

# Gladinet Cloud Server

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## Administration Guide

**Gladinet, Inc.**

**3/25/2015**

This document discusses the Gladinet Cloud Server Technology

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## Table of Contents

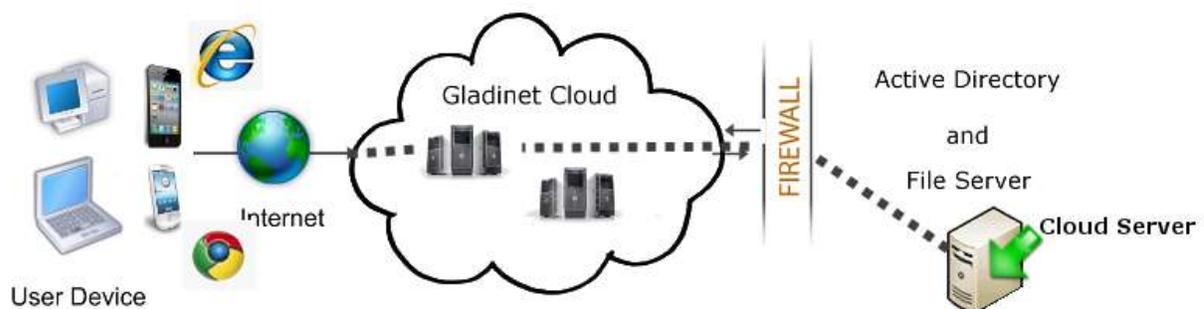
Overview of Gladinet Cloud Server .....	3
Installation .....	3
Administration and Configuration .....	8
Cloud Server Console .....	9
Task Manager.....	10
Settings – Bandwidth Control .....	26
Settings – Sync Control .....	27
Settings – Advanced.....	28
Settings – Trace.....	29
Conclusion .....	30

## Overview of Gladinet Cloud Server

Public cloud storage solutions have become increasingly convenient as they enable anywhere access to files and folders from web browsers, desktops, and mobile devices. With sync and share capabilities, it is also very easy for team members to collaborate over the Internet. However, the file server on the local area network (LAN) in your office still provides the key file storage and collaboration capabilities through network shares. As an enterprise you would like to adopt cloud storage technology along with all its new capabilities, however, you just cannot get rid of your file servers. Even if file servers were easy to replace, you still need a way to migrate all their data. It even gets more complicated when you need to collaborate across multiple file servers in multiple sites.

Enterprises need a way to access file server content over the Internet, migrate file server content to cloud storage and present a unified namespace across all distributed file servers. Businesses have traditionally relied on virtual private network (VPN) solutions to access corporate data. However, with a VPN, you will need additional solutions to enable mobile access, web browser based access, sync & share, and team collaboration functionalities.

Gladinet Cloud Server (Server Agent) technology allows you to turn your file servers into cloud servers to migrate the file server shares to the cloud seamlessly. During migration the existing share permissions are also migrated to the cloud. Server Agent technology turns any Windows file server into private cloud storage that can be accessed from anywhere using any device using existing identities and permissions.

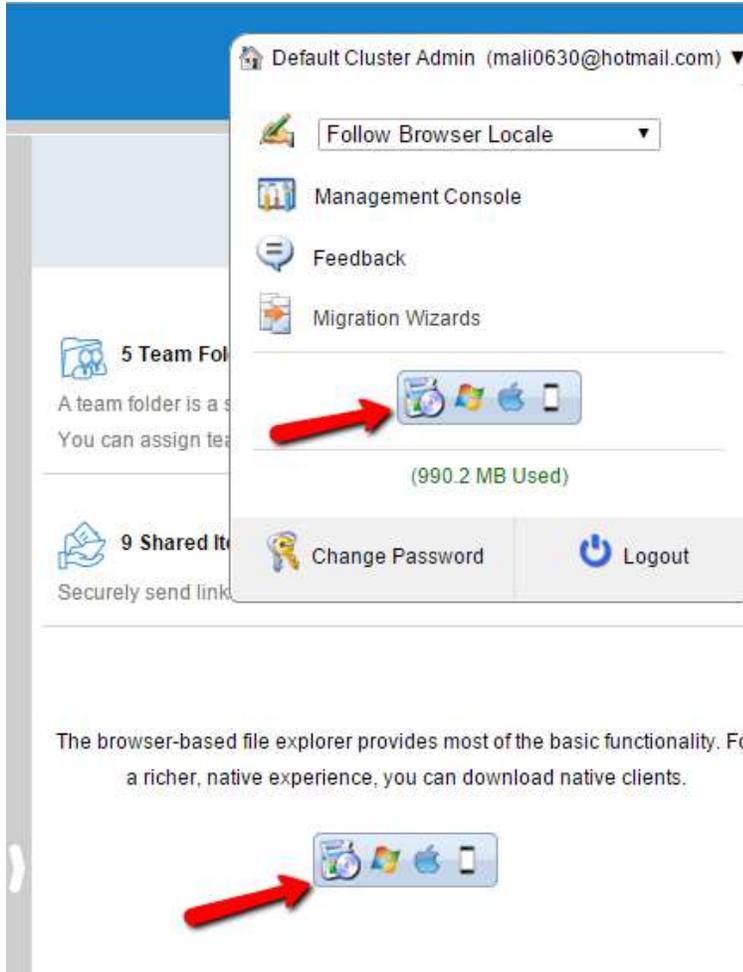


## Installation

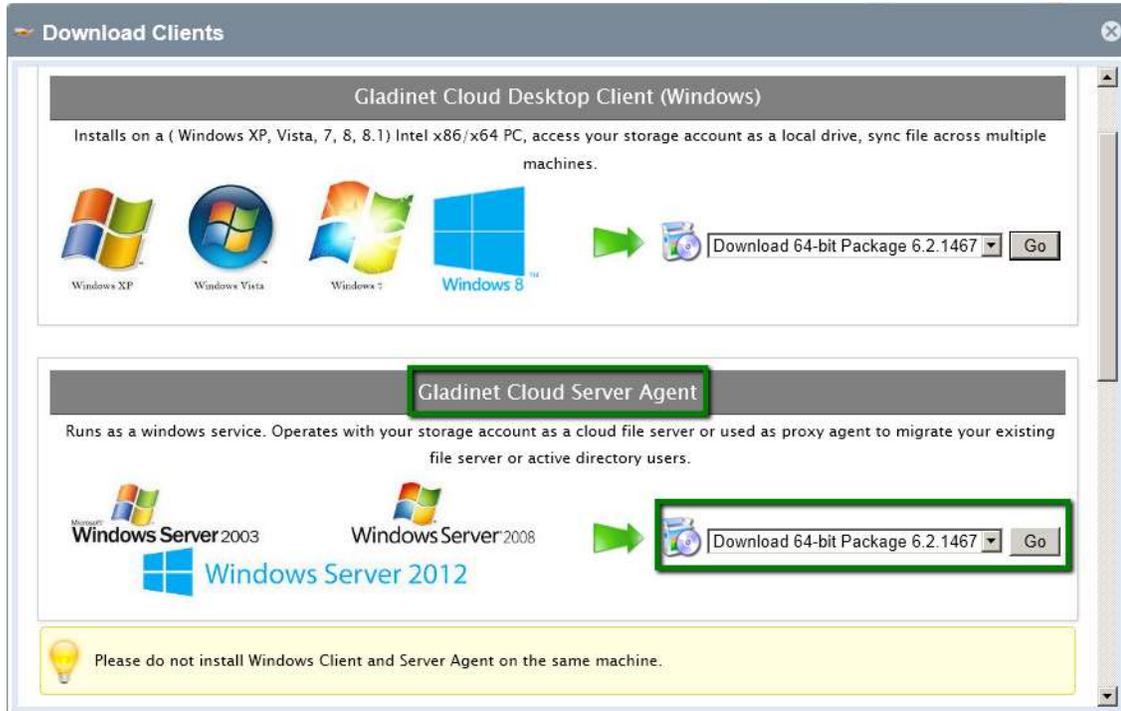
You can download and install the Cloud Server Agent software directly from the web portal. Once you login you will see the clients' download icon under your email or under Gladinet

Cloud in the right pane. Complete the following steps to install and Cloud Server Agent software on your file server.

1. Login to the web portal and click on the 'Download clients' icon in the right pane.



2. Select the 'Gladinet Cloud Server Agent' client and click on the 'Go' button.



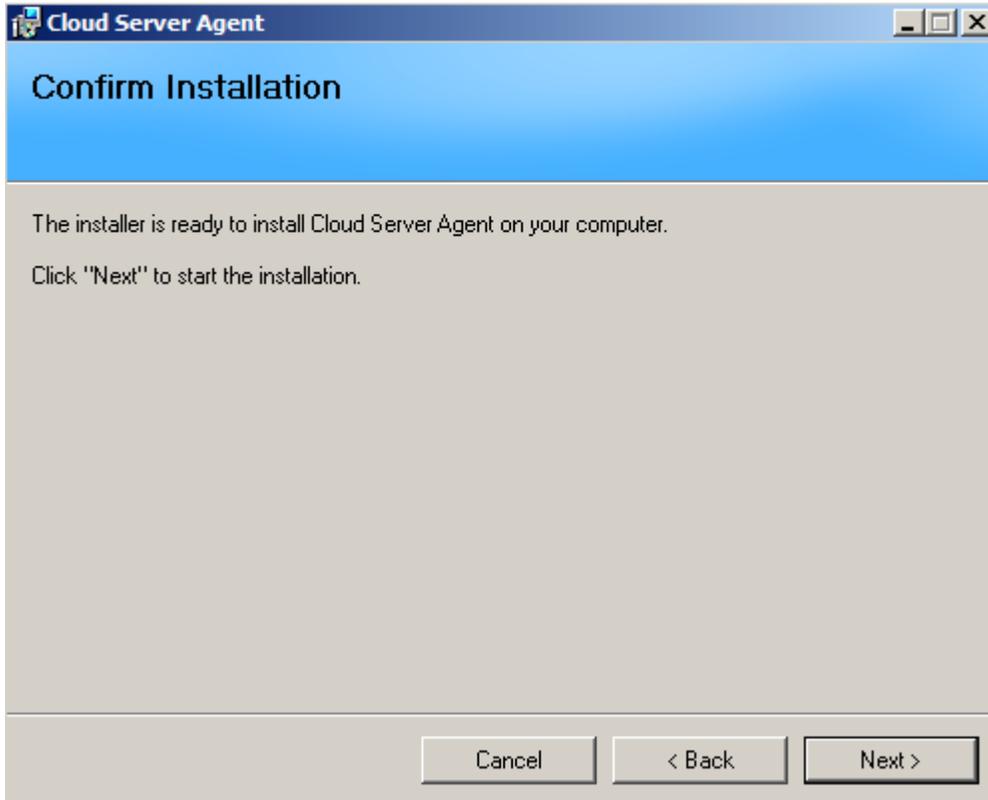
3. Click 'Next' on the 'Welcome' screen.



