



Gladinet User Guide

Foreword

The Gladinet User Guide gives step-by-step instructions for End Users.

Revision History

Date	Description	Version
8/20/2010	Draft Gladinet User Guide.	0.1
1/19/2011	Update with 3.0 features	3.0
6/14/2011	Update for 3.2	3.2

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GLADINET CLOUD STORAGE ACCESS SUITE

Gladinet's suite of solutions facilitates seamless access, aggregation, synchronization and backup to cloud storage. Most cloud storage services require access through a RESTful API. As a result, legacy applications are unable to access the cloud and new applications must be developed. Gladinet's products provide connectivity to the cloud for existing applications using existing protocols. In other words, many existing applications, like SQL Server, do not know how to talk to a cloud storage service but they do know how to talk to a local disk or network share. Since Gladinet makes cloud storage accessible through a local disk or network share, products like SQL Server can use cloud storage without requiring any special customization.

Gladinet's access platform helps to address the primary barriers to cloud storage adoption, including:

- **Usability** – Files in the cloud are exactly as accessible as they would be on a local disk or network share. All files on Gladinet instances are available from any web browser, even on an iPad, iPhone, or Android device.
- **Data Ownership** – Data can easily be replicated to multiple providers or moved between providers giving users more control of their data.
- **Privacy** – Gladinet provides the assurance that data stored in the cloud is protected during transmission and while stored in the cloud.
- **Reliability**- The ease of duplication across multiple service providers can mitigate risks related to reliability.
- **Flexibility** – Gladinet's solutions are developed to operate over any mix of cloud storage infrastructures, enabling seamless integration into existing systems.

If you have any questions or problems with Gladinet's platform, please contact our Helpdesk via support@gladinet.com. More information is also available from the company website at <http://www.gladinet.com>.

PRODUCT OVERVIEWS

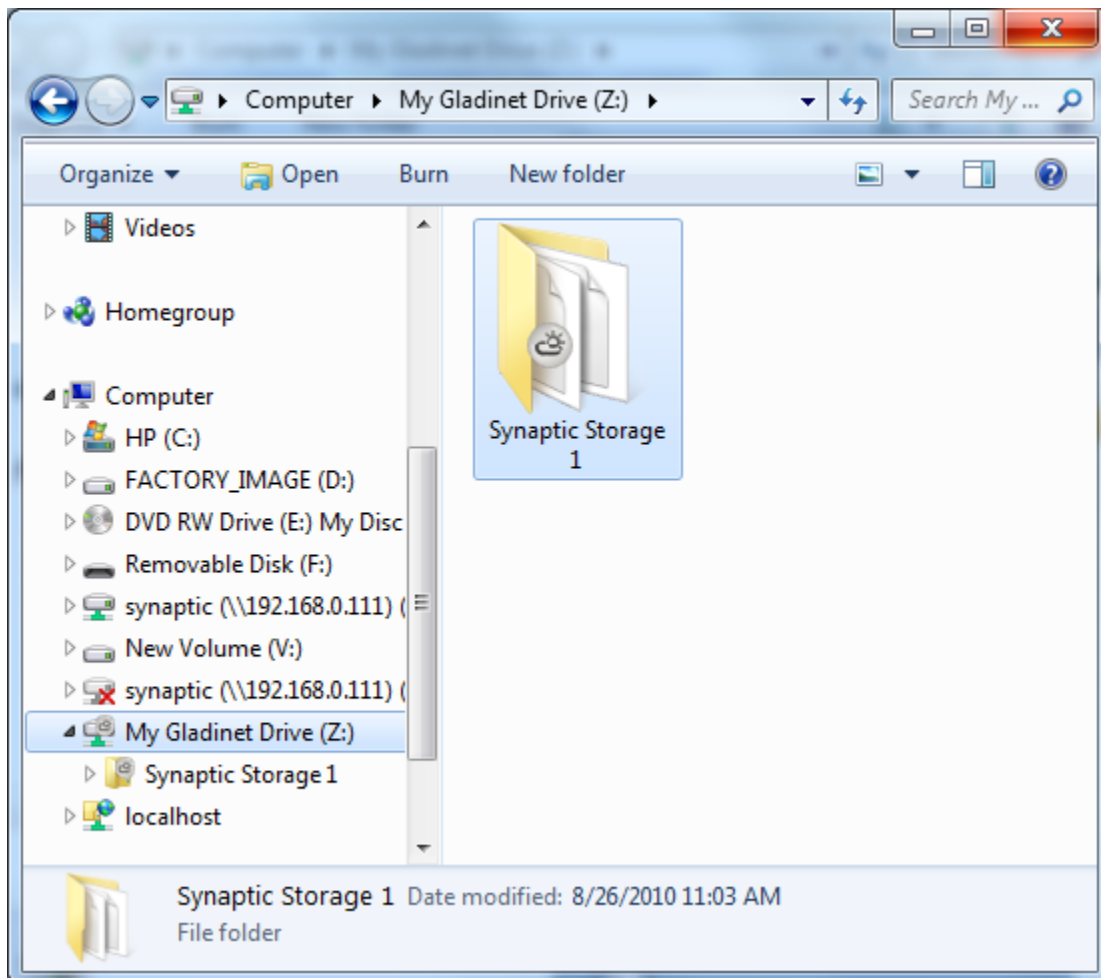
The Gladinet Access Suite consists of four products: **Cloud Desktop**, **Cloud AFS**, **Cloud Backup**, and **Cloud Space**.

Gladinet Cloud Desktop (GCD) is a desktop application. It has three main functionalities:

- Map a network drive to cloud storage for easy access.
- Backup functionality for simple backup tasks to the cloud storage
- Cloud storage based 2-way synchronization

Figure 1 shows how a folder is created for each cloud storage service. These cloud storage folders can be manipulated exactly as if they were folders on the local disk. The same is true for the files within them. For example, dragging a file into the folder labeled “Cloud Storage” would cause that file to be uploaded to AT&T Cloud Storage.

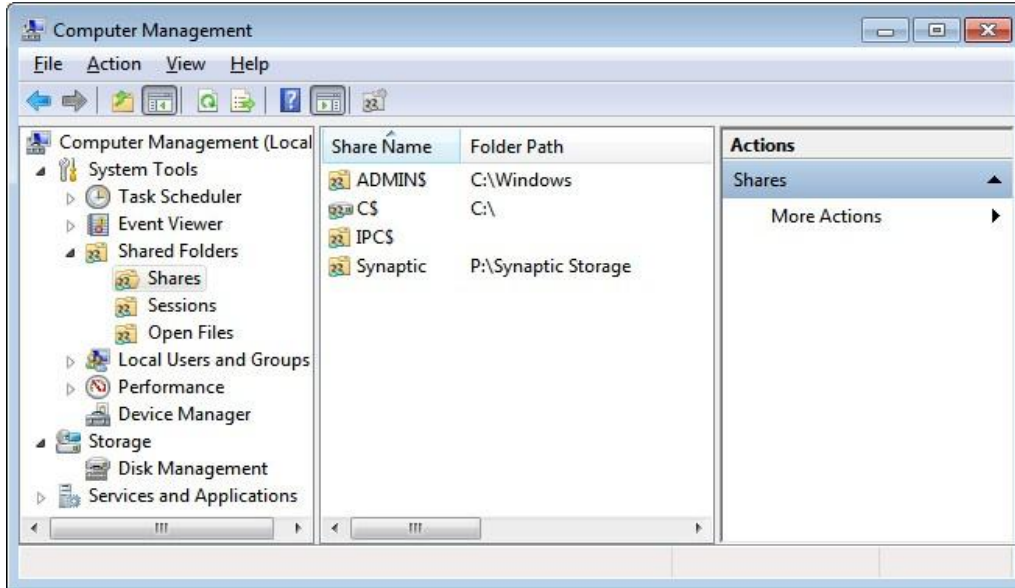
Figure 1 : Gladinet Cloud Desktop's Network Drive



Gladinet Cloud AFS creates a gateway to cloud storage. It allows cloud storage to be mounted as a local disk on a file server. The contents of that disk can then be published as a network share that is accessible via CIFS or NFS.

Figure 2 shows an example of this with AT&T Cloud Storage.

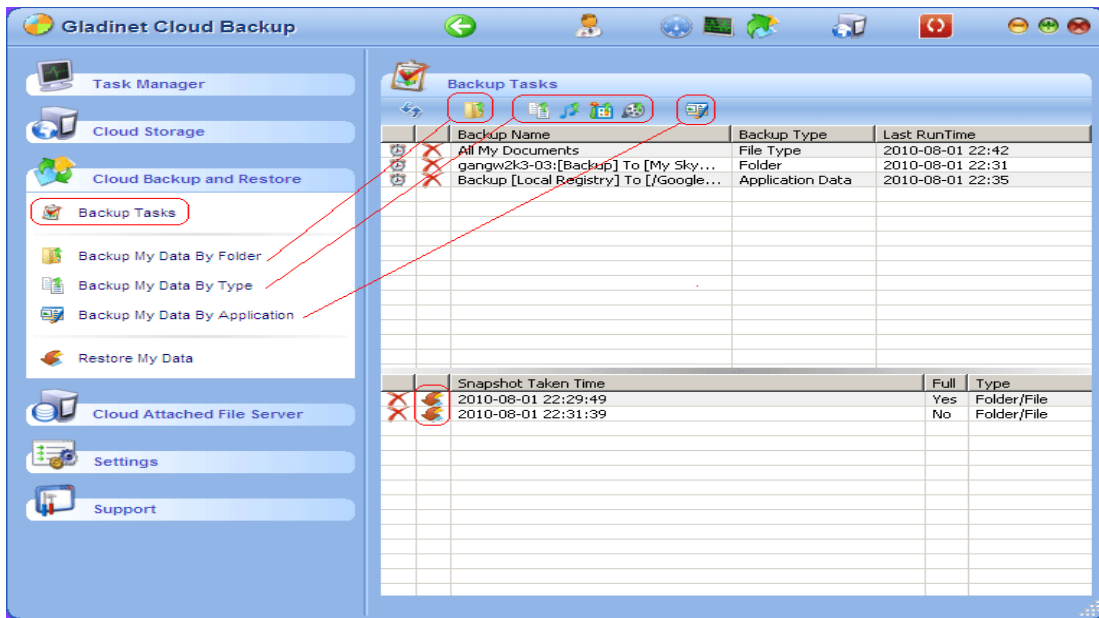
Figure 2: Gladinet Cloud AFS Published Share



Here we see that Cloud Storage has been attached as a folder on a local disk which can now be published as a network share.

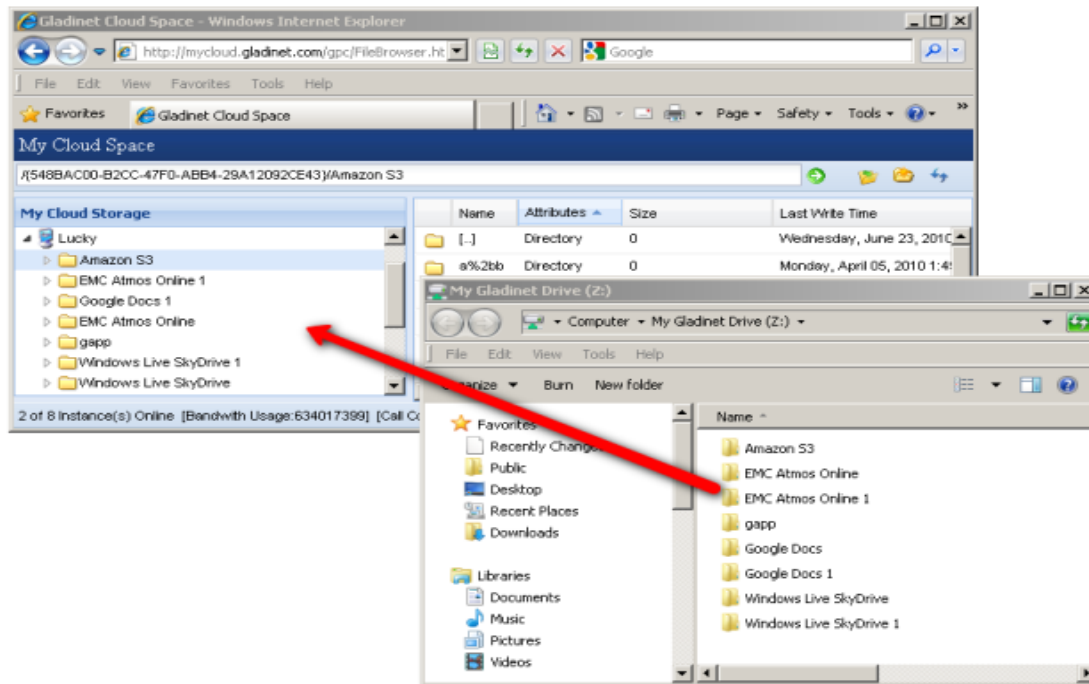
Gladinet Cloud Backup allows the backup of folders and files from Windows servers and clients. It allows the backup of SQL Server, Exchange Server and other live applications data to the cloud storage service of your choice. It supports full and incremental backups with the ability to easily recover data to any machine.

Figure 3: Gladinet Cloud Backup Management Console



Gladinet Cloud Space ties these offerings together by creating a virtual, personal cloud to which Gladinet instances can be added. All files on each instance then become accessible through any web browser, including on an iPad, iPhone or Android device.

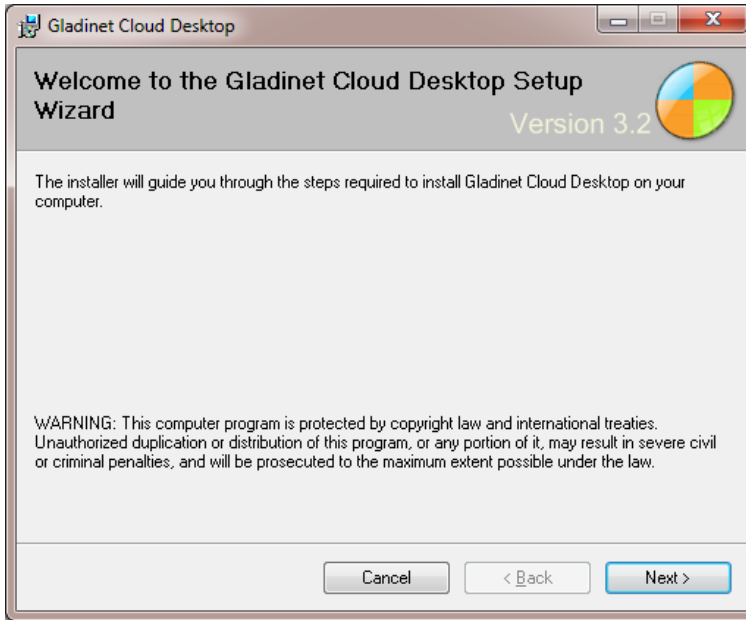
Figure 3: Gladinet Cloud Space



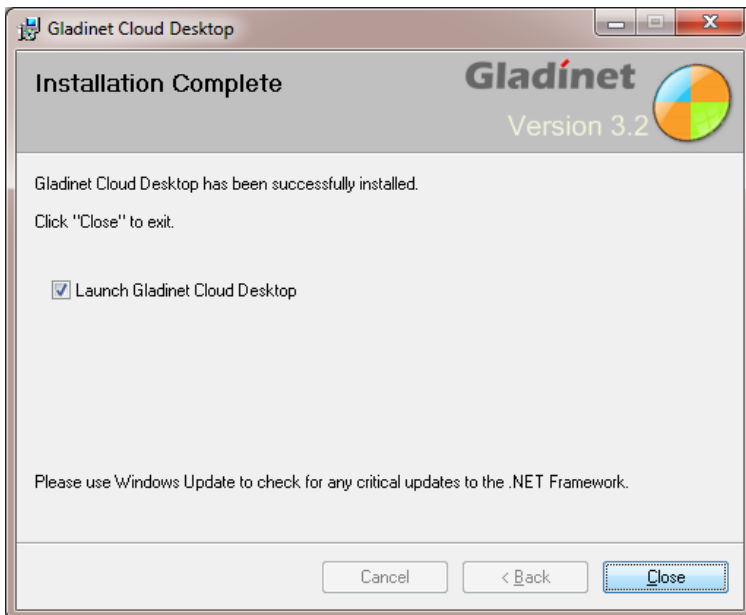
Gladinet Cloud Desktop

Installing Gladinet Cloud Desktop

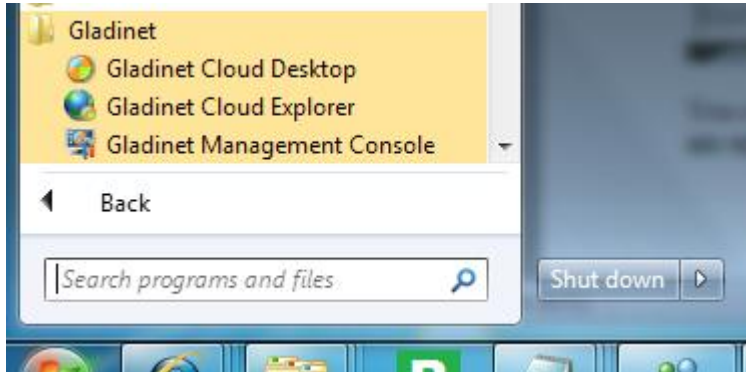
First download the GCD MSI package from the [Gladinet download page](#). This implies you are using a Microsoft Windows client and not Mac, Linux, UNIX, BSD, etc. If your Windows OS is 32-bit, you need to download the 32-bit MSI package. If your Windows OS is 64-bit, you need to download 64-bit MSI package. Double click the MSI package to start the installation. In the Setup Gladinet Cloud Desktop screen, you can customize the installation if necessary.



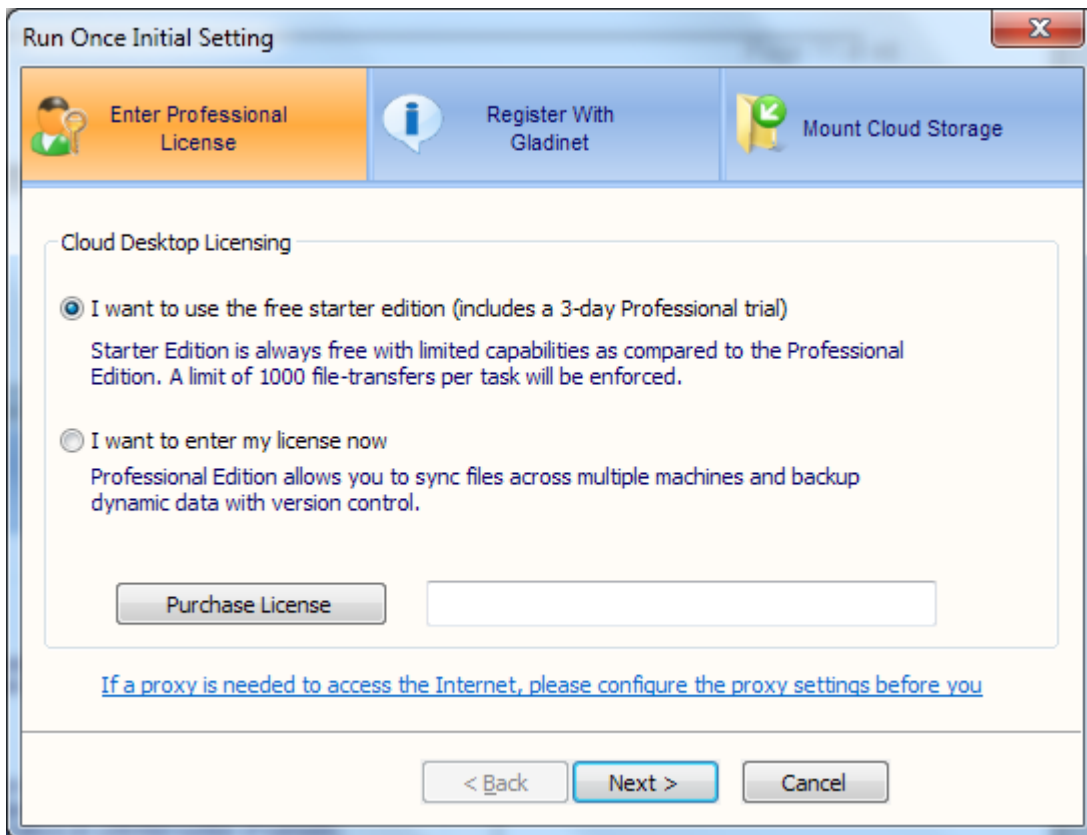
At the end of the installation, you can choose to start GCD immediately.



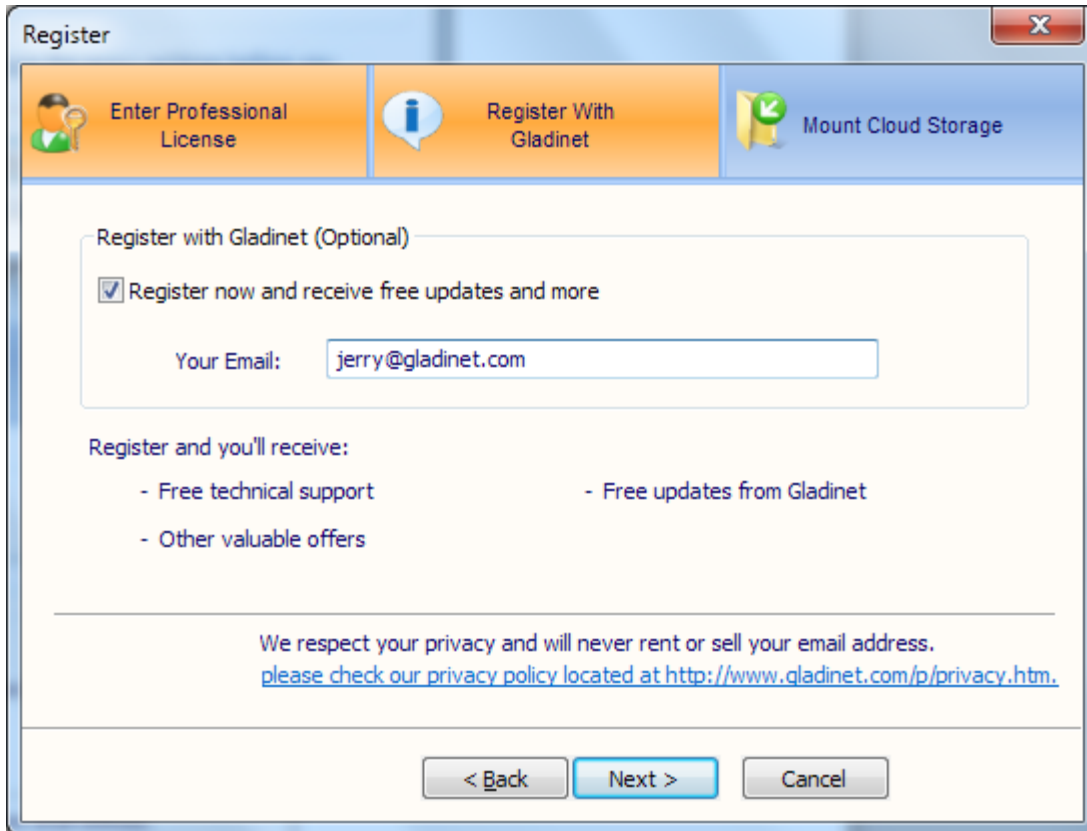
You may also start Gladinet from the shortcut created (if specified during the installation) or from the Windows Start menu.



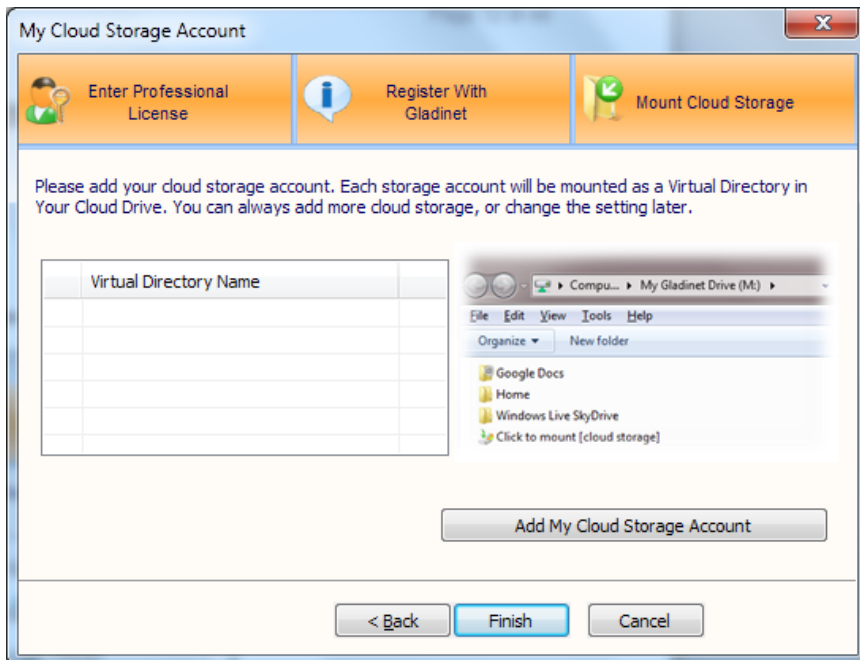
You can use Gladinet immediately. However, it is better if you logoff and re-login to windows so that the new registry settings are applied. Gladinet's initial settings will appear the first time that Gladinet is started.



Registration is recommended, since there are benefits for registered users.



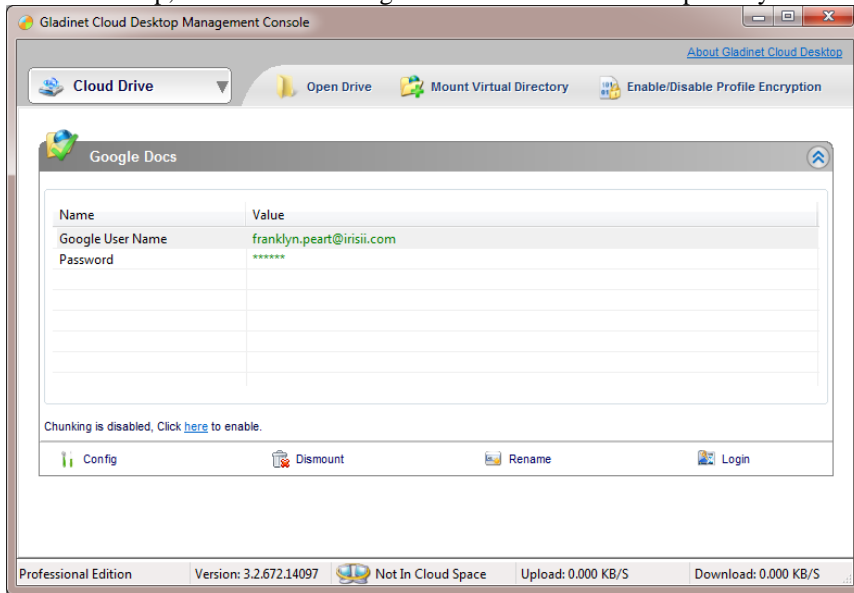
The next wizard page will ask you to mount cloud storage. You can do it now or skip and do it later.



Gladinet will store all mounted storage to a mapped drive called My Gladinet Drive. You can select the drive letter. Please make sure there are no conflicts with existing mapped drives. The drive letter can be changed later in the Settings Manager.

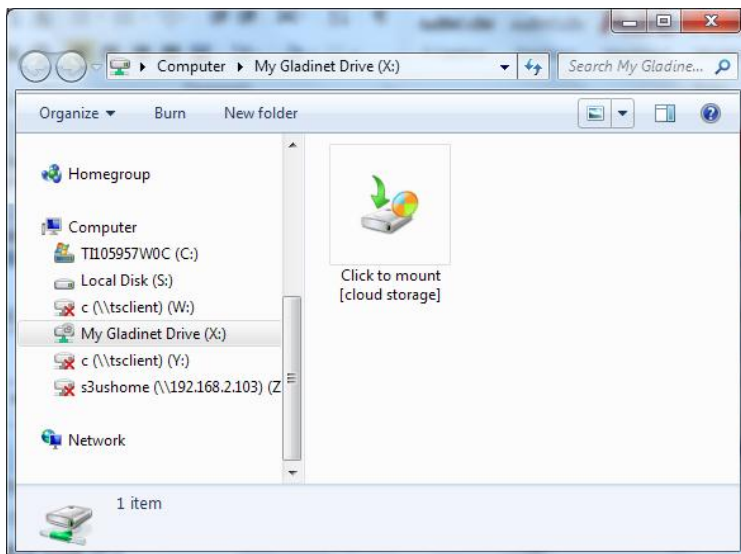
Gladinet maintains a cache between local files and cloud storage services. The cache folder should be placed on a drive with sufficient space. Gladinet stores all your cloud service credentials in a local profile. So, by default, there is no need to login to GCD during startup. The profile is only protected by your Windows logon. So, whoever logs in to Windows can start GCD and access your cloud storage. However, if the profile is encrypted, GCD will prompt for a password during startup. Thus the profile can be secured by both a Gladinet password and your Windows credentials. Please choose a password that is easy for you to remember or store in a safe place, since there is no way to retrieve it later.

As the last step, the Gladinet Management Console will show up with your selected cloud drive.

