



Licensing Cortona3D Products

User's Guide

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Chapter 1. Introduction

Licensing Cortona3D Products

The Cortona3D software products require customers to have the activated license (node-locked or floating). The license activation process consists of getting the license file. The license file specifies the product name, the period of time when the license is valid and the license type.

License Types

The Cortona3D products support four types of licenses:

- **node-locked.** The license is tied to a particular computer (Host ID) based on its MAC address. The correspondence between the MAC address and Host ID in the license file is checked during the product start-up phase.
- **floating.** The license is tied to a particular floating license server. The software will work anywhere on the network that can communicate with the floating license server and if the maximum number of purchased licenses is not exceeded. The floating license server should be installed in the customer's local area network if the customer needs to use floating licenses.
- **roaming.** The license is provided as an extra option to the floating license. The roaming license allows the users to use the software while disconnected from a local network. The license is best suited for the users that need temporary roaming or disconnected usage.
- **failover.** The license provides the capability to start up the failover server on the local network. The failover server takes over the license load of main license server which has gone down. During the time that the failover server is serving the licenses, no roaming operations are permitted on the licenses.

The time-limited and cost-free **evaluation licenses** are also provided. The company usually provides a node-locked evaluation license for a limited period of time (30 or 90 days). In some cases, the user can be provided with a floating evaluation license.

If you have a node-locked evaluation license, please follow the instructions specified in [Activating Node-Locked License](#).

If you have a floating evaluation license, please follow the instructions specified in the topics dedicated to the floating licenses.

The Cortona3D Software Update

Cortona3D releases new software products once or twice a year. Each major software release requires a new license. The product release is defined as major if the version number to the left of the decimal separator has been increased in comparison to the previous release version number.

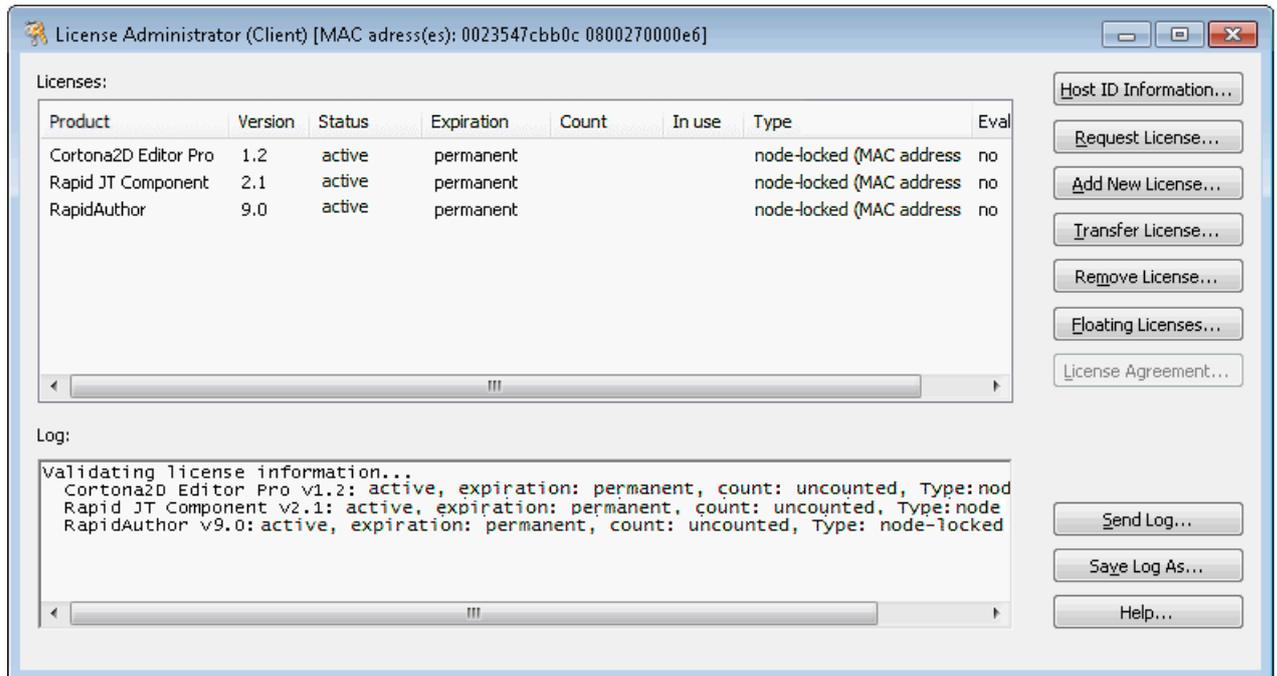
If you are a client of Siemens PLM Software, you will need to request a new license from DSOM (dsom.plm@siemens.com). Please indicate your *sold to* or *install number* in your request. If you have a floating license, it is recommended to update the floating license server to its latest version. The floating license server can be downloaded from GTAC.

If you are a client of Cortona3D, the license keys and downloading instructions for the new version will be sent to you by the Cortona3D team. If you have any issues with software update, please contact the Support Service at support@cortona3d.com.