4. Select 'I Agree' on the 'License Agreement' window and click 'Next'.



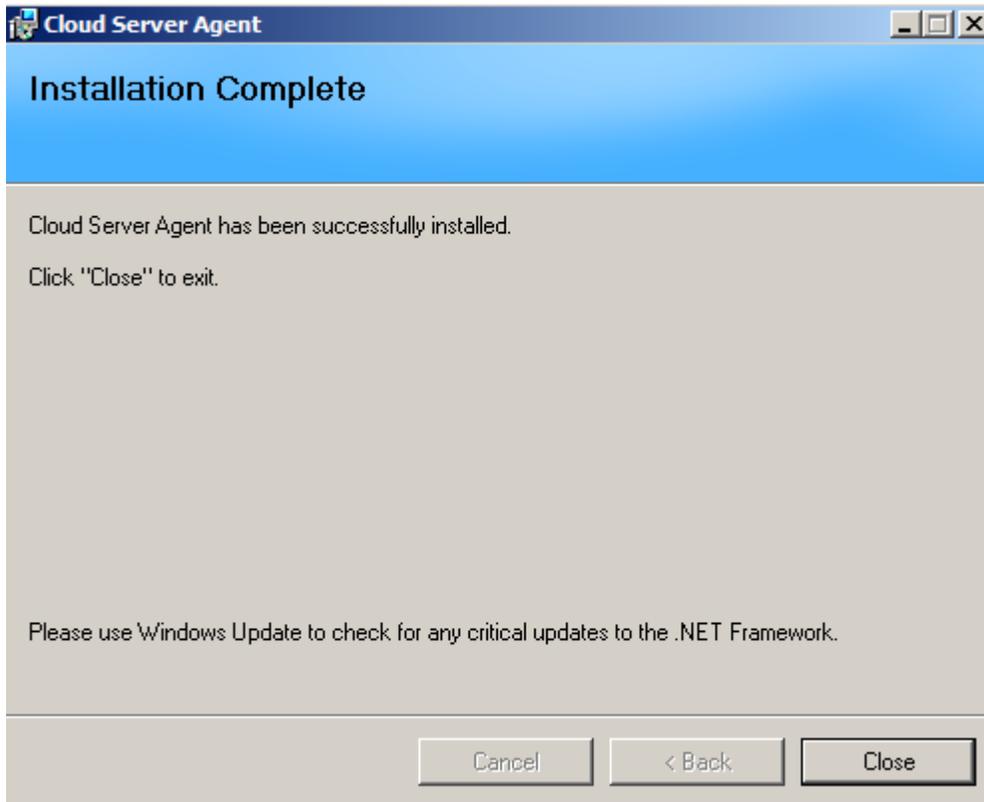
5. Click 'Next' on the 'Confirm Installation' window.



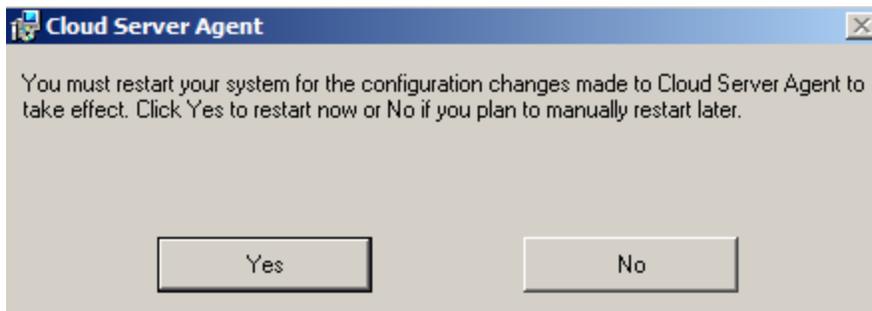
6. Let the install continue.



7. Click 'Close' on the 'Installation Complete' window.



8. Restart after the installation is complete.



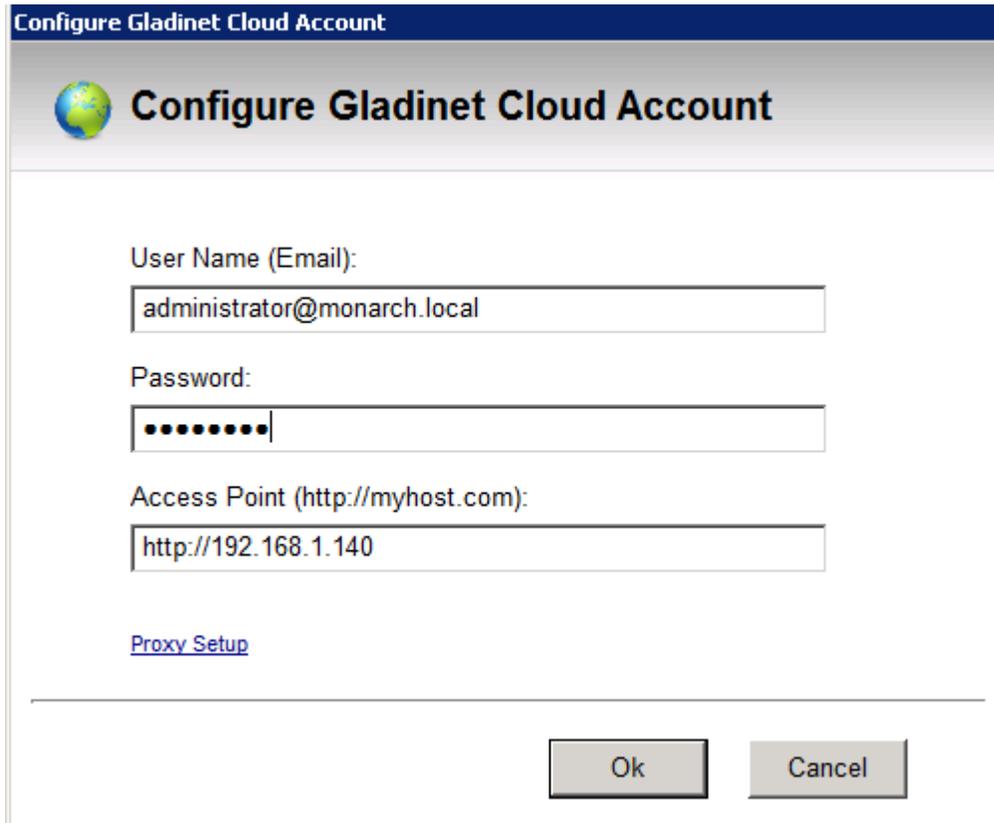
## Administration and Configuration

Gladinet Cloud Server (Server Agent) runs as a Windows Service in the background. Since it is a background service, it always runs regardless of the users logging into the server. However, the administration of the server agent is done via a Windows application – the Cloud Server Console. You need to log into the server console to use the Gladinet Server Agent Management Console for administrative related tasks.

## Cloud Server Console

Gladinet Cloud Server Console will launch automatically after the reboot using the cluster admin or tenant admin credentials that were used to install the software.

Gladinet Cloud Server Management Console Login:



**Configure Gladinet Cloud Account**

**Configure Gladinet Cloud Account**

User Name (Email):  
administrator@monarch.local

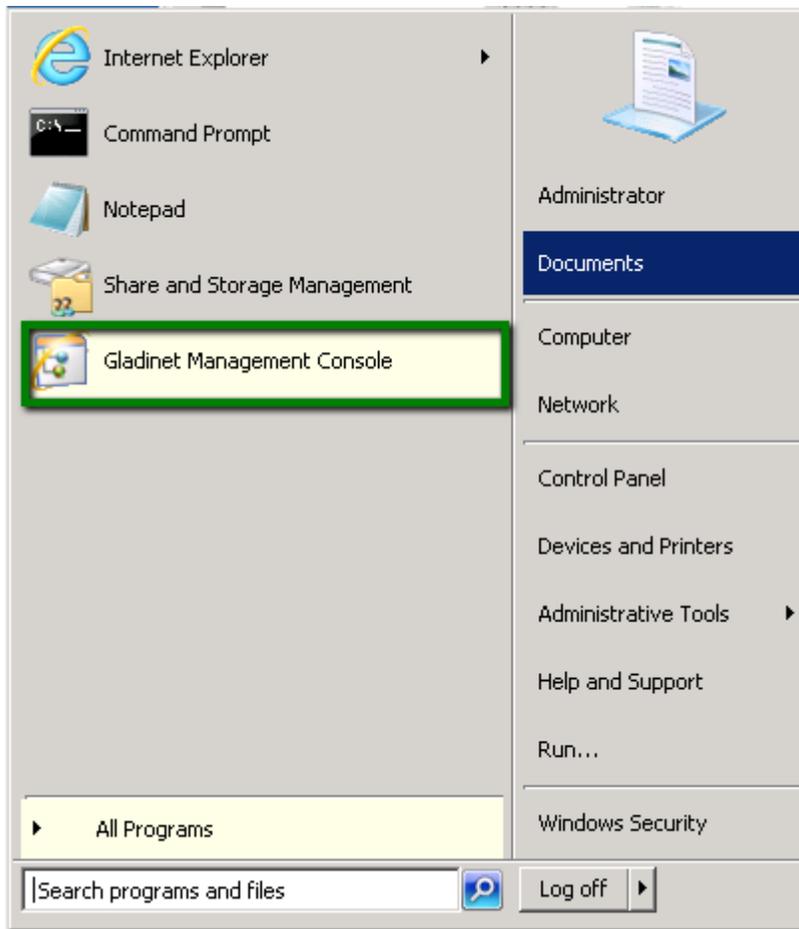
Password:  
.....

