs are listed in alphabetical order in the left pane of the catalog window. Expanding the tree beneath a backup job displays its versions ordered according to the date and time on which they were executed. Users can expand the tree under any backup version to view detailed information about the files that were backed up. The following filters can be selected: **All files**, **New files**, **Unchanged files**, **Modified files**, and **Deleted files**. Clicking on one of the filters

displays the results in the right pane. The following columns are available in the file list view, which can also be used for sorting:

- **Filename:** name of listed file.
- **Size:** size of listed file -before compression if backup set was compressed-
- **Date Modified** date of the most recent change made to the file before it was backed up.

- **GBM Data Type:** My Profile, My Folders or My Plugins.
- **Extension:** the filename extension (file type) of the backed up file.
- **Original Path:** the original path in which the backed up files was located.

The user can further refine the list of results by typing a filename mask in the **Filter by** field above the results pane. For more advanced file searching options, see Advanced Search.

Right-Click Options

Right clicking an object from the panes in the Genie Backup Manager Catalog will open a menu with options related to the clicked item.

Right-Clicking a Backup Job:

- **Delete Job:** Delete all catalog entries for the currently selected job.
- **Expand All:** Fully expand the tree beneath the selected backup job.
- **Collapse All:** Collapse the tree of backup runs below the selected backup job.

Right-Clicking a Backup Run:

- **Restore:** open the restore wizard to restore data from the selected backup run.
- **Show log:** Show backup log for the selected backup run.
- **Delete:** Delete the catalog entry for the selected backup run.
- **Delete All:** Delete all catalog entries for the currently selected job.

Right-Clicking a File:

- **Restore selected file:** Extract the selected file to a location specified by the user.
- **Restore checked files:** Restore all files with ticked checkboxes to a location specified by the user.
- **Mark all:** Mark all files as selected.
- **Clear all:** Deselect all files.
- **Run selected file:** Open selected file using the application associated by Windows with its file type.
- **View with Notepad:** View selected file using Notepad.

Advanced Search

The file Search dialog offers the most direct way to locate a backed up file. Use the Search dialog if you are looking for common file types, if you remember all or part of the name of the file you want to find, If you recall the size of the file you wish to locate, or if you know when you last changed a file. The Search dialog can search within all performed backup runs to locate all revisions of a file or files.

To open the advanced search dialog from the catalog window, click the **Advanced Search** link the upper-right corner.

You can write the name of the file you wish to locate directly in the **Search for** field. If you know only part of the name, you can use wildcard characters to locate all files that include that part in the name. For example, *map.* will find "road map.jpg", "tech map.doc", and "tech map.txt". You can also search for files which names contain a sequence of adjacent letters. For example, ost will find "most wanted.doc", "host.txt", and "outlook.ost".

You can instruct Genie Backup Manager to look for your file either in a specific backup archive, or in all the archives created by currently configured backup jobs, by selecting one of the following options from the **Search in** drop-down menu.

- **Selected Backup Run:** Search for file within the highlighted backup run.
- **Selected Backup Job:** Search for file within the selected backup job.
- **All Jobs:** Search the entire catalog.
- **Browse for Backup Job:** Open a list of backup jobs/runs to choose from
- **Browse for Backup File:** Specify a backup set to search within, useful when there is no catalog entry is available for that backup set.

The GBM data type menu enables you to refine your search by specifying whether the file you are searching for belongs to a **My Profile** item.

You can use additional search criteria to make your search more specific by clicking the **More choices** tab, this will enable you to refine your search according to the size and/or "last modified date and time" attribute of the file(s) you are looking for.

How to: Back up the Catalog

The catalog allows you to save job preferences, settings, and backup information. The size of the catalog varies depending on the number files taking from backup

To backup the catalog

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Plugins** tab.
3. Select **GBM 9.0 Preferences, Jobs, Scripts and Catalogs**.

Backup Devices

Backup Devices

The Where to Backup wizard screen defines where the backup will be stored. To choose a storage device during backup job creation/editing select **Where to backup** from the left navigation menu in the backup wizard. Make sure you can write in the destination and the selected folder (you have the proper rights and the media is not write-protected).

GBM is the only backup software that grants users the flexibility of choosing between all the following storage destinations without the need for purchasing and installing extra plugins or add-ons:

- External and Internal hard disks.
- Across network (Shared network locations, SAN devices, NAS devices, etc.).
- Memory Sticks (Flash memory).
- CD/DVD/Blu-ray media (all formats - DVD±RW/DVD±R/DVD-RAM/CD-R/CD-RW, Blu-ray).
- Removable media devices (REV, floppy disks, ZIP disks, JAZ etc ...)
- Remote locations using FTP/FTPS service.
- Amazon S3 Storage

For each backup run, a new index (".gbp file") is created in the destination folder, containing the backup job's catalog as well as other information necessary for Genie Backup Manager to be able to restore data automatically. If this file is lost, GBM will not be able to restore data, and the user will only be able to manually access the files and folders stored in the archive. The catalog is also stored locally to enable offline browsing of the data stored in the backup (even if the storage media is not loaded), as well as file versioning information.

If the backup destination drive/device is missing or disconnected when backup starts, Genie Backup Manager will display a warning message saying that there is not enough space on the destination, and backup will be aborted.

Note:

In easy mode, backing up to Local/LAN is only supported

Internal and External Drives

Internal and External Drives

Genie Backup Manager allows users to backup data to hard disk drives of all kinds, whether internal or external (hard drives, USB drives etc.). In addition, GBM enables users to select more than one hard disk as a backup destination; if one hard disk gets full, GBM will automatically continue backup to the next hard disk specified in the multi-drive spanning list. The **Local/LAN** option is selected by default when you define a new backup job, and data is backed up to the default backup destination as specified in the Global Preferences window.

To backup to an internal or external hard drive during backup job creation or editing, select **Where to Backup** from the left-hand menu, then select **Local/LAN location**.

If the backup destination drive/device is missing or disconnected when backup starts, Genie Backup Manager will display a warning message saying that there is not enough space on the destination, and backup will be aborted. Users can avoid this using either the Multi-Drive Spanning, or the Backup Transfer Method features.

If the desired location is not visible in Windows Explorer, users can also type the backup destination path directly in the box.

Note:

You can also backup USB attached external drives using Removable media option as it is automatically detected.

Multi-Drive Spanning

Multi-drive spanning allows Genie Backup Manager to treat multiple disk drives as one during backup.

Many people have more than one partition defined on their hard drive, others have more than one drive that they use to store backups on. Most backup solutions allow the user to select only one partition/drive as a target for storing data for each backup job, when that drive is full, backup will cease to run, unless the user manually frees more disk space, or automatically sets the software to erase the contents of the media. Genie Backup Manager offers a novel way for handling these scenarios, using multi-drive data spanning.

Multi-drive spanning is a feature that enables users to divide backed up data onto more than one local/LAN location, this includes multiple partitions, hard disks, shared and mapped networked locations, SAN and NAS devices etc.

Multi-drive spanning locations can either be preset, i.e. the user gets to predefine an ordered list of storage locations for GBM to use. Or, the user can set GBM to prompt him for a new location, once the drive currently being used is full. This feature is disabled by default.

Selecting **Repeat**, causes Genie Backup Manager to cycle through the list of backup devices, such that when the last destination in the list is full, GBM will re-attempt to backup on the first destination, and then the second, and so on.

Enabling multi-drive data spanning:

To allow GBM to span backed up data onto more that one local/LAN location:

1. From the left-hand navigation menu in the backup wizard select **Where to Backup**.
2. Select **Local/LAN location**.
3. Select **Allow multi-drive spanning**.
4. Choose one of the following options:

- **Use all available Space**: Write until current location is full before moving on to the next one.
- **Use fixed split size:** Use a fixed amount of disk space from the current location then move on to the next one, even if the previous one still has free disk space.

6. Click **Auto spanning drive List** to create a list of predefined locations for GBM to use. If no list is defined, GBM will prompt the user to enter a new backup location once the one currently being used is full.


Tip:

Use Read index from catalog to enable GBM to perform incremental or differential backups without the need to reload the previous backups

Splitting Backup Files

Using the new 64-bit Zip compression, Genie Backup Manager compresses backed up data to one file that can reach up to about 18 million terabytes in size (more precisely, 264 -1 bytes) - provided that this is supported by the file system being used - However, the user might want to split the compressed backup file into multiple smaller chunks, for instance in order to copy them later to removable media, or when the file system, such as FAT 16, does not allow creation of large files etc.

GBM can split the backup set into multiple linked files with sequentially numbered extensions (e.g. .001 .002 .003 etc ...) with the last file in the series assigned the main (.gbp) extension.

To split backup files:

1. From the left navigation menu in the backup wizard select **Where to Backup**.
2. Select **Local/LAN Location**.
3. Select **Enable multi-drive spanning**.
4. Select **Use fixed split size**, then enter the desired split size value.

How to: Restore from a Local Drives

Restoring data from backups stored on local hard drives is straight forward.

1. Make sure that the drive on which your backup is stored is attached to the computer and accessible from Windows Explorer.
2. Open the folder holding the backup on your device.
3. Double click the main "gbp" file corresponding to the backup set you wish to restore data from.

Network locations

Backup to Network Locations

Genie Backup Manager allows backing data to LAN-connected devices (Local Area Networks), these include shared network folders, mapped networked drives, SAN devices, NAS devices etc...

To backup to a networked device or location during backup job creation or editing, select **Where to Backup** from the left-hand menu, select **Local/LAN location**, **click Browse**, then select **My Network Places** or type the full path to the backup destination.

If the backup destination drive/device is missing or disconnected when backup starts, Genie Backup Manager will display a warning message saying that there is not enough space on the destination, and backup will be aborted. Users can avoid this using either the Multi-Drive Spanning, or the Backup Transfer Method features.

If the desired location is not visible in Windows Explorer, users can also type the backup destination path directly in the box, e.g. "\\Server\shared documents".

Backup from Network Locations

Genie Backup Manager users can backup data from shared folders on networked devices. To do so select **What to Backup** from the backup wizard, click **My Folders** tab, from the folders view pane select **My Network Places**, then select the folder(s) you wish to backup. If the desired location is not visible in **My Folders**, use the manual files selection feature to enter the path to the data location manually.

If the desired network location is a mapped drive/folder, simply browse to the drive letter assigned to it from the folders view pane to select the data for backup.


Tip

On a Microsoft Windows Network if you share a folder that has a dollar sign '$' at the end of its name, then it is considered to be hidden and other machines cannot see it, unless you explicitly enter its name in the address bar or the command prompt. Users can add this kind of sources by manually typing the complete path in the Manual File Selection panel. To add a new item, click Add, then type the full path to file or folder. Select Include sub-folders if you wish child folders to be included in backup.

How to: Restore Data Stored on Network Locations

1. In the main screen click **Restore**.
2. Click **Select Backup Set**.
3. Browse to the location of the backup set and select the ".gbp" file corresponding to the backup version you wish to restore, then click **Open**.
4. Click **Next**.
5. Continue with restore.

Remote Locations Using FTP/FTPS

FTP/FTPS Servers

Genie Backup Manager allows users to perform backup operations to any FTP server connected to the Internet by simply entering the server's address and authentication. Genie Backup Manager will create a local temporary copy of the backup, then "push" a data stream that can be compressed and/or encrypted to the designated FTP server. This feature will allow you to easily store data offsite or perform centralized backups for remote client data.

To perform FTP/FTPS backup, select **Remote Location Using FTP/FTPS** from the **Where to Backup** page in the backup wizard. Available space on FTP server will not be calculated/displayed during backup. You will need to make sure the FTP account you are using has enough disk space.

If the connection is dropped or interrupted, or if there was no upload activity for a considerable period of time during backup to a remote FTP server, GBM will pause the upload and retry to reestablish connection (if possible) then resume from the broken point; GBM repeats these steps until the entire backup is uploaded or the number of retries specified by the user are exceeded. Users can modify the number of auto-resume retries from the Advanced Settings dialog.

Users can restrict the transfer rate at which GBM uploads data to the FTP server during backup, so as not to "hog" the connection's bandwidth from the Advanced Settings dialog.

Limitations of FTP Backup

When FTP backup is selected, the following GBM features are not supported.

- Purging old backup files.
- Incremental backup without rollback.
- Mirror backup.
- Extracting from Catalog

 Tip:

You can rotate backup types via scheduling, for more information, please refer to How to: Schedule Rotating Backup Jobs

FTP/FTPS Backup Settings

The FTP backup settings dialog allows access to advanced FTP connection settings that users can customize for optimized performance and compatibility with the FTP server.

To open the advanced FTP Backup settings dialog, select **Where to Backup** from within the backup wizard, select **Remote location using FTP/FTPS**, then click **Advanced Settings**.

- **Protocol:** Select whether to use FTP, Secure FTP (FTPS) Implicit mode, or explicit mode.
- **Address:** Name or IP address of FTP server.
- **Port:** FTP server port number. Default value is 21 for non-secure transmission.
- **User:** Username for the FTP access account.
- **Password:** FTP access account password.
- **Backup Directory:** Path to which the backup should be stored on the server. If path does not exist, GBM will create it.

Test Connection: Perform a test connection to the server, to check that the entered settings are correct.

Advanced Settings: Advanced FTP settings. (Controls)

Passive mode: In passive mode, your computer establishes the connection. This may be necessary with some firewalls that don't allow establishing a connection from outside.

Use pre-configured settings: Get settings from the machine, for example: "proxy settings" from the control panel.

Limit Speed (Kb/s): Used to throttle bandwidth during upload. enter 0 for GBM to utilize maximum available bandwidth.

Connection Timeout: Idle time (no activity) before connection is dropped . Default value is 30 seconds.

Use FTP Proxy: Enable connecting to FTP server through a proxy. The FTP proxy server is an application level gateway that sits between a computer and the Internet. They are used by companies to provide security and/or restrict access.

Address: Host name or IP address of proxy server.

Port: FTP Proxy server port.

Server requires authentication: Enable passing a username and a password to the proxy server for authentication.

How to: Restore Data Backed Up Using FTP/FTPS

GBM currently does not support direct data restore from FTP/FTPS sites. In order to restore backed up data, the user needs to first download the backup files from the FTP/FTPS server using either an Internet browser, or a third party FTP software. It is recommended to use third party FTP software to download the backup set for better reliability and speed.

Restoring from FTP Using the Default Internet Browser

1. Open your default Internet browser.
2. Login to the FTP site containing your backed up data by entering its URL into the address bar in the following format:

   ftp://[username]:[password]@[ftpsiteaddress]

   Where:

   - [username] is the username of the FTP account used for uploading files.
   - [password] is the password for the FTP account used for uploading files.
   - [ftpsiteaddress] is the address for the FTP site used for uploading files, including the complete path to the location of the backup set.

   E.g.

   ftp://sam:mypassword@my.ftp.site.com/genie/monday/

3. Locate the backup set and then Copy/Paste it onto your hard disk.
4. Follow the local restore procedure.

Restoring from FTP Using Third Party Software

1. Use a third-party FTP software to download the complete backup set onto your hard disk.
2. Follow the local restore procedure.

Amazon S3

Amazon S3

GBM allows you to backup online to the robust cloud infrastructure of Amazon's Simple Storage Server (Amazon S3). To use this feature you will need to purchase an account from Amazon

Amazon S3 Settings:

Access Key ID: An alphanumeric text string that uniquely identifies user who owns account. This information is listed under **Security Credentials** under your amazon account

Secret Access Key: This serves as your password. This information is listed under **Security Credentials** under your amazon account

Bucket Name: It can be any directory created at the root level of your online storage.

Backup Directory: Where you would like to store your backups. Please make sure that you have enabled access permissions to the folder

Test Connection: Perform a test connection to the server, to check that the entered settings are correct.

Advanced Settings: To limit bandwidth, backup to Reduced Redundancy Storage, and for Server Side Encryption support. (Controls)

> **Limit Speed (KB/s):** Used to throttle bandwidth during upload. enter 0 for GBM to utilize maximum available bandwidth.
>
> **Enable Amazon Server Side Encryption (SSE):** Used to enable AES encryption on Amazon's cloud storage
>
> **Use Reduce Redundancy Storage (RRS):** A cheaper alternative that provides **99.99%** durability and to sustain the loss in a single facility instead of **99.999999999%** durability and to sustain the loss in 2 facilities.

Notes:

- To backup to Amazon S3, you will need to purchase an account. To do so, please visit http://aws.amazon.com/s3/
- You will need to create a bucket at the root directory and add the backup directory inside of it
- Purging is not supported, to rotate backup types, please use the advanced scheduler.
- Mirror and increment with rollback disabled is not supported with Amazon S3 backup.

Backup to Amazon S3

Setting Genie Backup Manager to perform backup:

1. Make sure you have an Amazon S3 account.
2. From the backup wizard, select **Where to Backup**.
3. Select **Amazon S3**.

4. Enter your Amazon S3 credentials
    - **Access Key ID:** An alphanumeric text string that uniquely identifies user who owns account. This information is listed under **Security Credentials** under your amazon account
    - **Secret Access Key:** This serves as your password. This information is listed under **Security Credentials** under your amazon account
    - **Bucket Name:** It can be any directory created at the root level of your online storage.
    - **Backup Directory:** Where you would like to store your backups. Please make sure that you have enabled access permissions to the folder.
5. For secure data transmission, check **SSL**
6. To limit upload bandwidth, backup to Reduced Redundancy Storage, and for Server Side Encryption support, click **Advanced Settings**
7. Click **Next** to proceed with the Wizard

Notes:

- To backup to Amazon S3, you will need to purchase an account. To do so, please visit http://aws.amazon.com/s3/
- You will need to create a bucket at the root directory and add the backup directory inside of it
- For secure data transfer, please enable SSL
- Purging is not supported, to rotate backup types, please use the advanced scheduler.

How to: Restore/View Backups from Amazon S3

Genie Backup Manager currently supports backing up to Amazon S3 storage. To restore:

1. Download the backup using any third party application.
2. Open the Restore Wizard and browse for the last .gbp file created in the backup set
3. Proceed with the wizard

How to: Delete backups off Amazon S3

GBM currently does not support deleting Amazon S3 backups. However, if you wish to delete backups manually, please make sure to delete the entire backup set (full backups + incrementals). In addition, please make sure to delete its corresponding backup information using "Delete job" option in the catalog

To learn more on how to delete backup sets, go to Understanding Backup Sets and Purging

Optical Media

Optical Media

Genie Backup Manager can write to CD/DVD media of any format (DVD±RW/DVD±R/DVD-RAM/CD-R/CD-RW), including double layer DVDs and Blu-ray, using both built-in burning capability and packet writing - with the aid of third party software -.

To set Genie Backup Manager to backup to a CD/DVD drive, select **Where to Backup** from the left-hand menu, select **CD/DVD media**, then select the drive letter of the recorder you wish to use.

You can backup an unlimited amount of data to CD/DVD media even if one disc does not have sufficient space to hold all the data, since GBM will by default divide your backup into several discs (*automatic disk spanning*), and all you need to do is to replace discs when prompted to do so.

Genie Backup Manager will by default use the entire amount of empty space available on each inserted disk during backup, you can select **Use fixed split size** to instruct GBM to only fill up a fixed amount of space on each inserted disc. Make sure to leave some space as a safety margin for the table of contents that will be written to close the disc session.

If GBM fails to write to disc or is interrupted during the process, the user will be given the option to retry by inserting a new disc, or to cancel the operation.

Genie Backup Manager checks the integrity of data written on each disc in the backup set immediately after the disc's session is closed. If the data is corrupt, GBM will ask the user whether to proceed with backing up the rest of the data (in the case of automatic disc spanning) or cancel the backup task.

To prevent GBM from verifying data integrity after writing to a CD/DVD, uncheck the option **Verify data after backup** in the disc burning progress dialog that appears during backup.

GBM by default uses the maximum speed supported by both the recorder drive and the inserted media for burning, however, for trouble shooting purposes the user can select a custom writing speed by clicking **Advanced Settings.** If no disk is inserted in the drive, GBM will load the list of speeds supported by the recorder drive, inserting a disk in the drive would cause GBM to load the list of speeds supported by both the recorder and inserted media.

Note

Blu-ray is only supported on Windows Vista and Windows 2008 Server and above

Disc Recording Options

Disc Recording Options

Genie Backup Manager uses two methods for writing a CD/DVD disc: The built-in burner and Incremental Writing (AKA Packet Writing) using third party software.

Track-at-Once recording is what most recorders and software support today, and is the built-in default CD/DVD recording method used in Genie Backup Manager, which means that you do not need to use third party software to use it for writing data to optical media. Track-at-once

burning does not allow manipulation of individual files after they have been written to disc, and thus, only supports full, incremental with rollback, and differential backup types. Purging old backups is also not supported.

Packet writing on the other hand lets you treat an optical disc as though it were a big floppy disk, allowing in the process for the deletion and replacing of individual files, thus supporting all backup types, including incremental without rollback and mirror (as long as data is not divided over multiple discs). However, Genie Backup Manager supports this recording method only through the use of third party software.

Built-in burner vs. packet writing.

Issue	**Track-at-Once**	**Packet Writing**
Speed	Slower.	Faster (Except when backup without compression is used).
Compatibility	Readily readable on most drives.	In most cases the packet writing software used to write the data must be installed in order to read from the disk.
Incremental & Mirror Backup	Rollback forced. Mirror backup not supported.	Backup with rollback option disabled is supported (new versions of files overwrite old versions). Mirror backup supported.
Purging old backups files	Not supported.	Supported as long as data is not divided over more than one disk.
Availability	Built in.	Must use third party packet writing software. **Note:** Default Windows XP writing component does not use packet writing.
Disk space utilization	More disk capacity.	Less disk capacity; Packet Writing consumes more space on disc.
Pre-use formatting	Blank disks need not be formatted before usage. Disks previously written to using packet writing software must be fully erased: **Tools** > **Format Re-writable CD** > **Full Format**.	All disks must be formatted at least once using the third party software, to become compatible with packet writing. **Note:** Disks formatted using one packet writing software must be reformatted before being used with another.

Using the Built-in Burner

The built-in CD/DVD burner in Genie Backup Manager can write to almost all optical media formats, including the new dual-layer DVD and Blu-Ray technologies; no third party software is required.

To set GBM to backup to optical media using the built-in burner:

1. From within the backup wizard select **Where to Backup**.
2. Select **CD/DVD media**
3. Make sure **Use packet writing Software** is not selected.

Incremental Writing (Packet Writing)

If your CD/DVD device is not compatible with Genie Backup Manager, or if you wish to use backup types not supported by GBM's built-in burner, you can use third party packet writing software.

Packet writing is a term for software that lets you record data onto an optical disc directly from Windows Explorer, My Computer, or from the File/Save As section of any computer program. Simply put, it lets you treat a CD as though it were a big floppy disk.

When backup using third party packet writing software is selected, Genie Backup Manager will still control what and how much data is written to each inserted disc.

- CD/DVDs written with this method can only be recognized on other computers if the same third party packet writing software is installed there too.
- Free Packet-Writing software are available for download on the Internet, please refer to the following knowledgebase article for more information: http://www.genie9.com/asp/community/KnowledgeArticle.asp?KBID=128

To set GBM to write to CDs and DVDs using third party packet writing software:

1. From within the backup wizard select **Where to Backup**.
2. Select **CD/DVD media** .
3. Select **Use third party packet writing Software**.

Formatting Optical Media

GBM comes with a CD/DVD formatting tool that can perform both quick erase and full disc format.

This feature can only be used with re-writable optical media.

- New blank discs need not be formatted before using them with Genie Backup Manager. However, if the disk has been written to previously using a packet writing software then it needs a full format before GBM can use it for backup.
- When using packet writing, make sure the disc you wish to backup to has been formatted using the third party packet writing software.

Setting a backup job to automatically erase CD/DVD discs before backup:

1. From the left navigation menu in the backup wizard select **Where to Backup**.
2. Select **CD/DVD media (DVD±RW/DVD±R/DVD-RAM/CD-R or CD-RW)**.
3. Make sure **Automatically erase disc before backup** is selected.

- Automatic disc erase uses quick erase, not full format.

Manually erasing CD/DVD discs:

1. From the toolbar click **Tools**, then select **Format Re-Writable CD/DVD**.
2. Select the drive letter of the recorder containing the disk you wish to erase.
3. Select one of the following options:

    - **Quick Erase:** Quickly delete the contents of the disk (takes around 1-2 minutes to complete)
    - **Format:** Fully format disc (might take around 30 minutes or more to complete).

- Quick erasing re-writable disks might render them ’r;stubborn’ after a number of erases, it is recommended to perform a format every 7-10 quick erase sessions to revitalize the disk.

Global Preferences: CD/DVD Settings

The **CD/DVD Settings** page of the **Global Preferences** window (accessible from the **Tools** menu, **Global Preferences** menu item) contains options pertaining to writing to optical media.

Cache disc image before burning : This option increases the reliability of backup to CD media by creating a temporary file on the hard disc that is then written at once to disc. Caching, however, means that GBM will first copy the data to a temporary local drive and then onto the CD, which adds a few minutes to the total running time for each disc.

- Caching is not supported on DVD or blu-ray

- If GBM doesn't detect enough space to perform caching, data will be copied directly to the CD.

Finalize disc (No further writing to the disk is possible): Close the CD/DVD media so that further writing to it is not possible. This is done by not recording the next writable address in the last session's lead-in, so that in the next time the recorder attempts to write, it has no way of knowing where to begin writing. Only finalize CDs if you are sure that you will not be appending new backup versions to it.

Import previous sessions on disc: If the CD contains more than one session, the most recent session is automatically imported so that it could be updated with the new data.

Each time data is written to a CD/DVD disk a table of contents is written at the end of the session in order to make the disk readable. This procedure is called session closing; data can still be appended to the disk after a session is closed.

Genie Backup Manager will by default import previous sessions on the inserted disc before writing to it so as not to lose existing data.

Disabling this feature causes GBM to write a new table of contents that does not refer to previously written data on the disc, rendering that data hidden and inaccessible, but it will not free the space occupied by it.

If a file with the same name as the backup file already exists on the CD, GBM will rename the new file by appending a trailing number, that is incremented by one for each new version of the file that is added.

Rename archive if a file/folder with the same name exists: This option prevents accidental overwriting of previous backup jobs stored on the CD/DVD in case a file with a similar file name already exists on it.

Eject the last backup disk after finishing

When backup to optical media is performed, eject the last disk in the media set to alert user that backup is finished.

How to: Restore from Optical Media

To restore data stored on CD or DVD discs:

1. Insert the last disc in the backup set into the drive.
2. Open the Restore wizard.
3. Click **Select backup set**.
4. Browse to the CD/DVD drive and select the catalog ".gbp file".
5. Click **Open**.

CD/DVD Backup Strategies

GBM offers flexibility and reliability when backing up to CD/DVD. Here are some strategies to make your backup reliable and more flexible:

1. **Use blank CD/DVDs:** For reliable backups it is recommended that you use blank (new) CD/DVDs to ensure that the CD/DVD does not contain scratches from extensive use.
2. **Simulate Backup**: GBM offers simulating capabilities to ensure successful burning of backup so you know that your backup will burn correctly on the CD/DVD before it actually backs up. To can enable this option from **Tools> Global Preferences> CD/DVD Settings> Simulate backup before committing backup to disc**
3. **Create full backup on high capacity media:** Backing up to CD/DVD is much slower than backing up to a hard drive. Also DVD's even if dual layered cannot compare with the high capacity Hard drives. In GBM you can create your full backup on an external drive, edit your job, select incremental or differential on CD/DVD. Please make sure **Read index from catalog (Enable changing storage location)** is selected from **Tools> Global Preferences> Cataloging**
4. **Rotate backup types via scheduling:** Purging is disabled when burning backups to CD/DVD media. However, you can rotate backup types using Advanced schedule in Scheduler. for more information, see Advanced Schedule
5. **Use packet writing software to purge backups:** you can enable purge option (fully supported if the backup does not span to multiple disks) using packet writing software as it enables writing to CD/DVD as if you were backing up to a hard drive. Packet writing also allows you to perform mirror backups and incremental backups with rollback disabled.

Removable media

Removable Media

Removable media devices include floppy disks, JAZ drives, ZIP drives, memory sticks, etc. Removable media is a practical backup destination, because it allows automatic media spanning, i.e. GBM would backup to the inserted volume until all available space has been consumed then prompt the user to insert a new disk, and so on, until all data has been written.

To set Genie Backup Manager to backup to a removable media device, open the backup wizard, select Where to Backup, then select **Multiple Disks (Removable Media Devices)**. A list of all attached removable media devices will be displayed to choose from. External hard disk drives are now detected under removable media; however, you may backup external harddisk under

Local/LAN option to enable multi-drive spanning. For more information, see Backup to Internal and External Drives.

You can backup an unlimited amount of data removable media even if one volume does not have sufficient space to hold all the data, since GBM will divide your backup into several discs, and you only need to replace discs when the program prompts you to do so.

Select **Automatically erase contents of disk before backup** if you wish to save time by allowing GBM to quick-format each inserted volume during backup.

How to: Restore from Removable Media

To restore data stored on removable media:

1. Make sure the last storage volume from the backup set is inserted/connected.
2. Open the Restore wizard.
3. Click **Select backup set**.
4. Browse to removable media drive and select the catalog ".gbp file".
5. Click **Open**.

The Default Backup Destination

When a new backup job is created, the backup destination option (where to backup) will be set to a default local folder, typically "My Documents\My Backups", which can be later changed by the user.

To change GBM's default backup folder select **Tools** from the toolbar, select **Global Preferences**, select **Backup Settings**, and enter a new path in the **Default backup destination** box. Note that the default backup destination can only be set to point to a local or networked location.

To view the contents of the default backup folder click **File** from the toolbar then select **Default Backup Folder**.

Backup Transfer Method

Disconnections during backup (network failure, faulty disks etc.) can lead to corrupt backups. To avoid having to redo backup when such an event occurs, users can activate this feature to make a temporary local copy of the data before copying it to its final destination; this way, Genie Backup Manager can resume backup from where it was interrupted.

To activate Backup Transfer Method for a backup job, select **Settings** from the backup wizard, click on the **More Settings** link, select **Backup Transfer Method**, and make sure the option **Backup to local temporary location before copying to backup destination** is checked.

Media ID

During backup to removable or optical media, Genie Backup Manager will assign a different id (label) to each disc/volume for identification. It is recommended to mark the media with this

label, since GBM will refer to it as it prompts the user to replace disks during restore or when attempting to add new versions to a backup.

GBM names each disk using the following naming scheme:

<Backup Job Name> - <Volume Number>

Where:

- **Backup Job Name:** is the name assigned to the backup job.
- **Volume Number:** indicates the disk's number according to the sequence in which volumes where inserted during backup.

To change the Media ID:

1. From the left navigation menu in the backup wizard select **Settings**.
2. Click **Advanced Settings**.
3. Make sure **Change media ID** is selected.
4. Type a new label to be used instead of the backup job name.

Data

Data

User data is divided into three categories to make it more manageable during backup and restore. Data selection is the third screen in the backup wizard.

My Profile

This user data group contains various built-in plugins that you can use to backup some of the most important items on your computer; this includes Emails, Favorites, Windows Settings, Desktop files and folders etc&ldots;

Plugins are system independent, i.e. one can backup his favorites, for instance, from a Windows XP machine and restore them on a Windows 2000 machine, without having to worry about the changed Windows environment, and GBM would know exactly where to copy the files.

The items in this group were selected to include the most commonly backed up data types during system formats.

My Folders

This user data group allows you to backup files and folders from any location readily accessible from My Computer using an easy to use Windows-Explorer-like interface.

Use this group when you know where your files and folders are located and need to be able to access/restore files individually.

My Plugins

This group lists plugins that can be used to back up various items, such as programs, program settings, saved games, databases etc ...

These plugins are different from those in My Profile in that users can download free plugins to extend the capabilities of GBM, or create their own custom plugins and share them with other users.

Personal Data and Settings (My Profile)

Profile Data

This user data group contains various built-in plugins that you can use to backup some of the most important items on your computer; these include Emails, Favorites, Windows Settings, Desktop files and folders etc. The items in this group were selected to include the data types most commonly backed up during system formats.

My Profile items can be migrated between different computers or different versions of Windows safely; one can backup his favorites, for instance, from a Windows XP machine and restore them on a Windows 2000 machine, and GBM would know exactly where to copy the files.

Selecting an item from the left pane displays a list of selection refinements in the right pane, along with item-specific settings.

System State

System State

Genie Backup Manager provides an easy, secure and reliable way to backup System State. System state backup includes all system state data as a unit; you cannot choose to backup individual components due to dependencies among the system state components and to insure a stable system after restoration.

System State Items That GBM Can Backup

- Boot files, including system files and performance counter configurations
- COM+ Class registration database: A store of registration information for COM objects in the Windows system. COM is a standard for binary interoperability of registered software components.
- Windows Registry: A database that Windows uses to store hardware and software configuration information, user preferences and setup information
- System Files under Windows File protection: A system service that protects special operating system files. In the event that one of these files is deleted or overwritten, System File Protection will replace the file with the original from its cache.
- Active Directory Service: Stores Information about the network resources across a domain and is only created on systems that are domains
- SYSVOL Directory: Contains Group Policy data this folder is only created on systems that are domain controllers
- Certificate Services database including private keys. This databases are only created on certification authority systems
- Cluster Database: Contains information about all physical and logical elements in a cluster, including cluster objects, their properties, and configuration data. It is created on systems that are a node of a Windows cluster
- The Metadirectory for The Microsoft Internet Information Services if IIS is installed on the computer

How to: Backup System State

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Profile** tab.
3. In the left-hand pane Select the checkbox next to **System State.**

How Restore to System State?

1. Open the restore wizard.
2. Load a backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. From the left-hand pane, select **System State**

Important Notes

- When Restoring System State with active directory, you must Restart the domain controller in Directory Services Restore Mode
- It is recommended to Restore Active Directory, which is part of System State, before restoring MS Exchange. This will save time instead of manually configuring you storage groups, mail boxes, etc...
- Aborting System State Restoration may cause your system to become unstable.
- It is Recommended to restore System State data to the same Windows version due to variation in components on each version
- If you have more than one domain controller in your organization and Active Directory is replicated to any of these other servers, you might have to authoritatively restore any Active Directory data that you want to restore.

Restart the Domain Controller in Directory Services Restore Mode

Restoring your Active directory requires your Domain Controller to be offline. Therefore you must restart your domain controller in Directory Services Mode

To perform this procedure, you must provide the Administrator password for Directory Services Restore Mode.

To restart the domain controller in Directory Services Restore Mode

1. Restart the domain controller.
2. When the screen for selecting an operating system appears, press F8.
3. On the Windows Advanced Options menu, select Directory Services Restore Mode.
4. When you are prompted, log on as the local administrator.

Email Clients

Backing up Email Clients Data

Genie Backup Manager offers backup options for of the most commonly used email clients: Ms Outlook (2000-2007, Windows Mail, and Outlook Express. Backup of other email clients' data is also supported through Genie9's free plugins project.

MS Outlook

MS Outlook

Genie Backup Manager can help you to backup all your Outlook data or transfer your existing Outlook profile(s) from one computer to another. Using Genie Backup Manager you can migrate your Outlook profile between different versions of Windows.

MS Outlook Data Items that GBM Can Backup:

- Main data files (Outlook.pst, Archive.pst) and additional data files created by the user.
- Extensions (addins).
- Settings and preferences, including customized toolbar settings, contacts and nicknames, send and receive settings, navigation pane settings, rules etc ...
- Signatures: The blocks of formatted text and/or graphics that appear at the end of e-mails send that identify yourself and your contact information.
- Stationery: Stationery and themes are a set of unified design elements and color schemes you want to apply to messages. They specify fonts, bullets, background color, horizontal lines, images, and other design elements you want to include in outgoing e-mail message
- Custom Forms: Custom forms created by outlook users. Forms are an easy way to distribute and collect information electronically.
- E-mail accounts: POP3, IMAP and HTTP e-mail accounts
- Miscellaneous options set by the user while using Microsoft Outlook such as: notifications, displays, read receipts, sending options and formats, maintenance preferences, etc...
- Categories: Any Microsoft Outlook item can be assigned to one or more categories. Consistent use of categories makes it easier to locate specific items.

Outlook Data Files

The following is a list of MS Outlook files that GBM can backup.

Description	Stored in	Typical File Location
Outlook data files	(.pst)	drive:\Documents and Settings\<user>\Local Settings\Application Data\Microsoft\Outlook
Offline Folders file	(.ost)	drive:\Documents and Settings\<user>\Local Settings\Application Data\Microsoft\Outlook
Personal Address Book	(.pab)	drive:\Documents and Settings\<user>\Local Settings\Application Data\Microsoft\Outlook
Offline Address Books	(.oab)	drive:\Documents and Settings\<user>\Local Settings\Application Data\Microsoft\Outlook
Command bar and menu customizations (.dat)	(.dat)	drive:\Documents and Settings\<user>\Application Data\Microsoft\Outlook

Navigation Pane settings. This file includes Shortcuts, Calendar, and Contact links.	(.xml)	drive:\Documents and Settings\<user>\Application Data\Microsoft\Outlook\Outlook.xml
Outlook contacts nicknames	(.nk2)	drive:\Documents and Settings\<user>\Application Data\Microsoft\Outlook
Rules	(.pst)	drive:\Documents and Settings\<user>\Application Data\Microsoft\Outlook Note: If you upgraded from a version of Outlook prior to Outlook 2002, you may have a .rwz file on your computer hard disk drive. The file is no longer needed and the rules information is now kept on the server for Microsoft Exchange e-mail accounts, and within the personal folders file (.pst) for POP3 and IMAP e-mail accounts. You can delete the file.
Print styles	(Outlprnt with no extension)	drive:\Documents and Settings\<user>\Application Data\Microsoft\Outlook
Signatures	(.rtf, .txt, .htm)	drive:\Documents and Settings\<user>\Application Data\Microsoft\Signatures
Stationery	(.htm)	drive:\Documents and Settings\<user>\Application Data\Microsoft\Stationery
Custom forms		drive:\Documents and Settings\<user>\Local Settings\Application Data\Microsoft\Forms
Dictionary	(.dic)	drive:\Documents and Settings\<user>\Application Data\Microsoft\Proof
Templates	(.oft)	drive:\Documents and Settings\<user>\Application Data\Microsoft\Templates
Send/Receive settings	(.srs)	drive:\Documents and Settings\<user>\Application Data\Microsoft\Outlook
Message	(.msg, .htm, .rtf)	drive:\Documents and Settings\<user>\My Documents

How to: Backup MS Outlook Data

1. Log in to the Windows account using the Outlook profile(s) you wish to backup.
2. From the left navigation menu in the backup wizard select **What to Backup**.
3. Select **My Profile** tab.
4. Expand the **Outlook** tree to view available profiles.
5. Select the checkboxes next to the profiles you wish to backup.
6. From the right-hand pane select the desired Outlook data items for each profile.

