

## **Out of Harms Reach -A Whitepaper on Online Backup**

### **Introduction:**

The world is an unpredictable place, one day your data is there, but the second day they aren't, due to viruses, system crash, and human error. The user should have an alternative or years and years of work, information and memories are in risk of eternal loss, this alternative is backing up the data.

Backup data is simply the process of copying or saving data to a different location. This location can be on an internal or external hard disk, tapes, removable media, or on a remote location mainly referred as online backup.

Online backup is ideal when the backup provider allows access to personal files and folders anytime anywhere. Online backup became popular subsequent to natural disasters like hurricane Katrina. Thousands of personal data and important documents were lost due to taking the wrong decision by keeping backups in one place.

So I want to ask you, do you want to risk your years and years of valuable data just by making one wrong decision? Of course not! But before you finally decide on considering online backup, choose wisely, for there are allot that provide online backup, but what provider suites you?

A user should mainly focus on these questions in order to choose the right provider:

Is my data going to be secure?

Is my storage space going to be optimally used suiting my needs?

Is backing up easy and not time consuming on my behalf?

Does the provider provide me with a plan that suites my type of usage?

Genie online backup answers these questions and more by providing their users with the following features:

Security to the Extreme

Backup with Ease

Workgroups

Online backup Plus Online Storage.

Space Utilization

Backup plans suitable for all.

### **Security to the Extreme:**

Genie online backup main consideration is security; for the safety of the user's personal data is one of our top priorities in a world full of hackers and vandalism, this should be the main concern of any online backup service, because personal information is what is carried via internet to the online services; therefore, this information should be handled with drastic security measures.

Genie Online Backup addresses security in three major aspects:

- Security of the user's account
- Security of the data on remote server
- Security of the link that transmits the files to the remote server

Security of the user's account:

Passwords are the keys of the gateway to your data; therefore, it is essential to have the proper protection for this critical information. Genie online backup encrypts these passwords with Secure Hash Algorithm (SHA-256). This algorithm is in use in U.S. Federal applications using a 256 hash key. Passwords are encrypted on the user's personal computer before they are sent across the internet.

Security of the data on remote server:

Genie Client provides file and folder encryption to enhance the security of the online backup service. The encryption method provided for the user's data is Advanced Encryption Standard (AES). AES 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. Genie Client 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. In addition to the encryption, the user's encrypted data is protected with an encryption password; this password is encrypted using the SHA algorithm explained above. This Encryption is carried out on the user's computer ensuring the user that the data is safe before leaving the computer.

Security of the link that transmits the files to the remote server

Data transmitted over the internet over goes an unknown journey, between many different hubs and computers this data can be exposed by various users, including hackers. Therefore, when sending critical data, a secure link should be established. Genie online client provides a 128-bit Secure Socket Layer (SSL) to ensure that your data won't be exposed through its journey.

For more information on the online security provided by Genie Online Backup, please refer to our "Is Your Data Safe Out There?" white paper.

### **Backup with Ease:**

Making things easy and simple is what made Microsoft Windows operating system a great success having nearly 90% of all computer users to use Windows operating system. This indicates that the main concern or what users are attracted to is a program that performs what the user needs in few and simple steps. Genie Online

Backup recognizes this concern making the online backup experience as user friendly as possible:

