The flexlm license server software

Below is a description for the setup needed to access the license server from a computer that is administrated by yourself (laptop, lab pc, desktop Mac, etc). For the Linux desktops, this has already been taken care of.

When you need to set up a ssh tunnel, you will need the generic flexlm port, which is 1700 in our system, and the port in use by the vendor daemon of the software you want to use (the example below is for matlab). Ports can be found here:

Software	**port**
Comsol	1719
IDL	31700
Matlab	1173
Origin	
Abaqus	29001
Autodesk	2080

This server also has our site license for Mathematica. However, for licenses on personal devices, see mathematica.

Note: in stead of license.strw.leidenuniv.nl, it is also possible to use license.lorentz.leidenuniv.nl or license.physics.leidenuniv.nl . They all point to the same server.

Using licenses from your laptop (part 1: local or vpn)

If you run Matlab on your laptop, you need to point it to our license server. You can either set the environment variable LM_LICENSE_FILE to point to our server and port number, or give this information through the setup of the program.
On Linux or MacOS (assuming your shell is bash):

```
export LM_LICENSE_FILE=1700@license.strw.leidenuniv.nl
```

or point it to a local file which should contain:

```
SERVER license.strw.leidenuniv.nl any 1700
USE_SERVER
```

Once you have done that, licensing is set up for all software that work with the FlexLM licensing software. And, you will no longer have to change this setup when new versions of the software become available.

For Windows users, it is probably easier to set up the license server address and port through the setup or installation of the program (although the environment method should work from powershell, and creating a license file should work as well).

Using licenses from your laptop (part 2: remote access, other than through vpn)

To reach our license server from outside the building, you will need to tunnel the connections through ssh (in this example, on ssh.lorentz.leidenuniv.nl ; Sterrewacht and LION people should of course substitute the name of their ssh machine). And then, on your laptop, point LM_LICENSE_FILE to 1700@localhost in stead of the actual server, since localhost:1700 is being forwarded to the license server. Two ports need to be tunnelled: port 1700 (the general port on which the license server listens), and the port of the vendor-daemon (see table; in case of matlab, this is 1173).

Example for commandline use (Linux, Mac OS X):

```
laptop$ ssh -g -L 1700:license.strw.leidenuniv.nl:1700 -L
1173:license.strw.leidenuniv.nl:1173
yourlorentzusername@ssh.lorentz.leidenuniv.nl
```

This opens an ssh session on our 'ssh' server. Keep this session open! Once it is closed, the port forwarding is closed as well! Now, from another terminal window or tab, you can start matlab after pointing to the local host as license server:

tcsh syntax:

```
laptop$ setenv LM_LICENSE_FILE 1700@localhost
```

or bash:

```
laptop$ export LM_LICENSE_FILE=1700@localhost
```

And from that session, you can start the licensed software.

Information about setting up a tunnel from a Windows system can be found here on the pages about putty or bitvise (eg you can set up the tunnel similarly to your remote login to your desktop).