

Running Lenya Behind Apache with mod_proxy

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1. Introduction

This tutorial aims at getting you started with a proxy environment. We're using Apache HTTPD 2.2 with the *mod_proxy* module. You'll find a lot of documentation on the web how to set up the web server on your machine.

Our goal is to run two virtual servers on your local machine:

- *cms.example.com* - the authoring environment of your publication
- *www.example.com* - the actual live site

Your administrators, editors etc. will use the URL *http://cms.example.com* to connect to the authoring environment. We'll require an SSL connection for the login usecase. Once you have established an SSL connection, your connection will stay encrypted.

2. Declaring the Hosts

To tell your system that the *example.com* domains run on your local machine, open your `hosts` file, usually located at `/etc/hosts`, and add the following lines:

```
127.0.0.1      cms.example.com
127.0.0.1      www.example.com
```

3. Configuring the Apache Web Server

Now we'll declare the virtual hosts for the Apache web server. This is done in a file called `httpd-vhosts.conf`. On Mac OS X, it is located in the directory `/opt/local/apache2/conf/extra`. If you're using Jetty on port 8888, the contents of the file should look like this:

```
NameVirtualHost *:80
NameVirtualHost *:443

# This is the non-SSL host for the authoring area.
<VirtualHost *:80>
    ServerAdmin webmaster@cms.example.com
    ServerName cms.example.com
    ServerAlias cms

    # Turn proxy requests off for security reasons
    ProxyRequests Off

    RewriteEngine On
    RewriteLog /home/john/src/www/logs/cms.example.com-rewrite_log
    RewriteLogLevel 4

    # First we match everything which is not mapped to /default/authoring
    RewriteRule ^/lenya/(.*) http://cms.example.com:8888/lenya/$1 [P,L]
    RewriteRule ^/modules/(.*) http://cms.example.com.com:8888/modules/$1 [P,L]
    RewriteRule ^/default/modules/(.*)
http://cms.example.com:8888/default/modules/$1 [P,L]

    # Redirect the login usecase to https
    RewriteCond %{QUERY_STRING} (.*).lenya\.usecase=ac\.login(.*)
    RewriteRule ^/(.*) https://%{SERVER_NAME}/$1 [R,L]
```

```
# Forward the authoring area to the proxy
RewriteRule ^/(.*) http://cms.example.com:8888/default/authoring/$1 [P,L]
ProxyPassReverse / http://cms.example.com:8888/default/authoring/

ErrorLog /home/john/src/www/logs/cms.example.com-error_log
CustomLog /home/john/src/www/logs/cms.example.com-access_log common
</VirtualHost>

# This is the SSL host for the authoring area.
<VirtualHost *:443>
  ServerAdmin webmaster@cms.example.com
  ServerName cms.example.com
  ServerAlias cms

  SSLEngine On
  SSLCipherSuite ALL:!ADH:!EXPORT56:RC4+RSA:+HIGH:+MEDIUM:+LOW:+SSLv2:+EXP:+eNULL
  SSLCertificateFile /home/john/pki/server.crt
  SSLCertificateKeyFile /home/john/pki/server.key

  ProxyRequests Off
  RewriteEngine On
  RewriteLog /home/john/src/www/logs/cms.example.com-rewrite_log
  RewriteLogLevel 4

  RewriteRule ^/lenya/(.*) http://cms.example.com:8888/lenya/$1 [P,L]
  RewriteRule ^/modules/(.*) http://cms.example.com:8888/modules/$1 [P,L]
  RewriteRule ^/default/modules/(.*)
http://cms.example.com:8888/default/modules/$1 [P,L]

  RewriteRule ^/(.*) http://cms.example.com:8888/default/authoring/$1 [P,L]
  ProxyPassReverse / http://cms.example.com:8888/default/authoring/

  ErrorLog /home/john/src/www/logs/cms.example.com-error_log
  CustomLog /home/john/src/www/logs/cms.example.com-access_log common
</VirtualHost>

# This is the non-SSL host for the live area.
<VirtualHost *:80>
  ServerAdmin webmaster@www.example.com
  ServerName www.example.com
  ServerAlias lenya

  ProxyRequests Off
  RewriteEngine On
  RewriteLog /Users/john/src/www/logs/www.example.com-rewrite_log
  RewriteLogLevel 4

  RewriteRule ^/([\^\.]+)$ $1/ [R]
  RewriteRule ^/(.*) http://www.example.com:8888/default/live/$1 [P,L]
  ProxyPassReverse / http://www.example.com:8888/default/live/

  ErrorLog /Users/john/src/www/logs/www.example.com-error_log
  CustomLog /Users/john/src/www/logs/www.example.com-access_log common
</VirtualHost>
```

If you're using Tomcat on port 8080 with Lenya in the context path *lenya14*, you have to change the port and add the context path accordingly:

```
RewriteRule ^/(.*) http://cms.example.com:8080/lenya14/default/authoring/$1
[P,L]
ProxyPassReverse / http://cms.example.com:8080/lenya14/default/authoring/
```

Note:

You'll certainly run into cookie problems when using a non-empty context path (like *lenya14* in the example above) instead of running Lenya in the root context. This causes errors like "The session doesn't contain the identity.". You'll have to add some code to manipulate the cookies. If you need this functionality, please send a mail to the developers list or file an enhancement bug.

Note:

With this setup, your browser might show error messages like "You have requested an encrypted page that contains some unencrypted information" when accessing a page with the `https` protocol. This is because Apache always connects to Lenya with the `http` protocol, so Lenya doesn't know that it should use `https` links to include images etc. on this page. This problem won't occur if you use the [mod_proxy_ajp](http://../docs/2_0_x/tutorials/mod_proxy_ajp.html) (../docs/2_0_x/tutorials/mod_proxy_ajp.html) approach.

The Apache web server can now be restarted using

```
$ sudo apachectl restart
```

4. Configuring the Publication for Proxying

When you use a proxy, Lenya has to convert all internal links accordingly. Therefore you have to tell the publication about the proxy configuration. Open the file `pubs/default/config/publication.xml` and uncomment and modify the `<proxy/>` elements:

```
<proxies>
  <proxy ssl="false" area="authoring" url="http://cms.example.com"/>
  <proxy ssl="false" area="live" url="http://www.example.com"/>
  <proxy ssl="true" area="authoring" url="https://cms.example.com"/>
  <proxy ssl="true" area="live" url="https://www.example.com"/>
</proxies>
```

5. Configuring the Global Proxies

The application-wide (publication independent) proxies are configured in `WEB-INF/cocoon.xconf`. Look for the declaration of the `GlobalProxies` service and update this entry:

```
<component logger="lenya.proxy"
  role="org.apache.lenya.cms.linking.GlobalProxies"
  class="org.apache.lenya.cms.linking.impl.GlobalProxiesImpl">
  <proxy ssl="false" url="http://cms.host.com"/>
  <proxy ssl="true" url="https://cms.host.com"/>
</component>
```

6. Testing the Settings

After re-deploying the publication and restarting your servlet container, you should be able to access the authoring environment of the default publication at the URL <http://cms.example.com/>.