How to: Backup While MS Outlook is Running

GBM may not properly backup Outlook data files if Outlook is running. To avoid files being skipped during backup if the Open File Backup service is disabled, the user can set GBM to automatically close Outlook before backup starts and then reopen it when backup is complete.

For a better solution to avoid this and all similar open-file problems, see Managing open files.

To set GBM to automatically close Outlook before backup:

1. From the toolbar, click **Tools**, then select **Global Preferences**.
2. Select **Backup Settings**.
3. Select **Automatically close Outlook before backup**.
4. If you wish to let GBM run outlook again after backup, select **Reopen Outlook after backup**.
5. Enter the number of minutes GBM should wait for Outlook to close before aborting backup; GBM will not be able to close Outlook if one of its dialogs or internal messages is open.

How to: Restore Outlook Data

Although Genie Backup Manager can backup multiple Outlook profiles simultaneously, each profile must be restored separately.

1. Open the restore wizard.
2. Load a backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. From the left-hand pane, expand the tree under **Outlook**, then select a profile.
5. From the items list pane select the Outlook Data Items you wish to restore.
6. Choose one of the following options:

    - **Create a new profile:** create a new profile, and restore data to it.
    - **Overwrite existing profile:** overwrite existing profile with the one being restored.
    - **Append to Existing profile:** merge restored profile with an existing one. PST files will be appended as additional data files, not synchronized.

7. If you wish to restore another Outlook profile, run Outlook once, then close it and repeat steps 1 through 6

Outlook Express

Outlook Express

Genie Backup Manager can help you to backup all your Outlook Express data or transfer your existing Outlook Express identity from one computer to another. Using Genie Backup Manager you can also migrate your Outlook Express emails and settings between different versions of Windows.

GBM is also the first and ONLY Outlook Express backup utility to allow users to view, read, print, and extract emails directly from the backup without restoring them first.

- Outlook Express makes it easy for two or more users on the same PC to keep their mail separate using identities. GBM can backup multiple Outlook Express identities simultaneously.
- Selecting an Outlook Express mail folder will automatically select all its subfolders.
- To select an Outlook Express mail folder without its subfolders or to deselect a folder without un-selecting its subfolders, right-click on the checkbox next to it.

How to: Backup Outlook Express

1. From the left navigation menu in the backup wizard select **Where to Backup**.
2. Select **My Profile** tab.
3. Expand the **Outlook Express** tree to view identities available for backup.
4. Select the checkboxes next to the identities you wish to backup.
5. From the right-hand pane select the desired Outlook Express data items for each identity.

How to: Backup While Outlook Express is Running

GBM may not properly backup Outlook Express data if Outlook Express is running and if Open File Backup (OBF) is disabled. To avoid files being skipped during backup, the user can set GBM to automatically close Outlook Express before backup and then reopen it when backup is complete.

For a better solution to avoid this and all similar open-file problems, see Managing open files.

To set GBM to automatically close Outlook Express before backup:

1. From the toolbar, click **Tools**, then select **Global Preferences**.
2. Select **Backup Settings**.
3. Select **Automatically close Outlook Express before backup**.
4. If you wish to let GBM run outlook Express again after backup, select **Reopen Outlook Express after backup**.
5. Enter the number of minutes GBM should wait for Outlook Express to close before aborting backup. GBM will not be able to close Outlook Express if one of its dialogs or internal messages is open

How to: Restore Outlook Express Data

Although Genie Backup Manager can backup multiple Outlook Express identities simultaneously, each identity must be restored separately.

1. If you are restoring to a new Windows installation, you must start Outlook Express once before attempting to restore.
2. Open the restore wizard.
3. Load the backup, then click **Next**.
4. Make sure the **My Profile** tab is selected.

5. From the left-hand pane, select the identity you wish to restore.
6. From the items list pane select the Outlook Express data items you wish to restore.
7. Click **Select identity**.
8. Choose an identity from the list and click **Select**.
9. Click **Back to Restore**.
10. Finish selecting other backup items and click **Next** to start restore.
11. Repeat steps 2 through 10 to restore additional Outlook Express identities.

How to: Synchronize Outlook Express Mail Folders

Genie Backup Manager isn't an Outlook Express synchronization tool per se', however, GBM offers a work around, by restoring data to a dummy temporary identity, from there the user can use Outlook Express import functionality to synchronize emails form the existing identity with emails from the restored identity.

To synchronize Outlook Express Emails:

1. Open the restore wizard.
2. Load a backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. From the left-hand pane, select the identity you wish to restore.
5. From the items list pane select the Outlook Express data items you wish to restore.
6. Click **Select identity.**
7. Choose an identity from the list, then click **Select**.
8. Select **Synchronize my emails**.
9. Click **Ok** and complete the restore process.
10. When restore is complete, run Outlook Express.
11. From the **File** menu select **Import** then select **Messages**.
12. Select **Microsoft Outlook Express**.
13. Select **Genie Backup Identity** and click **Next** until you reach the **Select Folders** page.
14. Choose one of the following options:

    - **Import all**.
    - **Selected Folders**.

How to: Synchronize Outlook Express Settings

To synchronize settings and email accounts from a backed up Outlook Express identity with an existing Outlook Express identity do the following:

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. From the left-hand pane, expand the **Outlook Express** list, then select an identity.
5. From the item list pane, make sure **Outlook Express Root** is not selected, and select **Outlook Express Data**.
6. Click **Select identity**.
7. Choose an identity from the list, then click **Select**.
8. Click **Back to Restore**.

How to: Extract Mail Folders Directly from a Backup

This features allows you to extract an Outlook Express mail folder directly from backup without having to restore the entire identity.

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. From the left-hand pane, select an identity.
5. From the items list pane, expand the **Outlook Express Root** tree, and select an email folder.
6. Click **Extract**.
7. Select a folder then click **Ok**.

How to: View Backed Up Emails

GBM is the first Outlook Express backup utility to allow users to view, read, print, and extract emails directly from the backup without restoring them first.

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. From the left-hand pane, select an identity.
5. From the items list pane, expand the **Outlook Express Root** tree, then select an email folder.
6. Click **View Emails**.

Windows Mail

Windows Mail

Windows Mail is the successor to Outlook Express. Windows Mail builds on the foundation of Outlook Express, adding a variety of new features designed to make your e-mail experience more productive and fun, while helping to reduce risks and annoyances such as phishing and junk e-mail. With GBM, users can backup and restore Windows Mail emails, accounts, rules, and stationary simply and easily with a click of a button.

Windows Mail Data Items that GBM Can Backup:

- Mail: Inbox, Outbox, drafts, Deleted Items, Junk email folders, and all user defined folders for emails
- Accounts: Email accounts, Internet news accounts and Directory Service accounts.
- Rules: Message rules created in Windows Mail
- Settings: This includes the options the user selects and sets while using Windows Mail such as: notifications, displays, send/receive message options, read receipts, sending options and formats, maintenance preferences, etc...
- Stationery: Stationery and themes are a set of unified design elements and color schemes you want to apply to messages. They specify fonts, bullets, background color, horizontal lines, images, and other design elements you want to include in outgoing email messages.

How to: Backup Windows Mail Data

1. From the left navigation menu in the **backup wizard** select Where to Backup
2. Select **My Profile** tab
3. Select **Windows Mail**

How to: Restore Windows Mail Data

1. Open the Restore wizard.
2. Load the backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. From the left-hand pane, select **Windows Mail**
5. Select one of the following options:

- **Overwrite:**This option will overwrite all items with what is in backup.
- **Merge:**This option enabled GBM to add missing emails, stationery to your current configuration. This method is recommended even if you are restoring to a new installation.

Backing Up Other Email Clients

Backup of email clients other than MS Outlook and Outlook Express is supported through Genie9's free Plugins project. The Genie9 plugins database contains hundreds of downloadable free plugins that extend Genie Backup Manager's capabilities to support backup of extra items, such as email clients, that are not already listed in the My Profile section. Users can also create custom plugins to backup additional items not included in the database, by writing XML-based scripts (for more information see Scripting).

Windows Registry

Windows Registry

Windows Registry is a database that holds the settings and options in your windows system. Whenever you make changes to your hardware configurations, software, users settings or PC preferences on your computer these changes are reflected in and stored in windows registry.

If you are the kind of person who likes to fiddle with registry to tweak settings or if you're a software experimenting fan, then backing up your registry is a necessity. Using Genie Backup Manager, you can backup your entire registry or just a few selected keys.

How to: Back Up the Entire Registry

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Profile** tab.
3. In the left-hand pane Select the checkbox next to **Registry**.
4. Select **Backup Entire Registry**.

How to: Back Up Selected Registry Keys

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Profile** tab.
3. In the left-hand pane Select the checkbox next to **Registry**.
4. Select **Backup selected registry keys**.
5. Click **Add Registry Keys**
6. Select a registry key then hit **Add**. Repeat this step until all desired registry keys are selected.
7. Click **Done**.

How to: Restore Windows Registry

Restoring the entire registry must NOT be performed except on the same machine and under the same Windows installation. Restoring the registry under a different Windows installation (for example after a system format) or to another machine WILL corrupt your system.

Arbitrary restoring registry keys may have unpredictable consequences and cause your system to crash or corrupt installed programs. It is recommended not to restore registry keys unless the user knows exactly what the keys are for.

To restore Windows Registry

1. Open the restore wizard.
2. Load the backup then click **Next**.
3. Select **My Profile** tab.
4. Select the checkbox next to **Registry**.
5. From the right-hand pane, select the registry key(s) you wish to restore.

Desktop Items

The Desktop

The Desktop area is the preferred location for storing files that the user needs to be readily available and accessible, however, the actual Desktop folder is nested in the drive in a location not obvious to most people. Genie Backup Manager will backup and restore Desktop items to their correct locations on the target computer regardless of the Windows version installed or the user account under which you are logged on.

How to: Back up Desktop Items

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Profile** tab.
3. Select **Desktop**.
4. From the right-hand pane select one of the following two options:

    - **All desktop:** backup the entire Desktop area with all its files and subfolders. The desktop area will be automatically re-scanned each time backup is performed to include newly added files and folders.
    - **Selected files and folders:** backup only a selected set of files and folders. Selection will not be re-scanned for new files in subsequent backups.

Note:

Shortcuts (*.lnk) are excluded from the backup job as they are linked to different locations that may not be restored in the original location causing broken and unused links.

How to: Restore Desktop Items

Genie Backup Manager allows you to migrate your Desktop area items between different machines, Windows, and user accounts.

1. Open the restore wizard.
2. Load the backup then click **Next**.
3. Select **My Profile** tab.
4. From the left-hand pane, select **Desktop**.
5. From the right-hand pane, select the Desktop items you wish to restore.
6. Select one of the following options:
    - **Restore to Desktop** to restore to the desktop area of the currently logged on user**.**
    - **Restore to alternate location** to restore to a different folder.

My Documents Folder

My Documents Folder

Most applications, including VS.NET, and the Microsoft Office suite etc. consider 'My Documents' as the default location for any user's work. However, this folder is mapped differently for each user on the same computer.

Genie Backup Manager enables you to backup 'My Documents' folder quickly and easily, over and over again, each time making sure that new and changed files are always backed up. Moreover, GBM will always restore 'My Documents' to its correct path on the target computer regardless of the Windows version installed or the user account under which you are logged on.

How to: Back Up My Documents

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Profile** tab.
3. Select **My Documents**.

4. From the right-hand pane, select one of the following two options:
    - **All My Documents:** Backup the entire 'My Documents' folder. Genie Backup Manager will automatically re-scan the 'My Documents' folder for newly added files before each backup run.
    - **Selected Files/Folders:** Select specific files and folders to be backed up from within the 'My Documents' folder. Genie Backup Manager will only backup the original set of selected files each time, newly added files and folders will be ignored.

How to: Restore My Documents Folder

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. From the left-hand pane, select **My Documents**.
5. From the right-hand pane, select the Desktop items you wish to restore.
6. Select one of the following options:
    - **Restore to My Documents:** to restore to the My Documents folder of the currently logged on user**.**
    - **Restore to alternate location** to restore to a different folder.

Windows Address Book

Windows Address Book

Windows Address Book is where contact information is stored. This information is used by programs such as Microsoft Outlook, Microsoft Outlook Express, Microsoft Internet Explorer, Microsoft NetMeeting, and Microsoft Phone System.

How to: Back Up Windows Address Book

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Profile** tab.
3. Select **Windows Address Book**.

How to: Restore Windows Address book

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. From the left-hand pane, select **Windows Address Book**.

- Windows Address Book contacts are listed according to Outlook Express identities, to be able to view the restored Windows Address Book contacts properly make sure restored Outlook Express identities keep their old names. Otherwise synchronize your Windows Address Book data.

How to: Synchronize Windows Address Book Contacts

Restoring Windows Address Book will replace the existing WAB file on the machine. The user can manually synchronize the existing address book with the backed up version by doing the following:

1. Open the restore wizard.
2. Select the backup set, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. From the left-hand pane, select **Windows Address Book**.
5. Click **View Backed Up Windows Address Book**.
6. From the toolbar click **File**, then select **Export**.
7. Select **WAB Address Book**, and save the WAB file in a temporary location.
8. Run Outlook Express.
9. From the toolbar click **File**, then select **Import**.
10. Select **Address Book**.
11. Browse to the location of the saved WAB file and select it then click **Ok**.

Windows Contacts

Windows Contacts

Microsoft Windows Vista provides a new mechanism and user interface for storing and retrieving information about people (contacts) who are important to the users of Microsoft Outlook and Windows Mail (formerly Outlook Express)

How to: Backup Windows Contacts Data?

1. From the left navigation menu in the backup wizard select **What to Backup**
2. Select **My Profile** tab
3. Select **Windows Contacts**
4. Select **Include Windows Live Contacts (if available)** if you wish to backup Windows Live contacts.

How to: Restore Windows Contacts

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. From the left-hand pane, select **Windows Contacts**

Note:

This option is used to restore Windows contacts backed up originally via GBM, restoring windows contacts will only restore missing contacts and will not delete newly created contacts that were not originally backed up via GBM.

Windows Favorites

Windows Favorites

In Microsoft Internet Explorer you can tell the program to remember a list of your "favorite" Web pages, so that you can go back to them easily, without having to type in the address (URL) again. Genie Backup Manager allows you to backup your Favorites, transfer them from one computer to another, or migrate them between different versions of Windows.

How to: Back Up Windows Favorites

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Profile** tab.
3. Select **Favorites**.

How to: Restore Windows Favorites

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. Select **Favorites**.

Windows Fonts

Windows Fonts

Windows Fonts are the files used by your operating system to display and print text. These fonts come in many different styles and types, and their location is usually unknown to users. Genie Backup Manager allows you to backup your Fonts, transfer them from one computer to another, or migrate them between different versions of Windows.

How to: Back Up Windows Fonts

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Profile** tab.
3. Select **Windows Fonts**.

How to: Restore Windows Fonts

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. From the left-hand pane, select **Windows Fonts**.
5. From the right-hand pane select the fonts you wish to be restored.

Media Files

Media Files

Genie Backup Manager can be set to automatically backup music and video playback files of all formats including: MP3, MPEG, DAT, WAV, RealPLayer files, MediaPlayer files, QuickTime files etc...

Genie Backup Manager offers two easy methods for locating and backing up media files on your computer: using playlists, and scanning for media files.

How to: Use Playlists to Backup Media Files

A media playlist is a table of your favorite media files -or more commonly, mp3s- that you have currently loaded into a media player to play in a specific order, by saving this list to file you can reuse it to play the same songs without having to re-select them each time.

Since most users already have their favorite songs on their machines organized in playlists, GBM offers a novel way of backing up media files using these playlists to locate favorite songs and movie clips and copy them to the backup destination.

GBM will also backup the playlist itself and regenerate it in the same original order at restore time so as to play the same songs even if they were restored to a different location.

- GBM supports 3 playlist formats: m3u, pls and wpl.

How to use playlists to backup media files?

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Profile** tab.
3. Click the plus sign next to **My Media** to expand the lest beneath it.
4. From the right-hand pane click **Add Playlist**.
5. Select a media playlist file then click **Open**.

How to: Automatically Scan for Media Files

You can set Genie Backup Manager to automatically locate and backup media files scattered on your hard drive. By default, when this option is selected, GBM will search for media files under the 'My Media' folder located in 'My Documents', however, the user can include new folders/drives to be scanned each time the backup job is run. The supported formats GBM scans for are the following:

.au,.snd,*.asf,*.wm,*.wmx,*.wmd,*.wma,*.wax,*.wmv,*.wvx,*.avi,*.wav,*.mpeg,*.mpg,*.mpe,

.m1v,.mp2,*.mpv2,*.mp2v,*.mpa,*.mp3,*.mid,*.midi,*.rmi,*.aif,*.aifc,*.aiff,*.rt,*.rm,*.ram ,*.ra,
.rmvb,.rp,*.rv,*.mov,*.qt,*.m4a,*.m4p,*.mp1,*.mpga,*.ssm,*.sdp,*.3gp,*.mp4,*.swa,*.3g pp,
.mpa,.m1a,*.m1v,*.mqv, and *.bwf

Genie Backup Manager will automatically re-scan the default media folders, defined in Genie Backup Manager, for new media files each time the backup job is run. However, new custom folders added by the user won't be re-scanned, unless the user clicks the **Scan** button in backup job editing mode.

Using Automatic Scan to Back Up Media Files?

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Profile** tab.
3. Select **My Media.**
4. If you wish to let GBM scan your entire computer for media files, click **Scan**, make sure **Local drives minus program files** is selected, then click **Search.**
5. If you wish to scan for media files only in certain folders of your choice, click **Add Folder**, select the folder you wish to scan, then click **Ok**. Repeat this step until all folders are selected.
6. When the media files list is populated, expand the three, to view a list of all detected media files, and select the ones that you wish to backup.

How to: Restore Media Files

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. Depending on the media backup method you selected, select **Media Playlist** or **My Media Files**.
5. From the right-hand pane, select the media files you wish to restore.
6. From the **Restore files to** list box select one of the following options:
    - **Original location:** restore each media file to the original path from which it was backed up.

- **Alternate location:** restore all media files under a user-specified folder, maintaining the original folder structure.
- **Single folder:** restore all media files to the root of a user-selected folder.

7. If you're restoring media files backed up using the playlist method, select **Regenerate playlist** to generate a new playlist based on the new locations to where your files were copied.

Images and Photos

Images and Photos

You can set Genie Backup Manager to automatically locate and backup image files scattered all over your hard drive. By default, when this option is selected, GBM will search for images under the 'My Pictures' folder located in 'My Documents', however, the user can include new folders/drives to be scanned for images.

How to: Back Up Images and Photos

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Profile** tab.
3. Select **My Photos**.
4. If you wish to let GBM scan your entire computer, click **Scan**, make sure **Local drives minus program files** is selected, then click **Search.**
5. If you wish to scan only in certain folders of your choice, click **Add Folder**, select the folder you wish to scan, then click **Ok**. Repeat this step until all folders are selected. Genie Backup Manager will automatically re-scan the default media folders, defined in Genie Backup Manager, for new image files each time the backup job is run. However, new custom folders added by the user won't be re-scanned, unless the user clicks the **Scan** button in backup job editing mode before backup.
6. When the photos list is populated, expand the three, to view a list of all detected image files, and select the ones that you wish to backup. GBM will display a thumbnail preview of any highlighted image in the upper-right corner of the program.

How to: Automatically Scan for Photos and Images

You can set Genie Backup Manager to automatically locate and backup media files scattered on your hard drive. By default, when this option is selected, GBM will search for photos and images files under the 'My Pictures' folder located in 'My Documents', however, the user can include new folders/drives to be scanned each time the backup job is run. The supported formats GBM scans for are the following:

*.bmp, *.dib,*.jpg, *.jpeg, *.jpe, *.jfif, *.gif, *.tif, *.tiff, *.raw and *.png

Genie Backup Manager will automatically re-scan the default media folders, defined in Genie Backup Manager, for new media files each time the backup job is run. However, new custom folders added by the user won't be re-scanned, unless the user clicks the **Scan** button in backup job editing mode.

Using Automatic Scan to Back Up Images and Photos

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Profile** tab.
3. Select **My Photos.**
4. If you wish to let GBM scan your entire computer for media files, click **Scan**, make sure **Local drives minus program files** is selected, then click **Search.**
5. If you wish to scan for media files only in certain folders of your choice, click **Add Folder**, select the folder you wish to scan, then click **Ok**. Repeat this step until all folders are selected.
6. When the media files list is populated, expand the three, to view a list of all detected media files, and select the ones that you wish to backup.

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How to: Restore Images and Photos

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. Select **My Photos**.
5. From the right-hand pane, select the image files you wish to restore.
6. Select one of the following options:
    - **Restore to original location:** to restore each image to the same path from which it was originally backed up.
    - **Restore to alternate location** to restore all image files under a different folder.

Internet Explorer

Internet Explorer

GBM enables the user to backup the following items that define the way Internet Explorer functions:

- **Internet Explorer Settings:** Home page, security, privacy, content, connections, programs, and advanced settings.
- **Internet Explorer Cookies:** Cookies are small text files that some web sites use to store information on your PC, among other reasons they are used sometimes to grant you access next time around to the web site or for customization features.

How To: Backup Internet Explorer

1. From the left navigation menu in the backup wizard select **What to Backup**
2. Select **My Profile** tab
3. Select **Internet Explorer**

4. In the right-hand pane, select one of the following options:

    - **Internet Explorer Settings:** Home page, security, privacy, content, connections, programs, and advanced settings.
    - **Internet Explorer Cookies:** Cookies are small text files that some web sites use to store information on your PC, among other reasons they are used sometimes to grant you access next time around to the web site or for customization features.

How to: Restore Internet Explorer Settings

1. Open the Restore wizard
2. Select the backup set, then click **Next**
3. Make sure the **My Profile** tab is selected
4. From the left-hand pane, select **Internet Explorer Settings**

Windows Settings

Windows Settings

GBM gives users the ability to backup the following selection of personalized Windows settings and configurations:

- **Desktop Wallpapers:** Desktop wallpaper settings and background image.
- **Visual Appearance:** Shapes, sizes and colors of windows, buttons and fonts.
- **International settings:** Regional settings, Time, Date, Currency and Number formats.
- **Mouse Preferences:** Mouse pointer behavior settings.
- **Mouse Cursors:** Preferred mouse cursor scheme.
- **Connections Settings:** Network connection accounts. Backing up Dialup Preferences will only backup network connection settings; needed protocols should already be installed and the modem should already be configured.
- **Power Settings:** PC power options properties located in the control panel.
- **Consol Settings:** Windows command prompt settings, options, colors, font and layout.
- **Multimedia:** For storing favorite sound, audio, and video settings plus the sounds scheme; sounds associated with events in the windows system.
- **Advanced Settings:** Saves Windows Explorer advanced view settings, such as hide extensions, show system files etc...

How to: Back Up Windows Settings

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Profile** tab.
3. Select **Windows Settings.**
4. Select the individual Windows settings items that you want to backup.

How to: Restore Windows Settings

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Make sure the **My Profile** tab is selected.
4. From the left-hand pane, select **Windows Settings**.
5. From the items list pane select the individual items you wish to restore.

Files and Folders

Files and Folders

This user data group allows you to backup files and folders from any location readily accessible from My Computer using an easy to use Windows-Explorer-like interface.

Use this group when you know where your files and folders are located and need to be able to access/restore files individually.

Selecting My Documents or items from the Desktop area for backup from My Folders does not guarantee that they will be restored properly, since the paths to these folders might differ on a other computers, new Windows installations or a different Windows versions. To avoid this, it is recommended to backup these items from My Profile.

	A plus sign means that the listing can be expanded to display additional items.
	A minus sign means that the listing can be collapsed to hide displayed items beneath it.
	An empty check box means that the item can be selected but is currently not.
	A check box with a blue or green check mark means that the item is selected with all its contents.
	A gray check mark means that some but not all of the item's contents have been selected.
	A grayed out check box means that the item is not available or not selectable; if the item has an Expand/Collapse box then the user needs to expand the listing to be able to select its contents.

My Folders Selection Options

Right-clicking on any item (file or folder) in the right-hand pane in My Folders tab and selecting **Selection Options** presents the user with several options for selecting files and folders, these are:

- **Select All:** Select all items in the pane
- **Clear All:** Deselect all items in the pane
- **Select Files Only:** Only select files appearing in the current view
- **Select Folders Only:** Only select folders appearing in the current view
- **Invert Selection:** Invert the selection in the current view (unselected items will be selected, and selected items will be deselected)
- **Run:** Will execute the selected file
- **Open:** Opens selected File/Folder

- **Open in Windows Explorer:** Opens the path of the file/folder in Windows Explorer
- **Properties:** Displays the File/Folder properties

Selecting Files and Folders for Backup

The My Folders window is divided into two panes; the left-hand pane lists drives and folders, where as, the right-hand pane lists the contents of the highlighted drive or folder form the left-hand pane.

Selecting files and folders for backup:

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Folders** tab.
3. Click in the checkbox next to each individual folder or file that you wish to backup.

When running repetitive backup tasks, especially scheduled unattended backups, the user would normally want files that are newly created in, or moved to a selected folder to be included in the backup automatically, without having to manually select them each time before running the backup task.

Genie Backup Manager automatically detects files and subfolders that have been added to a selected folder after the date of most the recent backup, provided that the parent folder was originally selected, i.e. the check box next to the folder was ticked when the backup job was created (or edited).

Example:

Lets assume Jack has a folder called Week that has three files, Saturday, Sunday, and Monday. Jack first creates a backup job, and selects the contents of the folder Week for backup. The next day, Jack adds several new files and folders to the folder Week.

- **Scenario:** When Jack created the backup job he selected folder Week for backup by ticking its check box, marking all its files for backup.

  Result: All new files and folders will be appended to the backup.
- **Scenario:** Jack selected the three files by ticking folder Week's check box, but before saving the backup job he deselected files Sunday and Monday.

  Result: All new files and folders will be appended to the backup.
- **Scenario:** Jack selected the three files by ticking each file's checkbox individually.

  Result: New files and folders won't be appended to backup.

Hidden and System files are made selectable in GBM only if they were visible in Windows Explorer. You can set GBM to always hide files with hidden or system attributes so that they would not to be included in the backup, regardless of their status in Windows Explorer. To do so, click **Tools**, then select **Global Preferences**, select **Backup Settings**, then remove the check mark next to **Show hidden files/folders in My Folders**.

On a Microsoft Windows Network if you share a folder that has a dollar sign '$' at the end of its name, then it is considered to be hidden and other machines cannot see it, unless you explicitly enter its name in the address bar or the command prompt. Users can add this kind of sources to the backup selection by manually typing the complete path in the **Manual File Selection** panel. To add a new item, click **Add**, then type the full path to file or folder. Select **Include sub-folders** if you wish child folders to be included in backup.

File Filtering

File Filtering

Users can filter selected files in My Folders based on filename, date, and size criteria. For instance users can choose to backup only .doc files in a certain folder or exclude all files that start with the letters (sa), backup files created between May and June this year, and/or not to include files/folders larger than 2GB.

Filters are applied to sources through rules consisting of an include filter or an exclude filter. Only one restriction type (include or exclude) can be assigned per rule. During backup, Genie Backup Manager processes only files that match the include filter and do not match the exclude filter. If a file satisfies both an include filter rule and an exclude filter rule, the exclude filter takes precedence and the file is not processed.

Rules are composed from restrictions created with one or more filename masks separated by a semicolon. If a file satisfies at least one restriction, the rule will apply.

- Filters are not reflected in the file/folder selection tree, they are only processed during backup.
- A rule can be attached to any folder but is only processed if the folder was selected for backup.
- If a rule is created for a folder "m1" and another rule is created for one of its decedents (sub folders) "\m1\m2", Genie Backup Manager will process the subfolder (m2)'s distinct rule regardless of the rule of parent folder (m1).

How to: Create New File Filters

1. From the navigation menu of the backup wizard select **What to Backup**.
2. Select **My Folders** tab.
3. Click **File Filters**.
4. Click **Create Rule**.
5. Select one of the following options:
    - **All data:** Apply created filter to all selected files and folders in the backup job.
    - **Selected folder:** Apply created filter to the folder that was highlighted prior to opening the File Filters dialog.

- **Browse for folder:** Select a folder to attach the created filter to.

6. Click **Ok** to return to the main dialog.
7. Select one of the following two options:

- **Include only file with the following mask:** Only files matching the specified file mask will processed during backup.
- **Exclude files with the following mask:** File matching the specified file mask will not be processed.

8. Type the name or part of the name of files you wish to filter. You can use wildcard characters to filter files that include a certain part of the name. For instance *.doc will filter all files with the extension doc. You can add more than one file mask per rule, use a semicolon (;) as a separator.
9. If you wish to apply the created rule to the decedents of the selected folder, select **Include Sub folder**
10. Click **More options** to enable filtering by **size** and **date**.

- Filtering by Size

You can create individual filtering by size or add them to existing rules by the following steps:

1. In the **File Filters...** dialog, click **More Options**
2. Click **Enable filtering by size** and select one of the following options:

- **Between:** Backs up files/folders between specified file size range
- **Less:** Backs up files/folders less than the specified size
- **More:** Backs up files/folders larger than the specified size

- Filtering by Date

You can create individual filtering by date or add them to existing rules by the following steps:

1. In the **File Filters...** dialog, click **More Options**
2. Click **Enable filtering by Date** and select one of the following options:

- **Between:** Backs up files/folders between specified dates
- **Before:** Backs up files/folders older than the specified date
- **After:** Backs up files/folders newer than the specified date

Quickly Adding a File Extension to a Previously Created Filter

From the **My Folders** tab in the **What to Backup** wizard screen right-click on the folder then choose **Add rule to this folder**.

How to: Import and Export File Filters

File filter rules can be exported from one backup job so as to be imported and used again in another.

Exporting File Filtering Rules to File

1. Open the File Filters dialog.
2. Select **Export**.
3. Choose a location to save the file to.
4. Click **Ok**.

Importing File Filtering Rules from File

1. Open the File Filters dialog.
2. Select **Import**, then select **Import from File**.
3. Browse to the location of the filters ".gix" file and select it, then press **OK**.

Importing Filters from Another Backup Job:

1. Go to **My Folders**.
2. Click **File Filtering Rules**.
3. Select **Import**, point to **Import from Backup Job**, then choose a backup job from the list.

Auto-Exclude

Some system files and folders on the computer are not intended to be moved or copied, and are accessed only by the Windows system, trying to backup these files will cause an error in GBM, so, to avoid running into backup problems, GBM does not process these sources during backup in any of the defined backup jobs. You can add custom Auto exclude rules to treat specific files and folders in the same manner.

Adding an Auto Exclude rule:

1. Click Tools in the toolbar, then select **Global Preferences**.
2. Select **Auto Exclude**.
3. Click **Add**.
4. Type the full path of the file/folder to be excluded. You can use wildcards here.
5. Type a description for the added item.
6. Click **Ok**.
7. Restart GBM.

- To disable all Auto-Exclude rules uncheck the option **Enable Auto Exclude.**
- To remove and Auto-Exclude rule, select it from the Auto-Exclude list then click **Remove**.

Using Wild Cards

A wildcard character is a keyboard character such as an asterisk (*) or a question mark (?) that is used to represent one or more characters when referring to files and folders.

Wildcard Characters Usage	
Asterisk (*)	Use the asterisk as a substitute for zero or more characters. If you are looking for a file that you know starts with "gloss" but you cannot remember the rest of the file name, type the following: **gloss*** This locates all files of any file type that begin with "gloss" including Glossary.txt, Glossary.doc, and Glossy.doc. To narrow the search to a specific type of file, type: **gloss*.doc** This locates all files that begin with "gloss" but have the file name extension .doc, such as Glossary.doc and Glossy.doc.
Question mark (?)	Use the question mark as a substitute for a single character in a name. For example, if you type **gloss?.doc** , you will locate the file Glossy.doc or Gloss1.doc but not Glossary.doc.

Restore

How to: Restore Files and Folders

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Select the **My Folders** tab.
4. Choose the files and folders you wish to restore.

File Attributes

During backup, files attributes, including the modified date and time stamp, might change depending on factors such as the storage device being used, file splitting, file system etc ... GBM saves this information during backup and reassigns each file its correct attributes during restore.

To disable restoring file attributes:

1. Open the restore wizard.
2. Load the backup, then click **Next**.

3. Select **My Folders** tab.
4. Click **Advanced**.
5. Uncheck the option **Restore file attributes**.

How to: Restore to a Different Location

By default, restore returns each file and folder selected for restore to the original path from where it was backed up. Genie Backup Manager can be set to restore the data to a different user-specified path.

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Select **My Folders** tab.
4. From the Restore file to combo box, choose one of the following options:

    - **Original location:** restore each file and folder to its original path.
    - **Alternative:** restore data to the specified path, while maintaining the original folder tree structure.
    - **Single folder:** restore data to the specified path, after collapsing the original folder tree structure (no subfolders).

Restoring Existing Files

By default, when a file being restored already exists in the destination folder, GBM will compare the two files' modified date and time stamps and overwrite the existing file only if it was older than the one being restored.

To change this behavior:

1. Open the restore wizard.
2. Load the backup, then click **Next**.
3. Select **My Folders** tab.
4. Click **Advanced**.
5. Choose one of the following options:
    - Do not replace existing files.
    - Replace older files.
    - Always replace files.

Programs and Program Settings

Programs and Program Settings

Other backup software charge users extra for downloading plugins that allow them to extend the software's capabilities and automatically backup additional items, such as email clients data, application settings, instant messengers, etc... Genie Backup Manager, however, offers its users unrestricted access to hundreds of plugins from the constantly growing Genie9 add-ins database free of charge.

Genie Backup Manager comes bundled with several popular plugins, which users can select for backup from the **My Plugins** tab in the backup wizard. Extra plugins can be downloaded by typing the name of an application in the **Easy plugin search and download** box then clicking **Go**; GBM will search the database and return a table of downloadable plugins matching that keyword.

My Plugins lists all installed plugins, but only those connected to applications detected on the system will be selectable.

Users can also use GBM's XML-based scripting to create new plugins, and share them with friends, colleague, and other GBM users.

How to: Back Up Programs and Program Settings

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Plugins** tab.
3. Select items you wish to backup.

Adding and Removing Plugins

Extra GBM plugins can be obtained and installed using the following methods:

- Searching for new plugins in the Genie9's database and downloading them.
- Creating custom plugins using GenieScript.
- Visiting the Genie9 community forums, and requesting a new script to be written for the program/item you wish to backup, Genie9 support team and other GBM users will do their best to help you.

How to Search for Plugins?

1. From the left navigation menu in the backup wizard select **What to Backup**.
2. Select **My Plugins** tab.
3. In the **Easy plugin Search and download** field, type the name, or part of the name, of the application or item you wish to be able to backup, then click **Go**.
4. Click the **Download** button next to the plugin you wish to install.

Installing a plugin:

Simply double-click the plugin file to install it.

Removing a plugin:

Right-click the plugin, then select **Remove selected**.

How To: Restore Plugins

1. Open the Restore wizard.
2. Load the backup, then click **Next**.
3. Select the **My Plugins** tab.
4. Choose the Plugins you wish to restore.
5. **Select Restore Destination (Per Plugin)**
    - **Restore to Default Location:** Restores data to the currently installed program location.
    - **Restore to Alternate Location (if applicable):** If the plugin is a full application backup, the user can specify a new location to restore the data as if you are installing the program in a new location.


Tip

To undo plugin restoration, see Plugin Rollback

Plugin Rollback

Restoring of data backed using plugins can be reversed with the help of the GBM restore-undo utility.

1. From the toolbar, click **Tools**, then select **Undo Plugin Restore**. A list of all restored My Plugins items will open.
2. Select an item from the list and click **Uninstall**.

Data Backup Settings

Backup Types

Backup Types

There are four types of backups supported by GBM that depend on whether the user wants to backup all the selected data, or just new and changed files. Backup types are: F*ull*, *Incremental*, *Differential*, and *Mirror*.

The first run always backs up all selected files and folders, and a backup catalog (.gbp file) is stored on the destination media. On subsequent runs, Genie Backup Manager searches for the catalog ".gbp file" in the destination. If the media is empty or it does not contain the catalog file, GBM will start with a new full backup. If the catalog file is found, GBM will make a new version, with a new version of the catalog file, depending on the selected backup type and versioning settings.

- Genie Backup Manager also stores a local copy of the catalog file on the computer on which the backup is performed. If you do not wish GBM to look for the file in the destination media - for instance, to store different versions on separate media volumes - you can set GBM to read the index from the local catalog.
- You can disable reset archive bit, if you do not want GBM to reset archives. This option will not affect on the backup jobs ran on GBM

Notes:

Differential, incremental, and mirror backups are not supported in Easy mode

Full Backup

When a user selects Full backup, GBM will back up all the selected files and folders each time the backup job is run. New files will also be appended to the selection. On consecutive runs, in general, this backup type is more time and space consuming than the other three backup types, but is more user friendly.

To set GBM to always run a full backup, select **Full**, from the **Settings** screen in the backup wizard.

- This backup type is best for one-time backups to migrate data between computers.

Incremental Backup

In incremental backup, the first run always backs up all selected files and folders, and a backup catalog (.gbp file) is stored on the destination media. On subsequent runs, Genie Backup Manager searches for the catalog ".gbp file" in the destination. If the media is empty or it does not contain the catalog file, GBM will start with a new full backup. If the catalog file is found, GBM will create a new backup version, containing only files that have been added or modified

since the previous run. A new version of the catalog file will be appended to the media, and files that were deleted, renamed or moved from the source machine will not be deleted from the backup archive, but they will not be included in the last version of the catalog.

To set GBM to use incremental backup, select **Increment**, from the **Settings** screen in the backup wizard.

