LICENSE SERVER

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Revision History:

Version 1.0   Rev. 21-02-2006
Version 1.0.1   Rev. 09-11-2006
Version 1.0.2   Rev. 18-12-2006
Version 1.0.3   Rev. 02-02-2007
Version 1.0.4   Rev. 11-10-2007
Version 1.0.5   Rev. 16-03-2009
Version 1.0.6   Rev. 15-09-2010
Version 1.0.7   Rev. 08-10-2010
Version 1.1   Rev. 26-01-2011
Version 1.2   Rev. 26-08-2013

Contents

1 Introduction

RIEGL LicenseServer allows you to use floating licenses for *RIEGL* software products. All licenses can be stored on a single computer available in your local network. You may borrow a floating license, disconnect from the network and work offline, too.

You can use the *RIEGL* LicenseManager to manage the licenses on your server. The *RIEGL* LicenseServer distributes the licenses through the network.

RIEGL LicenseService provides the same functionality as LicenseServer but can be started as a service.

2 Installation

2.1 LicenseServer

1. Launch the setup program and follow the instructions.

   Please make sure no dongle is attached during the installation process.

   Note: On Windows 7 or Windows Vista we recommend to install the LicenseServer software in a different directory, e.g. C:\LicenseServer, to avoid problems with the "Virtual Store" mechanism:

   When installing software in "C:\Program Files" or "C:\Program Files (x86)" Windows redirects access to created/modified files to the "Virtual Store". This is a special directory in the home directory of the user holding created and/or modified files in order to keep the installation directories clean from changes.
   When starting the LicenseServer from different user accounts the LicenseServer software will not be able to find all required files (the LicenseServer.dat file)!

2. When the setup program has finished attach the dongle to a free USB port.

3. Start the LicenseServer manually: Click "Start ⇨ Programs ⇨ RIEGL LMS ⇨ License Server ⇨ License Server".

When successfully installed and launched, the icon of the LicenseServer is shown in the task bar (task notification area on the right side):

If the LicenseServer is not active (due to an error, …), no clients can connect for a floating license. In this case the icon looks like this:
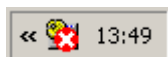
IMPORTANT NOTE:

On first start the LicenseServer creates a LicenseServer.dat file in the installation directory of the LicenseServer software. This LicenseServer.dat file and the dongle are now coupled.

If you install the LicenseServer software on a new machine and connect the dongle the LicenseServer.dat file will not be created!
You have to manually copy the file from the old machine into the installation directory on the new machine!

Please refer to chapter "Migration" for further information.

Please see next chapter for more information on configuration of the LicenseServer.

2.2 LicenseService

LicenseService is the service-running version of the LicenseServer. The LicenseServer must be run by logged-on user whereas the LicenseService does not require a logged-on user.

If you have to use the LicenceService for certain reasons we recommend to use the LicenseServer first and later – when everything is configured and the LicenseServer runs smoothly – switch to LicenseService. This is because the LicenseServer has a user interface and provides visual configuration and error reporting. When using the LicenseService you have to check the Windows Event Log facities for error messages.

Please note: LicenseServer and LicenseService cannot be used at the same time. You can use them alternatively, i.e. you can shutdown LicenseServer and start LicenseService and before you can start the LicenseServer again you must stop the LicenseService first.

The LicenseService is automatically installed (i.e. copied into the installation directory, but not yet registered) when installing the LicenseServer.

1. Launch the setup program and follow the instructions.

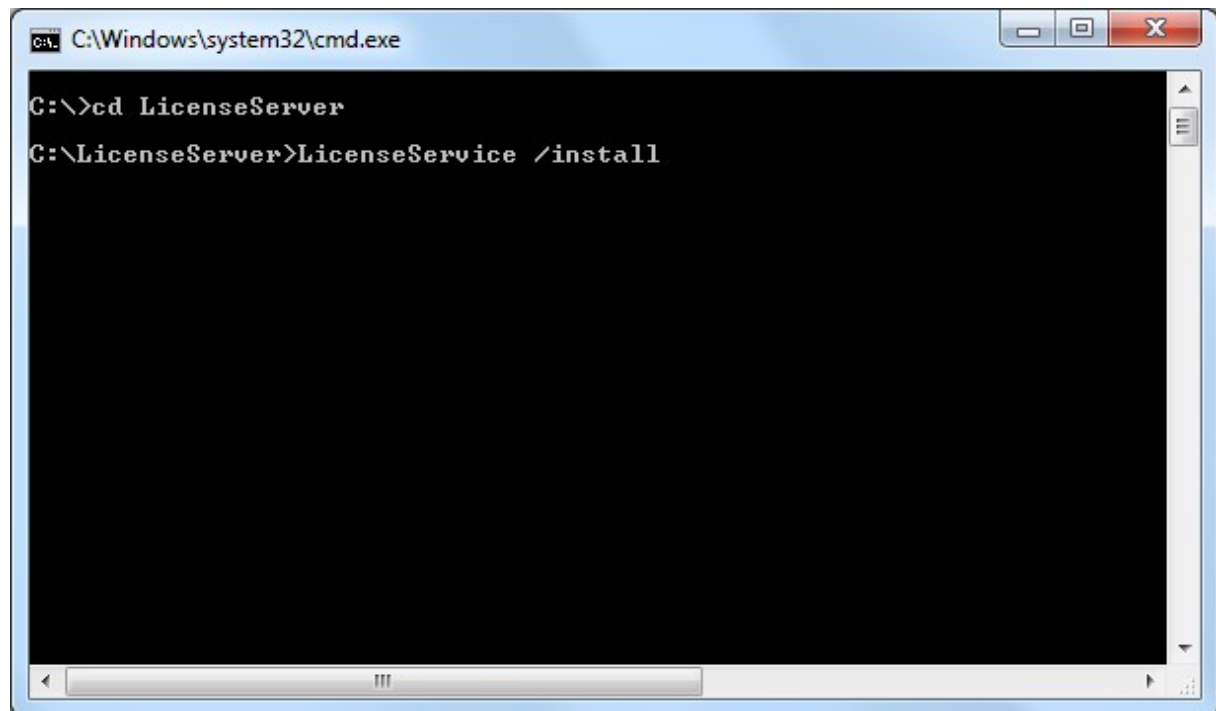   Please make sure no dongle is attached during the installation process.

2. When the setup program has finished attach the dongle to a free USB port.

3. Open a command line prompt: Click "Start ⇨ Run…", enter "cmd" and click "Ok". You might have to run the command line prompt as Administrator.

4. Change to the installation directory by:
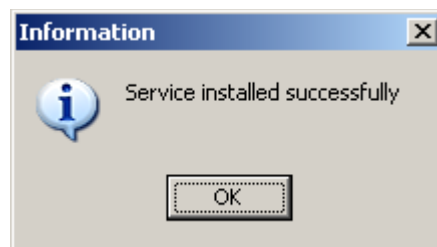
    cd \LicenseServer

    and then enter:

    LicenseService /install

If the installation succeeds we receive the following message:

Hint: Enter "LicenseService /uninstall" to uninstall RIEGL License Service (If the LicenseService has already been started please stop the LicenseService first)!