Access Point (http://myhost.com):  
http://192.168.1.140

[Proxy Setup](#)

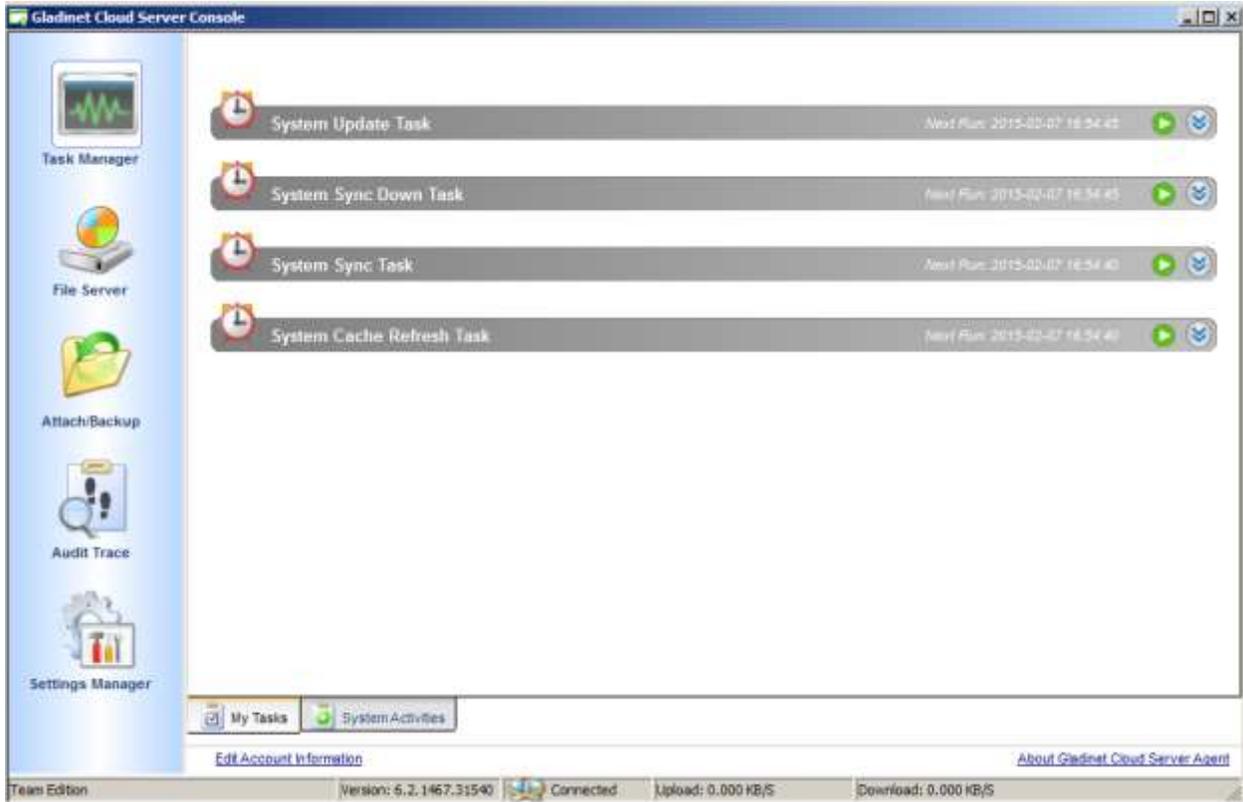
Ok Cancel

Gladinet Cloud Server Management Console can also be launched from Windows Start Programs Menu:

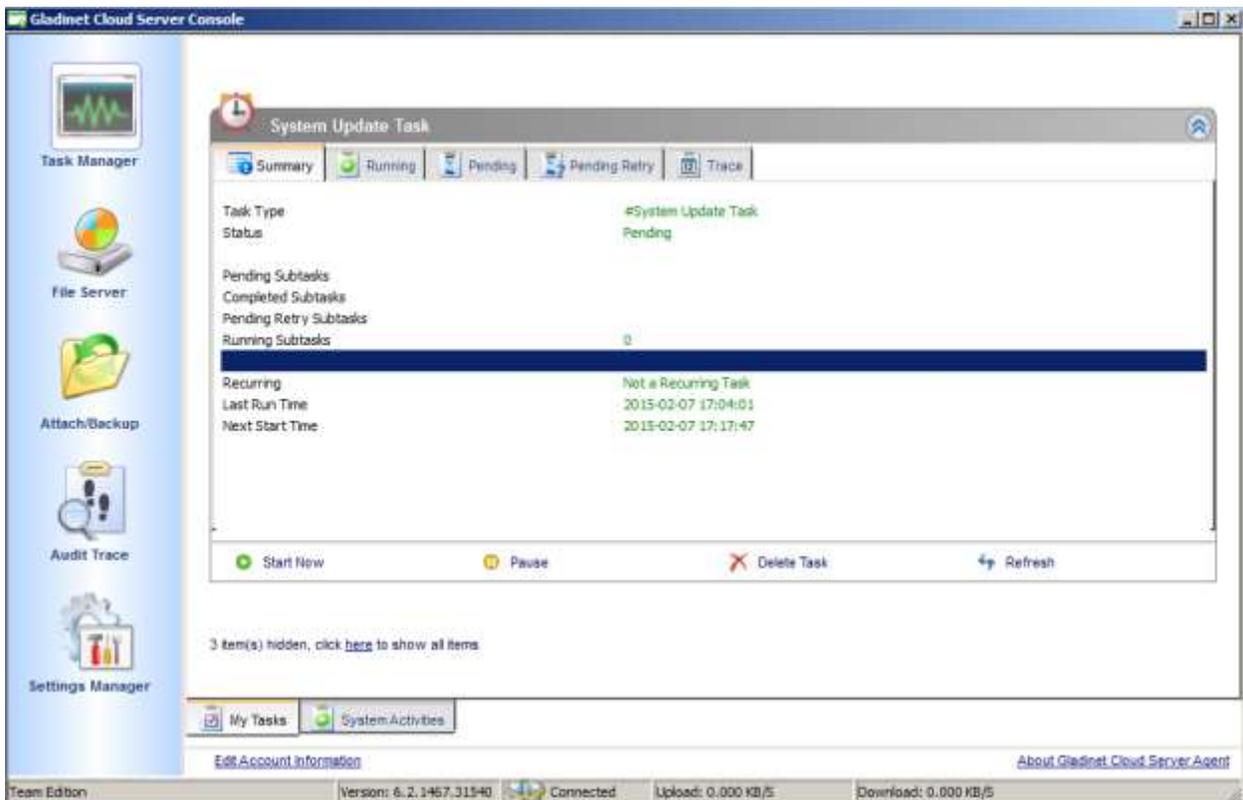


## Task Manager

Task Manager shows all the system related tasks.



## System Update Task



'System Update Task' shows all system related update tasks. Server Agent software checks the local file system every 15 seconds and when it notices the changes to the files, the changed files will be added to the upload queue. The real upload time depends on how big the upload queue is and if there is only one file with the changes, the changes to the file will be uploaded to the cloud in 15 seconds.

'Summary' tab shows a summary of all the 'System Update Tasks'. It shows the 'Task Type' where the type is basically the name of the task. It shows the 'Status' as 'Pending' which means that the 'System Update Task' is always looking for changes and is always in 'Pending' state in case there are any updates that needs to occur.

'Pending Subtasks' shows the subtasks which are in pending state and waiting for their turn to get uploaded to the cloud.

'Completed Subtasks' shows the number of upload subtasks that have been completed.

'Pending Retry Subtasks' shows the number of any tasks which are pending retry meaning for some reason the changes for some files were not uploaded to the cloud and hence they are in the 'Pending Retry Subtasks' queue and as soon as their turn comes the changes for files in 'Pending Retry Subtasks' will also be uploaded to the cloud.

'Running Subtasks' shows how many subtasks are currently running.

'Recurring' shows whether it is a recurring task or not.

'Last Run Time' shows the time when the Server Agent software last detected the changes on the local file system and ran to update the files in the cloud.

'Next Start Time' shows the time when the 'Update Task' will run next. The counter increments every 15 seconds.

Administrator can force the updates by clicking on 'Start Now' option in which case the software will run the update tasks right away. You can also use the 'Pause' option to stop the update task from updating local changes to the cloud. 'Delete Task' option allows to delete any tasks for which updates are not desired. 'Refresh' will refresh all the counters on the 'Summary' tab.

'Edit Account Information' link at the bottom allows you to provide different credentials to launch Cloud Server Console and perform management related tasks.

## System Sync Down Task

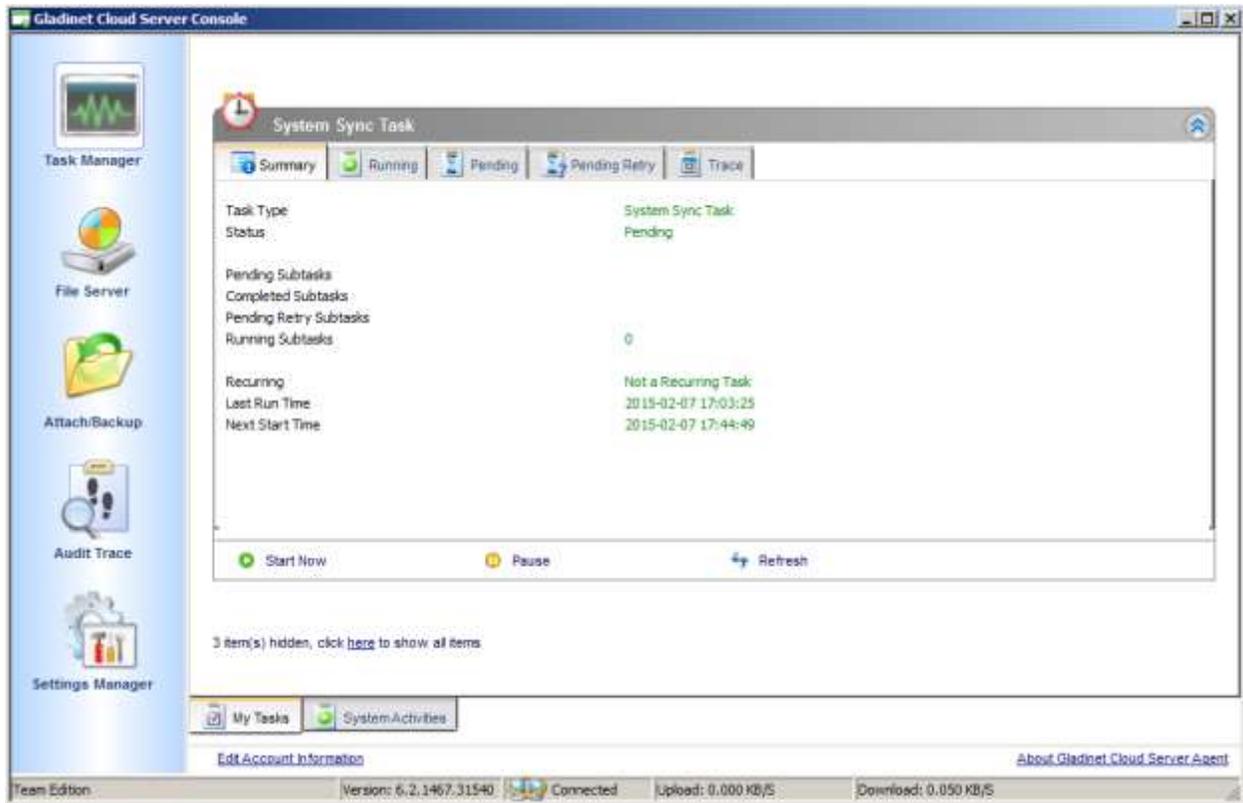
The screenshot shows the 'System Sync Down Task' configuration page in the Gladinet Cloud Server Console. The page is titled 'System Sync Down Task' and has a navigation bar with tabs for Summary, Running, Pending, Pending Retry, and Trace. The main content area displays the following information:

Task Type	System Sync Down Task
Status	Pending
Pending Subtasks	
Completed Subtasks	
Pending Retry Subtasks	
Running Subtasks	0
Recurring	Not a Recurring Task
Last Run Time	2015-02-07 12:17:08
Next Start Time	2015-02-07 17:09:39