- Incremental backup, by default, uses the files' "modified date and time" attribute to determine which files have been modified since the previous backup run.

Rollback

Enabling rollback during increment backup will cause GBM to keep old versions of modified files backed up in previous runs; this way the user can still restore (rollback to) any backed up older version of a certain file to protect against losing data by mistake.

With rollback enabled, each backup run will create a new file on the destination media - or a new folder if compression was disabled - containing new and changed files, and a new catalog ".gbp file" will be added to the root backup folder, with a trailing number appended to the filename; this number will be incremented by one for each new version, starting with zero (0) on the second run.

Example:

Backup Job.gbp ... First run.

Backup Job.0.gbp ... Second version.

Backup Job.1.gbp ... Third version.

Backup Job.2.gbp ... Fourth version.

Disabling rollback means that GBM will append new files to the original backup file/folder, while modified files will overwrite older versions.

When backup using compression is selected, if the data after compression exceeds 2GB in size, rollback will be forced.

- The catalog will only contain one entry during incremental backup with rollback disabled. Each new version catalog will replace the previous one.
- Disabling rollback is not supported when FTP or Amazon S3 Media types are selected.
- Backup without rollback is not supported when media is not re-writable, or if the user does not have delete permission on the destination.
- To backup to CD/DVD with rollback disabled, media needs to be re-writable and packet writing enabled.
- Backup without rollback is not supported when spanning to more than one location

Differential Backup

In differential backup, the first run always backs up all selected files and folders, and a backup catalog (.gbp file) is stored on the destination media. On subsequent runs, Genie Backup Manager searches for the catalog ".gbp file" in the destination. If the media is empty or it does not contain the catalog file, GBM will start with a new full backup. If the catalog file is found, GBM will create a new backup version, containing only files that have been added or modified *since the most recent full backup*. A new version of the catalog file will be appended to the media, and files that were deleted, renamed or moved from the source machine will not be deleted from the backup archive, but they will not be included in the catalog.

To set GBM to use differential backup, select **Differential**, from the **Settings** screen in the backup wizard.

Each backup run will create a new file on the destination media - or a new folder if compression was disabled - containing new and changed files, and the new catalog ".gbp file" will be added to the root backup folder, with a trailing number appended to the filename; this number will be incremented by one for each new version, starting with zero (0) on the second run.

Example:

Backup Job.gbp First run.

Backup Job.0.gbp Second version.

Backup Job.1.gbp Third version.

Backup Job.2.gbp Fourth version.

- Differential backup, by default, uses the files' "modified date and time" attribute to determine which files have been modified since the previous backup run.

Mirror Backup

In mirror backup, the first run always backs up all selected files and folders, and a backup catalog (.gbp file) is stored on the destination media. On subsequent runs, Genie Backup Manager searches for the catalog ".gbp file" in the destination. If the media is empty or it does not contain the catalog file, GBM will start with a new full backup. If the catalog file is found, GBM will create a new backup version, in which new files will be appended to the original archive, modified files will *replace* older versions, and files that are missing from the source machine will be removed from the backup archive. The catalog ".gbp file" will be replaced with a new version. The resulting backup archive consists of either one compressed file or one folder.

To set GBM to use mirror backup, select **Mirror**, from the **Settings** screen in the backup wizard.

Limitations of Mirror Backup

- When backup using compression is selected, if the data after compression exceeds 2GB in size
- The catalog will contain only one entry when mirror backup is enabled, with new versions of the catalog replacing old ones.
- Mirror backup is not supported when FTP backup is selected.
- Mirror backup is not supported when Amazon S3 backup is selected.
- Mirror backup is not supported when media is write protected, not rewritable, or if user does not have delete permission on the destination.
- To use mirror backup to CD/DVD, the media needs to be re-writable with packet writing enabled, and limited to only one disc.
- Not supported when spanning to more than one location

Security in GBM

Security in Genie Backup Manager

Genie Backup Manager offers multiple levels of protection to ensure that backed up data is not accessible to unauthorized persons. ZIP passwords offer moderate protection for compressed backups, with the added flexibility of being compatible with most compression utilities, to allow users to manually restore data from backup archives, while AES encryption has the advantage of being highly secure, as it is adopted by NIST as an FIPS-approved (Federal Information Processing Standard) symmetric encryption algorithm that may be used by U.S. Government organizations (and others) to protect sensitive information

Zip Password Protection

Genie Backup Manager uses standard zip format compression, and thus can add a standard zip compression password to the created archive; using this protection method would still allow users to access their data using ZIP-compatible compression utilities. Users will not be able to browse or restore files and folders stored inside a ZIP-password-protected backup until they enter their passwords.

- This method only offers moderate protection; it is not recommended for securing sensitive data.
- ZIP passwords cannot be less than 6 characters long.

To add zip password protection to a backup job:

1. From the left navigation menu in the backup wizard select **Settings**.
2. From the Security box select **Password Protection**.
3. Type a password twice in the **Password** and **Confirm Password** fields

Encryption

Encryption

Encryption is encoding data to prevent any non-authorized party from reading or changing it. The level of protection provided by encryption is determined by an encryption algorithm. The contents of the data that you want to protect are encrypted based on a password that you specify. In order for GBM later restore the original contents of the encrypted files, the correct password must be supplied

AES Encryption

GBM uses AES encryption. AES is the Advanced Encryption Standard. This encryption method, has been adopted by NIST as an FIPS-approved (Federal Information Processing Standard) symmetric encryption algorithm that may be used by U.S. Government organizations (and others) to protect sensitive information

GBM supports AES encryption in 3 different strengths: 128-bit AES, 192-bit AES and 256-bit AES. These numbers refer to the size of the encryption keys that are used to encrypt the data; the higher the number the stronger the encryption, at the expense of being slightly slower. All three methods can provide significantly greater security than the password protection method.

The strength of encryption does not depend only on the length of the encryption key used but also on the password supplied by the user. Please read more about Encryption Passwords

- GBM requires that the correct password be supplied before the contents of an encrypted backup set can be viewed or restored to its original unencrypted form. The password is not required, however, for actions that do not require access to the unencrypted contents of the file. In particular, encrypted files can be deleted from backup set, or can be replaced within the backup set, without a password

Notes on encryption safety

Encryption can be a very effective measure for protecting your sensitive data; however, even encrypted documents can be compromised . The following is a list of some of the ways in which the safety provided by encryption can be compromised. Note that these are not GBM related risks but rather risks that arise from mishandling the password or a file in its unencrypted form

If a keystroke monitor (key-logger) or other malicious code (such as a trojan horse) is running on your computer, your password may be recorded when you type it. Be sure to check frequently for viruses and follow other recommended computer safety procedures

If you extract an encrypted file and then delete it, it may be possible for someone to later "undelete" the file using file recovery software or the Recycle Bin. You can use the Genie Wipe tool to irreversibly delete sensitive files

When you extract, open or view a file directly from the backup set (using Catalog or from the Restore Wizard), GBM must extract the file to a temporary location so that the associated program can open it. If you subsequently close GBM without first closing the program that is using the file, GBM may not be able to delete the temporary copy of the file, thereby leaving it on disk in unencrypted form. The associated program may also make one or more backup copies of the decrypted file, and GBM will not be able to delete these

After backing up or restoring encrypted files, some or all of the unencrypted file contents may remain in your computer's memory or the page swap files on disk. A malicious user may be able to retrieve this unencrypted information

Using Encryption in Backup

GBM can protect backed up data from being accessed by unauthorized people using AES encryption. GBM encrypts data on-the-fly, meaning that it encrypts files as they are being copied to the backup storage device instead of first encrypting the entire data then backing it up.

To add AES encryption protection to a backup job:

1. From the left navigation menu in the backup wizard select **Settings**.
2. Select **AES Encryption**.
3. Type a password twice in the **Password** and **Confirm Password** text input boxes.
4. Click **Encryption Strength**.
5. Choose an encryption level.

Note

- Encryption applies only to the contents of backed up files. Information about an encrypted file, such as its name, date, size, and attributes, can be viewed, without a password, by anyone who has access to the backup set.
- Encryption is not supported in Easy Mode
- Please store the password in a safe place. If lost, the backed up data is irretrievable.

Decrypting data during restore

Upon selecting a backup set with encryption protection for restore, GBM will request the encryption password. The user will not be allowed to browse, view, extract or restore data unless the correct password is supplied.

Encryption Passwords

The security of your data depends not only on the strength of the encryption method but also on the strength of your password, including factors such as length and composition of the password, and the measures you take to ensure that your password is not disclosed to unauthorized third parties.

You should keep the following considerations in mind when choosing passwords for your files:

Encryption password cannot be less than 6 characters long

- In general, longer passwords are more secure than shorter passwords. To take maximum advantage of the full strength of AES encryption passwords lengths must be approximately:
    - 15 characters for 128-bit encryption.
    - 23 for 192-bit encryption.
    - 31 characters for 256-bit encryption.
- Passwords that contain a combination of upper and lower case letters, digits, and punctuation are more secure than passwords containing only letters.
- Because you can use spaces and punctuation, you can create "pass phrases" that are long enough but still easy to remember and type.
- Avoid using easily guessed passwords such as names, birthdays, Social Security numbers, addresses, telephone numbers, etc...
- Avoid storing the password on the same volume on which the encryption data is located.
- Keep a record of the passwords you use and to keep this record in a secure place. GBM has no way to access the contents of an encrypted file unless you supply the correct password.

Pre and Post Job Commands

To run commands before or after backup is completed, users can use the Pre and Post Job Commands option.

These are some of the helpful tasks that a user can accomplish using pre, pre-backup and post commands...

Task	**Command(s)**
Checking disk drives for errors before backup.	CHKDSK
Copying, moving, deleting and replacing files and folders.	COPY, XCOPY, RENAME, REPLACE, MOVE, DEL
Defragmenting a drive before or after backup.	DEFRAG
Temporally disabling real-time antiviral software to speed up backup.	Refer to the command line options section of your anti-virus help documentation.
Printing documents (such as the activity log when backup is done).	PRINT
Shutting down, logging off or restarting the computer.	SHUTDOWN

For a complete list of Windows system commands that can be used, open the **Start** menu, click **Run**, type *CMD* and click **Ok**, then type *help* and press enter. for more information on using a specific command type "<command> /?" in the command prompt then press enter.

To attach pre/post job commands to a backup job:

1. From the left navigation menu in the backup wizard select **Settings**.

2. Click **More Settings** then select **Pre & Post Job Commands**.
3. Make sure the **Enable Pre & Post Job Commands** option is checked
4. From the **Events** list select whether to attach a pre, post, or pre-data confirmation job command.
5. Make sure **Enable Command** is selected.
6. In the **Command Line** box, type the command you wish to be executed or browse for a .batch, .cmd or script file you wish to execute for multiple commands
7. If you do not wish for one process to run until the previous one in the sequence has finished, make sure the **Wait until previous process ends** option is selected. Other wise the command and the backup job will run almost simultaneously.

Environmental Variables

Output files from backup jobs have varying names, depending on the backup job name and the number of the backup run. Using special environmental variable strings, you can write commands and pass the backup job's output files as parameters without having to worry about their changing names:

$BACKUPOUTPUT$ Resolves to the complete path of the main backup file/folder.

$LOGFILE$ Resolves to the complete path of the backup log file.

$BACKUPPRFOLDER$ Resolves to the complete path of the parent folder containing the backup set.

$BACKUPFILENAME$ The name of the output backup file, without the path.

- Environmental variables passed to commands must be enclosed in quotations, such as "$BACKUPOUTPUT$".

Built-In Commands

When using the following commands, Genie Backup Manager will open a dialog displaying the progress of the command execution. Each one of these commands takes two parameters:

- **Copy:** Copy a file or folder to a new location.
- **Move:** Move a file or folder to a new location. The file/folder in the original location will be deleted.
- **Rename:** Rename a file or folder.

Understanding Backup Sets and Purging

When the storage media is re-writable, and the user has the right folder privileges, Genie Backup Manager can be set to delete old backup files created by the backup job, to save space.

The way purging old backups works varies depending on the backup type used. Purging is not supported when Mirror Backup is used .

To set GBM to purge old backup files created by a backup job:

1. From the left menu in the Backup Wizard, select **Settings**.
2. Click **Purge Settings.**
3. Select one of the following options:

    - **Keep old backups:** Do not delete old backups
    - **Keep only last X backups:** Keep only the last X backup files and delete files produced by older backups
    - **Keep old backups for a period of X days:** Delete any backup file older than X days

Backup Sets

To understand how purging works in Genie Backup Manager, the user needs to be familiar with the concept of Backup Sets. For the purpose of this help documentation, a backup set is the minimum collection of backup files - or folders, in the case of backup without compression - that are needed to successfully perform a restore. For example, if the user wishes to restore files that were backed up using an incremental backup job on March 23rd, then every backup file created by this backup job since that date and back to the most recent full backup before that date should be present and are considered a backup set.

Purging works with backup sets and not backup runs. if the user chooses to "keep the last 5 backups", that means that Genie Backup Manager will always keep the most recent 5 backup sets created by that job.

Purging with Full Backup

Full backup copies all the selected files each time the backup is performed. Each time a full backup is performed, a new backup set is created, and a bracketed number after the backup job name is incremented by one, to denote the backup run number.

Since each backup run creates a backup set, keeping the last X backup sets means keeping the backup files produced by the most recent X backup runs.

Ex:

A full backup is performed, job name is "My_backup", and purging option selected is "keep only last 4 backups".

1st run	My_backup.gbp is created
2nd run	My_backup(1).gbp is created
3rd run	My_backup(2).gbp is created
4th run	My_backup(3).gbp is created
5th run	My_backup(4).gbp is created and My backup.gbp is deleted
6th run	My_backup(5).gbp is created and My Backup(1).gbp is deleted
7th run	My_backup(6).gbp is created and My Backup(2).gbp is deleted

Purging with Incremental Backup

During incremental backups, the first backup run performed after the backup job is created is a Full backup, subsequent backup runs are all incremental until the user elects to reset the backup job to full, either manually or automatically using the "Limiting increments" feature. GBM treats each full backup and all subsequent increments until the next full run as a complete backup set.

For each backup run that is performed, a number after the backup job name is incremented by one, when backup is switched to full, that number is reset and another bracketed number is incremented by one to denote the number of full backups performed since the backup job was created.

When purging is selected, backup rotation is forced, which means that after a certain number of incremental backups, Genie Backup Manager will automatically reset the backup type to full for one backup run, then performs another set of incremental backup runs, then resets to full again, and so on.

If the user enables purging with the option to "Keep only last X backups", Genie Backup Manager will reset backup type to full "full" X time, and on the X+1 run, it will delete the oldest backup set.

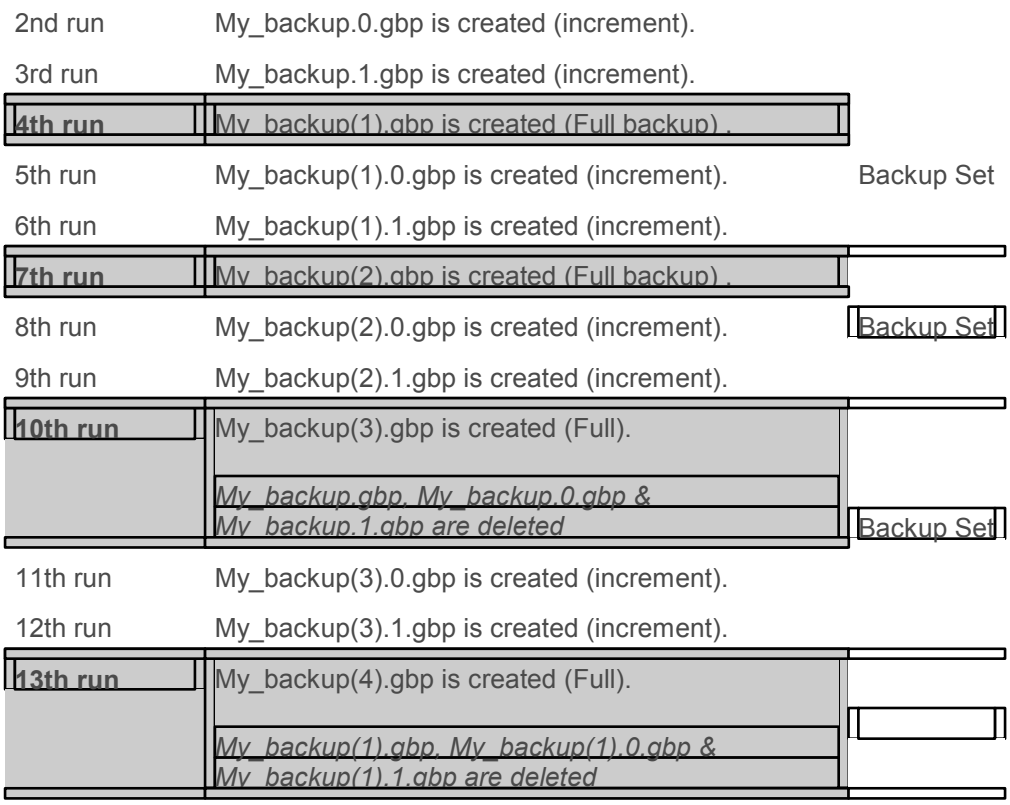
Example

An incremental backup is performed.

- **Job name:** "My_backup"
- **Purging option:** "keep only last 3 backups"
- **Backup rotation:** 2 increments.

* Bold denotes the creation of a new backup set.

1st run	My_backup.gbp is created (Full backup) .	Backup Set



Purging with Differential Backup

During differential backups, the first backup run performed after the backup job is created is a full backup, subsequent backup runs are all differential until the user elects to reset the backup job to full, either manually or automatically using the "Limiting increments" feature. Each differential backup along with the most recent full backup combined form a standalone backup set. Backup files produced in between those two backups can be deleted safely.

Purging with "Limit increments" option enabled

> If purging was selected and the "Limit increments" option was enabled for X increments. Genie Backup Manager will automatically reset the backup type to full after every X differential backup runs. Purging in this case will treat each full backup run with all subsequent consecutive differential runs as a backup set, and purging will work exactly like in the case of incremental backup.

Purging with "Limit increments" option disabled

> If purging is selected with the "limit increments" option disabled, Genie Backup Manager will treat each differential backup run along with the most recent full backup as a standalone backup set. Thus, the option to "Keep only last X backups" means that only

the full backup run, the last differential backup, and the most recent X intermediate backups are kept.

Example

An incremental backup is performed.

- **Job name:** "My_backup"
- **Purging option:** "keep only last 3 backups"
- **Limit increments:** disabled.

1st run	My_backup.gbp is created (Full backup) .
2nd run	My_backup.0.gbp is created (Differential).
3rd run	My_backup.1.gbp is created (Differential).
4th run	My_backup.2.gbp is created (Differential).
5th run	My_backup.3.gbp is created (Differential). *My_backup.0.gbp is deleted.*
6th run	My_backup.4.gbp is created (Differential). *My_backup.1.gbp is deleted.*
7th run	My_backup.5.gbp is created (Differential). *My_backup.2.gbp is deleted.*
8th run	My_backup.6.gbp is created (Differential). *My_backup.3.gbp is deleted.*

Rotating Backups

When increment or differential backup is used, the user can set GBM to automatically switch to full backup after a specific number of increments. Each full backup and its subsequent increments are treated by GBM as one backup set, enabling the user to purge old backup sets safely.

To set GBM to limit the number of increments for each backup set:

From the left menu in the Backup Wizard, select Settings

1. Click **Purge Settings**.
2. Select the **Limit increments** option.
3. In **Number of increments**, type the number of increments you wish GBM to perform before switching to full backup .

Note

Purging is not supported in the following cases:

- When the backup is spanned to multiple locations
- Backing up using the built-in CD/DVD burner
- FTP and Amazon S3 backups

Understanding Archive Bit and Backup Types

The archive bit is a file attribute that is set whenever a file is modified. For backups that use archive bits, this bit is turned off after the backup completes, indicating to the system that the file has been backed up. If the file is changed again before the next backup, the bit will be turned on and Genie Backup Manager will back up the file.

Whenever a file is created or changed, the operating system activates the Archive Bit or modified bit . By default, unless you specifically select to use the archive bit, Genie Backup Manager uses the last modified date and time stamp to determine whether a file has been backed up.

Using the archive bit in determining changed files, however, can cause confusion if the user is not careful, if the data selection for more than one backup job overlap. To explain this, consider this scenario: Jack has two backup jobs that he has scheduled to run consecutively, named Documents and Work . The folder Monthly Reports was selected to be backed up by both backup jobs. Come backup time, the job Documents, will backup the folder the turn off the archive bit. When its time for the job Work to run, it will find that the folder has already been backed up and skips the folder.

When the archive bit method is used with full, increment or mirror backup, GBM will turn off the archive bit after each backup run. However, when used with differential backup, GBM will only reset the bit in the first full backup, but not in subsequent differential runs, this way, GBM will always keep backing up files that have changed since the first full backup.

To set GBM to reset the archive bit after backup:

1. From the left menu in the backup wizard **Select Settings**.
2. Click **More Settings** then select **Advanced Settings**.
3. Select **Reset the Archive Bit**.

To use the archive bit in determining changed files:

1. Click the **Start** menu in the Windows toolbar, then select **Run**.
2. Type *regedit*.
3. Browse the registry until you reach the following key:
   HKEY_CURRENT_USER\Software\Genie-Soft\GBMAPPLICATION\Main\

4. Double-click the value CompareMethod.
5. Set the value to 0 (zero).

Adding a Timestamp to the Backup File

A timestamp is a combination of date + time that is appended at the end of the backup filename to indicate when the backup run was performed

To attach a timestamp to the backup set:

1. From the left navigation menu in the backup wizard select **Job Info**.
2. Click **Backup Filename Options**.
3. Select **Attach timestamp to backup set**.
4. From the **Timestamp** format combo-box choose preferred date/time format.
5. Click **Ok**.

Timestamp formats

Timestamp formats are:

- Month dd, yyyy@hh:mm:ss AM/PM
- Day of the week, Month dd, yyyy
- Month dd, yyyy
- yyyy-mm,dd
- Month dd
- mm-dd-yyyy@hh-mm AM/PM
- mm-dd-yyyy@hh-mm-ss AM/PM
- hh.mm.dd AM/PM

Rotating Backup Types

When increment or differential backup is used, the user can set GBM to automatically switch to normal backup after a specific number of increments. Each full backup and its subsequent incremental or differential executions are treated by GBM as one backup set, enabling the user to purge old backup sets safely.

To set GBM to limit the number of increments for each backup set:

1. From the left menu in the backup wizard, select **Settings**.
2. Click **Purge Settings**.
3. Select the **Limit increments** option.
4. In **Number of increments**, type the number of increments you wish GBM to perform before switching to full backup.

Notes:

Since purging is not supported on FTP, Amazon S3, backups spanned to multiple drives/media, and CD/DVD using buring method,use Advanced Schedule to rotate backup types.

If Advanced schedule is enabled and the backup is running via schedule, it will overwrite purge settings. To avoid conflicts only use purge settings with Basic scheduler else, use advanced scheduler and disable purging.

Compression

Genie Backup Manager uses non-proprietary ZIP64 compatible compression to reduce backed up data size and save space, supporting up to 264 -1 files within a zip archive as well as files that have a size greater than 4GB, for a zip file size that can reach up to about 18 million terabytes (more precisely, 2^64-1 bytes).

The Genie Backup Manager compression engine offers fast performance and low memory usage. Speed improvements reach 25%-75% in certain contexts. It also provides 15 to 20% better compression than other formats on many popular file types, especially XML data.

Users can choose between 9 levels of compression ranging form no-compression, to best.

To set GBM to compress backed up data:

1. From the left navigation menu in the backup wizard select **Settings**.
2. Select Use **Compression**.
3. Select the desired compression level from the combo box.

Backup without Compression

Selecting to backup data without compression would cause GBM to copy the data to a folder on the storage device while preserving the original file/folder structure, this makes data more accessible and less susceptible to corruption.

Power Management Options

Users can set Genie Backup Manager to trigger a power-saving event after a backup job has been executed. Allowed options are:

- Exiting Genie Backup Manager.
- Shutting down computer.
- Setting computer on Hibernate mode.
- Logging off computer.
- Setting computer on Stand-by mode.

To configure power-saving options for a backup job, select the **Settings** screen from the backup wizard, click **More Settings**, then select **Advanced Settings**. Selected power-saving options

must be supported by the computer. To configure power management settings for your computer, double-click **Power Options** in the **Control Panel**.

How to: Create Backup Shortcuts on the Desktop

Users can create shortcuts on the desktop area for created backup jobs for easy access. Shortcuts also run backup jobs without the need to go through the backup wizard.

To create a shortcut for a backup job:

1. Open **Jobs Manager**.
2. Select a backup job.
3. Click **Create Shortcut**.

How to: Create Self-Restorable Backups

Genie Backup Manager offers users a feature that enables them to restore their backed up data to any machine regardless of whether GBM is installed on it. Choosing Enable Self-Restorable backup option creates a standalone self-executable .exe file on the storage media, which can be used to browse backed up data and restore it on any machine, even if GBM is not installed on it.

How to Create a Self-Restorable Backup Archive?

1. Open the backup wizard.
2. From the left navigation select **Settings**.
3. Select **Enable Self-Restorable Backup**.

One-File SwiftRestore

If the data is backed up using compression, and is less than 200MB after compression, Genie Backup Manager will turn the entire backup set into one self-executable file. Otherwise, the software will create a separate .exe file in the same folder as the backup set; However, the user can specify to create a larger one file swift restore file by the following steps:

1. Go to **Tools**, then select **Global Preferences**.
2. Click the plus icon next to Backup Settings then select **Advanced Settings**.
3. Make sure **Enable one-file self-restorable backups** is selected.
4. Select a preferred size from the drop-down menu, or type a custom value (maximum 2 GB).

Notes

- One-file self-executable backups is not supported when backup data is spanned over multiple volumes or forced to split.

Extracting the Backup Archive from a SwiftRestore File

If the SwiftRestore .exe file got corrupted, users can extract the backup archive from the self-executable file:

1. From the toolbar click **Tools**, then select **Extract archive from .exe file**.
2. Click **Browse** to locate and select the desired self-executable backup file.
3. Click **Extract**. The extracted backup set will be stored in the same folder as the original SwiftRestore .exe file

Command Line Parameters

Genie Backup Manager can be started with various command line parameters to execute different actions on a particular backup job, such as loading and running a backup job, running the application minimized, alternating between backup types, shutting down the computer after backup etc. The parameters can be used to create shortcuts which start backup tasks automatically.

Syntax

GBM9 [-e] [-job "backup job name"] [-h] [-noexit] [-showlogfile] [-novalidate] [-bt|1 2 3 4] [-shutdown|1 2 3 4]

Parameters

Command	Result
-e	Activate the Command Line engine.
-job "job name"	Name of the backup job to be performed.
-novalidate	Do not verify backed up data after backup.
-h	Run the backup monitor minimized when backup starts.
-showlogfile	Display backup log when backup is complete.
-noexit	Do not exit Genie Backup Manager after backup.
-bt	Specify backup type to be used with this backup run.

	-bt1	Force running the backup job in full mode (backup all selected files).
	-bt2	Force running the backup job in increment mode.
	-bt3	Force running the backup job in mirror mode.
	-bt4	Force running the backup job in differential mode.
-shutdown	Choose power saving option to be executed when backup is complete.	
	-shutdown1	Shutdown computer.
	-shutdown2	Hibernate.
	-shutdown3	Logoff.
	-shutdown4	Standby.

Data Scheduler

Data Scheduler

Backing up data can take a lot of time depending on the size of the data intended for backup, during which a large portion of the machine's resources are consumed by the backup application. To avoid interrupting work or slowing down the machine while it is being actively used, users can schedule backup tasks to run unattended at times that guarantee no interruptions to their work. Scheduling also insure that the data is being backed up on a regular basis without user interaction.

Scheduling Backups are Step 5 in the Backup Wizard. GBM enables users two modes of backup scheduling in normal mode:

Basic Schedule: Schedule your backup Daily, Weekly, Monthly, Once, or at Windows login

Advanced Schedule: This option enables the user to schedule backups, rotate backup types, and limit backup sets in one simple step.

Basic Schedule

Scheduling is step 5 of the backup process in the backup wizard, in this step you can select how often you wish the backup job to be executed. Available options are: Every few hours, Daily, Weekly, Monthly, Once, and At Windows login.

How to schedule backup jobs in Basic Schedule?

1. From the left navigation menu in the backup wizard select **Schedule**
2. Check **Enable Schedule**, to enable schedule options.
3. Select how frequent you wish to run the backup:
    - **Run Every Few Hours**: runs backup every few hours, in this option you can also specify the days you wish the task to run
    - **Run Daily:** Runs backup daily at a specific time
    - **Run Weekly**: Specify the time and days you wish the backup to run
    - **Run Monthly:** Specify the time and day of the month
    - **Run Once:** Run this backup one time on a specific time
    - **Run at Windows logon**: Runs every time you logon into your computer
4. Under **Security Settings**, you can specify if you wish to run the backup whether the user is logged on or not. If you select **Run whether user is logged on or not**, you **must** enter the Windows login username or password; otherwise your backup will not run if Windows is logged out.
5. In **More Settings**, you can specify the following options:
    - **Minimize backup window when running job**: Selecting this option runs the backup job while scheduled backup window is minimized
    - **Do not start backup if the computer is running on batteries:** You can set this option that tells the task to run only if the computer is on AC power (not battery power)

- **Do not wait 10 seconds before starting backup**: By default the scheduled backup has a 10 second delay counter before actually running the backup. Choosing this option will enable to run the task without this 10 second delay.
- **Wake up computer to run this task (if supported):** If you computer is set to sleep at the time of backup, you can choose to wake up the computer to run the task. This option is enabled if **Run whether user is logged on or not** is enabled.

Advanced Schedule

Advanced Schedule

A common practice in scheduling backups is to set the task to run backup in normal mode (all selected files) on a weekly or monthly basis, and in increment or differential mode daily or weekly, the recurrence of backups depends on how critical the data is and how frequently it changes. This all can be achieved in **Advanced Schedule** mode

How to schedule backup jobs in Advanced Schedule?

1. From the left navigation menu in the backup wizard select **Schedule**
2. Check **Enable Schedule**, to enable schedule options.
3. Choose **Advanced Schedule**
4. By default, **Full Backup Scheduling** is always enabled as you cannot perform a incremental/differential backup without a full backup. Select how frequent you wish to run the backup as full backup type:
    - **Run Every Few Hours**: runs backup every few hours, in this option you can also specify the days you wish the task to run
    - **Run Daily:** Runs backup daily at a specific time
    - **Run Weekly**: Specify the time and days you wish the backup to run
    - **Run Monthly:** Specify the time and day of the month
    - **Run Once:** Run this full backup one time on a specific time
    - **Run at Windows logon**: Runs every time you logon into your computer
5. Select Differential/Incremental Backup (optional) and select how frequent you wish to run incremental/differential backup:
    - **Run Every Few Hours**: runs backup every few hours, in this option you can also specify the days you wish the task to run
    - **Run Daily:** Runs backup daily at a specific time
    - **Run Weekly**: Specify the time and days you wish the backup to run
6. Under **Security Settings**, you can specify if you wish to run the backup whether the user is logged on or not. If you select **Run whether user is logged on or not**, you **must** enter the Windows login username or password; otherwise your backup will not run if Windows is logged out.
7. In **More Settings**, you can specify the following options:
    - Limit Number of backup sets to (if supported by media): This option enables GBM to keep the most recent "X" number of full backups with its incremental/differential backups
    - **Minimize backup window when running job**: Selecting this option runs the backup job while scheduled backup window is minimized
    - **Do not start backup if the computer is running on batteries:** You can set this option that tells the task to run only if the computer is on AC power (not battery power)

- **Do not wait 10 seconds before starting backup**: By default the scheduled backup has a 10 second delay counter before actually running the backup. Choosing this option will enable to run the task without this 10 second delay.
- **Wake up computer to run this task (if supported):** If you computer is set to sleep at the time of backup, you can choose to wake up the computer to run the task. This option is enabled if **Run whether user is logged on or not** is enabled.

To learn more about how to rotate backups using advanced schedule, see How to: Rotate Backups using Advanced Scheduling

Notes:

- Advanced Scheduling is not supported in easy mode
- Limiting backup sets is not supported on FTP, Amazon S3, CD/DVD using burning technology, and when the backup is spanned to multiple locations
- Advanced scheduling overwrites purge settings and backup types specified in the settings page when schedule runs. If you backup manually, it will take backup settings from the Backup Settings page.

How to: Rotate Backups using Advanced Scheduling

Rotating backup types is recommended for more reliable backups. The following examples will demonstrate how to perform this practice easily in advanced scheduler.

Example 1:

Perform full backups on the first Sunday of the month and differential backups weekly on Fridays:

- In the advanced schedule, under **Full backup**, select **Run Monthly**
- Set the time you wish the backup to run, and then select **on the first Sun of the month**
- Mark the checkbox next to **Differential Backup (optional)** to enable differential backup schedule
- Select **Run Weekly** and set the time for the backup to run and under **on the following days** select **Fri**

Example 2:

Perform full backups weekly on Sunday, incremental backups daily every 5 hours the rest of the week, and on the beginning of a new week, delete the backups of the last week

- In the advanced schedule, under **Full backup**, select **Run Weekly**
- Set the time you wish the backup to run, and under **on the following days** select **Sun**
- Mark the checkbox next to **Incremental Backup (optional)** to enable incremental backup schedule

- Select **Run Every Few Hours**, in **Run Every** set it to 5 hours, and under **on the following days** select **Mon**, **Tue**, **Wed**, **Thurs**, **Fri**, and **Sat**
- Under **More Settings,** change **Limit number of backup sets to (if supported by media)** from unlimited to 01

The Backup Monitor

When running a backup job as a scheduled backup task or from a desktop shortcut the task will be run in a small window called the Backup Monitor.

The Backup Monitor Controls:

Help: Opens the Help documentation

Show Log...: Displays the backup log, this option is only enabled after backup completes

Abort: Aborts backup progress

Status bar: This window will display the status of the backup task along with a bar indicating progress.

Pause: Pauses the backup, this option is enabled during the backup process

Stop Timer: Cancels the 10 second timer before backup starts, to start the backup manually, click **Start Backup**

Snooze: Postpones the backup and runs it later specified in the **Click Snooze to be reminded again in**. You can choose the to snooze for:

- 10 minutes: after 10 minutes run backup
- 30 minutes: after 30 minutes, run backup
- 1 hour: after an hour run backup
- 2 hours: after 2 hours run backup
- 8 hours: after 8 hours, run backup
- 1 day: run this backup the next day at the same time

Computer power options: Set or change the computer power options to be performed after backup completes. These options are:

- **No Power option**: do not perform anything after backup completes
- **Shutdown**: Shutdown computer after backup completes
- **Logoff**: Logoff computer after backup completes
- **Hibernate**: Hibernate computer after backup completes

- **Suspend**: Suspend computer after backup completes

For more information about power options, see Power Management Options

Note:

You can only snooze before backup starts

Microsoft SQL

SQL Server

The need to back up databases on a regular basis is a major component of managing any production system. Without proper backup of your Microsoft SQL databases, your company's data is just one administrator's error away from disappearing permanently. Genie Backup Manager offers quick, easy and reliable backup of your SQL Server data, without the need for elaborate scripts.

Genie Backup Manager does NOT require disconnecting from the SQL Server in order to create a window for backup. Administrators and users can still connect to the SQL Sever and perform queries on the database while GBM takes a point-in-time copy of the various tables.

How to: Register MS SQL Plugin

Upon purchasing the SQL plugin, the user will receive an email containing a serial number for unlocking the SQL Backup.

To register MS SQL plugin:

1. Start GBM.
2. Click **Backup**.
3. Under SQL Backup in Backup Category, click Register SQL plugin
4. Type or copy-paste the serial number into its designated field then click **OK**.

How to: Backup SQL Server Data

Please refer to the SQL Server Backup Strategies page for more information on the best backup plan to adopt for your SQL Server databases.

1. From the Main Page, select **Backup**
2. In Backup Category, Select **SQL Backup**
3. From the left navigation menu in the backup wizard select **What to Backup**
4. Expand the **SQL Server** list, select the server instance you wish to backup from.
5. Mark the checkbox next to each database you wish to backup.
6. Click **Next** to continue

Important note:

- Under the full or bulk-logged recovery model, before you can restore a database, you must back up the active transaction log.

SQL Databases

When you install SQL Server 7.0, the setup program automatically creates four system databases along with two sample user-defined databases i.e. Pubs and Northwind. The four system databases that play a vital role in the successful operation of SQL Server are Master, Model, Msdb and Tempdb database.

Master Database

This database stores all critical information such as server specific configuration information, user login accounts, running processes, system error messages, system stored procedures etc. It also records the existence of other databases and the location of the primary files that contain the initialization information for the user databases. So it's always preferable to have a recent backup of this database.

Model Database

This database acts as a template for the new databases i.e. whenever you create a new database the database objects present in this database get copied onto the new database. If you want to perform some common operations on all user databases then you can include those objects such as tables, procedures etc so that the new database also contains them.

Msdb Database

This is one of the system databases that play an important role in SQL server's management and maintenance. It contains some system defined tables that are specific to this database only. The Msdb database contains task-scheduling, exception handling, alert management and system operator information i.e. it holds the information of all the operators such as email addresses or pager numbers and history information about all the backups and restore operations.

Tempdb Database

As the name suggests this database stores all the temporary tables and the temporary results generated by group by, order by, distinct clause etc. The temporary data resides on the tempdb database till the user is connected to the SQL server. All the temporary data and tables related to the user get dropped once the user logs out from the SQL Server. All the global variables lose their values after SQL Server shuts down or SQL Server crashes. Tempdb auto grows as needed and each time the system is started; tempdb is reset to its default size (i.e. 8.0 MB for data file and 0.5MB for log file). Because Tempdb is created every time SQL Server is started, the model database must always exist on a SQL Server system.

Important Note:

Before attempting to restore a **System database** (Master, MSdb, model, or Pubs) you must start SQL Sever in single user mode.

