The State of WebDAV Clients

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Background

WebDAV is an [Internet standard](#) that allows client software to modify files on a Web server.   In theory, a client and server implementing the WebDAV protocol should work together. In practice, we've found this expectation to be met to varying degrees depending on the implementation.

Summary

Adobe Dreamweaver's WebDAV client has significant shortcomings including

- being unable to use an HTTP proxy,
- being likely to fail when accessing servers across the Internet due to low latency tolerance,
- and being slow due to making redundant requests.

Unfortunately, all versions of Microsoft Windows including Vista and Windows 7 have limitations that should make you think twice before using them as the WebDAV client for Dreamweaver.

The best WebDAV solution on Windows is to use a third party WebDAV client, such as WebDrive, which can mount the remote folder as a local drive.

Mac OS X's WebDAV client can also be used to reliably make remote files available to Dreamweaver. Unfortunately, Mac OS X makes unneccesary calls. Within higher latency connections, this causes delays in directory and file listing. Also, this causes some unusually long "saves"

Some networks are configured to require the use of HTTP proxies, to deny certain types of HTTP requests, or both. Such configurations either hinder or prohibit WebDAV access.

WebDav doesn't work for Windows Vista, 64bit Windows, or Windows 7. It does work on Win XP SP3, Mac OS X 10.5.6, and in Dreamweaver (though the latter option is not recommended).

Dreamweaver

Adobe Dreamweaver is the WebDAV client that RightNow's customers likely most familiar with. Unfortunately, we've encountered a number of weaknesses in its WebDAV client.

We have found that Dreamweaver can have problems when trying to synchronize a local copy with the files on the RightNow WebDAV server when there is a poor network connection. Dreamweaver's threshold for network connection quality seems to be around 500 ms of latency or a small amount of packet loss. Clients outside of North America connecting to a data center in North America often report this problem.

Another disappointing aspect of Dreamweaver's WebDAV client is that it makes redundant requests. This oddity causes it to take a long time to transfer an interface's worth of files.

Dreamweaver does not support connecting to the Internet through an HTTP proxy. If your network configuration requires client computers to use an HTTP proxy server to reach the Web, you cannot use Dreamweaver's WebDAV client to upload files to RightNow's servers. Unfortunately, this shortcoming also prevents RightNow's Dreamweaver Extension from providing a high-fidelity design view or fulfilling many of its other features.

One possible work around for Dreamweaver's weaknesses is to use another WebDAV client. For example, you might like to continue using Dreamweaver to edit your Customer Portal files and to synchronize your local copy with the server. To do so, you could use a WebDAV client which mounts the remote server as a local drive and then configure your Dreamweaver site to use that drive as the server for your Dreamweaver site. Unfortunately, we've only found one WebDAV client which adequately meets that requirement.

Windows

Microsoft Windows also contains a WebDAV client. Actually, Windows has a few different WebDAV clients, each with its own quirks. Unfortunately, there's not an easy way to tell which client or which version of that client is installed.

One piece of good news about Windows' WebDAV clients is that they can connect to the Web through an HTTP proxy.

Windows Web Folders Client

Windows' older WebDAV client is known as the Web Folders Client or the Internet Publishing Provider DAV. Windows ME, 2000, and XP originally shipped with this client.

The most significant drawback of using this client is that it cannot mount a WebDAV server as a local drive, precluding it from as acting as the client for a Dreamweaver site. Dreamweaver is unable to use the folder that this client creates under My Network Places.

In some circumstances, this client requires that the port be specified, such as http://server:80/dav.

Aside from being unable to act as the client for Dreamweaver, this client works fairly well when accessing RightNow's WebDAV server.

Windows Mini-Redirector

One of Windows' newer WebDAV clients is known as the Mini-Redirector, minidir, and DAVRdr. This client shipped with Windows XP SP2 and SP3, Server 2003 SP1, and some versions of Vista. It also shipped with some newer revisions of Microsoft Office.

RightNow's WebDAV server uses HTTP Basic Authentication, which means that the credentials are sent in there clear (non-encrypted). Consequently, it should not be used over non-SSL connections.

In Windows XP and Server 2003 Standard Edition, the Mini-Redirector does not support HTTPS connections (i.e., SSL), so it should not be used with RightNow's WebDAV server due to security concerns. With a registry change, Windows XP and Server 2003 Standard Edition can be configured to use basic authentication over non-SSL connections.