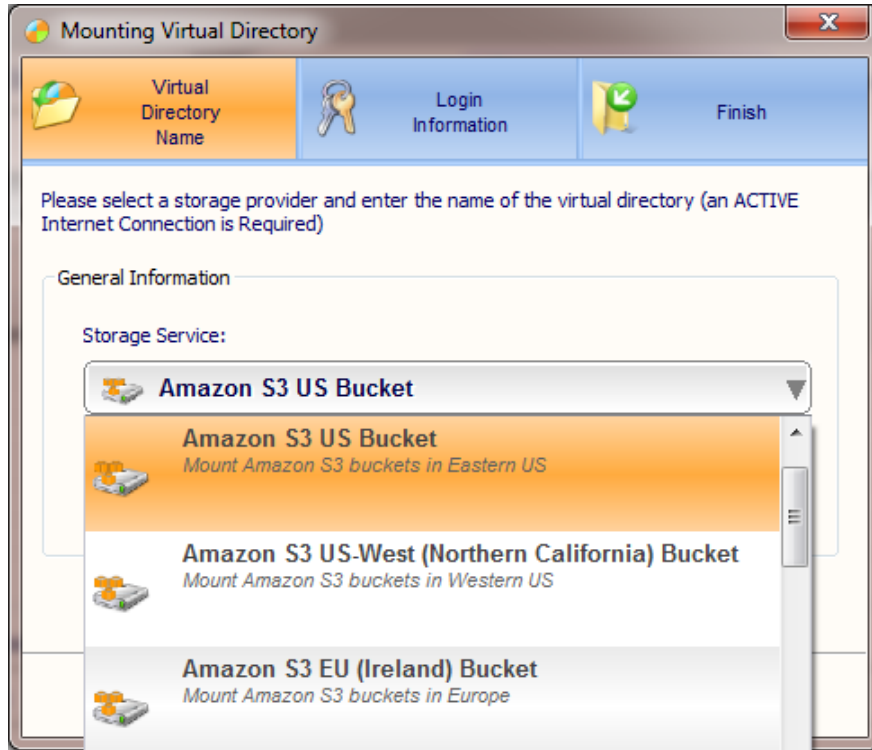


Connecting to the Cloud

You can connect to the cloud storage of your choice. After the installation, you can initiate the mount process from the Gladinet Management Console. From the screen shown in the diagram above, click on “Mount Virtual Directory”. You may also use the “click-to-mount” icon in your Gladinet Drive to mount Cloud Storage.

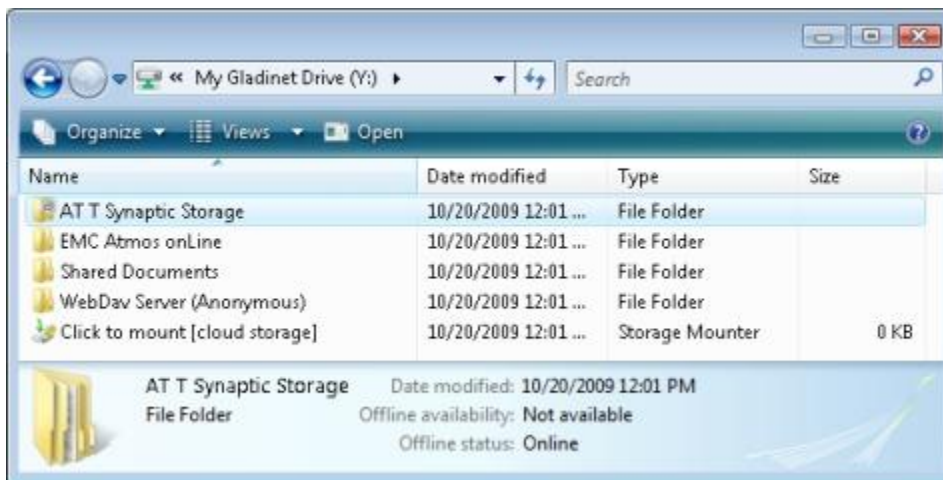


When the mount virtual directory dialog appears, follow the wizard to mount cloud storage.

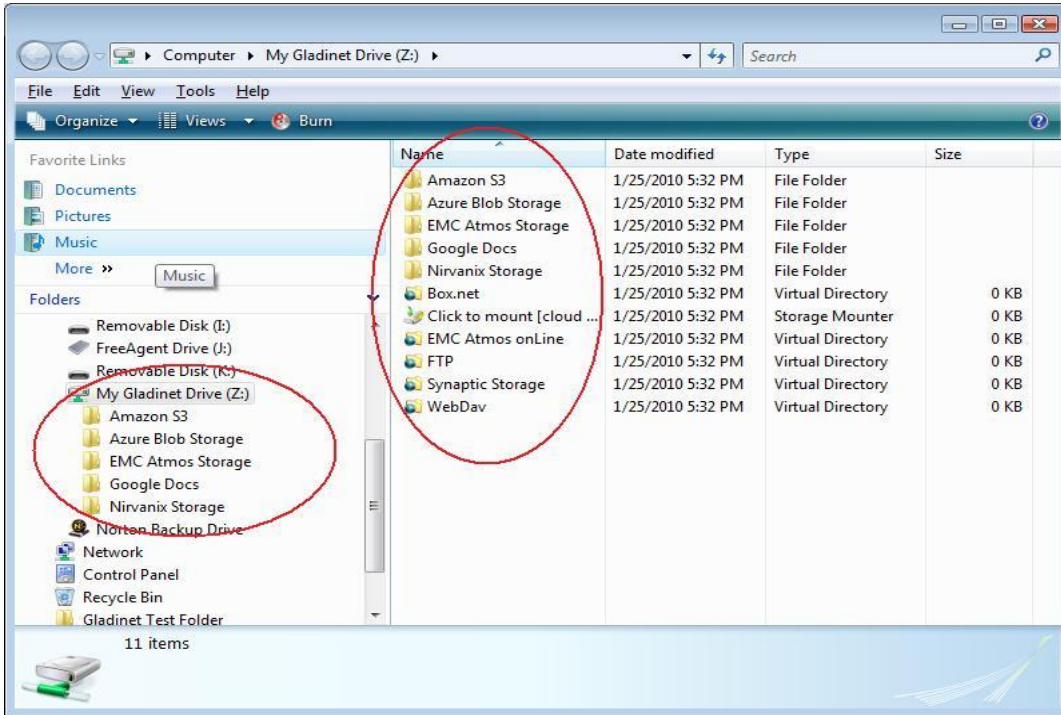


Transferring Files

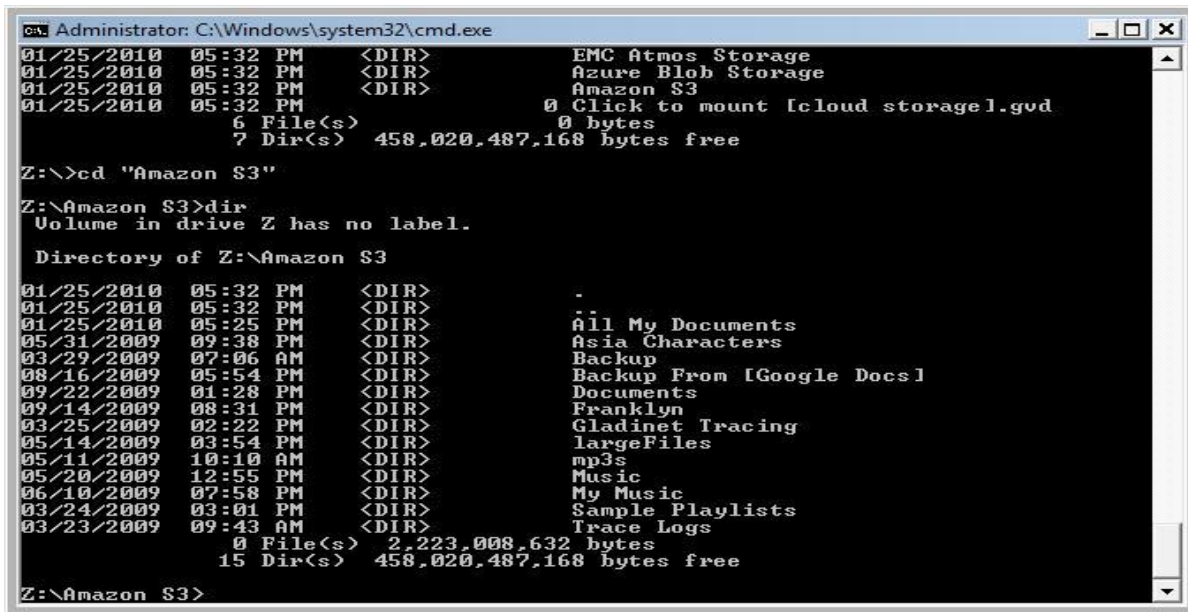
Now you can use the Cloud Storage as if it were a Virtual Drive or Folder. Simply drag and drop to copy local documents to the Cloud Storage.



Gladinet Cloud Desktop makes it very easy to move data into cloud storage or extract data from cloud storage. It also makes it trivial to migrate data from one cloud storage service provider to another. This is accomplished by turning Windows Explorer into a cloud storage portal, and treating each cloud storage service as a folder on your desktop.

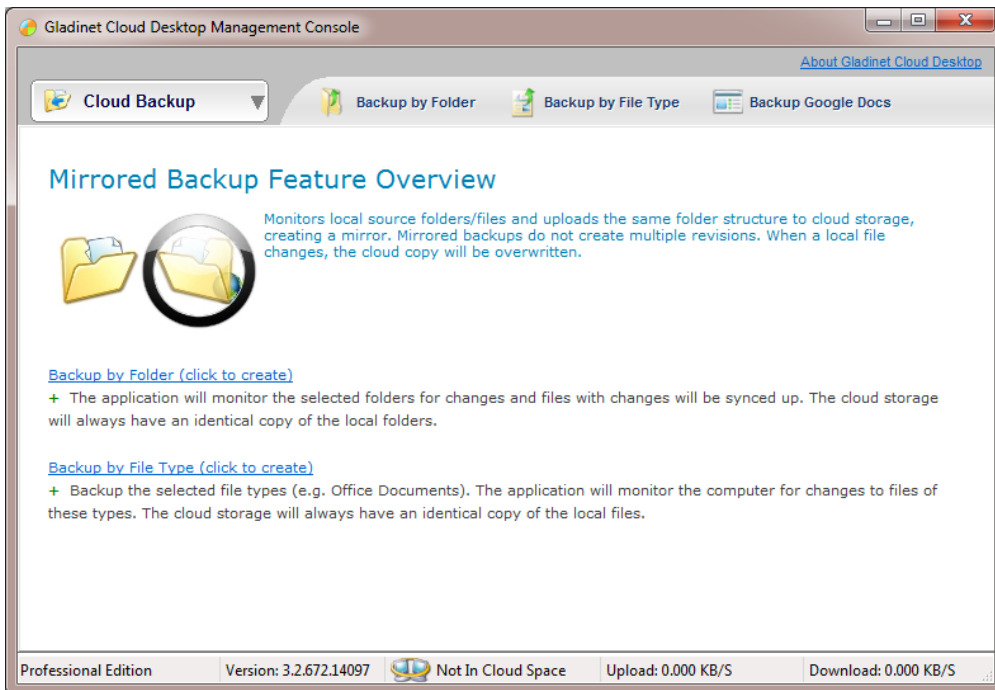
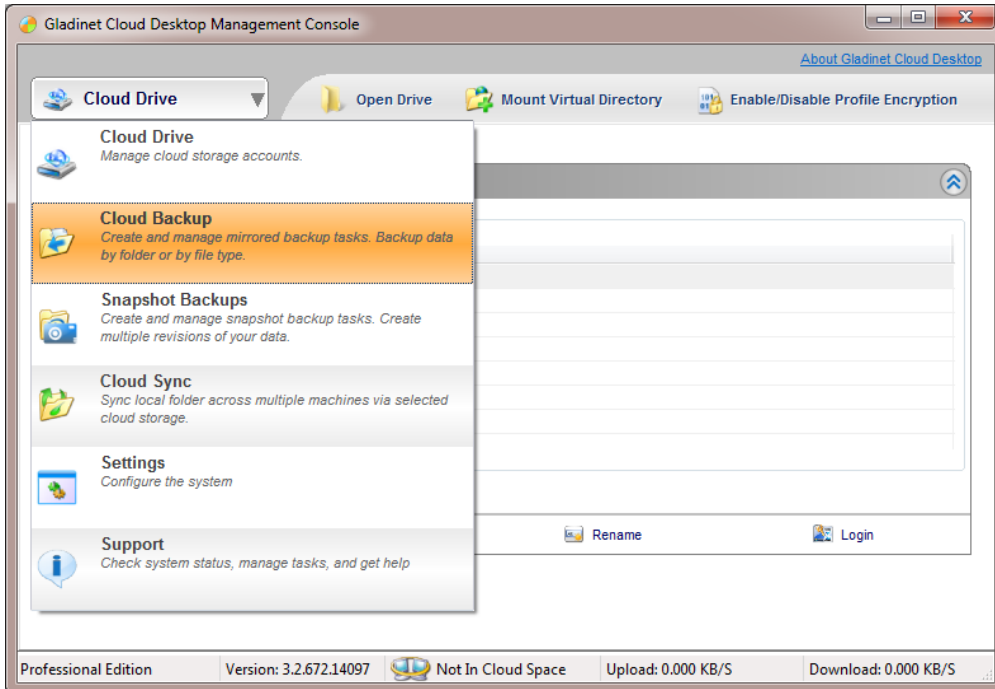


As a result, data can be moved into and out of cloud storage in the same manner as any other folder on your desktop. The entire contents of your Amazon S3 account can be moved to Azure Blob storage or Google Docs by dragging the Amazon S3 folder into the target folder. Or, the entire contents of your C drive can be moved to EMC Atmos storage by dragging C to the Atmos folder. If you double click on a word document in Azure, word is automatically launched and the document can be edited in place on your desktop and the changes will be reflected in the cloud. Gladinet Cloud Desktop supports complete file system integration with Windows. Even the command prompt works:



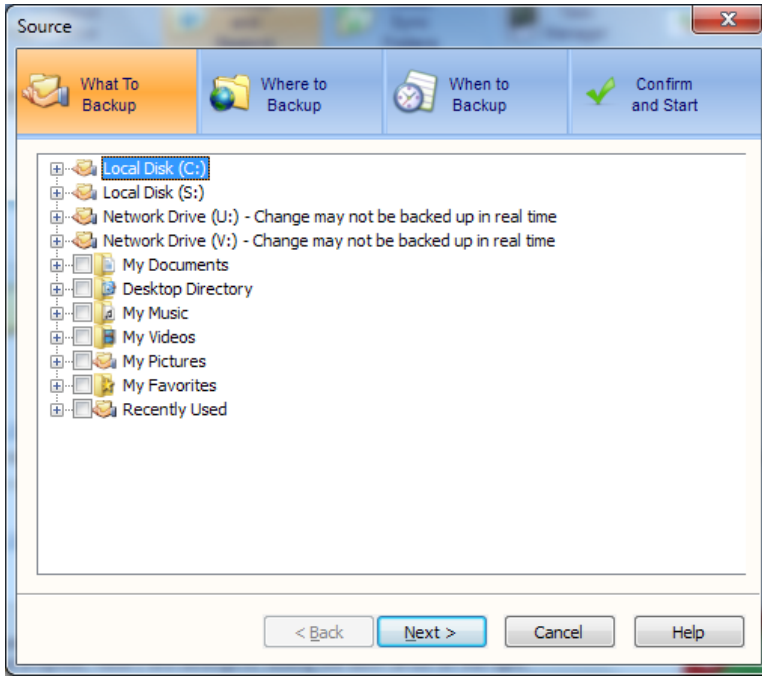
Mirror Backup

Mirror backup monitors local source folders/files and uploads the same folder structure to cloud storage, creating a mirror. Mirrored backups do not create multiple revisions. When a local file changes, the cloud copy will be overwritten.



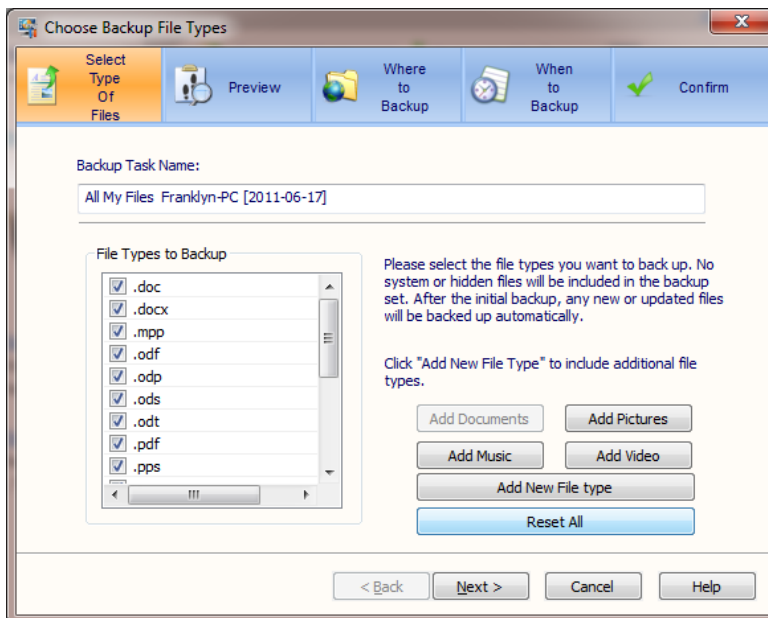
Backup by Folder

The application will monitor the selected folders for changes and files with changes will be synced up. The cloud storage will always have an identical copy of the local folders.



Backup by File Type

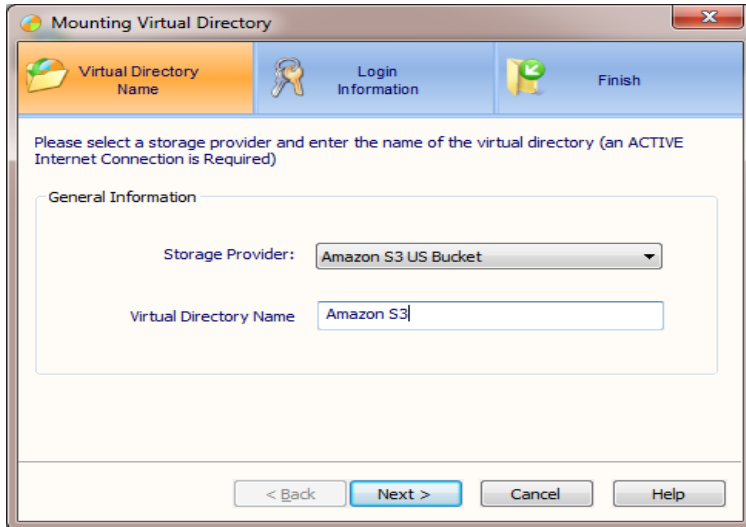
Backup the selected file types (e.g. Office Documents). The application will monitor the computer for changes to files of these types. The cloud storage will always have an identical copy of the local files.



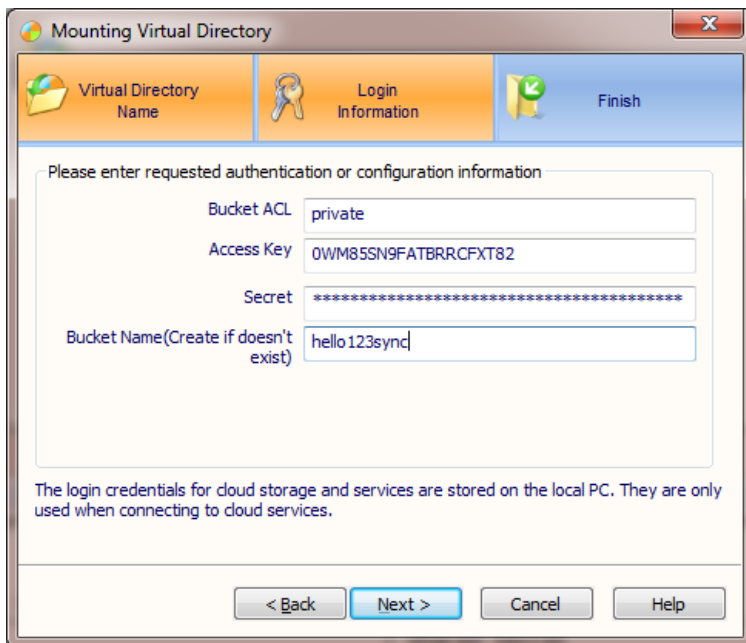
Multi-PC synchronization

A Cloud Sync Folder allows you to automatically keep your files in sync across multiple computers. Files placed here are instantly synchronized to your other computers that have the same Cloud Sync Folder enabled. Since the Cloud Sync Folder synchronizes with your cloud storage first, the folders and files under it will still be available to your other computers even if this computer goes offline after it has synchronized with your cloud storage.

To create a Cloud Sync Folder, we must first mount the cloud storage we intend to use. In this example, we have chosen to create a sync folder using our Amazon S3 account.



This wizard was launched from the Gladinet Management Console by selecting the Cloud Drive panel and then the mount virtual directory icon. The next step is to provide credentials:

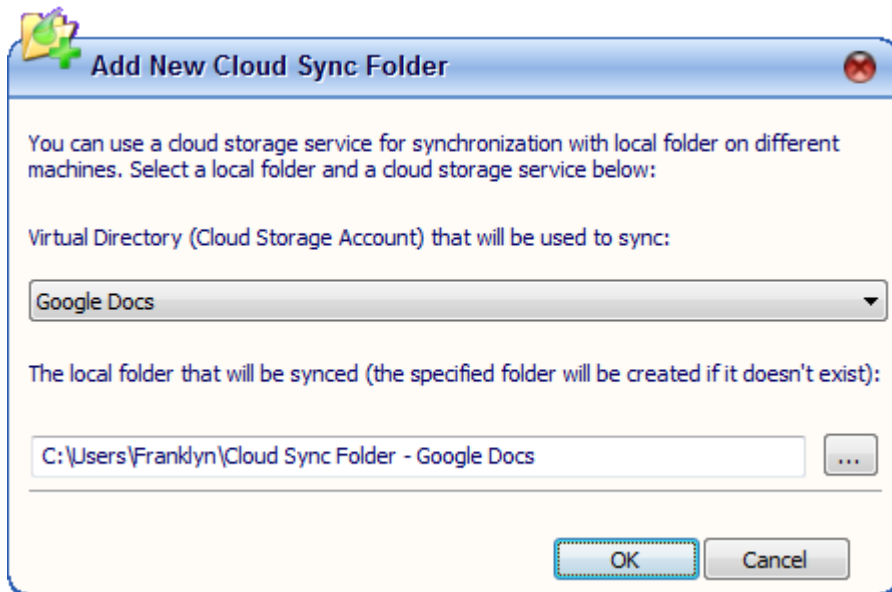


Make sure to use the same access key, secret and bucket name on each machine that you want to include in the sync.

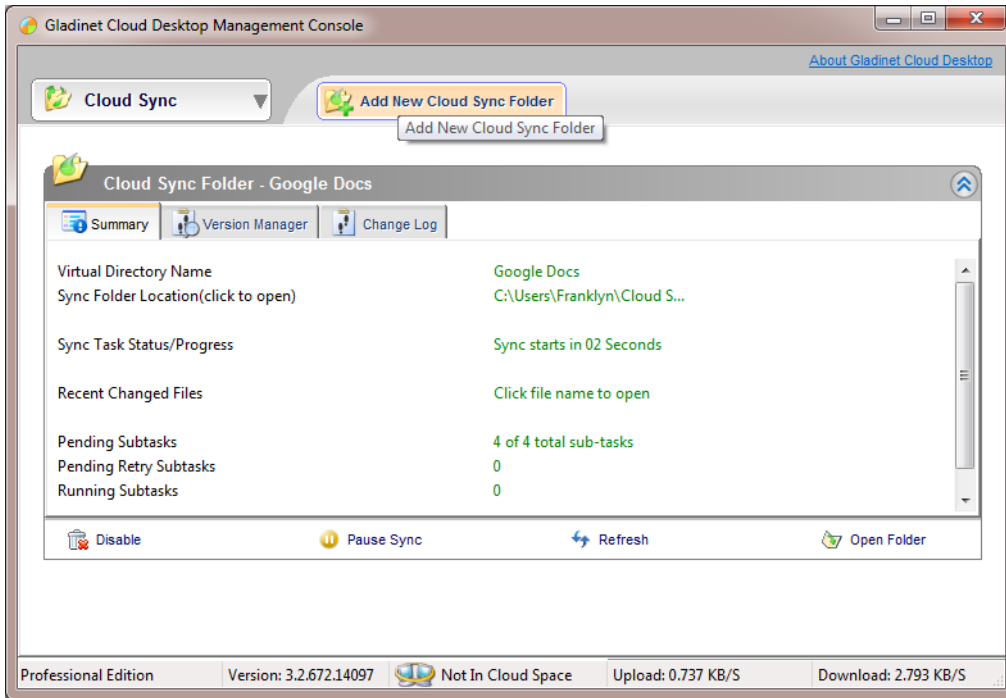
Once this has been done, select Cloud Sync from the dropdown in the management console



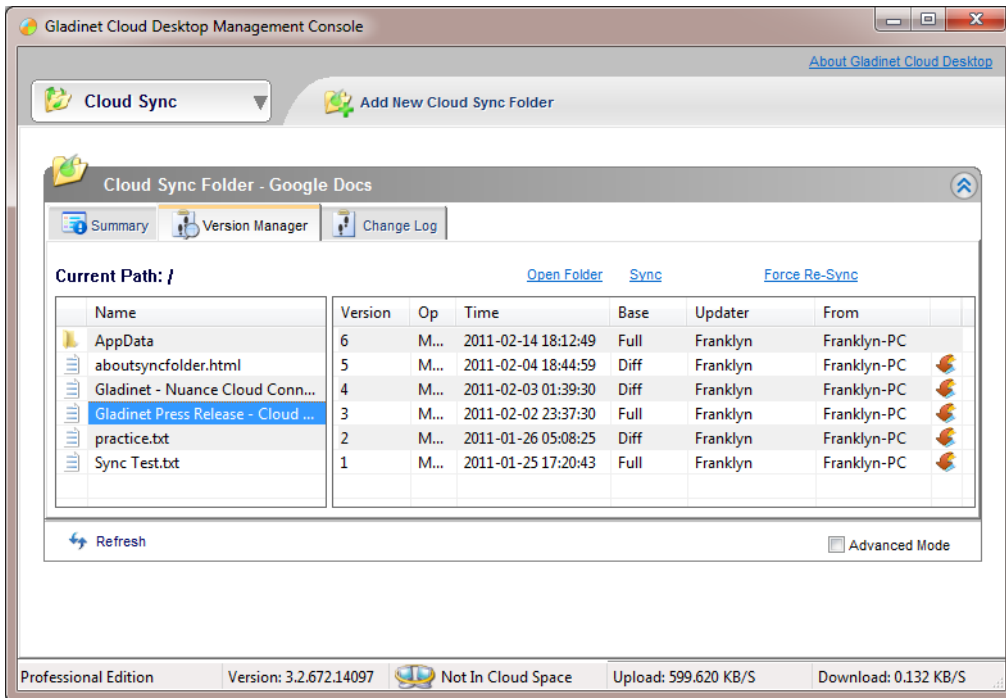
Then click on “Add a Cloud Sync Folder” and follow the wizard steps:



Note that a professional edition license is required for this feature. A sync folder will now be available from your desktop. Anything you place into that folder will be placed into cloud storage and sent to the sync folders on any machinr that has a sync folder enabled for this account on this machine. Once the folder has been created by checking the enable box and clicking on finish, more details can be found on the cloud sync panel of the management console.



Here you can look at the overall summary of synchronization activities, use the version manager to revert to any previous version of a synchronized file, or use the change log to view a comprehensive list of all the files that have been changed.



In the settings panel, it is also possible to change the polling so the GCD will check for changes more or less frequently.

Now that we have setup our sync folder, let's see what it looks like and how we can use it. On the desktop, we can see that there is a shortcut called "Cloud Sync Folder – Amazon S3". Anything placed into this folder will be synchronised with all other machines that have configured a sync folder. This activity may create one or more tasks that can be monitored and managed from the task manager. If a file in the sync folder is being updated by more than one person at the same time, the software will create multiple versions of the file and the correct version must be manually submitted or edited.

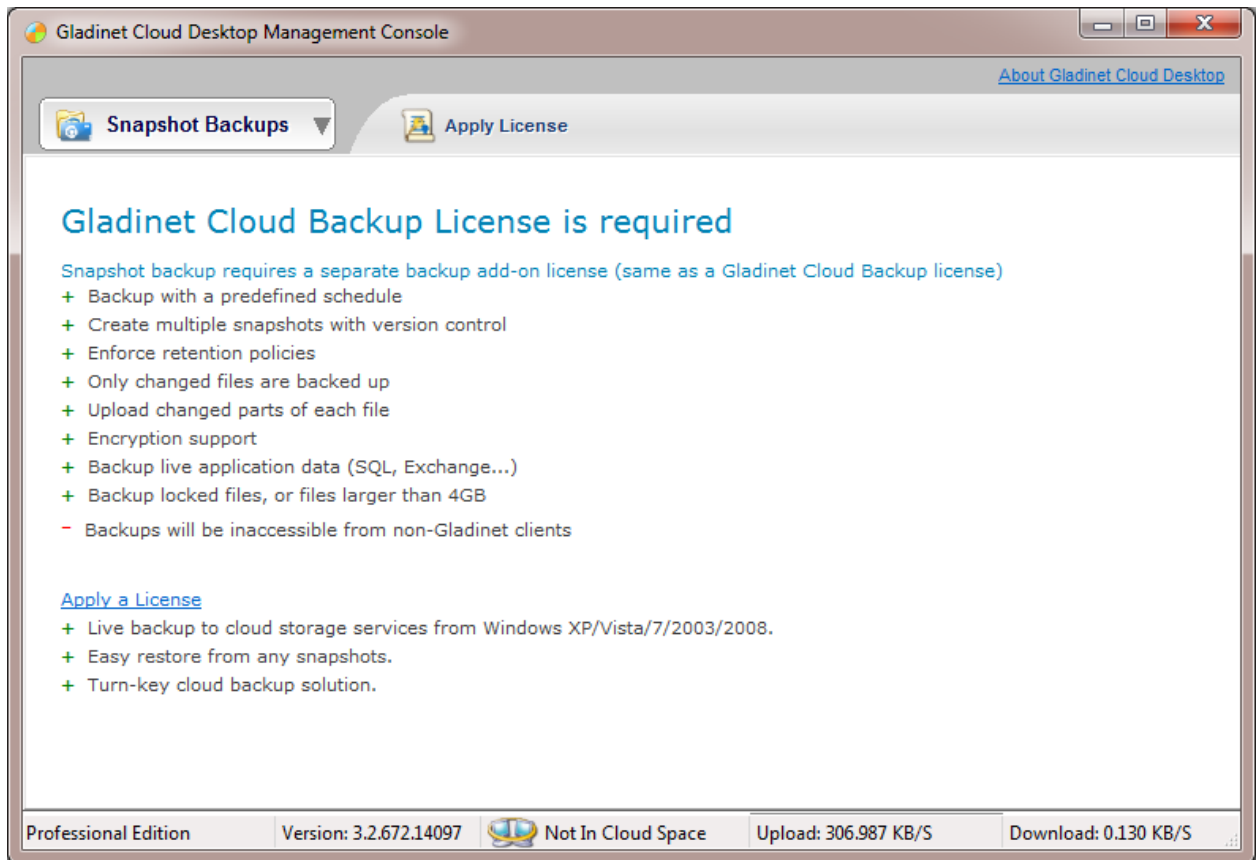
Snapshot Backup

Snapshot backups allow the backup of data that is in use or changing. A mirror backup just reflects the latest version of a file to the cloud and does not allow reversion to any older versions. A mirror backup is also limited to static files that are not locked or in use. In contrast, a snapshot allows the backup of dynamic data, like email and databases. It can even backup your registry or device drivers. This support is a direct result of integration with the Microsoft Volume Shadow Copy Service. Any application that is integrated with this service can be backed up by GCD.

