title:	Serving Archives with WebDAV
license:	General Public License, V2
copyright:	2004, 2005 Canonical Ltd. ../../bazaar-docs/src/ServingWithWebDAV.rst:3: (WARNING/2) Cannot extract compound bibliographic field “copyright”.
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original-location:	jblack@gnuarch.org--2004/bazaar-docs--initial--1.1

This article covers serving your archives via WebDAV. After you are finished reading this mini-howto, you will no longer have to worry about using listing files again.

Before we get started, what exactly is WebDAV (aka DAV)? Well, one overly simplified explanation is that WebDAV is essentially a filesystem that works over HTTP. Though WebDAV has all sorts of nifty concepts like locking, filesystem properties and namespace manipulation. However, to arch, DAV is really just another filesystem it can talk to.

This is pretty close to what HTTP can do for arch, so there must be some good reason to bother with DAV. It so happens that there _is_. HTTP doesn't work very well as a filesystem; in fact, HTTP doesn't even support directory listings (For those of you that are familiar with Apache's autoindex module, no, that is not a directory listing. That is actually a html page that is built on the fly). In order to get around this problem, arch creates ".listing" files that act as a cached directory listing. Though this does work around the problem to some extent, .listing files aren't *completely* reliable.

However, it so happens that DAV does support directory listings. By using DAV, arch doesn't need the listing files workaround. This makes installing read-only DAV support worth doing, especially considering installing read-only DAV support is pretty darn easy for apache.

Though DAV and arch support both reading from and writing to archives via DAV, this minihowto is just going to focus on serving archives with read-only DAV. There's a couple reasons for not covering writing with DAV. One reason is that arch (due to limitations of libneon) does not support SSL. The main reason this mini-howto doesn't cover writing archives via DAV is that arch does not currently support SSL. The other, less important, reason is that setting up writable DAV isn't the sort of task that somebody should undertake based on reading a mini-howto. :)

In order to use DAV with apache, there's a few things we need to do:

1. Make sure your archive is in a location that is served by apache. For the purpose of this tutorial, I'm going to assume your archive's location is in /home/jdoe/public_html/archives/jdoe@isp.com--2004.

2. First, make sure that DAV support is installed on the server. If you are using either Debian/GNU or Ubuntu Linux, then as root, run :

```
apt-get install libapache-mod-dav
```

4. Ensure that the mod_dav module is loaded by apache. You should have a line in /etc/apache/modules.conf that includes the line:

```
LoadModule dav_module /usr/lib/apache/1.3/libdav.so
```

5. Edit /etc/apache/httpd.conf, and add the following stanza:

```
<Directory /home/jdoe/public_html/archives/jdoe@isp.com--2004/>
DAV On
</Directory>
```

6. Restart apache.

And that should be it. You can verify that DAV is working by watching your apache logs while arch tries and retrieves from the archive. If DAV is working, you will not see any requests for ".listing" files.

Once you are satisfied that DAV is working, you can perform the following commands:

```
find /home/jdoe/public_html/archives/jdoe@isp.com--2004 -name .listing \
  | xargs -n 1 rm
rm /home/jdoe/public_html/archives/jdoe@isp.com--2004/=meta-info/http-blows
```