

Offline File Access and Synchronization

Synchronization Overview

The GroupDrive Desktop client has a powerful feature that allows users to select one or more files and/or folders that can be made available for **offline access**. This means that you can unplug your computer from the Internet and still access files through the mapped drive. The desktop client will remember all changes that are made to existing files, new files that are created, and files that are deleted. When the client reconnects in **online mode**, synchronization will be performed and any changes will be synchronized between the local computer and remote computer. This feature can be used extensively to ensure that a remote user will always have access to their files.

How it's done

New files created locally while offline – Any new files that are created locally while working offline through the mapped drive will be transferred to the remote server during the synchronization process; provided that the folder in which these files are stored has been marked for **offline access**.

Existing files modified locally while offline – Any existing files that are modified locally while working offline will be transferred to the remote server during the synchronization process; provided that the folder in which these files are stored, or the file itself, has been marked for **offline access**. During the synchronization process, the desktop client will check the date, time, and file size of the local and remote versions of the file to see if the local file should be uploaded to the server. If the server version of the file has not changed since the local copy was used, then the local copy will be uploaded and will replace the old version stored on the server. If the local file has changed, but the remote file has also changed, the desktop client will rename file on the server before uploading the local copy. If this happens, a message box will be displayed to the user so that the user can manually check for differences in the local vs. remote versions. The desktop client does not perform automatic merging of changes between local and remote versions.

Existing files deleted locally while offline – Any existing file that is deleted locally while working offline will be deleted from the remote server during the synchronization process; provided that the folder in which these files are stored, or the file itself, has been marked for **offline access**.

Configure the Client for Synchronization

Configuring the desktop client for offline access and synchronization is fairly straight forward. The first step involves enabling the offline/synchronization features in the client, then selecting one or more files/folders that will participate in the process.

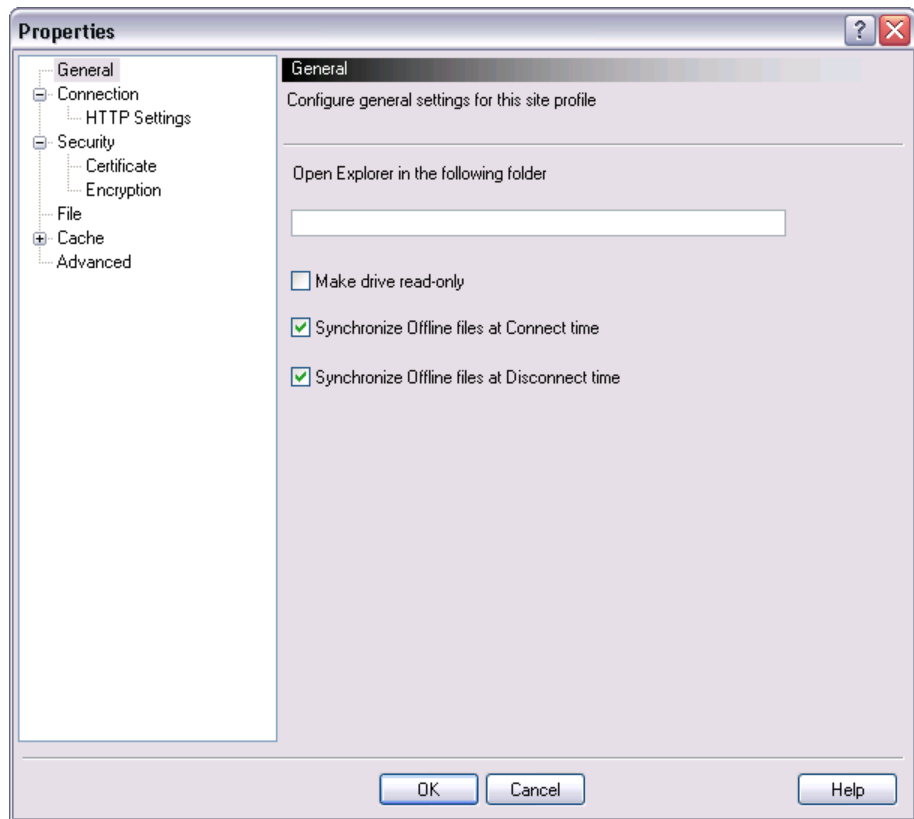
Enabling Offline Access/Synchronization

The first step involves configuring the Desktop Client so that the automatic synchronization features are enabled.

