Rubo Medical Imaging
Dicom Viewer 2.0

Network/Floating License Installation Instructions

In brief:

On the Windows Machine that will act as License Manager (**Server**)
1. Install the HASP Device Driver
2. Install the License Manager (lmsetup.exe)
3. Open port 475 in the firewall(s)
4. Test the installation
5. Plug in the red USB hardware key

On the **Client** Computers
1. Install the HASP Device Driver
2. Install the 'Rubo Dicom Viewer'
3. Configure and copy 'nethasp.ini' to the installation folder
4. Open port 475 in the firewall(s)

See next pages

The latest versions of the HASP License Manager and HASP device drivers can be downloaded from http://www.aladdin.com/support/hasp/enduser.asp.
However, the 'Rubo Dicom Viewer 2.0' CD holds all needed applications.

Install the HASP Device Driver

From the CD, start the batch file 'install.bat' from folder '\Hasp\Hinstall'.
You'll be presented with a small window, indicating that the driver is being installed. This could take up to 45 seconds.

Wait for the message 'The operation was completed successfully'.

On client computers, this may not be neccessary as the viewer will do this for you. If this fails for some reason, run the batch file from CD.

Install the License Manager (lmsetup.exe)

Select any PC on the network, install the License Manager, Device Drivers and open port 475. We recommend you choose the network server, since this is less frequently rebooted, but any PC works just as well.

     a. Insert the Dicom Viewer CD. Cancel the 'Installshield Wizard for Rubo Dicom Viewer'; this will start automatically and will only install the Dicom Viewer and this is not needed on the server.

     b. On the CD, browse to 'Hasp\License Manager (LM)\Windows' and start 'lmsetup.exe'

