

Introduction

There are two methods used to connect the xnatfs WebDAV server to an XNAT instance. The first is a [standalone server](#) bundled with Jetty into an executable jar file. The second is a [standard servlet](#) bundled as a J2EE war file. Both methods allow connection to the WebDAV server in a similar manner.

Standalone Server

xnatfsStandalone.jar implements a local WebDAV server for XNAT. The server requests authentication credentials that are passed onto the XNAT server.

Usage

```
java -jar xnatfsStandalone.jar --server central.xnat.org --scheme https --port 80 8081
```

Arguments

```
--server  -- XNAT instance to connect to
--scheme  -- prefix on URL (http or https supported)
--port    -- port on the XNAT instance (80 is default)
<port>    -- Local port to run the WebDAV server (8080 is the default)
```

On the Mac, you can connect through Finder->Go->Connect to Server... with a URL of <http://127.0.0.1:8081>. Incidentally, you can use a web browser to do the same thing. Not sure what you need to do under Windows. From what I've read, WebDAV support is fairly broken under WinXP, and only slightly better using Vista. Haven't tried Win7 yet. Under Linux, the various file managers support WebDAV fairly well. In all cases, the server will prompt you for your username/password. Use your XNAT credentials, which will be forwarded on to the XNAT instance.

At the moment, the local data is served using http, but we could implement https, I think. Though I haven't tried it, I think more than one user can connect at a time, all with different XNAT credentials.

Servlet

A servlet implementing the WebDAV protocol is bundled into a standard war archive. This may be deployed on any Servlet engine. Place the xnatfs.war file in the webapp's directory of your favorite Servlet engine.

Deployment on XNAT instance

If xnatfs is deployed on the same server as the XNAT instance, i.e. if the war file is placed in the same webapps directory as XNAT, no configuration is required. If custom configuration is required, see the next section.

Deployment on standalone Servlet engine

The configuration options for the servlet version of xnatfs are similar to the standalone distribution. Configuration is through a simple properties file in the xnatfs/WEB-INF/XNATFS.properties. Currently, the only recognized property is url:

```
url = http://central.xnat.org/REST
```

For the curious, once the war file has been unpacked, the xnatfs/WEB-INF/web.xml file has the following tags:

```
<servlet>
  <servlet-name>xnatfs</servlet-name>
  <!-- <servlet-class>org.xnat.xnatfs.webdav.xnatfsServlet</servlet-class> -->
  <servlet-class>com.bradmcevoy.http.MiltonServlet</servlet-class>
  <init-param>
    <param-name>resource.factory.class</param-name>
    <param-value>org.xnat.xnatfs.webdav.XNATFS</param-value>
  </init-param>
  <init-param>
    <param-name>filter_0</param-name>
    <param-value>org.xnat.xnatfs.filter.AuthenticationFilter</param-value>
  </init-param>
  <init-param>
    <param-name>filter_1</param-name>
    <param-value>org.xnat.xnatfs.filter.ChatterFilter</param-value>
  </init-param>
  <init-param>
    <param-name>not.found.url</param-name>
    <param-value>/404.jsp</param-value>
  </init-param>
</servlet>
```

It is not advised to change any of the tags unless you know what you are doing.

The filter_0 and filter_1 parameters instruct the WebDAV code to create the filters. The AuthenticationFilter ensures that the client is fully authenticated, before any resources are requested and the ChatterFilter helps to cut down on unnecessary transmissions.

Connecting to xnatfs

When connecting to xnatfs, you will be prompted for your username/password. Please use your XNAT credentials. NB: these will be transmitted to xnatfs more or less in plain text, and transmitted to XNAT in the same manner. This is the same behavior as if you were connecting directly to the XNAT instance. The https protocol (see the --scheme argument above) is the recommended connection scheme.

NB: If you are using the servlet version of xnatfs, the correct URL to connect to the WebDAV server is `http://localhost:80/xnatfs`. The port depends on the servlet engine used to host the war, and the `/xnatfs` can be modified in the web.xml file as above.

Browser Instructions:

Simply point your browser to <http://localhost:8081>. This interface, though not as fancy as the full WebDAV interface, will allow any files to be downloaded.

Mac Instructions:

On the Mac, you can connect through Finder->Go->Connect to Server... with a URL of <http://127.0.0.1:8081>. Incidentally, you can use a web browser to do the same thing.

Windows Instructions:

Not sure what you need to do under Windows. From what I've read, WebDAV support is fairly broken under WinXP, and only slightly better using Vista. Haven't tried Win7 yet. Some help may be found here <http://www.wikispaces.com/WebDAV+Windows+XP> and <http://www.powers1.net/techup/node/2> using NetDrive?.

Linux/Unix Instructions:

Under Linux, the various file managers support WebDAV fairly well. In all cases, the server will prompt you for your username/password. Use your XNAT credentials, which will be forwarded on to the XNAT instance.

Known Issues

On the Mac, if a file is opened or copied from an expanded folder in list view, xnatfs hangs for some unknown reason, and the file can not be copied due to insufficient privileges.

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Contact Information

Please contact Daniel Blezek (daniel.blezek@gmail.com) with any comments, bugs or suggestions.

The project page for xnatfs is hosted by Google Code <http://code.google.com/p/xnatfs/>.