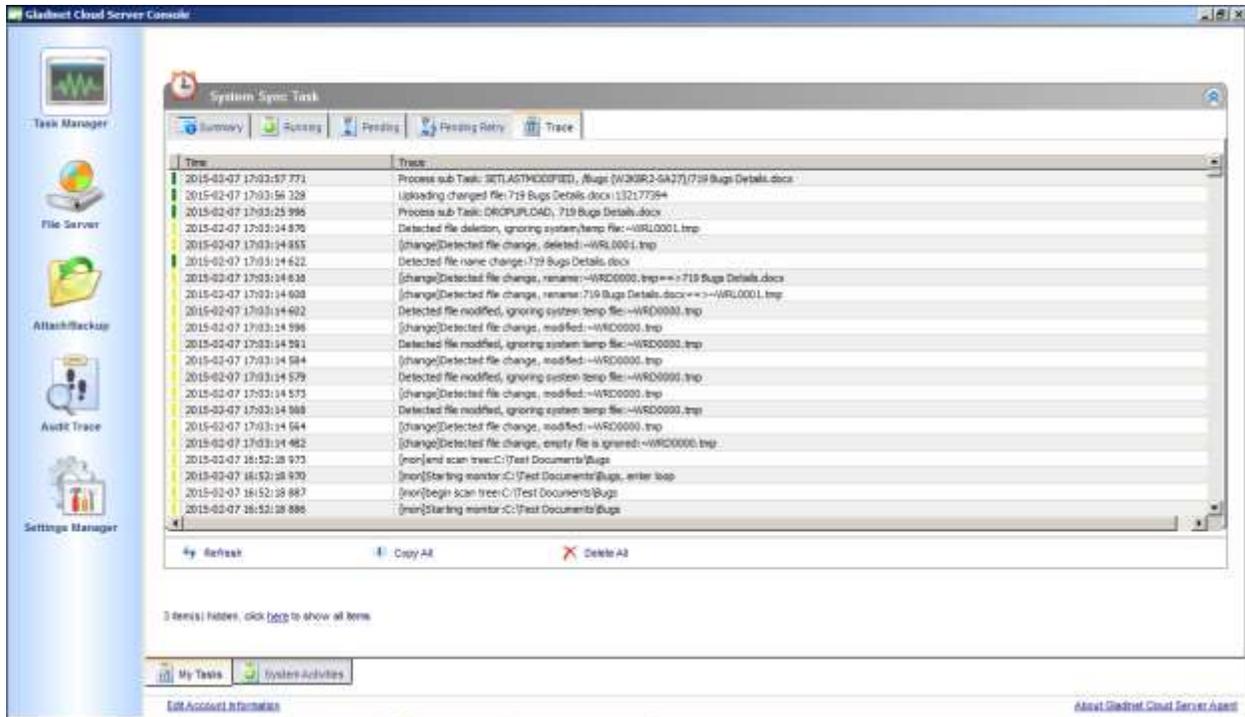
At the bottom of the main content area, there are four buttons: Start Now, Pause, Delete Task, and Refresh. Below the buttons, there is a message: '3 item(s) hidden, click [here](#) to show all items'. At the bottom of the console, there are tabs for 'My Tasks' and 'System Activities', and a status bar showing 'Team Edition', 'Version: 6.2.1467.31540', 'Connected', 'Upload: 0.000 KB/S', and 'Download: 0.000 KB/S'.

'System Sync Down Task' performs the exact same tasks as the 'System Update Task' but its job is to ensure that the changes that are done to the files in the cloud are automatically synced down to the file server. The 'System Update Task' and the 'System Sync Down Task' are what provides the mirroring or two-way sync between the local files on the cloud server and the files in the cloud.

## System Sync Task



‘System Sync Task’ is the master sync task and its job is to keep an eye on both local file changes and file changes that are done in the cloud. This is the task which triggers the ‘System Update Task’ or the ‘System Sync Down Task’.

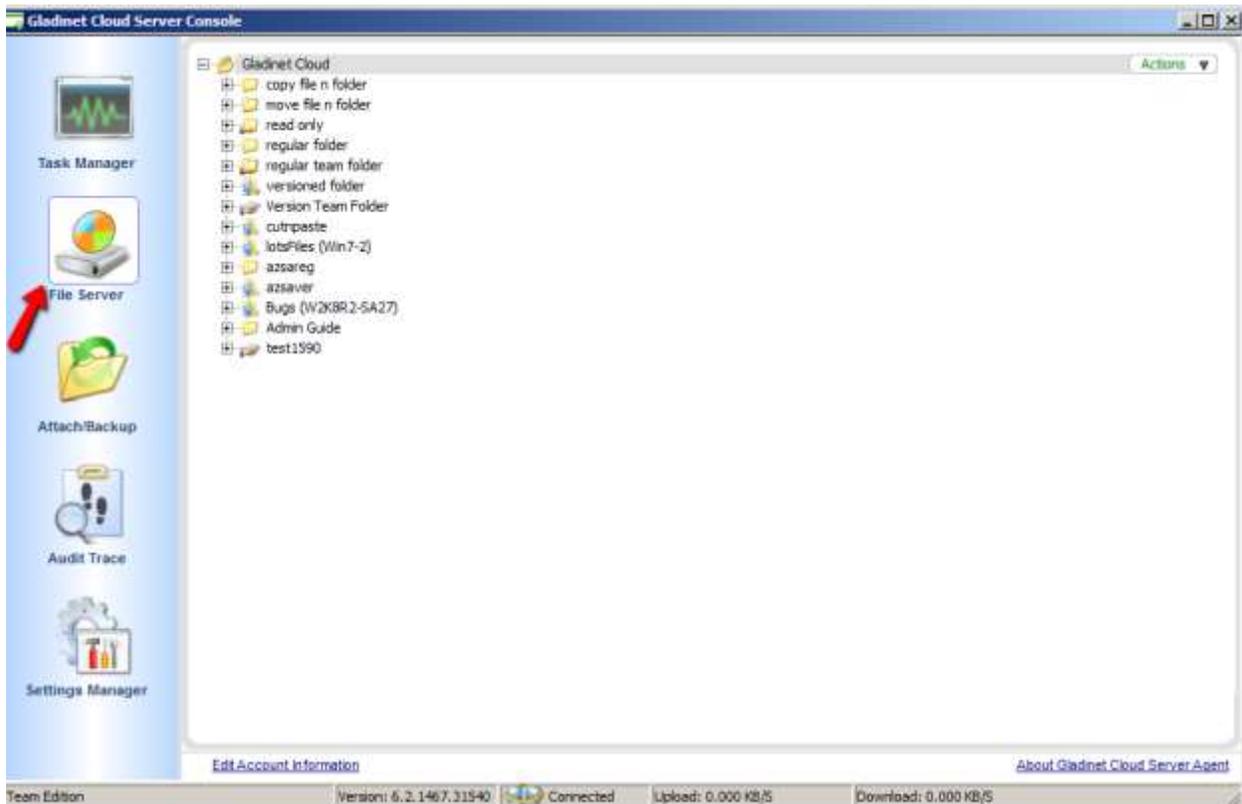


The 'Trace' tab in the 'System Sync Task' lists all the uploading, downloading, and monitoring tasks.

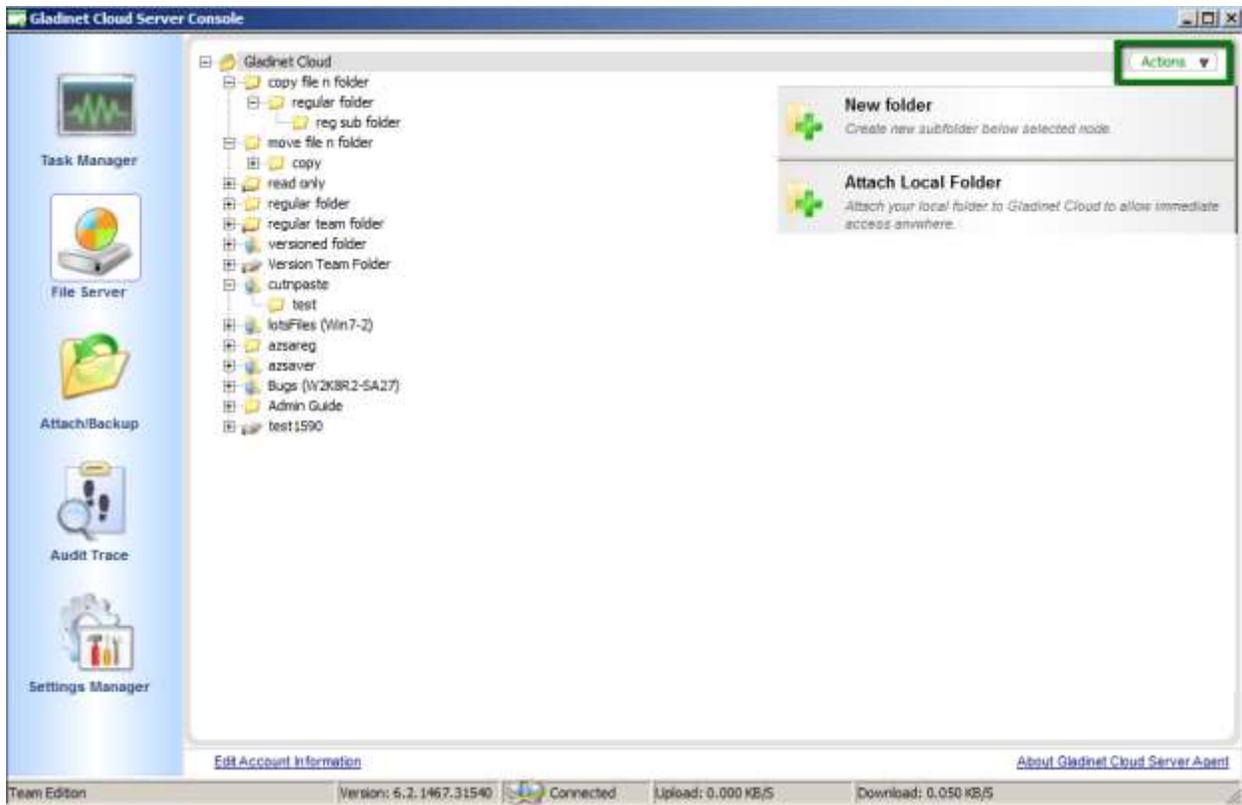
## System Cache Refresh Task

Whenever the server agent receives file change notification or directory change notification, it will decide whether it needs to refresh the directory contents and the local file cache. When there are refreshing task scheduled, they will show up in this task group.