     c. Follow the instructions as shown below
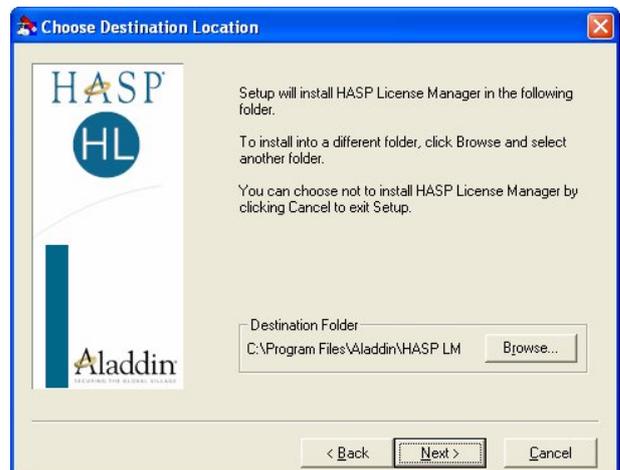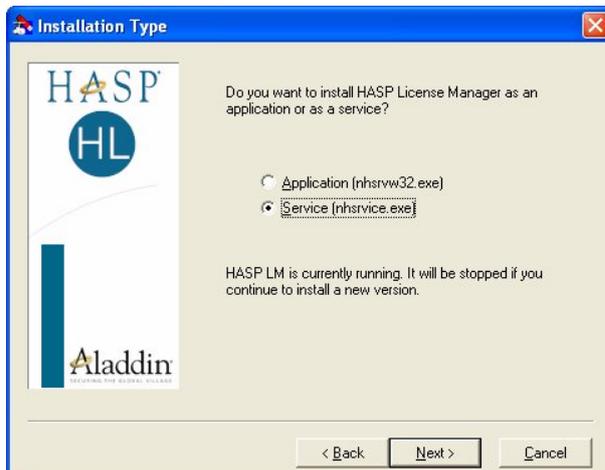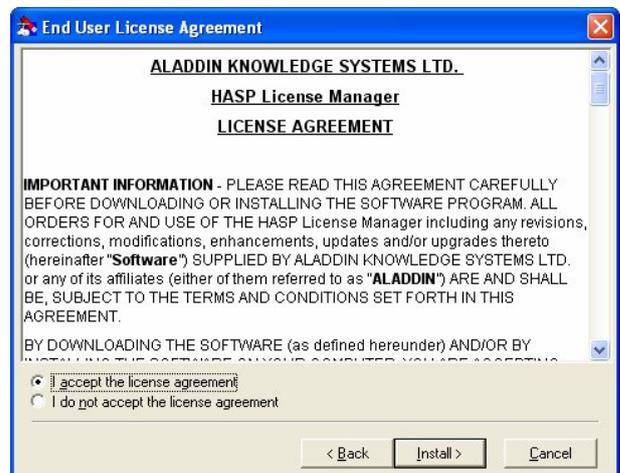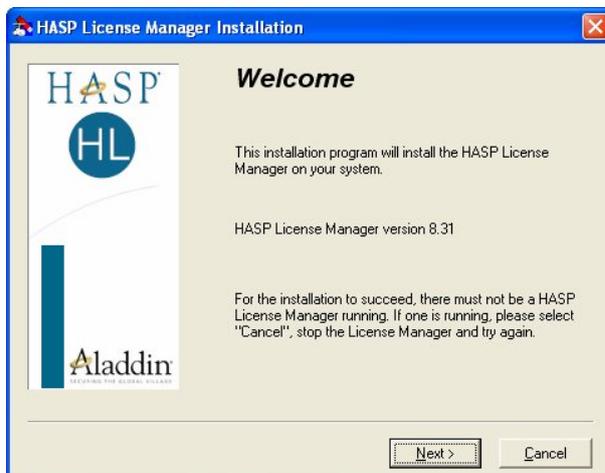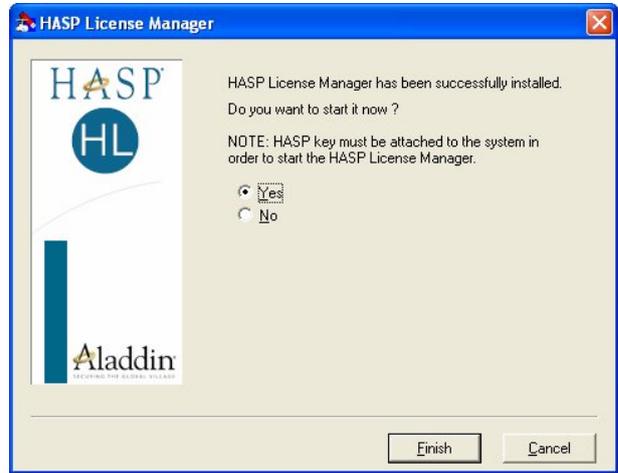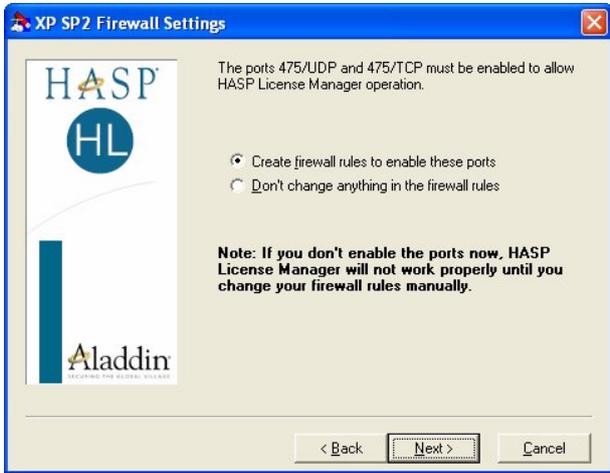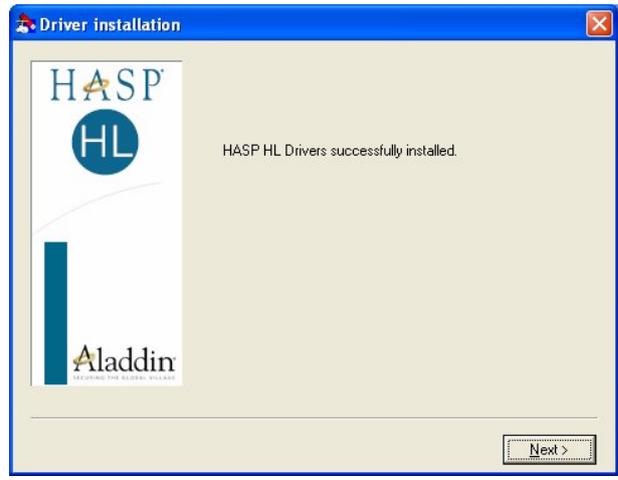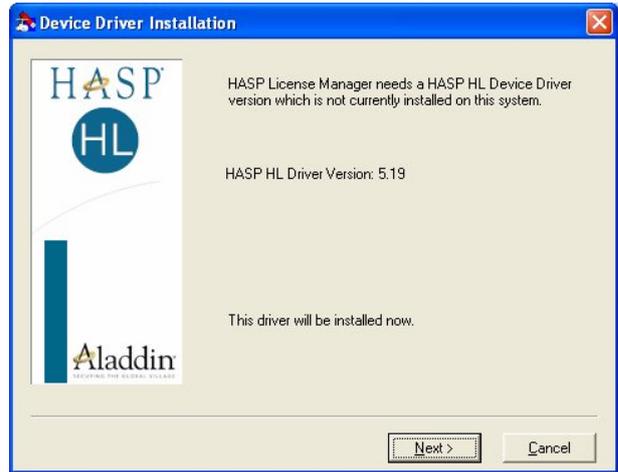
After a successful installation, the icon of the License Manager appears in the task tray, as shown in the image below.