SQL Recovery Models Overview

In order to make backups easier to implement, Microsoft has grouped the various strategies that can be employed into three stereotypes or models: simple, full, and bulk-logged. These SQL Server-specific models not only help you think about your needs, but also simplify the implementation of the appropriate strategy. The recovery models are implemented per database, and determines how much data loss is acceptable in case of a failure and what types of backup and restore functions are allowed.

Simple Recovery Model

This model minimizes administrative overhead for the transaction log, because the transaction log is not backed up. The simple recovery model risks significant work-loss exposure if the database is damaged. Data is recoverable only to the most recent backup of the lost data. Therefore, under the simple recovery model, the backup intervals should be short enough to prevent the loss of significant amounts of data. However, the intervals should be long enough to keep the backup overhead from affecting production work. Including differential backups in the backup strategy can help reduce the overhead.

Select Simple if:

- Your data is not critical.
- Losing all transactions since the last full or differential backup is not a problem.
- Data is derived from other data sources and is easily recreated.
- Data does not change often.
- Space is limited to log transactions. (This may be a short-term reason, but not a good long-term reason.)

Full Recovery Model

Provides the normal database maintenance model for databases where durability of transactions is necessary. Log backups are required. This model fully logs all transactions and retains the transaction log records until after they are backed up.

Select Full if:

- Data is critical and you cannot afford to lose any data.
- You always need the ability to do a point-in-time recovery.
- Bulk-logged activities are intermixed with normal transaction processing.
- You are using replication and need the ability to re-synchronize all databases involved in replication to a specific point in time.

Bulk-Logged Model

This recovery model bulk logs most bulk operations. It is intended solely as an adjunct to the full recovery model. For certain large-scale bulk operations such as bulk import or index creation, switching temporarily to the bulk-logged recovery model increases performance and reduces log space consumption. Log backups are still required. Like the full recovery model, the bulk-logged recovery model retains transaction log records until after they are backed up.

Select Bulk-Logged if:

- Data is critical, but logging large data loads slows down the system.
- Most bulk operations are done off hours and do not interfere with normal transaction processing.
- You need to be able to recover to a point in time.

Changing Recovery Models in SQL

1. After connecting to the appropriate instance of the Microsoft SQL Server Database Engine, in **Object Explorer**, click the **server name** to expand the server tree.
2. Expand the **Databases**.
3. Right-click a database, and then click **Properties**, which opens the **Database Properties** dialog box.
4. In the **Select a Page** pane, click **Options**.
5. The current recovery model is displayed in the **Recovery model** list box. Optionally, to change the recovery model select a different one from the list.

Or from the terminal, run this command ...

- ALTER DATABASE {database name} SET RECOVERY {FULL | SIMPLE | BULK_LOGGED}

SQL Backup Settings

Security Options

Security in Genie Backup Manager

Genie Backup Manager offers multiple levels of protection to ensure that backed up data is not accessible to unauthorized persons. ZIP passwords offer moderate protection for compressed backups, with the added flexibility of being compatible with most compression utilities, to allow users to manually restore data from backup archives, while AES encryption has the advantage of being highly secure, as it is adopted by NIST as an FIPS-approved (Federal Information Processing Standard) symmetric encryption algorithm that may be used by U.S. Government organizations (and others) to protect sensitive information

Zip Password Protection

Genie Backup Manager uses standard zip format compression, and thus can add a standard zip compression password to the created archive; using this protection method would still allow users to access their data using ZIP-compatible compression utilities. Users will not be able to browse or restore files and folders stored inside a ZIP-password-protected backup until they enter their passwords.

- This method only offers moderate protection; it is not recommended for securing sensitive data.
- ZIP passwords cannot be less than 6 characters long.

To add zip password protection to a backup job:

1. From the left navigation menu in the backup wizard select **Settings**.
2. From the Security box select **Password Protection**.
3. Type a password twice in the **Password** and **Confirm Password** fields

Encryption

Encryption

Encryption is encoding data to prevent any non-authorized party from reading or changing it. The level of protection provided by encryption is determined by an encryption algorithm. The contents of the data that you want to protect are encrypted based on a password that you specify. In order for GBM later restore the original contents of the encrypted files, the correct password must be supplied

AES Encryption

GBM uses AES encryption. AES is the Advanced Encryption Standard. This encryption method, has been adopted by NIST as an FIPS-approved (Federal Information Processing Standard) symmetric encryption algorithm that may be used by U.S. Government organizations (and others) to protect sensitive information

GBM supports AES encryption in 3 different strengths: 128-bit AES, 192-bit AES and 256-bit AES. These numbers refer to the size of the encryption keys that are used to encrypt the data; the higher the number the stronger the encryption, at the expense of being slightly slower. All three methods can provide significantly greater security than the password protection method.

The strength of encryption does not depend only on the length of the encryption key used but also on the password supplied by the user. Please read more about Encryption Passwords

- GBM requires that the correct password be supplied before the contents of an encrypted backup set can be viewed or restored to its original unencrypted form. The password is not required, however, for actions that do not require access to the unencrypted contents of the file. In particular, encrypted files can be deleted from backup set, or can be replaced within the backup set, without a password

Notes on encryption safety

Encryption can be a very effective measure for protecting your sensitive data; however, even encrypted documents can be compromised . The following is a list of some of the ways in which the safety provided by encryption can be compromised. Note that these are not GBM related risks but rather risks that arise from mishandling the password or a file in its unencrypted form

If a keystroke monitor (key-logger) or other malicious code (such as a trojan horse) is running on your computer, your password may be recorded when you type it. Be sure to check frequently for viruses and follow other recommended computer safety procedures

If you extract an encrypted file and then delete it, it may be possible for someone to later "undelete" the file using file recovery software or the Recycle Bin. You can use the Genie Wipe tool to irreversibly delete sensitive files

When you extract, open or view a file directly from the backup set (using Catalog or from the Restore Wizard), GBM must extract the file to a temporary location so that the associated program can open it. If you subsequently close GBM without first closing the program that is using the file, GBM may not be able to delete the temporary copy of the file, thereby leaving it on disk in unencrypted form. The associated program may also make one or more backup copies of the decrypted file, and GBM will not be able to delete these

After backing up or restoring encrypted files, some or all of the unencrypted file contents may remain in your computer's memory or the page swap files on disk. A malicious user may be able to retrieve this unencrypted information

Using Encryption in Backup

GBM can protect backed up data from being accessed by unauthorized people using AES encryption. GBM encrypts data on-the-fly, meaning that it encrypts files as they are being copied to the backup storage device instead of first encrypting the entire data then backing it up.

To add AES encryption protection to a backup job:

1. From the left navigation menu in the backup wizard select **Settings**.
2. Select **AES Encryption**.
3. Type a password twice in the **Password** and **Confirm Password** text input boxes.
4. Click **Encryption Strength**.
5. Choose an encryption level.

Note

- Encryption applies only to the contents of backed up files. Information about an encrypted file, such as its name, date, size, and attributes, can be viewed, without a password, by anyone who has access to the backup set.
- Encryption is not supported in Easy Mode
- Please store the password in a safe place. If lost, the backed up data is irretrievable.

Decrypting data during restore

Upon selecting a backup set with encryption protection for restore, GBM will request the encryption password. The user will not be allowed to browse, view, extract or restore data unless the correct password is supplied.

Encryption Passwords

The security of your data depends not only on the strength of the encryption method but also on the strength of your password, including factors such as length and composition of the password, and the measures you take to ensure that your password is not disclosed to unauthorized third parties.

You should keep the following considerations in mind when choosing passwords for your files:

Encryption password cannot be less than 6 characters long

- In general, longer passwords are more secure than shorter passwords. To take maximum advantage of the full strength of AES encryption passwords lengths must be approximately:
    - 15 characters for 128-bit encryption.
    - 23 for 192-bit encryption.
    - 31 characters for 256-bit encryption.
- Passwords that contain a combination of upper and lower case letters, digits, and punctuation are more secure than passwords containing only letters.
- Because you can use spaces and punctuation, you can create "pass phrases" that are long enough but still easy to remember and type.
- Avoid using easily guessed passwords such as names, birthdays, Social Security numbers, addresses, telephone numbers, etc...
- Avoid storing the password on the same volume on which the encryption data is located.
- Keep a record of the passwords you use and to keep this record in a secure place. GBM has no way to access the contents of an encrypted file unless you supply the correct password.

Compression

Genie Backup Manager uses non-proprietary ZIP64 compatible compression to reduce backed up data size and save space, supporting up to 264 -1 files within a zip archive as well as files that have a size greater than 4GB, for a zip file size that can reach up to about 18 million terabytes (more precisely, 2^64-1 bytes).

The Genie Backup Manager compression engine offers fast performance and low memory usage. Speed improvements reach 25%-75% in certain contexts. It also provides 15 to 20% better compression than other formats on many popular file types, especially XML data.

Users can choose between 9 levels of compression ranging form no-compression, to best.

To set GBM to compress backed up data:

1. From the left navigation menu in the backup wizard select **Settings**.
2. Select Use **Compression**.
3. Select the desired compression level from the combo box.

Backup without Compression

Selecting to backup data without compression would cause GBM to copy the data to a folder on the storage device while preserving the original file/folder structure, this makes data more accessible and less susceptible to corruption.

Power Management Options

Users can set Genie Backup Manager to trigger a power-saving event after a backup job has been executed. Allowed options are:

- Exiting Genie Backup Manager.
- Shutting down computer.
- Setting computer on Hibernate mode.
- Logging off computer.
- Setting computer on Stand-by mode.

To configure power-saving options for a backup job, select the **Settings** screen from the backup wizard, click **More Settings**, then select **Advanced Settings**. Selected power-saving options must be supported by the computer. To configure power management settings for your computer, double-click **Power Options** in the **Control Panel**.

Command Line Parameters

Genie Backup Manager can be started with various command line parameters to execute different actions on a particular backup job, such as loading and running a backup job, running the application minimized, alternating between backup types, shutting down the computer after backup etc. The parameters can be used to create shortcuts which start backup tasks automatically.

Syntax

GBM9 [-e] [-job "backup job name"] [-h] [-noexit] [-showlogfile] [-novalidate] [-bt|1 2 3 4] [-shutdown|1 2 3 4]

Parameters

Command	Result
-e	Activate the Command Line engine.
-job "job name"	Name of the backup job to be performed.
-novalidate	Do not verify backed up data after backup.
-h	Run the backup monitor minimized when backup starts.
-showlogfile	Display backup log when backup is complete.
-noexit	Do not exit Genie Backup Manager after backup.
-bt	Specify backup type to be used with this backup run.
	-bt1: Force running the backup job in full mode (backup all selected files). -bt2: Force running the backup job in increment mode. -bt3: Force running the backup job in mirror mode. -bt4: Force running the backup job in differential mode.
-shutdown	Choose power saving option to be executed when backup is complete.
	-shutdown1: Shutdown computer. -shutdown2: Hibernate. -shutdown3: Logoff. -shutdown4: Standby.

Adding a Timestamp to the Backup File

A timestamp is a combination of date + time that is appended at the end of the backup filename to indicate when the backup run was performed

To attach a timestamp to the backup set:

1. From the left navigation menu in the backup wizard select **Job Info**.
2. Click **Backup Filename Options**.
3. Select **Attach timestamp to backup set**.
4. From the **Timestamp** format combo-box choose preferred date/time format.
5. Click **Ok**.

Timestamp formats

Timestamp formats are:

- Month dd, yyyy@hh:mm:ss AM/PM
- Day of the week, Month dd, yyyy
- Month dd, yyyy
- yyyy-mm,dd
- Month dd
- mm-dd-yyyy@hh-mm AM/PM
- mm-dd-yyyy@hh-mm-ss AM/PM
- hh.mm.dd AM/PM

Pre and Post Job Commands

To run commands before or after backup is completed, users can use the Pre and Post Job Commands option.

These are some of the helpful tasks that a user can accomplish using pre, pre-backup and post commands...

Task	**Command(s)**
Checking disk drives for errors before backup.	CHKDSK
Copying, moving, deleting and replacing files and folders.	COPY, XCOPY, RENAME, REPLACE, MOVE, DEL
Defragmenting a drive before or after backup.	DEFRAG
Temporally disabling real-time antiviral software to speed up backup.	Refer to the command line options section of your anti-virus help documentation.
Printing documents (such as the activity log when backup is done).	PRINT
Shutting down, logging off or restarting the computer.	SHUTDOWN

For a complete list of Windows system commands that can be used, open the **Start** menu, click **Run**, type *CMD* and click **Ok**, then type *help* and press enter. for more information on using a specific command type "<command> /?" in the command prompt then press enter.

To attach pre/post job commands to a backup job:

1. From the left navigation menu in the backup wizard select **Settings**.
2. Click **More Settings** then select **Pre & Post Job Commands**.
3. Make sure the **Enable Pre & Post Job Commands** option is checked
4. From the **Events** list select whether to attach a pre, post, or pre-data confirmation job command.
5. Make sure **Enable Command** is selected.
6. In the **Command Line** box, type the command you wish to be executed or browse for a .batch, .cmd or script file you wish to execute for multiple commands
7. If you do not wish for one process to run until the previous one in the sequence has finished, make sure the **Wait until previous process ends** option is selected. Other wise the command and the backup job will run almost simultaneously.

Environmental Variables

Output files from backup jobs have varying names, depending on the backup job name and the number of the backup run. Using special environmental variable strings, you can write commands and pass the backup job's output files as parameters without having to worry about their changing names:

$BACKUPOUTPUT$ Resolves to the complete path of the main backup file/folder.

$LOGFILE$ Resolves to the complete path of the backup log file.

$BACKUPPRFOLDER$ Resolves to the complete path of the parent folder containing the backup set.

$BACKUPFILENAME$ The name of the output backup file, without the path.

- Environmental variables passed to commands must be enclosed in quotations, such as "$BACKUPOUTPUT$".

Built-In Commands

When using the following commands, Genie Backup Manager will open a dialog displaying the progress of the command execution. Each one of these commands takes two parameters:

- **Copy:** Copy a file or folder to a new location.
- **Move:** Move a file or folder to a new location. The file/folder in the original location will be deleted.
- **Rename:** Rename a file or folder.

SQL Continuous Data Protection

SQL Data Protection

Protecting your mission critical databases strongly rely on understanding the SQL backup types and recovery models. GBM gives the users and easy to use, Continuous Data Protection (CDP) for ultimate SQL database protection . Users can also perform single backups from the Single Level Protection (SLP) page.

SQL Backup Types

SQL Backup Types

Choose between different backup methods, for SQL Backup. The first run in all times must be Full or The backup will fail or its restore will be unreliable. SQL backups are not like other backups in GBM, as each backup done on SQL backup, even if it is a different job, depends on previous runs. It is recommended that your SQL backups are created in separate backup jobs from your other data.

- Database-complete: Backup all data in the database including the transaction log
- Database-differential: Backup all data in the database, including the transaction logs, since the last full backup
- Transaction Log: Backup all items in the transaction log.

Note:

- Transaction logs can only be backed up in Full Recovery mode

Database-Complete

When a user selects Complete backup, GBM will back up all the data in the database. Every table, stored procedure and all other objects in the database are placed into a single backup file. Complete backup must be done before backing up via Database-Differential or Transaction Log.

To set GBM to perform a complete backup:

1. From the left navigation menu in the backup wizard select **CDP**.
2. Go to **Single Level Protection (SLP)**

3. From the SQL Backup Type group select **Database-Complete**.

Database-Differential

Database differential backup will gather all changes since the last full backup into a backup file. If you are using Simple Recovery model, it is recommended that you do differential backup at least once a day.

To set GBM to perform Database differential backup:

1. From the left navigation menu in the backup wizard select **CDP**.
2. Go to **Single Level Protection (SLP)**
3. From SQL Backup Type select **Database Differential**.

Important Note:

When choosing Database differential Backup, you must make sure that you have performed a database complete backup run either in the same job or a different job

Job naming in database differential

If all the SQL backup is done in the same job, your output files will look as follows:

Backup Job.gbp ... Database-complete backup

Backup Job.0.gbp ... First Database-differential backup run

Backup Job.1.gbp ... Second Database-differential backup run

Backup Job.2.gbp ... Third Database-differential backup run

If your differential runs are separate from the complete backup your output files will be as follows:

complete.gbp ... Database-complete backup

differential.gbp ... First Database-differential backup run

differential.0.gbp ... Second Database-differential backup run

differential.1.gbp ... Third Database-differential backup run

You can also make each operation in separate jobs as well and the naming will be as follows:

complete.gbp ... Database-complete backup

first run.gbp ... First Database-differential backup run

second.gbp ... Second Database-differential backup run

third.gbp ... Third Database-differential backup run

Transaction Log

When choosing Transaction Log backup, you must make sure that you have performed a database complete backup run either in the same job or a different job or the backup will fail. The backup will also fail if you are not in full recovery model, to learn about recovery models, click here.

Transaction log will backup the transaction log and it is recommended to backup very frequent depending on the database traffic.

To set GBM to perform Transaction log backup:

1. From the left navigation menu in the backup wizard select **CDP**.
2. Go to **Single Level Protection (SLP)**
3. From SQL Backup Type select **Transaction log**.

Job naming in Transaction log

If all the SQL backup are performed in the same job, your output files will look as follows:

Backup Job.gbp ... Database-complete backup

Backup Job.0.gbp ... First transaction log run

Backup Job.1.gbp ... Second transaction log run

Backup Job.2.gbp ... Third Transaction log run

If your differential runs are separate from the complete backup your output files will be as follows:

complete.gbp ... Database-complete backup

transaction.gbp ... First transaction log run

transaction.0.gbp ... Second transaction log run

transaction.1.gbp ... Third Transaction log run

You can also make each operation in separate jobs as well and the naming will be as follows:

complete.gbp ... Database-complete backup

first run.gbp ... First transaction log run

second.gbp ... Second transaction log run

third.gbp ... Third transaction log run

Continuous Data Protection (CDP)

Continuous Data Protection

A common practice in protecting SQL Data is to run Database complete with differential and/or transaction logs backup to ensure latest data recovery, for more information, please view SQL Server Backup Strategies

How to protect SQL databases?

1. From the left navigation menu in the backup wizard select **CDP**
2. Select **Continuous Data Protection (CDP)**
3. **Database Complete** should be performed as you cannot perform a differential/transaction log backup without a full backup. Select how frequent you wish to run the backup as full backup type:
    - **Run Every Few Hours**: runs backup every few hours, in this option you can also specify the days you wish the task to run
    - **Run Daily:** Runs backup daily at a specific time
    - **Run Weekly**: Specify the time and days you wish the backup to run
    - **Run Monthly:** Specify the time and day of the month

- **Run Once:** Run this full backup one time on a specific time
- **Run at Windows logon**: Runs every time you logon into your computer

4. Select Differential/transaction log Backup (optional) and select how frequent you wish to run differential/transaction log backup:
    - **Run Every Few Hours**: runs backup every few hours, in this option you can also specify the days you wish the task to run
    - **Run Daily:** Runs backup daily at a specific time
    - **Run Weekly**: Specify the time and days you wish the backup to run
5. Under **Security Settings**, you can specify if you wish to run the backup whether the user is logged on or not. If you select **Run whether user is logged on or not**, you **must** enter the Windows login username or password; otherwise your backup will not run if Windows is logged out.
6. In **More Settings**, you can specify the following options:
    - Limit Number of backup sets to (if supported by media): This option enables GBM to keep the most recent "X" number of database-complete backups with its differential/transaction log backups
    - **Minimize backup window when running job**: Selecting this option runs the backup job while scheduled backup window is minimized
    - **Do not start backup if the computer is running on batteries:** You can set this option that tells the task to run only if the computer is on AC power (not battery power)
    - **Do not wait 10 seconds before starting backup**: By default the scheduled backup has a 10 second delay counter before actually running the backup. Choosing this option will enable to run the task without this 10 second delay.
    - **Wake up computer to run this task (if supported):** If you computer is set to sleep at the time of backup, you can choose to wake up the computer to run the task. This option is enabled if **Run whether user is logged on or not** is enabled.
    - **Run Database- Complete backup now (Recommended):** Choose this option if you wish to run a database-complete backup after saving CDP settings.

Notes:

- Limiting backup sets is not supported on FTP,Amazon S3, CD/DVD using burning technology, and when the backup is spanned to multiple locations

CDP Examples

Example 1:

Perform Database-Complete backups on the first Sunday of the month and differential backups weekly on Fridays:

- In CDP, under **Database-Complete Backup**, select **Run Monthly**
- Set the time you wish the backup to run, and then select **on the first Sun of the month**

- Mark the checkbox next to **Differential Backup (optional)** to enable differential backup schedule
- Select **Run Weekly** and set the time for the backup to run and under **on the following days** select **Fri**

Example 2:

Perform Database-Complete backups weekly on Sunday, Transaction log backups daily every 5 hours the rest of the week, differential daily, and keep only 1 backup set

- In the CDP, under **Full backup**, select **Run Weekly**
- Set the time you wish the backup to run, and under **on the following days** select **Sun**
- Mark the checkbox next to **Differential (optional)** to enable database-differential backup schedule
- Select **Run Daily**
- Mark the checkbox next to **Transaction log Backup (optional)** to enable transaction log backup schedule
- Select **Run Every Few Hours**, in **Run Every** set it to 5 hours, and under **on the following days** select **Mon**, **Tue**, **Wed**, **Thurs**, **Fri**, and **Sat**
- Under **More Settings,** change **Limit number of backup sets to (if supported by media)** from unlimited to 01

Single Level Protection

Using single Level protection enables users to create fast SQL backup using single backup type. When performing SQL Backup using GBM, you must perform a Database-Complete Backup before any Transaction log and Incremental backup.

Using Single Level Protection:

1. From **Backup** choose **Microsoft SQL**
2. Go to **CDP** and under **Single Level Protection** choose one of the following backup types:

- Database-complete: backs up all the data in the database including the transaction log
- Database-differential: Backup all data in the database, including the transaction logs, since the last full backup
- Transaction Log: Backup all items in the transaction log.

SQL Server Backup Strategies

When planning your SQL Server backup strategy, select the backup method that is the best tradeoff between backup and restore time, depending on the size of your database. For example, full backups take the longest to perform, but are the fastest to restore. Differential backups are overall faster than full backups, but take longer to restore. Incremental (transaction log) backups are the fastest, but are generally the slowest to restore.

Generally, it is faster to restore differential backups (with few, if any transaction logs) than it is to restore a full backup (with many transaction logs). This is because the restoration of transaction logs have to play back each transaction when restored. If a transaction took 5

minutes to run, it will also take about 5 minutes to run again when the transaction log is restored.

For fastest backups, we recommend performing a disk backup to a local drive/drive array, then moving the backup file(s) remotely.

The selected database recovery model should also play a role in your choice of backup method and frequency. If you are using the Simple Recovery model:

- Use only Database-Complete backups.
- Depending on how frequently the data changes and how critical it is, you should execute at least one full backup a day.
- This should occur during off-hours when there is minimal database use.

If you are using the Full or Bulk-Logged Recovery model:

- Option 1 -- use Database-Complete and Transaction.
- Option 2 -- use Database-Complete, Differential and Transaction.
- A full backup should be created at least once a day.
- Transaction log backups should occur every 15 minutes.
- Differential backups should occur every three hours.
- The full backup should occur during off-hours when there is minimal database use.
- The transaction and differential backups should be on a set schedule based on when your full backup occurs.

Restore

Restoring SQL Server Data

Although GBM has the ability to backup multiple databases, you can only restore one at a time. GBM can restore your database whether it is online or offline.

SQL Server data differs from other data in GBM in terms of restore in that backups must be restored in the order in which they were created, whereas with other GBM data, restoring the last backup will recover the latest versions of all files and folders.

If you are restoring a non-Database-Complete backup, please refer to the specific help pages on Restoring a transaction log backup or a Restoring a differential database backup.

Important notes

- If **Leave database non-operational** is selected on the last restore run, it will leave the database unusable. To reverse this effect, repeat the restore process for the last run and make sure that **Leave database non-operational** is not selected.
- Under the full or bulk-logged recovery model, before you can restore a database, you must back up the active transaction log.

When you wish to restore databases you have the following two options and each option slightly differs in the restoration process:

- **Restoring to a new database**.
- **Restoring over existing database**.

Restoring to a New Database

GBM enables the user to restore the data to a newly created database, as opposed to restoring over an existent one, please refer to the following steps:

1. Open the **Restore wizard**.
2. Load a backup, then click **Next**.
3. In the **Available Databases** list, select **Create new Database**.
4. Under **Set Restore Settings**, Select **Move database location** and specify the paths of the database location and logs location in the **DB Location** and **Logs Location** fields respectively.
5. Select **Leave database non operational** if there are still other differential or transaction runs that you wish to restore after this run.
6. Click **Next** to start restore.

Restoring Over an Existing Database

Before attempting to restore a **system database** (Master, MSdb, model, or Pubs) you must start SQL Sever in single user mode.

1. Open the **Restore wizard**.
2. Load a backup, then click **Next**.
3. From the **Available Databases** list, select the database you wish to restore to.
4. Under **Settings**, select **Restore over existing database**.
5. If you wish to change the location of the database and log; under **Settings**, select **Move Database location** then specify the new paths for the Database and logs in the **DB Location** and **Logs Location** fields respectively. Keep unchecked if you wish to restore to original location.
6. Select **Leave database non operational** if there are still other differential or transaction runs that you wish to restore after this run.
7. Click **Next** to start restore.

How to: Connect to the Database

To connect to the server via GBM, please refer to the following steps:

1. Open the restore wizard.
2. Load the backup set then click **Next**. If you are restoring multiple runs, see Restoring SQL Database from Multiple Runs,

3. From the left pane select an SQL Server Instance, the databases backed up under that instance will appear in the right pane.
4. Select the SQL database you wish to restore. You are only allowed to restore one database at a time.
5. Click **Set Restore Settings**.

How to: Start the Database in Single-User Mode

Under certain circumstances, such as before recover a damaged system database, you may have to start an instance of Microsoft SQL Server in single-user mode. To do so ...

1. In SQL Server Configuration Manager, click **SQL Server Services**.
2. In the right pane, right-click **SQL Server <instance_name>**, then click **Properties**.
3. On the **Advanced** tab, in the **Startup Parameters** box, type "-m" separated from other parameters by a semicolon (;).
4. Click **OK**.
5. Restart the database engine.

When you start an instance of SQL Server in single-user mode, note the following:

- Only one user can connect to the server.
- The CHECKPOINT process is not executed. By default, it is executed automatically at startup.

ow to: Restore a Transaction Log Backup

Backups must be restored in the order in which they were created. Before you can restore a particular transaction log backup, you must first restore the following previous backups without rolling back uncommitted transactions:

- The full database backup and the last differential backup, if any, taken before the particular transaction log backup.
- All transaction log backups taken after the full database backup or the differential backup (if you restore one) and before the particular transaction log backup.

To restore previous backups as stated above the **Leave database non operational** option must be checked during restore from the **Settings** dialog, which can be accessed from the right pane when SQL Server is selected in the restore wizard. This option tells the database that there is still additional data to be restored. The following scenarios illustrate when this option should be selected.

Scenario

Restoring a backup set consisting of a database-complete backup followed by two transaction log backups.

Restore sequence	Leave database non operational
Database-complete	Enabled
First transaction log	Enabled
Second transaction log	Disabled

Scenario

Restoring a backup set consisting of a Database-Complete backup followed by two differential database backups, and a transactional log backup .

Restore sequence	Leave database non operational
Database-complete	Enabled
Second differential database	Enabled
Transaction log	Disabled

Scenario

Backup sequence	Backup type
1st	Database-complete
2nd	Differential database (first)
3rd	Transaction log (first)
4th	Differential database (second)
5th	Transaction log (second)
6th	Transaction log (third)

Restore sequence	Leave database non operational
Database-complete	Enabled
Second differential database	Enabled
Second transaction log	Enabled
Third transaction log	Disabled

Important note

- If **Leave database non-operational** is selected on the last restore run, it will leave the database unusable. To reverse this effect, repeat the restore process for the last run and make sure that **Leave database non-operational** is not selected.

How to: Restore a Differential Database Backup

Backups must be restored in the order in which they were created. Before you can restore a particular Differential Database backup, you must first restore the most recent Database-Complete backup before it.

To restore the previous Database-Complete backup as stated above the **Leave database non operational** option must be checked during restore from the **Settings** dialog, which can be accessed from the right pane when SQL Server is selected in the restore wizard. This option tells the database that there is still additional data to be restored.

Important note

- If **Leave database non-operational** is selected on the last restore run, it will leave the database unusable. To reverse this effect, repeat the restore process for the last run and make sure that **Leave database non-operational** is not selected.

Microsoft Exchange Server

Microsoft Exchange Server

Genie Backup Manager provides an easy, secure and reliable way to backup the MS Exchange Server databases using advanced API technology. You do not need to stop the MS Exchange Server service while taking a backup. GBM is designed to backup the MS Exchange Server database without interrupting MS Exchange Server operations.

Note:

To enable backing up Microsoft Exchange Server, GBM automatically copies "esebcli2.dll" from the program folder Microsoft Exchange is currently installed in to X:/WINDOWS/System32/, where X is the drive you have windows installed on. However, if GBM fails to do so, it must be copied manually.

How to: Register MS SQL Plugin

Upon purchasing the Exchange plugin the user will receive an email containing a serial number for unlocking the Exchange Backup.

To register MS Exchange Plugin:

1. Start GBM.
2. Click **Backup**.
3. Under Exhange Backup in Backup Category, click Register Exchange plugin
4. Type or copy-paste the serial number into its designated field then click **OK**.

How to: Backup Exchange Server Data

To enable backing up Microsoft Exchange Server, GBM automatically copies "esebcli2.dll" from the program folder Microsoft Exchange is currently installed in to X:/WINDOWS/System32/, where X is the drive you have windows installed on. However, if GBM fails to do so, it must be copied manually.

Backing Up Exchange Server Data

1. From the Main Page, select **Backup**
2. In Backup Category, Select **Exchange Backup**
3. From the left navigation menu in the backup wizard select **What to Backup**
4. Expand the **Exchange** list, then select the Exchange Server you wish to backup from.
5. In the right pane expand the **Microsoft Information Store** list.
6. If you want to backup the entire Information Store on the selected server you can simply check the box next to **Microsoft Information Store**, or you can expand the tree beneath it and select a particular **Storage Group**.
7. Click **Next** to continue configuring the backup job.

Exchange Backup Settings

Security Options

Security in Genie Backup Manager

Genie Backup Manager offers multiple levels of protection to ensure that backed up data is not accessible to unauthorized persons. ZIP passwords offer moderate protection for compressed backups, with the added flexibility of being compatible with most compression utilities, to allow users to manually restore data from backup archives, while AES encryption has the advantage of being highly secure, as it is adopted by NIST as an FIPS-approved (Federal Information Processing Standard) symmetric encryption algorithm that may be used by U.S. Government organizations (and others) to protect sensitive information

Zip Password Protection

Genie Backup Manager uses standard zip format compression, and thus can add a standard zip compression password to the created archive; using this protection method would still allow users to access their data using ZIP-compatible compression utilities. Users will not be able to browse or restore files and folders stored inside a ZIP-password-protected backup until they enter their passwords.

- This method only offers moderate protection; it is not recommended for securing sensitive data.
- ZIP passwords cannot be less than 6 characters long.

To add zip password protection to a backup job:

1. From the left navigation menu in the backup wizard select **Settings**.
2. From the Security box select **Password Protection**.
3. Type a password twice in the **Password** and **Confirm Password** fields

Encryption

Encryption

Encryption is encoding data to prevent any non-authorized party from reading or changing it. The level of protection provided by encryption is determined by an encryption algorithm. The contents of the data that you want to protect are encrypted based on a password that you specify. In order for GBM later restore the original contents of the encrypted files, the correct password must be supplied

AES Encryption

GBM uses AES encryption. AES is the Advanced Encryption Standard. This encryption method, has been adopted by NIST as an FIPS-approved (Federal Information Processing Standard) symmetric encryption algorithm that may be used by U.S. Government organizations (and others) to protect sensitive information

GBM supports AES encryption in 3 different strengths: 128-bit AES, 192-bit AES and 256-bit AES. These numbers refer to the size of the encryption keys that are used to encrypt the data; the higher the number the stronger the encryption, at the expense of being slightly slower. All three methods can provide significantly greater security than the password protection method.

The strength of encryption does not depend only on the length of the encryption key used but also on the password supplied by the user. Please read more about Encryption Passwords

- GBM requires that the correct password be supplied before the contents of an encrypted backup set can be viewed or restored to its original unencrypted form. The password is not required, however, for actions that do not require access to the unencrypted contents of the file. In particular, encrypted files can be deleted from backup set, or can be replaced within the backup set, without a password

Notes on encryption safety

Encryption can be a very effective measure for protecting your sensitive data; however, even encrypted documents can be compromised . The following is a list of some of the ways in which the safety provided by encryption can be compromised. Note that these are not GBM related risks but rather risks that arise from mishandling the password or a file in its unencrypted form

If a keystroke monitor (key-logger) or other malicious code (such as a trojan horse) is running on your computer, your password may be recorded when you type it. Be sure to check frequently for viruses and follow other recommended computer safety procedures

If you extract an encrypted file and then delete it, it may be possible for someone to later "undelete" the file using file recovery software or the Recycle Bin. You can use the Genie Wipe tool to irreversibly delete sensitive files

When you extract, open or view a file directly from the backup set (using Catalog or from the Restore Wizard), GBM must extract the file to a temporary location so that the associated program can open it. If you subsequently close GBM without first closing the program that is using the file, GBM may not be able to delete the temporary copy of the file, thereby leaving it on disk in unencrypted form. The associated program may also make one or more backup copies of the decrypted file, and GBM will not be able to delete these

After backing up or restoring encrypted files, some or all of the unencrypted file contents may remain in your computer's memory or the page swap files on disk. A malicious user may be able to retrieve this unencrypted information

Using Encryption in Backup

GBM can protect backed up data from being accessed by unauthorized people using AES encryption. GBM encrypts data on-the-fly, meaning that it encrypts files as they are being copied to the backup storage device instead of first encrypting the entire data then backing it up.

To add AES encryption protection to a backup job:

1. From the left navigation menu in the backup wizard select **Settings**.
2. Select **AES Encryption**.
3. Type a password twice in the **Password** and **Confirm Password** text input boxes.
4. Click **Encryption Strength**.
5. Choose an encryption level.

Note

- Encryption applies only to the contents of backed up files. Information about an encrypted file, such as its name, date, size, and attributes, can be viewed, without a password, by anyone who has access to the backup set.
- Encryption is not supported in Easy Mode
- Please store the password in a safe place. If lost, the backed up data is irretrievable.

Decrypting data during restore

Upon selecting a backup set with encryption protection for restore, GBM will request the encryption password. The user will not be allowed to browse, view, extract or restore data unless the correct password is supplied.

Encryption Passwords

The security of your data depends not only on the strength of the encryption method but also on the strength of your password, including factors such as length and composition of the password, and the measures you take to ensure that your password is not disclosed to unauthorized third parties.

You should keep the following considerations in mind when choosing passwords for your files:

Encryption password cannot be less than 6 characters long

- In general, longer passwords are more secure than shorter passwords. To take maximum advantage of the full strength of AES encryption passwords lengths must be approximately:
    - 15 characters for 128-bit encryption.
    - 23 for 192-bit encryption.
    - 31 characters for 256-bit encryption.
- Passwords that contain a combination of upper and lower case letters, digits, and punctuation are more secure than passwords containing only letters.
- Because you can use spaces and punctuation, you can create "pass phrases" that are long enough but still easy to remember and type.

- Avoid using easily guessed passwords such as names, birthdays, Social Security numbers, addresses, telephone numbers, etc...
- Avoid storing the password on the same volume on which the encryption data is located.
- Keep a record of the passwords you use and to keep this record in a secure place. GBM has no way to access the contents of an encrypted file unless you supply the correct password.

Compression

Genie Backup Manager uses non-proprietary ZIP64 compatible compression to reduce backed up data size and save space, supporting up to 264 -1 files within a zip archive as well as files that have a size greater than 4GB, for a zip file size that can reach up to about 18 million terabytes (more precisely, 2^64-1 bytes).

The Genie Backup Manager compression engine offers fast performance and low memory usage. Speed improvements reach 25%-75% in certain contexts. It also provides 15 to 20% better compression than other formats on many popular file types, especially XML data.

Users can choose between 9 levels of compression ranging form no-compression, to best.

To set GBM to compress backed up data:

1. From the left navigation menu in the backup wizard select **Settings**.
2. Select Use **Compression**.
3. Select the desired compression level from the combo box.

Backup without Compression

Selecting to backup data without compression would cause GBM to copy the data to a folder on the storage device while preserving the original file/folder structure, this makes data more accessible and less susceptible to corruption.

Power Management Options

Users can set Genie Backup Manager to trigger a power-saving event after a backup job has been executed. Allowed options are:

- Exiting Genie Backup Manager.
- Shutting down computer.
- Setting computer on Hibernate mode.
- Logging off computer.
- Setting computer on Stand-by mode.

To configure power-saving options for a backup job, select the **Settings** screen from the backup wizard, click **More Settings**, then select **Advanced Settings**. Selected power-saving options

must be supported by the computer. To configure power management settings for your computer, double-click **Power Options** in the **Control Panel**.

Command Line Parameters

Genie Backup Manager can be started with various command line parameters to execute different actions on a particular backup job, such as loading and running a backup job, running the application minimized, alternating between backup types, shutting down the computer after backup etc. The parameters can be used to create shortcuts which start backup tasks automatically.

Syntax

GBM9 [-e] [-job "backup job name"] [-h] [-noexit] [-showlogfile] [-novalidate] [-bt|1 2 3 4] [-shutdown|1 2 3 4]

Parameters

Command	Result
-e	Activate the Command Line engine.
-job "job name"	Name of the backup job to be performed.
-novalidate	Do not verify backed up data after backup.
-h	Run the backup monitor minimized when backup starts.
-showlogfile	Display backup log when backup is complete.
-noexit	Do not exit Genie Backup Manager after backup.
-bt	Specify backup type to be used with this backup run.
	-bt1 — Force running the backup job in full mode (backup all selected files). -bt2 — Force running the backup job in increment mode. -bt3 — Force running the backup job in mirror mode. -bt4 — Force running the backup job in differential mode.

-shutdown	Choose power saving option to be executed when backup is complete.
	-shutdown1 — Shutdown computer.
	-shutdown2 — Hibernate.
	-shutdown3 — Logoff.
	-shutdown4 — Standby.

