



HUBDRIVE HELP DOCUMENTATION

CAMIO Setup Manual

JUNE 2017

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HubDrive

HubDrive

This document applies to the HubDrive 1.0 release, June 2017. Updated versions of this document may be available online at [this link](#).

HubDrive

HubDrive is a Dropbox-style folder synchronization system. It is based on folder contents being pushed to and pulled from a central server by subscribed client devices. The client devices run a tray application that manages the file updates. The incoming server files can be paused by a user before being written to the local device, and all outgoing local files are expressly directed to sync by a user.

There are two components to HubDrive, a server which stores the assets and manages access to them, and the clients which is installed on all devices that need access to those assets.

HubDrive can be setup to run on a CAMIO server or as a stand-alone system. This document only covers installation and operation on a CAMIO server. See separate document for installation and operation as a stand-alone system. Integration with CAMIO provides additional features which automatically set up syncing and distribution based on CAMIO configuration.

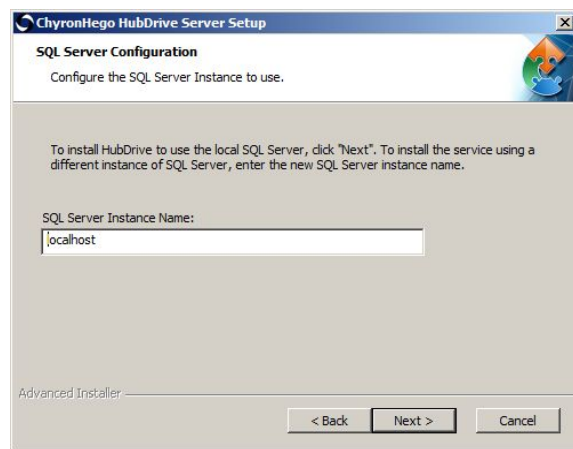
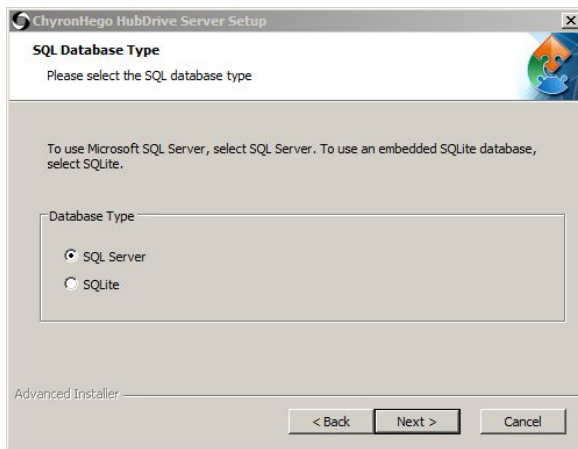
HubDrive is installed on playout devices, External Renderers, Mediamakers, art department PCs with offline graphics tools. Clients are required to login to access the system. Only users who are logged into the system with Artist or Admin privileges are allowed to write to the server. Fonts are automatically installed by the client when they are synchronized between devices.

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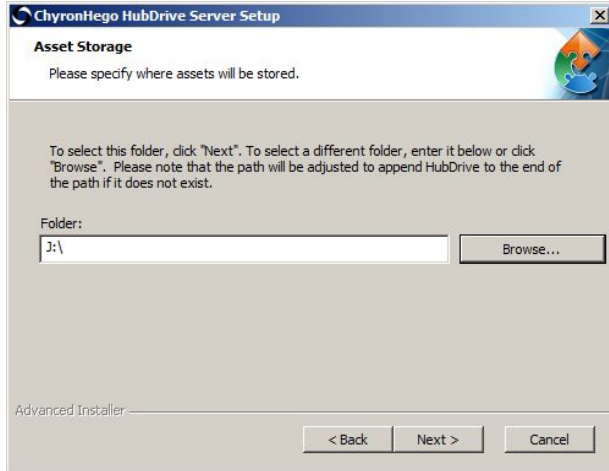
ghU`Uh]cbs

Install the server. You will be given the choice between using SQL Server or SQLite databases. On a CAMIO, SQL Server is already installed and can be used in conjunction with the CAMIO database. SQLite is a an option for small installations and should not be chosen in a CAMIO installation.



Run from the Windows start menu. It is recommended to put the Asset Storage (the repository of all synchronized assets) on the >xfj] Y of the Camio during installation so it will not compete for space with the assets on the I drive.

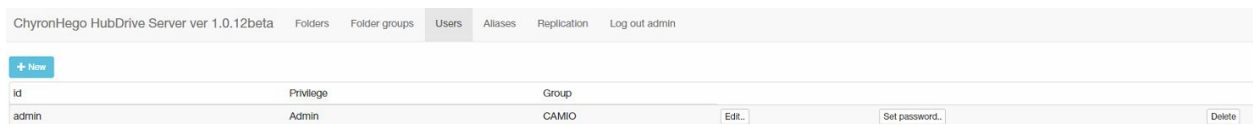
Assets stored in HubDrive are only accessible via the HubDrive clients and cannot be directly accessed. Multiple versions of files may be saved, therefore it is recommended that the HubDrive storage allocated at two to three times the expected storage requirements. Please check the available space on the system J drive and reallocate partitions are required. Contact ChyronHego support if you have any questions.



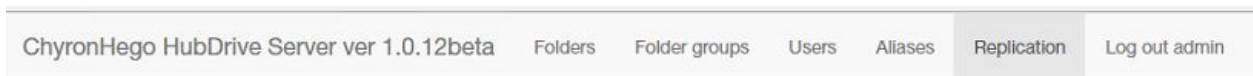
7 \Ub[]b[shYs< i V8 fj] YsGYfj YfsDUggk c fXs

Most of the HubDrive Server configurations CAMIO users require are accessible through the CAMIO user interface, however, the server interface allows for processes such as changing the admin/admin password.

To change the HubDrive password, you have to go to the server address at [hostname]:4301 in your web browser. Click on Users and change the admin password under “Users”. **DO NOT DELETE OR CHANGE THE PERMISSION LEVEL OF THE ADMIN USER.**



< i V\$UbXsGdc _Ys7 cbZ[i fUh]cbgs



The HubDrive Server user interface is where server to server replications can be set up where a central graphics hub CAMIO needs to replicate content to spoke station CAMIOs in a station group configuration. Please ~~Wt bHUMs7 \nfc b< Y[cs7 i ghca YfSi ddcfh~~to schedule setup of your Hub and Spoke HubDrive server to server configuration.