Open port 475 in the firewall(s)

Port 475 is the default communications port between the HASP License Manager (**server**) and the Rubo Dicom Viewer (**client**).
If you are running Service Pack 2 for WinXP or any other type of firewall, it restricts all non-default network communication. You should set an exception for the port your HASP License Manager is using. This is by default port 475.

For Windows XP SP2/Vista follow these instructions:
  a. Go to 'Control Panel', 'Security Center' and 'Windows Firewall'
  b. Select tab 'Exceptions' and check for 'HASP LM 475 TCP'. If this port is already open, go to d.
  c. Press button 'Add Port…'. Enter the name 'HASP LM 475 TCP', port 475 and check 'TCP'. Press 'OK'
  d. Check whether you are behind a **hardware firewall** (f.e. router). If this is the case, consult the manuals how to open port 475 on this.

Test the installation

To test the correct installation of your NetHASP License Manager, you can use telnet, a program available on all Windows platforms.

To do so, open up a console on the machine where you want to run the 'Rubo Dicom Viewer 2.0'. Do this by clicking 'Start', 'Run…' and enter 'cmd'. Press enter or the 'OK' button.
Now enter the command: **telnet XX.XX.XX.XX 475** where you have to fill in the IP address of the NetHASP License Manager for the **XX.XX.XX.XX** part.
The telnet program will now try to contact your license manager, printing the line 'Connecting to XX.XX.XX.XX…'.
Once the connection has been made, the console screen goes blank and you can test your license manager by simply hitting the <ENTER> key again, after which a line like this should appear:
'>>>>>>>>>>>>>>>>>>>>>>Connection to host lost…'

When this line appears, this means your license manager is reachable and ready for Rubo Dicom Viewer clients to connect and request a license.

Install the 'Rubo Dicom Viewer'

Simply insert the CD and follow the installation steps. Make sure though, that a possibly installed demo version of the software is removed first

An alternative way to install the viewer, is to copy from the CD, the entire folder 'DicomViewer' to your computer. This is **not** recommended but may be helpful when several remote clients need to install the viewer; you can simply email them this folder, or make it available on f.e. an ftp server. **However, make sure that the complete folder 'DicomViewer' is sent to the clients** [this includes all subfolders].

Configure and copy 'nethasp.ini' to the installation folder

The client application, the 'Rubo Dicom Viewer 2.0', uses one central file 'nethasp.ini', in its installation folder for the configuration. As a convention, all settings must appear in so-called sections, denoted by special tags written in square brackets. Everthing on a line appearing after a semicolon is discarded (as a comment).

The client normally doesn't have to be configured at all. It simply uses a broadcast (into the local network) to find any service replying on port 475. It then checks all those who replied whether they offer a license for the application ID it uses. If found, it requests (and locks) one license from the License Manager, which is released if the program terminates correctly.

In case your License Manager is **not** located in your local network zone, it probably cannot be reached with a broadcast (routers are usually configured to discard broadcast packages). You must then tell the application exactly where to find the NetHASP server.

A 'nethasp.ini' example:

```
[NH_COMMON]
NH_TCPIP = Enabled;

[NH_TCPIP]
NH_SERVER_ADDR = xx.xx.xx.xx;
NH_TCPIP_METHOD = TCP;
NH_USE_BROADCAST = Disabled;
```

Simply put in the IP address of your License Manager instead of the XX.XX.XX.XX bit and save the file as 'nethasp.ini' into the Dicom Viewer installation folder. You can also add hostnames (f.e. ftp.aladdin.co.il) or a combination of both. Separate multiple server addresses with a comma:

```
NH_SERVER_ADDR = xx.xx.xx.xx , yy.yy.yy.yy;
```

You can find an example copy of various 'nethasp.ini' files on the 'Dicom Viewer' CD in folder '\Hasp\NetHASP ini'. The sample above is taken from file 'tcpip.zip' and is the most common one used.