5. Now click "Start ⇨ Settings ⇨ Control Panel" and select "Administrative Tools":
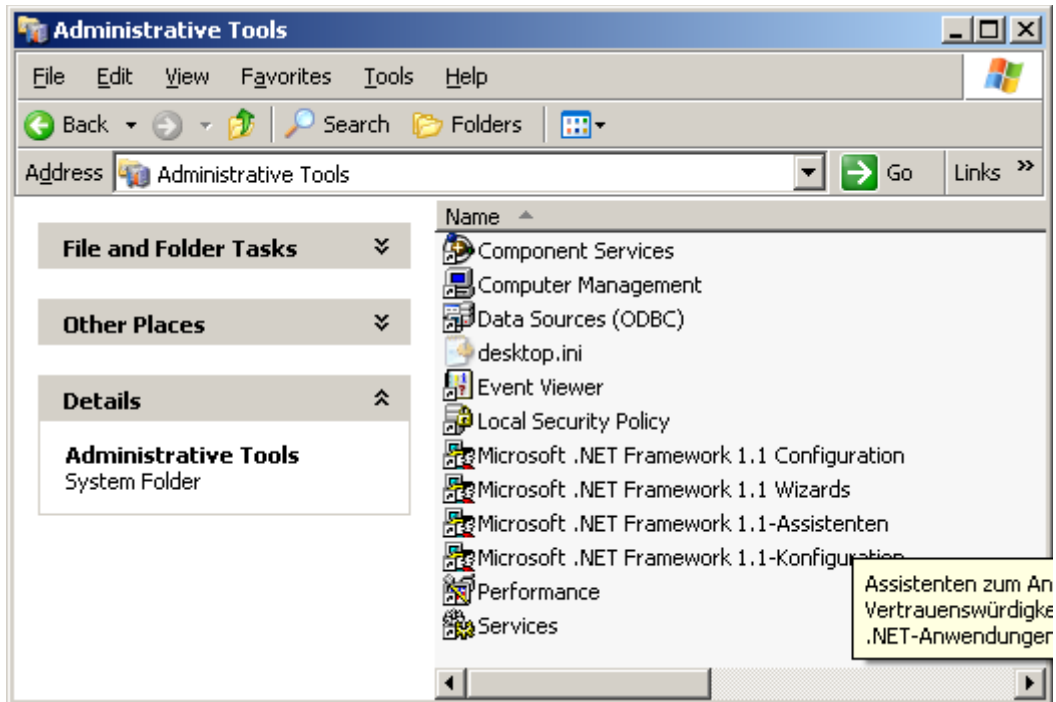
6. Double-click "Services":
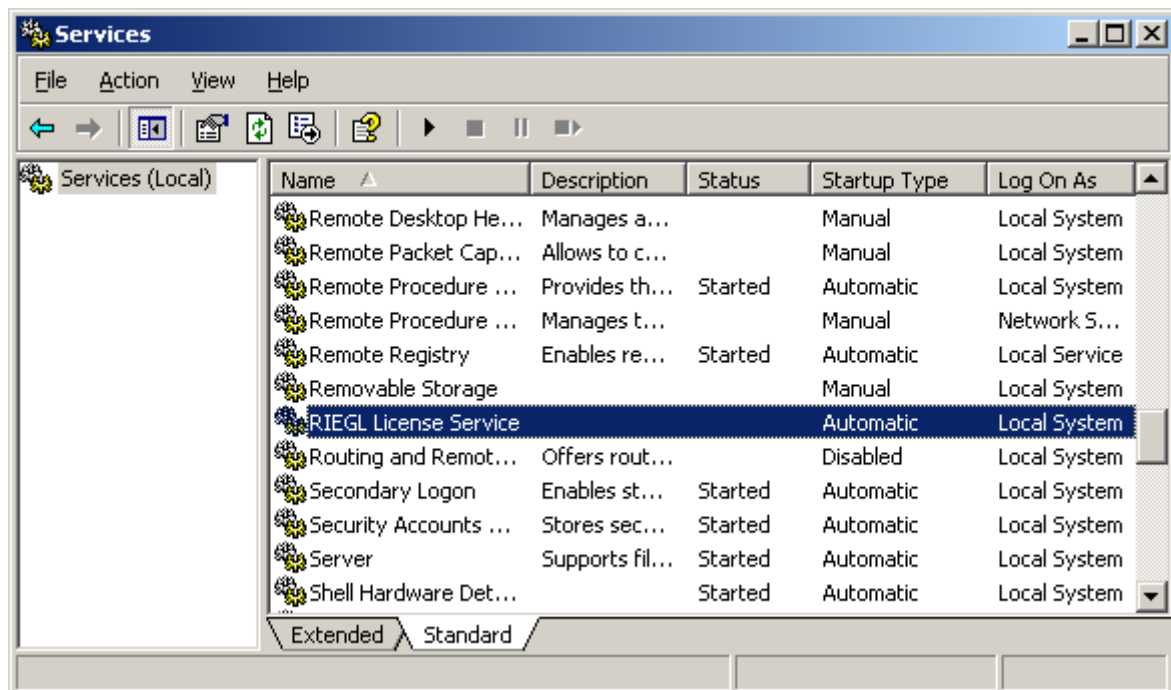
The service registers itself as "RIEGL License Service". Startup Type "Automatic" indicates the service will be started automatically on system (re)start.

Right-click the entry and select "Start/Stop" to manually start/stop the service:
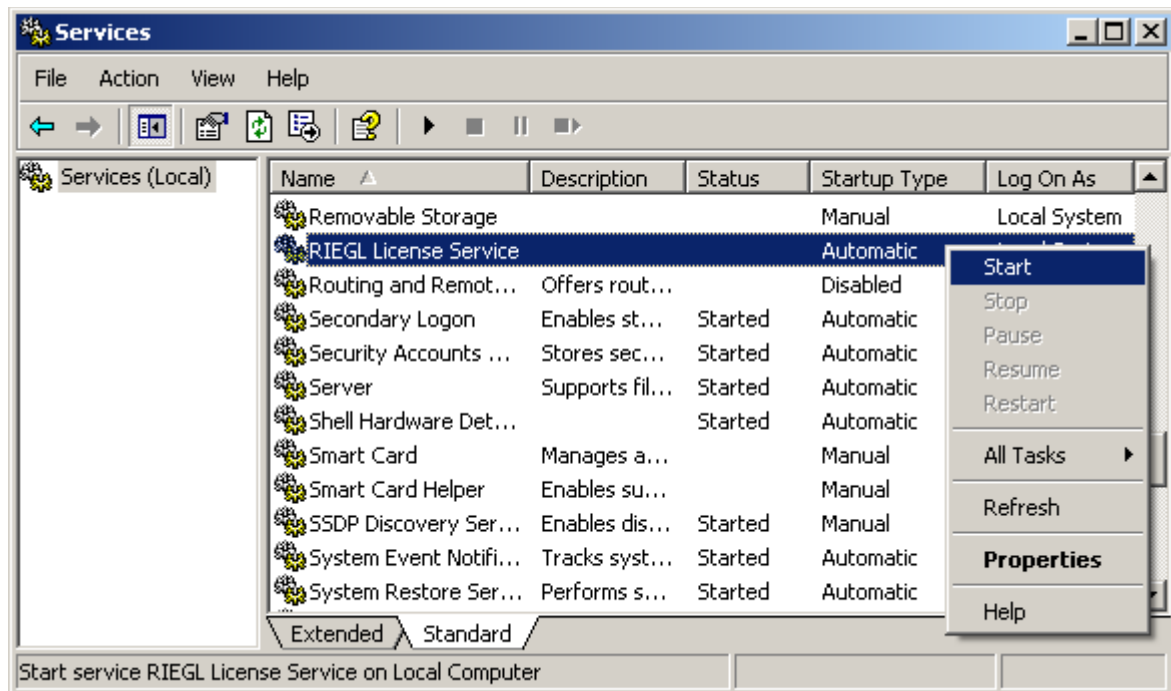
Now the service is operating.

