Cloud Sync

With Cloud Sync, you can seamlessly sync and share files among your Synology NAS and multiple public cloud services, such as Dropbox, Baidu Cloud, Google Drive, Box, OneDrive and hubiC.

Create New Connections

To sync files among your Synology NAS and public cloud services, you need to create connections on Cloud Sync to link to the service provider by using your user credentials.

To create a new connection:

1. On the Cloud Sync user interface, click on the **Create** icon at the bottom-left corner to start the wizard.

2. Follow the instructions to choose the public cloud service you want to sync files with, and log in with your user credentials.

3. Select a local folder as your sync destination to store the files.

Note:

1. Currently supported public clouds include Dropbox, Baidu Cloud, Google Drive, Box, OneDrive and hubiC.

2. When creating connections, you can only select empty folders as your sync folders.

3. Each user credential can only be used for creating one connection. You can create multiple connections all with different user credentials, but not duplicate connections with the same user credential.

4. Due to Baidu's limitations, you are only allowed to sync files to the **My Application's Data** > **Cloud Sync** folder in your Baidu Cloud storage.

5. File or folder names that end with a period (.) or a space will be renamed as "file name._DiskStation_modified date_TailCharacterConflict".

6. Files will not be synced by Cloud Sync under the following circumstances:

   - The file size is larger than 10 GB.

   - The folder or file path contains the following characters:

     * : ? \ / " < > |

   - The file name starts with any of the following:

     . _ ~ .SYNOPPSDB

   - The file/folder name is or contains any of the following:

     .ds_store desktop.ini @eadir thumbs.db .SynologyWorkingDirectory #recycle Icon\r $Recycle.Bin @sharebin

   - The folder or file path is longer than 2048 characters.

   - The file name is longer than 255 characters.

7. When setting file names you don't want to sync, on Windows if a file name is capitalized and another has the same name in lower case, it will be considered the same file name (ex. A.txt and a.txt) but on Linux and Mac systems they will be considered to be different file names.

8. Files will not be synced by Cloud Sync to Baidu Cloud, Dropbox, Box, OneDrive, and hubiC under the following circumstances:

   - For Baidu Cloud if:
     - The file name starts with a period (**.**).
     - The file/folder name is, or contains any of the following:
       .baohe .cache
   - For Dropbox if:
     - The file name starts with any of the following:
       .dropbox .cache
     - The file/folder name is, or contains **.dropbox**.
   - For Box if:
     - The size of a single file exceeds 250 MB.
     - The type of the file is **bookmark**.
   - For OneDrive if:
     - The size of a single file exceeds 100 MB.
     - The type of the file is a **note** document.
   - For hubiC if:
     - The size of a single file exceeds 5 GB.
     - The folder name is or contains **.ovhPub**.

9. Cloud Sync follows the **OAuth authentication standard**, as does Microsoft OneDrive. OAuth2 requires another server (which is hosted by Synology and located in Taiwan) to complete the authentication. Your Synology NAS will not remember or keep your account password. Your user credentials will only be used for the purposes of file transfer and syncing. Cloud Sync will not access or disclose any other personal account information such as contacts.

Manage Connections

Once a connection has been successfully created, you can view the connection information and modify your syncing tasks.

To manage connections:

1. Select the connection you want to edit from the connection list on the left panel.
2. Under the **Overview** tab, click **Manage** to do any of the following:
   - **Pause syncing**: Pause the syncing operation.

- **Resume syncing**: Resume the syncing operation.
- **Unlink**: Remove the connection of your Synology NAS and the public cloud service.

Manage Cloud Sync Advanced Synchronization Settings

Selective Sync is a feature of the Cloud Sync application that allows you to filter the files or select the folders you want to sync to the public cloud service. Selective Sync allows you to ensure you have only the files you need on the public cloud service or vice versa.