GYHj[d ds\Ys<i V8fj] YsGYfj Yfs]bs7 5A € s

< i V8fj] Ys7 cbZ[i fUhcbs

CAMIO Admin Tools > Configuration > HubDrive Configuration



< i V8fj] YsGYfj YfsDfchcVt` - set to 'http'

< i V8fj] YsGYfj Yf -'[camiohost]:4301'



DUggk cfX - defaults to 'admin', can be changed by logging directly into HubDrive server as described above.

The default password to the HubDrive server is "admin". By entering this you can save any settings you make in the Admin and Asset Manager to the server. You can change the password in the HubDrive server UI.

Note: if you delete this information, it simply keeps you from changing any CAMIO settings for HubDrive. It does not change settings about the server or clients, which would still exist in the HubDrive server outside of CAMIO.

Note: The following menus are presented in the recommended order of set up in CAMIO, as they build on each others' settings.

:]YsDUH\ s5`]UgYgs

File Path Aliases			
Alias Name	Filepath	Description	Folders Associated
Clips	j:\	Default Lyric Clip Location	
Packages	i:\	Default Lyric Package Localtion	

[Add Alias](#)

An Alias is the default drive path that a Sync Folder will be saved to on client machines. This has nothing to do with where the files are saved on the Server. All files on the server are saved in the Asset Storage drive defined on installation.

Typically, for Lyric content you want to set up the Alias for the drive path for Lyric directories on the I drive, and for clips on the J drive. If you are running the HubDrive client on a laptop that does not have an i:/ drive you might want to change the alias to c:\i-drive\. Note that this doesn't solve the issue that Lyric messages need the correct drive path to function correctly if there are non-embedded assets.

F Ya Ya VYfz5`]UgZsGnbV6 c`XYfs1DUHs

Lyric Projects (I:\) + PM News = I:\PM News

GYHb[s ds gYfgs

The screenshot shows a user creation form in the CAMIO Admin Tools. The 'Name' field contains 'Cheryl', the 'Type' dropdown is set to 'CAMIO User', and the 'Description' field is empty. Under the 'Group Membership Management' section, a table lists 'Artists' as a member of the group, with a red 'X' icon next to it. Below the table, there is a dropdown menu for 'Admins' with an 'Add' button. At the bottom of the form, there are 'Save' and 'Cancel' buttons.

HubDrive users are set up in the CAMIO Admin Tools under “Users”. There U'k Unqsa i ghsVdUs
`c[[YXsb[gYf with the HubDrive client so it is a good idea to make individual user logins for
the artist and admin clients (so there is a log and indication of which users made content
changes) and either individual or generic logins for the devices that are playout or rendering
devices.

When creating a new user for HubDrive

- Choose “CAMIO User” as the Type
- Enter the username/password for that user.
- Assign that user to group membership of ‘Admins’, ‘Artists’ or ‘All Users’ hit Add
- Save the user

5Xa Jbs gYfg have read/write access to HubDrive and are the only users that can log into Users are able to log into the HubDrive Server configuration pages. They are members of the Admin Group in CAMIO.

5fjgh gYfg have read/write access to HubDrive which allows them to upload new content and makes changes to existing content. They are members of the Artist Group in CAMIO.

7 JYbhs gYfg only have read access to HubDrive. They can subscribe to folder content to have it synchronize on their machines. They are members of the All Users Group in CAMIO.

Group Management			
Name	Description	Type	
Admins	Camio Administrators Group.	System	
All Users	The all users group where all users that are created go here by default.	System	
AM_NEWS		System	
Artists	These users can not log into admin tools but can log into asset manager.	System	
BREAKING_NEWS		System	

Name:

Type:

Description:

Group Membership Management

Member of Group	
All Users	

Admins

For read-only users such as playout devices, you can enter a generic name (such as “client”) and set it to the All Users group. This way it can be used to auto-login to any unmanned playout or rendering devices that are set to autologin.

NOTE: User can be verified in the Users Tab in the Hub Drive Server user interface.

CHYRONHEGO HUBDRIVE SERVER VER 1.0.8BETA						
		FOLDERS	FOLDER GROUPS	USERS	ALIASES	LOG OUT ADMIN
+ NEW						
ID	PRIVILEGE	GROUP				
JIM	3	CAMIO	EDIT..	SET PASSWORD..	DELETE	
ADMIN	7	CAMIO	EDIT..	SET PASSWORD..	DELETE	
ROB	3	CAMIO	EDIT..	SET PASSWORD..	DELETE	
REGGIE	7	CAMIO	EDIT..	SET PASSWORD..	DELETE	

NOTE: User configuration should be done only from the CAMIO Admin Tools. Creating CAMIO users in CAMIO admin creates them in the HubDrive server. Deleting CAMIO users in CAMIO deletes them from the HubDrive server. But adding/deleting users in the HubDrive server does not affect the CAMIO users database.

GYHj[d dsGmbV\$ c`XYfgs

CAMIO Admin Tools > Administration > HubDrive

The screenshot shows the CAMIO Admin Tool interface. On the left is a navigation menu with categories: Home Page, Documentation (Manuals, Installs), Reporting (List Assets, List Running Order), and Administration (Device, Context, Group, Context Permission, Ingest Folders, HubDrive). The main content area is titled 'HubDrive Management' and contains a table with the following data:

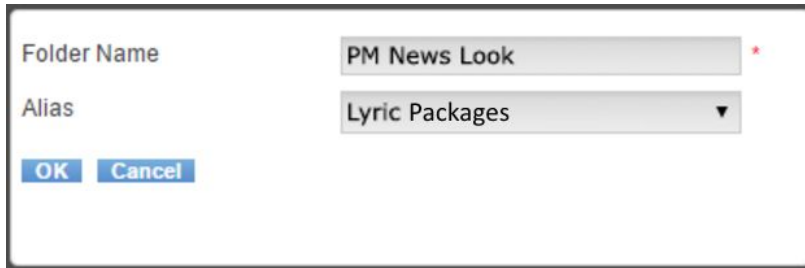
Available Sync Folders	Alias	Size	Contexts Associated
SyncTest	CAMIO EX HD SERVER	2.85 GB	Test

Below the table is a button labeled 'Add New Sync Folder'.