Snapshot backup also requires a separate license and includes the following features and benefits:

- Backup uses a predefined schedule
- Creates multiple snapshots with version control
- Enforces retention policies
- Only the changed files are backed up after the initial upload is complete
- Uploads only the changed parts of each file
- Encryption support
- Backup live application data (SQL, Exchange...)
- Backup locked files, or files larger than 4GB

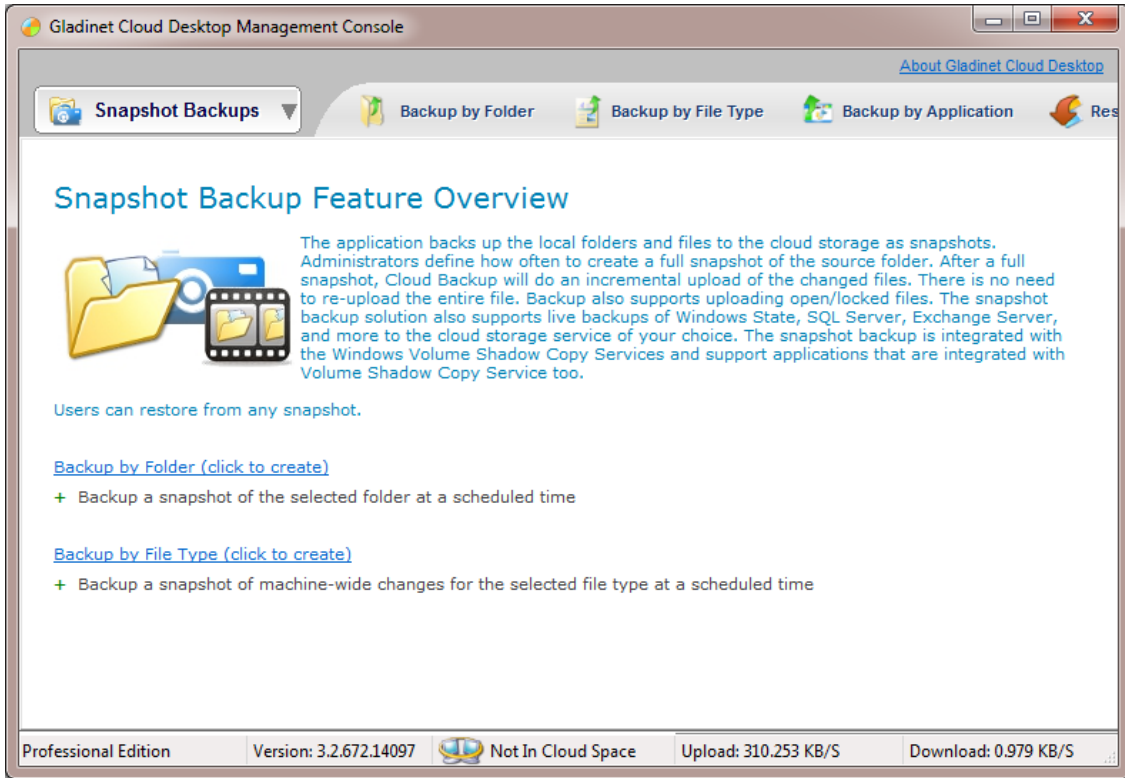
As an example, let's walk through the creation of a snapshot backup. First select the Backup and Restore panel in the management console.



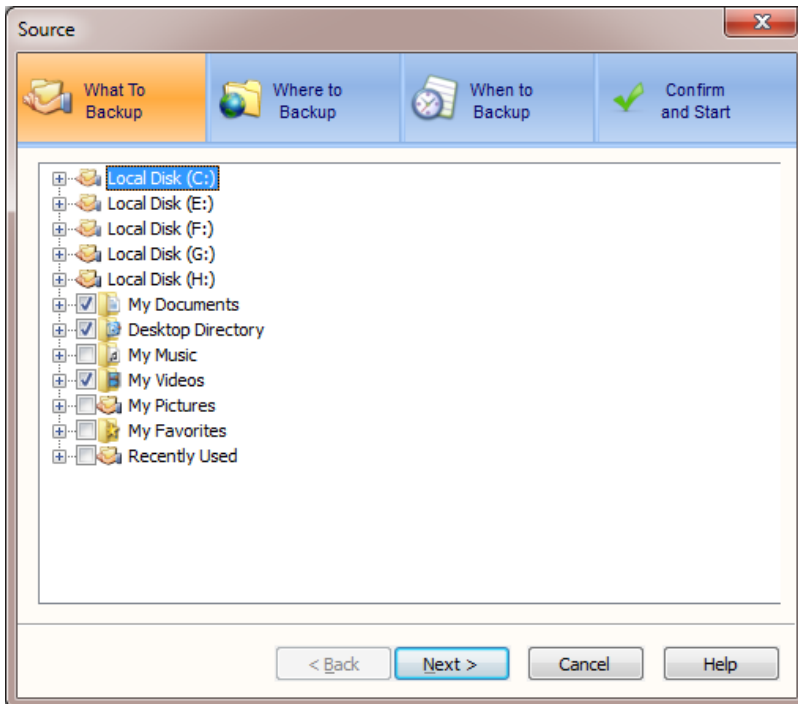
This is the first time we've configured a snapshot backup so we need to provide the license information:



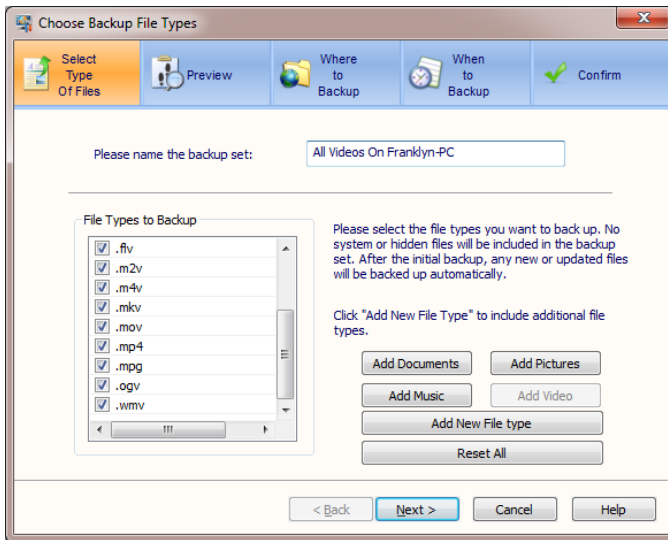
Next you will see the following screen. Here you will note three different ways to specify the backup set. You can backup files by folder, by file type, or by application.



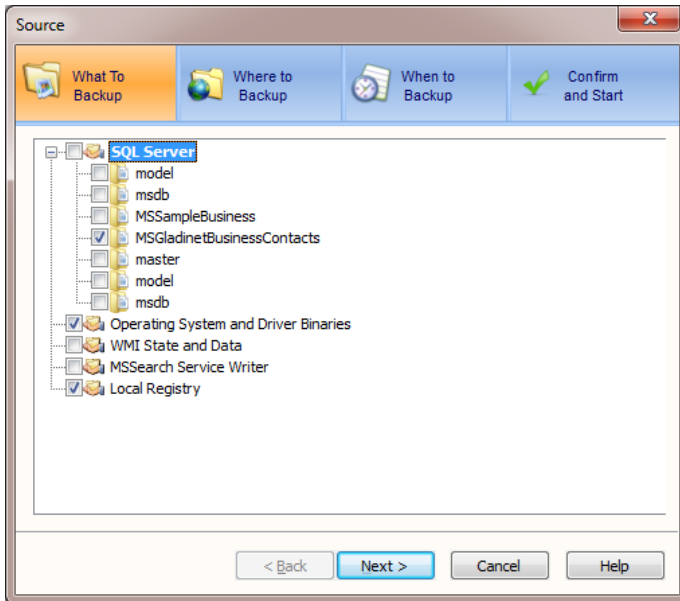
Selecting by folder simply means that a set of folders will be selected and everything in those folders will be backed. Whenever a change occurs in one of the folders, the change will also be backed up.



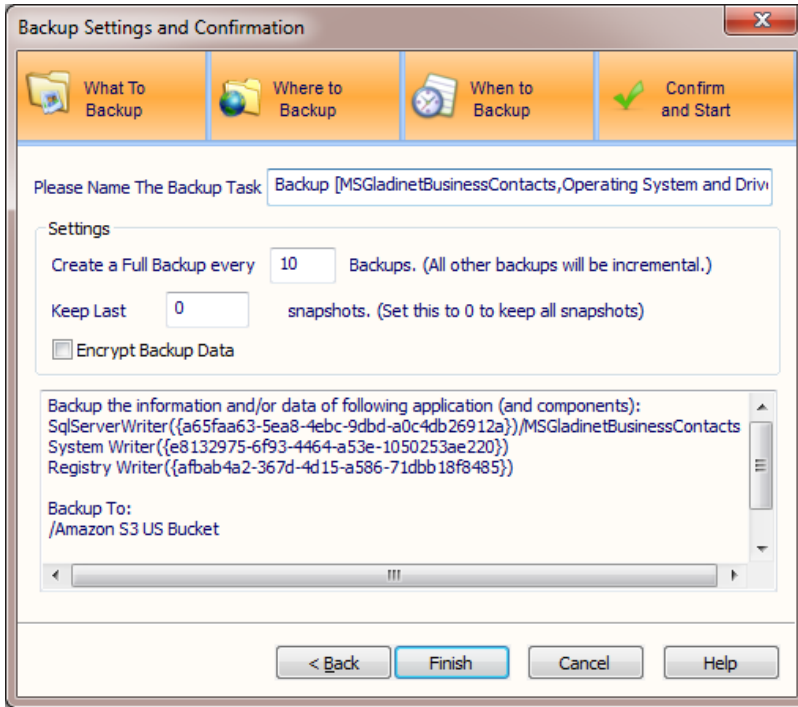
Backing up by file type is similar except that the entire system will be scanned for files with the matching type.



And finally, backup by application allows dynamic data to be backed up.

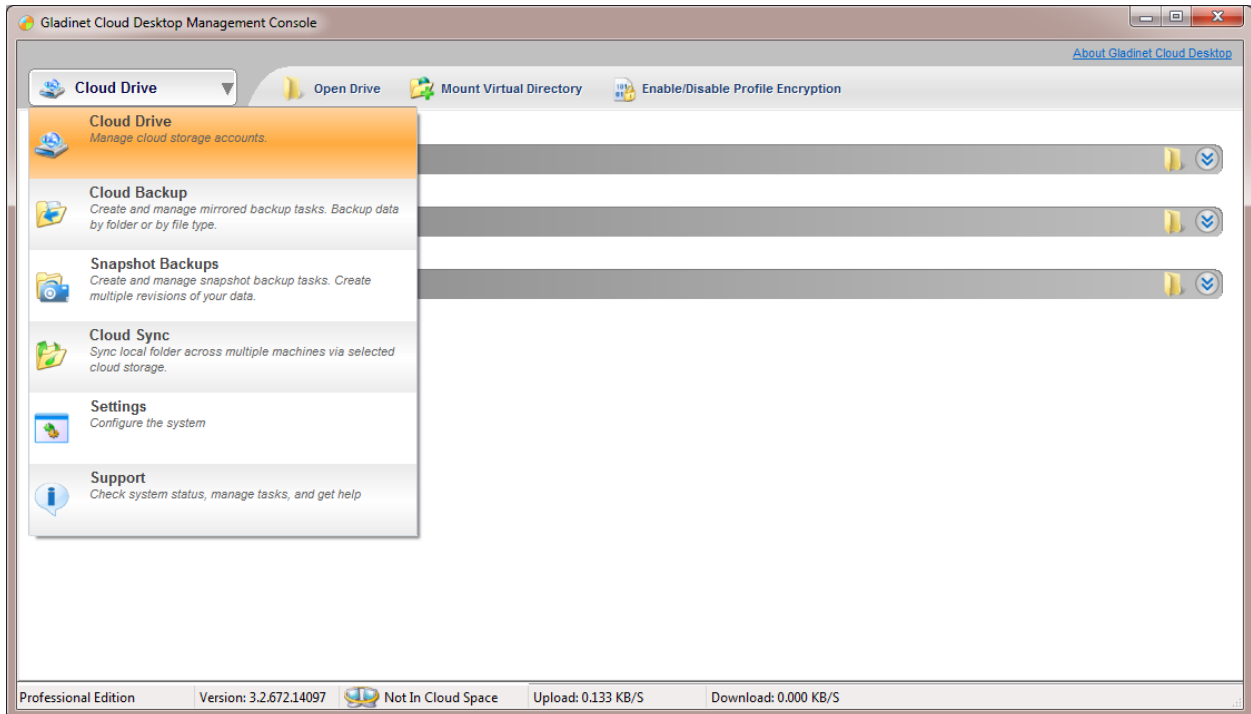


The wizard will display all installed applications that are supported. Gladinet supports anything that has a VSS writer so most Windows applications are covered. The machine where this screenshot was taken didn't have very many applications installed besides SQL Server. Once the backup set has been specified, the wizard allows you to specify how often a full backup should be performed. All others will be incremental. It also lets you specify how many snapshots should be kept and whether the backup should be encrypted.



Gladinet Cloud Desktop Management Console

Gladinet Cloud Desktop Management Console (GMC) is the central location to manage Gladinet Cloud Desktop. In 3.2, the Management Console has been revised, to make it easier to work with Gladinet.

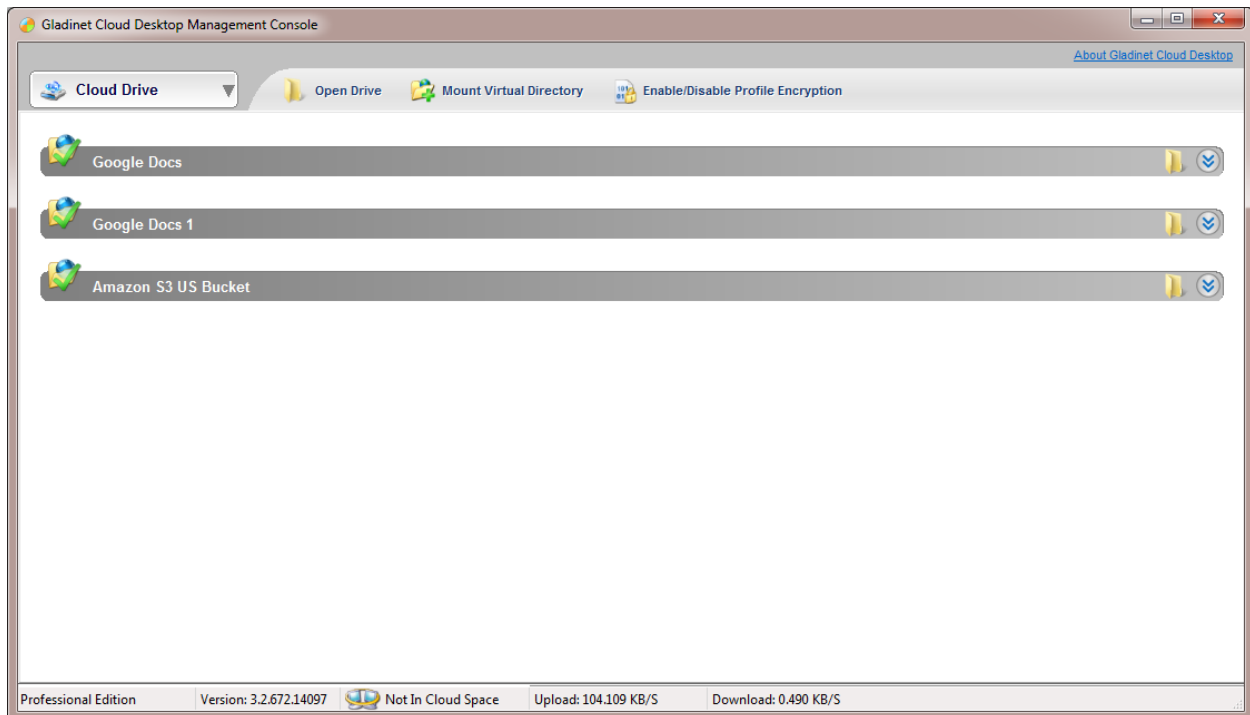


There are 6 groups of management functions.

- Cloud Drive:
 - Show all cloud storage mounted in Gladinet. Can mount new cloud storage, dismount existing storage, setup compressed folders and encrypted folders.
- Cloud Backup:
 - Manage mirrored backup and restore tasks in Gladinet
- Snapshot Backup:
 - Create multiple revisions of data by creating and managing snapshot backup tasks.
- Cloud Sync Folders:
 - Manage Cloud Sync Folders, a new feature in release 3.0. Can enable Cloud Sync Folders and manage file version in the cloud sync folders.
- Setting:
 - Customize Gladinet with all the settings.
- Support:
 - Access Audit Trace and related featured articles.

Cloud Drive

Virtual Directory



When user mounts cloud storage in Gladinet, it becomes a folder in the Gladinet drive. The folder is called a 'Virtual Directory'. The Cloud Drive section in GMC manages these virtual directories.

Virtual Directory Panel lists all the virtual directories mounted. The icon at the beginning is a status indicator.

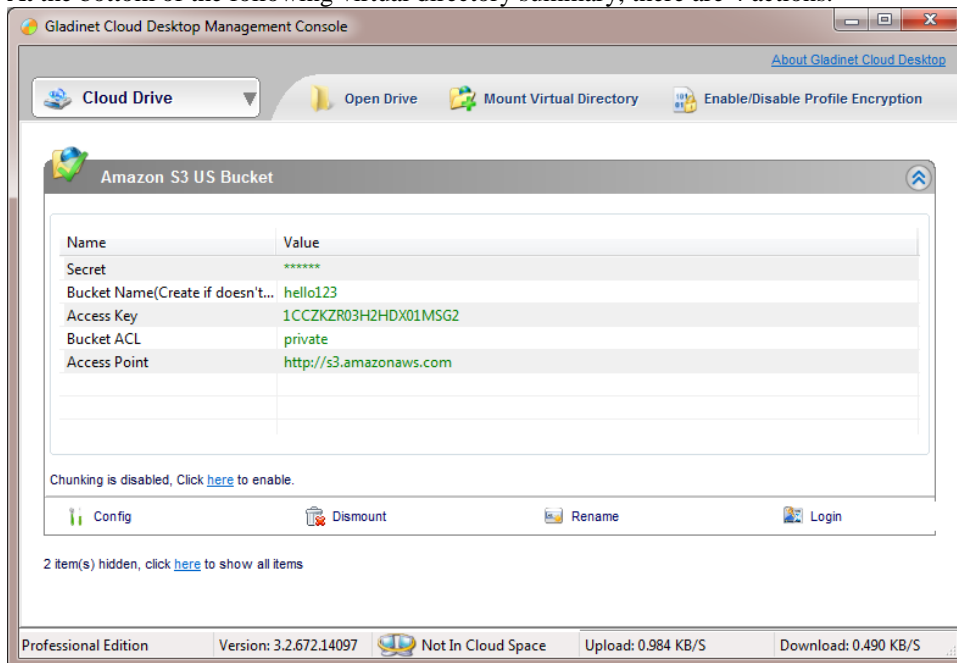


Green check mark means the virtual directory is OK.



Blue question mark means Gladinet either has a problem with the virtual directory, or Gladinet is connecting to the cloud service.

At the bottom of the following virtual directory summary, there are 4 actions.



- **Config:** Change the virtual directory login information. Enable/disable chunking feature and define the chunk size.
- **Dismount:** Remove the virtual directory from Gladinet.
- **Rename:** Give the virtual directory a new name. Please notice that certain features will not work after the rename. For example, Cloud Sync Folder. In that case, need to re-configure it.
- **Login:** Force Gladinet to re-connect with Cloud Service.

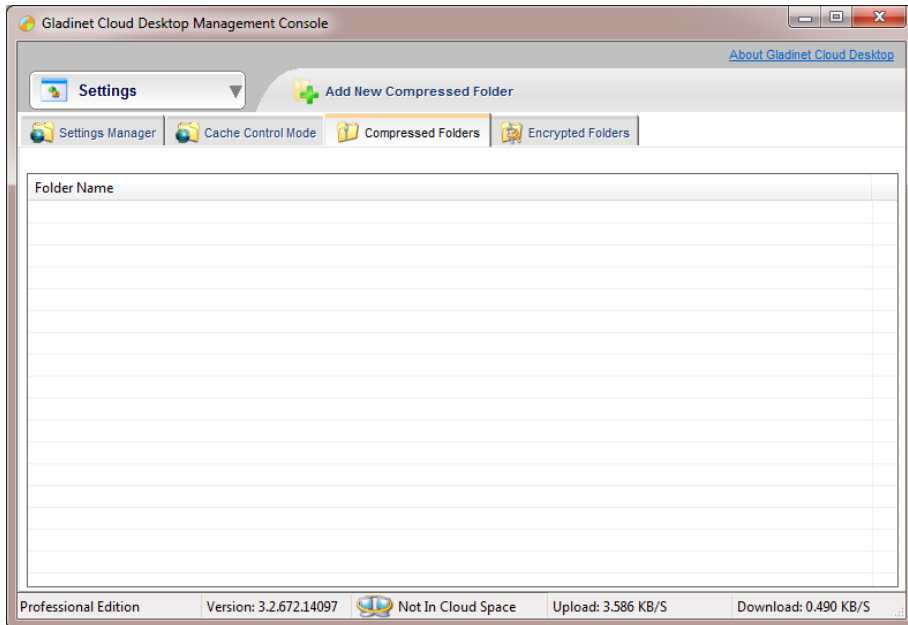
Auto Chunking

If supported by the cloud storage service provider, Gladinet can split large files into smaller chunks before uploading them. This is especially useful when the provider posts a limit on file size. It also improves transfer speed since each chunk can be uploaded simultaneously. Also, if one chunk transfer fails, Gladinet will only retry that single chunk, instead of the entire big file. In general, smaller files are much easier to upload or download.

User can enable/disable chunking here. Just follow the link on Virtual Directory Summary panel. Or they can do it with 'Config'. They can define the size for each chunk here too.

NOTICE: Once the file is chunked, it will be stored as multiple files in cloud storage. Accessing it from the storage directly, for example, from cloud storage's own web interface, will only show the stored chunks. It has to be downloaded by Gladinet client to restore to the original format.

Compressed Folders

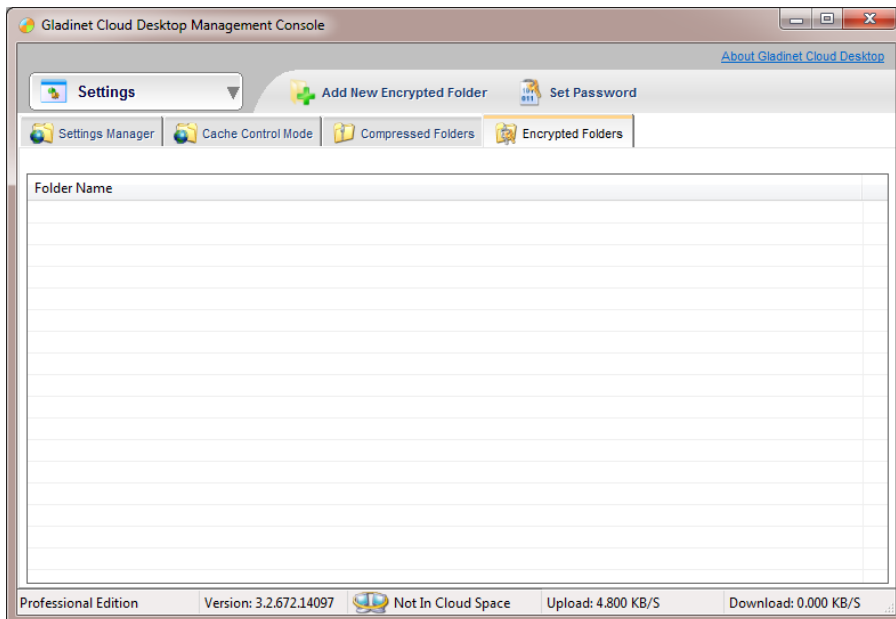


User can define a folder in cloud as a compressed folder. Once this is done, when upload files to the folder, Gladinet Cloud Desktop will compress the file first, then upload the compressed copy to the virtual directory. When downloading the file, it will be decompressed automatically.

Compression enhances data security, saves cloud storage space and accelerates transfers.

NOTICE: Once the file is compressed, it will be stored in compressed form in cloud storage. Accessing it from the storage directly, for example, from cloud storage's own Web interface, will only show the compressed version. It has to be downloaded by Gladinet to restore to the original format.

Encrypted Folders



User can define a folder in cloud as an encrypted folder. When upload files to the folder, Gladinet Cloud Desktop will encrypt the file first, with a user defined encryption key. Then upload the encrypted copy to the virtual directory. When downloading the file, it will be decrypted automatically. The encryption is done with AES-128 from openssl library.

To use encryption, user needs to define the encryption key. The key has to be remembered. If it is lost, there is no way to retrieve the file.

Please note that the existing files in the folder won't be encrypted. Only the newly uploaded files will be.

NOTICE: Once the file is encrypted, it will be stored encrypted in cloud storage. Accessing it from the storage directly, for example, from cloud storage's own Web interface, will only show the encrypted version. It has to be downloaded by Gladinet to decrypt.

Settings

Virtual Drive to Access Your Cloud Storage

Attribute	Default Value	Comments
Cloud Drive Label	My Gladinet Drive	The label for Gladinet mapped drive
Drive Letter	Z	The mapped drive letter for Gladinet drive

Cache

Attribute	Default Value	Comments
Cache Directory		The directory where the Application stores the cache. Suggest to set to a drive has enough spaces.
Delete Cached Files Upon Exit	false	Whether the Application should delete all cached files when exit

General

Attribute	Default Value	Comments
Enable One-Click-Mount Web Storage	true	Display Click-to-Mount link in Gladinet Drive
Files Stored Locally Only	thumbs.db;desktop.ini;picasa.ini;	The files be skipped during upload
Extensions of Files Stored Locally Only	.lnk;	The type of files be skipped during upload

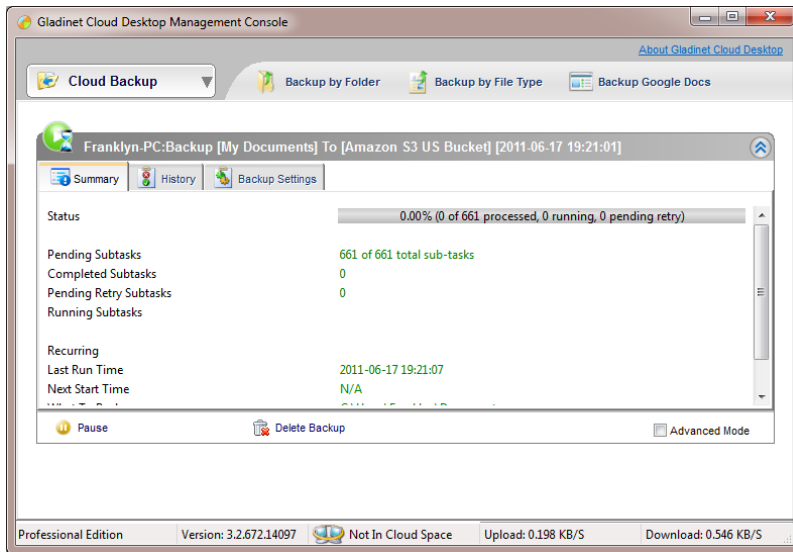
Mirrored Backups



Mirrored Backups show the list of mirrored backup tasks here.

User can create new backup tasks and manage existing tasks.

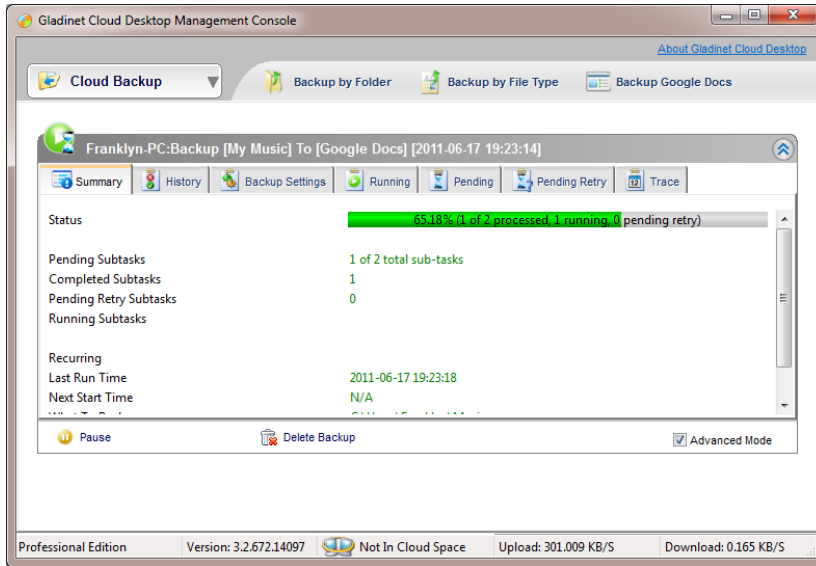
Mirrored Backup Task Details



User can click existing backup task, to check the task details.

- Summary: Show task status, schedule (when was last run, when will be next run), source and target.
- History: Show a summary for each run of the backup task
- Backup Settings: Customize the backup task. For example, re-schedule, add new source/target folder.. Remember to save it if make any changes here.

User can enable Advanced Mode, to check the related subtask information.

