

Secure Network File System

Barracuda WebDAV plugin

WebDAV is a set of extensions to the HTTP(S) protocol that allows a server to appear as a **standard network drive**.

WebDAV clients are native to Windows XP, Mac OS X, etc., and one can, therefore, simply mount a drive from one of these operating systems to one or several remote embedded devices. WebDAV eliminates the typical problems encountered in a mixed UNIX/Windows environment where a Windows machine cannot mount a NFS drive and vice versa.

Comparing WebDAV to SMB, NFS, and FTP

A WebDAV drive is comparable in functionality to the Windows networking file system SMB and to the UNIX networking file system NFS. Unlike a FTP server, a WebDAV, SMB or NFS server works as a real network drive, and are, therefore, much more efficient at managing the remote files. A WebDAV server benefits from the HTTP infrastructure in the following ways:

- Can use High-grade 256-bit AES SSL encryption by using the SharkSSL plugin
- Can use HTTP digest encrypted authentication
- Can bypass firewalls and proxies
- Is faster than SMB and NFS over the Internet

In addition, the Barracuda Embedded WebServer can authorize users without support from the underlying file system. One can, on a file by file basis, give users access to do one or several of the following operations: read, write, delete, move, copy, make new directories, set and get properties.

Using WebDAV during development

It is common that embedded devices crash during development. For example, it can be tedious to use FTP to upload data as the FTP connection must be re-established every time a device is restarted. On the other hand, WebDAV is using a stateless connection -- the remote drive can be used without reconnecting the client when a device is restarted. This also works with authentication as the client will automatically re-negotiate the user's credentials if the server requests such information.

WebDAV can automate and speed up the development process when volatile data must be uploaded to a device after being restarted.

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Mounting multiple ZIP files, databases, etc.

The Barracuda WebDAV plugin is designed such that the plugin can also be used to access other devices than a file system. Barracuda includes support for mounting ZIP files as read only file systems. One can easily interface, for example, a database and access the database via a WebDAV drive.

There is no limit to the number of WebDAV instances that can be inserted into the Barracuda Virtual File System. For example, one can mount 10 ZIP files, a database, and a regular file system and have the Barracuda Virtual File System combine the devices as one coherent file system.

Download WebDav Demo:

The WebDAV plugin is integrated into the BarracudaDrive Web Server:
<http://barracudaserver.com/products/BarracudaDrive/FileServer.Isp>