In the Admin Tool you can set up folders that will be available as sync folders for the HubDrive clients.

A sync folder is a folder that contains content that will be synchronized between devices that subscribe to it.

To create a sync folder, enter its name and associate it with an Alias (thereby creating its default path.) This will allow you to sync with this folder. For instance, if PM News Look was the Lyric directory root folder you wanted to synchronize across devices, and Lyric Packages (I:\) was the Alias (default path) you wanted it to appear as, you would enter PM News Look into the Folder name and choose as the Alias Lyric Packages



The image shows a dialog box with two main input fields. The first field is labeled 'Folder Name' and contains the text 'PM News Look'. The second field is labeled 'Alias' and is a dropdown menu currently showing 'Lyric Packages'. Below these fields are two buttons: 'OK' and 'Cancel'.

All Aliases that have been set up already will be available in the Alias ID drop down.

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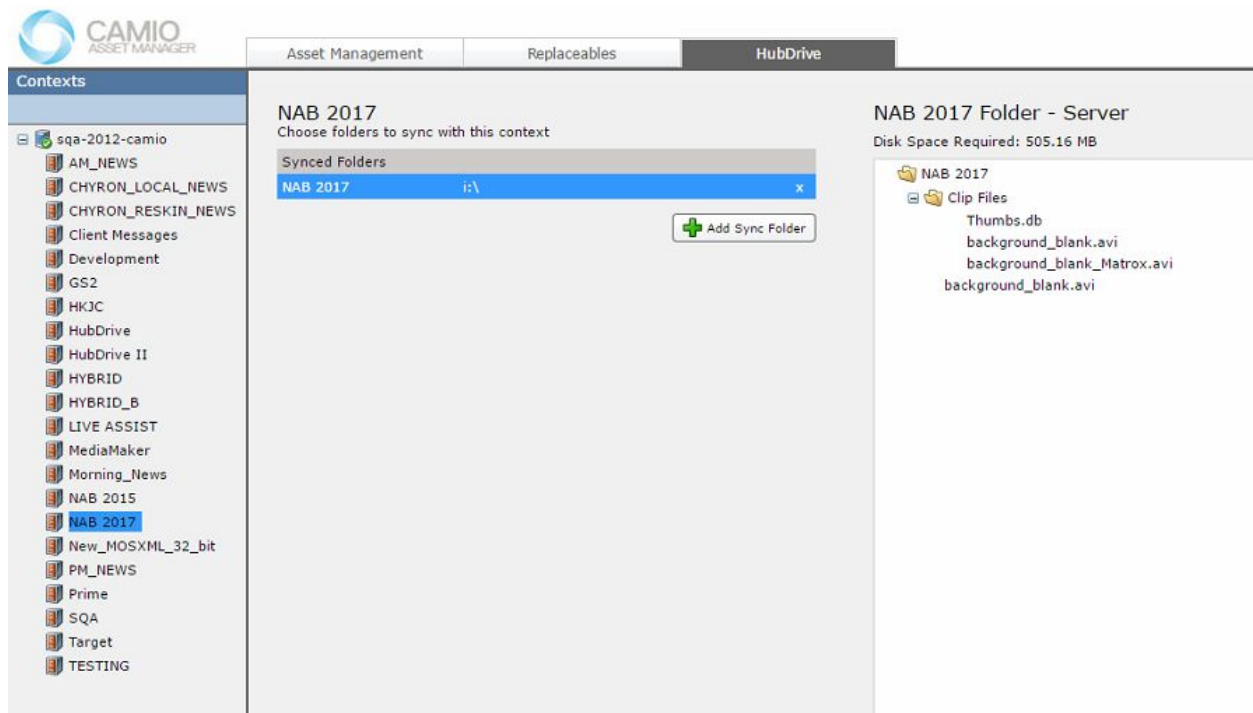
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5GGC7 5HB; sGMB7s C@89F GSS

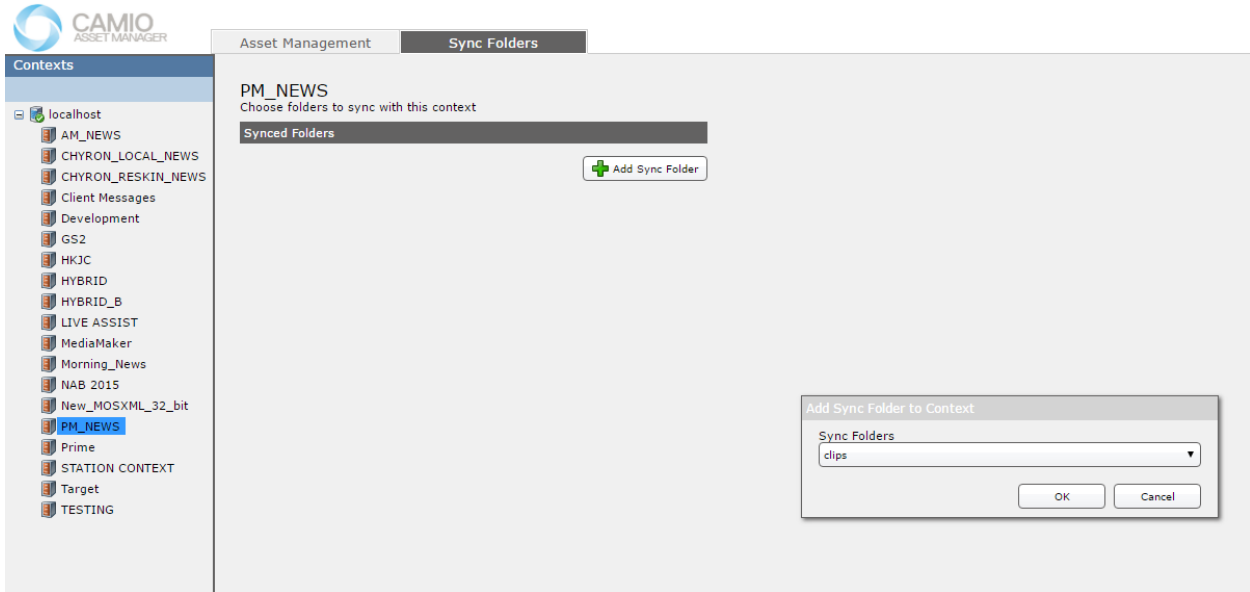
K #k s7 CBH9L Hs

Once the Sync Folders are set up in the Admin, it is time to collect those folders into a Context grouping so devices that receive content in a specific context can easily see and be able to subscribe to those folders. This step is done in the Asset Manager UI.