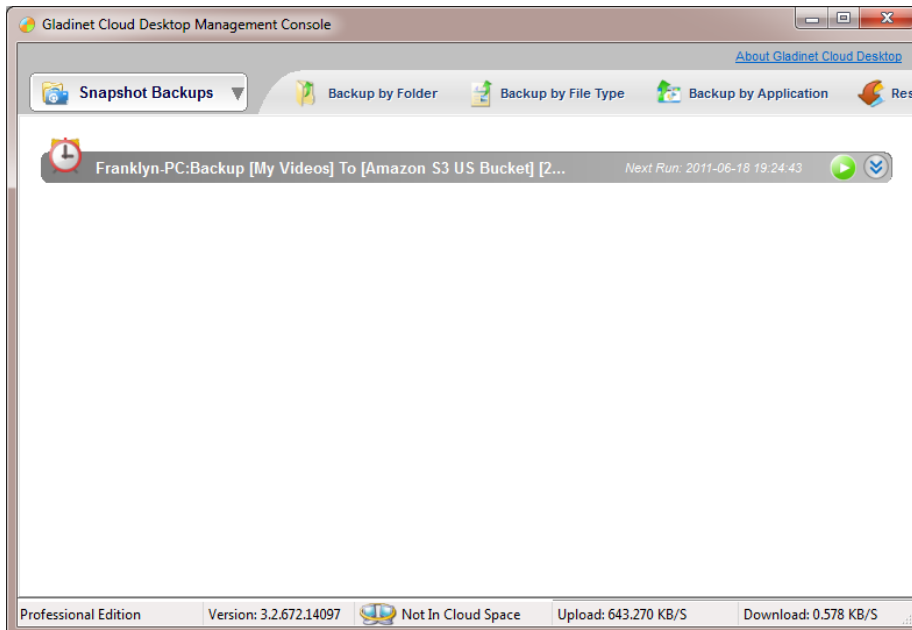


- Running: Current running subtasks
- Pending: Pending subtasks. Will run later
- Pending Retry: Subtasks have been processed but hit an error. Will retry later
- Trace: Audit trace for the task. Can 'Copy All' to copy to clipboard.

Snapshot Backups

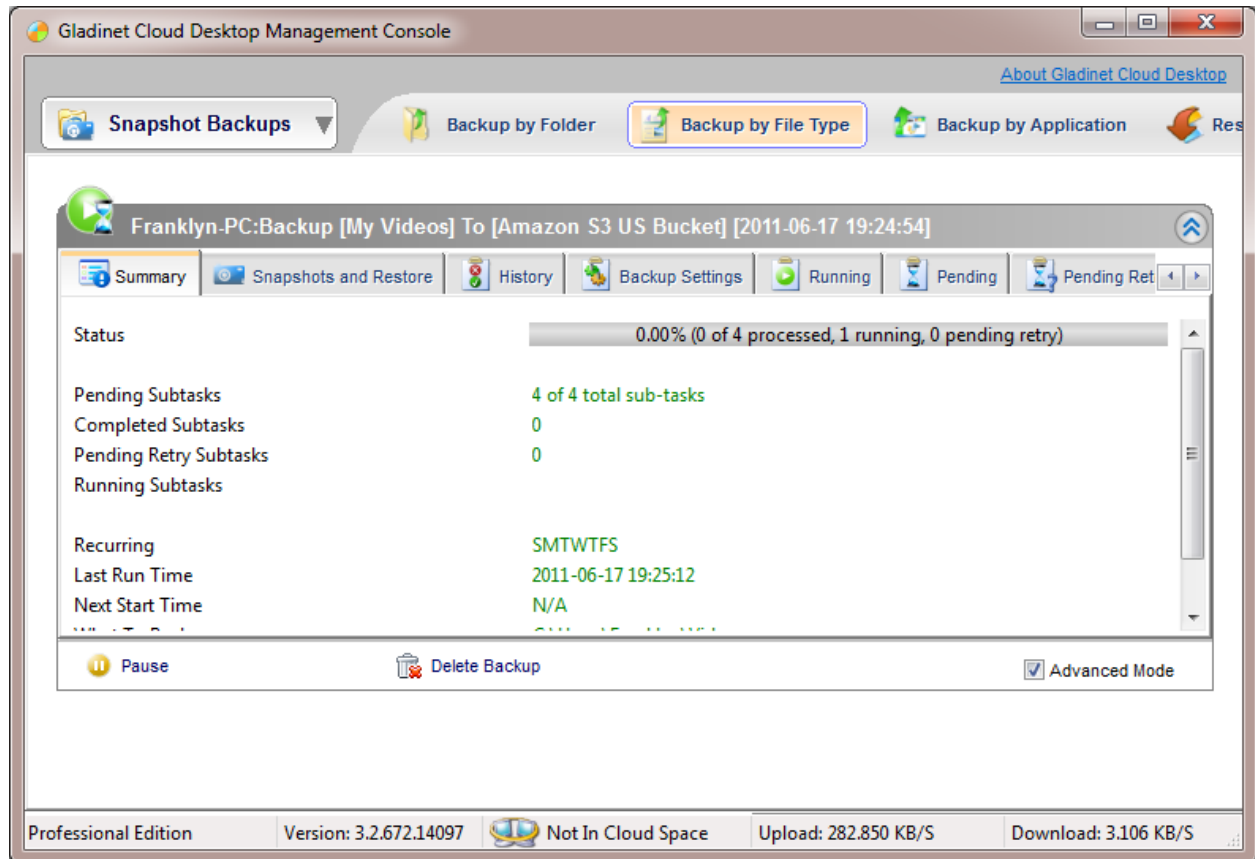
Snapshot backup backs up the data as snapshots. It is an add-on feature in Gladinet Cloud Desktop and requires a separate license to run.

Once the license is applied, user can create new snapshot tasks and manage existing tasks here.



- Restore from snapshot: Gladinet will display all the virtual directories containing snapshot backup information. User can select from the virtual directory, then the existing backup tasks and snapshot to restore.
- Email Setting: When a snapshot task finishes, Gladinet can send a status report email to the admin. The email setting applies to all snapshot backup tasks.

Snapshot Backup Task Details



User can click existing snapshot backup task, to check the task details.

- Summary: Show task status, schedule (when was last run, when will be next run), source and target.
- Snapshots and Restore: Show the existing snapshots created. Can restore from the snapshot directly here.
- History: Show a summary for each run of the backup task
- Backup Settings: Customize the backup task. For example, re-schedule, change how many snapshots to keep.

User can enable Advanced Mode, to check the related subtask information. Advanced Mode includes these extra panels.

- Running: Current running subtasks
- Pending: Pending subtasks. Will run later
- Pending Retry: Subtasks have been processed but hit an error. Will retry later
- Trace: Audit trace for the task. Can 'Copy All' to copy to clipboard.

Backup Settings

Mirrored Backup:

Attribute	Default Value	Comments
Force Refresh Cloud Directory When Verify Against Cloud Storage	False	After mirrored backup task uploads all the files to cloud, it will verify the files are uploaded. The setting defines whether the task will refresh the directory during the process. Refresh the directory will get the latest file/folder view of the target folder. However, it will be slower.
Delete Mirrored File when Source File is Deleted	False	Whether Gladinet should delete the target file, when the source file is deleted
Ignore source root folder	False	When set to false, the mirrored backup task will create the root folder in target. For example, if the task source folder is C:\data and target is Z:\Google Docs\backup. The backup task will create Z:\Google Docs\backup\data first, then upload all files to data folder on target. When set to true, the mirrored task will not create the root folder on the target. In the same example, the task will upload files to Z:\Google Docs\backup directly.
Mirror Task Wake up Interval	300	How often the backup task runs by default

General:

Attribute	Default Value	Comments
Include Hidden Files	false	Whether to backup hidden files in the source folders. It is a global setting. Each backup task can define its own behavior for hidden files. However, if the global setting is false, the setting in individual backup task will be ignored.
Include System Files	false	Whether to backup system files in the source folders. It is a global setting. Each backup task can define its own behavior for system files. However, if the global setting is false, the setting in individual backup task will be ignored.

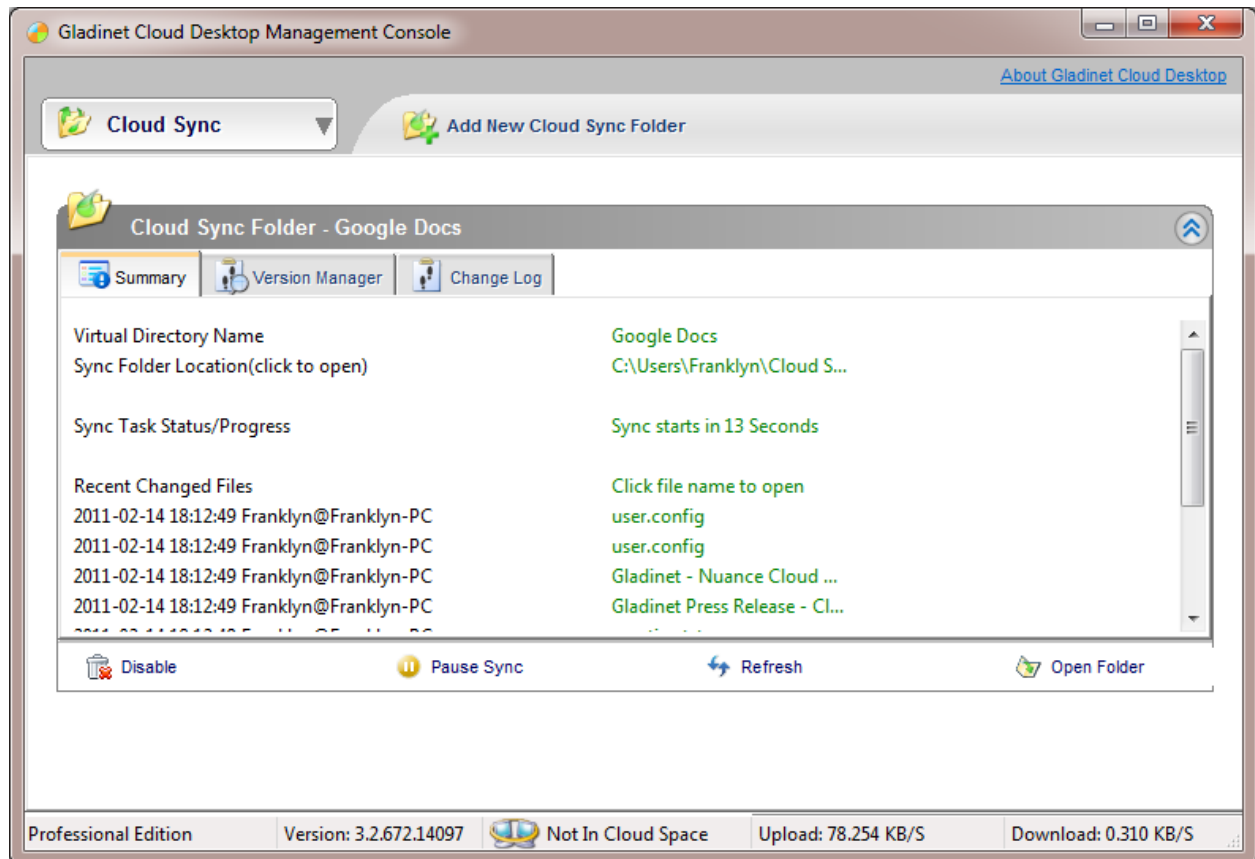
Cloud Sync Folders

Cloud Sync Folders

Cloud Sync Folder is a new feature added in release 3.0. It syncs a local folder among different computers when mount the same storage.

User can create new Cloud Sync Folder and manage existing cloud sync folders in Cloud Sync Folder panel.

Click an existing Cloud Sync Folder to view details.



- **Summary:** Show the local folder location (can click to open in Windows Explorer), Progress status and most recent file changes (can click to open in the associated application). Can pause the sync task and disable the sync folder.
- **Version Manager:** Show the versions of each file in the folder. Can restore to an old version
- **Change Log:** Show the change history, when a file is updated, when a file is deleted.

Advanced Mode enables extra panels to monitor the Cloud Sync Folder subtasks.

- **Current Activities:** Current running subtasks
- **Pending Sync Action:** Pending subtasks. Will run later
- **Pending Retry Action:** Subtasks have been processed but hit an error. Will retry later
- **Sync Task Trace:** Audit trace for the task. Can 'Copy All' to copy to clipboard

Cloud Sync Folders Settings

Syncing:

Attribute	Default Value	Comments
Polling Interval	15	How often the cloud sync task checks changes in cloud storage

Writer Identity

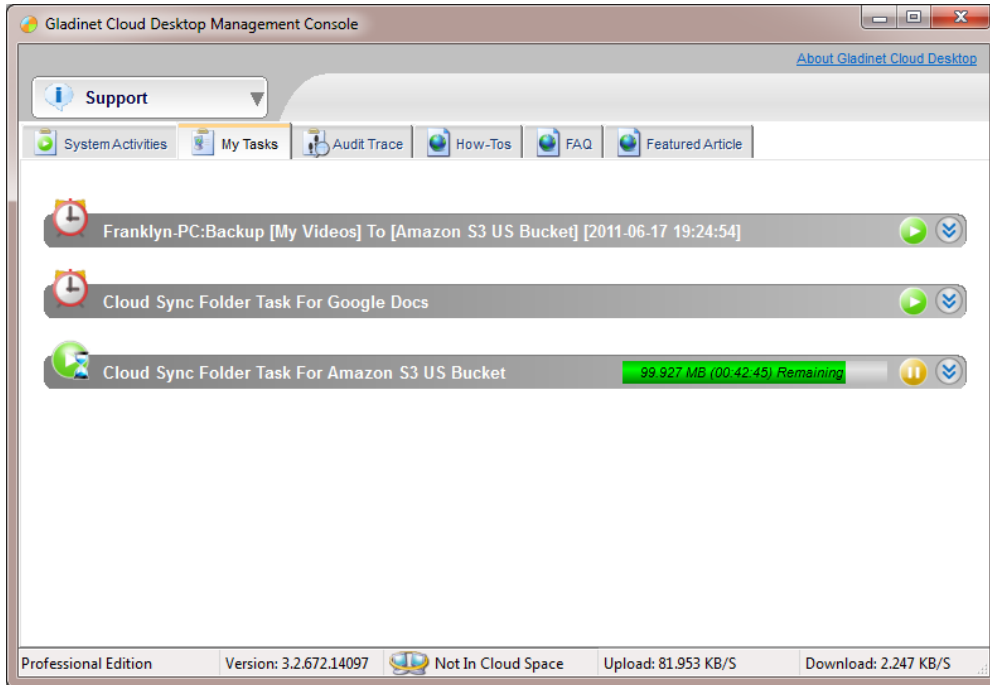
Attribute	Default Value	Comments
Update Name	<Windows Login name>	Who updates the file. Show in Version Manager.
Computer Name	<Machine host name>	Which machine updates the file. Show in Version Manager.

Task Manager

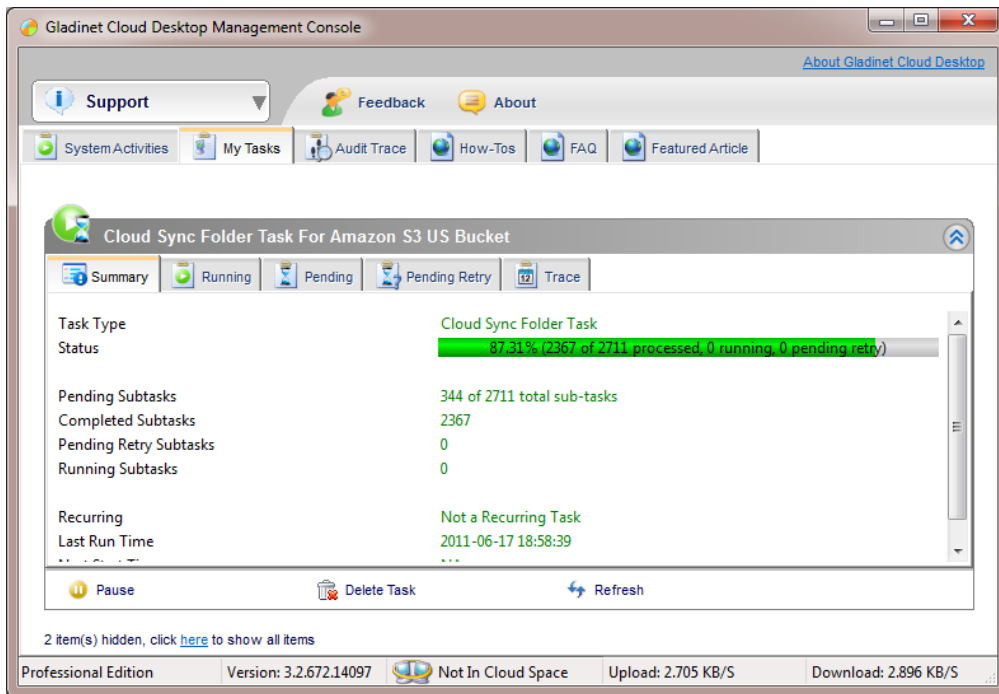
Task Manager manages tasks in Gladinet. There are two types of tasks.

- My Task: User initiated tasks. For example, user does drag&drop to upload files and folders to Gladinet drive, and all the backup tasks configured by user.
- System Tasks: System created tasks. For example, edit a file in Gladinet drive directly.

Task Details



User can click the task to check the details.



- Summary: Show task schedule, source and target folder. Can force the task to start, pause the task and cancel (delete) the task.
- Running: Current running subtasks

- Pending: Pending subtasks. Will run later
- Pending Retry: Subtasks have been processed but hit an error. Will retry later
- Trace: Audit trace for the task. Can 'Copy All' to copy to clipboard

System Activities

System Activities shows the current running subtasks. It gives user a quick idea of what Gladinet is doing.

Task Settings

Download:

Attribute	Default Value	Comments
Maximum concurrent download tasks	5	The number of download threads for one download task.
Download File in Multiple Parts	5	Gladinet will try to download the files in multiple parts, if server supports

Bandwidth Control:

Attribute	Default Value	Comments
Upload Speed Limit	0	The bandwidth limit (KB/s) for all upload tasks. 0 means no limit
Download Speed Limit	0	The bandwidth limit (KB/s) for all download tasks. 0 means no limit.

Backup:

Attribute	Default Value	Comments
Interval of scanning source folder changes	3600	How often Gladinet scans the source folders in mapped drive in the mirrored backup task. For local folders in mirrored backup task, Gladinet monitors them constantly. For folders in mapped drive, Gladinet has to scan the source folder regularly, to pick up the changes.

Upload:

Attribute	Default Value	Comments
Maximum concurrent upload tasks	5	The number of threads for one upload task.
Delete cached files after upload	True	When cache is used for upload, delete the cached file when upload is complete.

General:

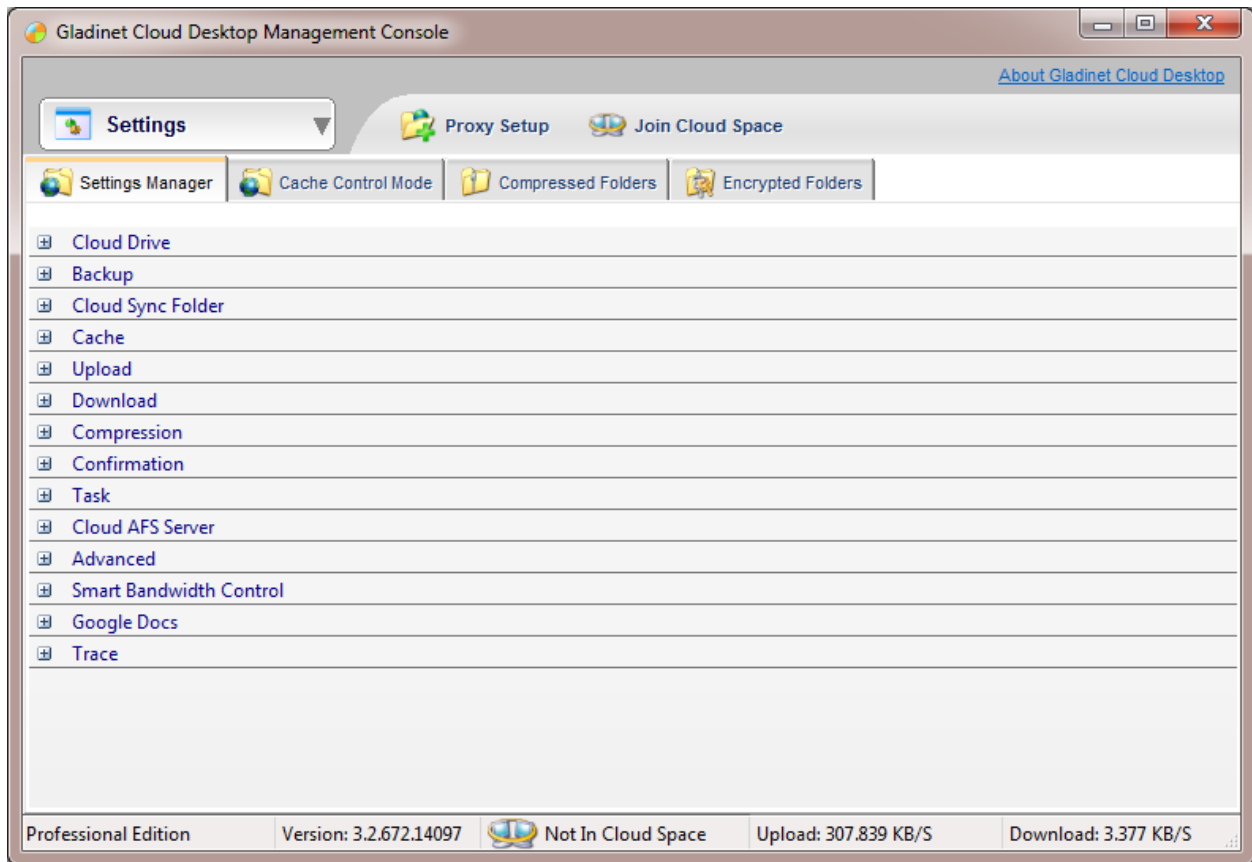
Attribute	Default Value	Comments
Verify tasks before marking them complete	False	Whether Gladinet will verify the task is complete. When set to false, Gladinet relies on cloud storage to tell us whether the upload task is successful.
Keep completed tasks in scheduler	True	Whether to keep the completed task as a history record. Can

database		view them in 'Completed Tasks' in task manager.
Automatically reschedule failed tasks	True	Whether Gladinet will retry a task when it fails
Interval Between Retries of failed tasks	120	Interval between the retry for failed task
Maximum consecutive errors before marking a task failed	1000	If Gladinet keeps hitting failure, there may be some serious problems. No need to try the rest subtasks.

Settings

Settings Manager

Gladinet runs well with all the default settings. Advanced users can customize it by changing all the settings.



Settings Manager shows all settings in Gladinet.

User can also configure proxy and setup Cloud Space here.

Download:

Attribute	Default Value	Comments
Download Bandwidth Limit	0	The bandwidth limit (KB/s) for all download tasks. 0 means

		no limit.
Number of Retry for Download	5	How many times Gladinet will retry for one single file download
Max Idle Time Before Teardown Download Connection (sec)	60	How long Gladinet waits before consider the connection is broken
Interval Between Retries (sec)	5	How long to wait to retry a subtask
Number of Download Threads	5	The number of download threads for one download task.
Download File in Multiple Parts	5	Gladinet will try to download the files in multiple parts, if server supports
Show Sub Tasks For Download Task	false	Display the multiple parts download sub tasks in task manager
Enable Inplace Open Zip File	False	Do not allow user to open zip file in Gladinet drive directly. This is to prevent Vista from auto downloading big zip files.
Max Size of Zip File Allowed to Open Inplace	20	If user prefers to open zip file in Gladinet drive, can define the size limit. When open a big zip file, Gladinet has to download the whole file from cloud first.

Mirrored Backup:

Attribute	Default Value	Comments
Include Hidden Files	false	Whether to backup hidden files in the source folders. It is a global setting. Each backup task can define its own behavior for hidden files. However, if the global setting is false, the setting in individual backup task will be ignored.
Include System Files	false	Whether to backup system files in the source folders. It is a global setting. Each backup task can define its own behavior for system files. However, if the global setting is false, the setting in individual backup task will be ignored.
Force Refresh Cloud Directory When Verify Against Cloud Storage	False	After mirrored backup task uploads all the files to cloud, it will verify the files are uploaded. The setting defines whether the task will refresh the directory during the process. Refresh the directory will get the latest file/folder view of the target folder. However, it will be slower.
Mirror Task Wake up Interval	300	How often the backup task runs by default
Delete Mirrored File when Source File is Deleted	False	Whether Gladinet should delete the target file, when the source file is deleted
Ignore source root folder	False	<p>When set to false, the mirrored backup task will create the root folder in target. For example, if the task source folder is C:\data and target is Z:\Google Docs\backup. The backup task will create Z:\Google Docs\backup\data first, then upload all files to data folder on target.</p> <p>When set to true, the mirrored task will not create the root folder on the target. In the same example, the task will upload files to Z:\Google Docs\backup directly.</p>

Confirmation

Attribute	Default Value	Comments
Disable Profile Not Available Notification	false	Hide the warning when Gladinet cannot find user's profile
Disable Deletion Confirmation	false	Hide the confirmation of file deletion

Disable Delete Virtual Directory Confirmation	false	Hide the confirmation when delete the virtual directory from My Gladinet Drive directly.
Disable Shutdown Confirmation	false	Hide the confirmation when shutting down Gladinet

Task Manager:

Attribute	Default Value	Comments
Use Start Now as Default Scheduling Method	false	When true, Gladinet will not prompt the user to schedule each task. It will always use 'Start Immediately'.
Keep System Awake When Task is Running	true	Do not put system to sleep when there are active tasks running
Show Directory Listing Operation	false	Whether Task Manager will display the directory listing tasks
Verify Before Mark Task Complete	False	Whether Gladinet will verify the task is complete. When set to false, Gladinet relies on cloud storage to tell us whether the upload task is successful.
Show Chunk Download Subtask	false	When download a chunked file, whether Task Manager will display the subtasks for each chunk
Maximum wait time for generic task (sec)	120	Maximum time Gladinet waits for task like directory listing. Can increase it when network is not stable
Maximum Consecutive Errors before Stop Scheduled Task	1000	If the consecutive number of subtask fails, Gladinet assumes there is a network problem. No need to try any further.
Reschedule Failed Task Automatically	true	When one task fails, should Gladinet reschedule it
Interval Between Failed Task Retries (sec)	120	Interval between retries for failed task, when Reschedule Failed Task Automatically is set to true.

Advanced:

Attribute	Default Value	Comments
Map Virtual Drive	true	Should Gladinet create the mapped drive. When set it to false, can still access mounted virtual directories in Gladinet Cloud Explorer
Store Profile in Memory Only	false	Only store profile in memory. Restart Gladinet will clean the profile. Can be used in public PC, like libraries or labs.
Enable Storage Plug-in Auto Update	true	Allow Gladinet to detect the availability of new storage plug-ins. It still requires a user confirmation as to whether to install the plug-in or not.
Keep Completed Task in the Scheduler Database	true	Whether Gladinet will keep the completed task information in the scheduler database. The completed tasks can be queried in Task Manager.
Days of Audit Trace to Keep	5	How many days of audit traces should Gladinet keep

Google Docs:

Attribute	Default Value	Comments
Convert documents, spreadsheets and presentations to Google Docs format	True	When upload certain type of files to Google Docs, should Gladinet convert them to Google Docs format. The type is defined next.
File types to convert when conversion is enabled for upload	doc; .rtf; .odt; .xls;	When conversion is enabled, the type of files Gladinet will convert during upload to Google Docs. Once a file is

	.ods; .ppt	converted, can edit it in Google Docs web. Please notice that for docx and xlsx files, once they are converted, they can only be downloaded in Office 2003 format, as .doc and .xls. They cannot be downloaded in Office 2007 format anymore.
Always use SSL when connect to Google Docs Storage	false	use SSL for Google Docs connection.
Keep Deleted File in Google Docs's TrashCan	false	When delete a file, should Gladinet keep it in Google Docs trashcan. Please notice that for any file upload, files in trashcan still counts as the storage used.

Trace:

Attribute	Default Value	Comments
Trace Level	0	Need to use Microsoft dbgview tool to view the traces

Smart Bandwidth Control:

Attribute	Default Value	Comments
Enable Smart Bandwidth Control	true	When Gladinet is uploading or downloading, if user is running certain programs on foreground, Gladinet can allocate less bandwidth for the tasks, to reserve bandwidth for the running programs
Slowdown when Process is Activated	iexplore.exe; Maxthon.exe; firefox.exe; chrome.exe	The applications Gladinet will apply smart bandwidth control
Remove bandwidth limit after system idle	5	If the foreground program is idle for too long, Gladinet will resume the full bandwidth usage

CloudAFS Server:

Attribute	Default Value	Comments
Connect to Cloud AFS Server	false	Should Gladinet connect to Cloud AFS server
Gladinet Cloud AFS Server Address		The IP address for Gladinet Cloud AFS server
Gladinet Cloud AFS Server Port		The port Gladinet Cloud AFS Server listens on

Cache:

Attribute	Default Value	Comments
Cache Directory		The directory where Gladinet stores the cache. Suggest to set to a drive has enough spaces.
Cached File Expire Time (sec)	0	How long will the cached files be in effect. Before the cache expires, when access the file, Gladinet will read from cache immediately, instead of downloading it from cloud storage. 0 means the cache will never expire.
Delete Cache after Upload	true	If set to 'true', Gladinet will delete the cache after a successful upload. However, when access the file from your virtual directory, Gladinet has to download the file again.
Delete Cached Files Upon Exit	false	Whether Gladinet should delete all cached files when exit

Notification:

Attribute	Default Value	Comments
Show All Notification	true	Display all Gladinet Notifications
Show Notification (New release, Urgent bug fix) from Gladinet.com	true	Display a notification for new release announcement and urgent bug fix
Disable Schedule Confirmation	false	Whether to confirm the schedule
Disable Service Provider Not Found Notification	false	When mount a storage, hide the error when Gladinet can't locate the service provider's plug-in
Disable Loading Service Provider Failure Notification	false	Hide the message when Gladinet fails to load the service provider plug-in
Disable Automatic Task Tracker for Scheduled Task	false	Do not display task tracker, which shows the task summary and progress, when a new task is scheduled.
Disable Move Not Allowed Notification	false	Gladinet doesn't support move in virtual directories. When users try to move a file, a message will display to warn the user not to move files

Chunk and Compression

Attribute	Default Value	Comments
Segment Size (KB)	2048	The segment size Gladinet reads the file, in compression or chunking.
Chunk Size (KB)	20480	The default size Gladinet use, to chunk a large file
Files to be Compressed		The type for files to be compressed in compressed folder. If leave blank, Gladinet will compress all files when upload to compressed folder.