Check the "Event Viewer" (also to be found in Administrative Tools) for messages issued by RIEGL License Service:
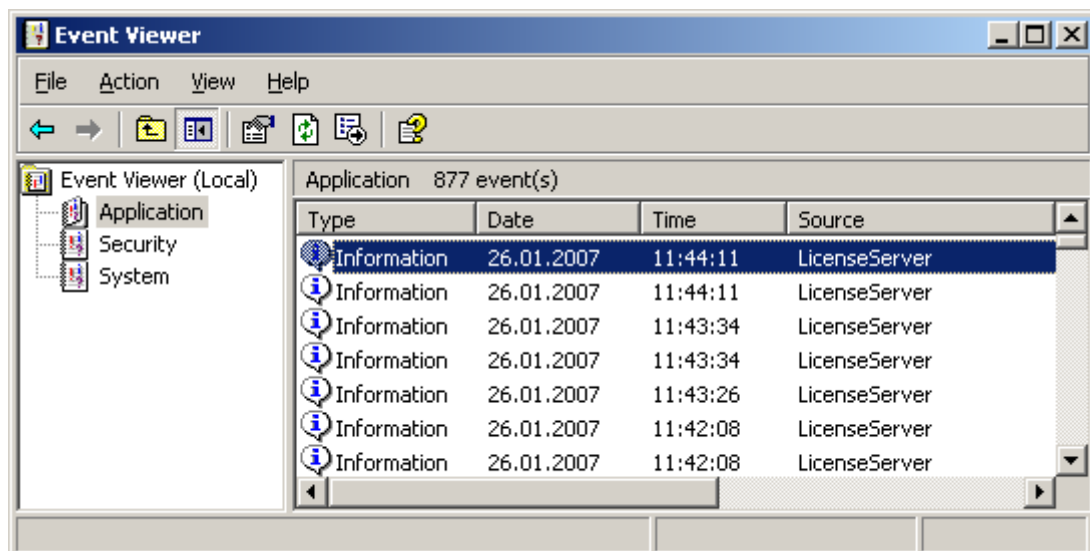
Note: If you add or remove licenses in your registry using the "RIEGL LicenseManager", you have to restart the "RIEGL License Service"!

Please see next chapter for more information on configuration.

2.3 Migration

On first start the LicenseServer/LicenseService creates a LicenseServer.dat file in the installation directory. From now on this file and the attached dongle are linked together.

If you want to uninstall the LicenseServer from a PC and re-install it on another PC (i.e. "move" the LicenseServer from one PC to another PC) perform the following steps:

1. Install the LicenseServer on the target PC (but do not start it yet).
2. Export the licenses from the (old) LicenseServer (see below).
3. Shut down the running LicenseServer.
4. Copy the LicenseServer.dat file from the installation directory (usually C:\Program Files\Riegl_LMS\LicenseServer) to the installation directory of the LicenseServer on the target machine.
5. Remove the dongle and attach it to the target machine.
6. Start the LicenseServer on the target machine.
7. Import the licenses into the LicenseServer on the target machine.

The LicenseServer is now operating on the new machine.

The licenses are stored in the registry of the machine (not in LicenseServer.dat). The licenses can be exported from the registry to a .lic file using the LicenseServer (menu "Licenses: Write to file (export)...") or the LicenseManager (Startmenu → Programs → Riegl LMS → Support → License Manager).
On the target machine the created .lic file can be imported using "Licenses: Read from file (import)..." and then "Save for all users" or "Save for current user".

If new licenses are added using the LicenseManager tool while the LicenseServer is running you have to use "Update from registry" to make the LicenseServer fetch the new licenses from the registry.

Don't forget to configure the new LicenseServer if the old LicenseServer had a different configuration than the default configuration.

If your client applications don't use auto-detection for finding the LicenseServer you have to update the client settings (new IP-Address, IP-Port, …) and/or its command line parameters.

Important notes on Windows 7 and Windows Vista:

Windows 7 (and Windows Vista) stores files created/modified in the installation directories ("C:\Program files\" or "C:\Program files (x86)\")

Windows 7 (and Windows Vista) keeps files created in installation directories ("C:\Program Files\" or "C:\Program Files (x86)\..." in the so-called "virtual store".

In other words: Windows redirects created/modified files written to installation directories to a special directory in the users home directory:

C:\Users\<USERNAME>\AppData\Local\VirtualStore\Program Files\...

or

C:\Users\<USERNAME>\AppData\Local\VirtualStore\Program Files (x86)\...

respectively.
Windows does this in order to keep the installation directories clean.

In case you started the LicenseServer using a new/other user account the LicenseServer will not find the LicenseServer.dat file if created by an other user. In this case please log in as the "old" user and check for the LicenseServer.dat file in the installation directory.

2.4 Uninstallation/Reinstallation

You cannot uninstall (and reinstall) the LicenseServer software without damaging the configuration.

Before uninstalling the LicenseServer software, make a backup copy of the LicenseServer.dat file (see chapter 'Migration')!

When reinstalling the LicenseServer the saved LicenseServer.dat file must be copied into the installation directory manually since it won't be created automatically (it is created only on very first installation).

Please also see chapter 2.3 Migration

In case of questions please ask *RIEGL* support BEFORE uninstalling, reinstalling or migrating the LicenseServer software.

Important notes on LicenseServer and LicenseService:

Do not remove the dongle while the LicenseServer / LicenseService is running!
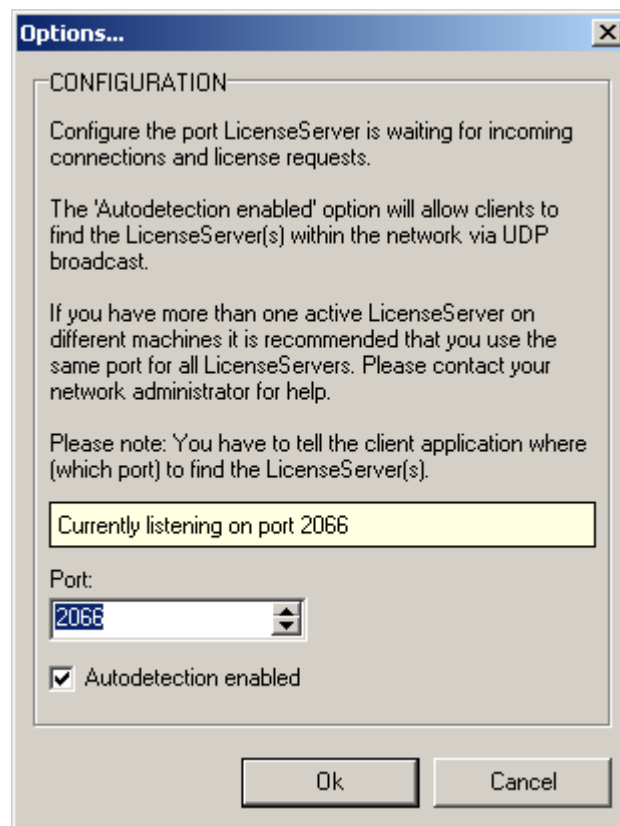
3 Configuration

3.1 LicenseServer

If the LicenseServer is running without any problems after the first start, any further configuration should not be necessary.