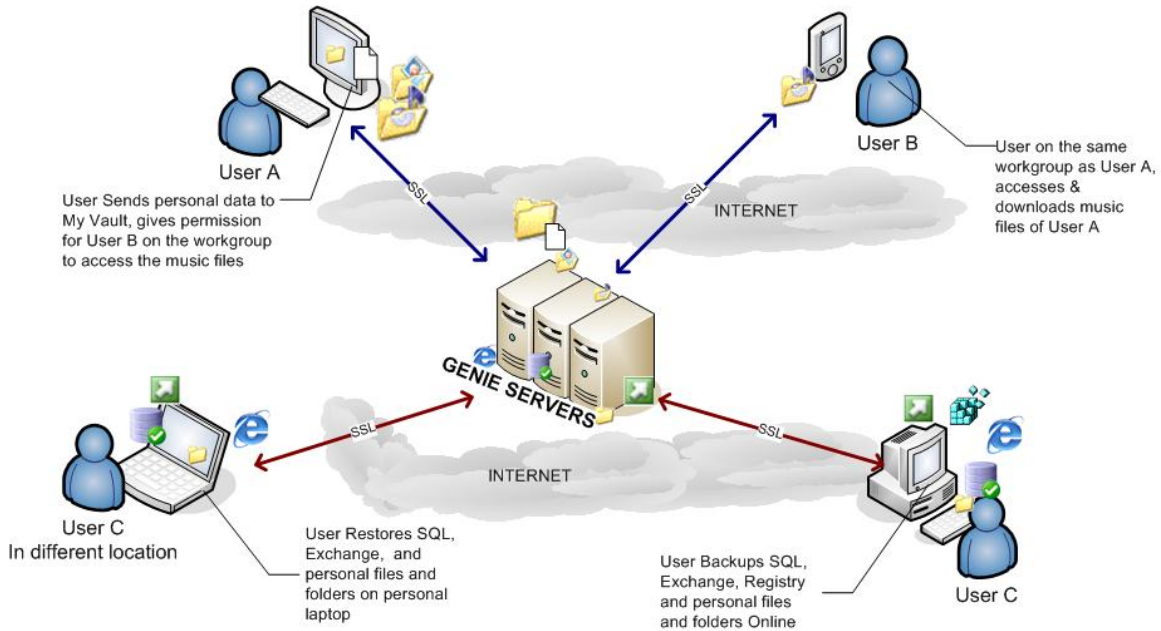
1. The backup is performed in four clear steps using a wizard
2. The user is enabled to perform backup for SQL, MS Exchange, MS outlook, desktop and much more. You don't have to worry if what you backed up is enough for these critical programs; we worry about that for you.
3. The backed up files/folders are stored in the same structure that was on your computer, making file accessing fast and easy.
4. Easy to restore with just selecting the needed files only, for a user does not need to restore the entire backup job, which also saves time.
5. The online Backup provides the users with a search tool to easily locate the specified folder/file without manual searching through the mass amount of files.
6. Schedule unattended backups: people that are on the run or are always forgetting to perform backups, can schedule the backups and Genie Client will do the rest. Genie client can also shutdown, hibernate, logoff, or even restart the computer after the job is done.
7. If the internet connection is dropped during backing up, Genie Client will retry to re-establish connection for a number of times that are defined by the user. In addition to that, if the connection is dropped during backup, the job will resume where it left off.
8. Supports Visual Accessibility Options; changing Windows appearance will change Genie Client GUI making the software more readable for people with color blindness, weak vision etc ...
9. Providing Genie Online Backup with Help documentation that shows step-by-step procedures in performing a specific task
10. Providing online support that will answer users inquiries within 24 hours (for registered users) and 3 business days (for trial users)

## Workgroups

If you are interested in purchasing more than one account for a business firm, Genie online backup enables you to purchase a workgroup with seats. Each user will be entitled to a username and a separate password for safe access to their accounts. The administrator can manage these accounts by assigning each user to a certain amount of quota, adding and deleting users, and can even suspend and resume users to access their accounts.

## Online Backup plus Online Storage:

Genie Online Backup is not just an online backup system, but also enables the user to upload and download any type of file or folder in "My Vault". It is also possible for a user to send files to anyone anywhere and share folders and files between its workgroup. The Following shows how genie online system can be utilized in both ways:



**Note:** Genie Online Backup does not limit the size of the file being uploaded, others do.

## Space Utilization:

Space utilization is a major concern when using online backup, because there is no such thing as infinite space. In addition to that, the user is usually charged by the space used, so the user should be ensured that he/she is getting his/her money worth of space. Genie Online supports the user with the following features that enables the users to optimize their storage space depending on their needs:

1. Supporting the system with 4 types of backups; Normal, Differential, Mirror, and incremental. The following gives a brief explanation of each backup type:
  - Normal: Backup all selected files and folder every time
  - Differential: Backup new files and files changed since the last NORMAL backup run only.
  - Incremental: Backup new files and files changed since the previous backup run only, missing files are not deleted from the backup set.
  - Mirror: Backup new files and files changed since the previous backup run only, in addition to that, any file that is missing in the new backup job will be deleted.
2. Enabling Purging: Genie Online Backup provides many different options in deleting old backup sets, giving the user flexibility for managing the backup jobs; for a user has the choice to delete old backups using either by specifying the number of old backups that should be kept or by specifying a

time period on how long old backups should be kept. In addition to this feature, when differential or incremental backup is used, the user can set Genie Client to automatically switch to normal backup after a specific number of increments. Each normal backup and its subsequent increments are treated by GBM as one backup set, enabling the user to purge old backup sets safely.

3. Data Compression: Genie Client uses standard zip format compression to compress backed up data and save space.



• Your data is compressed on your machine, before sending through the internet saving time in data transfer, some backup services compress at the server. In addition to that, people should be aware that some online backup services charge on the size of the uncompressed files and folders, instead of what space is used on their storage media, we don't.

### **Backup Plans Suitable For All:**

Not all backup providers provide you with a plan that fits your backup needs; some are targeted for home users while others target small businesses. With all the different types of users, genie online backup targets all these users by setting up backup plans to fit the needs of every user; from home users to business owners. We have plans to suite every ones needs. To view our backup plans, please refer to the following link:

[http://www.genie-soft.com/store/online\\_plans.html](http://www.genie-soft.com/store/online_plans.html)

### **Conclusion:**

Your personal files and folders are too valuable to get lost. Online backup will ensure safe storage of your data in case of a computer crash, human error, or even natural disasters. Genie Online Backup provides safe, easy and reliable backup services. In addition to features that enables users to utilize the size of their storage space. Genie-soft's goal is to provide its users with useful features that aid the users in making the backup experience as easy and convenient as possible.