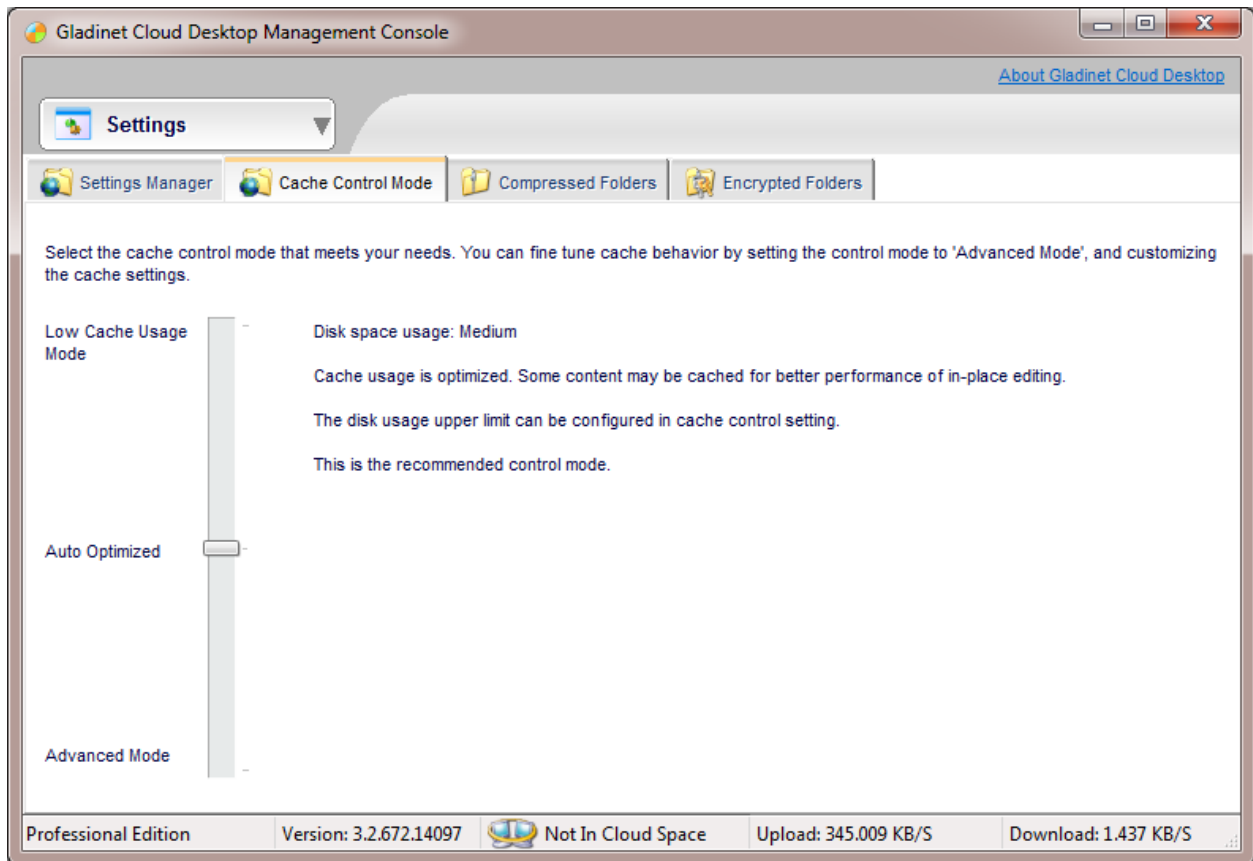
Upload:

Attribute	Default Value	Comments
Upload Bandwidth Limit	0	The bandwidth limit (KB/s) for all upload tasks. 0 means no limit
Number of Upload Threads	5	The number of threads for one upload task.

General:

Attribute	Default Value	Comments
Enable One-Click-Mount Web Storage	true	Display Click-to-Mount link in My Gladinet Drive
Number of Generic Task Threads	5	Number of threads for generic tasks, like query all files under a folder

Cache Control Mode



User can select the best fit cache control mode.

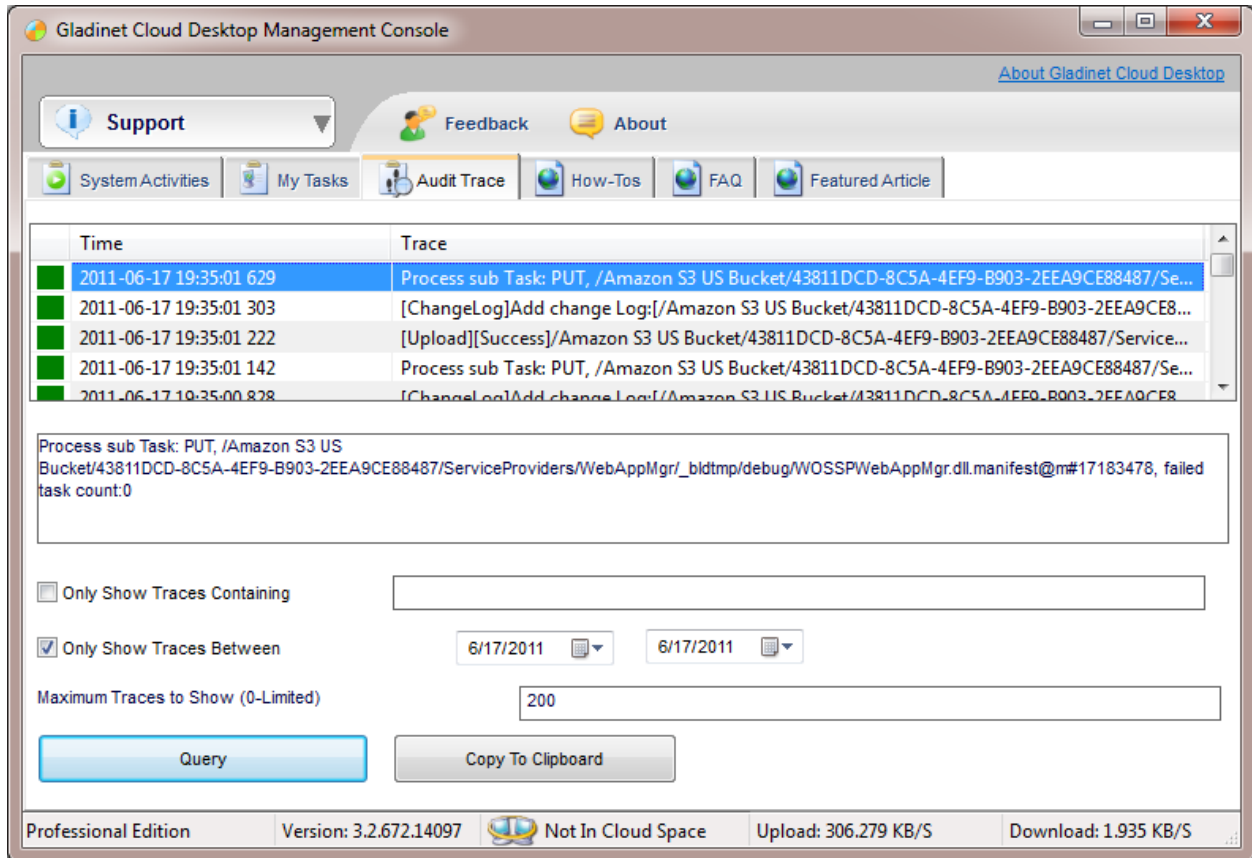
- Low Cache Usage Mode: Gladinet will use as less cache as possible. Can be used when disk space is really limited.
- Auto Optimized: Gladinet optimize cache usage, to balance performance and disk usage.
- Advanced Mode: Gladinet will use cache whenever possible. Can be used when best performance is needed.

Support

Support section provides helpful information about Gladinet.

User can send feedback to Gladinet. Please keep the feedback short and leave an email to reach back. If the space in feedback is not enough, please email us at support@gladinet.com directly.

Audit Trace

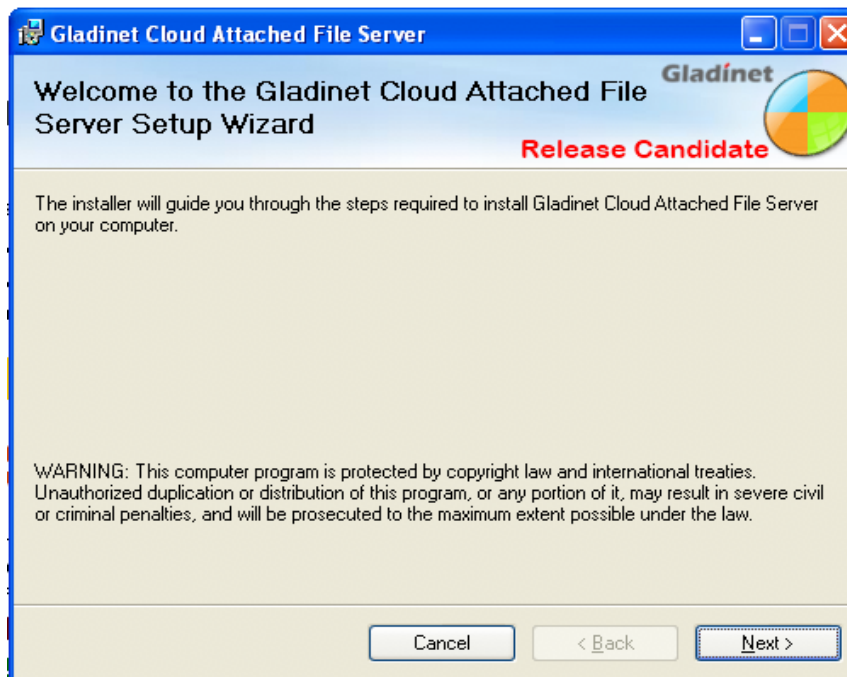


Audit trace is very useful when diagnosing problems. User can specify the string to query, the time frame to query and how many records to display. Remember to click the Query button to display the query results. Users can copy the audit trace using the “Copy to Clipboard” button.

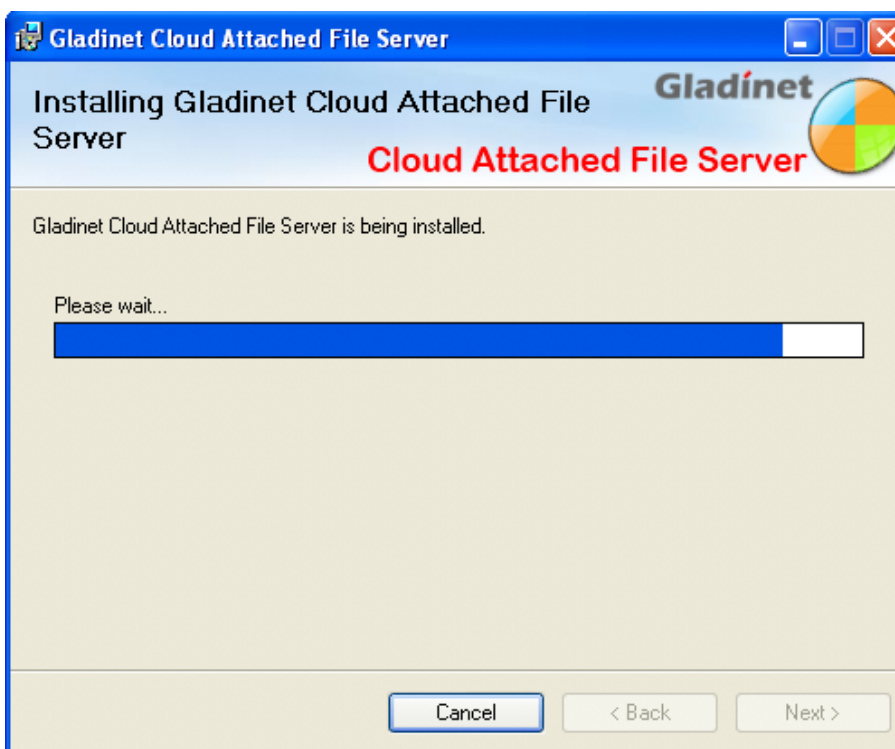
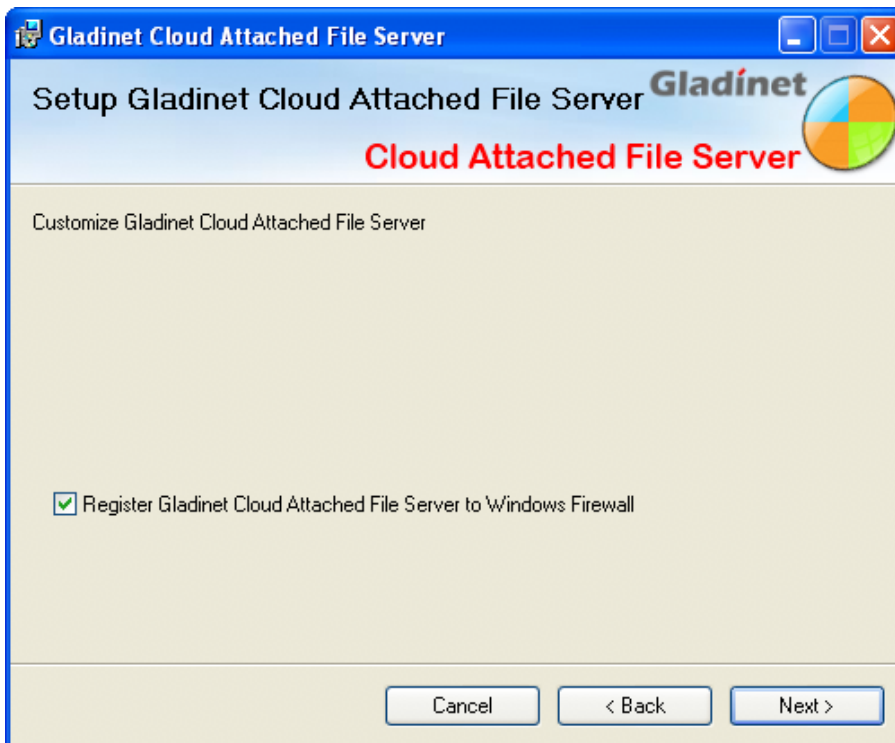
Gladinet Cloud AFS (Cloud Attached File Server)

Installing Gladinet Cloud AFS

Gladinet CloudAFS has a convenient wizard based installation as shown below.

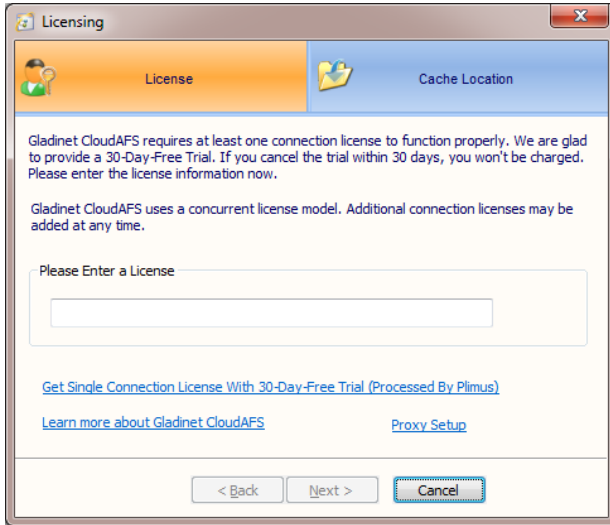


The following step allows CloudAFS to be registered with the Windows Firewall. If CloudAFS is not registered, the Windows Firewall may prevent it from working properly by limiting its ability to communicate on your network.

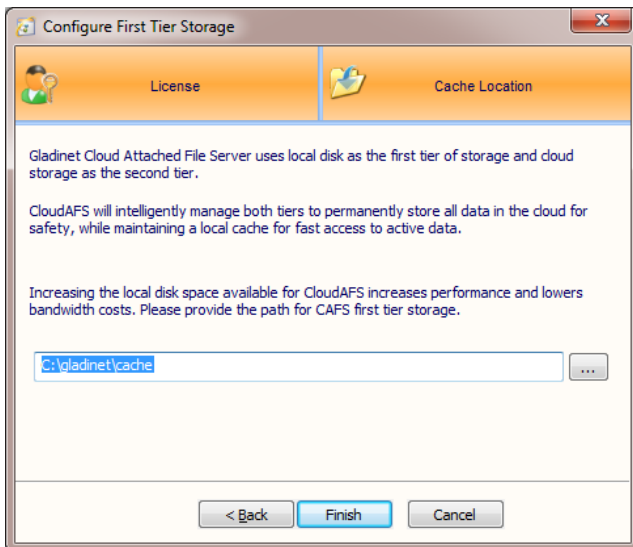


Initial Configuration

At the end of the installation, the CloudAFS installer will prompt for a reboot. Gladinet CloudAFS will prompt for configuration information when it is first launched for the same user (the one who installed CloudAFS) logs into Windows. The wizard will be launched the first time when you open the Gladinet Management Console if you haven't finished the initialization.



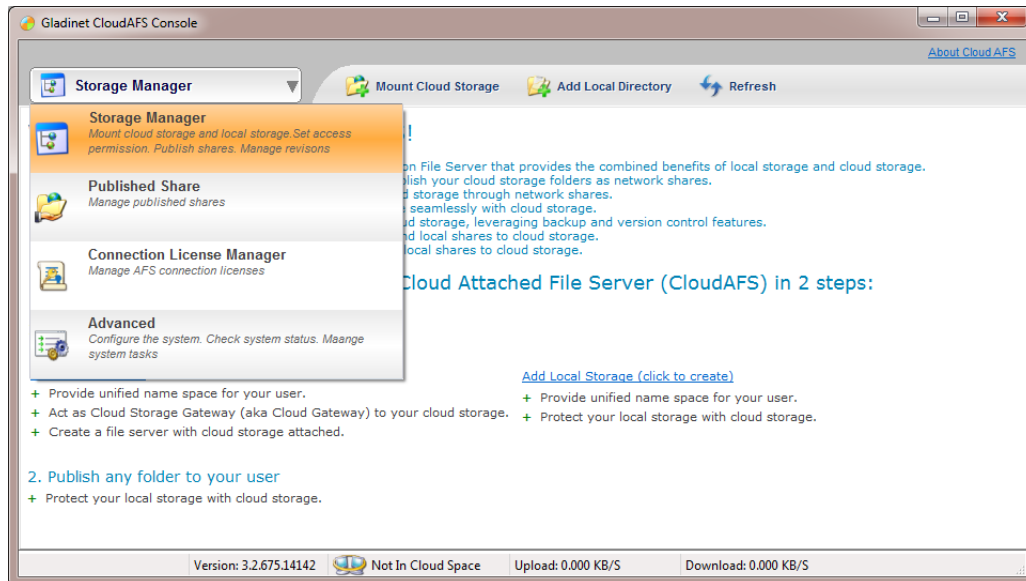
After entering license information, the first step is to configure the first tier storage location. CloudAFS uses multi-tiered storage to make sure that your data is stored safely but can also be accessed quickly. The first tier requires a path on the local disk. The second tier is configured in the next step. CloudAFS intelligently manages the data on both tiers to ensure that it is permanently and securely stored in the cloud, while maintaining fast access to data that is in use or often used.



Once the first tier has been configured, the second can be added. This can be configured at any time through the storage manager in the Gladinet CloudAFS Console.

Gladinet CloudAFS Management Console

As shown below, the Gladinet CloudAFS Management Console is organized into four groups of management tasks.



The Storage Manager allow you to:

- Mount cloud storage as a folder on a local drive
- Access cloud storage from a file share using any CIFS or NFS client (eg. Windows Explorer)
- Backup local directories to cloud storage
- Synchronize local directories with cloud storage

With the Published Share Manager, you can:

- Publish a folder from a mounted cloud storage service. This creates a local network share.
- Publish a folder from a mounted local directory. This also creates a local network share that can be synchronized with other file servers or backed up to cloud storage.

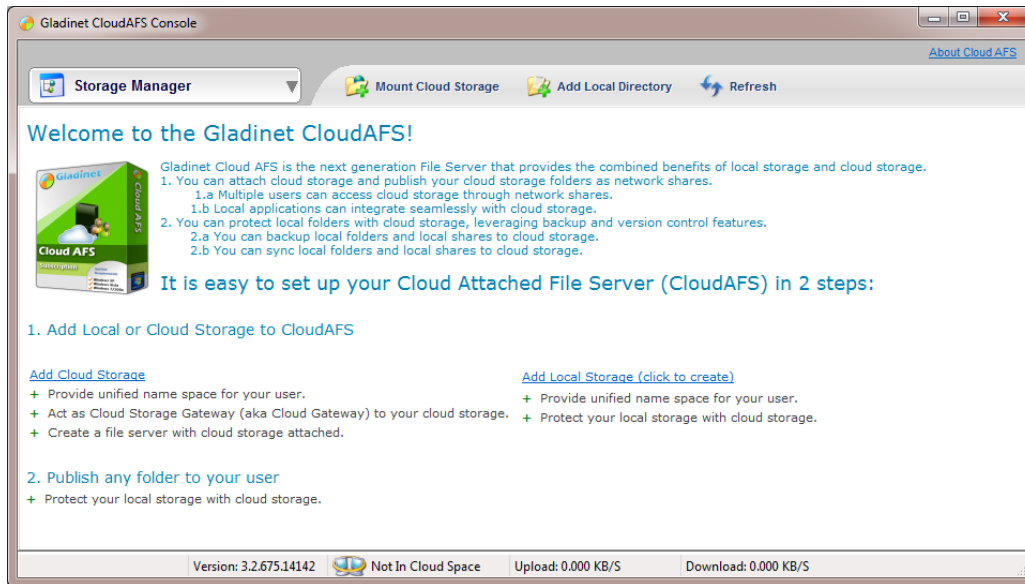
The Connection License Manager allow you to:

- Add connection licenses
- View license information

With the Configuration and Activity Manager, you can:

- Adjust system settings that control caching, transfers, chunking and compression, encryption, backup, auditing and more
- Monitor system activities like transfer progress and transfer status
- View audit traces for troubleshooting

Storage Manager



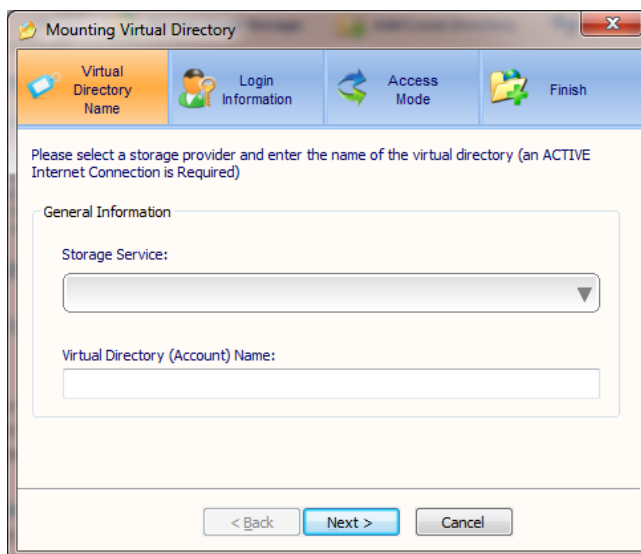
CloudAFS allows the use of cloud storage in one of two ways.

First, cloud storage can be **mapped** to virtual directories that can be accessed by multiple remote clients running Gladinet Cloud Desktop or a CIFS\NFS client. Before this can be done, the virtual directory, or one of its subfolders needs to be published. Once the folder has been published, users must be assigned to the folder and granted permission to access it.

Secondly, an existing local folder that is currently being accessed by users can be protected with cloud storage by using backup or version control features.

Mount Cloud Storage

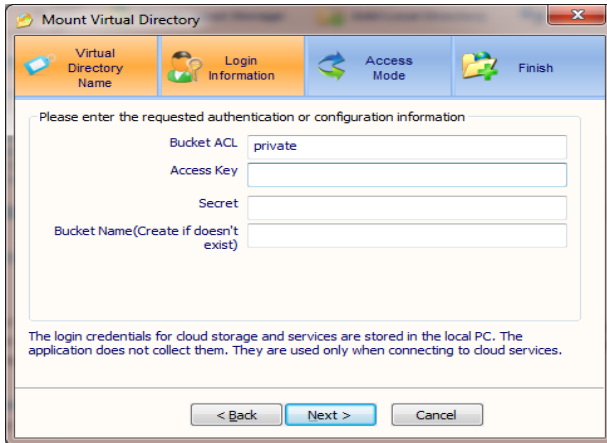
After clicking on “Mount Cloud Storage”, the following wizard will appear:



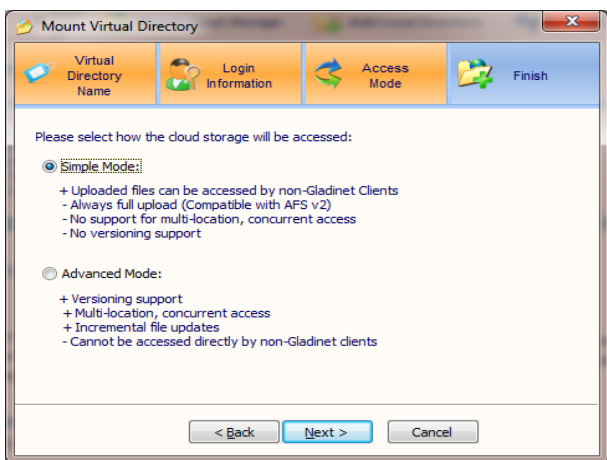
Click on the dropdown and the following screen pops up. Choose the cloud storage folder to be mounted and name it.



In the next step, credentials must be entered.

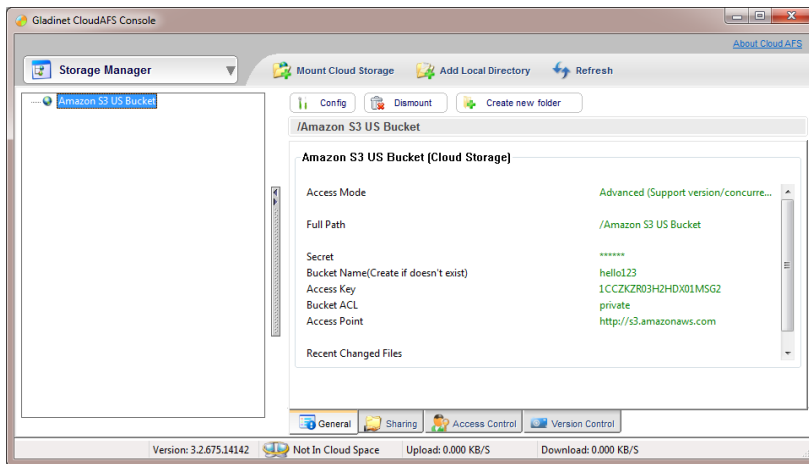


And then the access mode must be selected.



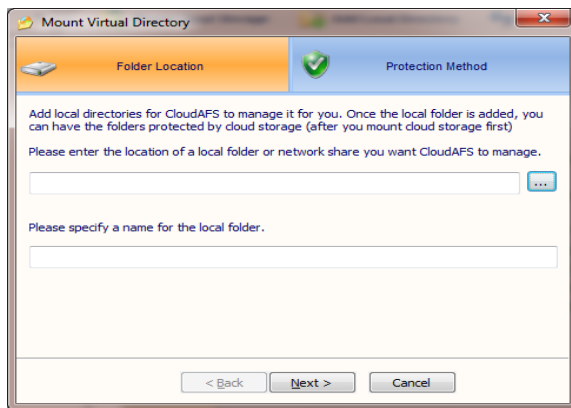
Note that though the advanced mode will allow backup and synchronization of published shares from the mounted storage, it also means that the published share will not be directly accessible without a Gladinet client.

Click next to complete the mounting process and the newly mounted cloud storage will become visible in the storage manager.