Adding a Timestamp to the Backup File

A timestamp is a combination of date + time that is appended at the end of the backup filename to indicate when the backup run was performed

To attach a timestamp to the backup set:

1. From the left navigation menu in the backup wizard select **Job Info**.
2. Click **Backup Filename Options**.
3. Select **Attach timestamp to backup set**.
4. From the **Timestamp** format combo-box choose preferred date/time format.
5. Click **Ok**.

Timestamp formats

Timestamp formats are:

- Month dd, yyyy@hh:mm:ss AM/PM
- Day of the week, Month dd, yyyy
- Month dd, yyyy
- yyyy-mm,dd
- Month dd
- mm-dd-yyyy@hh-mm AM/PM
- mm-dd-yyyy@hh-mm-ss AM/PM
- hh.mm.dd AM/PM

Pre and Post Job Commands

To run commands before or after backup is completed, users can use the Pre and Post Job Commands option.

These are some of the helpful tasks that a user can accomplish using pre, pre-backup and post commands...

Task	Command(s)
Checking disk drives for errors before backup.	CHKDSK
Copying, moving, deleting and replacing files and folders.	COPY, XCOPY, RENAME, REPLACE, MOVE, DEL
Defragmenting a drive before or after backup.	DEFRAG
Temporally disabling real-time antiviral software to speed up backup.	Refer to the command line options section of your anti-virus help documentation.
Printing documents (such as the activity log when backup is done).	PRINT
Shutting down, logging off or restarting the computer.	SHUTDOWN

For a complete list of Windows system commands that can be used, open the **Start** menu, click **Run**, type *CMD* and click **Ok**, then type *help* and press enter. for more information on using a specific command type "<command> /?" in the command prompt then press enter.

To attach pre/post job commands to a backup job:

1. From the left navigation menu in the backup wizard select **Settings**.
2. Click **More Settings** then select **Pre & Post Job Commands**.
3. Make sure the **Enable Pre & Post Job Commands** option is checked
4. From the **Events** list select whether to attach a pre, post, or pre-data confirmation job command.
5. Make sure **Enable Command** is selected.
6. In the **Command Line** box, type the command you wish to be executed or browse for a .batch, .cmd or script file you wish to execute for multiple commands
7. If you do not wish for one process to run until the previous one in the sequence has finished, make sure the **Wait until previous process ends** option is selected. Other wise the command and the backup job will run almost simultaneously.

Environmental Variables

Output files from backup jobs have varying names, depending on the backup job name and the number of the backup run. Using special environmental variable strings, you can write commands and pass the backup job's output files as parameters without having to worry about their changing names:

$BACKUPOUTPUT$ Resolves to the complete path of the main backup file/folder.

$LOGFILE$ Resolves to the complete path of the backup log file.

$BACKUPPRFOLDER$ Resolves to the complete path of the parent folder containing the backup set.

$BACKUPFILENAME$ The name of the output backup file, without the path.

- Environmental variables passed to commands must be enclosed in quotations, such as "$BACKUPOUTPUT$".

Built-In Commands

When using the following commands, Genie Backup Manager will open a dialog displaying the progress of the command execution. Each one of these commands takes two parameters:

- **Copy:** Copy a file or folder to a new location.
- **Move:** Move a file or folder to a new location. The file/folder in the original location will be deleted.
- **Rename:** Rename a file or folder.

Exchange Continuous Data Protection

Exchange Continuous Data Protection (CDP)

Protecting your mission critical mailboxes strongly rely on understanding the Exchange backup types. GBM gives the users and easy to use, Continuous Data Protection (CDP) for ultimate Exchange data protection. Users can also perform single backups from the Single Level Protection (SLP) page.

Exchange Backup Types

Exchange Backup Types

Choose between different backup methods for Exchange Backup. The first run in all times must be Full or the backup will fail or its restore will fail even if the backup ran. Exchange backups are not like other backups in GBM, as each backup done on Exchange backup, even if it is a different job, depends on previous runs. It is recommended that your Exchange backups are created in separate backup jobs from your other data.

- **Normal (Full):** Backup the directory or Exchange store in its entirety, as well as the log files, then purges the log files
- **Incremental:** Backup the changes since the last full or incremental backup (backs up the transaction logs that have accumulated since the last full or incremental backup) and purges the logs.
- **Differential:** Backup all items in the transaction log, but does not purge the logs.
- **Copy:** Backup the directory or Exchange store in its entirety, as well as the log files, and does not purge the log files.

Normal

The normal backup process backs up the directory or Exchange store in its entirety, as well as the log files. A normal backup marks the objects it has backed up so that incremental and differential backups have context. This is accomplished by backing up the entire database and all the log files, and then purging the log files. To restore from a normal backup, only one normal backup is needed. Purging is supported in this type of backup if all the other backup types are full and database-complete.

To set GBM to perform a Full Exchange backup:

1. From the left navigation menu in the backup wizard select **CDP**.
2. Go to **Single Level Protection (SLP)**
3. From the Exchange Backup Type group select **Normal (full)**.

Incremental

An incremental backup backs up the subset of the component that has changed since the last normal or incremental backup. Then it marks these objects as backed up. An incremental backup backs up only the log files, and then purges them.

To set GBM to perform a Incremental Exchange backup:

1. From the left navigation menu in the backup wizard select **CDP**.
2. Go to **Single Level Protection (SLP)**
3. From the Exchange Backup Type group select **Incremental**.

Job naming in Incremental Backup

It is recommended that the user backs up Exchange data in a separate job, however there is no restrictions on backing up Exchange or other data in the job, but if the backup types differ, it will effect on the backup naming, for more information, please refer to Backup Types and file naming

If all the Exchange backup is done in the same job, your output files will look as follows:

Backup Job.gbp ... Normal (Full) backup

Backup Job.0.gbp ... First Incremental run

Backup Job.1.gbp ... Second Incremental run

Backup Job.2.gbp ... Third Incremental run

If your differential runs are separate from the complete backup your output files will be as follows:

complete.gbp ... Normal Full backup

differential.gbp ... First Incremental run

differential.0.gbp ... Second Incremental run

differential.1.gbp ... Third Incremental run

You can also make each operation in separate jobs as well and the naming will be as follows:

complete.gbp ... Normal Full backup

first run.gbp ... First Incremental run

second.gbp ... Second Incremental run

third.gbp ... Third Incremental run

Differential

A differential backup backs up changes in the directory or Exchange store that have occurred since the last normal backup. A differential backup backs up only the log files but does not purge them. If a normal backup is not performed before a differential backup, the job will fail.

To set GBM to perform a Differential Exchange backup:

1. From the left navigation menu in the backup wizard select **CDP**.
2. Go to **Single Level Protection (SLP)**
3. From the Exchange Backup Type group select **Differential**.

Job naming in Differential Backup

It is recommended that the user backs up Exchange data in a separate job, however there is no restrictions on backing up Exchange or other data in the job, but if the backup types differ, it will effect on the backup naming, for more information, please refer to backup types and output files created.

If all the Exchange backup is done in the same job, your output files will look as follows:

Backup Job.gbp ... Normal (Full) backup

Backup Job.0.gbp ... First Differential run

Backup Job.1.gbp ... Second Differential run

Backup Job.2.gbp ... Third Differential run

If your differential runs are separate from the complete backup your output files will be as follows:

complete.gbp ... Normal Full backup

differential.gbp ... First Differential run

differential.0.gbp ... Second Differential run

differential.1.gbp ... Third Differential run

You can also make each operation in separate jobs as well and the naming will be as follows:

complete.gbp ... Normal Full backup

first run.gbp ... First Differential run

second.gbp ... Second Differential run

third.gbp ... Third Differential run

Copy

The copy backup is the same as a normal backup except no marking takes place to give incremental and differential context. This means that performing an incremental backup after a copy backup is equivalent to performing it before a copy backup. Use a copy backup to get a full backup of the directory or Exchange store without disturbing the state of ongoing incremental or differential backups. To restore from a copy backup, only one copy backup is needed. Purging is not supported in this type of backup.

To set GBM to perform a Copy Exchange backup

1. From the left navigation menu in the backup wizard select **CDP**.

2. Go to **Single Level Protection (SLP)**
3. From the Exchange Backup Type group select **Copy**.

Continuous Data Protection (CDP)

Continuous Data Protection

A common practice in protecting Exchange Mailbox Data is to run Full backups with differential and/or incremental backup to ensure latest data recovery.

How to protect Exchange Mailboxes

1. From the left navigation menu in the backup wizard select **CDP**
2. Select **Continuous Data Protection (CDP)**
3. **Full** should be performed as you cannot perform a differential/incremental backup without a full backup. Select how frequent you wish to run the backup as full backup type:
    - **Run Every Few Hours**: runs backup every few hours, in this option you can also specify the days you wish the task to run
    - **Run Daily:** Runs backup daily at a specific time
    - **Run Weekly**: Specify the time and days you wish the backup to run
    - **Run Monthly:** Specify the time and day of the month
    - **Run Once:** Run this full backup one time on a specific time
    - **Run at Windows logon**: Runs every time you logon into your computer
4. Select **Differential/Incremental Backup (optional)** and select how frequent you wish to run differential/incremental backup:
    - **Run Every Few Hours**: runs backup every few hours, in this option you can also specify the days you wish the task to run
    - **Run Daily:** Runs backup daily at a specific time
    - **Run Weekly**: Specify the time and days you wish the backup to run
5. Under **Security Settings**, you can specify if you wish to run the backup whether the user is logged on or not. If you select **Run whether user is logged on or not**, you **must** enter the Windows login username or password; otherwise your backup will not run if Windows is logged out.
6. In **More Settings**, you can specify the following options:
    - Limit Number of backup sets to (if supported by media): This option enables GBM to keep the most recent "X" number of full backups with its incremental/differential backups
    - **Minimize backup window when running job**: Selecting this option runs the backup job while scheduled backup window is minimized
    - **Do not start backup if the computer is running on batteries:** You can set this option that tells the task to run only if the computer is on AC power (not battery power)
    - **Do not wait 10 seconds before starting backup**: By default the scheduled backup has a 10 second delay counter before actually running the backup. Choosing this option will enable to run the task without this 10 second delay.

- **Wake up computer to run this task (if supported):** If you computer is set to sleep at the time of backup, you can choose to wake up the computer to run the task. This option is enabled if **Run whether user is logged on or not** is enabled.
- **Run Full backup now (Recommended):** Choose this option if you wish to run a Full backup after saving CDP settings.

Notes:

- Limiting backup sets is not supported on FTP, CD/DVD using burning technology, and when the backup is spanned to multiple locations

CDP Examples

Example 1:

Perform Full backups on the first Sunday of the month and differential backups weekly on Fridays:

- In CDP, under **Full Backup**, select **Run Monthly**
- Set the time you wish the backup to run, and then select **on the first Sun of the month**
- Mark the checkbox next to **Differential Backup (optional)** to enable differential backup schedule
- Select **Run Weekly** and set the time for the backup to run and under **on the following days** select **Fri**

Example 2:

Perform full backups weekly on Sunday, incremental backups daily every 5 hours the rest of the week, differential daily, and keep only 1 full backup

- In the CDP, under **Full backup**, select **Run Weekly**
- Set the time you wish the backup to run, and under **on the following days** select **Sun**
- Mark the checkbox next to **Differential (optional)** to enable database-differential backup schedule
- Select **Run Daily**
- Mark the checkbox next to **Incremental Backup (optional)** to enable transaction log backup schedule
- Select **Run Every Few Hours**, in **Run Every** set it to 5 hours, and under **on the following days** select **Mon**, **Tue**, **Wed**, **Thurs**, **Fri**, and **Sat**
- Under **More Settings,** change **Limit number of backup sets to (if supported by media)** from unlimited to 01

Single Level Protection

Using single Level protection enables users to create fast Exchange backup using single backup type. When performing Exchange Backup using GBM, you must perform a Full Backup before any Differential and Incremental backup.

Using Single Level Protection:

1. From **Backup** choose **Microsoft Exchange**
2. Go to **CDP** and under **Single Level Protection** choose one of the following backup types:

- Normal (Full): Backup the directory or Exchange store in its entirety, as well as the log files, then purges the log files
- Incremental: Backup the changes since the last full or incremental backup (backs up the transaction logs that have accumulated since the last full or incremental backup) and purges the logs.
- Differential: Backup all items in the transaction log, but does not purge the logs.
- Copy: Backup the directory or Exchange store in its entirety, as well as the log files, and does not purge the log files.

Restoring Exchange data

Restoring Exchange Server Data

Please read Prerequisites for Restoring Exchange Server, to ensure that Exchange Server is configured properly before attempting to restore your Exchange Server data using Genie Backup Manager.

If you have multiple runs to restore, it is recommended that you read Restoring Exchange Data from Multiple Runs before proceeding.

How to Restore Exchange Data?

1. Open the restore wizard.
2. Load a backup, then click **Next**.
3. Expand the tree under **Exchange Server** and select an instance (you are only allowed to restore one instance at a time)
4. From the right pane select the mailboxes you wish to restore
5. Specify a temp location path

Note

You can set GBM to automatically mount the database after restoration by selecting **Mount database after restore**

Prerequisites for Restoring a Storage Group

There are a few precautions that need to be taken into consideration before attempting to restore Exchange Server data, or else restore would fail.:

1. Preparing MS Exchange Server when installed from scratch (Skip to step 2 if you do not have to reinstall).
2. Configure the Storage Group for restore.

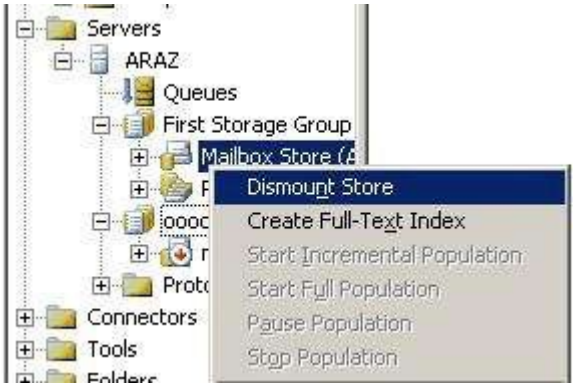
How to prepare MS Exchange Server When Installing from Scratch

A case may arise in which you have to completely reinstall and reconfigure Exchange. It is extremely important that the new Exchange installation be configured identically to that of the original server, please make sure that it is case sensitive.

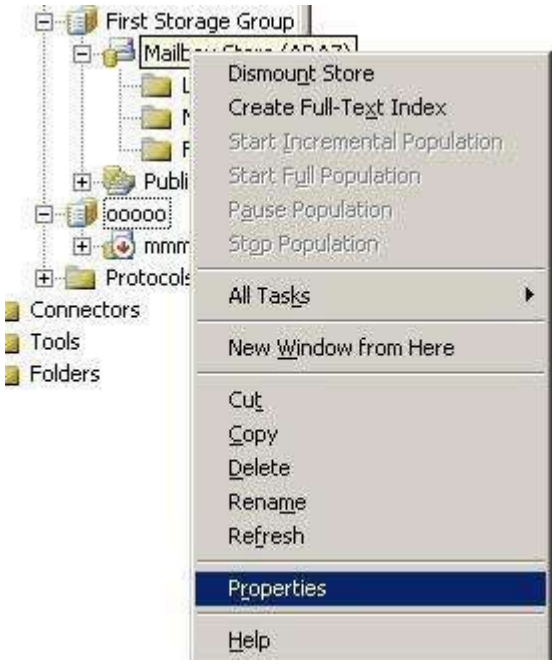
1. The **Site name** must be the same.
2. The **Organization name** must be the same (Case sensitive).
3. The **storage groups** must be configured the same (Case Sensitive), along with the original path and all the **mailboxes**.
4. Ensure that you install the same Exchange **Service Packs** that were existent on the previous server.
5. Remember, the key is to build the new Exchange Server identical to the previous one.

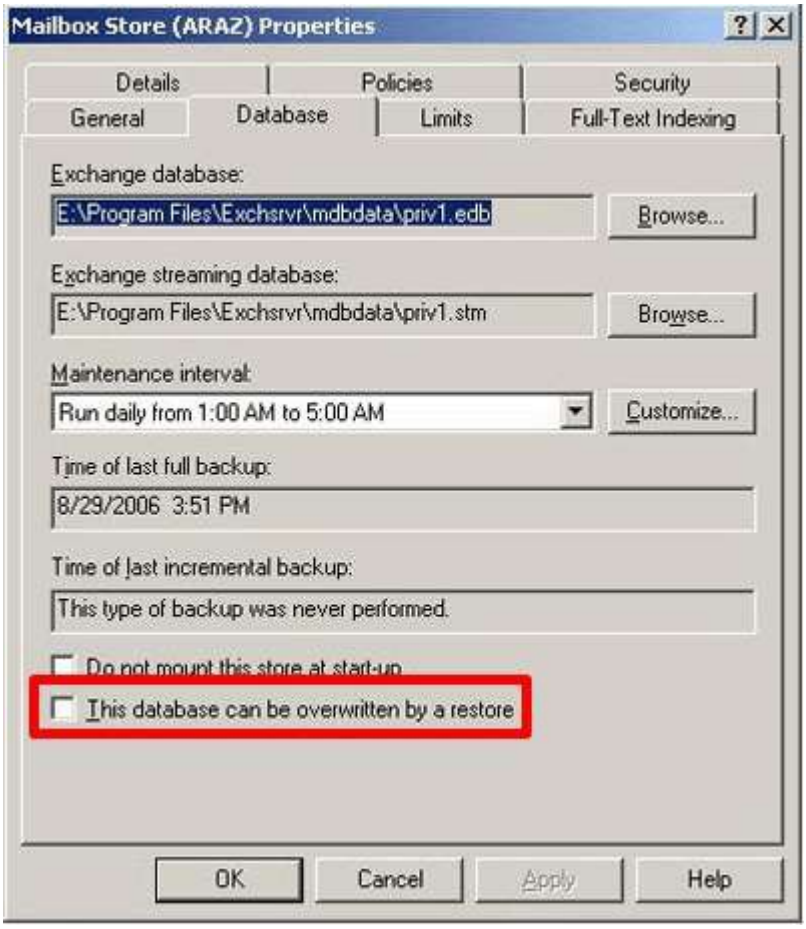
Configure the Storage group for Restoration

- The store you are restoring must be dismounted before you run the restore. Note the screen below for reference.



- Before running your Exchange Restore, make sure that the **This Database Can be Overwritten** option is selected - following these screenshots for reference.


First Storage Group
Publi
ooooo
mmm
Protocols
Connectors
Tools
Folders
Dismount Store
Create Full-Text Index
Start Incremental Population
Start Full Population
Pause Population
Stop Population
All Tasks
New Window from Here
Cut
Copy
Delete
Rename
Refresh
Properties
Help


Mailbox Store (ARAZ) Properties
Details
Policies
Security
General
Database
Limits
Full-Text Indexing
Exchange database:
E:\Program Files\Exchsrvr\mdbdata\priv1.edb
Browse...
Exchange streaming database:
E:\Program Files\Exchsrvr\mdbdata\priv1.stm
Browse...
Maintenance interval:
Run daily from 1:00 AM to 5:00 AM
Customize...
Time of last full backup:
8/29/2006 3:51 PM
Time of last incremental backup:
This type of backup was never performed.
Do not mount this store at start-up
This database can be overwritten by a restore
OK
Cancel
Apply
Help

How to: Restore an Incremental or Differential Backup

In Exchange Backups must be restored in the order in which they were created. Before you can restore a particular Incremental or differential backup. When you restore backup of an Exchange database, the database is in an inconsistent state. The process of bringing the database to a consistent state after a restore procedure is called "hard recovery." During hard recovery, the Extensible Storage Engine (ESE) uses information in the log files and patch files to redo operations performed on the database and then to undo any operations that belong to incomplete transactions. The **Last Backup Set** check box (accessible from the right pane when **Exchange Server** is selected in the restore wizard) determines if hard recovery should be run after the backup completes. If you select this check box, hard recovery is run automatically after the restore procedure finishes, and then the temporary files are removed. At this point, you can mount the database.

Case scenario

First backup **Full** followed by two runs of **incremental** backups.

Restore sequence	Last Restore Set	Mount database after restore
Full	Not selected	No
Incremental	Not selected	No
Incremental	Selected	Yes

Case scenario

First backup **Full** followed by **Differential** backup, then an **Incremental** backup.

Restore sequence	Last Restore Set	Mount database after restore
Full	Not selected	No
Differential	Not selected	No
Incremental	Selected	Yes

Run Backup

Run Backup

Users can run a backup job without going through the backup wizard by doing one of the following:

- From the **Tools** menu in the main page, click **Run Backup** and select a job to run.
- Create a shortcut on the Desktop for the backup job and double-click it whenever you wish to run a backup task.

The Backup Monitor

When running a backup job as a scheduled backup task or from a desktop shortcut the task will be run in a small window called the Backup Monitor.

The Backup Monitor Controls:

Help: Opens the Help documentation

Show Log...: Displays the backup log, this option is only enabled after backup completes

Abort: Aborts backup progress

Status bar: This window will display the status of the backup task along with a bar indicating progress.

Pause: Pauses the backup, this option is enabled during the backup process

Stop Timer: Cancels the 10 second timer before backup starts, to start the backup manually, click **Start Backup**

Snooze: Postpones the backup and runs it later specified in the **Click Snooze to be reminded again in**. You can choose the to snooze for:

- 10 minutes: after 10 minutes run backup
- 30 minutes: after 30 minutes, run backup
- 1 hour: after an hour run backup
- 2 hours: after 2 hours run backup
- 8 hours: after 8 hours, run backup
- 1 day: run this backup the next day at the same time

Computer power options: Set or change the computer power options to be performed after backup completes. These options are:

- **No Power option**: do not perform anything after backup completes
- **Shutdown**: Shutdown computer after backup completes
- **Logoff**: Logoff computer after backup completes
- **Hibernate**: Hibernate computer after backup completes
- **Suspend**: Suspend computer after backup completes

For more information about power options, see Power Management Options

Note:

You can only snooze before backup starts

Backup Progress

After the user selects Backup Now from the Selection Confirmation window, GBM will start the process of backing up data. The Backup Progression window displays the status of the backup job, this information includes:

Backup Job Name: Name assigned to the backup job.

Backup File: The full path and filename of the output backup file/folder.

Backup Type: Backup type of this backup run (Full, Increment, Mirror or Differential).

Backup Status: The current action being carried out

Elapsed Time: Time elapsed since the user hit the Backup Now button.

Actual Size: Actual size of processed data.

Compressed Size: Size of processed data after compression.

Processed: Number of new files being added to the backup set.

Updated: Number of processed files that have changed since the previous backup run.

Skipped: Number of processed files that have not been added to the backup set due to errors.

Unmodified: Number of processed files that have not changed since the previous backup run.

Missing: Number of processed files that have been moved or deleted since the previous backup run.

Backup Progress Options:

During backup, the user can change the following Options:

Pause: While the backup is running, the user can pause the backup if needed; however, tampering with the created backup could lead to unstable results

Backup Performance: During backup, a user can speedup backup performance by moving the pointer closer or exactly on **Quicker backups** or reduce impact on backup on the system with moving the pointer closer to **Faster Computer.** You can globally change this setting from Global Preferences in General - Advanced page

Enable/disable power options when backup completes: Using this option the user can enable/disable power options upon completing backup or change the power option that was pre-configured during creating backup. For more information about power options, see Power Management Options

Note:

Backup progress options are only supported in **Normal Mode**

Data Verification

Data Verification

Verification ensures that backed up data was successfully written on the storage media and that it can be restored reliably. Genie Backup Manager will by default verify backed up data immediately after the backup task is completed. But the user can also choose to test data integrity of a backup archive at a later time using the Testing Data Integrity tool.

Testing data integrity can be done using one of two methods in Genie Backup Manager, these are:

- **Bit-by-bit verification:** This is the default method used by GBM to verify that a backup archive is restorable, and the data contained within it is not corrupt. This is done by reading every bit of each backed up file, however, this verification method does not compare data to make sure that the backed up and original files are exactly identical. This means that if the contents of a file in the backup archive were modified after backup, Genie Backup Manager will not detect it.
- **CRC check verification:** CRC is short for (Cyclic Redundancy Check); a very powerful technique to obtain data reliability. The CRC is one of the most used techniques for error detection in data communications and file verification.

  When this verification method is used, Genie Backup Manager will generate a table of CRC values for all the selected files during backup. Come verification time, a new CRC table is generated for the data stored in the backup archive, and the CRC value for each file being verified is compared against its counterpart in the original table created during backup. If a file passes CRC check, that means that it can be restored reliably, and that it is exactly the same as the file that was originally backed up.

  CRC verification is not supported when backup is performed with encryption without compression.

Genie Backup Manager by default uses bit-by-bit verification for testing backed up data, to switch to CRC check, click the **Tools** menu, select **Global Preferences**, select **Backup Settings,** select **Advanced Settings**, and make sure the option **Use CRC check to compare files** is selected.

Genie Backup Manager will automatically verify backed up data when the user closes the backup summary dialog. To change this behavior, click the **Tools** menu, select **Global Preferences**, select **Test Data Integrity**, then choose one of the following options:

- **Automatically test data after backup:** Always verify data after backup without asking me
- **Ask me:** Ask me whether to verify data when backup is completed.
- **Do not test:** Do not verify backed up data.

By default, after an incremental, mirror or differential backup, Genie Backup Manager will only verify new and changed files that have been added to the backup set, which saves time, based on the assumption that the rest of the data was verified previously when it was first backed up.

To set Genie Backup Manager to verify the entire backup archive at the end of each backup execution, click the **Tools** menu, then select **Global Preferences**, select **Test Data Integrity**, and make sure the option **Test only new and changed files** is not selected.

To manually test a backup, make sure that the storage media holding the backup is connected, click the **Tools** menu, select **Test Backup**, select the backup job which created the backup archive you wish to test, then click **Test now**. Alternatively, you can directly select the backup by clicking **Browse**, navigating to the location of the archive, and selecting the backup's ".gbp" file.

Post-backup data verification is not supported when the backup storage media is FTP or Amazon S3 is selected. However, in all cases, data is verified while it's being written to the media.

Verification Methods

Testing data integrity can be done using one of two methods in Genie Backup Manager, these are:

- **Bit-by-bit verification:** This is the default method used by GBM to verify that a backup archive is restorable, and the data contained within it is not corrupt. This is done by reading every bit of each backed up file, however, this verification method does not compare data to make sure that the backed up and original files are exactly identical. This means that if the contents of a file in the backup archive were modified after backup, Genie Backup Manager will not detect it.
- **CRC check verification:** CRC is short for (Cyclic Redundancy Check); a very powerful technique to obtain data reliability. The CRC is one of the most used techniques for error detection in data communications and file verification.

  When this verification method is used, Genie Backup Manager will generate a table of CRC values for all the selected files during backup. Come verification time, a new CRC table is generated for the data stored in the backup archive, and the CRC value for each file being verified is compared against its counterpart in the original table created during backup. If a file passes CRC check, that means that it can be restored reliably, and that it is exactly the same as the file that was originally backed up.

  CRC verification is not supported when backup is performed with encryption without compression.

Changing the Verification Method

Genie Backup Manager by default uses the bit-by-bit verification method for testing backed up data, to switch to the CRC check verification method, do the following:

1. From the tool bar, click **Tools**, then select **Preferences**.
2. Select **Backup Settings** then **Advanced Settings**.
3. Make sure the option **Use CRC check to compare files** is marked.

Verifying New and Changed Files

By default, after an incremental, mirror or differential backup run, Genie Backup Manager will only verify new and changed files that have been added to the backup set. This saves a lot of time, based on the assumption that the rest of the data was verified previously when it was first backed up.

To set Genie Backup Manager to verify the entire backup archive (data created by most recent full backup along with all subsequent increments), you can do the following:

1. From the tool bar, click **Tools**, then select **Global Preferences**.
2. Select **Testing Data Integrity**.
3. Make sure the option **Test only new and changed files** is marked.

Data Integrity Testing Tool

The Data Integrity Testing tool verifies backed up data to ensure it can be reliably restored. To open the Data Integrity Testing tool click **Tools** in the toolbar, then select **Test Backup**.

The Controls

- **Backup Jobs:** List of executed backup jobs.
- **Backup Job:** Name of backup job.
- **Status:** Availability of the backup archive. If the media is not loaded, or the backup archive has been moved, the backup will not be available for testing.
- **Backup File:** Path and filename of the backup archive.
- **Refresh List:** Refresh list of backup jobs and their statuses.
- **Browse:** Manually locate the backup archive you wish to test.
- **Test Now:** Perform data integrity test for the selected backup job from the list.
- **View Test Log:** Displays the log produced by a performed data integrity test.
- **Settings:** Open the data integrity testing settings page in the Global Preferences dialog.
- **Close:** Close the Data Integrity Testing Tools dialog.
- **Help:** Open this help page.

Managing Open Files

Managing Open Files

Genie Backup Manager ensures business continuity of all their mission critical data, by backing up opened or used files by other users or applications; leveraging Microsoft's latest Volume Shadow-Copy Service (VSS) framework, to permit consistent backup of open files without the need for additional applications or plug-ins.

Open File Backup agent is a utility that helps GBM capture files that are open, even if they are changing during the backup, without locking users out of the applications or forcing them to log off the network, giving your backup software the ability to protect ALL your mission critical data by giving it access to exclusive, open or in use files. And ensuring business continuity by protecting your data in real time without causing interruptions.

Volume Shadow Copy Service

The Volume Shadow Copy Service (VSS) provides the backup infrastructure for the Microsoft Windows XP and above operating systems, serving a mechanism for creating consistent point-in-time copies of data known as shadow copies. Microsoft's VSS component allows GBM to backup opened files, resulting in a consistent backup free of skipped files.

Allowing VSS to handle backup of open files

1. From the toolbar click **Tools**, then select **Global Preferences**.
2. Select **Open File Backup**.
3. Select **Use Volume Shadow Copy (fully integrated)**

Limitation of Volume Shadow Copy Service:

- Works only with NTFS formatted partitions.
- Supported only on Windows XP and above

Restore

How to: Load Backup from the Catalog

If you want to restore data from a backup that was created on the same computer you are restoring to, and the original backup job configuration is still present, you can load the backup and browse backed up files and folders even if the backup archive itself is not accessible at the time.

To load a backup using the catalog:

1. Open the Restore Wizard.
2. Under **Select a file to restore**, click the plus sign next to the name of the backup job to view a list of all its backup executions.
3. Select the backup run you wish to restore from.
4. Click **Next** to continue configuring the restore task.

Alternatively, you can do the following:

1. Open the Catalog.
2. Under **History of backup runs**, click the plus sign next to the name of the backup job to view a list of all its backup executions.
3. Right-click a backup execution and select **Restore**. This will open the restore wizard and load the selected backup.
4. Click **Next** to continue configuring the restore task.

Note:

Genie Backup Manager will try to locate the backup archive in the default backup destination configured in the backup job. If GBM fails to find the archive, it will prompt you to insert/connect the media on which the backup is stored, and select the folder containing the .gbp needed to restore the data.

How to: Load Backup from the Archive

Backup catalogs ("index.gix" files) are saved locally and in the backup destination together with the backup archive. When a backup job is executed, a new ".gbp" file is created, containing the catalog file and other internal information needed by GBM to restore the data.

To load a backup in order to restore data from it, simply double-click the .gbp file corresponding to the backup version you want to restore. Alternatively, you can open the Restore Wizard, click **Browse** to navigate to the location of the .gbp file and select it, then click **Open**.

A special file naming convention is used by Genie Backup Manager to denote different backup versions/executions of the same backup job. For more information, see Backup Types.

How to: Restore Using Self Restore

Users do not need to have Genie Backup Manager installed in order to restore data from a self-restorable backup. Simply run the self-executable ".exe" file located in the backup folder, click

Extract (or **Run**) to extract the backup archive to a temporary folder on your machine and open the restore wizard. Then click **Browse** to select the .gbp file corresponding to the backup version you wish to restore, and click **Next** to select data items you wish to restore. Finally click **Next** to restore your data.

- If the entire backup archive was stored in a single compressed self-executable file, the SwiftRestore .exe file will be named <backup job name>.exe.
- If the backup archive is not compressed or consists of more than one file (such as in the case of incremental or differential backup, or when data is too big to fit into one .exe file), the self-executable file will be named GBM8_SwiftRestore.exe.

Extracting the backup archive from a SwiftRestore file

If the self-executable .exe file got corrupted, users can extract the backup archive from the self-executable file in order to restore using the Genie Backup Manager application:

1. Open Genie Backup Manager.
2. Select the **Tools** Menu.
3. Select **Extract archive from .exe file**.
4. Click **Browse** to locate and select the self-executable backup file.
5. Click **Extract**. The extracted backup archive will be stored in the same folder as the original SwiftRestore .exe file.

How to: Restore/View Backups from Amazon S3

Genie Backup Manager currently supports backing up to Amazon S3 storage. To restore:

1. Download the backup using any third party application.
2. Open the Restore Wizard and browse for the last .gbp file created in the backup set
3. Proceed with the wizard

How to: Restore Data?

My Profile:

How to: Restore Outlook Data

How to: Restore Outlook Express Data

How to: Restore Windows Mail Data

How to: Restore Windows Registry

How to: Restore Desktop Items

How to: Restore My Documents Folder

How to: Restore Windows Address book

How to: Restore Windows Contacts

How to: Restore Windows Favorites

How to: Restore Windows Fonts

How to: Restore Media Files

How to: Restore Images and Photos

How to: Restore Internet Explorer Settings

How to: Restore Windows Settings

My Folders:

How to: Restore Files and Folders

My Plugins:

Restore Plugins

Restoring SQL Server Data

Although GBM has the ability to backup multiple databases, you can only restore one at a time. GBM can restore your database whether it is online or offline.

SQL Server data differs from other data in GBM in terms of restore in that backups must be restored in the order in which they were created, whereas with other GBM data, restoring the last backup will recover the latest versions of all files and folders.

If you are restoring a non-Database-Complete backup, please refer to the specific help pages on Restoring a transaction log backup or a Restoring a differential database backup.

Important notes

- If **Leave database non-operational** is selected on the last restore run, it will leave the database unusable. To reverse this effect, repeat the restore process for the last run and make sure that **Leave database non-operational** is not selected.
- Under the full or bulk-logged recovery model, before you can restore a database, you must back up the active transaction log.

When you wish to restore databases you have the following two options and each option slightly differs in the restoration process:

- **Restoring to a new database**.
- **Restoring over existing database**.

Restoring to a New Database

GBM enables the user to restore the data to a newly created database, as opposed to restoring over an existent one, please refer to the following steps:

1. Open the **Restore wizard**.
2. Load a backup, then click **Next**.
3. In the **Available Databases** list, select **Create new Database**.
4. Under **Set Restore Settings**, Select **Move database location** and specify the paths of the database location and logs location in the **DB Location** and **Logs Location** fields respectively.
5. Select **Leave database non operational** if there are still other differential or transaction runs that you wish to restore after this run.
6. Click **Next** to start restore.

Restoring Over an Existing Database

Before attempting to restore a **system database** (Master, MSdb, model, or Pubs) you must start SQL Sever in single user mode.

1. Open the **Restore wizard**.
2. Load a backup, then click **Next**.
3. From the **Available Databases** list, select the database you wish to restore to.
4. Under **Settings**, select **Restore over existing database**.
5. If you wish to change the location of the database and log; under **Settings**, select **Move Database location** then specify the new paths for the Database and logs in the **DB Location** and **Logs Location** fields respectively. Keep unchecked if you wish to restore to original location.
6. Select **Leave database non operational** if there are still other differential or transaction runs that you wish to restore after this run.
7. Click **Next** to start restore.

Restoring Exchange Server Data

Please read Prerequisites for Restoring Exchange Server, to ensure that Exchange Server is configured properly before attempting to restore your Exchange Server data using Genie Backup Manager.

If you have multiple runs to restore, it is recommended that you read Restoring Exchange Data from Multiple Runs before proceeding.

How to Restore Exchange Data?

1. Open the restore wizard.
2. Load a backup, then click **Next**.
3. Expand the tree under **Exchange Server** and select an instance (you are only allowed to restore one instance at a time)
4. From the right pane select the mailboxes you wish to restore
5. Specify a temp location path

Note

You can set GBM to automatically mount the database after restoration by selecting **Mount database after restore**

Disaster Recovery

Genie Disaster Recovery

Disaster recovery focuses on continuous system protection by backing up Windows, system state, documents, settings, and programs to recover the system to a stable state prior system failure.

Genie Backup Manager provides an easy to use wizard to create the disaster recovery backup. Genie Disaster Recovery consists of two main steps

1. Create Genie Disaster Recovery (GDR) Bootable Disk
2. Create Genie Disaster Recovery (GDR) Backup

Opening the Disaster Recovery Wizard

To start the Disaster Recovery wizard do the following:

- From the **Main Screen** click the **Disaster Recovery** button.

Important Note:

Disaster Recovery Backup should only be restored on the same hardware configuration of the Disaster Recovery Backup.

Disaster Recovery backup is not supported on FTP and Amazon S3 storage

How to: Create Genie Disaster Recovery Bootable Disk

Genie Disaster Recovery (GDR) Bootable disc enables GBM to restore your Disaster recovery data outside the Windows environment.

The boot disc is mainly a CD or DVD disc used to start GBM's Disaster Recovery's restore wizard and therefore enables the user to select the most recent disaster recovery backup. Only one copy of this disc is required, therefore it is unnecessary to perform this step every time a

disaster recovery backup is performed.

This disc contains of the following components:

1. Windows boot files
2. Genie runtime files necessary to run the Disaster Recovery restore wizard

Important note:

You must create this bootable disc in order to restore your disaster recovery data, as the regular GBM program is only operable in Windows environment.

To Create GDR Bootable Disc

1. In the Main Page, Select **Disaster Recovery**
2. A Dialog will open, click **Create GDR Bootable** or in the Welcome Page of the Disaster recovery wizard, Select **Create Genie Disaster Recovery (GDR) Bootable disc**, then **click Next**
3. Select the bootable Media to boot from:
    - CD/DVD recorder: Create a bootable CD or DVD
    - Create ISO Image: This enables users to create the boot image as a .iso file on the local drive to be burnt using third party burning software.
4. **Click Next** to continue

How to: Create Genie Disaster Recovery Backup

How To: Create Genie Disaster Recovery Backup

After Genie Disaster Recovery bootable disc is created, it is required to backup essential data to restore your system to the previous state prior the disaster.