By default, Windows Vista only performs HTTP Basic Authentication over an SSL connection. It can also be configured to authenticate over a non-SSL connection. Recent hotfixes to Vista have negatively impacted the webDAV client.

Even with registry changes, many versions of this client send the user's authentication credentials in a non-standard way that will not work with RightNow's WebDAV server in versions November '08 and earlier. For the complete list of clients with this problem, look for the versions marked with the "basic-authentication" tag on this page. Additionally, a different set of version of this client will not work with RightNow versions November '08 and earlier because they send an OPTIONS request for "/" when asked to visit "/dav/." For the complete list of clients with this problem, look for the versions marked with the "server-discovery" tag on this page.

The scenarios of using Windows as a WebDAV client are further complicated when Microsoft Office is installed. That suite includes a separate WebDAV client that takes over in the scenarios above when Windows' is unable to authenticate. Unfortunately, that client is unable to mount a WebDAV share as a drive, preventing it from acting as a client for Adobe Dreamweaver.

Windows Server 2003 Enterprise Edition and Windows XP x64

Windows Server 2003 Enterprise Edition and Windows XP x64 do not include the Web Extender Client by default; thus it has no support for WebDAV, although it includes with the UI to connect to a WebDAV folder. Microsoft suggests installing either of the clients mentioned above. Of course, those clients also suffer from the problems described above.

Windows Vista x64

A number of our customers have reported unsolvable problems trying to use the built in Vista x64 WebDAV client. We do not recommend using it.

WebDrive (Recommended for Windows)

The best WebDAV client we've found is WebDrive. It is a commercial, third party client.

We've found it

- to be robust when operating over poor network connections,
- to handle HTTP proxy well,
- to work with both SSL and non-SSL connections,

- to authenticate with RightNow's WebDAV server,
- to mount the remote files as a local drive,
- to transfer an interface's worth of files reasonably quickly, and
- to perform well as the WebDAV client for Dreamweaver.

The most significant problem that we've found with this client is that it caches too aggressively at times. Fortunately, WebDrive allows its caching configuration to be modified.

To configure Dreamweaver to use a WebDAV server mounted by WebDrive as a drive, follow these steps:

1. Install WebDrive
2. Start WebDrive
3. If your network configuration requires an HTTP proxy, configure WebDrive appropriately.
4. Install the RightNow Dreamweaver Extension.
5. Start Dreamweaver.
6. Click Commands | RightNow | Configure RightNow Extension
7. Click the Create Dreamweaver Site… button.
8. Fill in the required details and click OK.
9. In the Site Definition dialog, click on Remote Info in the Category box.
10. Copy the value from the URL box.
11. In WebDrive, create a new site.
12. Paste the URL you copied in Dreamweaver into the URL box in WebDrive.
13. Set the site type to WebDAV.
14. Fill in the username and password.
15. Specify a drive letter.
16. Save the site.
17. Connect the site. Your PC should now show a new drive.
18. In Dreamweaver's Site Configuration dialog's Remote Info page, change the access type to Local/Network.
19. In the Remove folder box, specify the drive WebDrive just created.
20. Click OK.

NetDrive

We previously recommended NetDrive as an alternative to WebDrive. In mid-2009 new versions of NetDrive introduced a bug which caused the operating system to hang when using NetDrive and Dreamweaver together. We no longer recommend NetDrive.

Mac OS X with Cyberduck (Recommended for Mac OS X)

This is a free utility for Mac OS X users that provides connectivity for various types of protocols.

To configure CyberDuck to act as the WebDAV client for Dreamweaver, follow these steps:

1. Download and install Cyberduck from http://cyberduck.ch/
2. Either use "Open Connection" or "Quick Connect" with the server address ://<your_site>/dav
3. Enter your username and password
4. Click Connect
5. In Dreamweaver's Site Configuration dialog's Remote Info page, change the access type to Local/Network.
6. Click on the folder to the right of "remote folder" and browse "Places" for the connected WebDAV connection that was just created.

Mac OS X with native WebDAV client

We highly recommend connecting with Cyberduck, but have left this option for your reference. Dreamweaver's WebDAV weaknesses are also present when running on Mac OS X. A technique similar to the one described above with WebDrive can be used to co-opt the native WebDAV support of Mac OS to serve as the WebDAV client for Dreamweaver.