## File Server

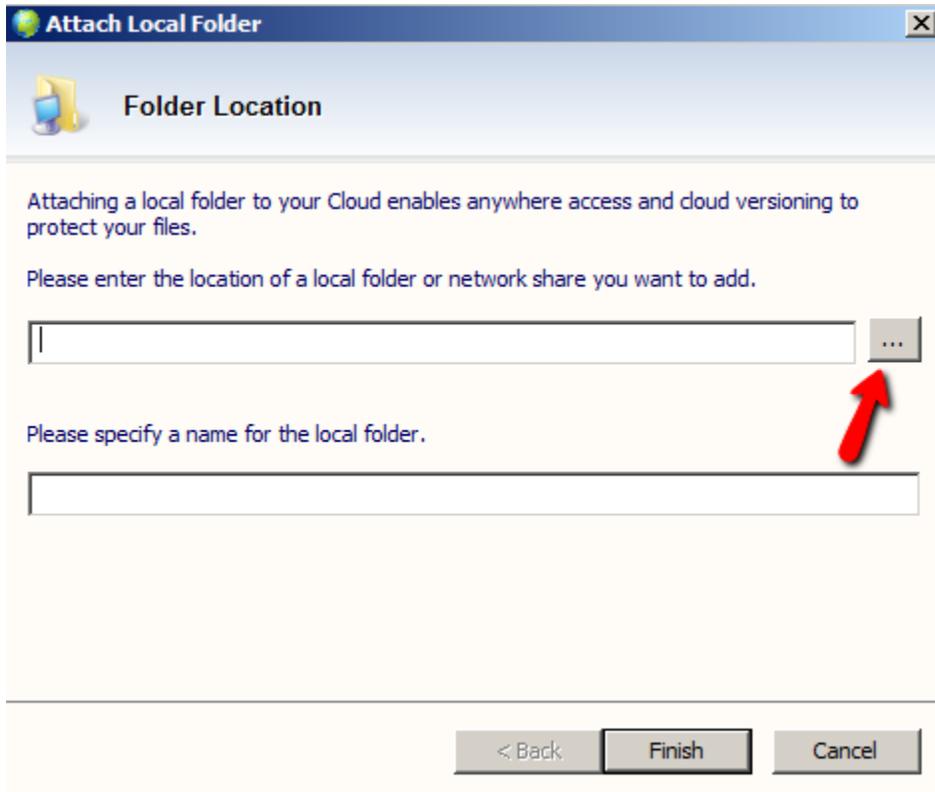


'File Server' shows all the data that have been uploaded to the cloud and the files and folder structure. It lists folder structure which includes sub-folders as well. The local folders that are attached either from the file server or a user's machine have the machine name in parenthesis.

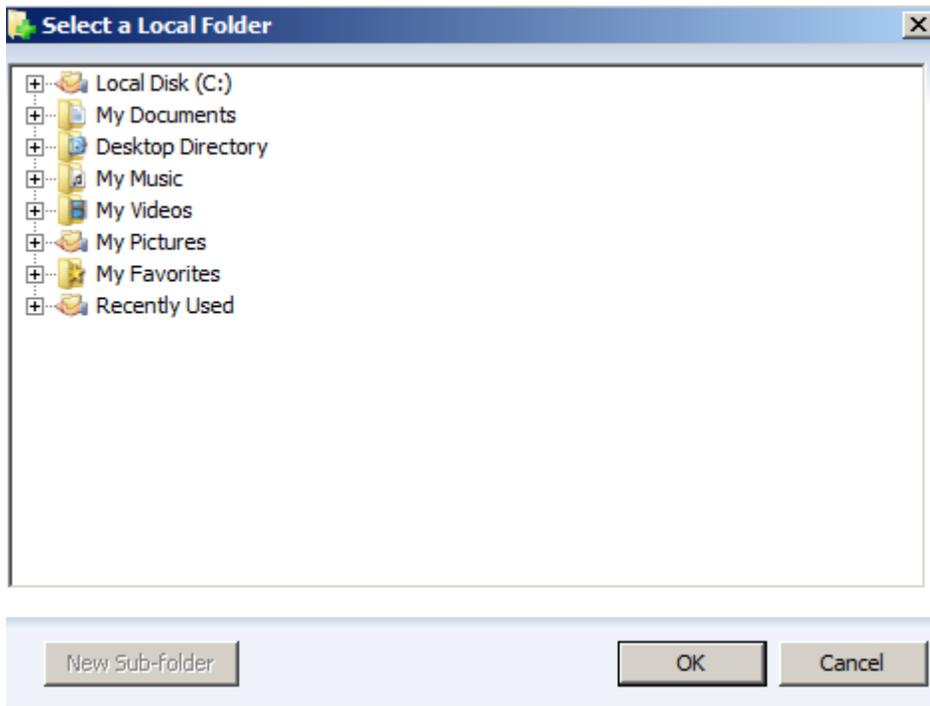


An Administrator can create a new sub-folder below selected node or can attach additional local folders using the 'Attach Local Folder' option under 'Actions'. Attaching a local folder to Gladinet Cloud using the 'Attach Local Folder' option allows immediate access to the local content from anywhere using any device. "Attached Local Folder" will be synchronized upwards to the cloud first and also the changes in the cloud will be sync down to the local file server.

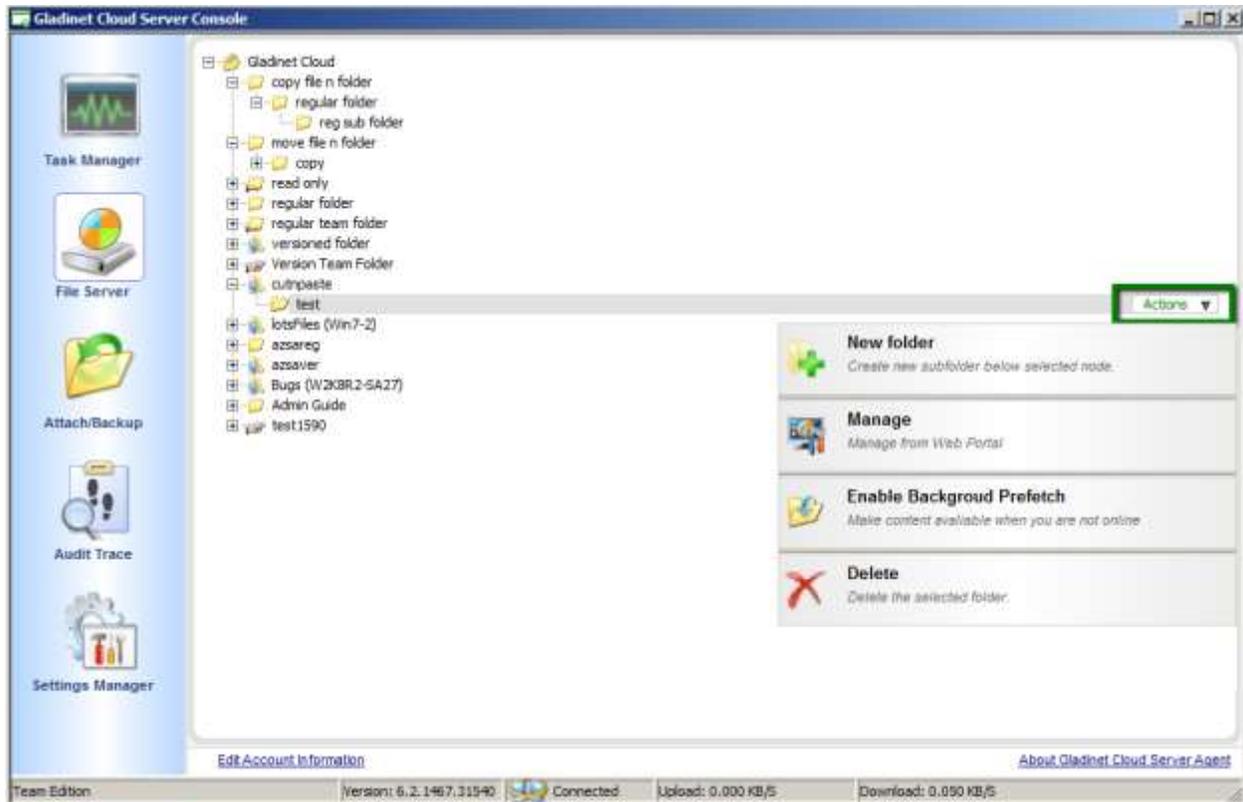
NOTE: The two-way synchronization feature of the "Attach Local Folder" only applies to local folders such as those on the C: drive, D: drive and local hard drives in general. It won't work for network share. The two-way synchronization depends on the local file system's event change notification about files and folders. These changes will be detected and synchronization will happen based on the changes discovered.



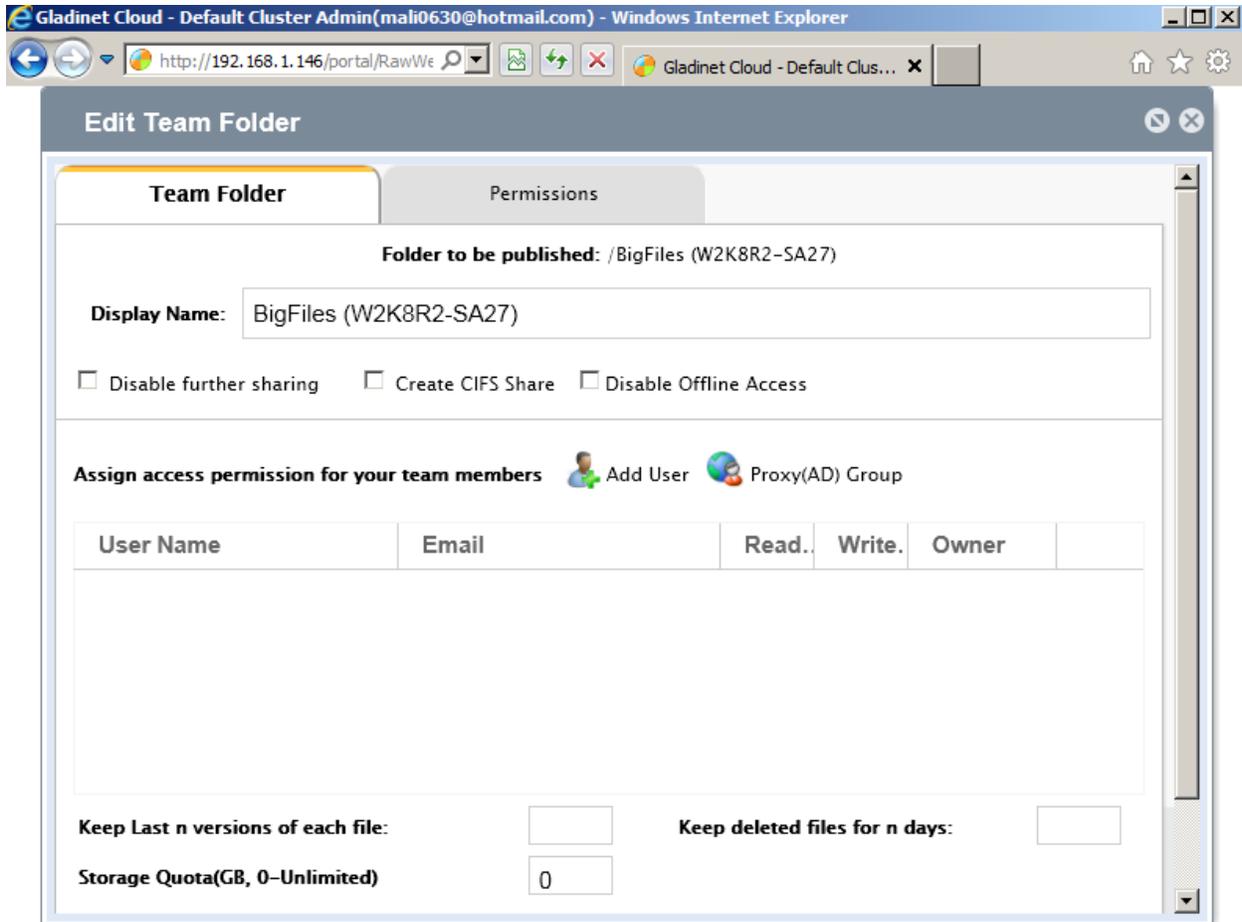
You can browse to any local folder and attach to the cloud using the 'Attach Local Folder' option.