Start the LicenseServer and right-click its symbol in the task bar (the task notification area on the right side):
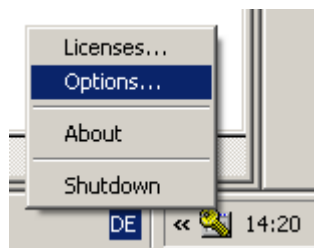
Select 'Options…' from the popup menu:

Enter the port you want the LicenseServer waiting for incoming connections from other *RIEGL* software products asking for a floating license. If the specified port is

invalid, an error message is shown when clicking 'Ok'. In this case enter an other port an try again.

If you enable the 'Autodetection' option, *RIEGL* software offers you to find LicenseServer(s) in your network. If you omit autodetection, you have to specify the installed LicenseServer(s) manually.

Please see the documentation/manual of your software product for more information on *RIEGL*'s licensing management and how to enter a valid license key.

3.2 LicenseService

There is no user interface for configuring the "RIEGL License Service". Please manually create/edit (or copy LicenseServer.ini) the LicenseService.ini file (same folder as LicenseService.exe):

[LicenseServer]
Auto=1
Port=2066

The "Auto" parameter enables(1) or disables(0) the autodetection feature. The "Port" parameter configures the port LicenseService is waiting for client requests (see above).
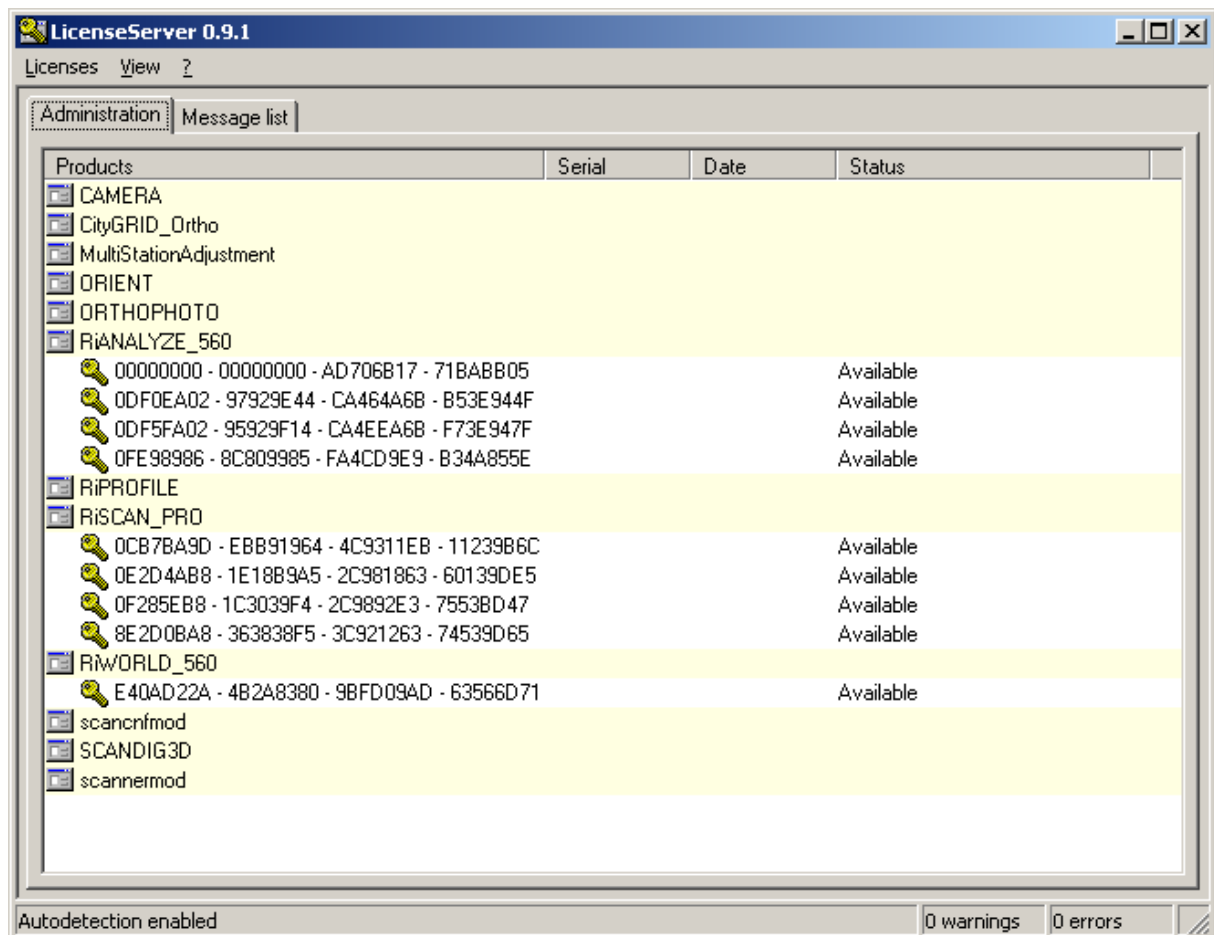
Note: Restart the "RIEGL License Service" if you changed the configuration!

4 Administration

This chapter describes the license management of the LicenseServer.
Right-click the LicenseServer icon in the task bar and select "Licenses...":
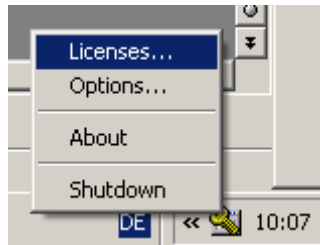
The window shows all currently installed licenses for all software products:

Use the *RIEGL* LicenseManager to add, modify and remove the licenses for each software product.

Select menu option "Licenses: Update from registry" to re-synchronize new licenses added via the *RIEGL* LicenseManager.

4.1 Importing licenses

LicenseServer can import existing licenses from an other LicenseServer in the network. Click "Licenses: Import from server…" and enter the name/address and the port of the LicenseServer to import from:
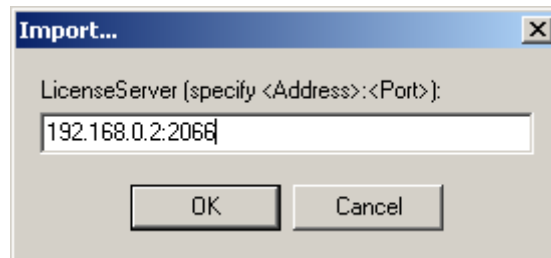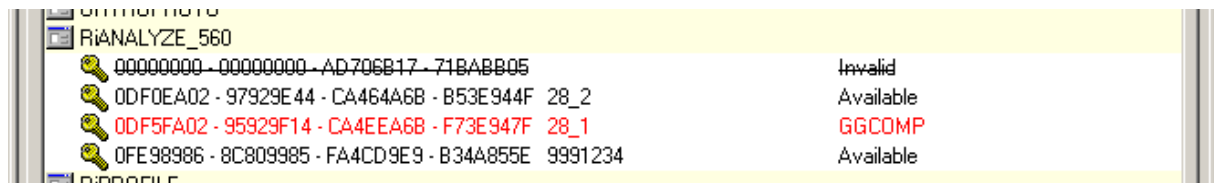

All licenses from the specified server will be transferred and synchronized with the existing ones.