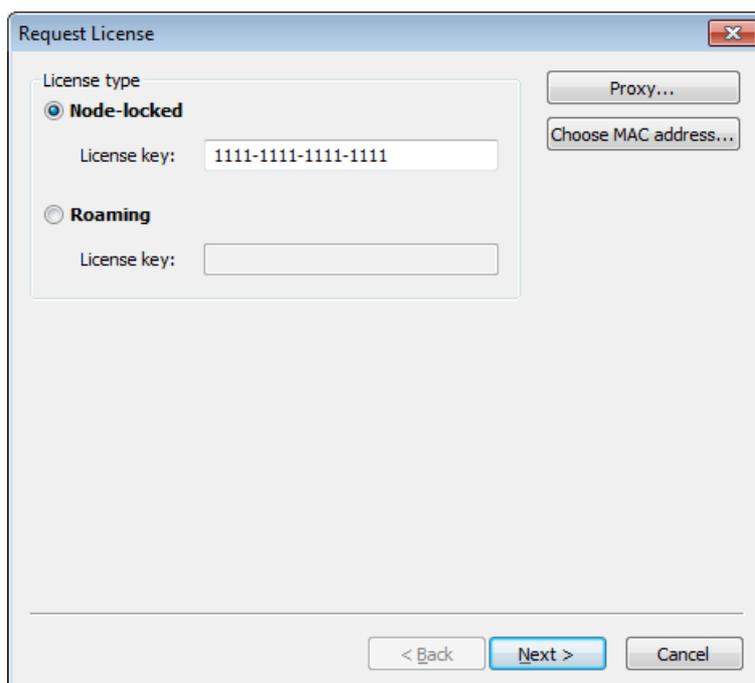
Chapter 2. Node-Locked License

Activating Node-Locked License

1. Launch License Administrator (Client) from the Start menu. License Administrator displays the status of licenses on your computer (*active* or *inactive*).



2. Click **Request License**. The Request License dialog box appears.
3. Click **Node-locked**.
4. In the corresponding box enter the license key.



If you have a proxy server on your network, click **Proxy** and configure the proxy-server settings.

5. Click **Next**.

If the license is successfully activated (a license file has been received), you can start using the corresponding product.

If you get an error message, click **Send Mail** to request the license file via e-mail.

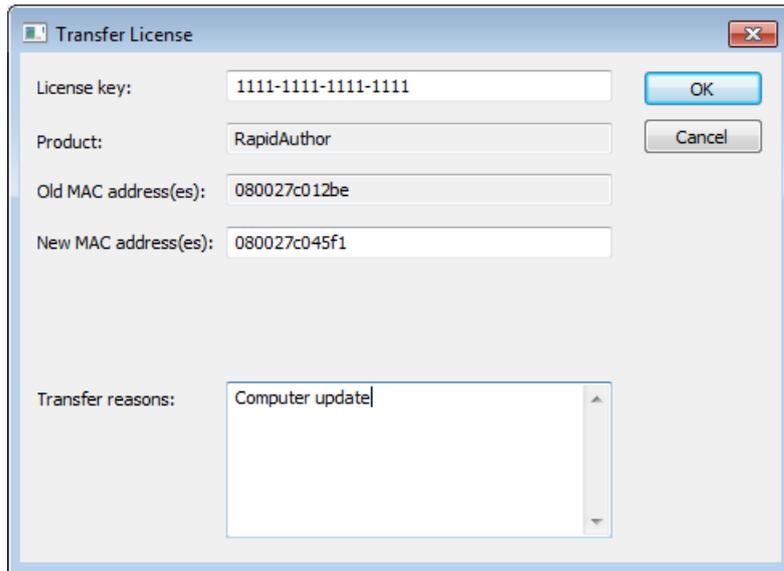
Adding License File Received by E-mail

1. Save the license file received by e-mail.
2. Launch License Administrator (Client) from the Start menu.
3. Click **Add New License**, specify the path to the license file, and then click **Next**.

The procedure is completed if the license status is *active*.

Transferring License to a New Computer

1. Launch License Administrator (Client) from the Start menu.
2. In the License list select the license, and then click **Transfer License**. The Transfer License dialog box appears.



3. Fill in all the boxes. Please provide reason for license transfer. Click **OK**.

An e-mail message will be generated in your e-mail client. Please send it to the indicated address.

4. Activate license on a new computer.
After receiving the transfer confirmation, remove the license from the old computer (see [Removing License](#)) and activate the new license on a new computer.

Removing License

1. Launch License Administrator (Client) from the Start menu.
2. In the License list select the license, and then click **Remove License**. The Remove License dialog box appears.
3. Click **OK**.

Restrictions

- The node-locked licenses cannot be used to run the software on a remote computer via Windows Terminal Servers. The floating licenses should be used instead.
- You can't use evaluation node-locked licenses and non-evaluation node-locked license for the same product on the same computer. If you activate them on the same computer, only non-evaluation licenses will be available as they have higher priority. It is recommended to activate evaluation and non-evaluation licenses on different computer or remove non-evaluation licenses first.

Chapter 3. Floating License Server on Computers with Windows Operating System

Introduction

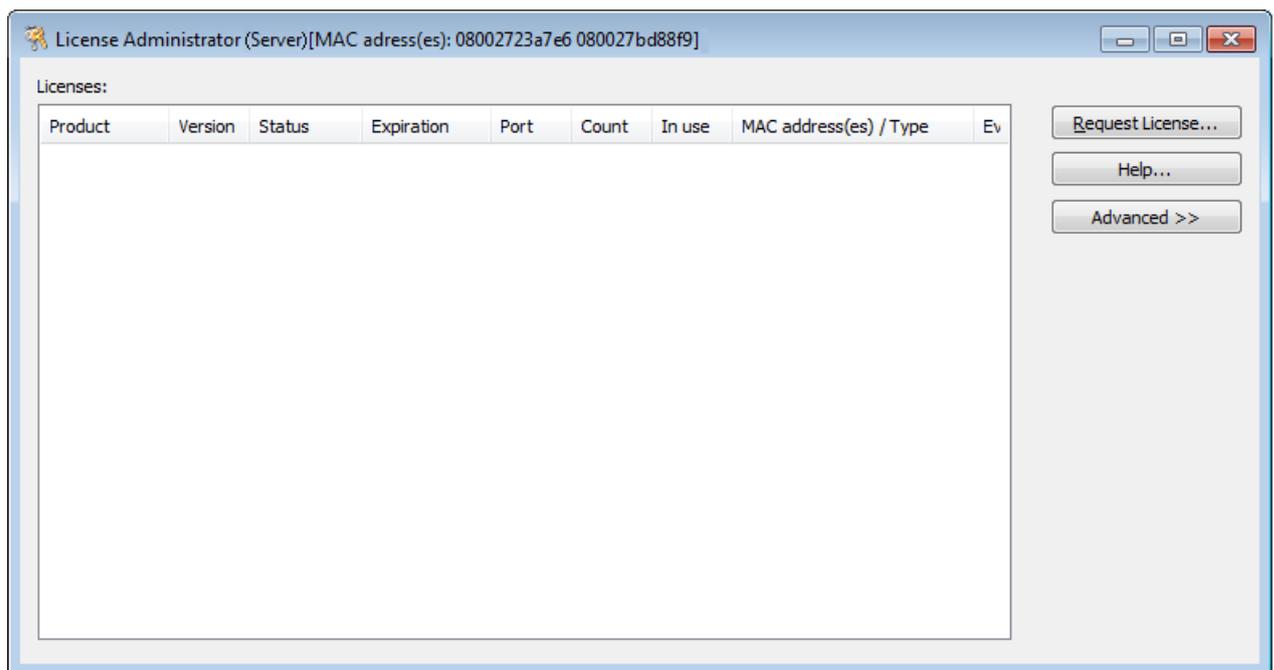
This section should be read by those who plan to install the floating license server on a computer with Windows operating system. The floating license server is shipped with the product package if the floating license is purchased. The License Administrator (Server) is used to manage the floating licenses.