Administrator can also highlight an existing cloud folder and create new sub-folders underneath that highlighted folder.



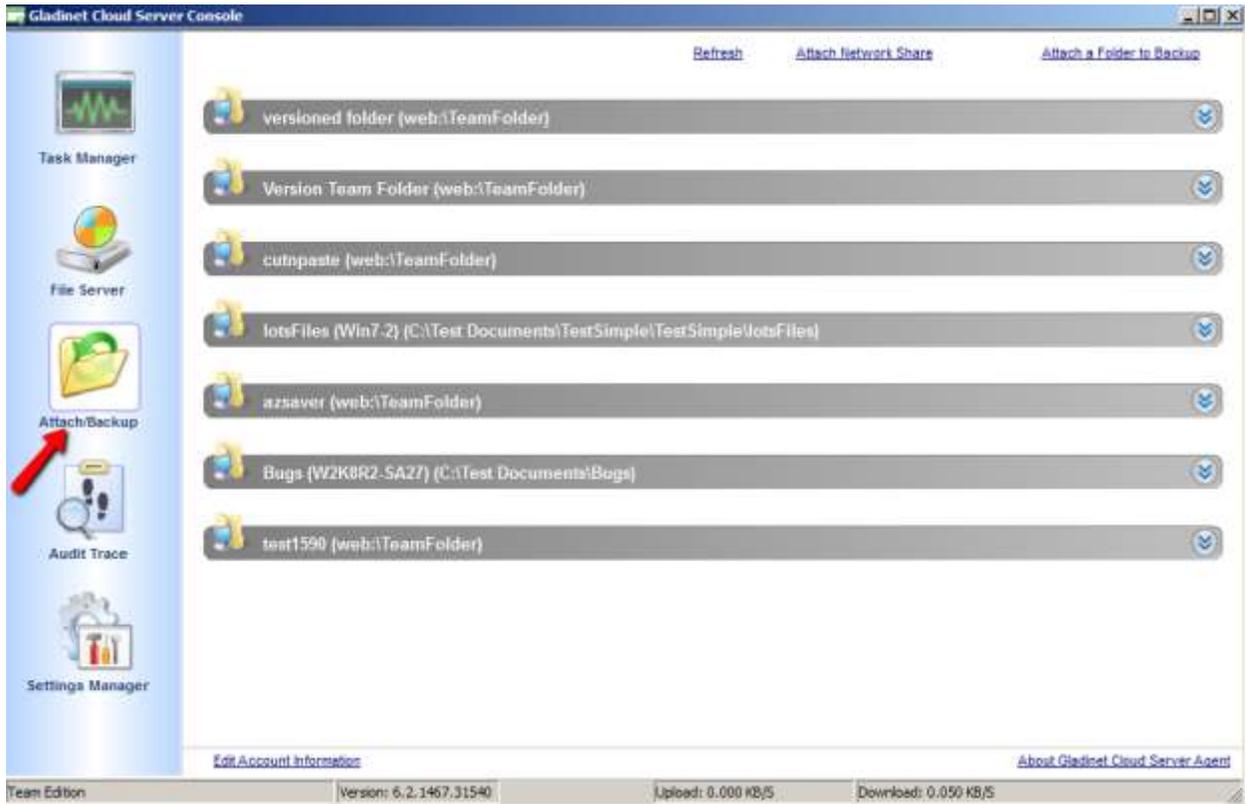
An administrator can also manage the folder using web portal by using the 'Manage' option. This will allow an admin to convert any folders that have been attached to the cloud or are in the cloud to convert them into 'Team Folders' for collaboration etc.



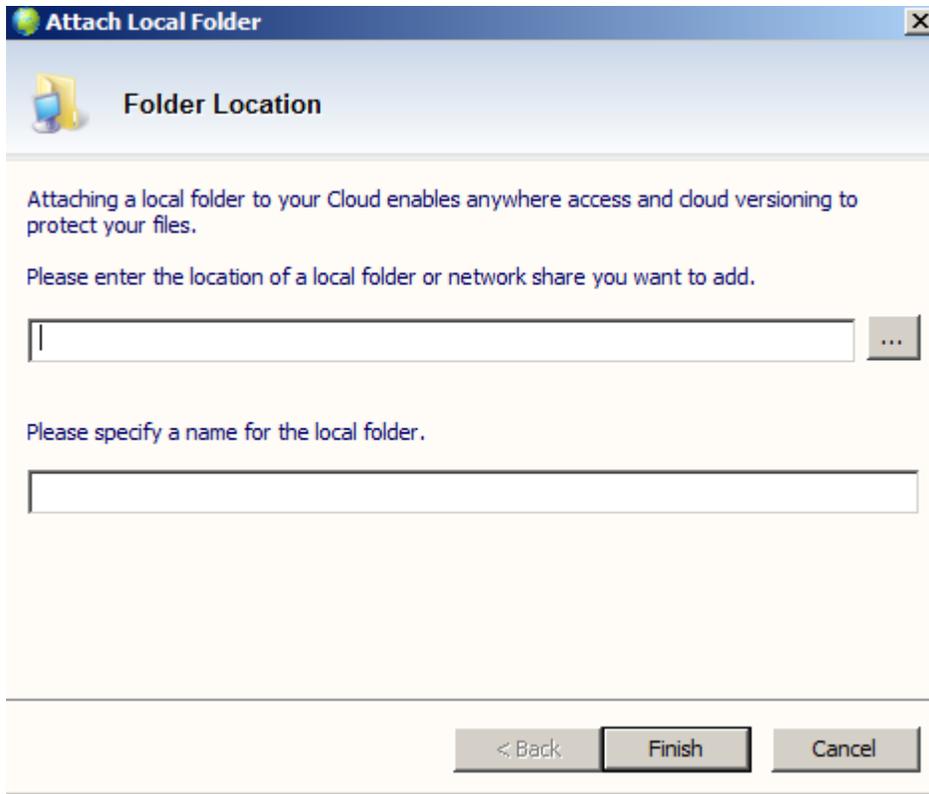
‘Enable Background Prefetch’ enables the contents of the selected folder to be available offline.

‘Detach’ provides the capabilities to detach the local folder from the cloud. This feature allows the administrators who would like to remove the contents of the local folder from the cloud. This will not remove any contents from the local source, however, all the contents in the cloud from this source will be hidden. If you go to the web portal and re-create a versioned folder with exactly the same name (including the machine’s name and the parenthesis), the folder can be shown with a cloud-only context without any local machine relationship.

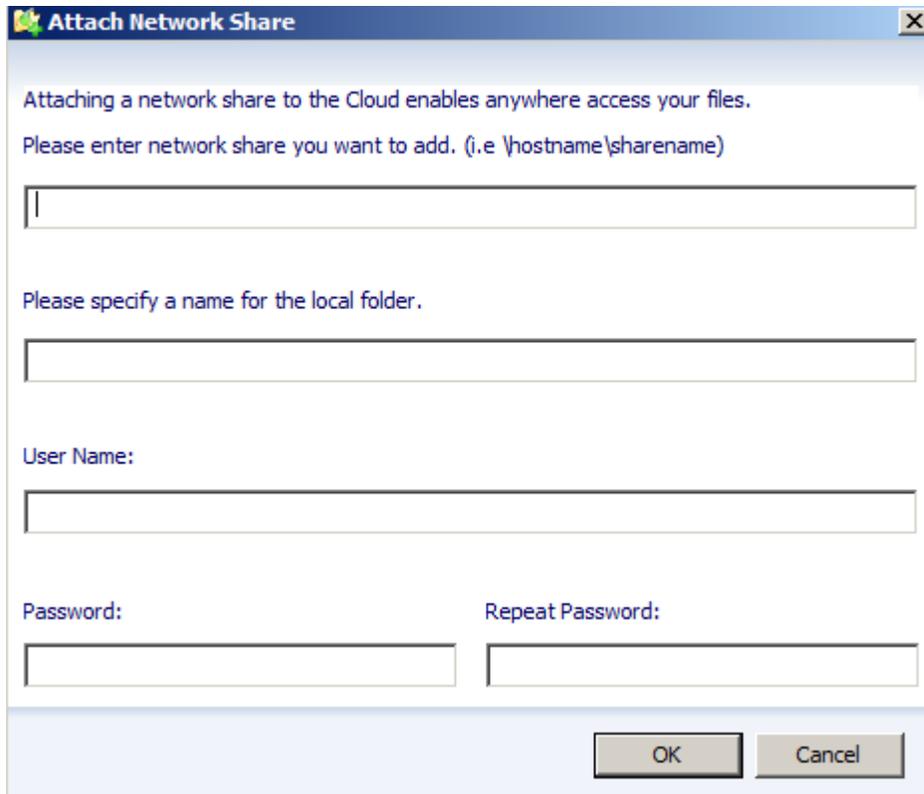
## Attach/Backup



Attach/Backup folder allows an administrator to attach a local folder to the cloud using 'Attach a Folder to Backup'. Using this option enables a two-way sync between the local folder and the cloud. The default view shows all the "Attached-Folders" on the local machine that are attached to the cloud. Basically, this allows multiple folders that have contents synchronized with the cloud.