To configure Mac OS X to act as the WebDAV client for Dreamweaver, follow these steps:

1. Go to the Finder menu and select Go.
2. Click Connect to Server.
3. In the Internet or Network Address field, type http://<your_site>/dav.
4. Click the Next button.
5. Type your user name and password in the fields and click the OK button.
6. Go to Places under the file browser (click the Macintosh HD) connected network drive to view the connected resource.
7. In Dreamweaver's Site Configuration dialog's Remote Info page, change the access type to Local/Network.
8. Click on the folder to the right of "remote folder" and browse "Places" for the connected WebDAV connection that was just created.

Network Configuration

Some network configurations make reaching an external WebDAV server difficult or impossible.

Adobe Dreamweaver does not work well with networks that require using an HTTP proxy to reach external websites. Neither its WebDAV client nor RightNow's extension for Dreamweaver will be able to reach RightNow's servers on such a network.

Some networks have restrictions on the HTTP methods that can be sent in requests. Although these networks allow the common HTTP methods of GET and POST, they may disallow OPTIONS, PROPFIND,

PUT, MKCOL, COPY, MOVE, or DELETE methods which are required for WebDAV. Contact your network administrators if you have problems performing some of these actions.

WebDAV Connection Trials

The below chart is a "thumb in the air" assessment in providing what seem to be somewhat typical responses from using the methods described.

Task	OS	Site Data Center	Client Location	CONNECTION METHOD					Time	Notes	Results
				DW Version	DW WebDAV	OS WebDAV	netdrive.exe	NetDrive_SETUP.exe			
Install Extension default and download entire site via DW	Mac OS 10.5.5	UK	US Bozeman Gen III First Floor NE Corner	CS3	Yes	No	No	No		On initial site load, the connection would continue to fail multiple times	FAILED
Download entire site via OS WebDAV without using DW	Mac OS 10.5.5	UK	US Bozeman Gen III First Floor NE Corner	CS3	No	Yes	No	No	10 Minutes	Downloaded Entire Site without using DW	OK
Download entire site via OS WebDAV with DW	Mac OS 10.5.5	UK	US Bozeman Gen III First Floor NE Corner	CS3	No	Yes	No	No	10 Minutes	Was able to connect DW directly to OS WebDAV mount just like a regular file/network connection	OK
Install Extension default and download entire site via DW	Windows XP SP 2	UK	US Bozeman Gen III First Floor NE Corner	CS3	Yes	No	No	No		On initial site load, the connection would continue to fail multiple times	FAILED
Download entire site via OS WebDAV without using DW	Windows XP SP 2	UK	US Bozeman Gen III First Floor NE Corner	CS3	No	Yes	No	No	10 Minutes	Was able to download entire site without DW, using netdrive.exe only	OK
Download entire site via OS WebDAV with DW	Windows XP SP 2	UK	US Bozeman Gen III First Floor NE Corner	CS3	No	Yes	No	No	10 Minutes	Was able to connect DW directly to netdrive.exe mount just like a regular file/network connection	OK
Download entire site via 3rd Party WebDAV without using DW	Windows XP SP 2	UK	US Bozeman Gen III First Floor NE Corner	CS3	No	No	Yes	No	2 Minutes	Was able to download entire site with DW as a local/network via netdrive.exe. Also was extremely fast. Was less than a couple minutes	GOOD
Edit and Save files via 3rd Party WebDAV using DW	Windows XP SP 2	UK	US Bozeman Gen III First Floor NE Corner	CS3	No	No	Yes	No	< 10 seconds	Edited about.php and uploaded to server	GOOD

Task	OS	Site Data Center	Client Location	CONNECTION METHOD					Time	Notes	Results
				DW Version	DW WebDAV	OS WebDAV	netd rive. exe	NetDrive _SETUP. exe			
Download entire site via 3rd Party WebDAV without using DW	Windows XP SP 2	UK	US Bozeman Gen III First Floor NE Corner	CS3	No	No	No	Yes	10 Minutes	Was able to download entire site with DW as a local/networ k via netdrive.exe. Also was extremely fast. Was less than a couple minutes	OK
Edit and Save files via 3rd Party WebDAV using DW	Windows XP SP 2	UK	US Bozeman Gen III First Floor NE Corner	CS3	No	No	No	Yes	< 10 seconds	Edited about.php and uploaded to server	GOOD