The licenses can be saved to a text file using the "Licenses: Write to file (export)…" option. This file can be imported using option "Licenses: Read from file (import)…".

Using "Save for current user" or "Save for all users" the new licenses are saved in the registry of the machine.
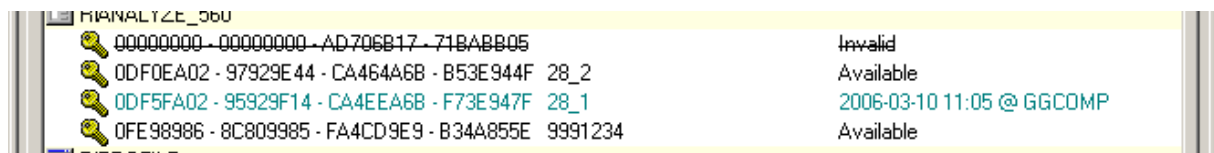
4.2 License usage

The "Status" field displays information about the availability/usage of a license. When the license is given to a client application the status may look like this:

Use the option "Revoke" (right-click a license) only if you wish to withdraw the license from a client. This will cause the client application to terminate immediately! You should use this option only in emergency cases!

As stated earlier, licenses can be borrowed from the LicenseServer and used offline. In this case the status information looks like this:

5 Release history

2013/08/26 – LicenseServer 1.2

- LicenseServer now uses UTC time (not local time).
- Documentation updated.
- Product 'RiANALYZE' renamed to 'RiANALYZE_560'.
- Issue when considering licenses as dead fixed.

2011/01/26 – LicenseServer 1.1

- Notification window on first start of LicenseServer.
- LicenseService name changed to RiLicSvc.
- Default (recommended) installation directory is C:\LicenseServer

2009/12/17 – LicenseServer 1.0.5

- Documentation update (chapter Uninstallation/Reinstallation added).

2009/03/16 - LicenseServer 1.0.5

- Documentation update only (new chapter about migration).

2007/10/11 – LicenseServer 1.0.4

2007/02/02 – LicenseServer 1.0.3

2006/12/18 – LicenseServer 1.0.2

2006/11/09 – LicenseServer 1.0.1

2006/02/21 – LicenseServer 1.0

6 Application software

This chapter provides information on how to license *RIEGL* software products.

6.1 General

The LicenseServer distributes the stored licenses to other *RIEGL* software products requiring a license key. After the LicenseServer's startup it accepts requests for license key from client applications.

When a *RIEGL* software product requiring a license key is started, it checks the local registry for license keys. If no valid license could be found on the local machine it contacts the LicenseServer for a key.

The application needs to know the name (or IP address) of the LicenseServer machine and the port number where the LicenseServer is listening.

Please refer to the software product's manual/documentation where to find the product's license manager window. Typically you will find it in the "Tool" menu.
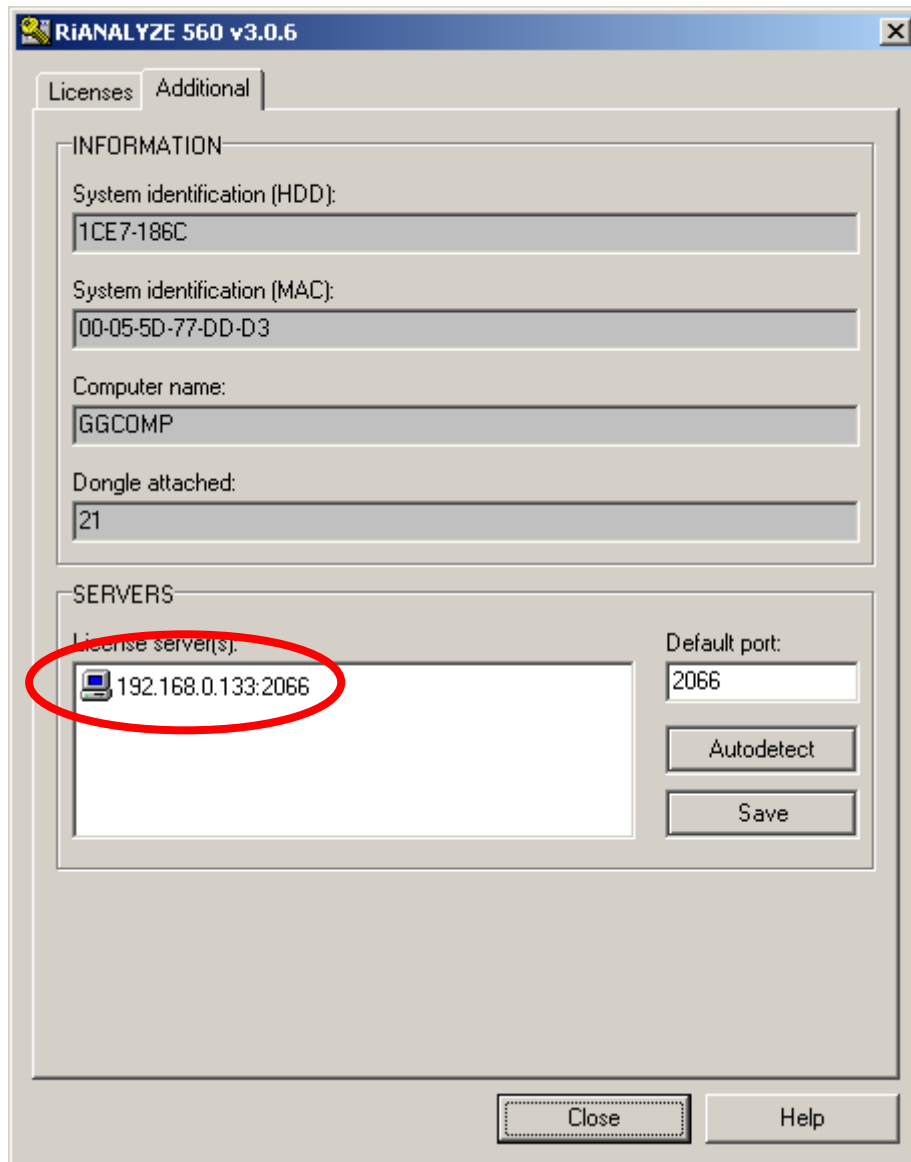
Use the context menu or hit "Insert" to add a server to the list. You can enter the "Default port" and click "Autodetect" instead.

Click "Save" to save the servers to the registry so they are available for all other modules/products requiring a floating license.