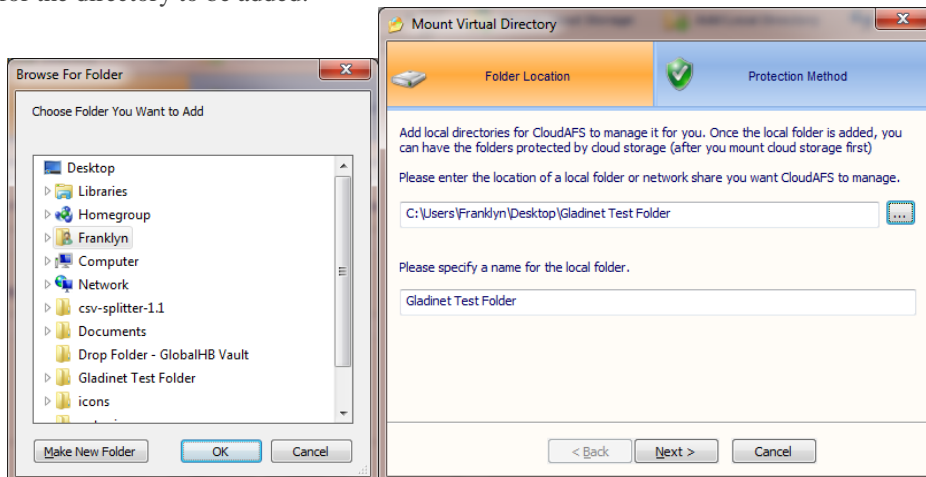


Mount Local Storage

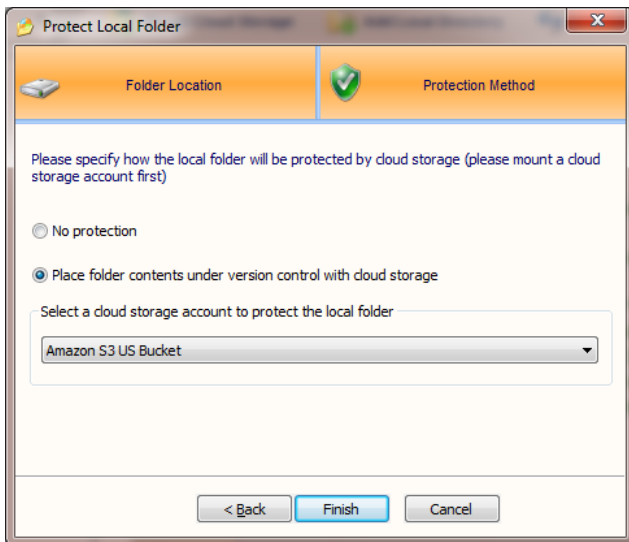
The process for adding a local directory is similar. First click on “Add Local Directory”



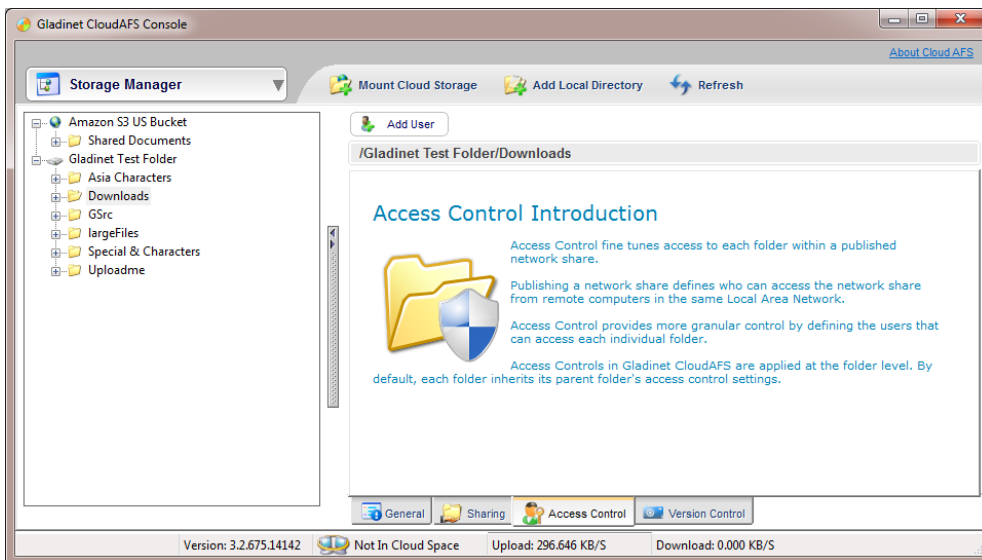
Browse for the directory to be added:



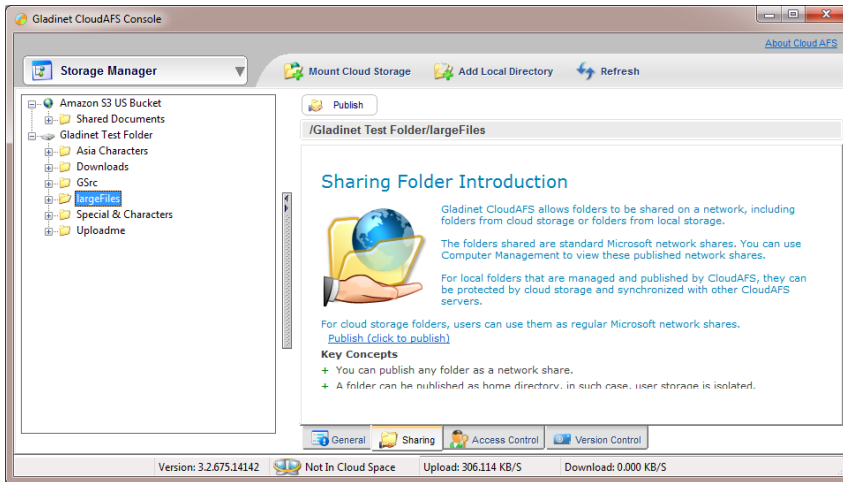
Then click next and select how the local folder will be protected:



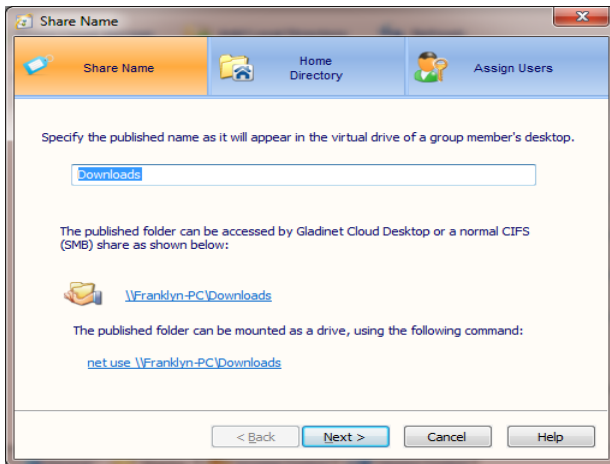
Click finish and the local folder is shown in the storage manager.



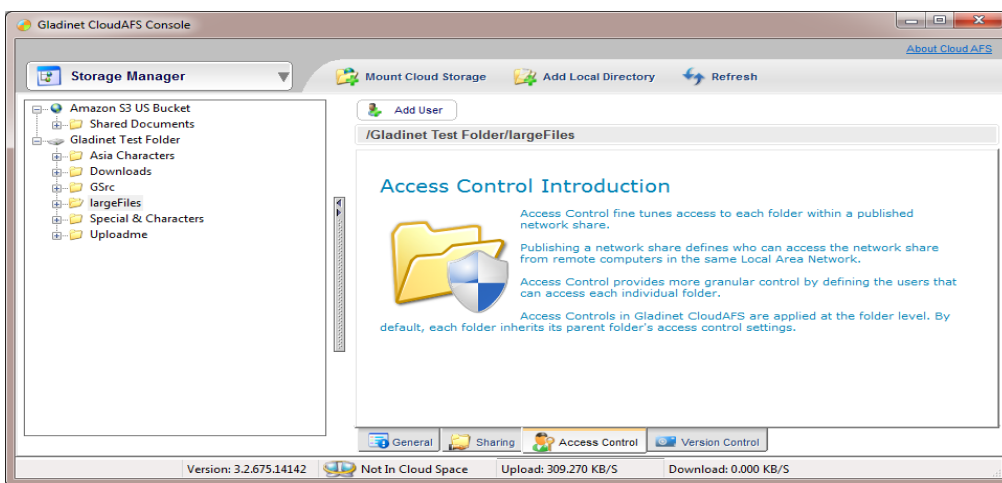
And now that the folder has been mounted, it can be published from the sharing tab as shown below.



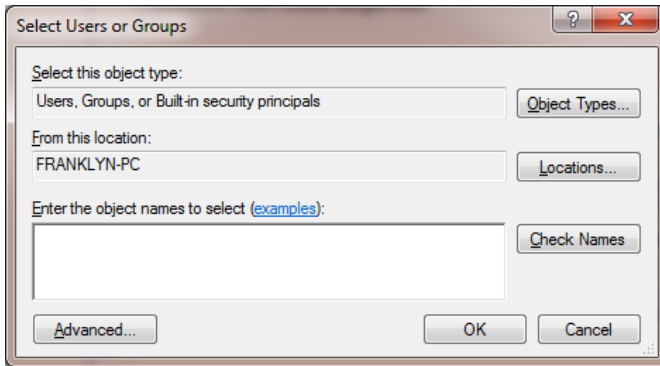
Click on the “Publish” link and the publishing wizard is launched. This will be covered in more detail in the section for the published share manager.



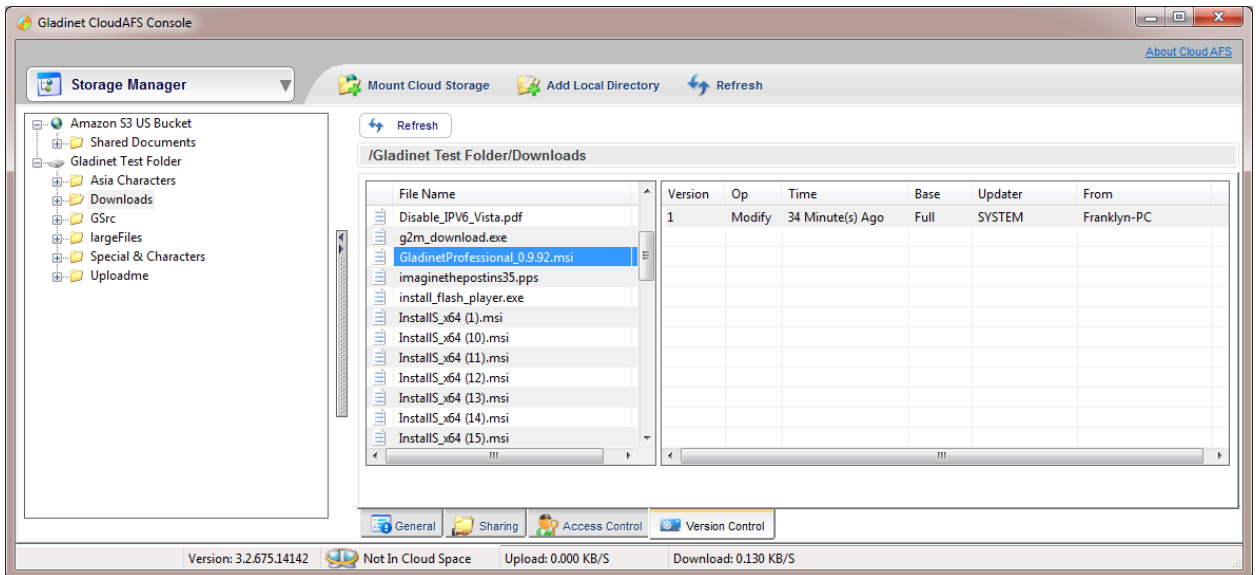
Gladinet CloudAFS also allows authorization to be managed at the folder level by visiting the “Access Control” tab shown below:



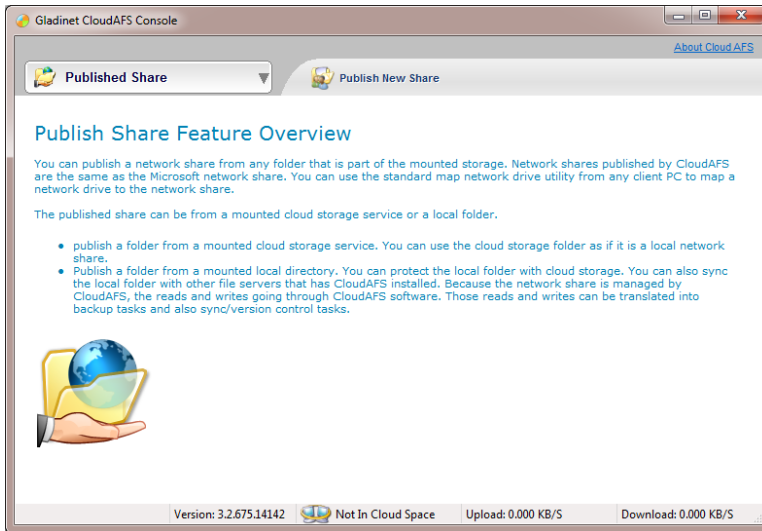
By clicking the “Add User” button, we can grant permission to users in an NT Domain or Active Directory using the familiar user selection box shown below.



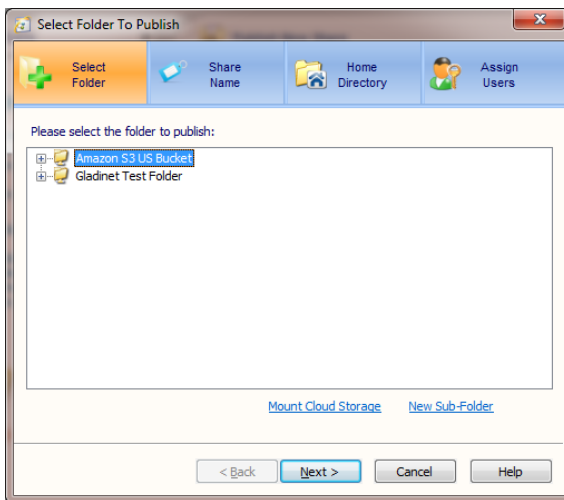
And since we specified that this local directory would be protected using version control, the “Version Control” tab will show the versioning history for each file it contains. We can see that the system has uploaded the first version of each file in the local directory we added in earlier steps. Now this local directory can be synchronized across multiple CloudAFS servers in multiple locations.



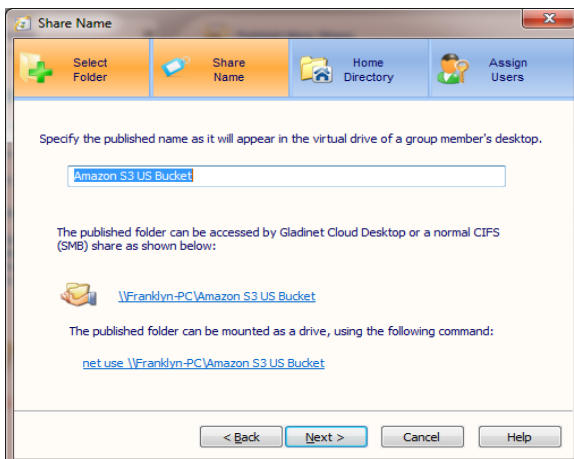
Published Share Manager



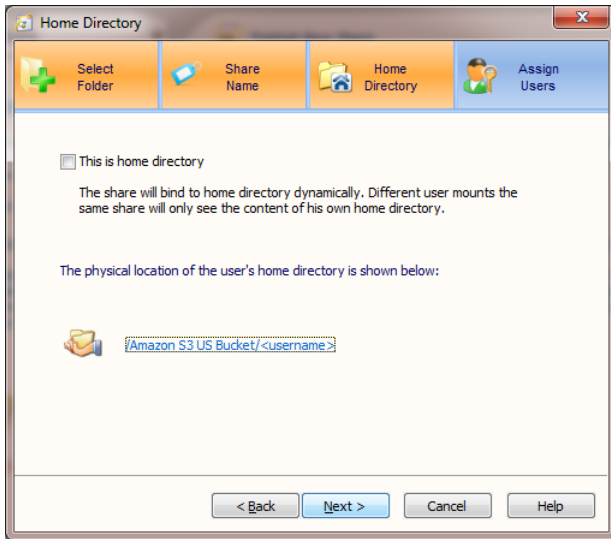
Click on the “Publish a New Share” button to add a published share



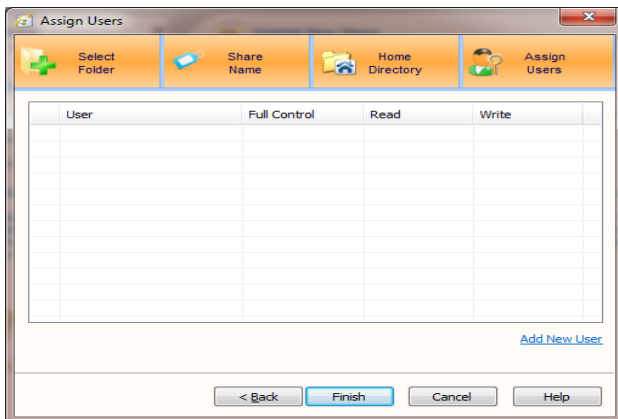
Select the folder or subfolder to be published and click next and name the published share.



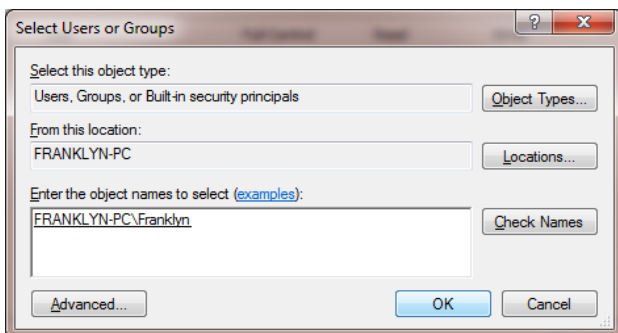
Next we have the option of setting the option of turning the published folder into a home directory. If selected, this option means that each network identity that mounts the share will only see content for that identity.

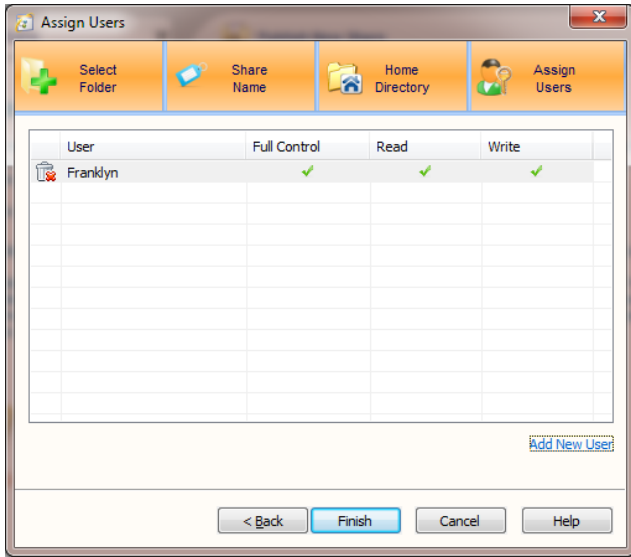


Finally, we must define which users have access to the published share, as shown in the sequence below:

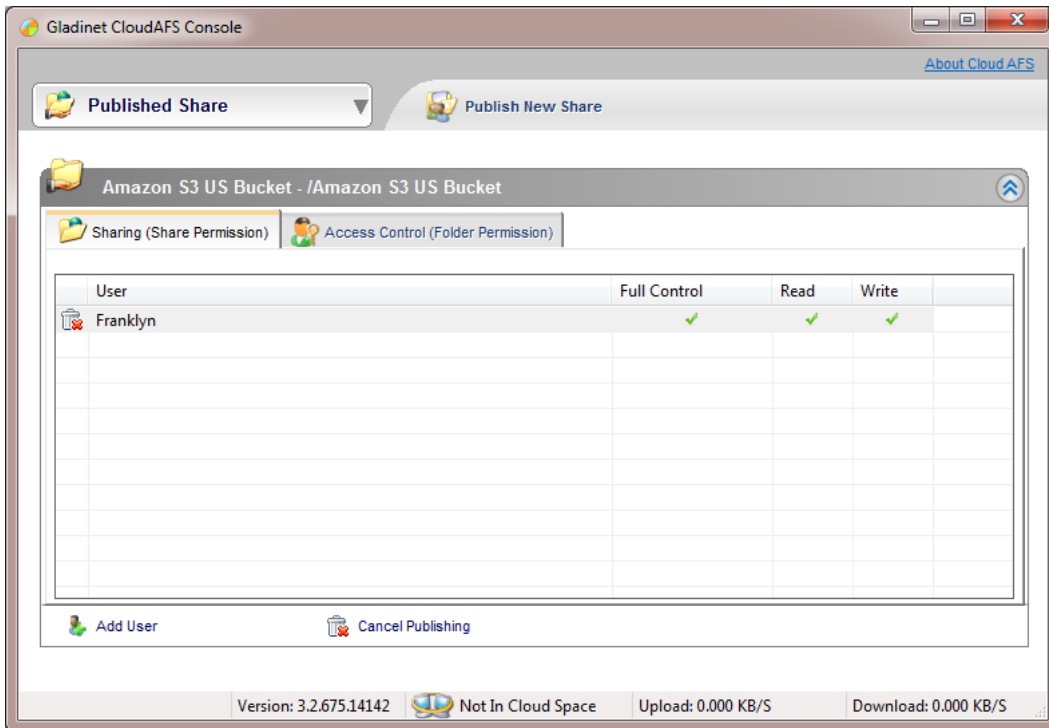


Clicking on “Add New User” allows the selection of users from Active Directory or an NT Domain:

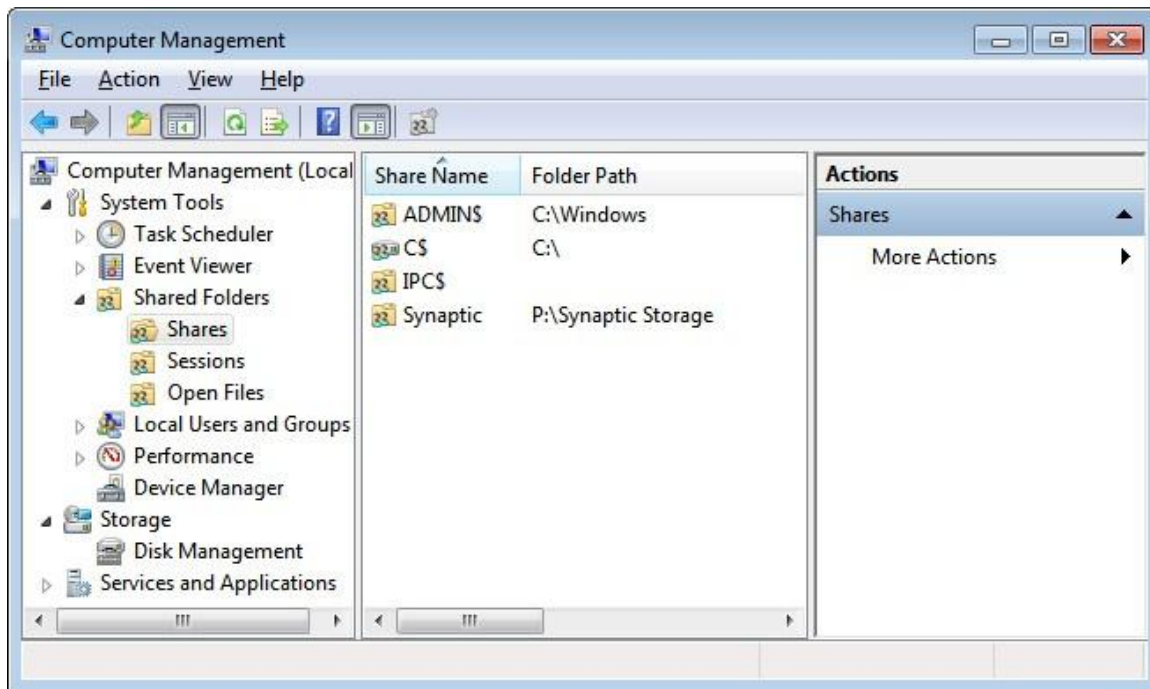




Click on finish and the published share appears in the main window. From here, we can manage the accessibility of the published share from the Sharing tab or use the Access Control tab to control access to individual folders within the share.



Viewing Published Shares Using Computer Management

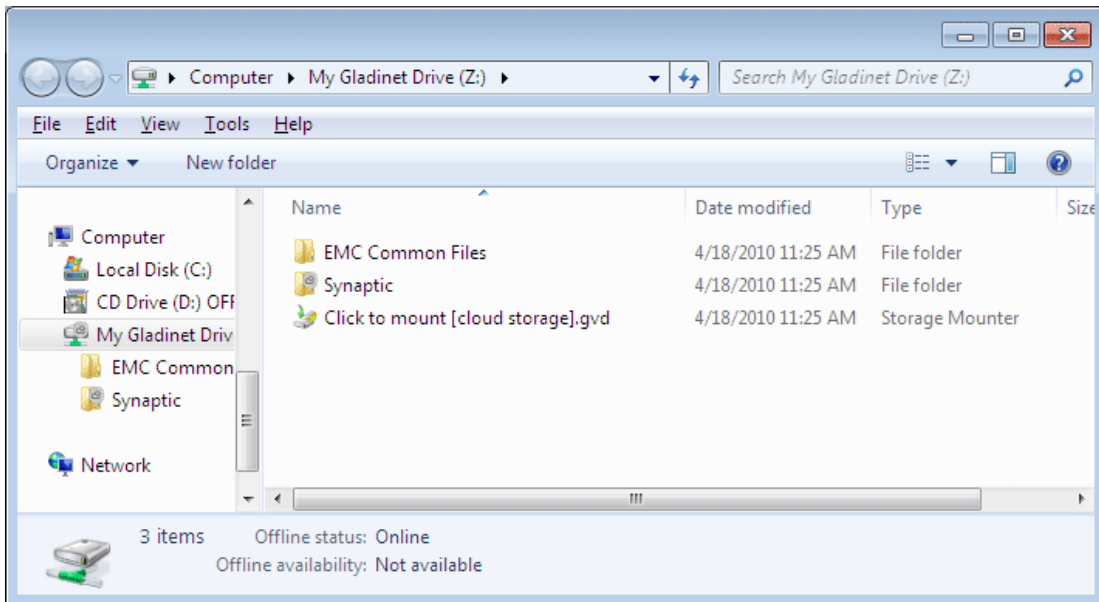
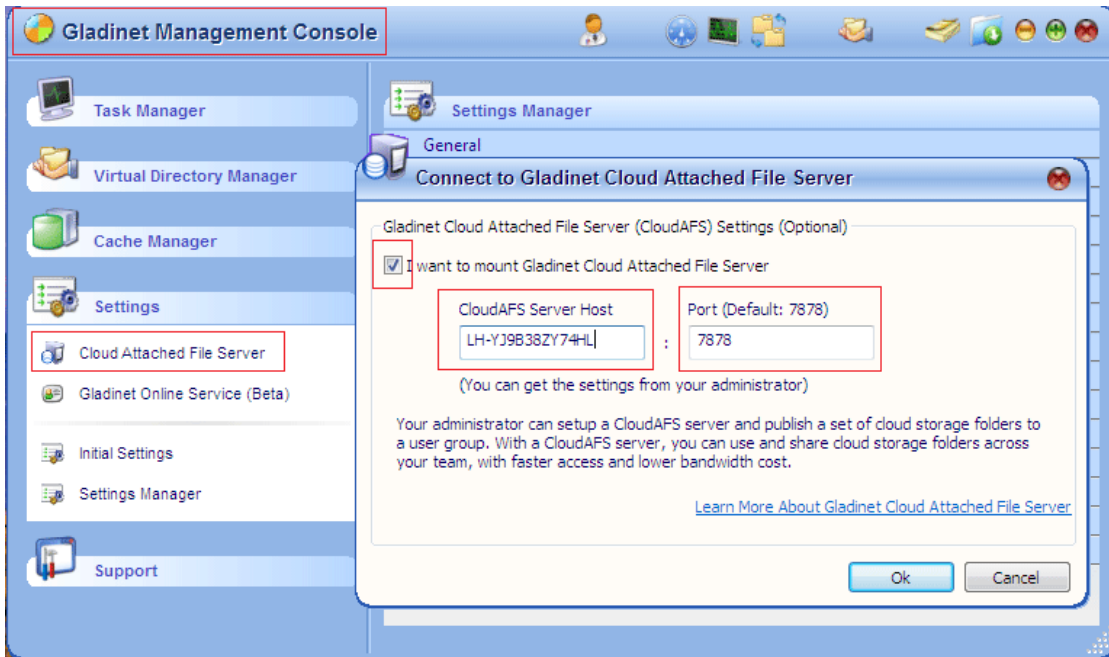


Accessing Published Shares

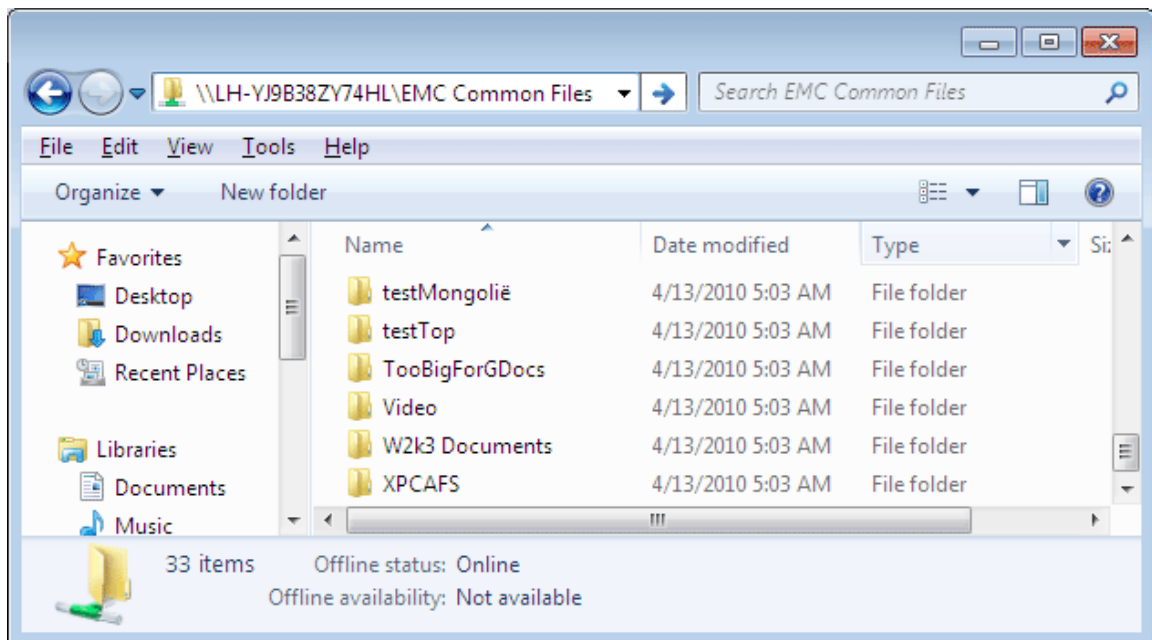
The published shares can be accessed in Gladinet Cloud Desktop, or mounted as network drives with CIFS.

A Gladinet Cloud Desktop user can setup Cloud Desktop, to connect to CloudAFS server. After the setup, Cloud Desktop will have all the shares in CloudAFS listed in My Gladinet Drive. There is no need to mount each individual shares.