Setting Up the License Server

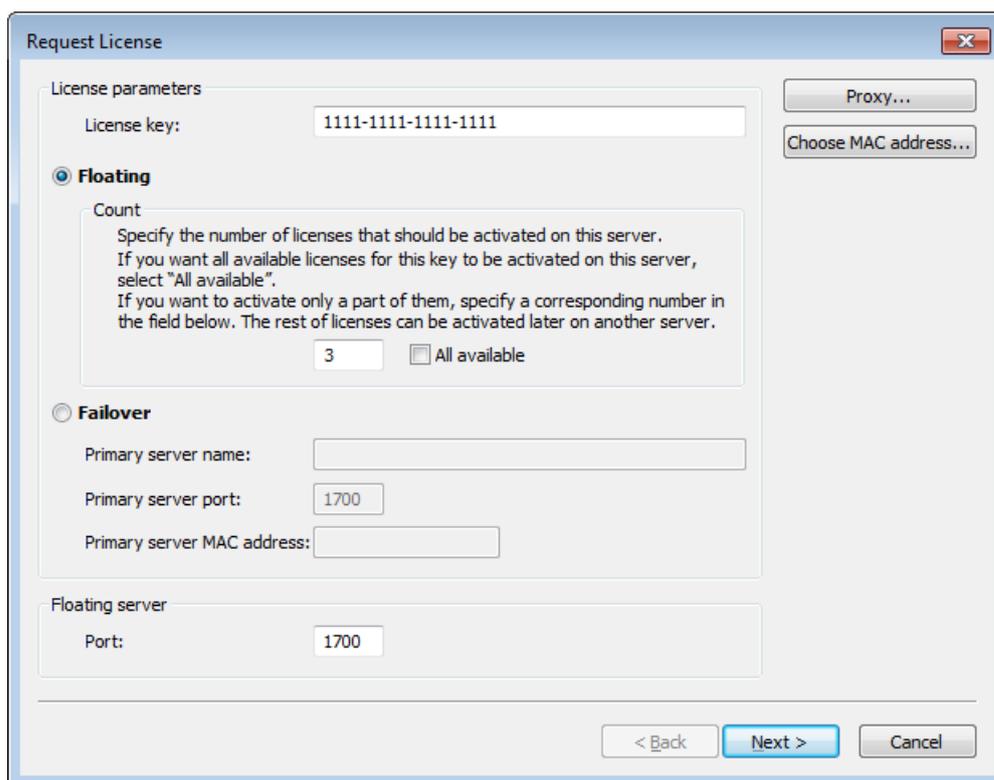
To install the license server on a server computer in your local network, run the *LicenseServer.exe* file and follow the on-screen instructions.

Activating Floating Licenses

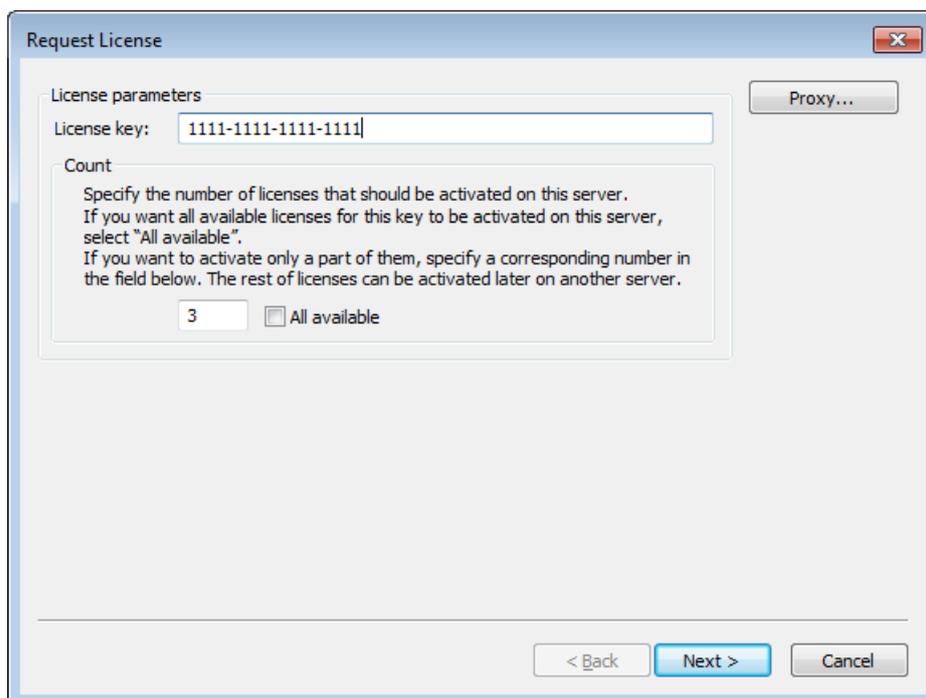
1. Launch License Administrator (Server) on a computer with the floating license server.



