

# Running VIVO behind an Apache server

Most sites choose to configure their VIVO system with an Apache HTTPD web server to accept requests and then proxy them to the VIVO Tomcat context. This will make Vitro available at <http://example.com> instead of <http://example.com:8080/vitro>. It will also allow the use of external authentication.

Setup HTTPD to send all of the requests that it receives to Tomcat's AJP connector. This can be done in HTTPD 2.x with a simple directive in httpd.conf:

```
ProxyPass / ajp://localhost:8009/
```

Modify the <Host> in Tomcat server.xml (located in [tomcat root]/conf/) so that the context path is empty to allow VIVO to be served from the root path. Locate the <Host name="localhost"...> directive and update as follows:

```
<Host name="localhost" appBase="webapps"
  DeployOnStartup="false"
  unpackWARs="true" autoDeploy="false"
  xmlValidation="false" xmlNamespaceAware="false">

  <Alias>example.com</Alias>

  <Context path=""
    docBase="/usr/local/tomcat/webapps/vitro"
    reloadable="true"
    cookies="true" >

    <Manager pathname="" />
  </Context>

  ...
```

After setting up the above, it is recommended that you modify the Tomcat AJP connector parameters in server.xml. Look for the <connector> directive and add the following properties:

```
connectionTimeout="20000" maxThreads="320" keepAliveTimeout="20000"
```

Note: the value for maxThreads (320) is equal or greater than the value for MaxClients in the apache's httpd.conf file.