The following components are always added to the disaster recovery backup job:

- Windows Folder
- Program Files
- Documents and Settings

- System State

Note:

It is recommended that the GDR backup job only consists this data as this backup is restored outside windows environment and for a faster recovery without any conflicts or errors, it is recommended that the size stays reasonable and all other data should be backed up in a different backup and restored inside windows environment. For more information, please refer to Disaster Recovery Strategies

To Backup Genie Disaster Recovery (GDR) Backup:

1. In the Main Page, select **Disaster Recovery**
2. If a Genie Disaster Recovery Bootable disk is not created and you do not wish to create one in the time being, then click **Skip creating disk**. If a disk has been created, then in the welcome page Select **Create Disaster Recovery Backup** and **click Next**
3. In **Where to Backup page**, Select the Backup Destination
4. In **What to Backup** a list of Disaster Recovery Data is displayed you can add additional folders by clicking on Add Additional Files/Folders link or via **My Folders** Tab.
5. From the **Settings Page** Select the Settings of the backup job
6. **Click Next** to start backup

Important Note:

Creating Disaster Recovery bootable disk is essential to restore your Disaster Recovery Backup job. However, this disk is system independent so you can create it on any system prior restoration.

Disaster Recovery: Where to Backup

In Disaster recovery you can backup to the following locations:

Internal and External Drives: This includes local drives, External USB drives, and Flask disks. You can also enable multi drive spanning to span your disaster recovery backup to more than one location

Network locations: This includes any drive, RAID, SANs NAS... remotely off your computer

Optical Media:This includes (DVD±RW/DVD±R/DVD-RAM/CD-R/CD-RW), including double layer DVDs and Blu-ray, using both built-in burning capability and packet writing - with the aid of third party software-.

Removable media: You can also create External USB, Flash disks, Zip, Jaz using removable media option

Note:

Backing up to FTP and Amazon S3 are not supported

Disaster Recovery: What to Backup

What to Backup Consists of Two Tabs:

My GDR: Contains the essential data necessary to restore your system after failure to boot your operating system or if it becomes unstable. This data consists the following:

- Windows Folder: Contains the Windows Folder; Drive:\Windows
- Program Files: Contains data of installed programs; Drive:\Program Files
- Documents and Settings: Contains Documents and Settings Data for All users; Drive:\Documents and settings
- System State: Contains the following:
    - Boot files, including system files and performance counter configurations
    - COM+ Class registration database: A store of registration information for COM objects in the Windows system. COM is a standard for binary interoperability of registered software components.
    - Windows Registry: A database that Windows uses to store hardware and software configuration information, user preferences and setup information
    - System Files under Windows File protection: A system service that protects special operating system files. In the event that one of these files is deleted or overwritten, System File Protection will replace the file with the original from its cache

My Folders: If you wish to add other important files to your backup you can do so from the **Add additional Files/ Folders** link or by Clicking on My Folders tab.

Note

Adding additional Files/Folders is not recommended because it will increase the size of the backup and time resulting in increasing time of system recovery. It is recommended to keep a

separate backup for your personal files/folders and restore them in Windows environment. For more information, please refer to Disaster Recovery Strategies

Disaster Recovery Settings

The user can configure the disaster recovery backup job with the following settings:

Compression: Create Disaster Recovery backup with non-proprietary 64- bit ZIP compression or perform backup without compression to view backup in native format. For more information, please review the Compression section in the help documentation

Security: Disaster Recovery backup can be secured with multiple levels of protection to ensure that backed up data is not accessible to unauthorized persons. Either with Zip password protection or AES encryption. For more information about security options, see the Security in GBM section.

Disaster Recovery Strategies

Having a disaster recovery job minimizes **Recovery Time Objective** (RTO) after unstable systems, hardware failure, virus attacks, and erroneous deletion of system files...

Restoring Disaster Recovery is performed outside Windows environment; therefore, the disaster recovery job consists of two Parts

1. Creating a bootable disk to run the disaster recovery restoration environment
2. The actual disaster recovery job.

To restore your data, you must insert the bootable disk when the computer starts, then browse for your Disaster recovery job.

To ensure faster RTO, it is recommended:

1. **Perform disaster Recovery on a newly installed machine with all important programs installed on the system:** Disaster Recovery job includes Windows folder, program files, documents and settings, and System state; however, in fears of virus attacks, spyware or other malicious attacks on these files; it is recommended that you perform disaster recovery on a clean system to ensure consistent data.

2. **Keep your disaster recovery backup as small as possible:** Restoring disaster recovery data is performed outside windows environment, leaving the system unfeasible. Therefore, it is not recommended to include large files and folders in the Disaster recovery job, assuring faster recovery time of the operating system. When the system is up, you may restore your data in windows environment, if needed.

3. **Perform separate backups of your data:** GBM enables fast backup and restore of data backups inside Windows environment. Therefore, it is recommended to perform recurrent-scheduled data backups to avoid minimum data loss.

Walkthrough: Creating Disaster Recovery

This Walkthrough summarizes how to create a complete disaster recovery backup

Step 1: Create Genie Disaster Recovery Bootable

In this Step you will create a bootable CD/DVD needed to boot the restoration runtime environment. This step is only required once

Requirements: Blank or empty CD/DVD.

Recommended: New CD/DVD

Steps:

Create Bootable CD/DVD Disc

1. In the **Main Page**, Select **Disaster Recovery**

2. A Dialog will open, click **Create GDR Bootable** or in the Welcome Page of the Disaster Recovery wizard, Select **Create Genie Disaster Recovery (GDR) Bootable disc**, then click **Next**

3. Select **CD/DVD Recorder** and choose CD/DVD writer that contains a blank or empty CD/DVD in order to create your bootable disc

4. Click **Next** to continue

Create ISO Image

1. In the **Main Page**, Select **Disaster Recovery**

2. A Dialog will open, click **Create GDR Bootable** or in the **Welcome Page** of the Disaster Recovery wizard, Select **Create Genie Disaster Recovery (GDR) Bootable disc**, then click **Next**

3. Select **Create ISO Image** and select a drive with efficient space to create this image

4. Click **Next** to continue

5. After the image is created, use a third party burning software to open the image and burn it on a CD/DVD

Warning: GBM will erase all contents of the disk prior creating the bootable disk; therefore, please make sure that the disk does not contain any important data.

Step2: Create Disaster Recovery Job:

This step backs up the main data necessary to recover your system after it fails to load properly

Requirements: Backup storage media;

Recommended: External, or Network location.

Steps:

1. In the **Main Page**, select **Disaster Recovery**

2. If a Genie Disaster Recovery Bootable disk is not created and you do not wish to create one in the time being, **not recommended**, and then click **Skip creating disk**. If a disk has been created; in the welcome page Select **Create Genie Disaster Recovery(GDR) Backup** and click **Next**

3. In **Where to Backup** page, Select the Backup Destination

4. In **What to Backup** a list of Disaster Recovery Data is displayed you can add additional folders by clicking on Add Additional Files/Folders link or via My Folders Tab.

5. From the **Settings Page** Select the Settings of the backup job

6. Click **Next** to start backup

Restoring Disaster Recovery Job

Restoring Disaster Recovery Job

Disaster Recovery jobs are restored outside Windows environment. Therefore, the disaster recovery boot disc loads the recovery environment and then after the disaster Recovery restore wizard is loaded you can simply restore your system.

How to boot up the Disaster Recovery enviornment:

1. Insert the Disaster Recovery bootable disk you have created. If you haven't created one, you can install GBM on any computer and create a bootable disk.
2. Restart your computer.
3. Change the boot sequence inside your BIOS, to enter BIOS or "Setup" the hotkey is presented when you first start up your computer. It is usually Delete or F2.
4. Make the first boot sequence the CD/DVD drive.
5. The Disaster Recovery Restore wizard should appear.

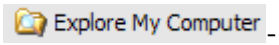
Genie Disaster Recovery Restore Wizard

This Wizard loads up outside Windows environment when booting up the system from Genie Disaster Recovery Bootable Media

These are the steps that you must confirm in the Genie Disaster Recovery restore wizard:

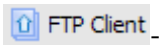
1. **Select a file to restore:** Select the Disaster recovery backup archive you wish to restore data from. Depending on the destination on which the backup is stored, select one of the following options from the left menu:
    - **Disk Restore:** For selecting and loading a backup stored on disk-based media
    - **Online Restore:** Select and load a Disaster Recovery job stored on your Genie Online Backup Account.
2. **Disaster Recovery Mode:** This enabled users to select the whether to restore all data or select specific data to restore, and whether to restore the boot manager.
3. **Data Selection:** Select the files and folders you wish restore. This step appears only if custom restore is selected

Utilities



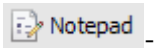
- Opens Windows Explorer

- Opens Mozilla Firefox web browser

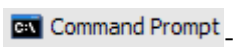


- Opens FTP client to browse FTP sites

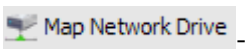
- Opens a partitioner utility enabling hard disk partitioning



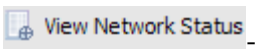
- Opens Windows Notepad program.



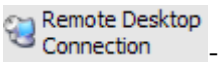
- Opens Windows Command Prompt "cmd.exe" program.



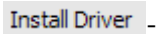
- Enables network drive mapping to restore disaster recovery jobs stored on a network location



- Views the status of the network connections



- Opens the Remote desktop connection to connect to a remote computer



- Enables users to install additional drivers

Menu Commands

Menu	Item	Function
File	Exit	Close this wizard and return to Windows.
System Utilities	Explore My Computer	Open Windows Explorer.
	Windows Tasks Manager	Open the Windows tasks manager.
	Partition Manager	Open a partitioner utility enabling hard disk partitioning .
	Notepad	Open Windows Notepad program.
	Command Prompt	Open Windows Command Prompt "cmd.exe" program.
	Install Driver	Enable users to install additional drivers.
Web Utilities	Web Browser	Open Mozilla Firefox web browser.
	FTP Client	Open FTP client to browse FTP sites
	Telnet	Enable access via Telnet protocol
Network Utilities	Map Network Drive	Enable network drive mapping to restore disaster recovery jobs stored on a network location.
	View Network Status	View the status of the network connections.
	Remote Desktop Connection	Open the Remote desktop connection to connect to a remote computer
Help	Contents	Open the help documentation.
	About	Credits and basic information about the product.

How to: Restore Disaster Recovery Job?

Disaster Recovery is only used to restore your current windows installation from virus attacks, accidental deletion of system files, or any action leading to an unstable system.

You can simply restore your disaster recovery job by following these steps:

1. Make Sure that your CD/DVD Drive is the first bootable device in your boot sequence

2. Insert the Genie Disaster Recovery Bootable media in your drive while your computer is starting up
3. Press any key to boot from the disc
4. After the booting completes the Genie Disaster Recovery Restore wizard will appear, browse for your disaster recovery backup. If the backup is spanned to multiple locations, browse to the last location/disk it has spanned to.
5. Select **Disaster Recovery Restore Mode**
    - **Full disaster Recovery Restores (Highly Recommended)**
        - This option restores all disaster recovery data backed up in the disaster recovery job. This mode is highly recommended as it ensures stable recovery
    - **Custom Restore (for Advanced users)**
        - This option enables advanced users to select the items they wish to recover. This is recommended for advanced users as it is difficult to determine the cause of an unstable system and does not ensure full recovery.
    - Enable **Restore Boot Manager (Highly Recommended)** in the following two cases:

        1. You only have one Operating System installed
        2. You have performed this Disaster Recovery job after installing all Operating Systems on your machine

6. Click **Next**.
7. Continue with Restoration process

Logs and Reports

Logs and Reports

Genie Backup Manager offers a variety of detailed logs and reports that help users to keep track of what happens during its various operations, the most important of which is backup.

The Logs Manager

The Logs Manager utility provides users with a graphical interface for viewing, exporting and printing backup activity logs. The logs manager keeps a complete archive of all the logs produced by backup jobs that are currently configured in the Jobs Manager.

To open the Logs Manager, Click **Tools**, then select **Logs Manager**. Users have the choice of viewing backup jobs in the following sorting orders:

- **By Jobs:** Logs are sorted according to the names of their respective backup jobs. Expanding the tree beneath a backup job displays a list of its versions sorted according to their dates.
- **By Date:** Logs are sorted according to the date on which the backup job was run. Jobs that were run on the same day are grouped together.

The logs manager offers two types of logs: **Normal** and **Detailed**.

Normal

The normal log is opened by default after each backup run. It displays a summary of the backup task's settings and statistics, grouped into four sections:

- **Job information:** selected backup job settings, including the job's name, backup destination, backup type, etc.
- **Backup information:** a breakdown of the types and sizes of the backed up data sources.
- **Backup summary:** a summary of the types of processed files (new, modified, unchanged, deleted, skipped) and errors encountered during backup.
- **Data integrity test:** displays a summary of errors encountered during testing the integrity of each file in the backup archive (if any).

You can print this log by clicking **Print**, or save it as an html file by clicking **Save as**.

Detailed

The detailed log lists all processed files along with each file's status - whether successfully backed up or not. Genie Backup Manager's internal files - files creating by GBM in the backup

archive for the purpose of cataloging and indexing - are hidden by default. You can view them by checking the **Show GBM system files** option.

To only view skipped file - files that GBM failed to backup - select **Show only skipped/failed files and folders**.

This log can be saved to a text file that can be later on printed or emailed by clicking the **Export** button**.**

The Backup Log

The normal log is opened by default after each backup run. It displays a summary of the backup task's settings and statistics, grouped into four sections:

- **Job information:** selected backup job settings, including the job's name, backup destination, backup type, etc.
- **Backup information:** a breakdown of the types and sizes of the backed up data sources.
- **Backup summary:** a summary of the types of processed files (new, modified, unchanged, deleted, skipped) and errors encountered during backup.
- **Data integrity test:** displays a summary of errors encountered during testing the integrity of each file in the backup archive (if any).

The Restore Log

To view the log file containing details about GBM's activity during restore click **View Restore Log** in the last screen of the restore wizard

Their is only one restore log, which is overwritten during every restore task. The Restore log file is located in the following folder:

Windows 2000/XP/2003: Drive:\Documents and Settings\%Username%\Application Data\Genie-Soft\GBMAPPLICATION\Jobs\restore.html

Windows Vista and above:

C:\Users\USERNAME\AppData\Roaming\Genie-Soft\GBMAPPLICATION\Jobs\restore.html

Data Verification Log

After using the Data Integrity Test tool to perform data verification on a backup archive, you can click the **View Test Log** button to display an HTML file containing the test results. Any encountered errors will be listed in the log.

For a complete list of backed up files and the status of each tested file, select **Click here for a more detailed log**.

Event Viewer logging

Event Viewer maintains logs about program, security, and system events on your computer. You can use Event Viewer to view and manage the event logs, gather information about hardware and software problems, and monitor Windows security events. GBM logs backup information in the Application logs of the Event viewer.

Opening the Event Viewer

To open Event Viewer, click **Start > Control Panel** > **Administrative Tools >** then double-click **Event Viewer**.

Logging information found in the event viewer:

GBM logs in the event viewer when three events occurs:

Starting a backup: GBM places the backup job name, backup media, backup type, and security option applied for the job in the log.

Backup ending: The backup job name, backup size, and verification status are logged.

Applying power options: The power option type is logged.

Advanced Logging

GBM Trace Log

When trace log is activated, Genie Backup Manage logs all backup activities and dumps the verbose to a file, for purposes of debugging. The file is typically located in:

Windows 2000/XP/2003: Drive:\Documents and Settings\%Username%\Application Data\Genie-Soft\GBMAPPLICATION\Logs

Windows Vista:

C:\Users\USERNAME\AppData\Roaming\Genie-Soft\GBMAPPLICATION\Logs

Where X is the letter of the drive on which Windows is installed.

To activate the GBM trace log click the **Tools** menu, select **Global Preferences**, select **General**, select **Advanced**, make sure **Enable advanced logging for debugging** is checked. Note that activating the trace log will slightly slow down the program's operations.

The trace log is emptied every time Genie Backup Manager is restarted.

VSS Trace Log

Genie Backup Manager logs all Volume Shadow Copy operations and stores them in a file typically located in

Windows 2000/XP/2003: Drive:\Documents and Settings\%Username%\Application Data\Genie-Soft\GBMAPPLICATION\Logs\vsslog.log

Windows Vista:

C:\Users\USERNAME\AppData\Roaming\Genie-Soft\GBMAPPLICATION\Logs\vsslog.log

If you encounter a problem with backup while GBM is set to use Microsoft's Volume Shadow Copy service to backup open files, submit this file to the Genie9 support team for debugging.

Notifications and Alerts

Email Notification

Email Notification

If you are a network administrator who is always on the move, and you've scheduled backup jobs to run while you're away, but still need to make sure everything goes smoothly, then email notification is the feature you need.

E-mail notification is a nifty feature that enables GBM to send information to the user about the status of the performed backup upon its completion via email.

How to: Activate E-mail Notification

1. From the toolbar click **Tools**,then select **Preferences**.
2. Select **Email Settings**.
3. Select **Enable e-mail notification.**
4. Enter the following settings:

    - **SMTP server:** The name or IP address of SMTP server to be used for sending notification emails
    - **Port:** SMTP sending port. (25 by default)
    - **SSL:** SSL (Secure Sockets Layer) is a security protocol that provides communication privacy. Select this option if your SMTP server supports this protocol.
    - **From:** The email address to appear in the From field of the sent notification email
    - **To:** The address of the recipient of the notification email
    - **Subject:** Enter the description that will appear in the Subject field on the sent email

How to: Send Email Notifications

1. Make sure email notification is enabled.
2. From the left navigation menu in the backup wizard select **Settings**.
3. Click **More Settings** then select **Email Notification**.
4. Select **Send e-mail notification.**
5. Choose one of the following options:

    - **When backup is complete:** Send notification email when backup is over.
    - **Only if error occurs:** Send notification email only if GBM encountered a problem during backup (skipped files, failed to create backup file, etc...)

1. Type a subject for the submitted email. If you do not manually enter a subject line, it will by default be sent as "GBM Backup Notification"

SMTP Authentication

GBM supports different SMTP authentication methods for sending email notifications. SMTP authentication uses different methods of encryption to protect the user mail account's name and password as they are being sent to the SMTP server. If you do not know which authentication method your email server uses, please consult your system administrator.

To choose an authentication method:

1. From toolbar, click **Tools**, then select **Preferences**.
2. Select **Email Notification Settings.**
3. Click **Authentication Method.**
4. Choose one of the following authentication methods:

    - **NONE:** Send the password to the server in an insecure format.
    - **AUTH LOGIN:** Most common authentication method.
    - **CRAM MD5:** (Challenge Response Authentication Mode), most secure authentication method.
    - **LOGIN PLAIN:** Sends authentication in plain text

Sound Alerts

Genie Backup Manager can be set to play sound files to notify users when specific backup-related events take place, such as when a backup task is completed, or when GBM prompts the user to replace a storage volume.

To open the Sound Alerts settings page, click **Tools**, select **Global Preferences**, expand the **General** list, then select **Sounds**.

To disable sound alerts, uncheck the **Enable sound alerts** option.

To attach a sound file to a predefined event, select the event from the list, select **Attach sound to selected event**, then click **Browse** to select a sound file from your computer.

Events that support sound alerts are:

- Finishing backup successfully.
- Finishing backup with errors.
- Completing data verification.
- Prompting the user to replace disk during a multiple media backup.
- Finishing data integrity testing.

Scripting

Scripting in Genie Backup Manager

GBM offers two powerful scripting environments that can help users take control of what and how they backup

- **GenieScript:** XML-based scripting designed to enable users to create custom plugins that extend the capabilities of GBM.
- **GRunScript:** Most backup software offer complex command line options to allow users to perform backups without using the user interface, a feature which is intended to provide extended flexibility for advanced users who wish for instance to create batch files that can be shared with other network users to perform standardized backup tasks. Genie Backup Manager takes this a step further by allowing users to create complete backup jobs using XML based scripting.

Using XML Tags

This page is not intended to teach you scripting per se', it will however give you an insight on the way tags work. GenieScript and GRunScript are very simple, and you don't have to be an advanced user to understand how to use them for writing scripts. You can learn scripting while creating your first GenieScript plugin, or GRunScript backup job, especially with the aid of the Templates and Examples provided in this help section.

Tags are commands that come in two parts: A beginning and a closing tag, both parts are enclosed within brackets, and the difference between a beginning and an ending tag is the forward slash </> on the latter.

Ex: <Author> Genie9</Author>

The bracketed text is the command that needs to be performed, the text between the beginning and ending tags is a value that is passed on to the command, for instance in the previous example, the tag <Author> passes on the name of the author of the script to the compiler.

Sometimes tags also have properties; these are subcommands that are usually included in the beginning tag that pass on specific properties to the compiler related to the main tag command.

Ex: <Folder IncludeSub =" False"> C:\personal </Folder>

Here, the tag <Folder> is telling GBM to backup the folder (C:\personal), the property IncludeSub which is set to False instructs it to only backup files in the main folder, and to ignore any underlying subfolders.

Note:

- Tags are case sensitive.

Environmental Variables

Environmental Variables are like the wildcards of file and folder paths, they are provided by Windows so as to enable writing portable bits of code to be used on any Windows platform.

Each one of these variables corresponds to a certain system or custom folder in the Windows OS, and will always get the right path for that folder, which might differ from one Windows platform to another.

Say for instance that you want to write a code that uses the file Notepad.exe file located in the Windows directory, in that case you would refer to the path to that file as $$P_WIN$$/Notepad.exe, that will ensure that your code points to the right path whether you're working under Windows XP, Vista or Server platforms

Here's a list of all Windows and custom environmental variables that you can use when writing scripts:

Windows Environmental Variables	
$$P_WIN$$	Windows path (C:\WINNT, C:\Windows)
$$P_WINTEMP$$	Windows temporary location
$$P_PROGRAM_FILES$$	Program files folder. A typical path is C:\Program Files.
$$P_COMMON_PROGRAMFILES$$	Contains application program related files that are, or can be, used by more than one application program. A typical path is C:\Program Files\Common Files
$$P_DESKTOP$$	File system directory used to physically store file objects on the desktop (not to be confused with the desktop folder itself). A typical path is C:\Documents and Settings\username\Desktop
$$P_COMMON_DESKTOP$$	Refers to the desktop items common for all the users. A typical path is C:\Documents and Settings\All Users\Desktop.
$$P_PROGRAMS$$	File system directory that contains the user's program groups (which are also file system directories). A typical path is C:\Documents and Settings\username\Start Menu\Programs.
$$P_STARTMENU$$	File system directory containing Start menu items. A typical path is C:\Documents and Settings\username\Start Menu.
$$P_APPDATA$$	File system directory that serves as a common repository for application-specific data. A typical path is C:\Documents and Settings\username\Application Data

$$P_SENDTO$$	File system directory that contains Send To menu items. A typical path is C:\Documents and Settings\username\SendTo.
$$P_STARTUP$$	File system directory that corresponds to the user's Startup program group. The system starts these programs whenever any user logs onto Windows NT® or starts Windows® 95. A typical path is C:\Documents and Settings\username\Start Menu\Programs\Startup.
$$P_COOKIES$$	File system directory that serves as a common repository for Internet cookies. A typical path is C:\Documents and Settings\username\Cookies.
$$P_FAVORITES$$	File system directory that serves as a common repository for the user's favorite items. A typical path is C:\Documents and Settings\username\Favorites.
$$P_HISTORY$$	File system directory that serves as a common repository for Internet history items.
$$P_INTERNET_CACHE$$	File system directory that serves as a common repository for temporary Internet files. A typical path is C:\Documents and Settings\username\Temporary Internet Files.
$$P_PERSONAL$$	File system directory that serves as a common repository for documents. A typical path is C:\Documents and Settings\username\My Documents.
$$P_COMMON_DOCUMENTS$$	Refers to the Documents common for all users. Typical path C:\Documents and Settings\All Users\Documents
$$P_COMMON_MUSIC$$	Refers to music files common for all users. Typical path C:\Documents and Settings\All Users\Music
$$P_COMMON_PICTURES$$	Refers to pictures and image files common for all users. Typical path C:\Documents and Settings\All Users\Pictures
$$P_COMMON_VIDEO$$	Refers to video and media files common for all users. Typical path C:\Documents and Settings\All Users\Video
$$P_RECENT$$	File system directory that contains the user's most recently used documents. A typical path is C:\Documents and Settings\username\Recent.
$$P_TEMPLATES$$	File system directory that serves as a common repository for document templates.
$$P_SYSTEM$$	System folder. A typical path is C:\WINNT\SYSTEM32
$$P_LOCAL_APPDATA$$	File system directory that serves as a data repository for

	local (nonroaming) applications. A typical path is C:\Documents and Settings\username\Local Settings\Application Data
$$P_COMMON_PROGRAMS$$	File system directory that contains the directories for the common program groups that appear on the Start menu for all users. A typical path is C:\Documents and Settings\All Users\Start Menu\Programs.
$$P_COMMON_STARTMENU$$	File system directory that contains the programs and folders that appear on the Start menu for all users. A typical path is C:\Documents and Settings\All Users\Start Menu.
$$P_COMMON_STARTUP$$	File system directory that contains the programs that appear in the Startup folder for all users. A typical path is C:\Documents and Settings\All Users\Start Menu\Programs\Startup.
$$P_COMMON_TEMPLATES$$	File system directory that contains the templates that are available to all users. A typical path is C:\Documents and Settings\All Users\Templates.
$$P_COMMON_APPDATA$$	Application data for all users. A typical path is C:\Documents and Settings\All Users\Application Data.
$$P_CONNECTIONS$$	Refers to network and Dial-up Connections.
$$P_CDBURN_AREA$$	Refers to staging area used by Windows to store the data before recording to CD. Typical path USERPROFILE\Local Settings\Application Data\Microsoft\CD Burning
$$P_NETHOOD$$	Location of the "Network Neighborhood" folder. Typically located in "\Documents and Settings\%Username%\NetHood"
Custom Environmental Variables	
$$<Variable Name>$$	Returns the path or file/folder name assigned to the variable in the <Variables> tag
$$P_APPPATH$$	Path for the application retrieved from Registry using the <Path> tag (GenieScript)
$$P_APPPATHEXE$$	Current Application EXE file name. (GenieScript)
$$P_COMPUTERNAME$$	Returns network name for the computer on which the backup job is being run.
$$P_USERNAME$$	Returns username of the user currently logged on into Windows.

Plugin Scripting (GenieScript)

Plugin Scripting (GenieScript)

GenieScript is XML-based scripting designed to enable users to create custom plugins that extend the capabilities of GBM.

What Can GenieScript Do?

Any installed Windows based application stores data and settings on your computer through a number of "changes" that it makes to your system, such as copying files to certain folders, writing to registry, etc... GenieScript gives you access to these program-unique changes and data so that you can back them up for safe keeping and restore them whenever the need to do so arises. This means that with GenieScript you can backup anything from application settings and saved games to entire programs.

GenieScript can be used effectively to automate the backup of items such as:

- Entire programs.
- Program settings and preferences.
- Database files.
- Mail clients' data.
- Game saves.

And much more.

GenieScript also provides the means for making backed up items portable between different Windows platforms using Environmental Variables.

Creating a Plugin

How to: Create a Plugin using XML Tags

In order to simplify learning GenieScript we've written an example using all the tags needed to write a full plugin script and added explanation after each tag or block of script using the script comments convention. (Sentences enclosed in <!-- --> are comments that the compiler will ignore and are only there for the benefit of whoever reviews the script).

Notes:

- Click the plus sign to view sub-tags and explanation.
- Tags are case sensitive.
- The script must be written using the same tag order as listed above.

<Backup> <!-- Starts the script file, a necessary tag that tells the compiler that the plugin script has begun. -->

<!-- Using GenieScript, you can create a plugin that backups up multiple items or programs. Each individual application or group of settings you wish to backup should be enclosed within the <Program> </Program> tags. -->

<Program> <!-- Begins the Program tag to indicate the start of a program's backup. -->

<!-- This is the section where you specify basic information about the group of items you are backing up; if it's a whole application you should write its given name and assign a category to it, otherwise you can choose any name you wish. -->

<Main> <!-- List basic information about the plugin and the data it backs up. -->

<Name> Winamp </Name>

<!-- Assigns a to the plugin, If you are backing up a program or an application's settings, you should use the name of the program, for example: Winamp, WinZip etc... If the script is intended to backup a group of personal data items not related to an application, you can choose any name you like. -->

<Category> Media </Category>

<!-- Assigns a category to the group of backed up data items, we use CNET download.com programs categorizing scheme, for example, Winamp goes under Media. If you're not backing up a full application you can use either "Settings" or "Folders" to describe the plugin. -->

<SubCategory> Player </SubCategory>

<!-- Optional. Assigns a subcategory to the plugin, we use CNET download.com subcategories assigning convention, for example the subcategory for Winamp would be Players. -->

<HomePageURL> http://www.winamp.com </HomePageURL>

<!-- Optional. Specifies a URL containing more information about the data that the plugin is intended to backup, if one exists, The

home page for the program backed up by the plugin is usually used. -->

<HomePageText> Winamp Website </HomePageText>

<!-- Optional. Assigns a text description to link to the Homepage URL, for example "Winamp Website", if non is given, the address itself will be used as linking text. -->

<Note> Backup all winamp skins and plugins </Note>

<!-- This tag is used to write a small description for the benefit of the user using the plugin, about what the script does, what items it backs up, and any other relevant information. -->

</Main>

<Version> <!-- Declare the version(s) of an application that this plugin will be able to backup. -->

<!-- Declares the start of the version script block. Which denotes the versions of the application which the plugin is tested and will backup successfully. -->

<Min> 2.0.0 </Min>

<!-- Specifies the earliest version of the application that is supported by this plugin. To find out the version of the application you're trying to backup:

1. Open Windows Explorer and browse to the location of the main executable (.exe) file for the application in question.
2. Right click on the file and select Properties from the menu.
3. Click the Versions tab. -->

<Max> 2.9.9 </Max>

<!-- Specifies the latest version of the application that this script can backup properly. -->

</Version>

<Path> <!-- Retrieve the path of an application's program folder. -->

<!-- This section will tell Genie Backup Manager from where to get the path to the program's main folder.

Every program stores its main program folder's path somewhere in the registry.

Note that this path indicates the location of the program's main folder which Genie Backup Manager will by default include in the backup, but in some cases the program might store files and folders in other locations, these can be backed up using the Folders and Files tags and with the help of Variables.

To get the path for your script, you need to locate a registry key that points to the main program executable file. For instance in Genie Backup Manager that path is typically: C:\Program Files\Genie9\GBM9Server\GBM9.exe. Once that registry key is provided in the script, the plugin will use it to determine the main program folder for the application during backup and restore, this ensures that the plugin will work whether the user decides to install the program to its default location or to an alternative folder. There are 4 scenarios that the user can choose from while writing the path retrieval block in the script.

1st Scenario (Backing Up Personal Data and Program-Independent Files and Folders).

If the user intends to backup program-independent data, such as a personal work folder, or a folder containing MP3s etc... The <Type> tag must be set to -1

Example:

<Path>

<FileName/>

<Type> -1 </Type>

<KeyName/>

<Value/>

<IncludeSub> FALSE </IncludeSub>

<Enable> FALSE </Enable>

</Path>

2nd Scenario.

The default location that most programs use for storing the path to its main executable file is the App Paths subkey in the HKEY_LOCAL_MACHINE registry tree.

To find out whether the path to the application you intend to create a plugin for is stored in this key browse to the key "HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\App Paths\" and look for a subkey carrying the name of the program's main executable file. If you find it, set the <Type> tag to 1. and set the <KeyName> tag to the executable file name.

Genie Backup Manager stores its path in:

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\App Paths\GBMServer7.exe

So the path tag would look like...

<Path>

<FileName> gbm7.exe </FileName>

<Type> 1 </Type>

<KeyName>GBMserver7.exe</KeyName>

<Value> Default </Value>

<IncludeSub> TRUE </IncludeSub>

<Enable> TRUE </Enable>

</Path>

3rd Scenario.

If you couldn't find the required registry key using the previous method, you might be able to use type 2, which retrieves the path using a file extension that is associated with the program. For instance (.gbm) is a file extension usually associated with Genie Backup Manager, (psd) is a file extension typically

associated with Adobe Photoshop. These files are usually assigned an icon that is stored in the application's main executable file.

To use this path retrieval type:

1. Right click on the HKEY_CLASSES_ROOT tree and click **Find**.
2. Type the main executable filename preceded by a backslash (\) , for instance <\gbm7.exe>.
3. Make sure that only the **Data** checkbox is ticked.
4. Click **Find Next**.

If you find a DefaultIcon subkey with a value that points to the path, then type 2 is the way to go.

Example:

Genie Backup Manager has the extension (.gbm) associated with it, so in the, HKEY_CLASSES_ROOT tree we find the subkey \GBMFile\DefaultIcon , with the default value pointing to the path. With that in mind the path block would look like...

```
<Path>

    <FileName> gbm7.exe </FileName>

    <Type> 2</Type>

    <KeyName>GBMFile\DefaultIcon</KeyName>

    <Value>Default</Value>

    <IncludeSub> TRUE </IncludeSub>

    <Enable> TRUE </Enable>

</Path>
```

4th Scenario (When All Else Fails).

When all else fails, the user can get the program path from anywhere inside the registry, you can do that by searching through the registry for the name of the main executable file of the application, if a registry key turns up with a value that points to the path of that file, it can be used for path retrieval.

To perform a search using the registry editor, do the following:

1. From the toolbar click **Edit** then select Find.

2. Type the main executable filename preceded by a backslash \ , for instance <\gbm7.exe>.
3. In the **Look at** group, make sure only **Data** is ticked.
4. Click **Find Next**.

Performing a search for Quicken's main executable (qw.exe), returns the key:
HKEY_CURRENT_USER\Software\Netscape\Netscape Navigator\Viewers

With the value: application/x-qfx

So the Path tag would look like...

<Path>

<FileName> qw.exe</FileName>

<Type> 3 </Type>

<KeyName> HKEY_CURRENT_USER\Software\Netscape\Netscape Navigator\Viewers </KeyName>

<Value>application/x-qfx </Value>

<IncludeSub> TRUE </IncludeSub>

<Enable> TRUE </Enable>

</Path>

To know which type (scenario) to use, you need to open the Registry Editor:

1. Click **Start**, then select **Run**.
2. Type regedit, then click **OK**. The Registry Editor will open. -->

<FileName> winamp.exe </FileName>

<!-- The name of the program's main executable (.exe) file, GBM will refer to this file to retrieve the version of the program installed on the machine during backup and restore. For instance Genie Backup Manager's main executable file is named gbm7.exe -->

<Type> 1 </Type>

<!-- Denotes one of 4 methods for retrieving the main program folder's path. Click here for explanation. -->

<KeyName> Winamp.File\DefaultIcon </KeyName>

<!-- Indicates the registry key which contains the value that points to the main program executable path. -->

<Value>Default</Value>

<!-- Default value= Default. Selects the value under the key specified in the <KeyName> tag where the path is stored. This tag is only applicable Type 2 and 3 only. -->

<IncludeSub>TRUE </IncludeSub>

<!-- Optional tag. Values TRUE or FALSE, Default = TRUE. Tells GBM Server whether to include the subfolders when backing up the main program folder or not, in most cases the user would want this to be set to TRUE. -->

<Enable>TRUE</Enable>

<!-- Optional tag. Values TRUE or FALSE, Default = TRUE. Tells Genie Backup Manager whether to backup the main program folder, the user might want to set this to False for instance if he is trying to backup specific settings or saved games, and not the whole application, in which case Genie Backup Manager won't backup the program folder but will check whether the program exists or not when its time to restore those settings. -->

</Path>

<Variables> <-- Declare variables that will be used around the script. -->

<!-- The path tag allows the user to get the main program folder's path from the registry because that path can vary from one computer to another, or from one platform to another. What if there are more than one folder associated with the program you intend to backup? Also, What if you encountered a file or a folder whose name or path is repeated several times within the plugin script? Do you need to write the complete path over and over, everywhere it appears in the script?

The Variables tag is provided to tackle such scenarios.

When a variable is assigned a string value (i.e. a file, folder or registry key path or name), then every time that variable is used within the script (using $$<Variable Name>$$), it will be replaced with its corresponding value at runtime.

The <Var> tag is used to declare a variable. This tag takes two parameters name, type and value. -->

<Varname="x1"type="Direct"> I:\NapsterSetup.exe </Var>

<Varname="x2"> HKEY_CLASSES_ROOT\.ZIP </Var>

<Varname="x3"type= "Reg"value="Test1">
HKEY_CURRENT_USER\Software\Genie-soft\GBMPro9\Main </Var>

<!-- name: assigns a name to the declared variable, the assigned name should be enclosed within quotation marks, for instance name = "X1". This name is used to represent the variable throughout the script in the format $$<Variable Name>$$.

type: takes one of two values: Direct, or Reg, the value needs to be enclosed within quotation marks. Direct means that the string value assigned to the declared variable will be taken as is, whereas Reg means that the string assigned to the variable is a registry key path which points to to a value that contains the string that will be assigned to the variable.

value: when the type parameter is set to Reg, value should contain the name of the value in the specified registry key, containing the desired string. -->

</Variables>

<RegistryKeys> <!-- Backup Windows Registry keys, subkeys and values. -->

<!-- Most programs will depend on the registry for storing their preferences and settings. So to be able to backup any application successfully you need to backup all the changes it makes to the Windows registry.

You can instruct Genie Backup Manager to backup keys with or without including their sub keys or you can specify certain key values to be modified when restoring the data. -->

<KeyIncludeSub="TRUE"> HKEY_LOCAL_MACHINE\

<!-- <Key>: Starts the backup of a registry key, it takes takes one parameter IncludeSub.

IncludeSub: Optional. Values TRUE or FALSE, Default = TRUE. When set to TRUE, the specified registry key will be backed up with all its subkeys, this parameter is optional, and is by default set to TRUE.