If you want to manually set a MAC address for licensing the floating server or if you need to change the port of the floating server, click **Advanced** and then **Request License**. The extended Request License dialog box appears:



Otherwise, click **Request License**. The Request License dialog box appears:



2. In the corresponding areas, specify

- the license key;
- count — the number of licenses that should be activated on this server. If you want all available licenses for this key to be activated on this server, select **All available**. If you want to activate only a part of them, specify a corresponding number in the field. The rest of licenses can be activated later on another server;

If it is required, change the port of the floating server (1700 by default).

If you have a proxy server on your network, click **Proxy** and configure the proxy-server settings.

If you want to manually set a MAC address for licensing the floating server, click **Choose MAC address**.

3. Click **Next**.

The procedure is completed if the license status is *active*.

If you get an error message, click **Send Mail** to request the license file via e-mail.

Adding License File Received by E-mail on License Server

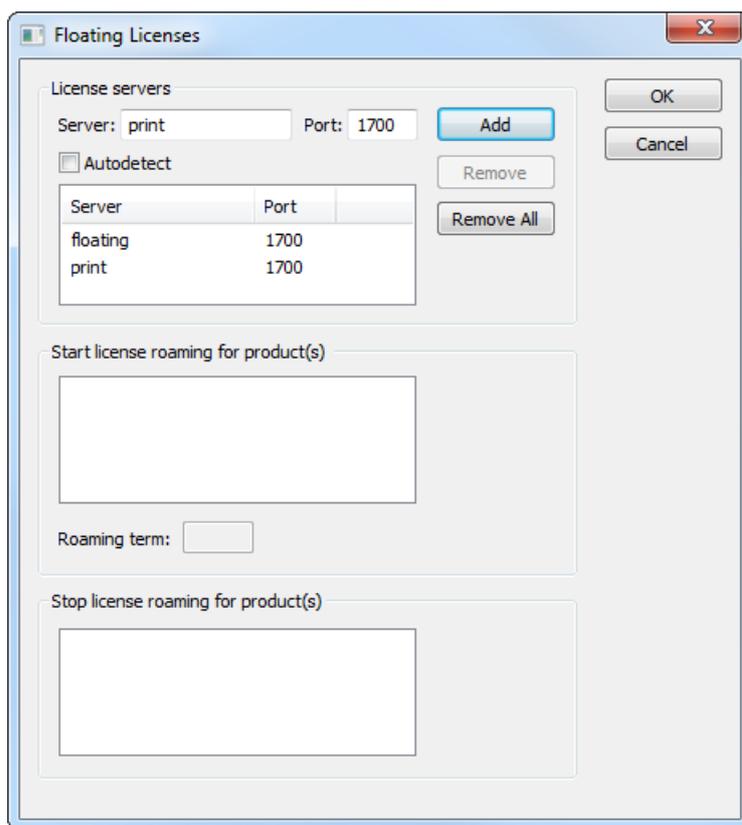
1. Save the license file received by e-mail.
2. Launch License Administrator (Server) on a computer with the floating license server.
3. Click **Advanced**.
4. Click **Add New License**, specify the path to the license file, and then click **OK**.

The procedure is completed if the license status is *active*.

Adding License Server to Server List on Client Computer

1. Launch License Administrator (Client) on a client computer.
2. Click **Floating Licenses**. The Floating Licenses dialog box appears.
3. In the corresponding boxes, specify the server name, port, and then click **Add**.

The server is added to the list.

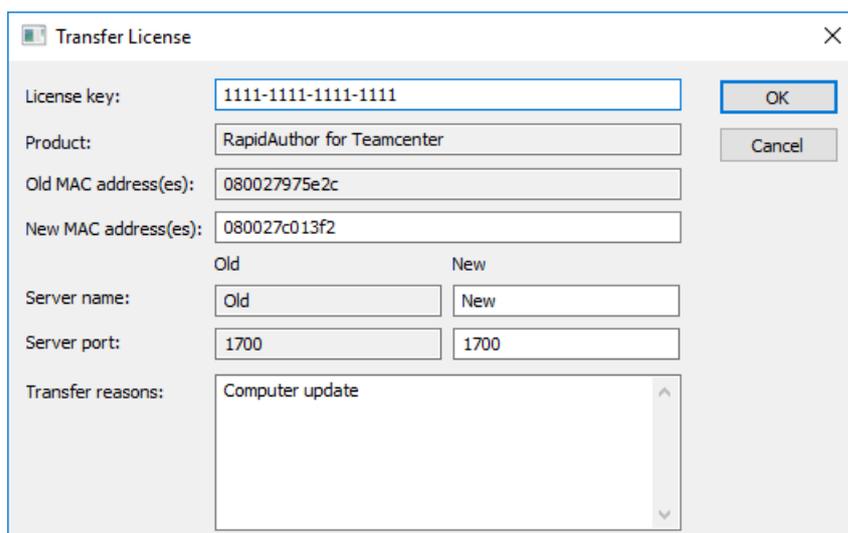


4. Click **OK**.

 The Floating Licenses dialog box contains the Autodetect option. By default this option is cleared. This means that the administrator should specify the parameters of the floating server manually. If the Autodetect option is selected, the floating license server is found by the License Administrator (Client) on your local network.

Transferring License to a New Computer

1. Launch License Administrator (Server) on a computer with the floating license server.
2. Click **Advanced**, in the License list select the license, and then click and then click **Transfer License**. The Transfer License dialog box appears.
3. Fill in all the boxes. Please provide the reason for the license transfer.



Click **OK**.

An e-mail message will be generated in your e-mail client. Please send it to the indicated address.