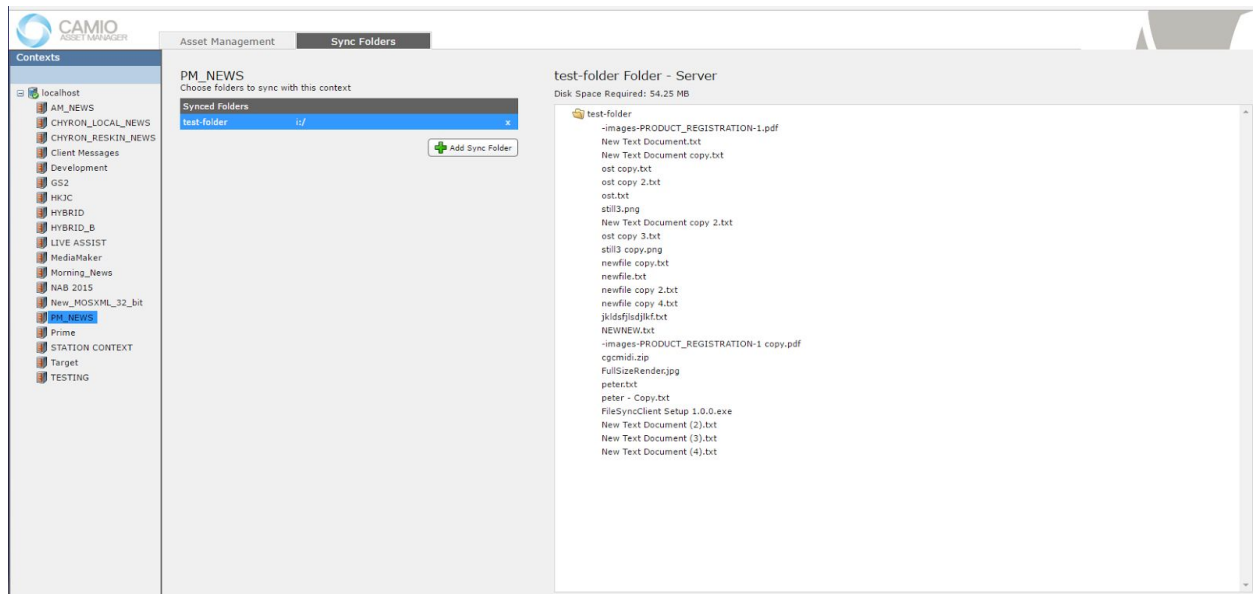
In Asset Manager, there is a tab called “HubDrive”. When clicked on, the user interface updates to show only contexts in the left navigation pane. Select a context to see or set up synced folders for that context.

To add a new Sync Folder, click “Add New Folder.”

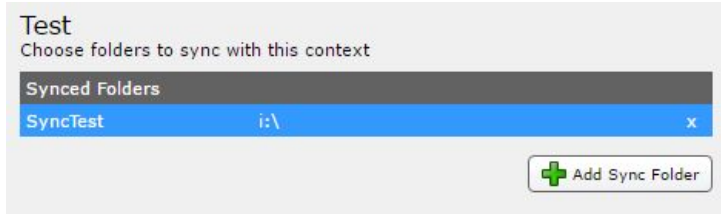


Choose a Sync Folder that you had previously set up in the CAMIO Admin to associate it with that context.

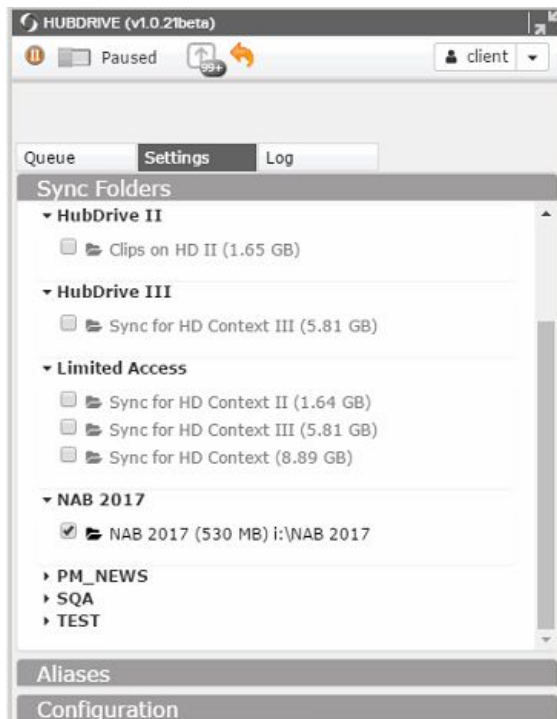
You can then select the Sync Folder to see the contents of it.



To remove the Sync Folder from that context, click on the x in the list.



In the HubDrive client UI, these folders will be displayed in the client in a single group under the Context name. A playout device should select which Contexts it will be required to playout, and that will sync to the required content folders. In the example below, the playout device will be using the NAB 2017 context and synchronizing the i:\NAB 2017 folders required for the Context to be played out.



Note that the same Sync Folder can be used by multiple Contexts. And a given Context can require multiple Sync Folders. A Sync Folder that is not associated with a Context will be shown in a group called 'Orphans'.