The <Key> </Key> tags enclose the complete path for the registry key that needs to be backed up. -->

SOFTWARE\Classes\Directory\ shell\Winamp.Bookmark </Key>

<!-- If you want to specify only some of the registry values contained in that registry key, you need to do the following:-->

<KeyIncludeSub="TRUE">

<Key> HKEY_CURRENT_USER\Software\ Genie-soft\GBMServer9\Main </Key>

<Value> BComplete </Value>

<Value> BOEWithoutClose </Value>

<Value> BOLWithoutClose </Value>

<Value> CDWXP_CacheImage </Value>

<!-- <Value> </Value> enclose the name of the registry value that you want to be backed up. -->

</Key>

</RegistryKeys>

<Files> <!-- Backup files. Path strings can be used. -->

<File> <!-- Declares backup of a single file. -->

<From> $$P_WIN$$\uninstbb.exe </From>

<!-- Specifies the full path including the name of the desired file. -->

<To> $$P_WIN$$ </To>

<!-- Tells Genie Backup Manager where to copy the backed up file during restore. It need not be the same path as the <From> backup path. -->

<Filter> FALSE </Filter>

<!-- Optional tag. Values TRUE or FALSE, Default = FALSE. Some files, whether binary or text, sometimes contain paths that point to files or folder that get changed when the backed up program or item is restored to a different folder, machine or Windows platform. To ensure that the paths will still point to the correct locations, Genie Backup Manager can parse the file and substitute such paths with environmental variables. That get restored to their correct values at restore time. -->

<NeverUninstall> TRUE </NeverUninstall>

<!-- Optional tag. Values TRUE or FALSE, Default = FALSE. Set this to TRUE when backing up (dll) files and system files that might be shared and should not be

deleted if the Plugin Uninstal Utilityl was used to uninstall the program. -->

<CompareTimeStamp> TRUE </CompareTimeStamp>

<!-- Optional tag. Values TRUE or FALSE, Default = TRUE. Set this to TRUE if you wish to avoid replacing newer files with older versions when you restore data backed up using this plugin. -->

<RegServer> TRUE </RegServer>

Optional tag. Values TRUE or FALSE, Default = FALSE. When set to TRUE this will register a dll or Active-X file using regsvr32 (for advanced users). -->

</File>

</Files>

<Folders> <!-- Backup folders. Path strings can be used. -->

<!-- Specify complete folders to be backed up.

- You don't need to backup the main program folder here, if you've already specified its path in the path extraction block and set the <Enabled> tag to TRUE. -->

<FolderIncludeSub="TRUE"Extension="*.h;*.cpp">

<!--This tag starts the backup of a single folder (with or without its subfolders). More than one <Folder> tag can be used within the <Folders> </Folders> block to back up more than one folder. This tag takes two parameters IncludeSub and Extension.

IncludeSub: Optional. Values TRUE or FALSE, Default = TRUE. When set to TRUE, tells Genie Backup Manager to backup all the subfolders within the specified folder.

Extension: Optional. Values: file extensions. This parameter enables you to filter backed up files within the selected folder according to file types (extensions). The selected file types will be included in backup, other files will be ignored. The value of the parameter needs to be in the format *.doc *.exe *.txt etc ... To include more than one files extension, use the semicolon as a separator. Example: Extension ="*.h;*.cpp;*.exe". -->

<From> $$P_PERSONAL$$\my data </From>

<!-- This tag is used to specify the full path of a folder intended for backup. -->

<To> $$P_PERSONAL$$\my data </To>

<!-- Tells Genie Backup Manager where to copy the backed up folder during restore. It need not be the same path as the <From> backup path. -->

</Folder>

</Folders>

<Ini> <!-- Moidfy ini file entries. -->

<!-- Many applications append to ini files when their installed, and in many cases write their own ini files to hold their settings and preferences, which the user might modify while using the program. The <Ini> tag allows you to backup certain portions of ini files instead of backing up and restoring the entire file, which in some cases might lead to errors.

The following is a portion taken from the Windows system.ini file:

...

[drivers]
wave=mmdrv.dll
timer=timer.drv
[mci]
[driver32]
[386enh]

woafont=dosapp.FON
EGA80WOA.FON=EGA80WOA.FON
EGA40WOA.FON=EGA40WOA.FON
CGA80WOA.FON=CGA80WOA.FON
CGA40WOA.FON=CGA40WOA.FON

...

In the explanation below **[drivers]** is a key. **wave** is a value while **mmdrv.dll** is that value's data. -->

<IniFile> <!-- Modify a single ini file. Use as many of these blocks to modify as many ini files as needed. -->

<File> $$P_WIN$$\win.ini </File>

<!--Specifies an ini file to open for modification. More than one file can be modified in a single script. >

<Key> drivers </Key>

<!--Contains the name of the key in the ini file that the user wishes to append new values to, or modify existing values under. >

<ValueName> wave </ValueName>

<!--Specifies the name of the value to be appended or modified within the ini file and under the Key specified in the previous tag, <Key>. -->

<Value> mmdrv.dll </Value>

<!--Assigns data to the value selected in the previous tag, <ValueName>. -->

<!-- Note:

- You can use as many of these last 3 tags as you need to convey all the changes in an ini file. -->

</IniFile>

</Ini>

<Links> <!-- Backup shortcuts. -->

<!-- Most programs create shortcuts on the desktop among other locations that serve as a link to the main executable file(s) for faster access. GenieScript enables you to backup these shortcuts along with their attributes.

Right-click on the desired link and choose properties, then use the data inside the properties window in the following block of script. -->

<Link> <!-- Starts backup of an individual shortcut. -->

<URL>TRUE</URL>

<!- Optional tag. Values TRUE or FALSE, Default = FALSE. This will create a URL link instead of normal shortcut - a URL link is a link that points to an address on the World Wide Web. -->

<SavePath> $$P_DESKTOP$$\Babylon.lnk </SavePath>

<!-- Contains the full path to the location of the shortcut file to be backed up. -->

<Target> $$P_APPPATH$$\Babylon.exe </Target>

<!-- Specifies the full path of the target executable to which the link refers, this path can be found in the target field in the shortcut's properties window. If you are creating a URL link, this should be an internet address path. -->

<IconIndex> 0 </IconIndex>

<!-- Optional. Values: integers equal or larger than zero, Default = 0. If you specify a file as the holder of the shortcut's icon, in the <IconLocation> tag, the <IconIndex> tag will indicate which of the embedded icons should be used, by default the first icon with index 0 will be used.

- To know which index number to use, click the "change icon" button inside the shortcut properties window, choose the desired file containing the icons, you should then see all the available icons, the index number is calculated starting from 0 at the top left corner icon and increasing by one as you go from left to right and then downwards.

If the shortcut has a default icon set by Windows, such as text files (.txt), then write the following

<IconIndex/>

<IconLocation/>

-->

<IconLocation> $$P_APPPATH$$\ Babylon.exe </IconLocation>

<!-- This tag carries the full path of the file containing the icon that will be assigned to the shortcut file. Note that this file must either already exist on the destination machine (to which the backed up data will be restored) or be included with the backup, to insure that this tag does not point to a non-existent file. -->

</Link>

</Links>

<Restore> <!-- Plugin restore settings. -->

<!-- After Backing up an application, you need to tell GBM Server where to restore it to on the target machine, notice that here too you will be using environmental variables in order to insure portability when needed. -->

<RestorePath> $$P_PROGRAM_FILES$$\Babylon </RestorePath>

<!-- Contains the full path to which Genie Backup Manager should restore your backed up application or item, if this tag is missing, Genie Backup Manager will restore the program to the original path location retrieved using the Path tag. -->

<RestoreNote> Comments </RestoreNote>

<!-- If you have any comments or notes about the restore procedure, here is where it goes.-->

<PathMustExist> TRUE </PathMustExist>

<!-- Optional tag. Values TRUE or FALSE, Default = TRUE. When set to TRUE, Genie Backup Manager will not restore the data backed up using the plugin, unless the related application program is installed on the target machine. -->

</Restore>

<Author> <!--Script author information. -->

<!-- Give credit where credit is due, if you're going to write the plugin script and you intend to share it so that other GBM Pro users can benefit from it, you'll probably want to be able to leave your mark, the <Author> tag, enables you to provide your personal information for users of the plugin to see..-->

<Name> Genie9 </Name>

<!-- Name of the author of the script. -->

<Company> Genie9 </Company>

```
            <!-- Company of the author of the script. -->

            <Date> 26-2-2012 </Date>

            <!-- Date of creation of the script. -->

            <HomePage> http://www.genie9.com </HomePage>

            <!-- Website containing information about the author of the script,
            or belonging to the author. -->

            <email> support@genie9.com </email>

            <!-- Contact email address of the author. -->

        </Author>

    </Program>

</Backup>
```

How to: Create a Plugin using XML Tags

In order to simplify learning GenieScript we've written an example using all the tags needed to write a full plugin script and added explanation after each tag or block of script using the script comments convention. (Sentences enclosed in <!-- --> are comments that the compiler will ignore and are only there for the benefit of whoever reviews the script).

Notes:

- Click the plus sign to view sub-tags and explanation.
- Tags are case sensitive.
- The script must be written using the same tag order as listed above.

<Backup> <!-- Starts the script file, a necessary tag that tells the compiler that the plugin script has begun. -->

<!-- Using GenieScript, you can create a plugin that backups up multiple items or programs. Each individual application or group of settings you wish to backup should be enclosed within the <Program> </Program> tags. -->

<Program> <!-- Begins the Program tag to indicate the start of a program's backup. -->

<!-- This is the section where you specify basic information about the group of items you are backing up; if it's a whole application you should write its given name and assign a category to it, otherwise you can choose any name you wish. -->

<Main> <!-- List basic information about the plugin and the data it backs up. -->

<Name> Winamp </Name>

<!-- Assigns a to the plugin, If you are backing up a program or an application's settings, you should use the name of the program, for example: Winamp, WinZip etc... If the script is intended to backup a group of personal data items not related to an application, you can choose any name you like. -->

<Category> Media </Category>

<!-- Assigns a category to the group of backed up data items, we use CNET download.com programs categorizing scheme, for example, Winamp goes under Media. If you're not backing up a full application you can use either "Settings" or "Folders" to describe the plugin. -->

<SubCategory> Player </SubCategory>

<!-- Optional. Assigns a subcategory to the plugin, we use CNET download.com subcategories assigning convention, for example the subcategory for Winamp would be Players. -->

<HomePageURL> http://www.winamp.com </HomePageURL>

<!-- Optional. Specifies a URL containing more information about the data that the plugin is intended to backup, if one exists, The home page for the program backed up by the plugin is usually used. -->

<HomePageText> Winamp Website </HomePageText>

<!-- Optional. Assigns a text description to link to the Homepage URL, for example "Winamp Website", if non is given, the address itself will be used as linking text. -->

<Note> Backup all winamp skins and plugins </Note>

<!-- This tag is used to write a small description for the benefit of the user using the plugin, about what the script does, what items it backs up, and any other relevant information. -->

</Main>

<Version> <!-- Declare the version(s) of an application that this plugin will be able to backup. -->

<!-- Declares the start of the version script block. Which denotes the versions of the application which the plugin is tested and will backup successfully. -->

<Min> 2.0.0 </Min>

<!-- Specifies the earliest version of the application that is supported by this plugin. To find out the version of the application you're trying to backup:

1. Open Windows Explorer and browse to the location of the main executable (.exe) file for the application in question.
2. Right click on the file and select Properties from the menu.
3. Click the Versions tab. -->

<Max> 2.9.9 </Max>

<!-- Specifies the latest version of the application that this script can backup properly. -->

</Version>

<Path> <!-- Retrieve the path of an application's program folder. -->

<!-- This section will tell Genie Backup Manager from where to get the path to the program's main folder.

Every program stores its main program folder's path somewhere in the registry.

Note that this path indicates the location of the program's main folder which Genie Backup Manager will by default include in the backup, but in some cases the program might store files and folders in other locations, these can be backed up using the Folders and Files tags and with the help of Variables.

To get the path for your script, you need to locate a registry key that points to the main program executable file. For instance in Genie Backup Manager that path is typically: C:\Program Files\Genie9\GBM9Server\GBM9.exe. Once that registry key is provided in the script, the plugin will use it to determine the main program folder for the application during backup and restore, this ensures that the plugin will work whether the user decides to install the program to its default location or to an alternative folder. There are 4 scenarios that the user can choose from while writing the path retrieval block in the script.

1st Scenario (Backing Up Personal Data and Program-Independent Files and Folders).

If the user intends to backup program-independent data, such as a personal work folder, or a folder containing MP3s etc... The <Type> tag must be set to -1

Example:

<Path>

<FileName/>

<Type> -1 </Type>

<KeyName/>

<Value/>

<IncludeSub> FALSE </IncludeSub>

<Enable> FALSE </Enable>

</Path>

2nd Scenario.

The default location that most programs use for storing the path to its main executable file is the App Paths subkey in the HKEY_LOCAL_MACHINE registry tree.

To find out whether the path to the application you intend to create a plugin for is stored in this key browse to the key "HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\App Paths\" and look for a subkey carrying the name of the program's main executable file. If you find it, set the <Type> tag to 1. and set the <KeyName> tag to the executable file name.

Genie Backup Manager stores its path in:

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\App Paths\GBMServer7.exe

So the path tag would look like...

<Path>

<FileName> gbm7.exe </FileName>

<Type> 1 </Type>

<KeyName>GBMserver7.exe</KeyName>

<Value> Default </Value>

<IncludeSub> TRUE </IncludeSub>

<Enable> TRUE </Enable>

</Path>

3rd Scenario.

If you couldn't find the required registry key using the previous method, you might be able to use type 2, which retrieves the path using a file extension that is associated with the program. For instance (.gbm) is a file extension usually associated with Genie Backup Manager, (psd) is a file extension typically associated with Adobe Photoshop. These files are usually assigned an icon that is stored in the application's main executable file.

To use this path retrieval type:

1. Right click on the HKEY_CLASSES_ROOT tree and click **Find**.
2. Type the main executable filename preceded by a backslash (\) , for instance <\gbm7.exe>.
3. Make sure that only the **Data** checkbox is ticked.
4. Click **Find Next**.

If you find a DefaultIcon subkey with a value that points to the path, then type 2 is the way to go.

Example:

Genie Backup Manager has the extension (.gbm) associated with it, so in the, HKEY_CLASSES_ROOT tree we find the subkey \GBMFile\DefaultIcon , with the default value pointing to the path. With that in mind the path block would look like...

<Path>

<FileName> gbm7.exe </FileName>

<Type> 2</Type>

<KeyName>GBMFile\DefaultIcon</KeyName>

<Value>Default</Value>

<IncludeSub> TRUE </IncludeSub>

<Enable> TRUE </Enable>

</Path>

4th Scenario (When All Else Fails).

When all else fails, the user can get the program path from anywhere inside the registry, you can do that by searching through the registry for the name of the main executable file of the application, if a registry key turns up with a value that points to the path of that file, it can be used for path retrieval.

To perform a search using the registry editor, do the following:

1. From the toolbar click **Edit** then select Find.
2. Type the main executable filename preceded by a backslash \ , for instance <\gbm7.exe>.
3. In the **Look at** group, make sure only **Data** is ticked.
4. Click **Find Next**.

Performing a search for Quicken's main executable (qw.exe), returns the key:
HKEY_CURRENT_USER\Software\Netscape\Netscape Navigator\Viewers

With the value: application/x-qfx

So the Path tag would look like...

<Path>

<FileName> qw.exe</FileName>

<Type> 3 </Type>

<KeyName>
HKEY_CURRENT_USER\Software\Netscape\Netscape Navigator\Viewers </KeyName>

<Value>application/x-qfx </Value>

<IncludeSub> TRUE </IncludeSub>

<Enable> TRUE </Enable>

</Path>

To know which type (scenario) to use, you need to open the Registry Editor:

1. Click **Start**, then select **Run**.
2. Type regedit, then click **OK**. The Registry Editor will open. -->

<FileName> winamp.exe </FileName>

<!-- The name of the program's main executable (.exe) file, GBM will refer to this file to retrieve the version of the program installed on the machine during backup and restore. For instance Genie Backup Manager's main executable file is named gbm7.exe -->

<Type> 1 </Type>

<!-- Denotes one of 4 methods for retrieving the main program folder's path. Click here for explanation. -->

<KeyName> Winamp.File\DefaultIcon </KeyName>

<!-- Indicates the registry key which contains the value that points to the main program executable path. -->

<Value>Default</Value>

<!-- Default value= Default. Selects the value under the key specified in the <KeyName> tag where the path is stored. This tag is only applicable Type 2 and 3 only. -->

<IncludeSub>TRUE <</IncludeSub>

<!-- Optional tag. Values TRUE or FALSE, Default = TRUE. Tells GBM Server whether to include the subfolders when backing up the main program folder or not, in most cases the user would want this to be set to TRUE. -->

<Enable>TRUE</Enable>

<!-- Optional tag. Values TRUE or FALSE, Default = TRUE. Tells Genie Backup Manager whether to backup the main program folder, the user might want to set this to False for instance if he is trying to backup specific settings or saved games, and not the whole application, in which case Genie Backup Manager won't backup the program folder but will check whether the program exists or not when its time to restore those settings. -->

</Path>

<Variables> <-- Declare variables that will be used around the script. -->

<!-- The path tag allows the user to get the main program folder's path from the registry because that path can vary from one computer to another, or from one platform to another. What if there are more than one folder associated with the program you intend to backup? Also, What if you encountered a file or a folder whose name or path is repeated several times within the plugin script? Do you need to write the complete path over and over, everywhere it appears in the script?

The Variables tag is provided to tackle such scenarios.

When a variable is assigned a string value (i.e. a file, folder or registry key path or name), then every time that variable is used within the script (using $$<Variable Name>$$), it will be replaced with its corresponding value at runtime.

The <Var> tag is used to declare a variable. This tag takes two parameters name, type and value. -->

<Varname="x1"type="Direct"> I:\NapsterSetup.exe </Var>

<Varname="x2"> HKEY_CLASSES_ROOT\.ZIP </Var>

<Varname="x3"type= "Reg"value="Test1">
HKEY_CURRENT_USER\Software\Genie-soft\GBMPro9\Main </Var>

<!-- name: assigns a name to the declared variable, the assigned name should be enclosed within quotation marks, for instance name = "X1". This name is used to represent the variable throughout the script in the format $$<Variable Name>$$.

type: takes one of two values: Direct, or Reg, the value needs to be enclosed within quotation marks. Direct means that the string value assigned to the declared variable will be taken as is, whereas Reg means that the string assigned to the variable is a registry key path which points to to a value that contains the string that will be assigned to the variable.

value: when the type parameter is set to Reg, value should contain the name of the value in the specified registry key, containing the desired string. -->

</Variables>

<RegistryKeys> <!-- Backup Windows Registry keys, subkeys and values. -->

<!-- Most programs will depend on the registry for storing their preferences and settings. So to be able to backup any application successfully you need to backup all the changes it makes to the Windows registry.

You can instruct Genie Backup Manager to backup keys with or without including their sub keys or you can specify certain key values to be modified when restoring the data. -->

<KeyIncludeSub="TRUE"> HKEY_LOCAL_MACHINE\

<!-- <Key>: Starts the backup of a registry key, it takes takes one parameter IncludeSub.

IncludeSub: Optional. Values TRUE or FALSE, Default = TRUE. When set to TRUE, the specified registry key will be backed up with all its subkeys, this parameter is optional, and is by default set to TRUE.

The <Key> </Key> tags enclose the complete path for the registry key that needs to be backed up. -->

SOFTWARE\Classes\Directory\ shell\Winamp.Bookmark </Key>

<!-- If you want to specify only some of the registry values contained in that registry key, you need to do the following:-->

<KeyIncludeSub="TRUE">

<Key> HKEY_CURRENT_USER\Software\ Genie-soft\GBMServer9\Main </Key>

<Value> BComplete </Value>

<Value> BOEWithoutClose </Value>

<Value> BOLWithoutClose </Value>

<Value> CDWXP_CacheImage </Value>

<!-- <Value> </Value> enclose the name of the registry value that you want to be backed up. -->

</Key>

</RegistryKeys>

<Files> <!-- Backup files. Path strings can be used. -->

<File> <!-- Declares backup of a single file. -->

<From> $$P_WIN$$\uninstbb.exe </From>

<!-- Specifies the full path including the name of the desired file. -->

<To> $$P_WIN$$ </To>

<!-- Tells Genie Backup Manager where to copy the backed up file during restore. It need not be the same path as the <From> backup path. -->

<Filter> FALSE </Filter>

<!-- Optional tag. Values TRUE or FALSE, Default = FALSE. Some files, whether binary or text, sometimes contain paths that point to files or folder that get changed when the backed up program or item is restored to a different folder, machine or Windows platform. To ensure that the paths will still point to the correct locations, Genie Backup Manager can parse the file and substitute such paths with environmental variables. That get restored to their correct values at restore time. -->

<NeverUninstall> TRUE </NeverUninstall>

<!-- Optional tag. Values TRUE or FALSE, Default = FALSE. Set this to TRUE when backing up (dll) files and system files that might be shared and should not be deleted if the Plugin Uninstal Utilityl was used to uninstall the program. -->

<CompareTimeStamp> TRUE </CompareTimeStamp>

<!-- Optional tag. Values TRUE or FALSE, Default = TRUE. Set this to TRUE if you wish to avoid replacing newer files with older versions when you restore data backed up using this plugin. -->

<RegServer> TRUE </RegServer>

Optional tag. Values TRUE or FALSE, Default = FALSE. When set to TRUE this will register a dll or Active-X file using regsvr32 (for advanced users). -->

</File>

</Files>

<Folders> <!-- Backup folders. Path strings can be used. -->

<!-- Specify complete folders to be backed up.

- You don't need to backup the main program folder here, if you've already specified its path in the path extraction block and set the <Enabled> tag to TRUE. -->

<FolderIncludeSub="TRUE"Extension="*.h;*.cpp">

<!--This tag starts the backup of a single folder (with or without its subfolders). More than one <Folder> tag can be used within the <Folders> </Folders> block to back up more than one folder. This tag takes two parameters IncludeSub and Extension.

IncludeSub: Optional. Values TRUE or FALSE, Default = TRUE. When set to TRUE, tells Genie Backup Manager to backup all the subfolders within the specified folder.

Extension: Optional. Values: file extensions. This parameter enables you to filter backed up files within the selected folder according to file types (extensions). The selected file types will be included in backup, other files will be ignored. The value of the parameter needs to be in the format *.doc *.exe *.txt etc ... To include more than one files extension, use the semicolon as a separator. Example: Extension ="*.h;*.cpp;*.exe". -->

<From> $$P_PERSONAL$$\my data </From>

<!-- This tag is used to specify the full path of a folder intended for backup. -->

<To> $$P_PERSONAL$$\my data </To>

<!-- Tells Genie Backup Manager where to copy the backed up folder during restore. It need not be the same path as the <From> backup path. -->

</Folder>

</Folders>

<Ini> <!-- Moidfy ini file entries. -->

<!-- Many applications append to ini files when their installed, and in many cases write their own ini files to hold their settings and preferences, which the user might modify while using the program. The <Ini> tag allows you to backup certain portions of ini files instead of backing up and restoring the entire file, which in some cases might lead to errors.

The following is a portion taken from the Windows system.ini file:

...

[drivers]
wave=mmdrv.dll

timer=timer.drv
[mci]
[driver32]
[386enh]
woafont=dosapp.FON
EGA80WOA.FON=EGA80WOA.FON
EGA40WOA.FON=EGA40WOA.FON
CGA80WOA.FON=CGA80WOA.FON
CGA40WOA.FON=CGA40WOA.FON

...

In the explanation below **[drivers]** is a key. **wave** is a value while **mmdrv.dll** is that value's data. -->

<IniFile> <!-- Modify a single ini file. Use as many of these blocks to modify as many ini files as needed. -->

<File> $$P_WIN$$\win.ini </File>

<!--Specifies an ini file to open for modification. More than one file can be modified in a single script. >

<Key> drivers </Key>

<!--Contains the name of the key in the ini file that the user wishes to append new values to, or modify existing values under. >

<ValueName> wave </ValueName>

<!--Specifies the name of the value to be appended or modified within the ini file and under the Key specified in the previous tag, <Key>. -->

<Value> mmdrv.dll </Value>

<!--Assigns data to the value selected in the previous tag, <ValueName>. -->

```
                <!-- Note:

                    • You can use as many of these last 3 tags as you need to
                    convey all the changes in an ini file. -->

            </IniFile>

        </Ini>


        <Links> <!-- Backup shortcuts. -->

            <!-- Most programs create shortcuts on the desktop among other locations
            that serve as a link to the main executable file(s) for faster access.
            GenieScript enables you to backup these shortcuts along with their
            attributes.

            Right-click on the desired link and choose properties, then use the data
            inside the properties window in the following block of script. -->

            <Link>  <!-- Starts backup of an individual shortcut. -->

                <URL>TRUE</URL>

                    <!- Optional tag. Values TRUE or FALSE, Default =
                    FALSE. This will create a URL link instead of normal
                    shortcut - a URL link is a link that points to an address on
                    the World Wide Web. -->


                <SavePath> $$P_DESKTOP$$\Babylon.lnk </SavePath>

                    <!-- Contains the full path to the location of the shortcut file
                    to be backed up. -->


                <Target> $$P_APPPATH$$\Babylon.exe </Target>

                    <!-- Specifies the full path of the target executable to which
                    the link refers, this path can be found in the target field in
                    the shortcut's properties window. If you are creating a URL
                    link, this should be an internet address path. -->
```

<IconIndex> 0 </IconIndex>

<!-- Optional. Values: integers equal or larger than zero, Default = 0. If you specify a file as the holder of the shortcut's icon, in the <IconLocation> tag, the <IconIndex> tag will indicate which of the embedded icons should be used, by default the first icon with index 0 will be used.

- To know which index number to use, click the "change icon" button inside the shortcut properties window, choose the desired file containing the icons, you should then see all the available icons, the index number is calculated starting from 0 at the top left corner icon and increasing by one as you go from left to right and then downwards.

If the shortcut has a default icon set by Windows, such as text files (.txt), then write the following

<IconIndex/>

<IconLocation/>

-->

<IconLocation> $$P_APPPATH$$\ Babylon.exe </IconLocation>

<!-- This tag carries the full path of the file containing the icon that will be assigned to the shortcut file. Note that this file must either already exist on the destination machine (to which the backed up data will be restored) or be included with the backup, to insure that this tag does not point to a non-existent file. -->

</Link>

</Links>

<Restore> <!-- Plugin restore settings. -->

<!-- After Backing up an application, you need to tell GBM Server where to restore it to on the target machine, notice that here too you will be using environmental variables in order to insure portability when needed. -->

<RestorePath> $$P_PROGRAM_FILES$$\Babylon </RestorePath>

<!-- Contains the full path to which Genie Backup Manager should restore your backed up application or item, if this tag is missing, Genie Backup Manager will restore the program to the original path location retrieved using the Path tag. -->

<RestoreNote> Comments </RestoreNote>

<!-- If you have any comments or notes about the restore procedure, here is where it goes.-->

<PathMustExist> TRUE </PathMustExist>

<!-- Optional tag. Values TRUE or FALSE, Default = TRUE. When set to TRUE, Genie Backup Manager will not restore the data backed up using the plugin, unless the related application program is installed on the target machine. -->

</Restore>

<Author> <!--Script author information. -->

<!-- Give credit where credit is due, if you're going to write the plugin script and you intend to share it so that other GBM Pro users can benefit from it, you'll probably want to be able to leave your mark, the <Author> tag, enables you to provide your personal information for users of the plugin to see..-->

<Name> Genie9 </Name>

<!-- Name of the author of the script. -->

<Company> Genie9 </Company>

<!-- Company of the author of the script. -->

<Date> 26-2-2012 </Date>

<!-- Date of creation of the script. -->

<HomePage> http://www.genie9.com </HomePage>

<!-- Website containing information about the author of the script, or belonging to the author. -->

<email> support@genie9.com </email>

<!-- Contact email address of the author. -->

</Author>

</Program>

</Backup>

How to: Create a Plugin using Plugin Creator

Most users prefer dealing with GUIs to perform tasks. The Plugin creator generates the XML file automatically without the need to write the XML tags. This can be done in 11 simple steps:

Step 1: Information

This is the section where you specify basic information about the group of items you are backing up; if it's a whole application you should write its given name and assign a category to it, otherwise you can choose any name you wish.

Name: Assigns a name to the plugin, If you are backing up a program or an application's settings, you should use the name of the program, for example: Winamp, WinZip etc... If the script is intended to backup a group of personal data items not related to an application, you can choose any name you like.

Category: Assigns a category to the group of backed up data items, we use CNET download.com programs categorizing scheme, for example, Winamp goes under Media. If you're not backing up a full application you can use either "Settings" or "Folders" to describe the plugin.

Subcategory: Optional. Assigns a subcategory to the plugin, we use CNET download.com subcategories assigning convention, for example the subcategory for Winamp would be Players.

Home Page URL: Optional. Specifies a URL containing more information about the data that the plugin is intended to backup, if one exists, The home page for the program backed up by the plugin is usually used.

Home Page Text: Optional. Assigns a text description to link to the Homepage URL, for example "Winamp Website", if non is given, the address itself will be used as linking text.

Note: This tag is used to write a small description for the benefit of the user using the plugin, about what the script does, what items it backs up, and any other relevant information.

Step 2: Supported Version

A script written to backup an application or a programs' settings might not work for all the versions and builds of the program in question. It's vital when writing a script that backs up program-related data to specify which version(s) of the application the script will backup properly. In most cases, unless the leftmost number in the version number is different from the one you worked on, the script should work.

ALL: If the script is intended to backup non-program-related items, such as an MP3s folder, or if you know the plugin will work for all versions of an application, then select All.

Support these

- **Earliest Version:**Specifies the earliest version of the application that is supported by this plugin.
- **Latest Version:** Specifies the latest version of the application that this script can backup properly.

To find out the version of the application you're trying to backup click Browse... to the location of the main executable (.exe) file for the application in question.

Step 3: Main Program Path

This section will tell the backup application where to get the path to the program's main folder. Every program stores its main program folder's path somewhere in the registry.

Main executable filename: The name of the program's main executable (.exe) file, GBM will refer to this file to retrieve the version of the program installed on the machine during backup and restore. For instance Genie Backup Manager's main executable file is named GBM8.exe, if in the S**tep2: Supported Versions** step, you have found the versions number via browsing for the exe file, this field will be filled automatically.

The four types for retrieving the main program folder's path:

- **Type -1: Non-program related data:** If the user intends to backup program-independent data, such as a personal work folder, or a folder containing MP3s etc
- **Type 0: Application File name:** This will take the Main executable filename as it is, it also can be a variable
- **Type1: HKEY LOCAL MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\App Paths\:**The default location that most programs use for storing the path to its main executable file is the App Paths subkey in the HKEY_LOCAL_MACHINE registry tree. To find out whether the path to the application you intend to create a plugin for is stored in this key click Browse and search for "HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\App Paths\" and look for a subkey carrying the name of the program's main executable file and select it to be placed in Registry key. If you find it, then select this type.
- **Type 2: File extension that is associated with the program:** If you couldn't find the required registry key using the previous type, you might be able to use type 2, which retrieves the path using a file extension that is associated with the program. For instance (.gbm) is a file extension usually associated with Genie Backup Manager, (.psd) is a file extension typically associated with Adobe Photoshop. These files are usually assigned an icon that is stored in the application's main executable file.

To use this path retrieval type click Browse :

Right click on the HKEY_CLASSES_ROOT tree and click Find

Type the main executable filename preceded by a backslash (\) , for instance <\GBM8.exe>

Make sure that only the Data checkbox is ticked

Click **Find Next**

If you find a DefaultIcon subkey with a value that points to the path select it to be placed in Registry key. And go with type 2.

- **Type 3: Random registry key :**When all else fails, the user can get the program path from anywhere inside the registry, you can do that by searching through the registry for the name of the main executable file of the application, if a registry key turns up with a value that points to the path of that file, it can be used for path retrieval.

To perform a search using the registry editor, do the following:

From the toolbar click Edit then select Find

Type the main executable filename preceded by a backslash \ , for instance <\GBM8.exe>

In the Look at group, make sure only Data is ticked

Click Find Next

Key Value : Default value= Default . Selects the value under the key specified in the Registry key field where the path is stored. This tag is only applicable to Type 2 and 3 only

Backup main program folder: Tells whether to backup the main program folder, the user might not want to select this, for instance if he is trying to backup specific settings or saved games, and not the whole application, in which case Genie Backup Manager won't backup the program folder but will check whether the program exists or not when its time to restore those settings.

Include subfolders: Tells GBM whether to include the subfolders when backing up the main program folder or not, in most cases the user would want this to select this.

Step 4: Variables

The path tag allows the user to get the main program folder's path from the registry because that path can vary from one computer to another, or from one platform to another. What if there are more than one folder associated with the program you intend to backup? Also, What if you encountered a file or a folder whose name or path is repeated several times within the plugin script? Do you need to write the complete path over and over, everywhere it appears in the script?

The Variables tag is provided to tackle such scenarios.

Variable name: assigns a name to the declared variable.

Variable Type: takes one of two values either String or from registry

String: that the string value assigned to the declared variable will be taken as is

Value: enter the string value in this field

From registry: that the string value assigned to the variable is a registry key path which points to to a value that contains the string that will be assigned to the variable.

Registry key: Search for the variable's registry key by clicking on ...

Registry value: value should contain the name of the value in the specified registry key, containing the desired string.

Flags: The Following are the variable flags to modify

Remove arguments: This attribute allow you to backup the variable excluding the arguments (options) attached

Remove quotation: This attribute allows you to backup the variable removing the quotations if any.

Remove filename: This attribute allows you to backup the path of the variable removing the variable's file name.

Remove: Removes the selected variable from the list.

Clear all: Deletes all what is in the fields in the Variable box

Add/Update: Adds the variable created with its type and value to the variables list

Step 5: Registry

Most programs will depend on the registry for storing their preferences and settings. So to be able to backup any application successfully you need to backup all the changes it makes to the Windows registry.

You can instruct Genie Backup Manager to backup keys with or without including their sub keys or you can specify certain key values to be modified when restoring the data.

Registry Key: Starts the backup of a registry key, to browse for it click **Add Key ...**

There are three options for the functionality of the Registry key:

- **Do not include sub keys:** the specified registry key will not back up with all its subkeys
- **Include sub keys:** the specified registry key will be backed up with all its subkeys
- **Include only these values:** backs up only some of the registry values contained in that registry key

Registry value: the chosen registry value contained in the selected registry key to be included at backup; searching for by clicking Add Value... And to remove a registry value from the list select the value and click Remove ...

Add/Update: To add the registry key and its information of the registry key to the Registry key list.

Remove: Removes the selected registry key from the Registry key list.

Step 6: Files

This step will allow you to backup individual files.

File: Specifies the full path including the name of the desired file finding it is done by clicking Browse... or inserting manually full path

Restore to: Tells Genie Backup Manager where to copy the backed up file during restore. It need not be the same path as in File. It is found by clicking Browse... or inserting manually full path.

Never Uninstall: Default unchecked. Check this if when backing up (dll) files and system files that might be shared and should not be deleted

Filter Internal file data: Default unchecked. Some files, whether binary or text, sometimes contain paths that point to files or folder that get changed when the backed up program or item is restored to a different folder, machine or Windows platform.

Compare Time Stamp: Default unchecked. Check this if you wish to avoid replacing newer files with older versions when you restore data backed up using this plugin.

Register server (Using regsvr32.exe): Default unchecked. If this is checked then this will register a dll or Active-X file using regsvr32 (for advanced users).

Remove: Removes the selected filename from the list.

Clear all: Deletes all the fields in the Files box

Add/Update: Adds the File record created with its information to the Files list.

Step 7: Folders

In this step you can backup the most important part of any application, the actual files and folders.

Folder: Specifies the full path including the name of the desired folder finding it is done by clicking Browse... or inserting manually full path

Restore to: Tells Genie Backup Manager where to copy the backed up folder during restore. It need not be the same path as in Folder. It is found by clicking Browse... or inserting manually full path.

Include Sub Folders: The default is unchecked. When checked, Genie Backup Manager will backup all the subfolders within the specified folder.

Filter file types: Default unchecked. If checked it enables you to filter backed up files within the selected folder according to file types (extensions) which is typed in Filer file types . The selected file types will be included in backup, other files will be ignored. The value of the parameter needs to be in the format *.doc *.exe *.txt etc ... To include more than one files extension, use the semicolon as a separator.

Remove: Removes the selected folder from the list.

Clear all: Deletes all whats in the fields in the Folder box

Add/Update: Adds the Folder record created with its information to the Folder list.

Step 8: Ini Files

Many applications append to ini files when their installed, and in many cases write their own ini files to hold their settings and preferences, which the user might modify while using the program. This section allows you to backup certain portions of ini files instead of backing up and restoring the entire file, which in some cases might lead to errors.

INI Files: Specifies an ini file to open for modification, finding it is done by clicking on **Browse...**

Key: Contains the name of the key in the ini file that the user wishes to append new values to, or modify existing values under.

Value name: Specifies the name of the value to be appended or modified within the ini file and under the Key specified in the Key.

Value: Assigns data to the value selected in the Value name.

Remove: Removes the selected Ini file from the list.

Clear all: Deletes all whats in the fields in the Ini Files box

Add/Update: Adds the Ini file record created with its information to the Ini files list.

Step 9: Shortcuts

Most programs create shortcuts on the desktop among other locations that serve as a link to the main executable file(s) for faster access. Genie Plugin Creator enables you to backup these shortcuts along with their attributes.

Shortcut location: Contains the full path to the location of the shortcut file to be backed up, finding it is done when clicking on Browse...

Target: Specifies the full path of the target executable to which the link refers, this path can be found in the target field in the shortcut's properties window. If you are creating a URL link, this should be an internet address path or by clicking on Browse...

Icon location: This tag carries the full path of the file containing the icon that will be assigned to the shortcut file, finding it is done when clicking on Browse...

Icon index: Values: integers equal or larger than zero, Default = 0 . If you specify a file as the holder of the shortcut's icon, in the Icon Location, it will indicate which of the embedded icons should be used, by default the first icon with index 0 will be used.

Create web URL: Default unchecked. This will create a URL link instead of normal shortcut - a URL link is a link that points to an address on the World Wide Web.

Remove: Removes the selected shortcut from the list.