4. After receiving the transfer confirmation, stop roaming license on all client computers (see [Roaming License](#)).
5. Remove the license on old license server (see the section below *Removing License*).
6. Activate the license on a new license server.
7. On all client computers, add information about a new license server and remove the information about the old server. See [Adding License Server to Server List on Client Computer](#), [Removing License Server from List of Servers on Client Computer](#).
8. If any failover server is used on the network, a new license should be obtained and the activation procedure should be done once again. See [Failover Server for Windows Operating System](#): sections *Copying Licenses from Primary to Failover Server* and *Adding Failover Server to Server List on Client Computer*.
9. The transfer procedure should be done separately for each product.

Removing License

1. Launch License Administrator (Server) on a computer with the floating license server.
2. Click **Advanced**, in the License list select the license, and then click **Remove License**. The Remove License dialog box appears.
3. Click **OK**.

Removing License Server from List of Servers on Client Computer

1. Launch License Administrator (Client) on a client computer.
2. Click **Floating Licenses**.
3. In the list of servers, click the server to be removed, and then click **Remove**.

Increasing the Number of License Seats

1. Purchase a floating license for additional number of license seats.
2. After receiving the license key, perform the license procedure (see [Activating Floating Licenses](#)).

 If the license server contains two or more floating licenses for the same product, the total number of licensed users is equivalent to the number of seats according to all licenses.

Restrictions

You can't use evaluation floating licenses and non-evaluation floating license for the same product on the same floating license server. If you activate them on the same server, only non-evaluation licenses will be available as they have higher priority. It is recommended to activate evaluation and non-evaluation licenses on different license servers.

If licenses for different versions of the same software product are installed on the same floating license server, only the license corresponding to the later version of the software product is used. These licenses cannot be used simultaneously. If necessary, these licenses can be installed on different license servers.

 You can check whether your license is evaluation or not with the help of License Administrator (Server). The Eval parameter is set to "yes" for evaluation licenses and is set to "no" for non-evaluation licenses (see the picture below).

Licenses:

Product	Version	Status	Expiration	Port	Count	In use	Type	Eval	License Key
RapidAuthor	10.0	active	permanent	1700	1	0	floating (MAC address(es): 0800ba)	no	1104-2422-4

Chapter 4. Floating License Server on Computers with Linux Operating System

Introduction

This section should be read by those who plan to install the floating license server on a computer with Linux operating system. The floating license server is shipped with the product package if the floating license is purchased.

Setting Up the License Server

Run the script *install.sh* as root user. The license server will be installed in the directory */opt/Cortona3DIs*. See *readme.txt* from installation package for more information.

Floating Licenses Activation

1. Obtain a license in one of the following ways:

- Online activation

Enter from the command line as root user:

```
/opt/Cortona3DIs/bin/licenseadm activate -k key -h hostid -n number
```

key (required) The license key.

hostid A computer MAC address. To get a list of available MAC addresses, run the following command: */opt/Cortona3DIs/bin/licenseadm list-interfaces*. If you do not specify *hostid*, the MAC address of the network interface is used for activation.

number Number of workplaces. If you need to activate all available licenses on this server, do not specify the *-n* parameter.

Example:

```
/opt/Cortona3DIs/bin/licenseadm activate -k 1111-1111-1111-1111 -h aabbccddeeff
```

- Requesting a license file by E-mail

Enter from the command line:

```
/opt/Cortona3DIs/bin/make_req.sh
```

Enter **1**.

Fill in the registration form.

The completed registration form is saved in the file */tmp/reg_form.txt*. Send this file by e-mail to the address indicated in the file *reg_form.txt*. In reply to your request, you will get an appropriate license that should be saved in the following directory:

```
/etc/Cortona3DIs
```

2. Start the license server.

Enter from the command line as root user:

```
systemctl start Cortona3DIs.service
```

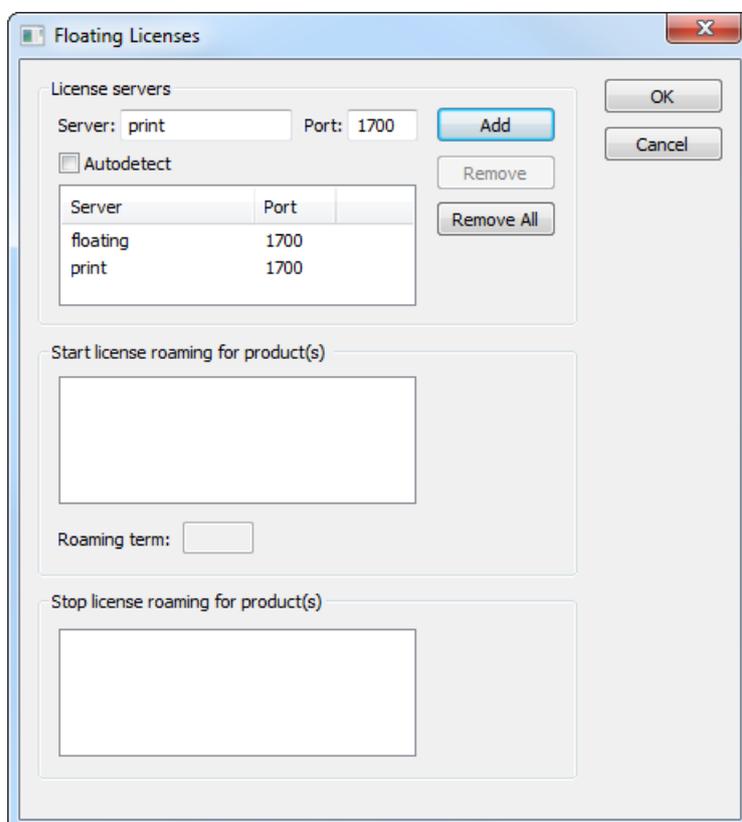
3. Enable the license server autoloader.
Enter from the command line as root user:

```
systemctl enable Cortona3DIs.service
```

Adding License Server to Server List on Client Computer

1. Launch License Administrator (Client) on a client computer.
2. Click **Floating Licenses**. The Floating Licenses dialog box appears.
3. In the corresponding boxes, specify the server name, port, and then click **Add**.