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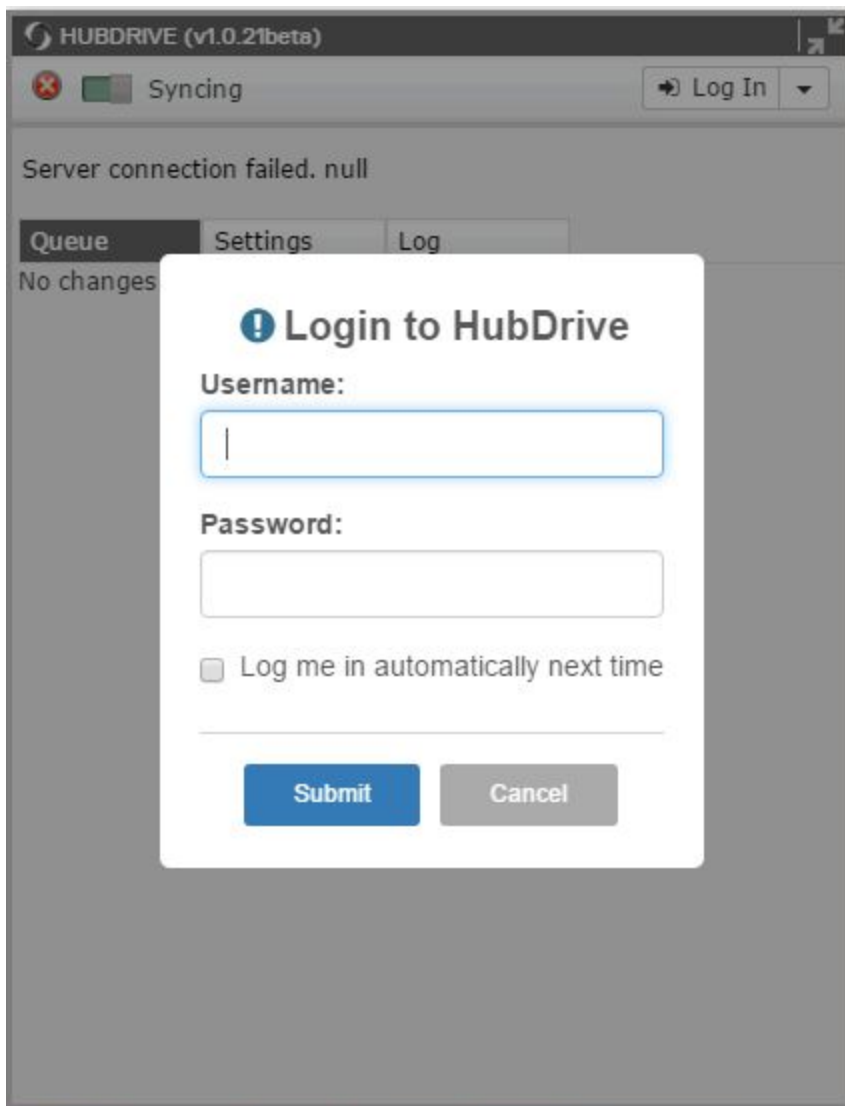
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:]fghH]a Ys

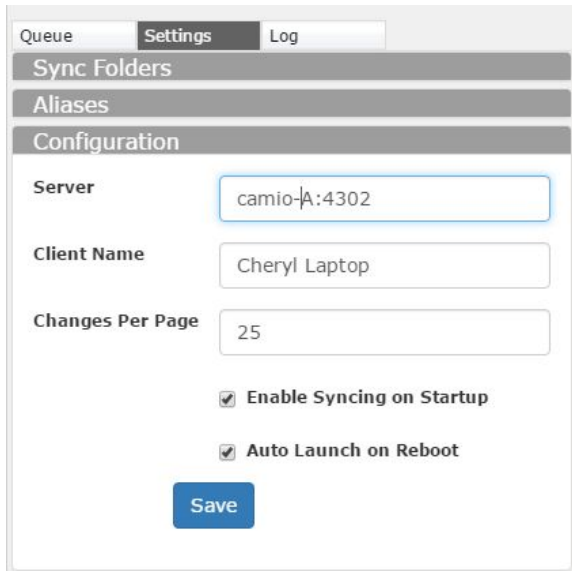
Note, the first time the Client is installed it will open to the login screen as login is required to run HubDrive. Please cancel to be able to configure settings.



GYHj b[gs7 cbZ[i fUj]cbs

GYfj Yf is the address of the server this client will get its content from.

Client should log in with [hostname]:4302 in the Settings>Configuration>Server. For example, if the CAMIO hosting the HubDrive server is called CAMIO-A, the server address one should put into HubDrive Client is CAMIO-A:4302. Hostname can be hostname or IP.



7 YbhsUa Y is the name this client will display as. This will be used to identify client devices connected to the server.

7 \Ub[YgsdYfsdU[Y defines how many changes per page listed in the Queue. Too large a number may slow performance.

9bUVYsGnbVj[scbsGHUfhi d, when selected, enables the Syncing switch on start up, which will automatically download all changes from the server unless there is a conflict.

5i hcs@U bWscbsF YVcch when selected, will launch HubDrive Client software if the device reboots.

Enable Syncing on Startup and Auto Launch on Reboot should both be set to on for any devices that run without human intervention (CAMIO server, external rendering devices, Mediamaker, etc.)

7 `]Ybhs5`]UgYgs



Users can overwrite the default path (Alias) set on the server to match their local system. For instance, if the server default path for Lyric messages is 'i:\', but this client machine does not have an i: drive, the alias name should be changed to 'c:\content' here. If you are going to be repointing all folders this saves a step in the Sync Folder set up by having that default to the new path.

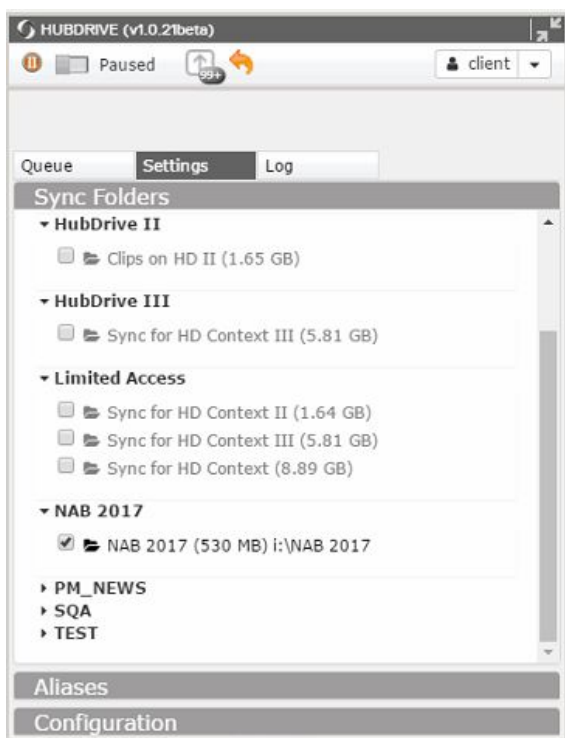
BCH9.Si YrcsnfMAU]b[sUVgc`i HysUNg, it is recommended not to put any part of a Lyric directory on a different file path than I:\, but the purpose of this is to be able to repoint the root drive from the Server Alias to a different path if desired.