- 1) Launch the GroupDrive Client application. If you have not yet configured a **site profile** to access your GroupDrive, click on the **Site** button and then select **New** from the drop down menu. This will launch the **Site Profile Wizard** used to create a new site profile (this topic is covered under a separate document located on our website).
- 2) Once you have a site profile configured, click on the **Properties** button located on the main Site Manager Dialog. This will open the **Advanced Properties** dialog for the currently selected site profile.



- 3) The **Advanced Properties** dialog is laid out so that advanced settings are placed into various groupings. Each grouping is identified by a label located in a tree hierarchy on the left portion of the dialog box. The **Synchronization** configuration settings are located under the **General** section. Click on the **General** item in the tree to display the settings.



- 4) There are two synchronization settings, one used for synchronization when initially connecting to the server when the drive is mapped, and one used when disconnecting from the remote server. Enable both features for full synchronization. Failure to enable both features may result in some files not being synchronized correctly.

Synchronize Offline files at Connect time – Enable this option to have the Desktop Client synchronize all offline files with the remote GroupDrive Server each time you connect to the server in **Online** mode. When this option is enabled, the Desktop Client will perform an automatic synchronization with the remote server immediately after the drive has been mapped and the username & password have been authenticated against the remote server.

Synchronize Offline files at Disconnect time – Enable this option to have the Desktop Client synchronize all offline files with the remote GroupDrive Server each time you disconnect from the server and you are in **Online** mode.

- 5) Click **OK** to save these settings and return to the main Site Manager dialog.

Marking Files & Folders for Offline Access

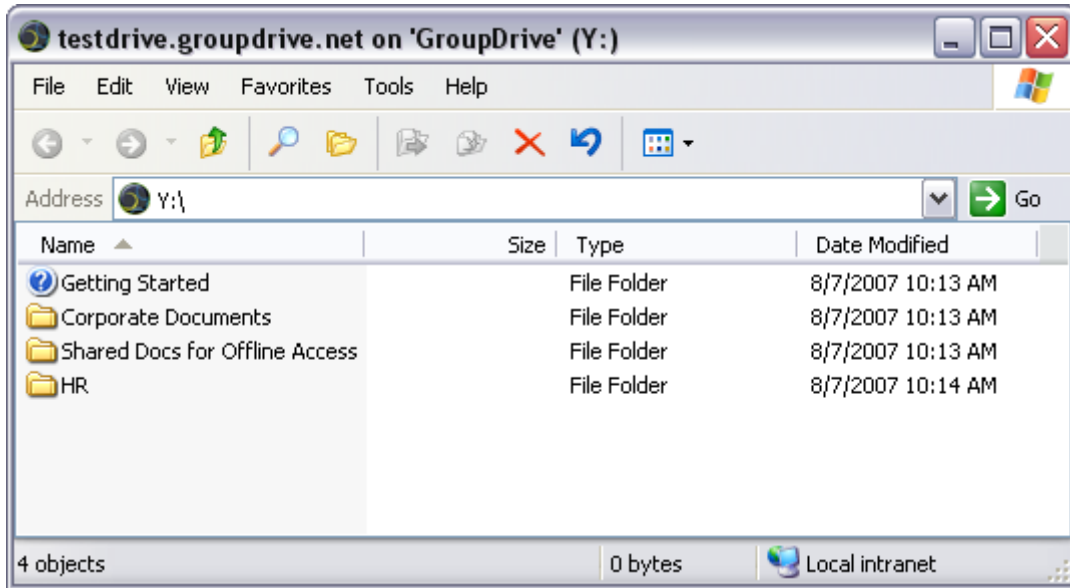
The next step in the process involves connecting to the remote GroupDrive Server and selecting one or more files and folders to be available when working offline.