The server is added to the list.



4. Click **OK**.

 The Floating Licenses dialog box contains the Autodetect option. By default this option is cleared. This means that the administrator should specify the parameters of the floating server manually. If the Autodetect option is selected, the floating license server is found by the License Administrator (Client) on your local network.

Transferring License to a New Computer

1. Set up the license server on a new computer.
2. Request a new license file. On old computer, enter from the command line:

```
/opt/Cortona3DIs/bin/make_req.sh
```

Enter **3**.

Fill in the form. To do it, get the MAC address for a new computer by entering on it from the command line:

```
/opt/Cortona3DIs/bin/rlmhostid
```

The completed registration form will be saved in the following file: */tmp/reg_form.txt*. Send this file to the address provided on the form. In reply to your request you will get the appropriate license files that should be saved in the following directory of the new license server:

```
/etc/Cortona3DIs.
```

3. Start the license server.

Enter from the command line as root user:

```
systemctl start Cortona3DIs.service
```

4. After receiving the transfer confirmation, stop roaming license on all client computers (see [Roaming License](#)).
5. Remove the license on old license server (see the section below *Removing License*).
6. On all client computers, add information about a new license server and remove the information about the old server. See [Adding License Server to Server List on Client Computer](#), [Removing License Server from List of Servers on Client Computer](#).
7. If any failover server is used on the network, a new license should be obtained and the activation procedure should be done once again. See [Failover Server for Linux Operating System](#): sections *Copying Licenses from Primary to Failover Server* and *Adding Failover Server to Server List on Client Computer*.
8. The transfer procedure should be done separately for each product.

Removing License

1. Stop the license server. Enter from the command line as root user:

```
systemctl stop Cortona3DIs.service
```

2. Remove the file that contains the license from the directory */etc/Cortona3DIs*.

3. Start the license server if it contains valid licenses:

Enter from the command line as root user:

```
systemctl start Cortona3DIs.service
```

Removing License Server from List of Servers on Client Computer

1. Launch License Administrator (Client) on a client computer.
2. Click **Floating Licenses**.
3. In the list of servers, click the server to be removed, and then click **Remove**.

Increasing the Number of License Seats

1. Purchase a floating license for additional number of license seats.
2. After receiving the license key, perform the license procedure (see [Floating Licenses Activation](#)).

 If the license server contains two or more floating licenses for the same product, the total number of licensed users is equivalent to the number of seats according to all licenses.

Restrictions

You can't use evaluation floating licenses and non-evaluation floating license for the same product on the same floating license server. If you activate them on the same server, only non-evaluation licenses will be available as they have higher priority. It is recommended to activate evaluation and non-evaluation licenses on different license servers.

If licenses for different versions of the same software product are installed on the same floating license server, only the license corresponding to the later version of the software product is used. These licenses cannot be used simultaneously. If necessary, these licenses can be installed on different license servers.

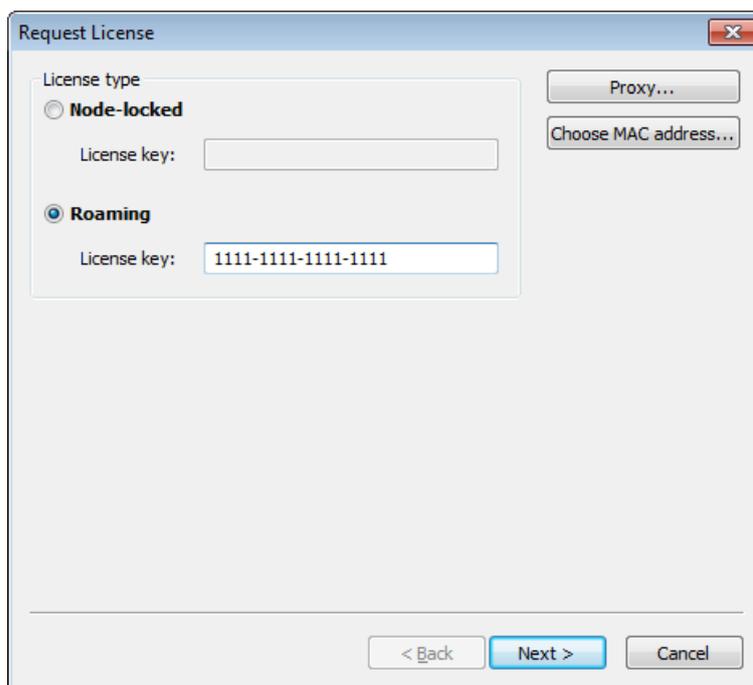
Chapter 5. Roaming License

Roaming License

Roaming is the ability to use the floating license without a connection to a license server. To allow the floating licenses to roam, it is necessary to receive and activate a roaming license. A roaming license is a license that is locked to a specific (portable) computer. After the roaming is started, the portable computer can be removed from the network and Cortona3D products can be used for the given number of days.

Activating Roaming License

1. Launch License Administrator (Client) from the Start menu.
2. Click **Request License**. The Request License dialog box appears.
3. Click **Roaming**.
4. In the corresponding box enter the license key.



The screenshot shows a 'Request License' dialog box with the following elements:

- License type:** Two radio buttons are present: 'Node-locked' (unselected) and 'Roaming' (selected).
- License key:** A text input field. For 'Node-locked', it is empty. For 'Roaming', it contains the value '1111-1111-1111-1111'.
- Buttons:** 'Proxy...' and 'Choose MAC address...' are located to the right of the license type options. At the bottom, there are '< Back', 'Next >', and 'Cancel' buttons.

If you have a proxy server on your network, click **Proxy** and configure the proxy-server settings.

5. Click **Next**.

The procedure is completed if the license status is *active*.

If you get an error message, click **Send Mail** to request the license file via e-mail.