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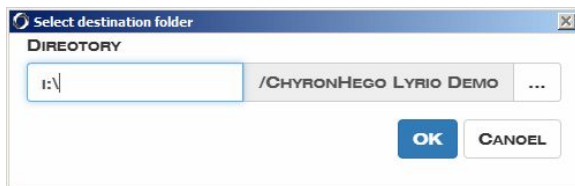
S GMB7 s C@89F Gs

Contexts (folder groups) and their sync folders are listed in the Sync Folders menu of the Client settings. Select which folders this client is “subscribing” to. Those are the folders that this client device will synchronize.

Click on the checkbox next to the Sync Folder you want to subscribe to:



When first subscribing to a Sync Folder you will be asked to select an Alias Path



Select a folder and it will show you where it will save it by default according to the Aliases set up on this client. To override the path, click on the browse button to repoint the folder to where you desire. If you have pointed a folder incorrectly, simply unclick and relick to repoint.

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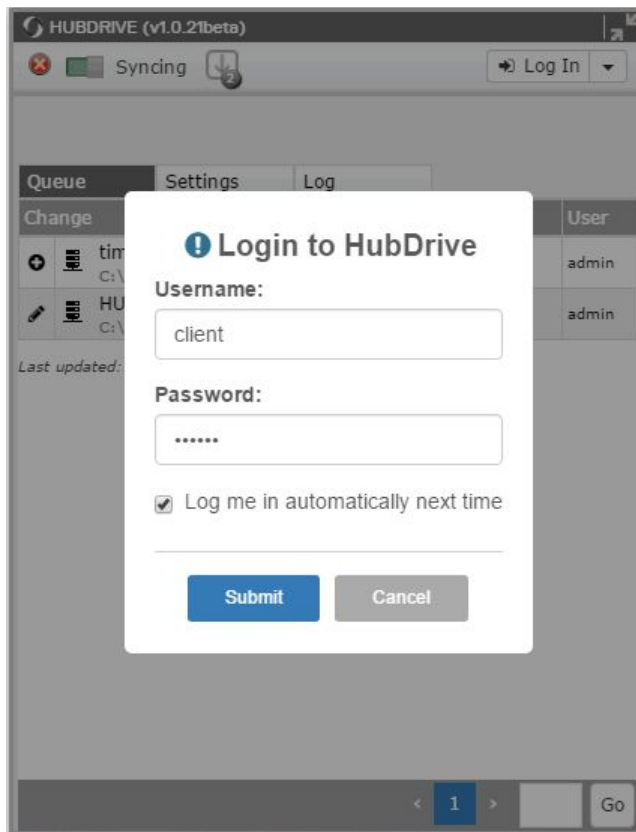
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— S I G9F @C; =Bs

Logging into a client as an artist or admin means that user will have permission to be able to write as well as read. Read Only permission allows the user to receive files from the server as well as revert any changes made on this local machine to the server version but NOT to write any files back to the server for distribution to the rest of the clients.

Devices that are not logged in with a username to the HubDrive client are only able to receive content with the Syncing switch enabled. IT IS HIGHLY RECOMMENDED EVERY CLIENT IS ALWAYS LOGGED IN, even as a read-only user.

@c[A YsbSi hca U]W`nBYI h-H]a Y - will automatically log the user in with the supplied username and password and must be enabled for unmanned devices (CAMIO, Mediamaker, etc.)

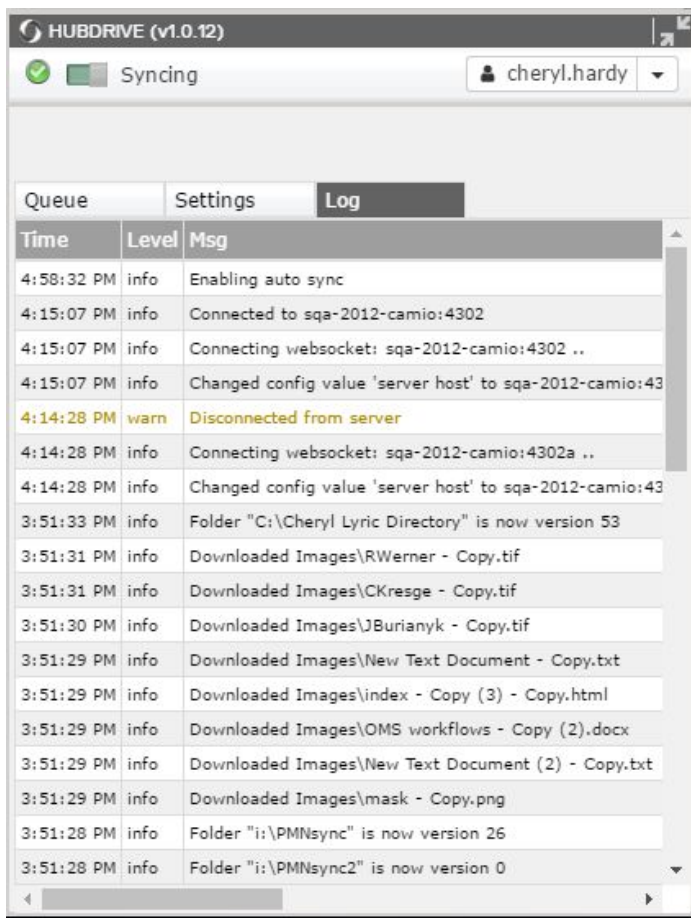


Once you are logged in, the client should go from an Error state to a Paused state.



To log out click the down arrow next to the username and select Log Out.

7`Ybhs@[s



The log shows all activity in the client, whether uploading or downloading.

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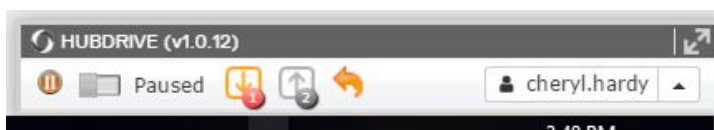
The top bar of the HubDrive Client contains the version information as well as the push/pull/revert all icons and a minimize and maximize arrow.

The client is docked to the lower right corner of the screen and cannot be moved.