You can manage Cloud Sync Selective Sync settings by doing the following:

1. Go to the **File Filter** tab and under **Filter By File Size**, you can prevent certain files from being synced by setting a maximum file size.
   - maximum file size should be between 1~10240 MB.
2. Under **Filter By File Type**, you can prevent certain files from being synced by entering the file name or unchecking the files or file extentions that you do not want to be synced.
   - File name: Any file with the designated file name will not be synced to the public cloud service. The maximum length of the file name is 255 characters.
   - File extension: Any designated file extensions will not be synced to the public cloud service.
     Add *.**extension** to the table, e.g. *.**iso**. The maximum length of the file extension is 255 characters.
3. Go to the **Folder** tab and select the folders you want to sync.
4. Click **Apply** to save your settings.

Cloud Sync Bandwidth Control

Bandwidth Control is a feature of the Cloud Sync application that allows you to set the maximum upload rate and the maximum download rate.

You can manage Cloud Sync Bandwidth Control by doing the following:

1. Go to the **Bandwidth** tab to edit settings.
2. You can limit the file upload rate by setting a **maximum upload rate** and the rate of file download by setting a **maximum download rate**.
   - If the value of this field is 0, it means that there is no limit to the rate of file transfer.
3. Click **Apply** to save your settings.

Manage Cloud Sync from DSM System Tray

After you have installed and launched Cloud Sync, a package icon will appear at the top-right corner of your DSM system tray. You can easily and efficiently manage Cloud Sync and perform the following actions from the system tray:

- Monitor recently modified files.
- View the transfer speed and progress for current transfers.

- Pause or resume your connections.

- Open the paired sync folders.

- Launch Cloud Sync.

Settings

Cloud Sync records in the actions of each linked account in the history log. Every time you synchronize a file, a history log is created. In the **Settings** panel in the bottom left corner, you can specify the number of records in the history log for each linked account. The default is 20,000 but if you wish to keep more records of each file, please set a higher number.

To specify the database location:

1. Select a volume in the **Database Location Settings** dropdown menu.

2. Click the **OK** to save your settings.

To specify maximum records in history log:

1. In the **Maximum records** field, input a number between 5 and 100000.

2. Click the **OK** to save your settings.

For Advanced Users

To ensure your files and folders sync correctly, please note the following information.

Metadata that will not be synced to your public cloud services:

- UNIX read/write and execution permissions.

- Windows ACL.

- Mac's extended attributes.

- Last modified time of the folders.

- Last modified time of the files (for Dropbox and Baidu Cloud).

- File changes made during the time your Synology NAS is unlinked from Dropbox. If the file size remains the same when you relink Synology NAS to Dropbox, the local file will not be synced to Dropbox even if it has been modified.

Default action for conflicted copy:

If a file or directory is modified on both your local Synology NAS and remote public cloud account at the same time, Cloud Sync will try to keep the local changes as much as possible, and the remote changes will be saved as one revision if the cloud service supports versioning.

Why is Cloud Sync slower than other cloud services' PC applications?

Due to the below limitations, Cloud Sync might take longer to sync files with public cloud services than the official PC applications such as Dropbox and Baidu.

- **Speed limits imposed by cloud service providers**: Although no public cloud service provider has disclosed any information related to this topic, it is highly possible that public cloud servers communicate

with their official PC applications through a dedicated tunnel/protocol, or impose bandwidth limitations on third-party applications that access their services on a regular basis (such as Cloud Sync).

- **No incremental update**: Some cloud service providers do not releases a public API for developers to track file changes. This means Cloud Sync must re-download and sync the entire file every time a file has been modified, even when you've only made partial modifications. On the other hand, cloud service providers' official PC applications might be able to re-download and sync the modified bits only, reducing sync time.

- **No local network sync**: Certain public cloud service providers offer LAN sync, a technique that allows one client to obtain files from existing clients in the same local area network (LAN), thus significantly boosting sync speed. However, LAN sync accesses files in client computers without notifying them, which could possibly become a security backdoor. Therefore, this feature is not included in Cloud Sync.

Given the above limitations, the syncing performance of Cloud Sync shall continue to be enhanced, while also maintaining the safety and security of your Synology NAS.