Please note: You can specify one or more LicenseServer(s) on the command line when starting the application:

Example: RiANALYZE.exe /LicenseServer=192.168.0.11:2066

If the application reports that no LicenseServer has been found, you need to check the settings of the application and configure the LicenseServer to be contacted. When restarting the application the connection to the LicenseServer should be successful.
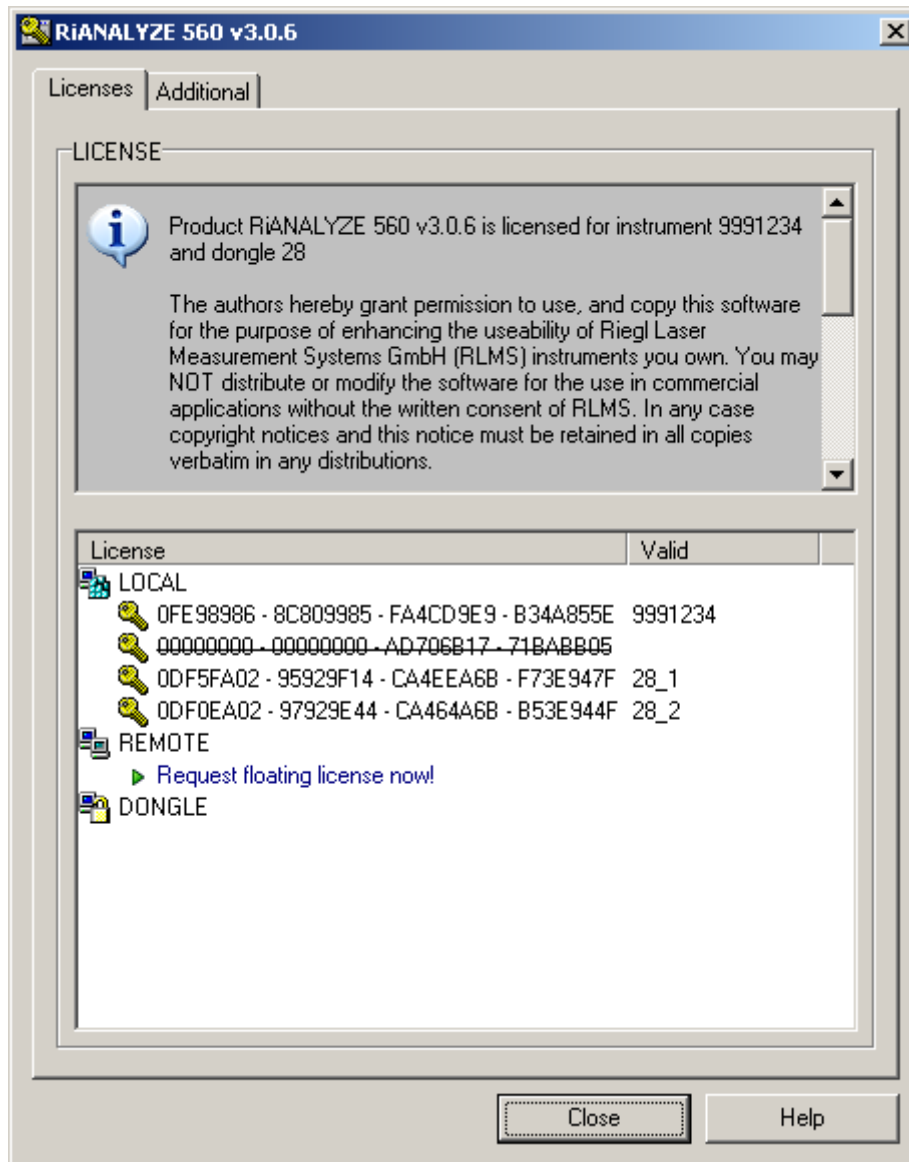
In the example above you can see RiANALYZE 560 v3.0.4 is licensed for dongle number 28 and instrument serial number 9991234. Only licenses stored in the local registry are used yet.

6.2 Local licenses

You can add, edit and delete local licenses by using the context menu (right-click a license key and select "Add…", "Edit…" or "Delete":
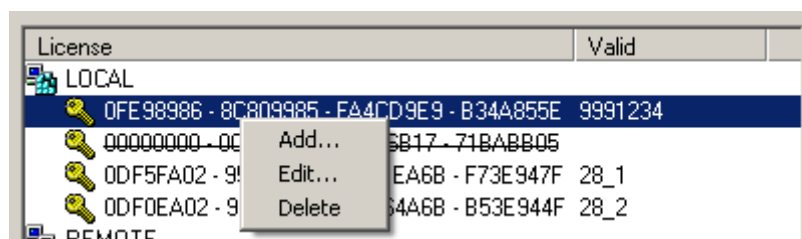
After modifying the license keys, you must not forget to save your changes to the registry. Right-click the "LOCAL" entry and select "Save to registry (all users)" or "Save to registry (current user)":
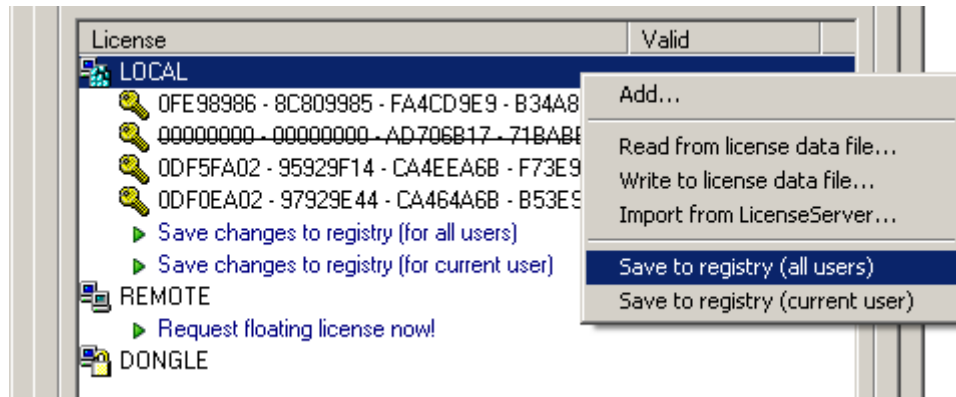

Use "Write to license data file…" option to export the local licenses into a file. You can copy this file to another computer and use "Read from license data file…" to import the licenses from the file.

The "Import from LicenseServer…" option allows to import all licenses for this product from a *RIEGL* LicenseServer so you need not to type the license keys.

6.3 Floating licenses

Please note: Only if there are no local licenses available, the application tries to connect to a LicenseServer on startup.