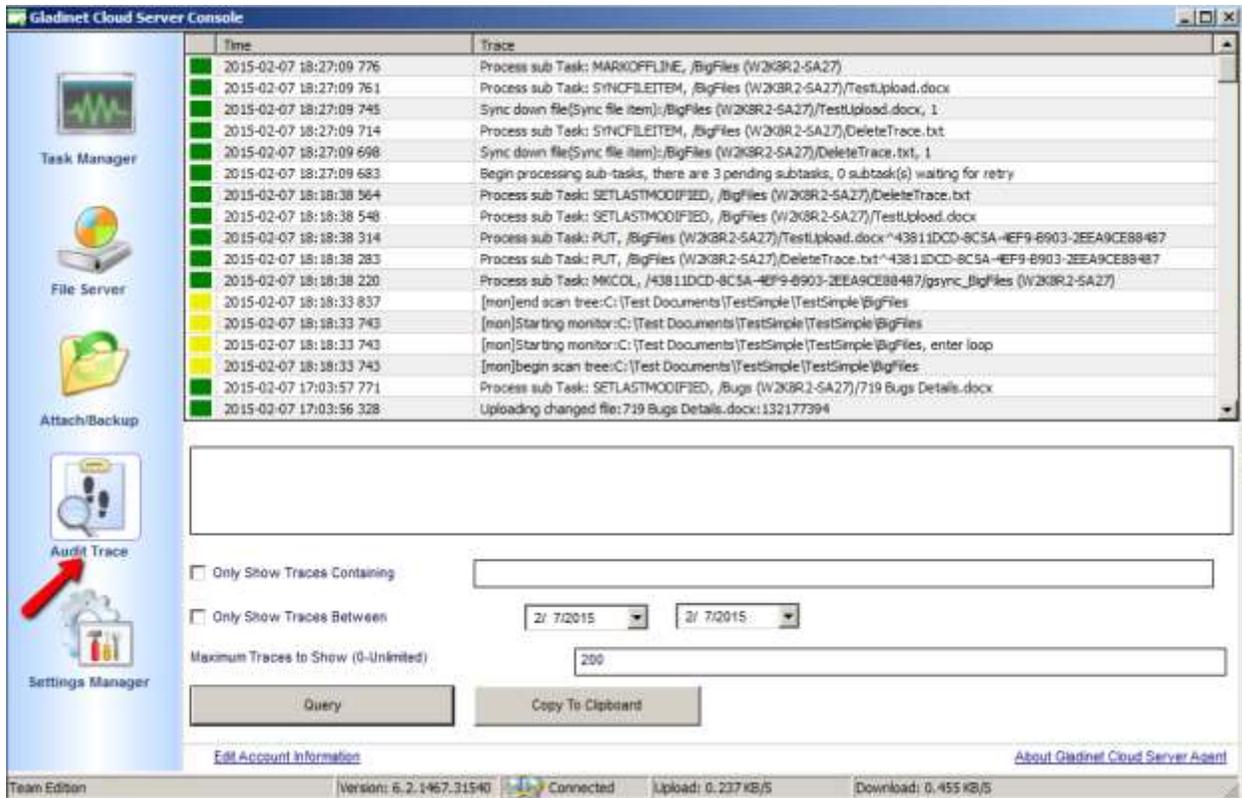


You can also use 'Attach Network Share' to attach a network share's contents to the cloud. However, this option does not keep the two-way sync between the network share's contents and the cloud. Attached Network Share enables remote access from other locations. Compared to the "Attach Local Folder", Attached Network Share doesn't get the folder contents actually replicated into cloud.



## Audit Trace

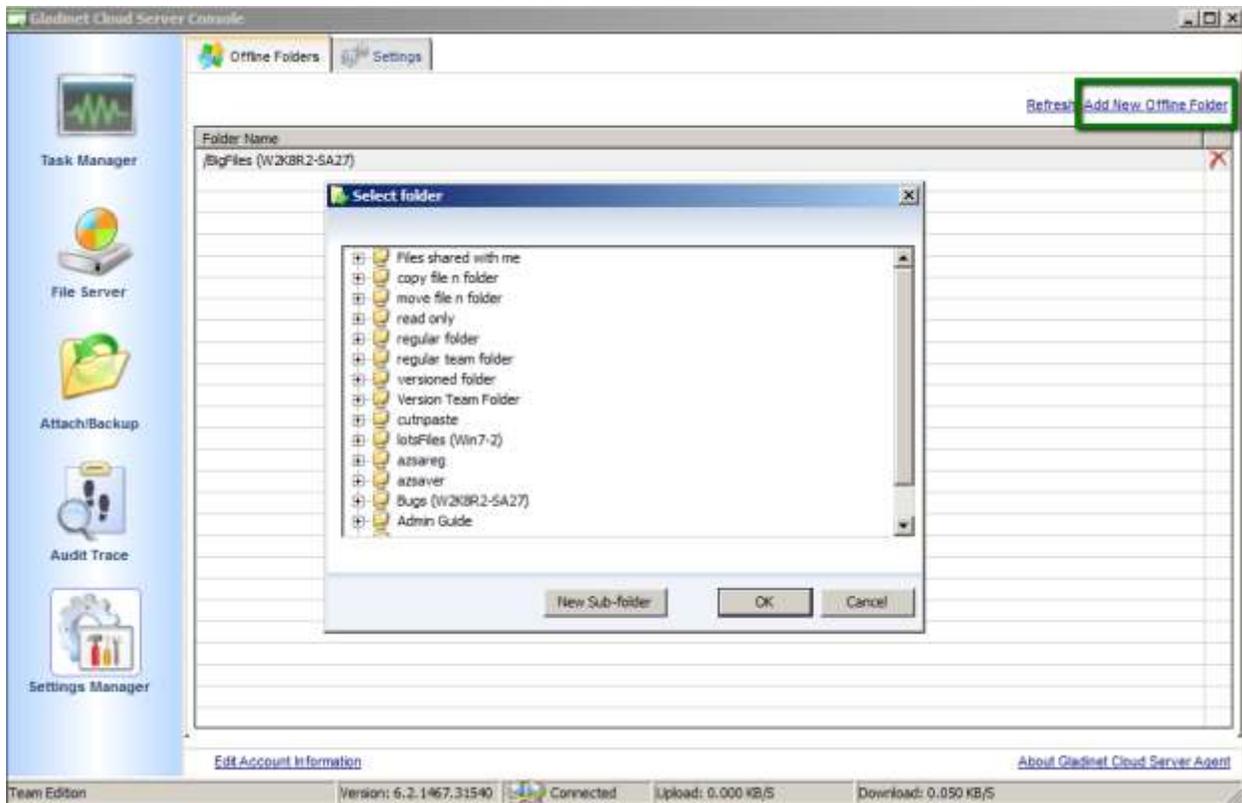
Audit trace shows the history of all the tasks that have taken place. Administrators can query the 'Audit Trace' to see the history of uploads, downloads, changes, and monitoring on the files in the cloud. You can also filter the tasks you would like to query by using the 'Only Show TracesContaining' field. As an administrator you can also specify the times that you would like to run the query for. You can specify the amount of traces you would like to query where '0' means unlimited traces.



## Settings Manager

Administrators can configure customized settings under ‘Settings Manager’.

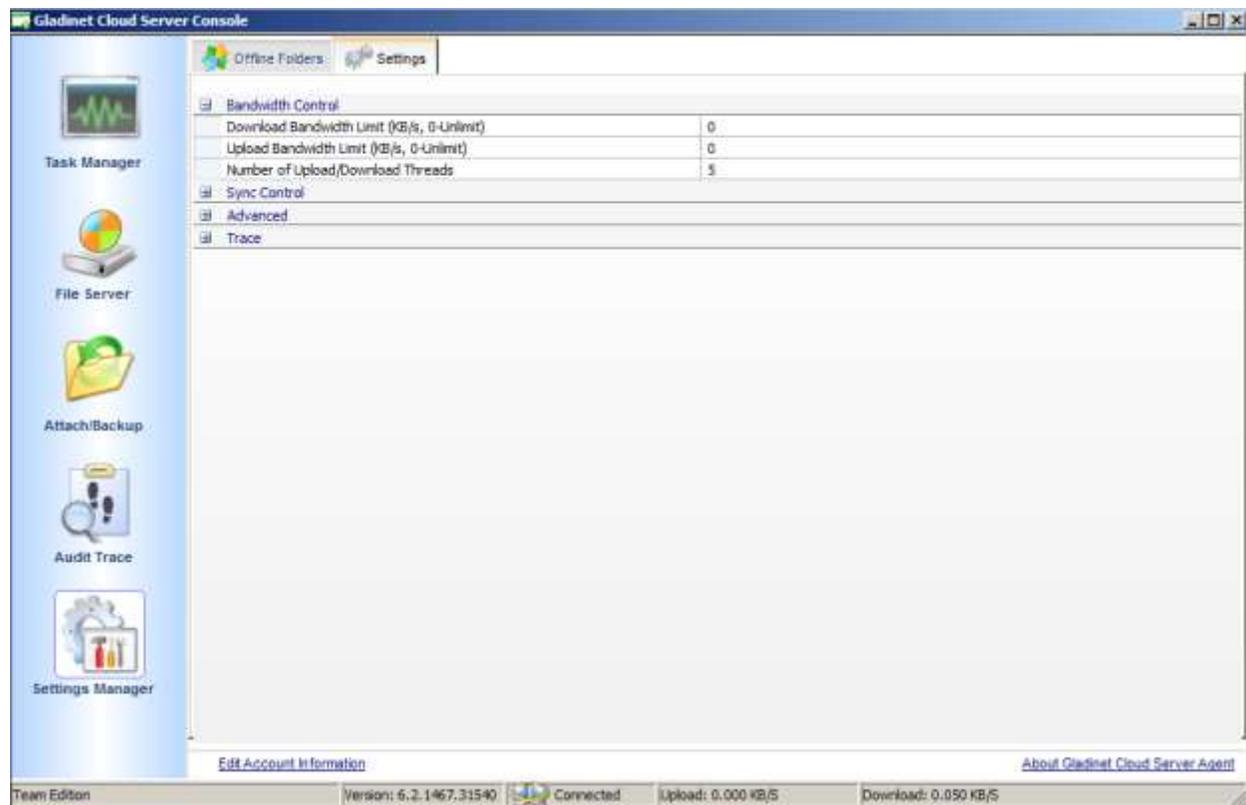




Administrators can also select any folder to be available for offline access using the 'Add New Offline Folder' in the 'Offline Folders' tab.

## Settings – Bandwidth Control

As an administrator you have full control over how much bandwidth should be consumed for uploading contents to the cloud and also for downloading contents from the cloud. You can also control how many consequent uploads and downloads are allowed at any one time.



## Settings – Sync Control

Administrator can turn the 'Throttle Sync' flag to 'True' to stop and start the sync depending on the available bandwidth. You can also specify the 'Sync Throttle Upload and Download Bandwidths' in KB/S fields where '0' means unlimited bandwidth is available for upload and download sync.