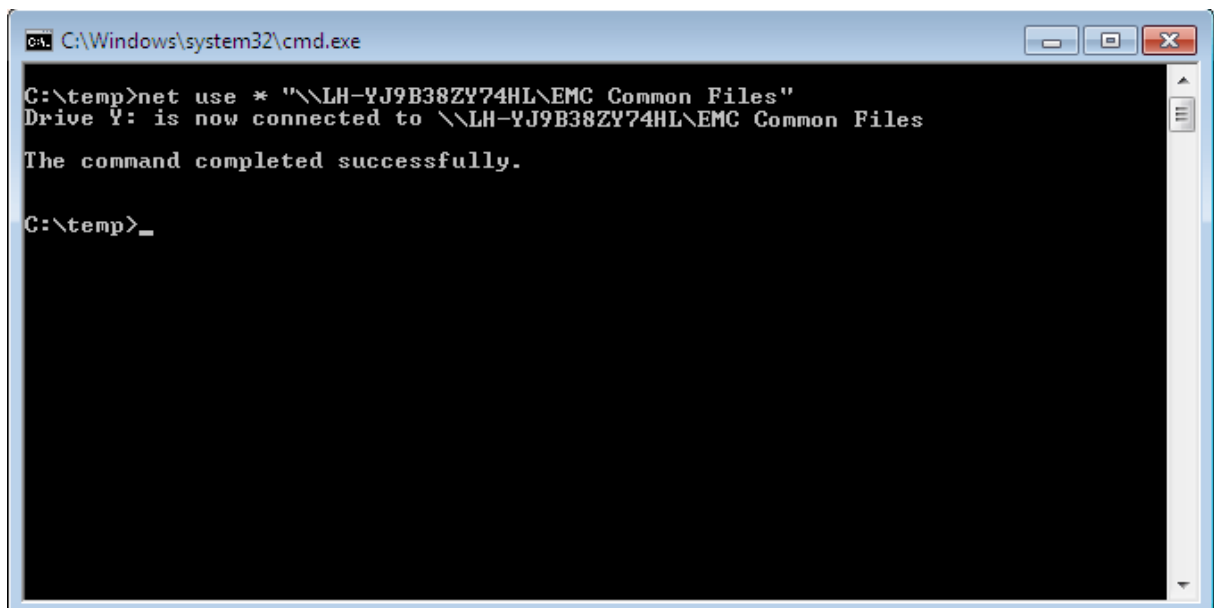
To setup CloudAFS in Cloud Desktop, open 'Settings' in Gladinet Management Console and click 'Cloud Attached File Server'. Type in the CloudAFS server and port number information and click 'Ok'.



Users can access the CIFS share in Windows Explorer directly. Just type the CIFS address in the Windows Explorer address bar. For example, '\\LH-YJ9B38ZY74HL\EMC Common Files'.



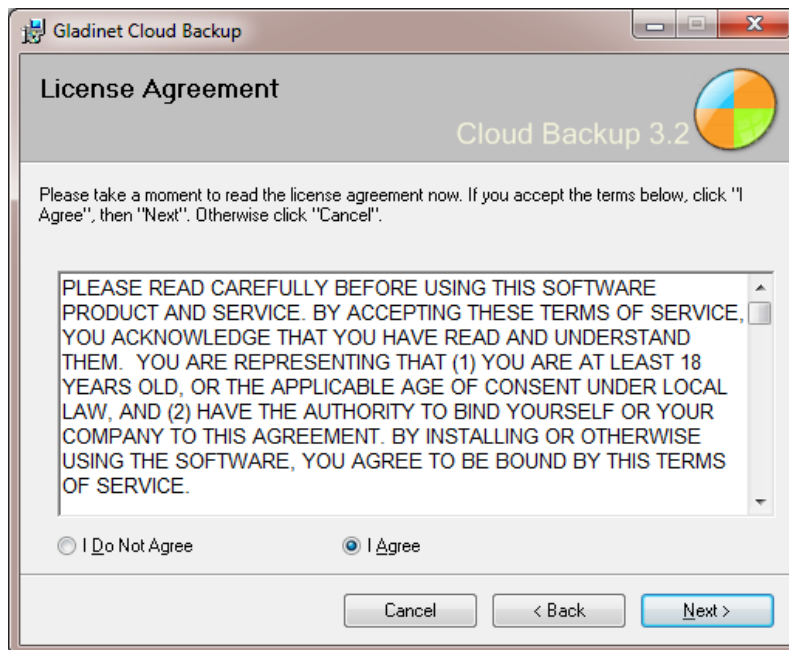
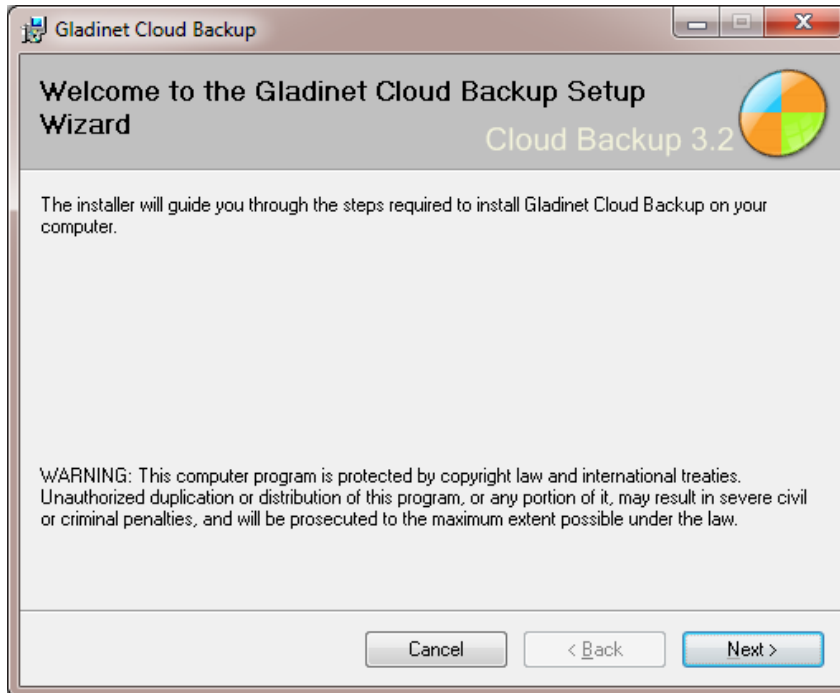
User can also mount the CIFS share as a network drive. In Windows, open a Command Prompt and type 'net use * \\your CIFS share'.



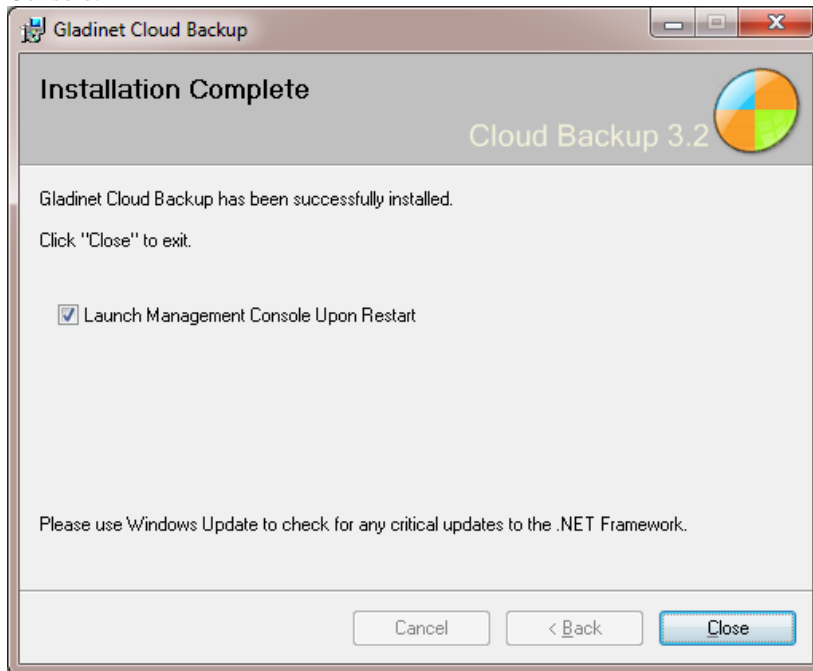
Gladinet Cloud Backup

Installing Cloud Backup

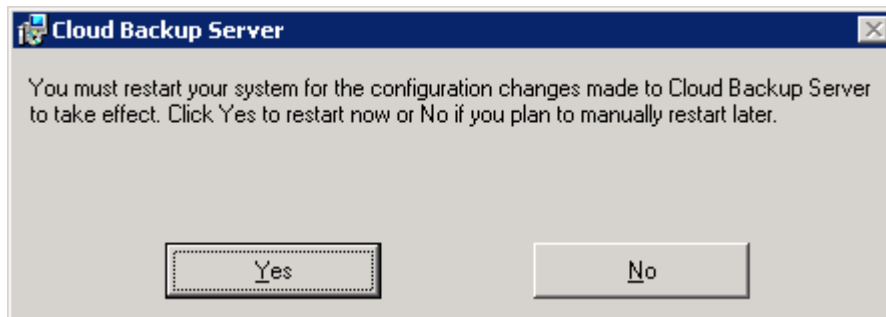
Gladinet Cloud Backup has a convenient installation wizard:



At the end of the installation, you can choose to automatically start the Cloud Backup Management Console.



The installation will prompt you to restart your machine. The restart is required to make the configuration changes take effect.



Creating a Backup

Here's a snapshot of the Backup management console. Under the Mirrored Backups and Snapshot Backups, there are 3 types of backup tasks:

[Backup My Data By Folder](#)

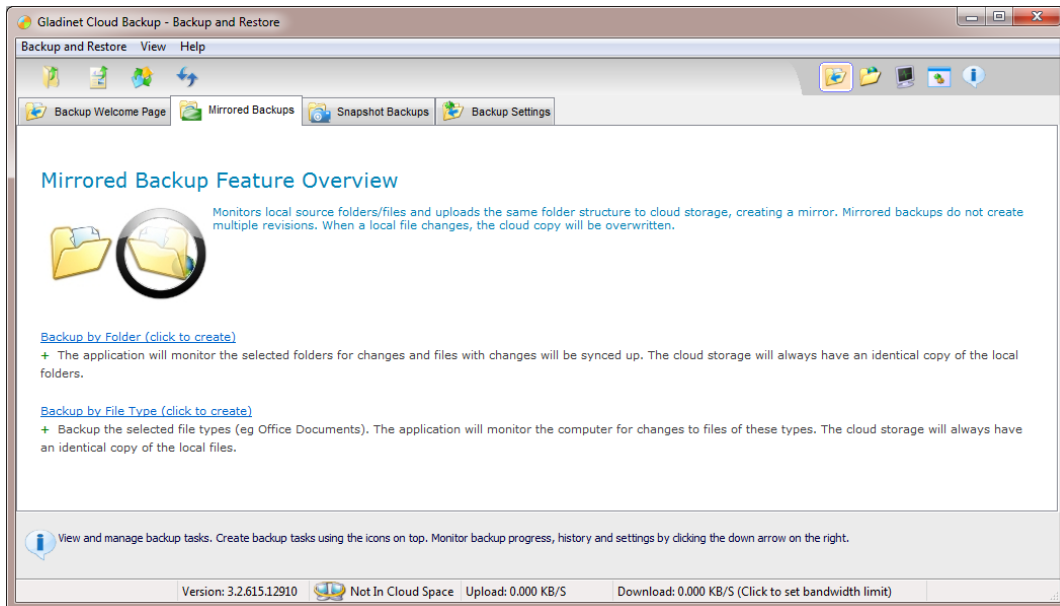
[Backup My Data By Type](#)

[Backup My Data By Application](#)



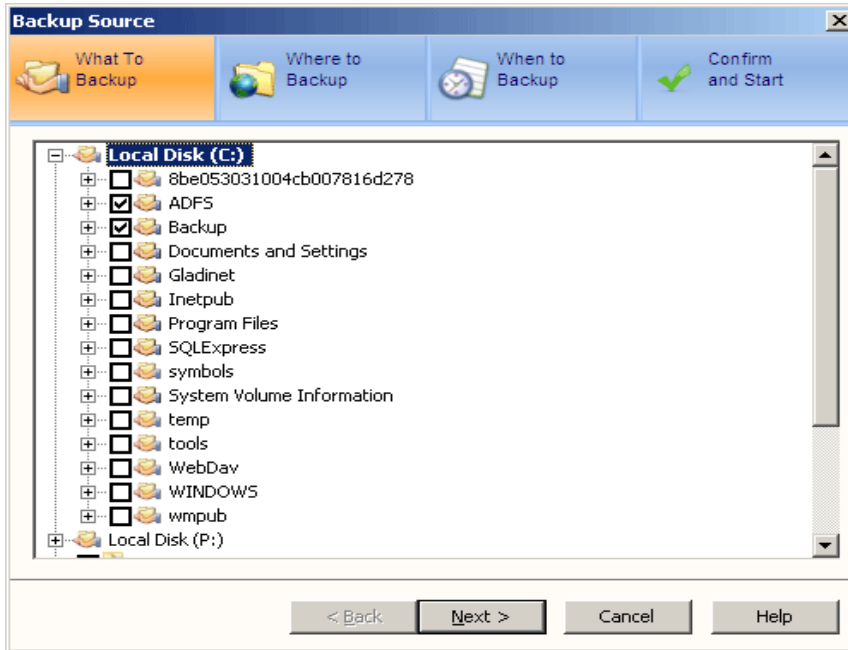
Backup My Data By Folder

Folder based backups allow the selection of a folder or set of folders that will be monitored for changes. When the backup task runs for the very first time, it will create a full upload of the source folders. Further run of the task will create incremental snapshots, where only file changes will be uploaded.

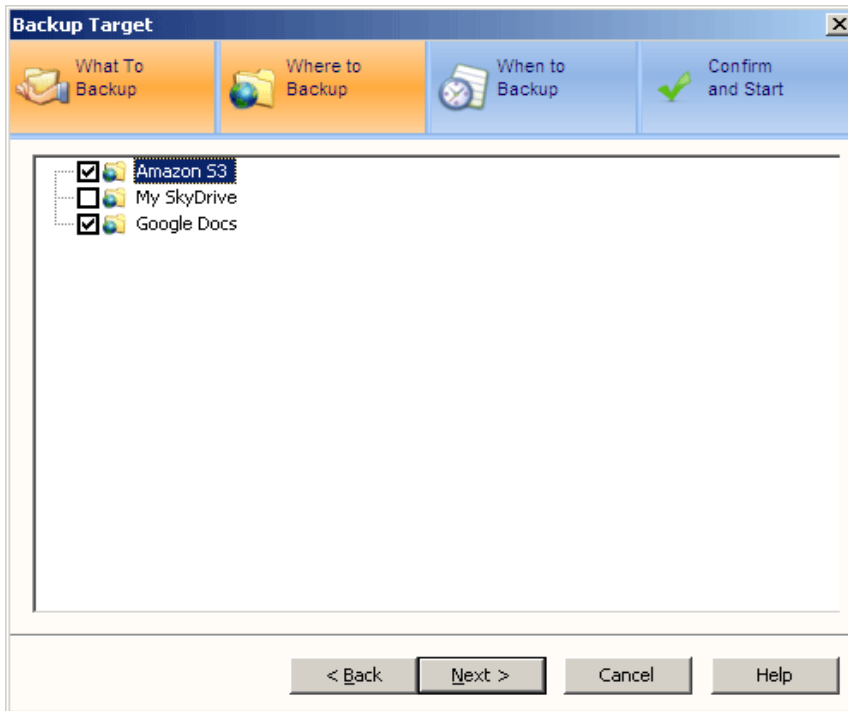


Folder backups can be created by clicking the link 'Backup By Folder'.

Select the source folders to backup from. Cloud Backup only supports local disks for now. No network drives are supported. Here you can select multiple folders as source folder.



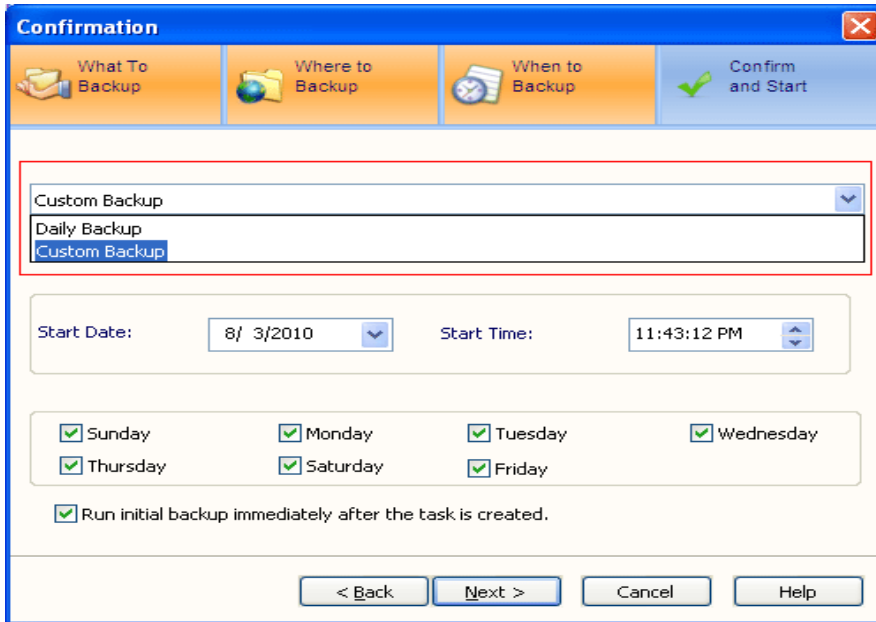
Select the target cloud storage services for the backup. Cloud Backup will create a specific backup folder under the root of each selected service. All the backup snapshots are stored in this folder. Multiple cloud storage services may be selected for redundancy.



The next step is to setup the backup schedule. You can set the backup to run daily, where you specify the time to run each day. Or customize it, to pick up the days of the week for the task to run. After the task is created, it will run at

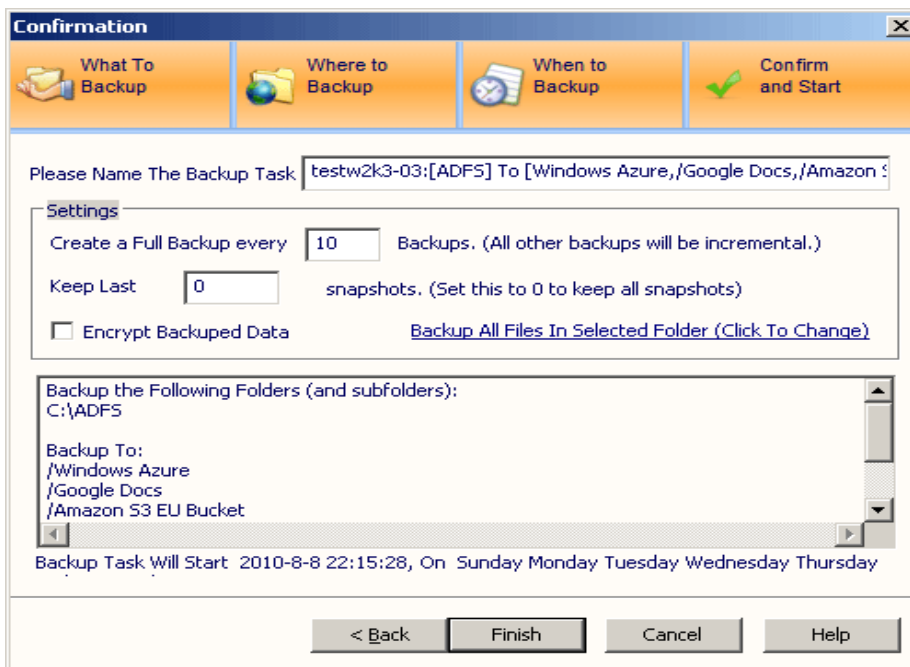
the scheduled time.

You can also force the task to run the initial backup as soon as the task is created. If so, make sure 'Run initial backup immediately' is checked.



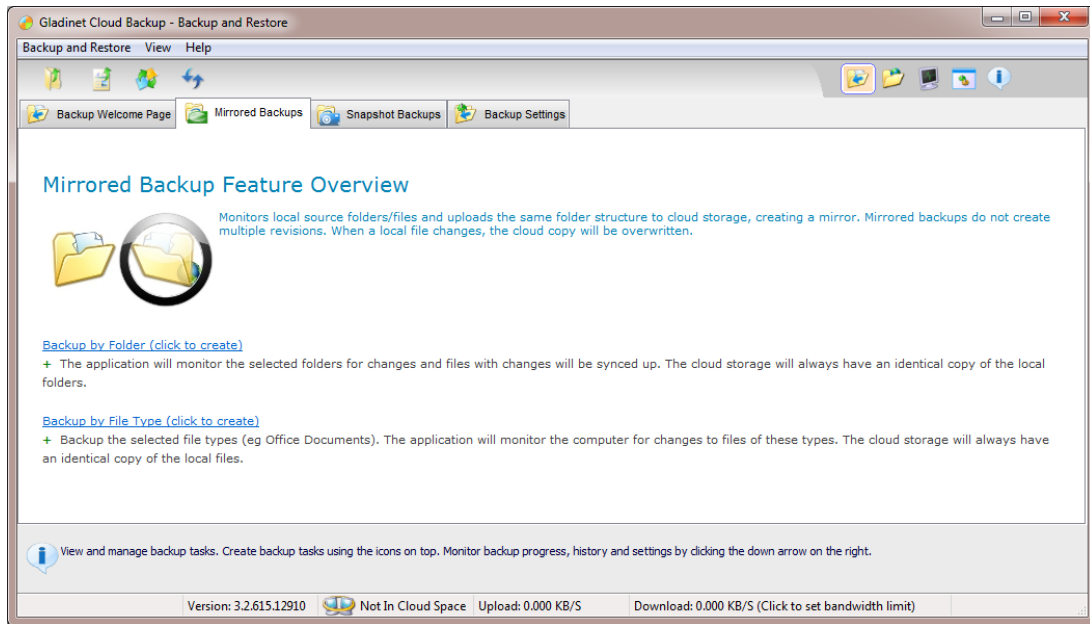
Confirm the backup.

Here you can change the backup name and define the backup setting. You can also define how often the backup will run a full backup and how many snapshots the backup task should keep to save space. You can choose to encrypt the backup data. If it is checked, you'll need type in a key. Please notice that the key applies to all encrypted backups. Without the key, there is no way to restore the snapshot. Please keep the key in a safe place.



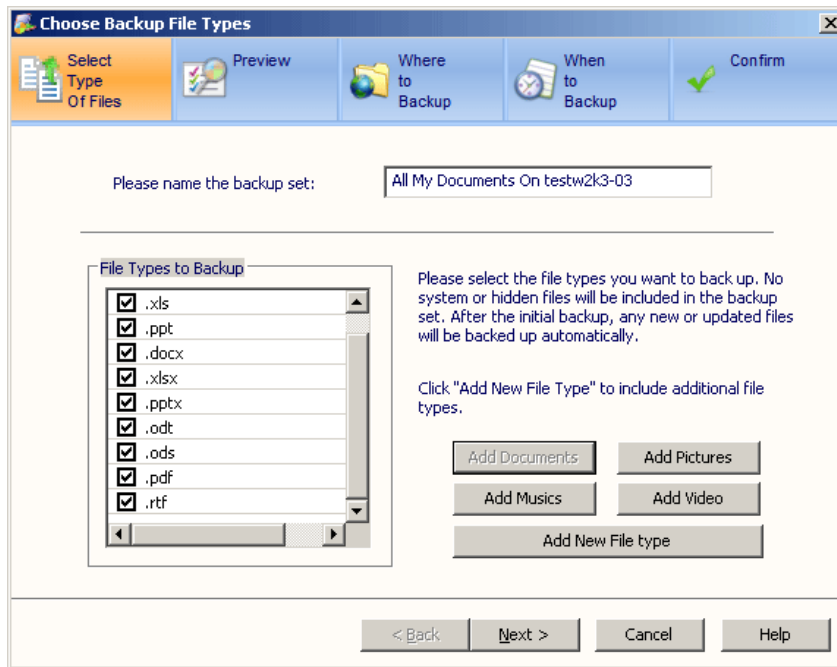
Backup My Data By Type

File type based backups allow the specification of a class of files that will be backed up. Gladinet Cloud Backup monitors the entire file system for new files or changes to existing file of the selected type. These changes will be detected and automatically uploaded.

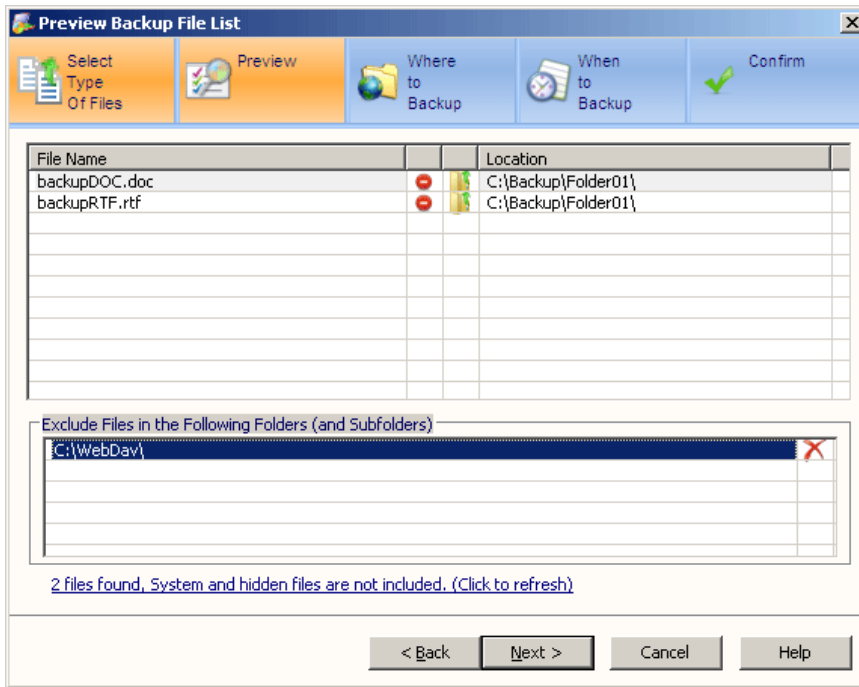


File Type backups can be created by clicking the link 'Backup My Data By Type'.

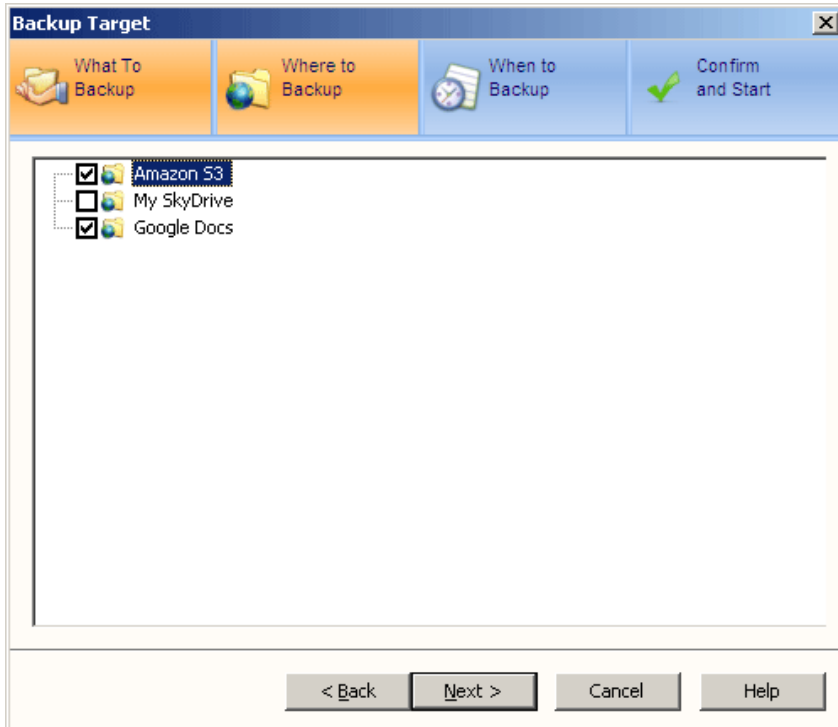
Assign a name to the task and select the types of files that will be included in the backup set.



The next screen shows a preview of the files that will be backed up. It can be fine tuned by the exclusion of some folders.

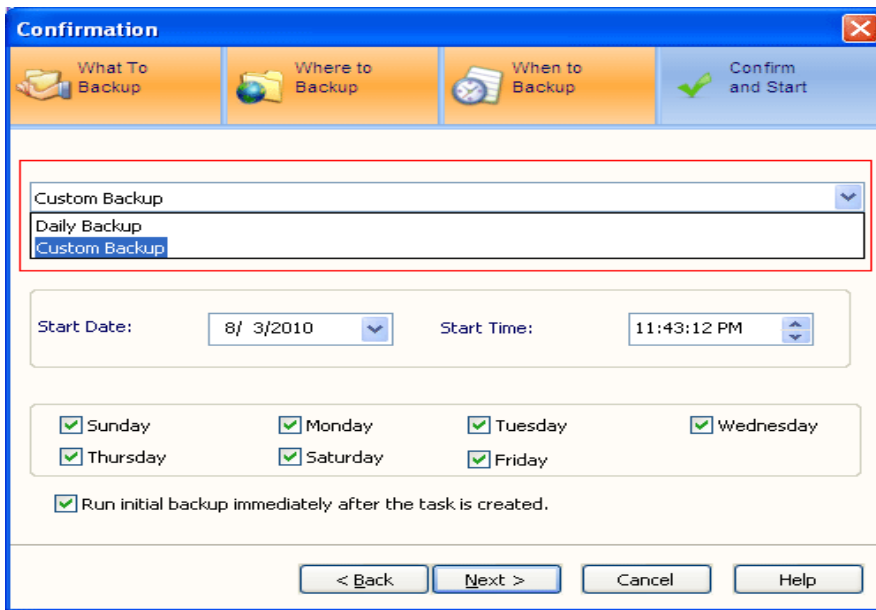


Select the target cloud storage services for the backup. Cloud Backup will create a specific backup folder under the root of each selected service. All the backup snapshots are stored in this folder. Multiple cloud storage services may be selected for redundancy.



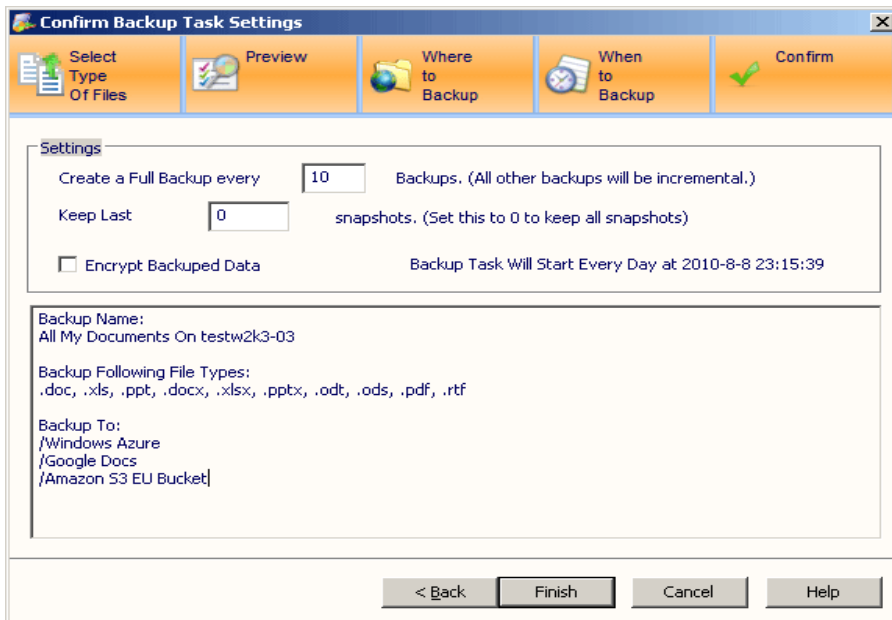
The next step is to setup the backup schedule. You can set the backup to run daily, where you specify the time to run each day. Or customize it, to pick up the days of the week for the task to run. After the task is created, it will run at the scheduled time.

