# InteProxy Users Manual

Status: December,  $4^{th}$  2006 for InteProxy 0.1.1

Note: InteProxy is a prototyp and currently in "beta phase". This means, not all features are implemented yet and usability is not as comfortable as it should be.

InteProxy is a helper for those applications that use HTTP for arbitrary services that also need secure transmission via SSL and user authentication.

The proxy runs on the same system as the actual application.

A typical case are the services that have been specified by the Open Geospatial Consortium (WMS, WFS, etc.).

### Download

The current version of InteProxy can be found under <u>http://wald.intevation.org/frs/?group\_id=23</u>.

For the Windows operating system you should download the Windows installer package (e.g. "InteProxy-0.1-setup.exe").

#### Installation

MS Windows: As administrator on your Windows system, execute the setup program of InteProxy. You will not need to install any other applications.

GNU/Linux: Currently, no installation packages are available for the various GNU/Linux distributions. The only requirement is the availability of Python 2.4. Place the two files "InteProxy.py" and "proxyconnection.py" from the downloaded source code package into a directory.

#### Starting InteProxy

MS Windows: Start InteProxy as user via Windows menu. A DOS box is opened where log information will appear. You can minimize the box if you like.

GNU/Linux: In a comman shell, change to the directory where you installed InteProxy and enter this command:

\$ python2.4 InteProxy.py

#### Usage

Now in your application prefix the actual URL of the WMS service with the text <u>"http://localhost:64609/</u>".

InteProxy caches the authorization data for each URL. Thus you have to authorize only once per URL. Once you stop InteProxy, all cached data are lost. It is necessary to stop InteProxy and restart it in case you want to log in for a URL where you already authenticated with another user account.

Note for the authentication dialog: On MS Windows, the dialog does not always pop up in the front, but is hidden by some other windows. Currently

there is no graphical user interface for GNU/Linux. Entering user name and password happens in the comman shell where InteProxy has been started.

## Simple Test (via Web Browser)

With this test you check whether InteProxy basically works and is not blocked e.g. by a firewall.

To test whether InteProxy runs properly, first make sure InteProxy is running. Then open the web broweser and enter the following URL:

http://localhost:64609/frida.intevation.org/cgibin/frida\_wms?VERSION=1.1&SERVICE=WMS&REQUEST=GetMap

The browser will first request at port 64609 on your local system where InteProxy is waiting for requests. InteProxy raises a authentication dialog for user name and password. For the above URL it does not matter what you enter. After you finish authentication, you browser should now show a map of the city of Osnabrück, because InteProxy executed the actual WMS request (frida.intevation.org/cgi-

bin/frida\_wms?VERSION=1.1&SERVICE=WMS&REQUEST=GetMap)and relayed the answer to the browser. Especially, InteProxy uses the protocol "https" and not "http".

# Full Test (via OpenJUMP)

The desktop GIS "OpenJUMP" (<u>www.openjump.org</u>) is Free Software and supports WMS 1.1.1 layers in the map view.

Start InteProxy and OpenJUMP. In OpenJUMP choose menu "layers" and ther item "add WMS request". You will be asked for a URL. Enter this one:

http://localhost:64609/inteproxy-demo.intevation.org/cgi-bin/frida-wms

For the use of the data two accounts are available:

User/Password = meier/meier: Allowed to view any WMS layers

User/Passwort = schmidt/schmidt: Allowed to view all WMS layers but the roads

If you authenticate as "meier", the layer choice contains more than layers than for user "schmidt". Note, that due to the password caching you need to stop and restart InteProxy to change the user.

### Note when using Intranet-Proxies

In case all HTTP/HTTPS request of your system need to go over a proxy service, you mingt experience various problems depending on the actual configurations. Here are some hints on what you can do to cope with this:

- Configure environment variable "https\_proxy": InteProxy interprets and uses the environment variable "https\_proxy". In case this variable defines e.g. "http://proxy.hq.sample", InteProxy will submit all requests to this service. This holds for both, MS Windows and GNU/Linux. Attention: Problems may occure when concurrently defining "http\_proxy".
- For Java clients sich as OpenJUMP, it might be necessary to define extra

parameters for Java when execute the tool: "-DproxySet=true -DproxyHost=proxy.hq.sample -DproxyPort=8080".

#### Limitations and Perspectives

Currently, InteProxy expects a deegree OWSProxy on the server side. Any other proxy that uses the URL parameters "user=" and "password=" will work as well.

It is very simple (because already implemented) to have InteProxy use the standard HTTP authentication method. If a corresponding server is used, you need to uncomment the deegree-specific element (user, password) in the source code.

A adaption for MapBender OWSProxy is also relatively easy to realize ("",sid" and "",wms" instead of "user" and "",password").

User-friendliness (graphical dialogs) of these (and other) configurations are planned.

See known bugs and report new problems:

http://wald.intevation.org/tracker/?group\_id=23