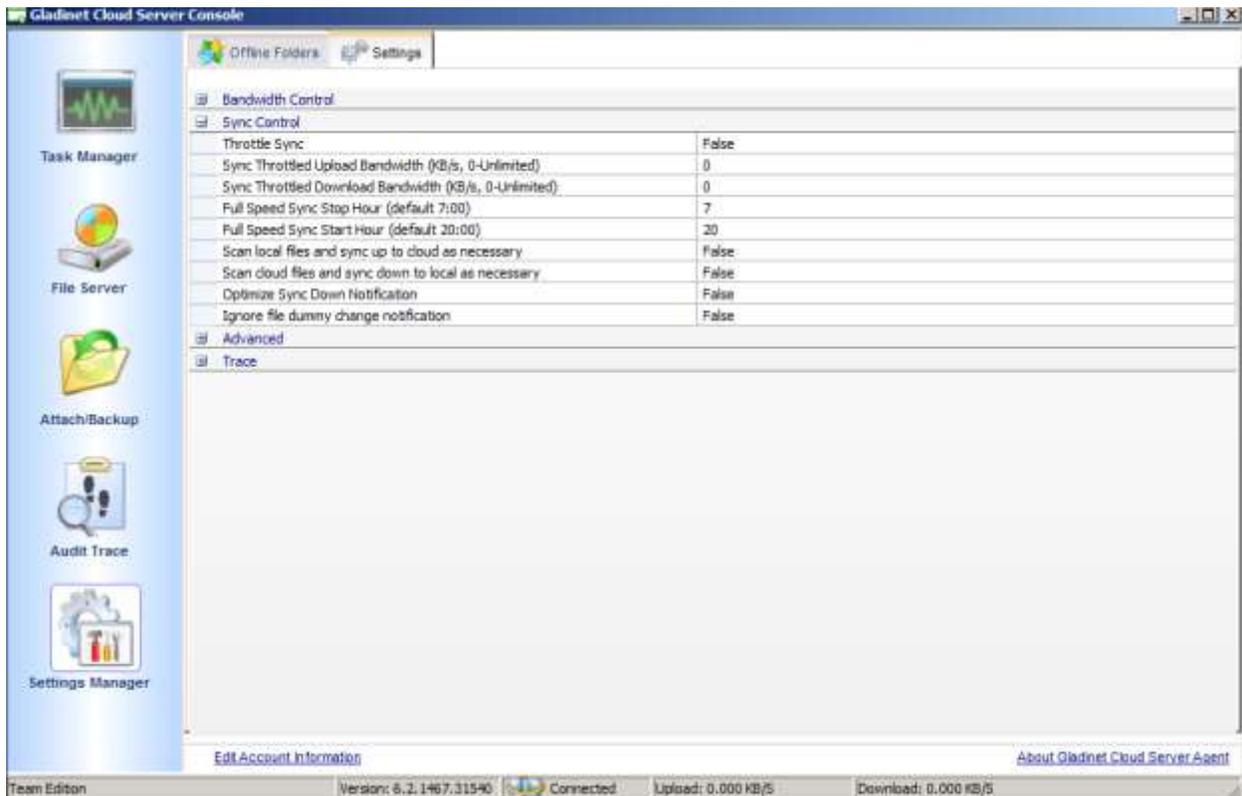
As an administrator you do not want to bring your network to a crawl and would like to control when the full sync starts and stops. Many administrators want to keep the sync to a minimal during business hours. You can specify the start and stop sync hour in the 'Full Speed Sync Start Hour' and 'Full Speed Sync Stop Hour'.

There could be instances when local files for one reason or another are not synced up to the cloud. In cases like these you can turn the 'Scan local files and sync up to the cloud as necessary' flag to 'True'. This will scan the local file system and make sure that everything which is not synced to the cloud is synced accordingly.

Also, similar to scanning local files and syncing up to the cloud, there could be a need to scan cloud files and sync down locally. This can be achieved by turning the 'Scan cloud files and sync down to local as necessary' flag to true.

You can also enable sync down notifications by enabling ‘Optimize Sync Down Notification’ flag.

‘Ignore file dummy change notification’ when set to true will not send notifications for 0 byte files or files that received change notification from the file system but the files are not actually changed.



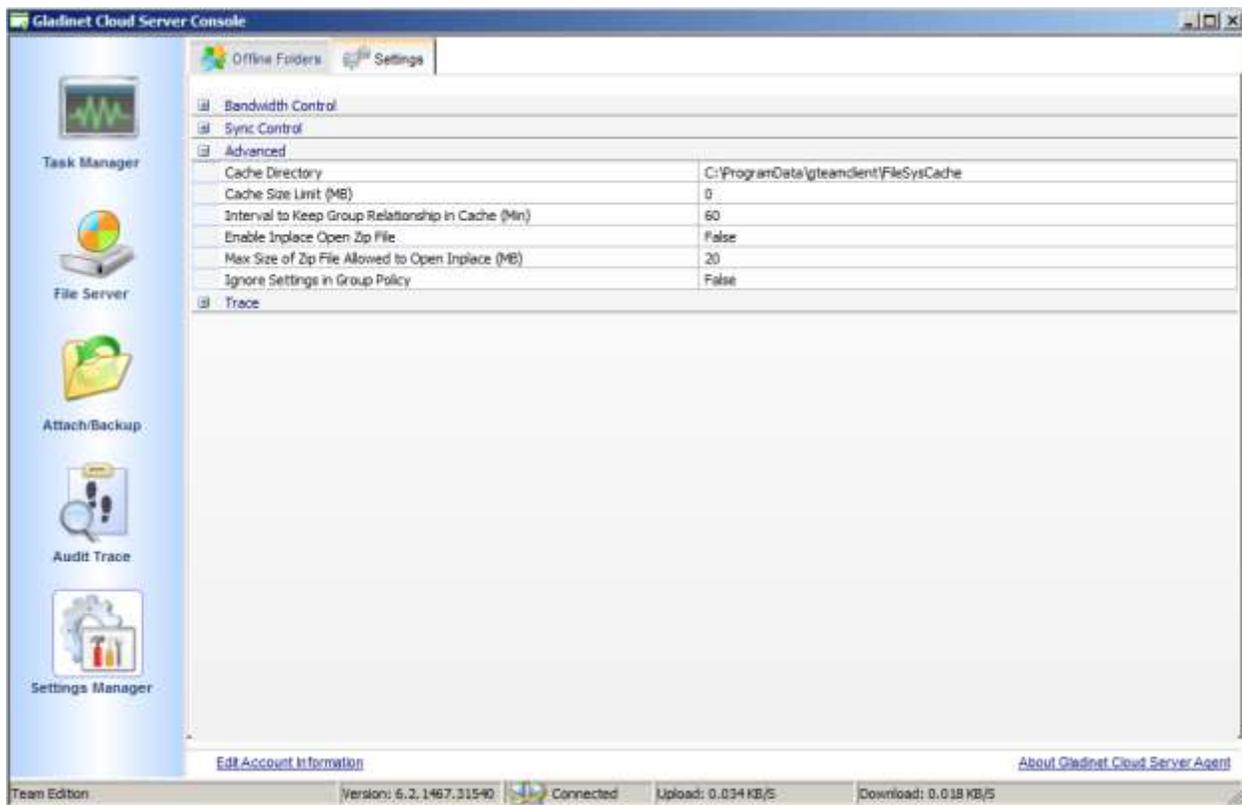
## Settings – Advanced

Administrator can locate the cache directory under ‘Advanced’ option in settings. Using the ‘Cache Size Limit (MB)’ field can specify the size limit for the cache file.

‘Interval to Keep Group Relationship in Cache (Min)’ field is a performance optimization setting. The server agent will check the remote requests against the ACL (Access Control) set on the local files. Most of the times it involves Active Directory or NT domain group membership checking. The group membership checking is a CPU intensive work so the result is cached to improve performance. This controls how long the result will be cached. If users are not changing group frequently, you can set the interval to a long period of time.

'Enable In-place Open Zip File' field enables in-place editing on files which are in zipped folders in the cloud. You can also specify the maximum size for zipped files that are allowed for In-place editing.

'Ignore Settings in Group Policy' flag when set to 'True' will ignore the configured settings in web portal and the settings configured under Settings\Advanced will take precedence.



## Settings – Trace

The audit trace log can grow exponentially if not kept under control. As an administrator you can specify the number of days to keep the audit trace. 'Days of Audit Trace to Keep' setting is the field to specify the duration to keep the trace for.

Trace Level when set to '0' which is the default does not collect any traces meaning it is disabled.

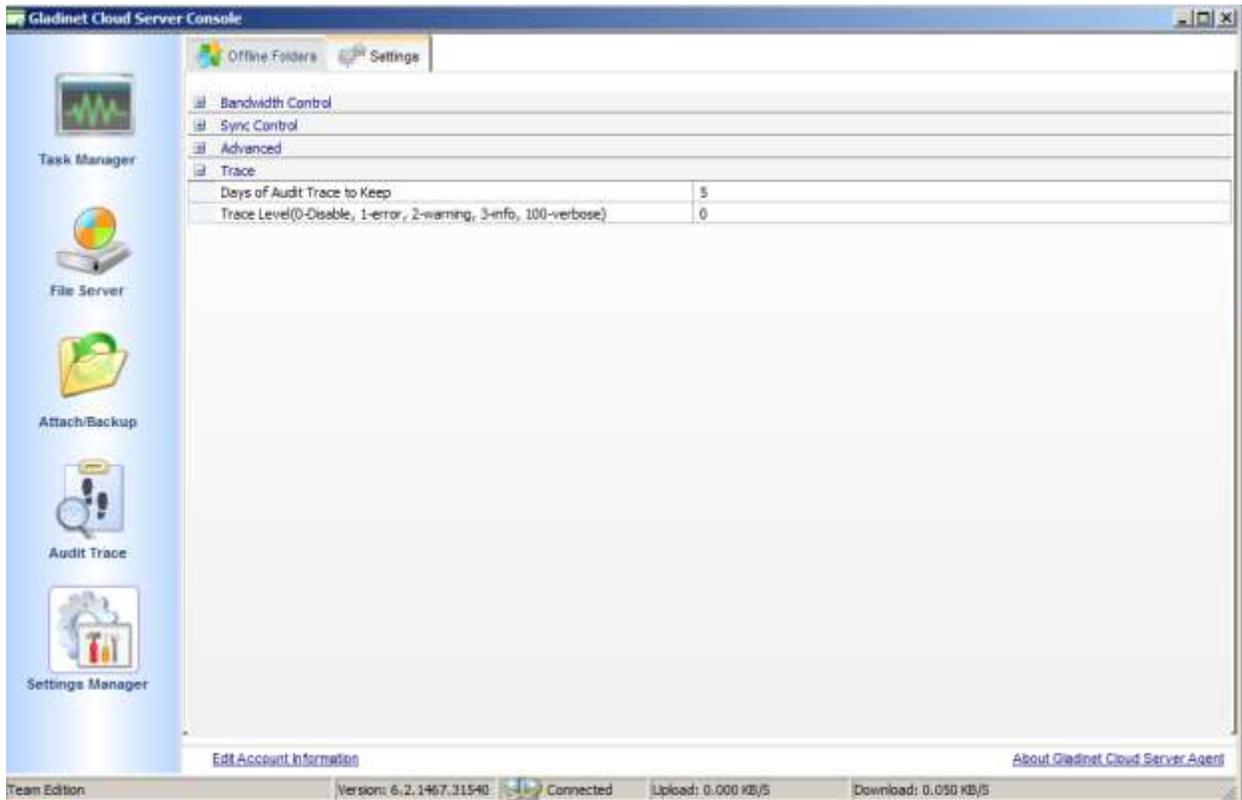
Trace Level 1 – error will collect all the error traces.

Trace Level 2 – warning will collect warning traces along with errors.

Trace Level 3 – info will collect errors, warnings, as well as info traces.

Trace Level 100 – verbose helps developers to collect detailed traces which helps them when debugging issues.

NOTE: When it is necessary to collect DebugView trace for debugging purpose, the Trace Level typically is set to 101.



## Conclusion

Enterprises were looking for ways to access file server contents over the internet. They were looking for technologies which will allow them to migrate the data residing on On-Premise file servers to the cloud and provide a unified namespace across all distributed file servers. Gladinet Cloud Server combines the strengths of cloud storage technology and traditional file server to enable data access from the cloud by enabling sync, share, and collaboration on that data.