Maximized Client


























Minimized Client





Additionally, the Pull Now (from Server)  orange down arrow, Push Now (from Local)  blue up arrow, and Revert to Server Version  orange left arrow, when pressed in the top bar, will Push, Pull, or Revert ALL in the Queue. (Clicking on the buttons inline in the Queue only push, pulls, or reverts that one file.)

	 Multi Candidate No Pic FF...	 	6 weeks ago	Unknown
	 OTS - Image Left.lyr	 	6 weeks ago	Unknown
	 FF - Map.lyr	 	6 weeks ago	Unknown
	 Ticker_Weather.lyr	 	9 weeks ago	Unknown
	 Ticker_Breaking News.lyr	 	9 weeks ago	Unknown
	 Ticker.lyr	 	9 weeks ago	Unknown

5i hc sGmbWb[ss

There are two states of the Auto Syncing switch

Cbs fGmbWb[ts



This is when the client will automatically download any pending server changes to the local device. BCH9zscWU sW Ub[YgsB 9J 9F sU hc! gmbWb[sH Ysg Yfj YfsUbXsa i ghsW sdi g\YX s[sH Ys gYfj Yf's

CZs fDUi gYXts



This is when the any server changes will queue and must be pulled to the local device to change on that device. Local changes also queue and must be pushed to the server.

Status Indicators

There are four statuses of the HubDrive Client.



- Synchronized



- Sync paused. No changes from the server will automatically sync to the client.



- Error. Either there is a conflict that must be resolved or there is an issue in the settings.



- Syncing content in progress.

Whatever the current status, it is replicated in the tray icon.



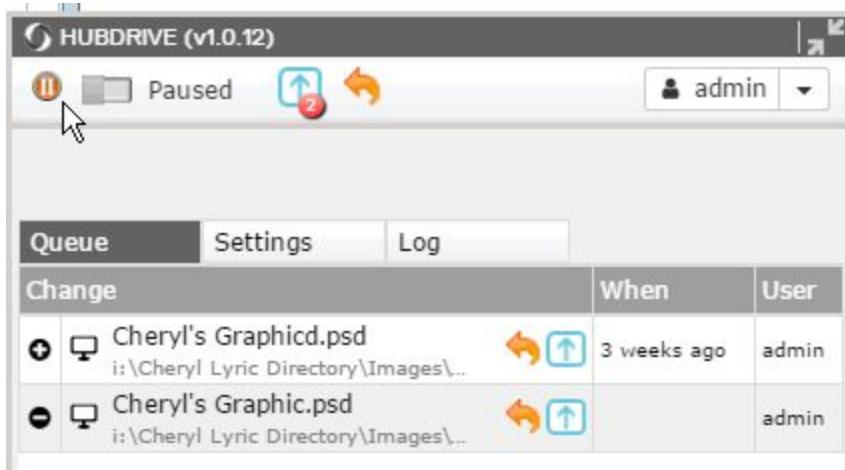
By right clicking on the tray icon you can

7 UbW`dJkck b`cUX that is happening.

<JXY the Client (and Show the client if it is hidden)

7`cgY and exit HubDrive.

E i Yi Ys



The different icons in the queue indicate different info and capabilities.

HndYscZsW Ub[Ys

- created file

- deleted file

- edited file that exists on both server and client devices

K \YfYsk UgshYsW Ub[Ysa UXYss

- Local device

- Server

5Wjcbgsi gYfgsWUbsdYfZcfa s

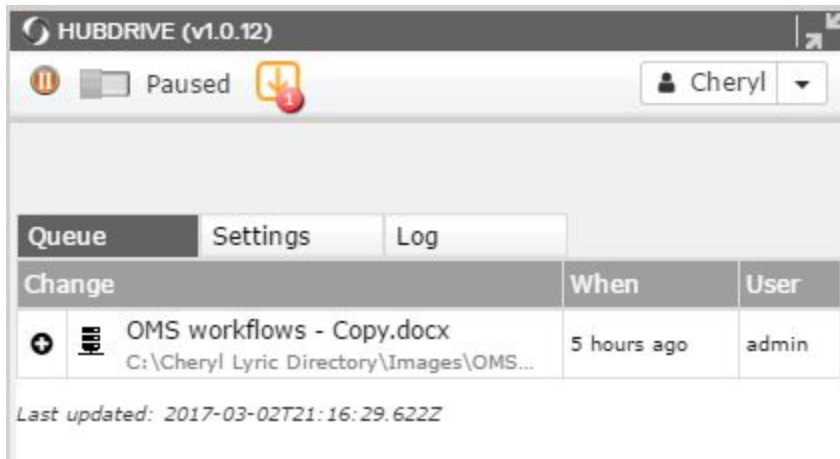
Orange down arrow in the top bar (for pull all) or next to individual items in the queue indicate files available on the server that can be pulled to local device. This indicator is only available when syncing is paused, otherwise Server files will be automatically synced to the local device.



























Blue up arrow in the top bar (for push all) or next to individual items in the queue indicate files changed locally that can be pushed to the server. Even when syncing is not paused, all local file changes must be pushed manually, either by pressing the “push all” button in the top bar, or by manually pushing individual files in the change queue. @cW5zYgsk J`BCHs
 U i lca UhW`ns\Ysli g\YXscs\YsgYfj YfSjbsJbngWbUf]c"s



Orange revert arrow in the top bar (for revert all) or next to individual items in the queue indicates reverting a local change back to the server version by pulling the server version of that (or all) files to the local device again. Whether a single file or all files are reverted is determined by whether the orange revert arrow is pressed in the top bar or against individual files in the Changes Queue.



Orange down arrow is pull down server versions to local device. It only exists in the top bar while Syncing is paused.

Changes		When	User
	 HS_Beyonce.tif C:\test-folder\HS_Beyonce.tif	 	admin
	 KWeir.tif C:\test-folder\KWeir.tif	 	admin
	 New Bitmap Image.bmp C:\test-folder\New Bitmap Image...	 	admin
	 HS_David Beckham.tif C:\test-folder\HS_David Beckham...	 	admin
	 HS_Jennifer Lopez.tif C:\test-folder\HS_Jennifer Lopez.tif	 	admin
	 Landgraf_Lois.tif C:\test-folder\Landgraf_Lois.tif	 	admin

Blue up arrow is push local content back to server (only available to read/write and admin users only.)