Adding License File Received by E-mail

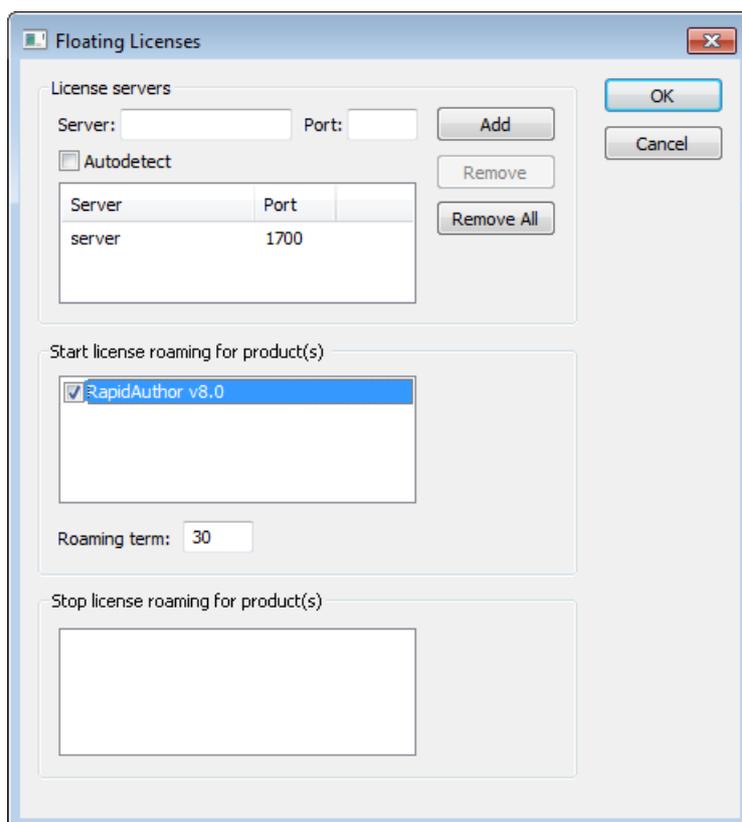
1. Save the license file received by e-mail.

2. Launch License Administrator (Client) from the Start menu.
3. Click **Add New License**, specify the path to the license file, and then click **OK**.

The procedure is completed if the license status is *active*.

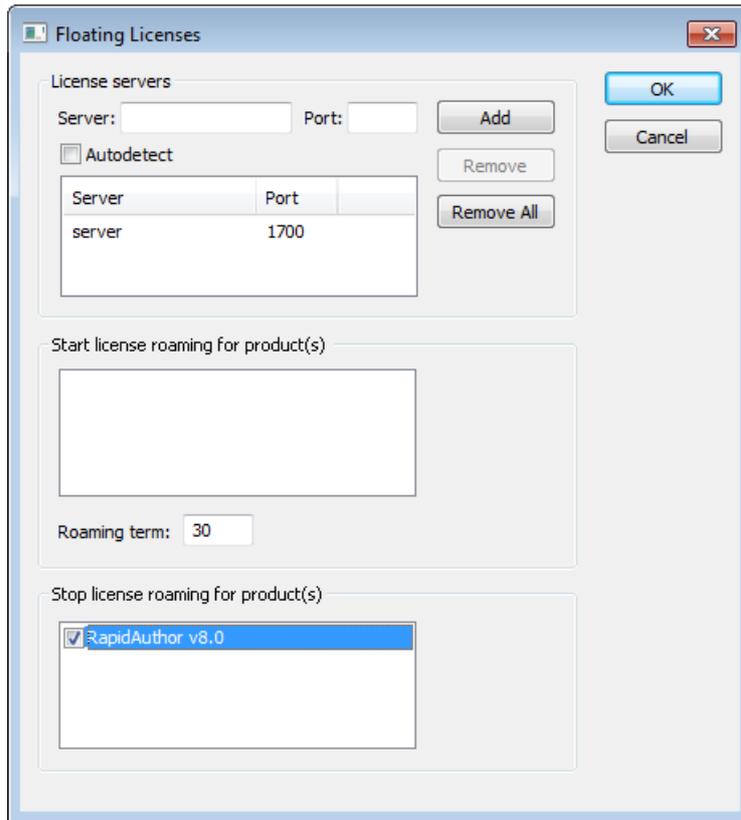
Starting or Stopping Roaming

1. Launch License Administrator (Client) from the Start menu.
2. Start roaming.
In the *Start license roaming for product(s)* box, select the product; then in the *Roaming term* box, specify the roaming duration. Click **OK**.



The selected product appears in the *Stop license roaming for product(s)* box.

3. Stop roaming.
In the *Stop license roaming for product(s)* box, select the product, and then click **OK**.



Chapter 6. Failover Server

Failover Server for Windows Operating System

The failover license provides the capability to start up the failover server in the local network. The failover server takes control over floating licenses when the main server has gone down. The failover server can control several license servers in the local network.

The failover server is a license server with one or more failover licenses. Each failover license specifies the name of the primary (attended) server. The copy of all licenses of the primary server should be forwarded to the failover server via the Export/Import operations.