You can also force the task to run the initial backup as soon as the task is created. If so, make sure 'Run initial backup immediately' is checked.



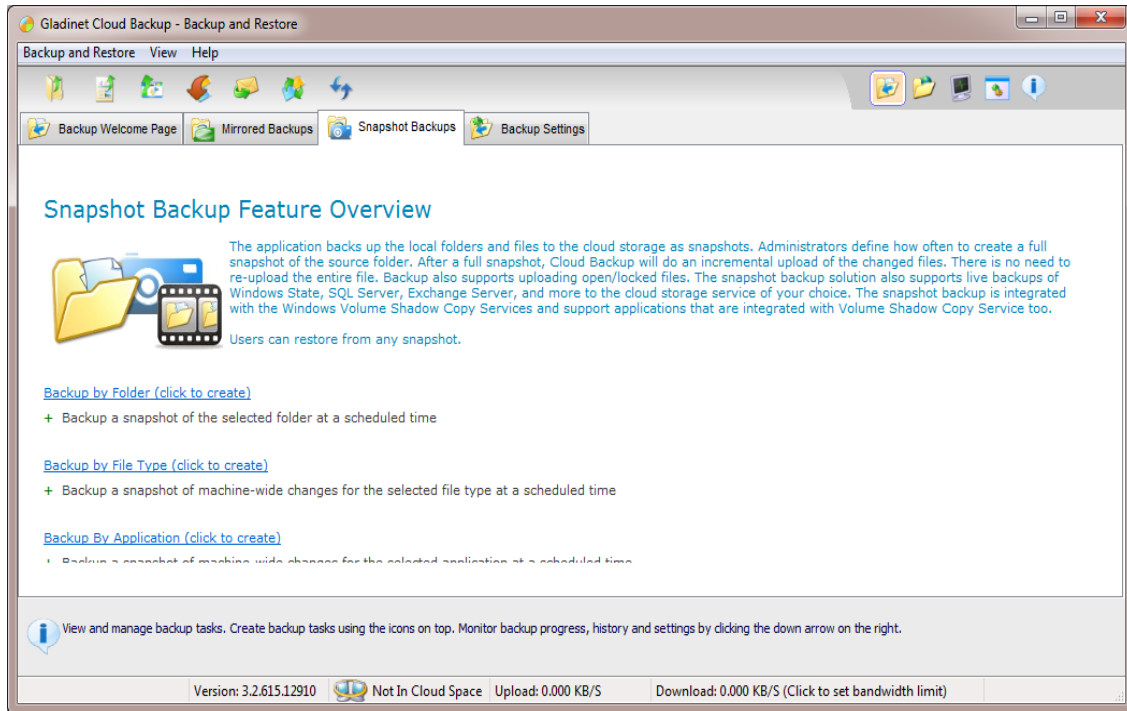
Confirm the backup.

Here you can change the backup name and define the backup setting. You can also define how often the backup will run a full backup and how many snapshots the backup task should keep to save space. You can choose to encrypt the backup data. If it is checked, you'll need type in a key. Please notice that the key applies to all encrypted backups. Without the key, there is no way to restore the snapshot. Please keep the key in a safe place.



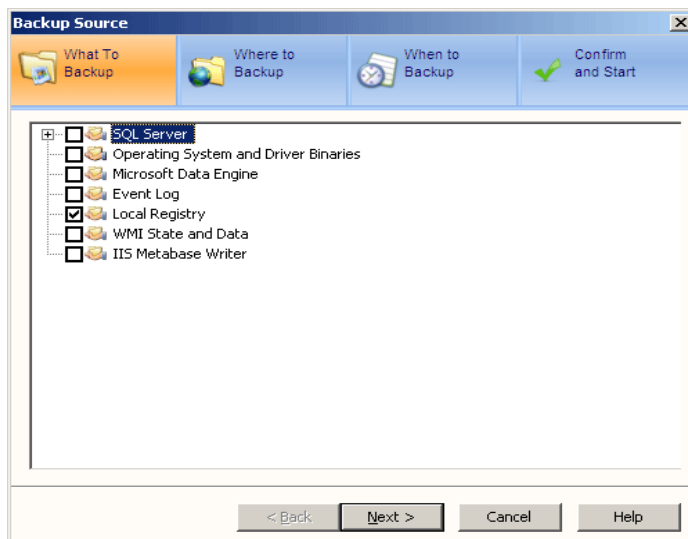
Backup My Data By Application

Gladinet Cloud Backup can backup certain application data, including SQL Server, Exchange Server, Active Directory and the Local Registry.

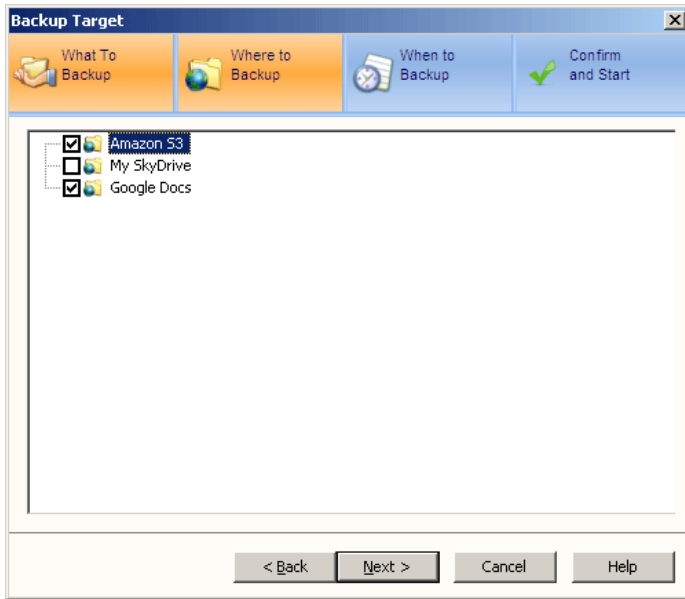


Application backups can be created by clicking the link 'Backup My Data By Application'.

Select the Application data you want to backup.

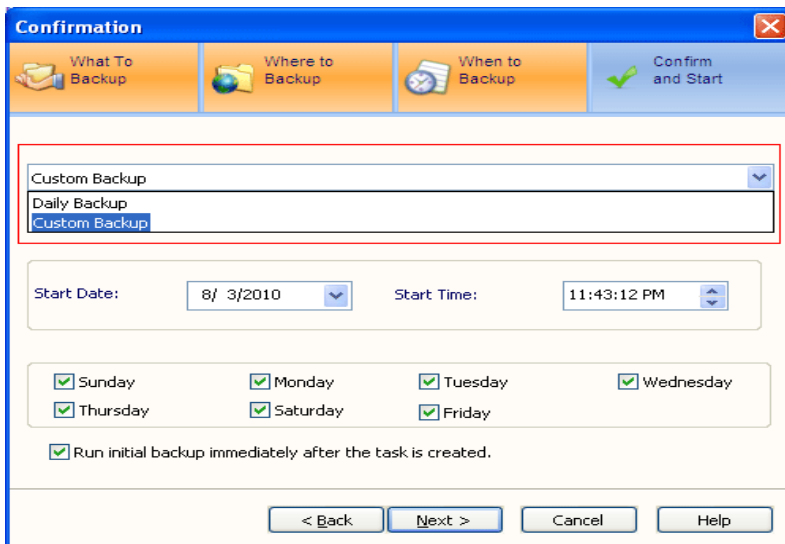


Select the target cloud storage services for the backup. Cloud Backup will create a specific backup folder under the root of each selected service. All the backup snapshots are stored in this folder. Multiple cloud storage services may be selected for redundancy.



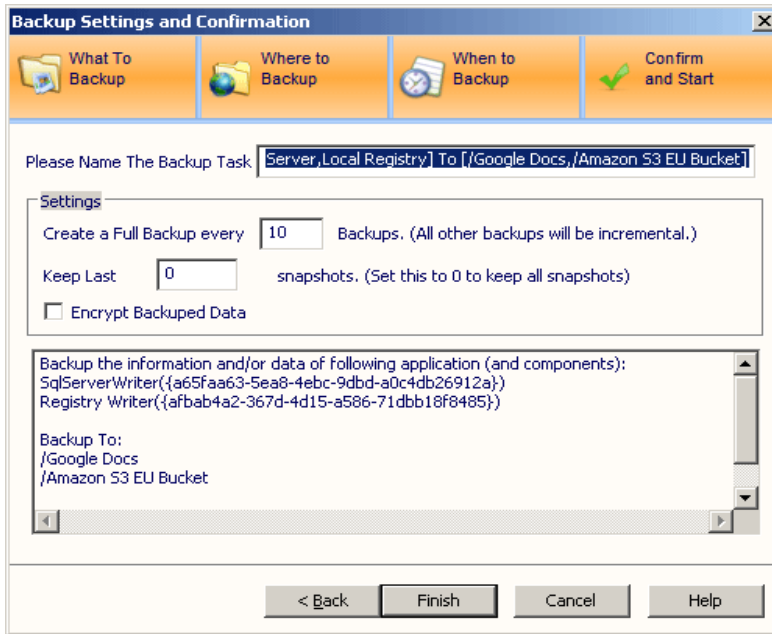
The next step is to setup the backup schedule. You can set the backup to run daily, where you specify the time to run each day. Or customize it, to pick up the days of the week for the task to run. After the task is created, it will run at the scheduled time.

You can also force the task to run the initial backup as soon as the task is created. If so, make sure 'Run initial backup immediately' is checked.



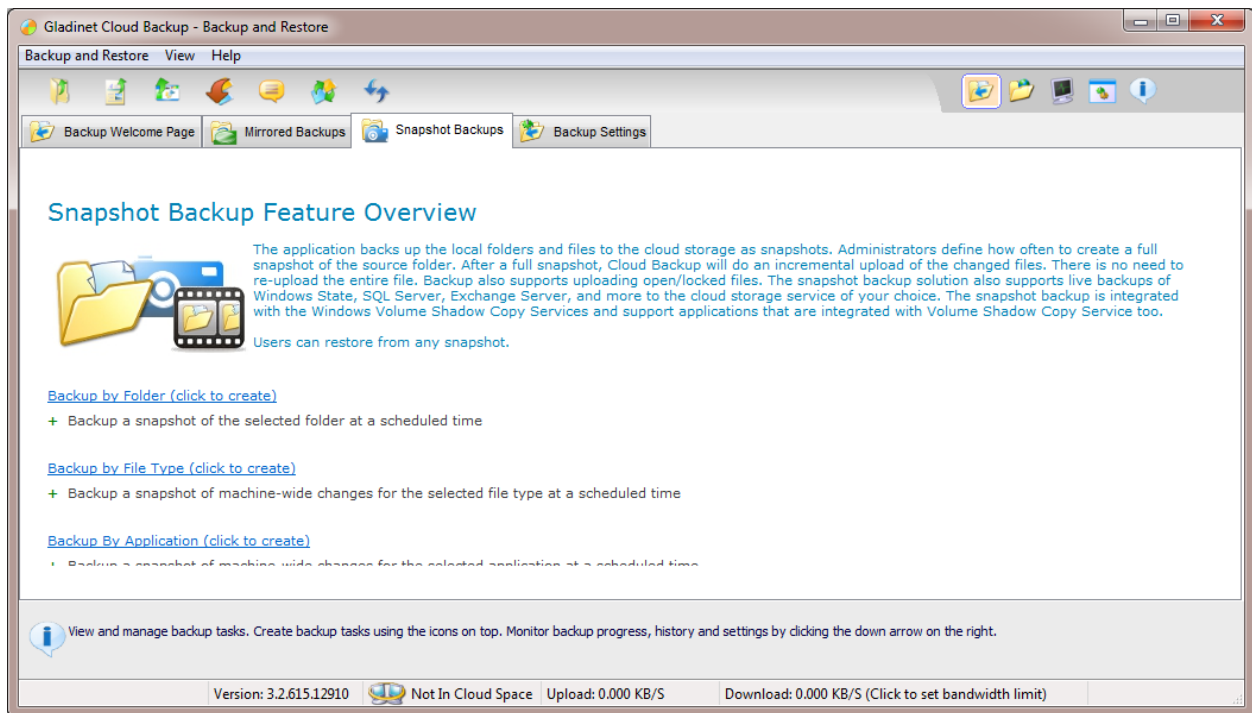
Confirm the backup.

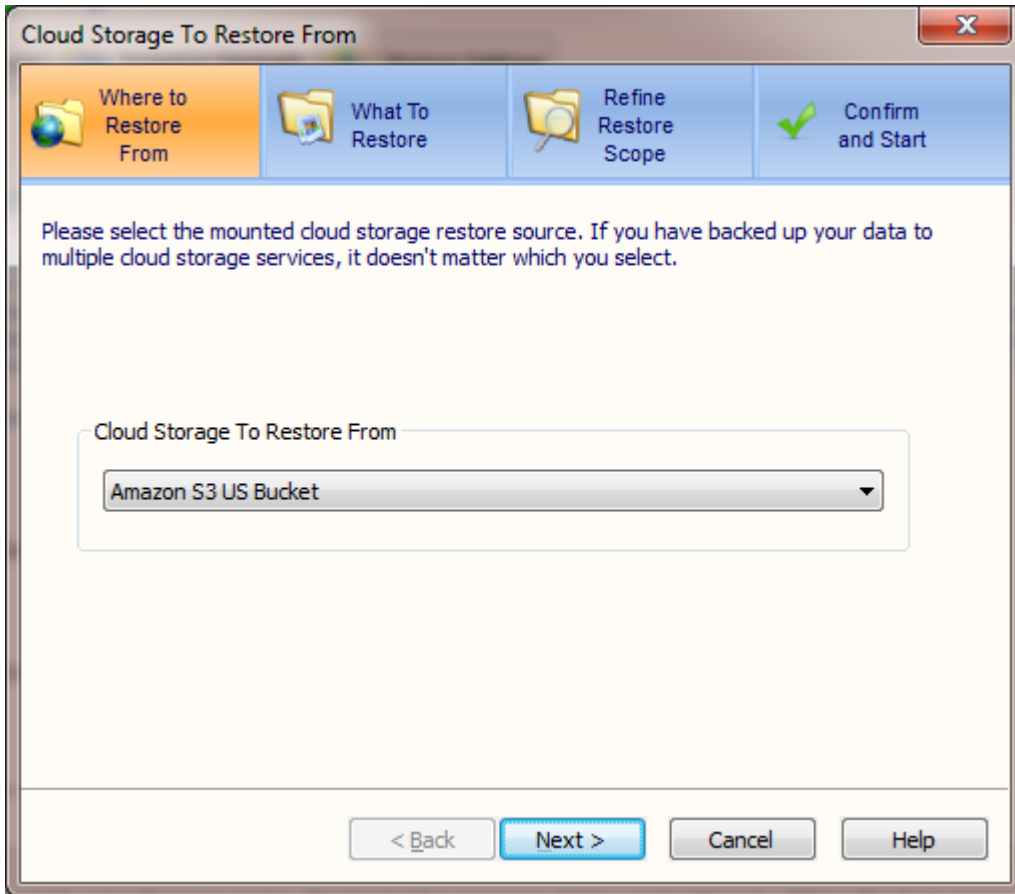
Here you can change the backup name and define the backup setting. You can also define how often the backup will run a full backup and how many snapshots the backup task should keep to save space. You can choose to encrypt the backup data. If it is checked, you'll need type in a key. Please notice that the key applies to all encrypted backups. Without the key, there is no way to restore the snapshot. Please keep the key in a safe place.



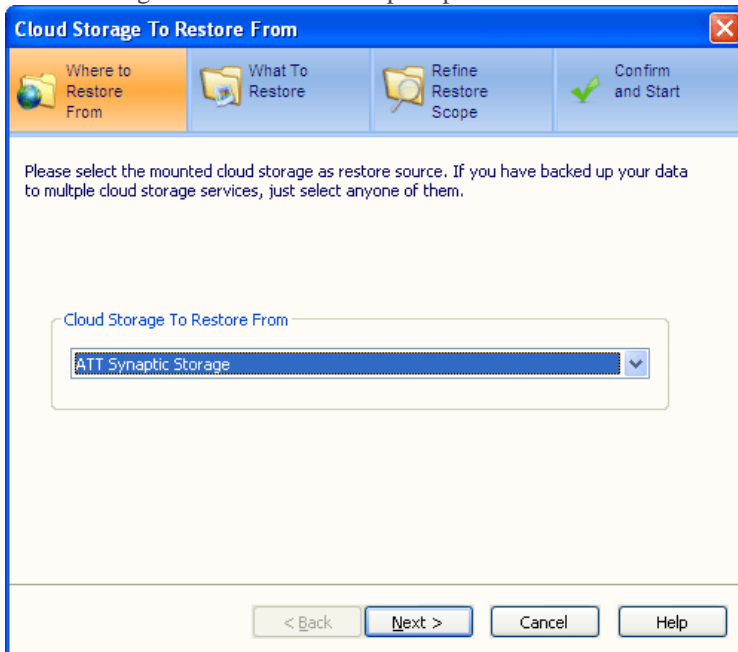
Restoring a Snapshot

To restore the snapshot, you can click the restore icon next to each snapshot, or the restore icon in the top menu bar.

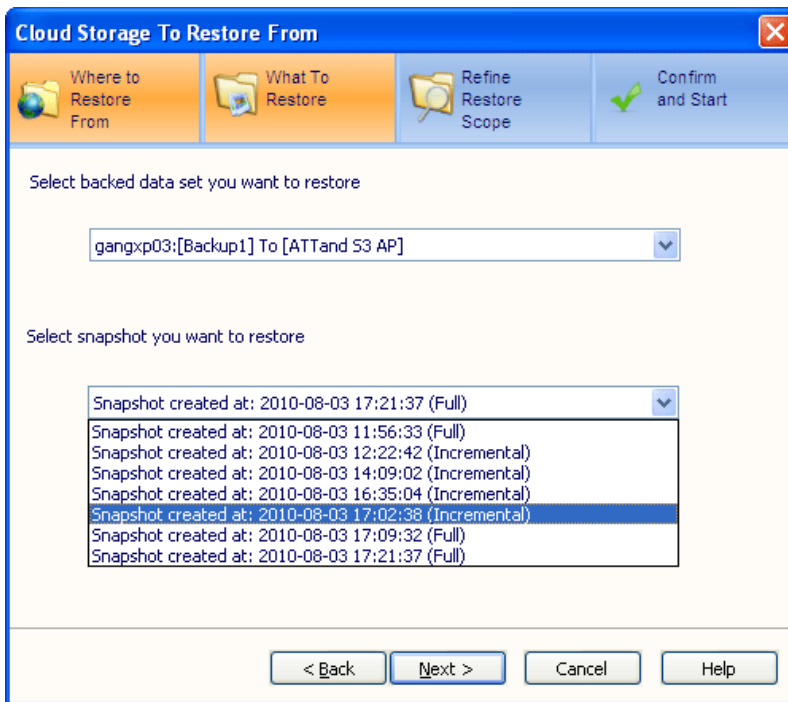




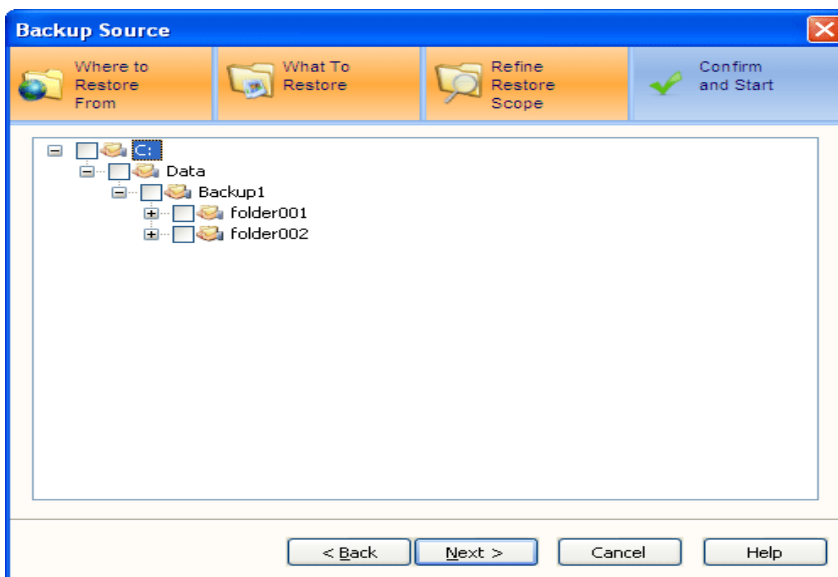
Select the cloud storage service where backup snapshots are stored.



Once the storage service provider is selected, Cloud Backup will scan the storage account to find existing backup sets. Select one backup set and all the snapshots for the set will be populated in the drop down list. Select the snapshot to be restored.



After selecting the snapshot, Cloud Backup will display all the folders and files in the snapshot. You can select the files and folders you want to restore.



Finally, confirm the restore. There are 4 options to control how the restore works.

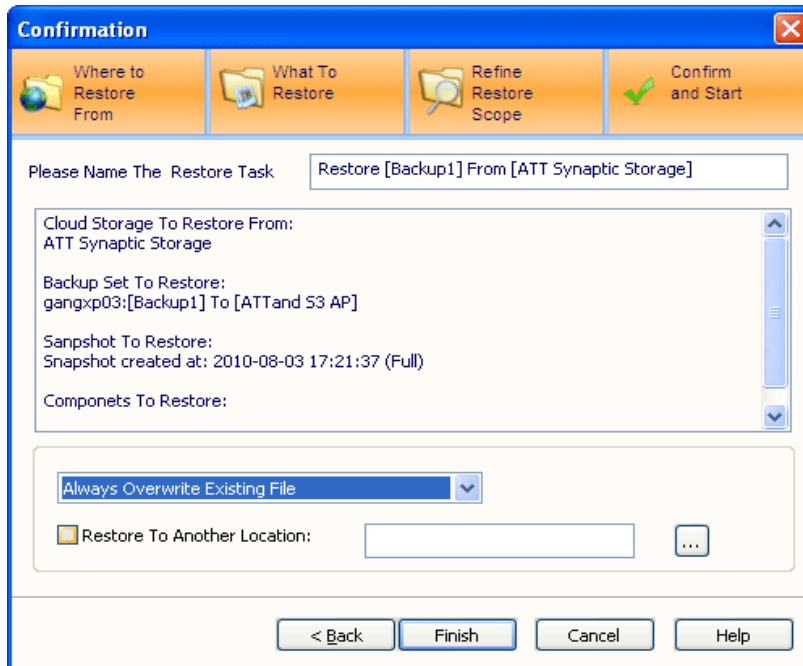
Always Overwrite Existing File: The restore task will always overwrite the existing files

Keep Newer File: The restore task will compare the timestamp of the backed up file with the existing file. If the existing file is newer, it will be kept.

Rename if Target File Exists: If the file is already there, keep the original and rename the restored file to a different name.

Skip if Target File Exists: If the file is already there, no need to restore.

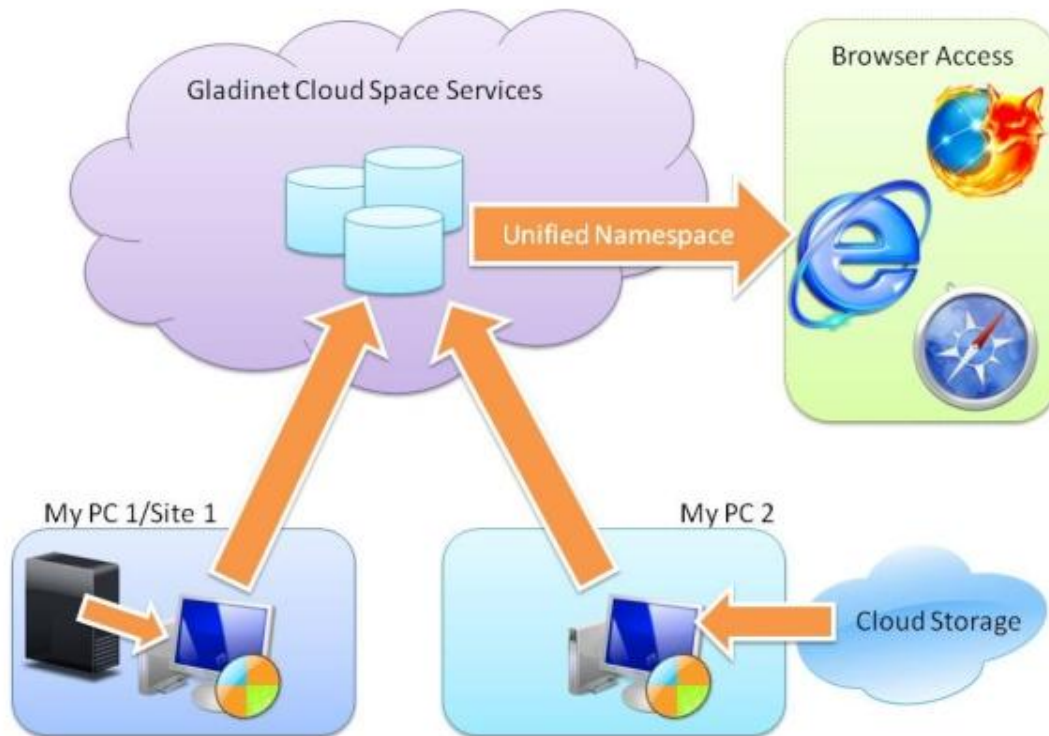
And you can choose to restore to a location other than the original folder.



Gladinet Cloud Space

Gladinet Cloud Space Overview and Key Concepts

Gladinet Cloud Space is an add-on service to both Gladinet Cloud Desktop and Gladinet CloudAFS. It is a monthly subscription service that provides browser access to your Cloud Desktop and CloudAFS instances.



Why Browser Access?

Use Case 1: You have an iPad and want to access your PC files and cloud storage files.

Use Case 2: You have Gladinet Cloud Desktop installed on your desktop PC. You want to access the virtual drive when you are not on the same local network.

Use Case 3: You have PCs at different sites. You want to unify access to all of them.

Step 1: Install Gladinet Cloud Desktop

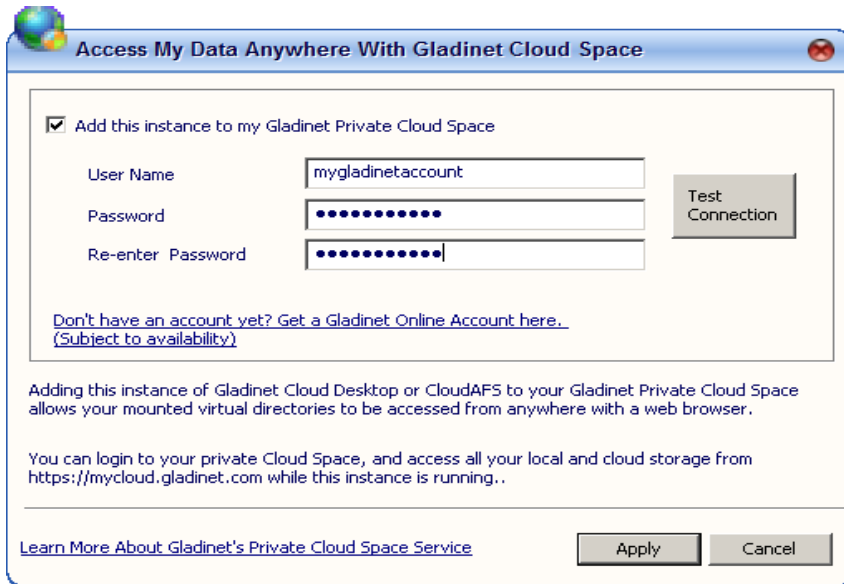
Gladinet Cloud Space is an add-on service. You will need to install either Gladinet Cloud Desktop or CloudAFS before you can use the service. Gladinet Cloud Space was first introduced in Gladinet Cloud Desktop version 2.3

Step 2: Add Gladinet Cloud Desktop to My Cloud Space



Step 3: Create a Gladinet Online Account

A Gladinet Online Account is required for the Gladinet Cloud Space service.

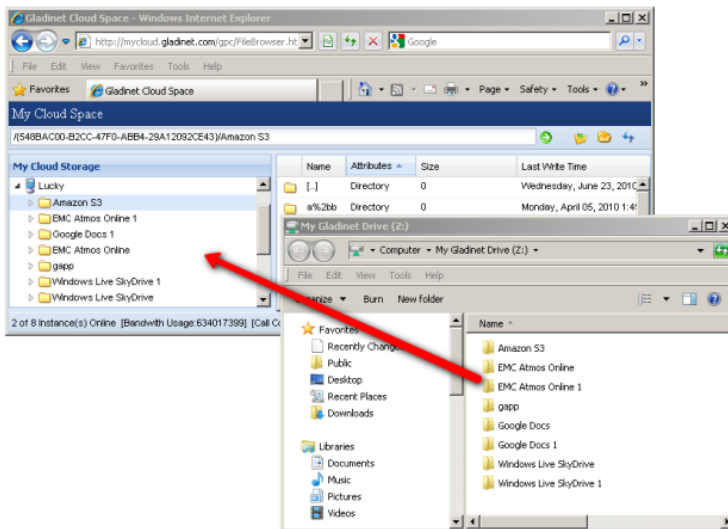


Step 4: Access Gladinet Cloud Desktop from any Web Browser

You can log into mycloud.gladinet.com and access the virtual drives on your cloud desktops.



Step 5: Use the File Browser from any Web Browser



Technology Highlights

Security

- AES-256 Bit Encryption for Data-at-Rest with keys owned by the user
- Profile Encryption
- In Memory Profile Option
- SSL Connections to the Cloud

Performance

- Chunking
- Compression
- Smart Bandwidth Controls
- Bandwith Throttling
- Tier1-Tier2 Caching
- Block Based Differentials

Management

- Highly configurable and customizable
- Reliable transfers on an unreliable network