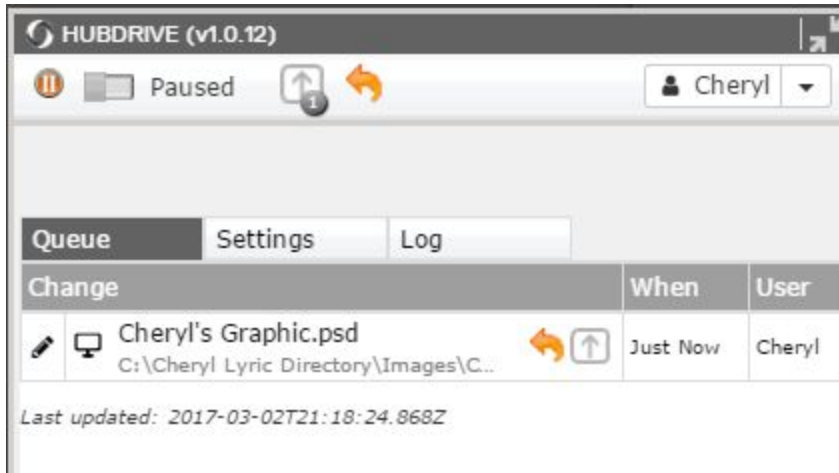
Orange revert arrow means revert changed local file to server version (available to all users.)

Reverting will mean different things depending on what kind of file action it is reverting.

Reverting a file ADDITION/creation - means the file will be DELETED locally (bypassing the Recycle Bin.)

Reverting a file SUBTRACTION/deletion - means the file will be RE-DOWNLOADED from the server.

Reverting a file EDIT - means the file will be RE-DOWNLOADED from the server and local changes OVERWRITTEN.



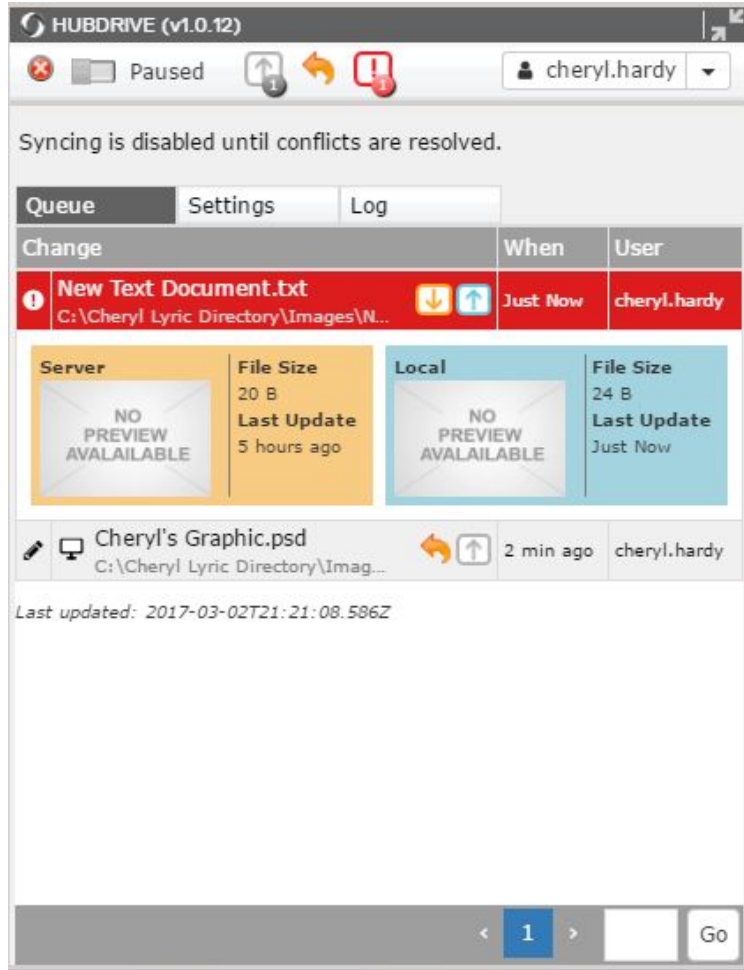
A read only user, after making a change, would only be given the option to revert all files (top bar orange revert arrow) or revert files one at a time (orange revert arrow next to each file in the Change Queue.) That user would not be able to push local changes to the server and those local changes would accumulate in the Queue and in the top bar indicator.



When Syncing is Paused, files must be pulled from the client before local files can be pushed to the server, as shown above. The push from local button in the top bar is inactive until files are pulled from the server.

7cbZMgs

When a file has been changed on both the server and on the local device, a conflict occurs and must be resolved before any other files may be pushed or pulled.

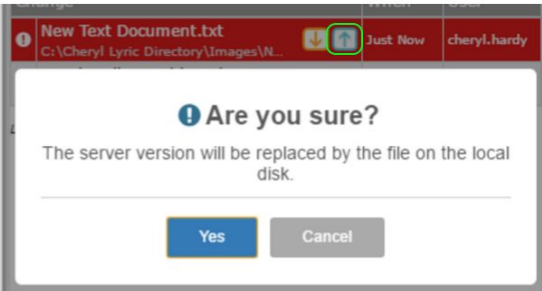


HC\$ 9GC@ 9\$K 9\$ CB: @7H, a user must choose either the orange server version or blue local version by clicking on the down orange (server) or up blue (local) arrow button to resolve the conflict.

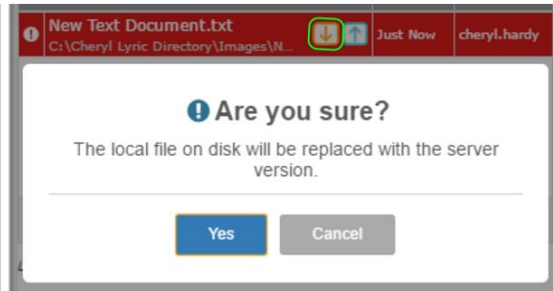


Push the orange pull down (use server version) or blue push up (use local version) buttons in the conflicted file's row to resolve the issue.

Choosing Local Version



Choosing Server Version



If you choose the server version it will come down and overwrite the local version. If you choose the local version it will wait for you to push local changes to server, (at this point you can still choose to revert change from server), then overwrite the server version with the local version.

9l]hb[s i Vs8fj] Ys

You can close HubDrive by right clicking on the icon in the tray.

You can also right click on the HubDrive icon in the taskbar to close.