To connect to the remote GroupDrive Server, launch the GroupDrive Site Manager, and click on the **Connect** button which will connect you to the remote GroupDrive Server and create a drive letter in Windows Explorer for your GroupDrive. *Note: Make sure that the **Connect OFFLINE** option is **NOT** enabled at this time. When selecting files/folders for offline access, you must connect to the remote GroupDrive Server in **Online** mode.*

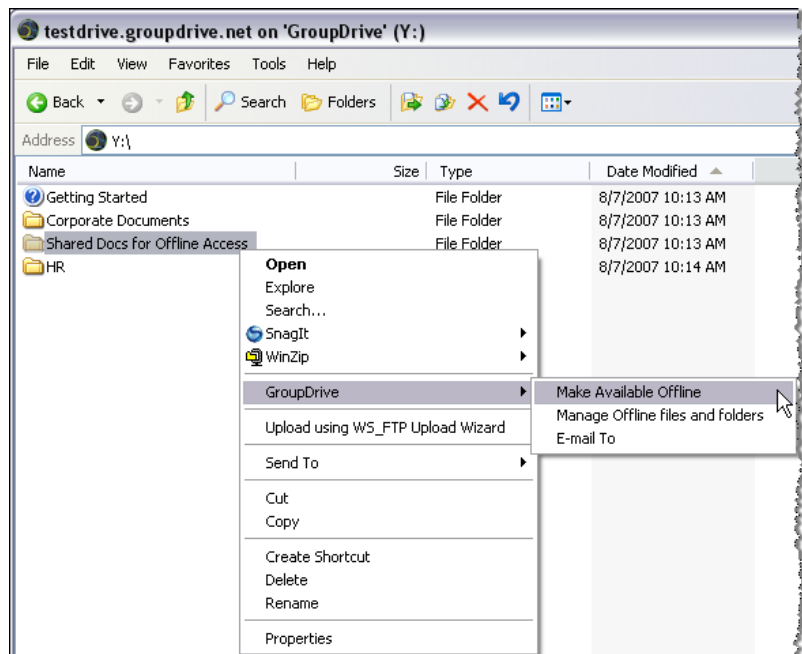
Once your username and password have been authenticated, the Site Manager dialog will close and Windows Explorer will open and display the contents of your mapped drive. In this example, the Y drive was used. *Note: if Windows Explorer does not open automatically, double-click on My Computer and then double-click on the drive letter that was configured in your Site Profile.*



When Windows Explorer opens, the contents of your GroupDrive will be displayed. If there are no files in your GroupDrive, Windows Explorer will not display anything.



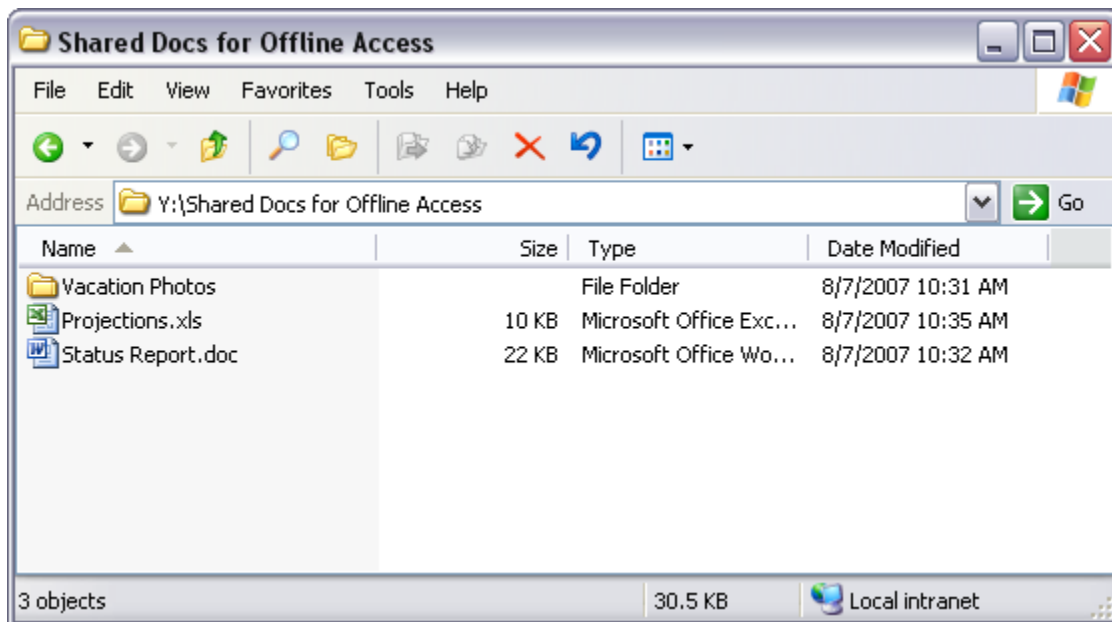
In this example, we have 4 folders/directories in our GroupDrive; Getting Started, Corporate Documents, Shared Docs for Offline Access, and HR. Our desire is to have the **Shared Docs for Offline Access** folder will be made available for offline access. To make this folder available, right-click on the folder and select **GroupDrive** and **Make Available Offline** from the popup context menus.