Clear all: Clear all fields in the Shortcut box

Add/Update: Adds the Shortcut record created with its information to the Shortcuts list.

Step 10: Restore

After backing up an application, you need to tell GBM where to restore it to on the target machine, you will be using environmental variables in order to insure portability when needed.

Restore data to: Contains the full path to which Genie Backup Manager should restore your backed up application or item, it can be selected by clicking Browse... or typing in the path manually.

Note: Add additional comments or notes needed for the plugin.

Application must be installed: Default unchecked. When checked, Genie Backup Manager will not restore the data backed up using the plugin, unless the related application is installed on the target machine.

Step 11: Author

Give credit where credit is due, if you're going to create the plugin and you intend to share it so that other GBM users can benefit from it, you'll probably want to be able to leave your mark, this step, enables you to provide your personal information for users of the plugin to see.

Name: Name of the author of the script.

Company: Company of the author of the script.

Date: Date of creation of the script (Automated)

Home page: Website containing information about the author of the script , or belonging to the author.

Email: Contact email address of the author.

Clear all: Empty all the fields.

GenieScript Examples

Win Zip

```
<Backup>
    <Program>
        <Main>
            <Name>WinZip</Name>
            <Category>Utilities</Category>
            <SubCategory>File Compression</SubCategory>
            <HomePageURL>http://www.winzip.com</HomePageURL>
            <HomePageText>WinZip Web Site</HomePageText>
        </Main>
        <Version>
            <Min>0</Min>
            <Max>8.1</Max>
        </Version>
        <Path>
            <FileName>winzip32.exe</FileName>
```

```
            <Type>1</Type>

            <KeyName>winzip32.exe</KeyName>

            <IncludeSub>TRUE</IncludeSub>

        </Path>

        <RegistryKeys>

            <Key>HKEY_CLASSES_ROOT\.ZIP</Key>

            <Key>HKEY_CLASSES_ROOT\.ARC</Key>

            <Key>HKEY_CLASSES_ROOT\.ARJ</Key>

            <Key>HKEY_CLASSES_ROOT\WinZip</Key>

            <Key>HKEY_CLASSES_ROOT\*\shellex\ContextMenuHandlers\WinZip</K
            ey>

            <Key>HKEY_CLASSES_ROOT\.cab</Key>

            <Key>HKEY_CLASSES_ROOT\CLSID\{E0D79304-84BE-11CE-9641-
            444553540000}</Key>

            <Key>HKEY_CLASSES_ROOT\CLSID\{E0D79305-84BE-11CE-9641-
            444553540000}</Key>

            <Key>HKEY_CLASSES_ROOT\CLSID\{E0D79306-84BE-11CE-9641-
            444553540000}</Key>

            <Key>HKEY_CLASSES_ROOT\CLSID\{E0D79307-84BE-11CE-9641-
            444553540000}</Key>

            <Key>HKEY_CLASSES_ROOT\Directory\shellex\DragDropHandlers\WinZi
            p</Key>

            <Key>HKEY_CLASSES_ROOT\Directory\shellex\ContextMenuHandlers\Wi
            nZip</Key>

            <Key>HKEY_CLASSES_ROOT\Drive\shellex\DragDropHandlers\WinZip</K
            ey>

            <Key>HKEY_CLASSES_ROOT\Folder\shellex\DragDropHandlers\WinZip</
            Key>
```

```
            <Key>HKEY_CLASSES_ROOT\Folder\shellex\ContextMenuHandlers\WinZip</Key>

            <Key>HKEY_CURRENT_USER\Software\Nico Mak Computing\WinZip</Key>

            <Key>HKEY_LOCAL_MACHINE\SOFTWARE\Classes\WinZip</Key>

            <Key>HKEY_LOCAL_MACHINE\SOFTWARE\Classes\*\shellex\ContextMenuHandlers\WinZip</Key>

            <Key>HKEY_LOCAL_MACHINE\SOFTWARE\Classes\CLSID\{E0D79304-84BE-11CE-9641-444553540000}</Key>

            <Key>HKEY_LOCAL_MACHINE\SOFTWARE\Classes\CLSID\{E0D79305-84BE-11CE-9641-444553540000}</Key>

            <Key>HKEY_LOCAL_MACHINE\SOFTWARE\Classes\CLSID\{E0D79306-84BE-11CE-9641-444553540000}</Key>

            <Key>HKEY_LOCAL_MACHINE\SOFTWARE\Classes\CLSID\{E0D79307-84BE-11CE-9641-444553540000}</Key>

            <Key>HKEY_LOCAL_MACHINE\SOFTWARE\Classes\Directory\shellex\DragDropHandlers</Key>

            <Key>HKEY_LOCAL_MACHINE\SOFTWARE\Classes\Directory\shellex\DragDropHandlers\WinZip</Key>

            <Key>HKEY_LOCAL_MACHINE\SOFTWARE\Classes\Directory\shellex\ContextMenuHandlers\WinZip</Key>

            <Key>HKEY_LOCAL_MACHINE\SOFTWARE\Classes\Drive\shellex\DragDropHandlers\WinZip</Key>

            <Key>HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\App Paths\winzip.exe</Key>

            <Key>HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\WinZip</Key>

    </RegistryKeys>

    <Files>

    </Files>

    <Folders>
```

```
</Folders>
<Ini>
</Ini>
<Links>
    <Link>
        <SavePath>$$P_DESKTOP$$\winzip.lnk</SavePath>
        <Target>$$P_APPPATH$$\winzip32.exe</Target>
        <IconIndex>0</IconIndex>
        <IconLocation>$$P_APPPATH$$\winzip32.exe</IconLocation>
        <Comment/>
        <Arguments/>
    </Link>
    <Link>
        <SavePath>$$P_COMMON_PROGRAMS$$\WinZip\winzip.lnk</SavePath>
        <Target>$$P_APPPATH$$\winzip32.exe</Target>
        <IconIndex>0</IconIndex>
        <IconLocation>$$P_APPPATH$$\winzip32.exe</IconLocation>
    </Link>
    <Link>
        <SavePath>$$P_COMMON_STARTMENU$$\winzip.lnk</SavePath>
        <Target>$$P_APPPATH$$\winzip32.exe</Target>
        <IconIndex>0</IconIndex>
        <IconLocation>$$P_APPPATH$$\winzip32.exe</IconLocation>
```

```
</Link>

<Link>

        <SavePath>$$P_COMMON_PROGRAMS$$\WinZip\Uninstall
        WinZip.lnk</SavePath>

        <Target>$$P_APPPATH$$\winzip32.exe</Target>

        <IconIndex>0</IconIndex>

        <IconLocation>$$P_APPPATH$$\winzip32.exe</IconLocation>

        <Arguments>/uninstall</Arguments>

</Link>

<Link>

        <SavePath>$$P_COMMON_PROGRAMS$$\WinZip\Help
        Manual.lnk</SavePath>

        <Target>$$P_APPPATH$$\WINZIP.HLP</Target>

        <IconIndex>0</IconIndex>

        <IconLocation/>

        <Arguments/>

</Link>

<Link>

        <SavePath>$$P_COMMON_PROGRAMS$$\WinZip\Whats
        New.lnk</SavePath>

        <Target>$$P_APPPATH$$\WHATSNEW.TXT</Target>

        <IconIndex>0</IconIndex>

        <IconLocation/>

        <Arguments/>

        <Comment>What's New</Comment>
```

```
        </Link>
        <Link>
            <SavePath>$$P_COMMON_PROGRAMS$$\WinZip\ReadMe.txt.lnk
            </SavePath>
            <Target>$$P_APPPATH$$\ReadMe.txt</Target>
            <IconIndex>0</IconIndex>
            <IconLocation/>
            <Arguments/>
            <Comment/>
        </Link>
        <Link>
            <SavePath>$$P_COMMON_STARTUP$$\WinZip Quick
            Pick.lnk</SavePath>
            <Target>$$P_APPPATH$$\WZQKPICK.EXE</Target>
            <IconIndex>0</IconIndex>
            <IconLocation/>
            <Arguments/>
            <Comment>WinZip Quick Pick</Comment>
        </Link>
    </Links>
    <Restore>
        <RestorePath>$$P_PROGRAM_FILES$$\WinZip</RestorePath>
        <RestoreNote/>
    </Restore>
    <Author>
```

```
            <Name>Genie9</Name>
            <Company>Genie9</Company>
            <Date>8-04-2012</Date>
            <HomePage>http://www.genie9.com</HomePage>
            <email>support@genie9.com</email>
        </Author>
    </Program>
</Backup>
```

How to: Compile a Plugin Script

After you've finished writing a backup script you need to convert it into a binary file that GBM can understand, this is done using GenieScript Compiler which can be found in the "Genie Backup Manager Tools" window under Genie9 in the Start Menu.

To compile a GS script:

1. From the toolbar in Genie Backup Manager, click **Tools**, then select **GenieScript Compiler**.
2. Click **Open** and browse to the location where you've stored your script.
3. Click **Compile.**
4. If your script is error free the compiler will create a file with the extension (gpc) in the same folder as the script.
5. Copy the output file to the folder GScript in your GBM main program folder. This is typically: Drive:\Program Files\Genie9\GBMAPPLICATION\GScript

Script Compilation Errors

Error Message	Number	Description
The operation was successful	0	Operation was successful
Failed to create output file name	1	Failed to create output filename, make sure there is enough space or that the folder is not locked
File does not exist	2	The script file does not exist or GScript can’t open the file, make sure the file is not locked
Could not find "Backup" main tag	3	Couldn’t find or open <Backup> tag, make sure the tag is spelled correctly; tags are case sensitive
Could not find "Program" tag	4	Couldn’t find or open <Program> tag, make sure the tag is spelled correctly; tags are case sensitive
Could not find "Main" tag	5	Couldn’t find or open <Main> tag, make sure the tag is spelled correctly; tags are case sensitive

Could not find "Main -> Name" tag	6	Couldn’t find or open <Name> tag inside <Main>.This tag is necessary, it contains name of the item that the script backs up
Could not find "Version" tag	7	Couldn’t find or open <Version> tag, you must specify the version or you can type ”ALL” to make script applicable to all versions
Could not find "Path" tag	8	Couldn’t find or open <Path> tag, make sure the tag is spelled correctly; tags are case sensitive
Could not find "Path -> Filename" tag	9	Couldn’t find or open <Filename> tag, make sure the tag is spelled correctly; tags are case sensitive
Could not find "Path -> Type" tag	0	Couldn’t find or open <Type> tag inside <Path>. Valid Type values are: -1, 1, 2, 3
Could not find "Path -> Keyname" tag	10	Couldn’t find or open <Keyname> tag inside <Path>, make sure the tag is spelled correctly; tags are case sensitive
Could not find "RegistryKeys" tag	11	Couldn’t find or open <RegistryKeys> tag, make sure the tag is spelled correctly; tags are case sensitive
Could not find "RegistryKeys -> Key" tag	12	Couldn’t find or open <Key> tag inside <RegistryKeys>, make sure the tag is spelled correctly; tags are case sensitive
Error while Parsing "IncludeSub" Attribute inside "Key" tag	13	Could not parse attribute ”IncludeSub” within <Key> tag inside <Registry>, valid values are TRUE or FALSE (case sensitive)
Error while Parsing "Files" tag	14	Couldn’t find or open <Files> tag, make sure the tag is spelled correctly; tags are case sensitive
To without From, Must write from tag	15	<To> without <From>, you must enter a <From> tag before you write <To> tag
Error while Parsing "Links" tag	16	Couldn’t find or open <Links> tag, , make sure the tag is spelled correctly; tags are case sensitive
Icon index is invalid	17	Links icon index is invalid, valid values are 0 and higher
Could not find "Restore" tag	18	Couldn’t find or open <Restore> tag, make sure the tag is spelled correctly; tags are case sensitive
Could not find "RestorePath" tag	19	Couldn’t find or open <RestorePath> tag, make sure the tag is spelled correctly; tags are case sensitive
Could not parse "Path -> IncludeSub" tag	20	Could not parse <IncludeSub> tag within <Path> tag, valid values are TRUE or FALSE (case sensitive)
Could not parse "File -> Filter" tag	21	Could not parse <Filter> tag within <File> tag, valid values are TRUE or FALSE (case sensitive)
Could not parse "Folders" tag	22	Couldn’t find or open <Folders> tag, make sure the tag is spelled correctly; tags are case sensitive
To without From, Must write from tag	23	<To> without <From>, you must enter <From> tag before you write <To> tag
Could not parse "Folders -> IncludeSub" tag	24	Could not parse <IncludeSub> tag within <Folders> tag, valid values are TRUE or FALSE (case sensitive)
Could not parse "File -> NeverUninstall" tag	26	Could not parse <NeverUninstall> tag within <File> tag, valid values are TRUE or FALSE (case sensitive)
Could not parse " File-> CompareTimeStamp" tag	27	Could not parse <CompareTimeStamp> tag within <File> tag, valid values are TRUE or FALSE (case sensitive)

Could not parse "File -> RegServer" tag	28	Could not parse <RegServer> tag within <File> tag, valid values are TRUE or FALSE (case sensitive)
Could not find "Ini -> IniFile" tag	29	Couldn’t find or open <IniFile> tag within <Ini>, make sure the tag is spelled correctly; tags are case sensitive
Error while Parsing "Links -> URL" tag	30	Could not parse <URL> tag within <Links> tag, valid values are TRUE or FALSE (case sensitive)
Error while Parsing "Path -> Enable" tag	31	Could not parse <Enable> tag within <Path> tag, valid values are TRUE or FALSE (case sensitive)
Error while Parsing "Restore -> PathMustExist" tag	32	Could not parse <PathMustExist> tag within <Restore> tag, valid values are TRUE or FALSE (case sensitive)
Error while Parsing "Restore -> Uninstall" tag	33	Could not parse <Uninstall> tag within <Restore> tag, valid values are TRUE or FALSE (case sensitive)

Scripted Backup (GRunScript)

Scripted Backup (GRunScript)

Most backup software offer complex command line options to allow users to perform backups without using the application's graphical user interface, a feature which is intended to provide extended flexibility for advanced users who wish for instance to create batch files that can be shared with other network users to perform standardized backup tasks. Genie Backup Manager takes this a step further by allowing users to create complete backup jobs using XML based scripting.

GRunScript is created by feeding the script all the settings and selections the user would specify using the backup wizard, these include:

1. Backup Job information.
2. Backup storage device selection.
3. Data selection.
4. Settings.
    - Backup Type.
    - Security settings.
    - Compression settings.
    - Email notification settings.

How to: Create a Backup Job Script

In order to simplify learning GRunScript we've written an example script using all the tags needed to write a full script file and added explanation after each tag or block of script using the script comments convention. (Sentences enclosed in <!-- --> are comments that the compiler will ignore and are only there for the benefit of whoever reviews the script).

Notes

- Click the plus sign next to each tag to expand it.
- Tags are case sensitive.

<Backup> <!-- Starts the script file, a necessary tag that tells GBM to start interpreting -->

<!-- For the compiler to know where the script starts and where it ends it needs the < Backup > </ Backup > tags, all other tags should be enclosed within these two, the compiler will ignore anything not lying between them. -->

<Main> <!-- Basic backup job information. -->

<!-- Sets the basic backup job information, including:

- Job name
- Backup filename
- job description
- New job or an existing backup job
- Backup Media selection
- Backup monitor visibility
- Count-down to backup
- Time Stamping
- Deployment settings

-->

<Jobname> Test1 </Jobname>

<!-- Assigns a name to the backup job. -->

<Type> 0 </Type>

<!--Optional. Values 0 or 1, Default = 0. Indicates whether this is a new backup job or is meant to load an existing backup job. 0 = New backup job, 1= Loading an existing backup job. Loading an existing backup job would use the backup job name to load the settings and selections of the specified backup job and ignore the rest of the script. -->

<MediaType> 4 </MediaType>

<!-- Values 0,1,2,3. Indicates the storage media that will be used for backup. The user selects a number denoting the desired media, then GBM looks for its settings in the Media tag.

Media Types:

- 0=Local/Lan
- 1=Removable
- 2=FTP
- 3=CD,DVD

<HideMonitor> FALSE </HideMonitor>

<!--Optional tag. Values TRUE or FALSE, Default = FALSE. Instructs GBM Server whether to display the backup monitor while running the script. When set to TRUE, the backup monitor will minimized when the backup start. -->

<TimeToBackup> 0 </TimeToBackup>

<!-- Optional. Values: integer value higher than -1, Default = 10. Sets the number of seconds for thea count-down before starting backup (Window for user to cancel backup)

- -1= Default value.
- 0= Disable countdown.

-->

<Description> Just a simple test </Description>

<DriveNumber> 0 </DriveNumber>

<!-- Number corresponding to the recorder's drive letter as listed inside GBM Server. I.e. 0 for the 1st drive, 1 for the 2nd drive -- >

<SpaceType> 0 </SpaceType>

<!-- Whether to allow GBM Server to utilize all available space on each inserted disc or to use a fixed amount of space

Values:

- 0 = Utilize maximum available space (Default)
- 1 = Use fixed size

-->

<SplitSize> 600 mb </SplitSize>

<!-- When SpaceType (1) is selected, user must enter a fixed split size

Default is 600 MB -->

<UsePacketWriting>FALSE</UsePacketWriting>

<!-- Writing to CD/DVD media using third party packet writing software, default value is False -->

<Erase>FALSE</Erase>

<!-- Delete contents of inserted CD/DVD media before backup, default value is False -->

<TimeStamp> FALSE </TimeStamp>

<!-- Optional tag. Values TRUE or FALSE, Default = FALSE. Used to attach a timestamp to the backup filename, timestamps indicate when a backup run was carried out. Use <TimStampType> tag to choose timestamp format. -->

<TimeStampType> 0 </TimeStampType>

<!-- Values: 1,2,3,4,5,6,7 . C hoose a format for the attached timestamp

Values:

- 0= Month dd, yyyy@hh:mm:ss AM/PM
- 1= Day of the week, Month dd, yyyy
- 2= Month dd, yyyy
- 3= yyyy-mm,dd
- 4= Month dd
- 5= mm-dd-yyyy@hh-mm AM/PM
- 6= mm-dd-yyyy@hh-mm-ss AM/PM
- 7= hh.mm.dd AM/PM

-->

<Filename> My Backup </Filename>

<!--Name assigned to the output file/folder produced by backup, if not specified, job name will be used. -->

<Deployment> 0 </Deployment>

<!--Specify whether you wish to run, deploy, or deploy and run this job. Where 0 = run, 1= Deploy and run, and 2= Deploy. -->

</Main>

<Media> <!-- Where to store the backup. -->

<!-- GBM Server will look in this section for the tag corresponding to the media type selected in <Type> tag under <Main> to retrieve the settings associated with the selected media type. -->

<LocalLan> <!-- Backup to a storage location readily accessible from Windows Explorer (Internal/External hard disks, NAS, SAN, LAN locations etc ...) -->

<OutputPath> I:\ </OutputPath>

<!-- Output folder, if not specified, default backup location will be chosen \My Documents\My Backups -->

<SplitSize/>

<!-- Split size, default value 2 GB. -->

</LocalLan>

<Removable> <!--Backup to multiple disks (JAZ disks, ZIP disks etc...) -->

<Drive> H:\ </Drive>

<!-- Drive letter for the selected removable media drive, selecting a non-removable media device will cause backup to fail -->

<Erase>FALSE</Erase>

<!-- Causes GBM Server to erase each inserted disk before backup without prompting the user. WARNING: Selecting this option will erase ALL data on the inserted disks -->

</Removable>

<FTP> <!-- Backup to an FTP server or a remote location using FTP service -->

<Host> ftp.server.com </Host>

<!-- Hostname or IP address or remote location -->

<Port> 21 </Port>

<!-- Port number for establishing connection, default value is 21. -->

<Username> myusername </Username>

<!-- Username for FTP account. -->

<Password> 123456 </Password>

<!--Password for FTP account, WARNING: Password will not be secure if saved inside the script -->

<Folder> backup_test1 </Folder>

<!-- Folder on the FTP location to backup data to -->

<PassiveMode>TRUE</PassiveMode>

<!-- Connecting in Passive or active mode, Default value is False -->

<UsePreConfig>TRUE </UsePreConfig>

<!-- Use pre-configured settings (Get settings from the machine, for example: "proxy settings" from the control panel). Default is TRUE. -->

<KeepLocally>TRUE</KeepLocally>

<!-- Causes GBM Server to keep the temporary backup files stored locally on the machine before being uploaded, default value is False -->

<StorePath> </StorePath>

<!-- Specify local temporary folder used for storing backup files created before being uploaded to the FTP location, if left empty the default backup location will be used -->

<UseFTPProxy>FALSE</UseFTPProxy>

<!-- Enable connecting through an FTP proxy, default value is False -->

<FTPProxy></FTPProxy>

<!-- FTP Proxy address -->

<FTPProxyPort> 21 </FTPProxyPort>

<!-- FTP Proxy port, default value (21) -->

<FTPProxyUsername></FTPProxyUsername>

<!-- FTP Proxy access Username -->

<FTPProxyPass></FTPProxyPass>

<!-- FTP Proxy access Password -->

</FTP>

<DVD_CD> <!-- Backup to CD/DVD media -->

<!--Optional description for the created backup job, if left empty it will be set to default (Time and date of job creation). -->

</DVD_CD>

</Media>

<Data> <!-- Select files/folders and items to be backed up. -->

<MyProfile> <!-- Select items from the My Profile tab in GBM Server. -->

<OutlookExpress> <!-- Backup Outlook Express emails and settings -->

<Identity>

<!-- Select Outlook Express identities to be backed up, backing up multiple identities is supported, identities can be selected by either specifying the identity name or its corresponding GUID-->

<IdentityName> Main identity </IdentityName>

<!-- Select an identity by specifying its name as displayed in Outlook Express Identity Manager or GBM Server, or enter **$$ALL$$** to backup all identities -->

<IdentityGUID/>

<!-- Select an identity by supplying its GUID. To find an identity's GUID refer to Windows Registry key

HKEY_CURRENT_USER\Identities -->

</Identity>

</OutlookExpress>

<Outlook> <!-- Backup Outlook emails, PST files, settings etc ... -->

<ProfileName> </ProfileName>

<!-- Select a profile by supplying its name, You can see a list of all available Outlook profiles by going to Control Panel -> Mail -> Show Profiles. Enter **$$ALL$$** to backup all profiles -->

</Outlook>

<Registry> <!-- Backup Windows Registry. -->

<Key>ALL</Key>

<!-- Backup entire registry database -->

<Key> HKEY_LOCAL_MACHINE\SOFTWARE </Key>

<!-- Backup a specific key with all its sub-keys. -->

</Registry>

<WinSettings>FALSE</WinSettings> <!-- Backup Windows settings, True to backup all supported Windows settings, and False to skip them -->

<IESettings>FALSE</IESettings> <!-- Backup Internet Explorer settings, values are True or False -->

<Favorites>FALSE</Favorites> <!-- Backup Favorites, values are True or False -->

<Wab>FALSE</Wab> <!-- Backup Windows Address Book, values are True or False -->

<Desktop>FALSE</Desktop> <!-- Backup the Desktop area, values are True or False -->

<Fonts>FALSE</Fonts> <!-- Backup Windows fonts, values are True or False -->

<MyDocuments>True</MyDocuments> <!-- Backup My documents folder, values are True or False -->

<MediaPlaylist> <!-- Parse media playlists and backup media files they point to>

<File> I:\playlist\1.m3u </File> <!-- Full path and file name of the media playlist -->

```
</MediaPlaylist>

<WindowsMail>True<\WindowsMail><!-- Backup Windows Mail, values
are True or False -->

<WindowsContacts>True<\WindowsContacts><!-- Backup Windows Mail,
values are True or False -->




</MyProfile>


<MyFolders> <!-- Backup files and folders. -->


    <FolderIncludeSub="FALSE"> I:\CD1 </Folder>

        <!-- Path for folder selected for backup, use of Path Strings is
        supported.

        IncludeSub: instructs GBM Server whether to include all subfolders
        of the selected folder, Default is True. -->



    <FolderIncludeSub="TRUE"> $$P_DESKTOP$$ </Folder>

        <!-- Path for folder selected for backup, use of Path Strings is
        supported.

        IncludeSub: instructs GBM Server whether to include all subfolders
        of the selected folder, Default is True. -->


    <File> I:\CD2\layout_start_V3.psd </File>

        <!-- Full path and filename of file to be backed up, use of
        wildcards is supported -->

    <Filters> <!--Add filters -->
```

```
<Rule IncludeSub="FALSE"> I:\CD1 </Rule>

    <!-- Path for folder selected to create filter rules, use of
    Path Strings is supported.

    IncludeSub: instructs GBM Server whether to include all
    subfolders of the selected folder, Default is True. -->

    <FilterType>0</FilterType>

        <!-- Specify whether to include or exclude the
        following filters 0= include  1=exclude-->

    <Filters>"*.doc;*.txt"</Filters>

        <!-- filter the following types; wildcards are
        supported -->


  </Filters>

</MyFolders>


<MyPrograms> <!-- Backup items listed in MY Plugins tab. -->


  <Program> Winzip </Program> <!-- Name of item as listed in My Plugins. --
  >


</MyPrograms>

</Data>


<Settings>


  <!-- Configures backup job settings, including:
```

- Backup Type
- Compression Type
- Security Type
- Power options
- Pre & Post job commands

-->

<BackupType> 0 </BackupType>

<!-- Values 0, 1, 2, 3. Set the backup type for this backup job. See backup types.

Backup Types:

- 0=Full
- 1=Incremental
- 2=Mirror
- 3=Differential

-->

<CompressionType> 1 </CompressionType>

<!-- Optional tag. Values 0 or 1, Default = 1. Compression Type, 0= Without compression (Preserves file/folder structure), 1= use zip format compression. See compression. -->

<CompressionLevel> 6 </CompressionLevel>

<!-- Optional tag. Values 0 - 9, Default = 6. Level of compression (if compression was selected in the previous tag). Ranges between 0 (No compression, fastest) and 9 (Maximum compression, slowest). -->

<Security> 0 </Security>

<!-- Values = 0, 1, 2. Default= 0. Data protection type to be used, 0=None, 1= Zip Password protection, 2=AES encryption. See Security. -->

<AESType> 0 </AESType>

<!-- AES Encryption strength (if encryption security is selected in the previous tag)

Values:

- 0=128 bit
- 1=192 bit
- 2= 256 bit

-->

<Password> MyPassword246 </Password>

<!-- Password for security type 1 and 2. **WARNING**: Security option when using GRS scripting is compromised since the password is saved without encryption in the script. -->

<Password_Confirm> MyPassword246 </Password_Confirm>

<!-- Retype the password for confirmation. -->

<ShutdownGBM>FALSE</ShutdownGBM>

<!-- Optional tag. Values TRUE or FALSE. Exit GBM Server when backup is complete. -->

<ShutdownComputer>FALSE</ShutdownComputer>

<!-- Optional tag. Values TRUE or FALSE, Default = FALSE. Perform power saving action when backup is complete, See next tag. -->

<ShutdownComputerType> 0</ShutdownComputerType>

<!-- Values: 0, 1, 2, 3. Power saving action to perform when backup is complete.

- 0 = Shut down
- 1 = Hibernate
- 2 = Logoff
- 3 = Standby

-->

<PreJobCommandWait="TRUE"></PreJobCommand>

<!-- Optional tag. Type a command to be performed automatically right BEFORE the backup job starts. Takes one parameter: Wait: When set to TRUE, means that GBM will wait for this process to end before starting backup. -->

<PostJobCommandWait="TRUE"></PostJobCommand>

<!-- Optional tag. Type a command to be performed automatically right AFTER the backup job ends. Takes one parameter: Wait: When set to TRUE, means wait for the previous process to end before running the command. -->

</Settings>

</Backup>

How to: Run a Scripted Backup

To run a scripted backup:

1. Convert the script's extension from .xml to .grs.
2. Double click the file. This will automatically start the backup job without the need of opening the GBM interface.

To schedule your script as an unattended backup task:

1. Click **Start**, click **All Programs**, point to **Accessories**, point to **System Tools**, and then click **Scheduled Tasks**.

2. Double-click **Add Scheduled Task**.
3. Click **Next**.
4. Click **Browse**, then select the script file.
5. Continue by following the on-screen instructions.

Troubleshooting

Scheduling Unattended Backup Tasks

1. Generic troubleshooting tips.
2. GBM Is requesting a username for scheduling an unattended backup although I do not use one.
3. Error Message: "Failed to create a scheduled backup job."
4. Error message: "0x80070005: Access is denied."

Generic troubleshooting tips

GBM uses Windows Schedule task to schedule the backup tasks. However, under certain circumstances, Windows fails to run the scheduled tasks. Here are steps to troubleshoot scheduling issues.

1. Run the Job manually from GBM: If the scheduled task does start but encountered problems running, open GBM and run the task from there as it may be a problem from the backup job itself. If you encounter problems in the manual run, please contact technical support.
2. Check the scheduled task status: If your scheduled tasks are running in different times than expected or not running at all, check your scheduled tasks from Control Panel> Scheduled Tasks, remove all unwanted schedules of the task or edit the schedule time of the schedule task by right-clicking the scheduled task> properties> under the schedule tab you can edit the schedule. You can also edit the scheduled tasks via GBM from Scheduled Wizard> Edit Existing Tasks. You can also check the Status column in the Scheduled Tasks window. The following table describes the status types.

Status	Description
Blank	The task is not running, or it ran and was successful.
Running	The task is currently being run.
Missed	One or more attempts to run this task was missed.
Could not start	The most recent attempt to start the task failed.

   For details on the scheduled tasks status, go to step 4.

3. Run the job via scheduled Tasks: You can try to attempt a manual run from opening the scheduled task in the task wizard> Right-click> Run and see if the tasks runs.
4. Check the scheduled task logs for detailed tasks status: The Scheduled Tasks log (SchedLgU.txt), enables you to view more information about the status of a scheduled task. This log file for Scheduled Tasks is stored in the Windows folder, where it is used to record the activity of scheduled tasks. You can use the log file to determine why a task might have stopped, by viewing errors that may have encountered the task or to check on the status of a task. Usually, you can search the Microsoft knowledge base http://support.microsoft.com/search/ with the error codes you are encountering and find fixes and workarounds for common errors.
5. Manually schedule the task: You may refer to the following knowledgebase article on how to manually schedule unattended GBM backup tasks.

http://www.genie9.com/asp/Community/KnowledgeArticle.asp?KBID=55

6. Schedule a Task non- related to GBM: Try scheduling a task that is not related to GBM so you can identify if the problem is related to GBM or Windows.

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GBM Is requesting a username for scheduling an unattended backup although I do not use one.

SYMPTOMS:

Genie Backup Manger requests a username and password for scheduling an unattended backup task even though mine is a standalone computer and no user name or password are required to log in.

CAUSE:

Your Windows has a login password, but its set to Null.

RESOLUTION:

Use the following when you are prompted to enter a username and password

User: {Username}
Password: Empty

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Error Message: "Failed to create a scheduled backup job."

If you are on a domain the user name must be written in the format Domain/Username. Also make sure that the user name and password that you entered are the ones for the user logged onto the machine when the backup job is intended to run.

GBM uses **Windows Scheduled Tasks** agent to schedule unattended backup jobs. Make sure that the Scheduled Tasks agent is active by manually creating a scheduled task and running it once. For instructions on how to do this, please follow the link below:

http://www.genie9.com/asp/Community/KnowledgeArticle.asp?KBID=55

In most cases, the user will get an error message that reads

"The new task has been created, but may not run because the account information could not be set. The specific error is: 0x8007007a: The data area passed to a system call is too small."

This indicates that the buffer that stores account information for ALL scheduled tasks is finite, and has been exhausted.

To work around this error:

1. Copy/Paste the following to a notepad file and name it *StopStartTaskScheduler.bat*:

   ```
   @echo off
   net stop "Net Logon"
   net stop "Windows Time"
   net stop "Task Scheduler"
   net start "Windows Time"
   net start "Net Logon"
   net start "Task Scheduler"
   @ping -n 901 127.0.0.1>nul
   @echo You may set the account information for the 'new task' and schedule additional tasks.
   ```

2. Open a CMD prompt.
3. Type *StopStartTaskScheduler.bat* and press **Enter**.
4. When you see the **You may set the account information for the 'new task' and schedule additional tasks** message, in 15 minutes, the **Task Scheduler scavenger tool**, which start 10 minutes after the Task Scheduler service is started, should have freed enough buffer memory.

NOTES:

- You may have to press **OK** in a dialog that tells you that some scheduled tasks have been missed.
- When the script starts the Task Scheduler, it is normal to receive: "The requested service has already been started."

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Error message: "0x80070005: Access is denied"

SYMPTOMS:

When I try to create a scheduled job manually from windows schedule wizard I get an error message that reads ”r;0x80070005: Access is denied”

CAUSE:

This problem also occurs because of a regression that was introduced in Windows XP Service Pack 2 (SP2) and Windows XP Tablet PC Edition 2005.

RESOLUTION:

Please make sure that you are logged on into your user's account with the correct password, Even though if you are an administrator the scheduler will not recognize you as you are not logged on with admin password.

From Microsoft knowledge base :"A supported hotfix is now available from Microsoft, but it is only intended to correct the problem that is described in this article. Only apply it to systems that are experiencing this specific problem. This hotfix may receive additional testing. Therefore, if you are not severely affected by this problem, we recommend that you wait for the next Windows XP service pack that contains this hotfix."

To download fix please use the following link:

http://www.microsoft.com/technet/security/bulletin/ms04-022.mspx

To work around this problem:

1. Click **Start**, click **Run**, type Gpedit.msc, and then click **OK**.
2. Expand the following items in the **Local Computer Policy** list:

    - Computer Configuration
    - Windows Settings
    - Security Settings
    - Local Policies

3. Click **User Rights Assignment**.
4. Double-click **Access this computer from the network**, and then click **Add User or Group**.
5. Add the new user name or the group name in the **Enter the object names to select** area.
6. Click **Check Names** to verify the entries.
7. Click **OK** two times.

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Restoring a Self-Restorable Backup

1. Error message: "The application has failed to start because {MSVCP71.dll or MFC71U.dll} was deleted. Reinstalling the application may fix the problem"

Error message: "The application has failed to start because {MSVCP71.dll or MFC71U.dll} was deleted. Reinstalling the application may fix the problem"

SYMPTOMS:

While trying to restore from a self-restorable (SwiftRestore) backup, the system displays an error saying that a DLL file is missing.

CAUSE:

You have previously uninstalled a program that inadvertently deleted a files that is necessary for this operation.

RESOLUTION:

Click HERE to download the file MSVCP71.dll
Click HERE to download the file MFC71U.dll

Place the downloaded file in the folder:
C:\WINDOWS\system32

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Backup Types

Error Message: "Missing index.gix file, can't continue without this file"

SYMPTOMS:

When backing up in mirror or incremental mode with compression disabled, the backup can't find index.gix and reports the error message:

"Missing index.gix file, can't continue without this file"

CAUSE:

Your previous backup run was interrupted.

RESOLUTION:

Run a full backup. This will recreate the index.gix file.

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GBM is set to backup only new and changed files, but it reports the size of the entire set of selected files and folders before backup, even though few files were added or updated

CAUSE

During the "confirming data selections" step before backup, Genie Backup Manager depends on the Archive bit/flag attribute to determine which files have not already been backed up. If GBM was not able to reset this flag during previous backups, for instance if the source was write-protected, it will assume that all files need to be backed up. Note that this does not prevent GBM from actually backing up only the correct set of files in real-time, as it refers to its own internal index.

RESOLUTION

If the data source was a network location, change the share permissions for folders that you've selected for backup to "full control". Otherwise, please make sure that the source media is not write-protected.

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Technical Support

Contacting Support

Even though we strive to make Genie Backup Manager easy to install and use, we understand that sometimes you may need a helping hand.

Before contacting the support team, please take the time to collect the following information that will help our team identify the problem and provide you with timely support:

1. Name of the product you are using and build number. You can find the build number by opening the main application and going to **Help** > **About**.
2. Windows platform the program is being used on.
3. Registration name and serial number if applicable.
4. Can the problem be consistently reproduced, if so what are the steps that can be followed to replicate the error.

You can contact the support team at Genie9 using the helpdesk call tracking system. Users must be signed up with **My Account** in order to send inquiries (available for free for both registered and non registered users). Sign up with My Account.

If you've forgotten your password, click on the Forgot your password? link in the My Account login page, enter your email address, and click **Send**. An email will be sent to you. Click the link in the email to confirm the request. The system will then automatically reset your password and send you another email containing the new password.

Using the Helpdesk

To access the helpdesk, log in to 'My Account'. From the **My Account** menu, select **Helpdesk**.

If you click on **Main**, a list of all open tickets will be displayed; click on a ticket's case number to view your inquiry and the support technician's responses.

To submit a new inquiry, click on **Submit New Request**, complete the form, then click **Send**. To attach a file to the call ticket, click **Choose** to select the file you wish to send from your computer, then click **Attach**.

Upon form submission, a ticket will be created in our call tracking system. When the support specialist assigned to your call responds to your inquiry, an e-mail will be sent to notify you with a URL and a unique ticket number that you can use to view the response. You can send a reply by writing a new message in the text box at the bottom of the page, then clicking **Send.**

Ordering Genie Backup Manager

Genie Backup Manager has a trial version. This means that you can evaluate a fully functional copy of the software for FREE. You are entitled to evaluate the software for up to 30 days without obligation to pay. After 30 days, if you decide to keep the software, you must pay for and register your copy with us.

There are also a number of 'incentives' for registering:

1. Removes the registration and license dialogs.
2. You can use the software after the trial period.
3. You can use the auto update feature to check for new software upgrades and fixes.
4. Receive priority customer support.
5. **Free upgrades to any minor version (9.x)**
6. Special offers on major upgrades.

How to register / purchase:

To purchase the software point your web browser to http://www.genie9.com/store/store.html

Software Satisfaction Guaranteed

If for any reason you are not satisfied with software purchased directly from Genie9, simply contact us for a refund within 30 days of purchase.

For returns, please contact sales@genie9.com

Please note that shipping and delivery charges are non-refundable.

These terms and conditions apply only to Genie9 software purchased directly from Genie-Soft. If your software was purchased through a different vendor, it must be returned to that vendor and is subject to the return policies of that vendor.

Your Order Is Secure

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