Now we will see how to manually request a floating license:
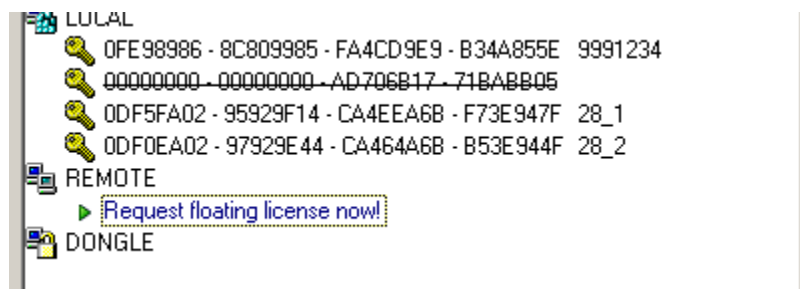
Click "Request floating license now!" (or right-click "REMOTE" entry and select "Request") to contact a LicenseServer from the server list to receive a floating license. If the operation is successful, you received a valid license key:
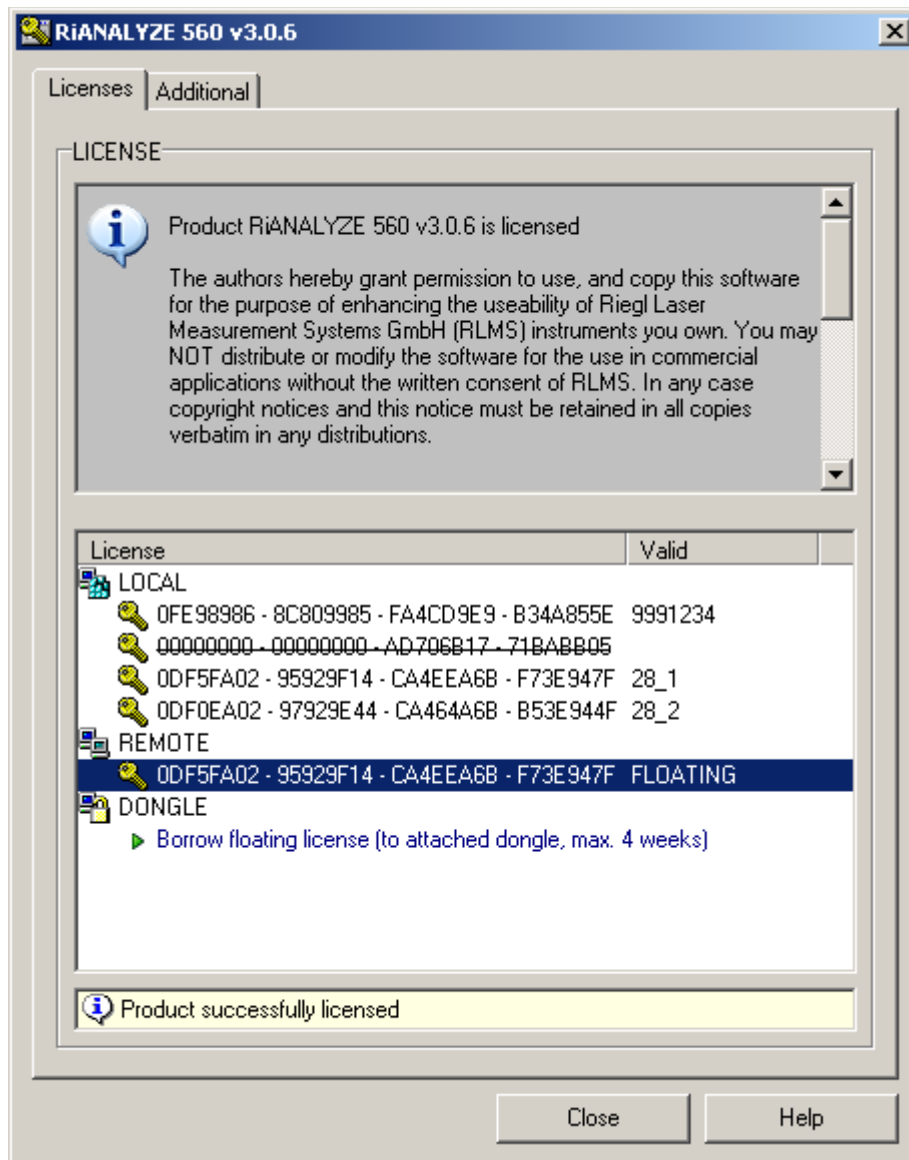
The next section explains how to borrow a floating license for offline-usage (without a network connection, e.g. laptop).

## 6.4 Borrowing licenses from a LicenseServer

In case you want to use a software product requiring a floating license without a network connection (e.g. on a laptop), you can 'borrow' a license from a LicenseServer.

To use this feature you need a dongle for the license you want to borrow. Please contact *RIEGL* Laser Measurement Systems for 1 or more dongles. You can use these dongles for all *RIEGL* software products.

The required license key is requested from a LicenseServer while you are connected to the network. Then you can borrow this license for a time to specify (max 4 weeks). You need a *RIEGL* dongle to be attached to your laptop. The license is then moved to this dongle.

While being offline, you need this dongle now containing the license attached to your laptop. After the time you specified, the license expires and the LicenseServer allows you to use the license again. Of course you can return the license from the dongle to the LicenseServer at any time.

Click "Borrow floating license" or (right-click the floating license you want to borrow and select "Borrow..."). Now you are asked to enter the date (+time) for how long you want to use the license offline (max. 4 weeks):
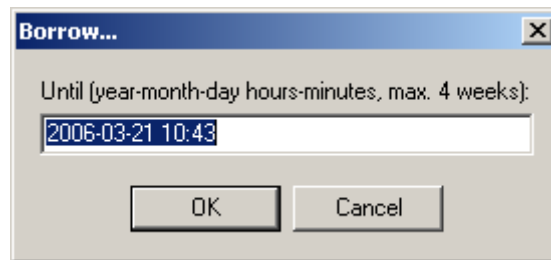
Make sure a dongle is connected and click "OK".
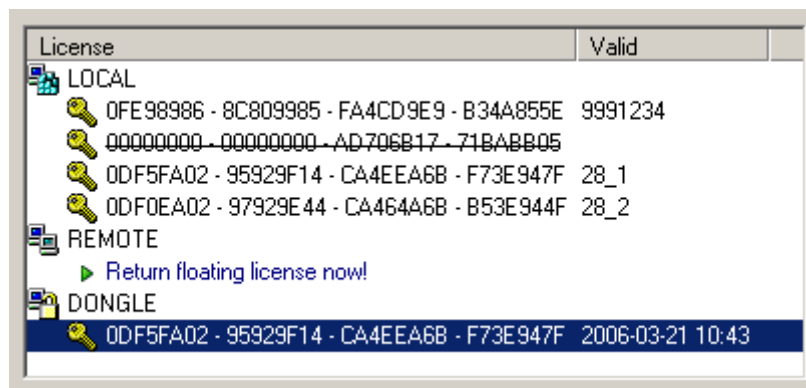
We can see now that the license has been transferred to the attached dongle.

Note: You can store up to four licenses on a single dongle.

As long as the dongle is attached to your laptop and the license(s) on the dongle are not expired you can use the application without network access.

The dongle simply acts as a container for licenses. Expired licenses on a dongle are overwritten automatically when borrowing new licenses.

6.5 Returning a license to a LicenseServer

If you want to return the license, simply click "Return floating license now!" (or right-click the license key and select "Return").

If the LicenseServer has been contacted and accepted the returned license, it will disappear from section "DONGLE".

Please note: A borrowed license can only be returned to the LicenseServer it has been borrowed from! If the LicenseServer has moved please ask your network administrator where to find the LicenseServer now.

If you close the license management window using the "OK" button, the specified/detected LicenseServers will be saved and available for all other *RIEGL* software products.

7 Troubles

First, you have to make sure the LicenseServer is running smoothly:
When starting the LicenseServer no error message must be shown.

Applications report that they are unable to find the LicenseServer:
Please check the options of the application and set the LicenseServer manually (no autodetection) as described in chapter 6. Your network administrator can help you here.

Applications report that no valid license can be found:
Right-click the LicenseServer icon in your taskbar and select 'Licenses...'. Please check if there are enough licenses for this application available.