A dialog box will be displayed asking if all subdirectories (and files in those directories) should also be made available for offline access. If you would like all files and folders under the selected folder to be available when you are working offline, then **enable** the **Apply To Subdirectories** option on this dialog and click the **OK** button to save the changes.



Opening the folder shows that there are two files and one folder that will be accessible when we re-connect in offline mode. The contents of the **Shared Docs for Offline Access** can be changed, viewed, or deleted when in Offline mode.



Working Offline

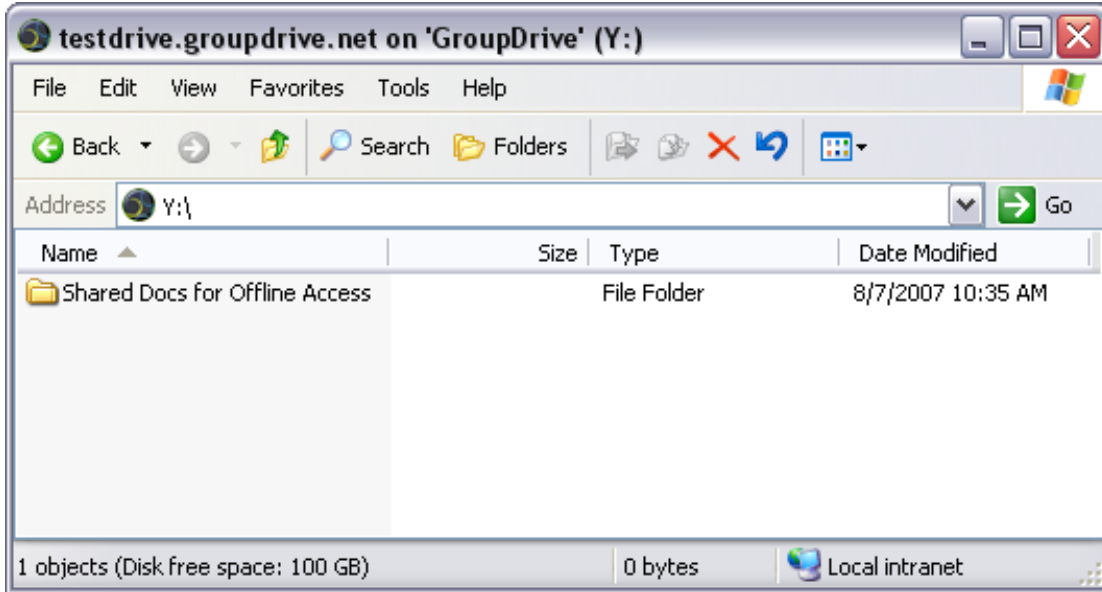
Once you have marked one or more files/folders to be made available while working offline, you are ready to move to offline mode.

Connecting in **Offline mode** is simply a matter of mapping the drive while the **Connect Offline** option has been enabled. To connect offline, launch the Site Manager program and enable the **Connect Offline** option. Click **Connect** to map the GroupDrive and connect in offline mode.

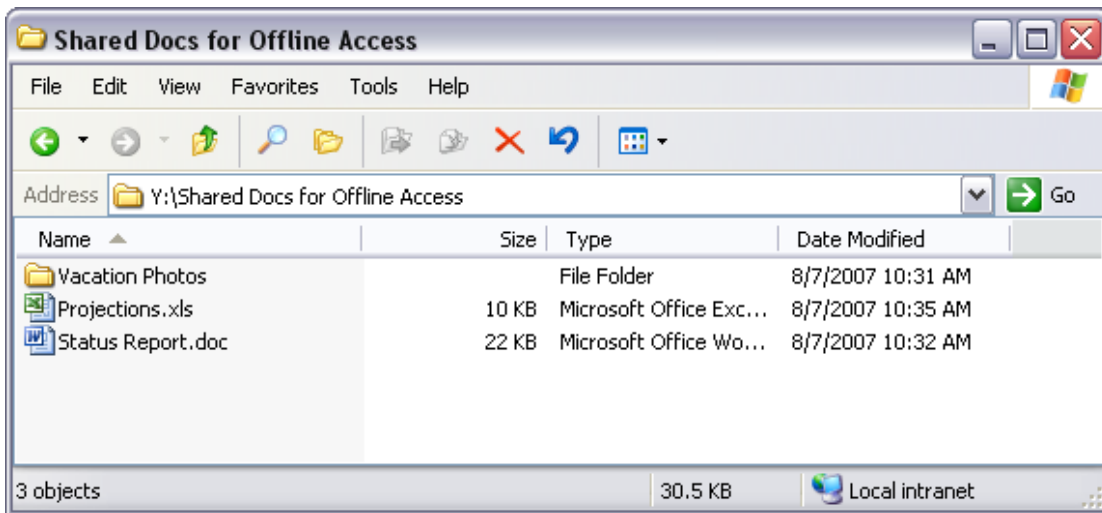
Once connected in offline mode, the GroupDrive Site Manager dialog will close and Windows Explorer will open, displaying the contents of your mapped drive.



One immediate difference will be that some of the files and folders will appear to be missing. This is because only those files/folders that have been marked for offline access will be accessible when running offline.



Files in the subdirectory also appear.