Dongle installation

In case usbkey.sys driver can not be located on your computer please download the latest dongle driver setup version from the following link:

   http://www.keylok.com/downloads/Install.zip

Please note: During dongle driver installation no other *RIEGL* software product must be running and the dongle must not be attached.

Windows Firewall

The Microsoft Windows FireWall might cause problems when clients try to contact a LicenseServer. Please disable the FireWall and try again.

How to configure the FireWall on Microsoft Windows XP ServicePack 1:
Start ⇨ Control Panel ⇨ Network connections (classic view) ⇨ Local Area Connection ⇨ Properties (right-click) ⇨ Tab 'Advanced' ⇨ Group 'Internet Connection Firewall' ⇨ Button 'Settings...'

How to configure the FireWall on Microsoft Windows XP ServicePack 2:
Start ⇨ Control Panel ⇨ Windows-FireWall

See chapter 8 for information about how to enter a license key.

8 Licensing a software product

After installing your *RIEGL* software product you have to enter a license key in order to provide full functionality of the software product.

1) After installing the application software please launch it (As default, you will find the software in the "Start ⇨ Programs ⇨ *RIEGL* LMS ⇨ <product-name>" folder on your computer.

2) Close the application. The application only needs to be run once after installation to automatically set up information for the license manager needed to administrate software licenses properly.

3) Run the *RIEGL* LMS License Manager that comes with the software product. In most cases you find it in "Start ⇨ Programs ⇨ *RIEGL* LMS ⇨ Support ⇨ License Manager".
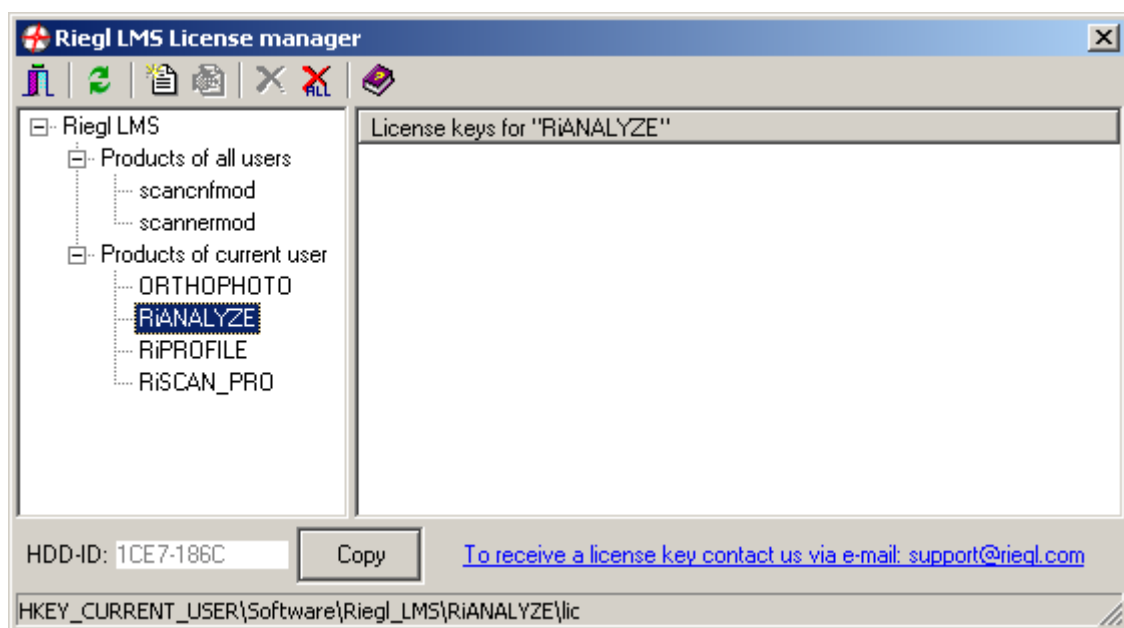
4) You should find the entry naming your software product (e.g. 'RiANALYZE') on the left-hand side. Highlight this entry (as shown above).

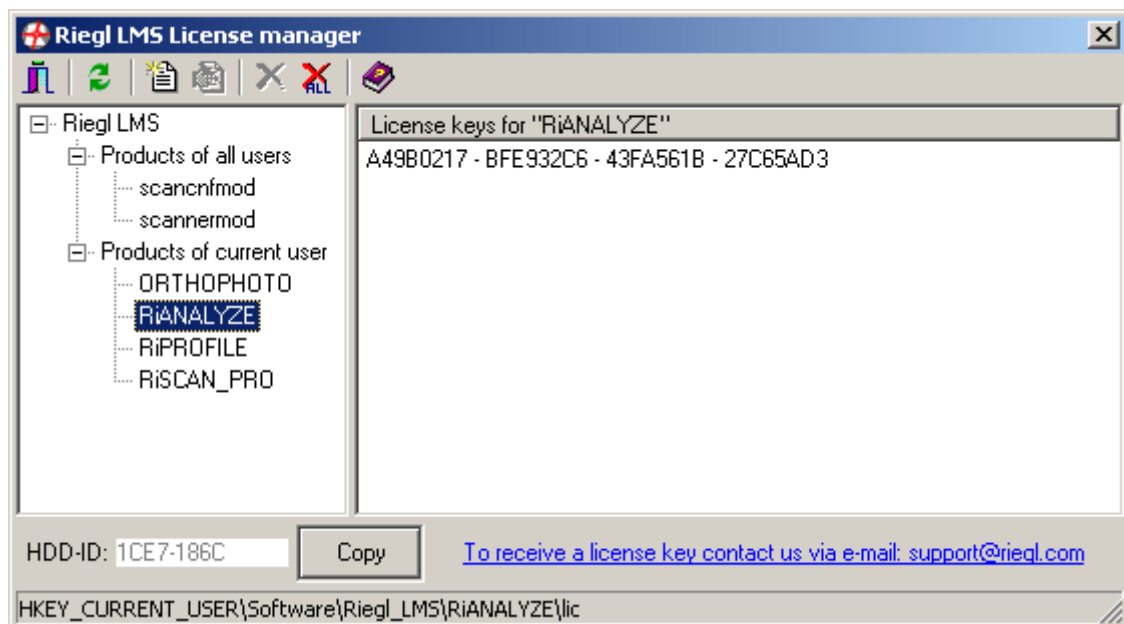5) Hit "F3" (or click button 🗐 "Add new license key") to enter the license key:

6) Please enter the license key you received from *RIEGL* Laser Measurement Systems (RLMS):
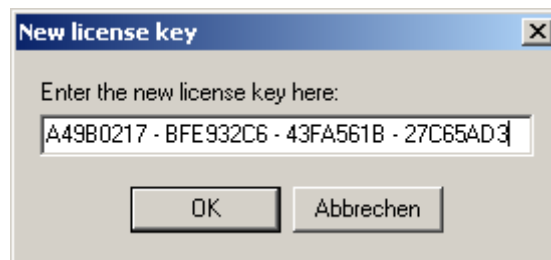
Hint: If you received the key via email, you may simple copy-and-paste the key from the mail text into the dialog box:

7) Click "Ok" to store the license key.

Now we have the license manager window look like this:

Note: You can enter more than one license keys for a single software product.

8) Close the license manager and start the application.