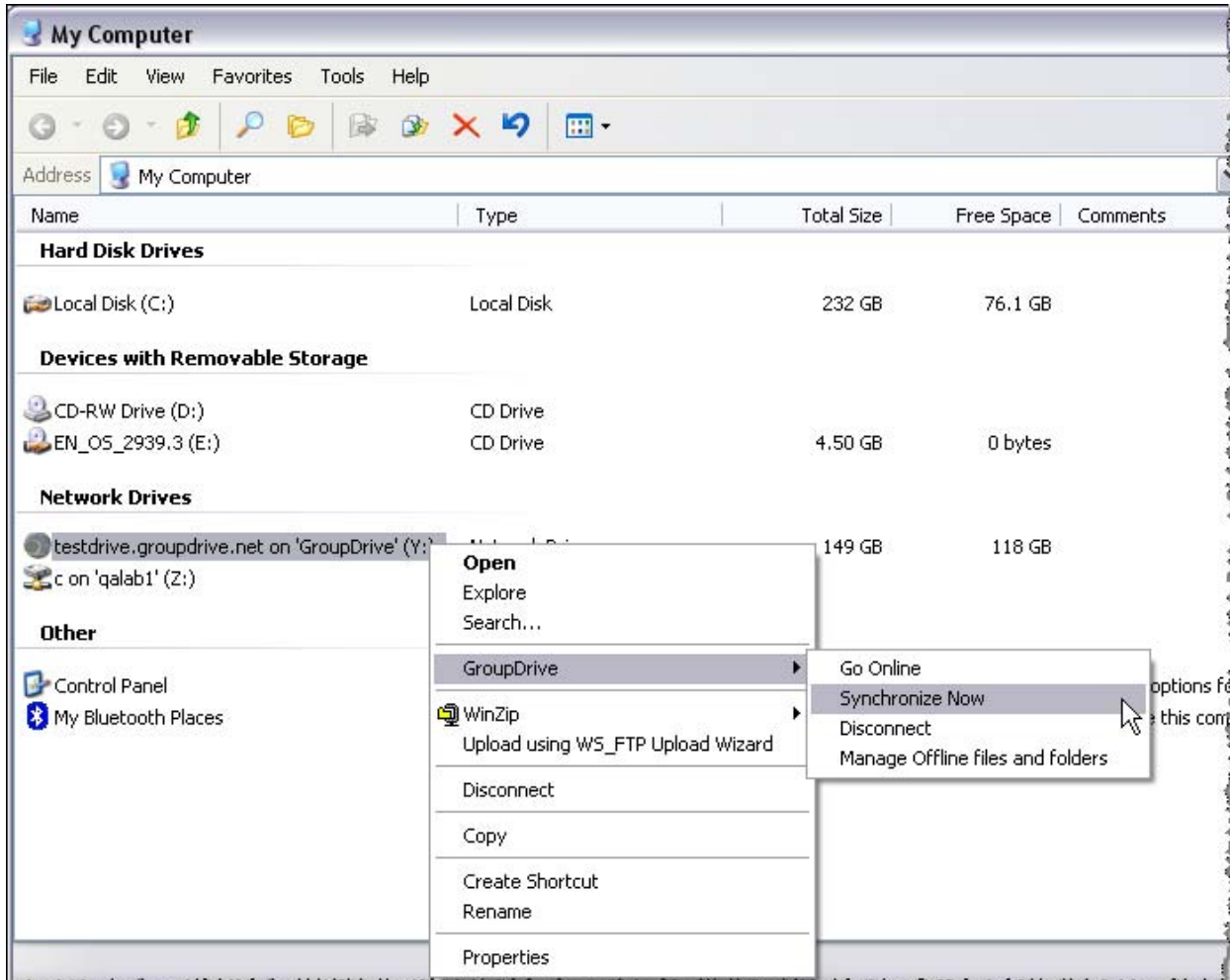


At this point, using your GroupDrive is identical to using it when you are online. You can use your applications to edit, create, and delete any files and folders on your GroupDrive. All changes will be stored locally until you reconnect in **online mode** at which time all changes between the local and remote server will be synchronized.

Manual Synchronization

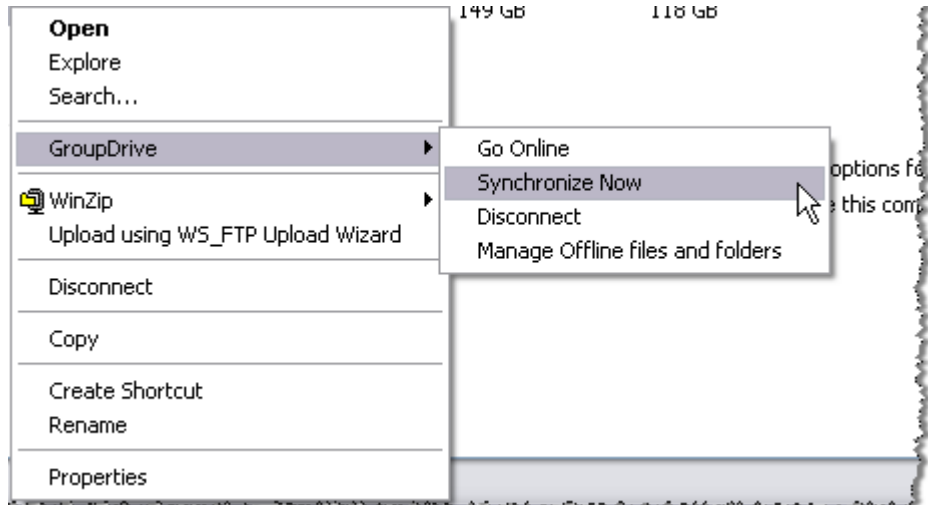
While the most common configuration has the desktop client configured for automatic synchronization, you can also manually synchronize with the remote server at any time. To manually synchronize the contents of the local drive with the contents of the remote GroupDrive Server, open **My Computer**, then right-click on your GroupDrive and from the context menu, select **GroupDrive** then **Synchronize Now**.

This will cause GroupDrive to synchronize all changes between the local drive and remote server.



Go Online & Go Offline

The desktop client also has the ability to dynamically go from **offline mode** to **online mode** without having to manually un-map and re-map the drive letter. To toggle between online and offline mode, right click on your GroupDrive under **My Computer**, and select **Go Online** or **Go Offline** from the GroupDrive context menu.



The process of toggling between online and offline mode will also cause a synchronization to be performed.

Conclusion

For some installations, mainly where the computer will always be connected to the Internet, and thus able to connect to the GroupDrive, offline access may not be necessary. If offline access is not necessary, it is better to leave it disabled as the synchronization process could use up a lot of disk space on your local computer.

For installations where offline access is required, just be sure there is ample disk space on the client computer to allow for the cached files when running in offline mode. For example, if a folder containing 2GB of data is marked for offline access, and you **Go Offline**, GroupDrive will cache the entire 2GB locally on the user's computer, usually under My Documents\GroupDrive\Cache\ so you should set the GroupDrive Cache size to be large enough to handle the necessary volume of information.