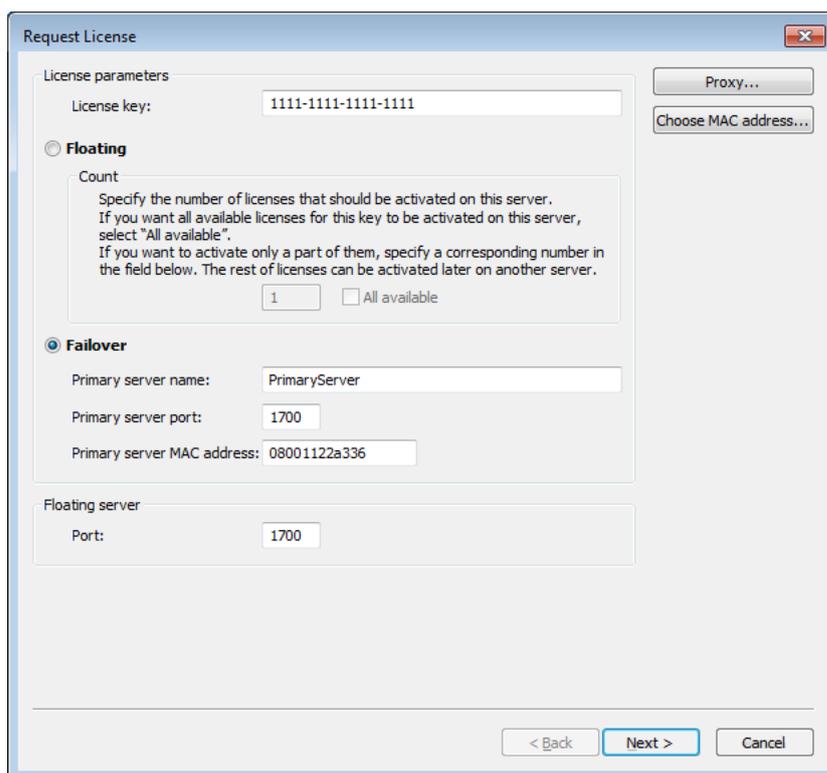
To access the failover server from the client computer, it is required to add the name of the failover server to the license servers list on the client computer.

Setting Up the Failover Server

To install the license server on a computer to be used as failover server, run the *LicenseServer.exe* file and follow the on-screen instructions.

Activating Failover License

1. Launch License Administrator (Server) on the computer with failover server.
2. Click **Advanced**, and then click **Request License**. The Request License dialog box appears.
3. Click **Failover**.
4. In the corresponding boxes, specify the license key; name of the primary server (paste the data copied with the Host ID Information option); port of the primary server; MAC address of the primary server; port of the failover server.



If you have a proxy server on your network, click **Proxy** and configure the proxy-server settings.

5. Click **Next**.

If the license is successfully received, the title bar of *License Administrator – Server* is changed to *License Administrator – Failover server*.

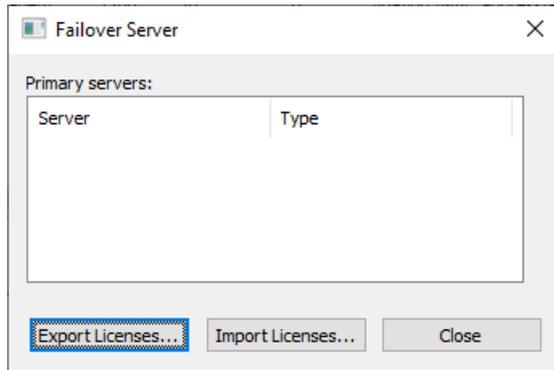
If you get an error message, click **Send Mail** to request the license file via e-mail.

Adding License File Received by E-mail

1. Save the license file received by e-mail.
2. Launch License Administrator (Server) on the computer with failover server.
3. Click **Advanced**.
4. Click **Add New License**, specify the path to the license file, and then click **OK**.

Copying Licenses from Primary Server to Failover Server

1. Launch License Administrator (Server) on the computer with the primary server.
2. Export licenses to the exchange folder.
Click **Advanced**, and then click **Failover Server**. The Failover Server dialog box appears.
Click **Export Licenses**. The Browse for Folder dialog box appears.
Choose the folder that can be shared in the local network, and then click **OK**.

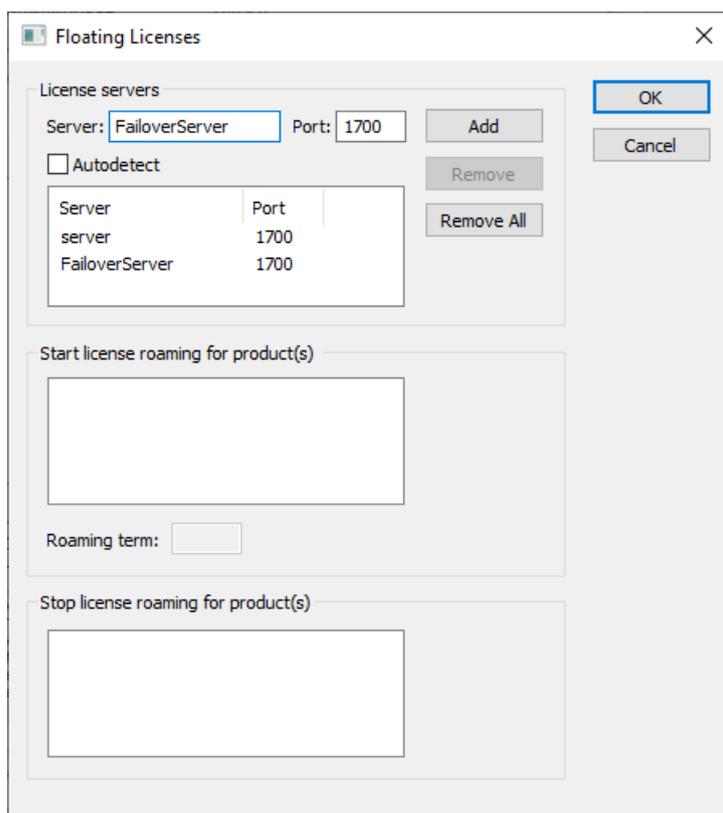


 If you have several primary servers on a network, it is necessary to place all licenses in the same exchange folder before importing. To do it, repeat steps 1 and 2 for all primary servers and specify the same shared folder.

3. Launch License Administrator (Server) on the computer with the failover server.
4. Import licenses from the exchange folder.
Click **Advanced**, and then click **Failover Server**. The Failover Server dialog box appears.
Click **Import Licenses**. The Browse for Folder dialog box appears.
Choose the exchange folder that you have specified in step 2, and then click **OK**.

Adding Failover Server to Server List on Client Computer

1. Launch License Administrator (Client) on a client computer.
2. Click **Floating Licenses**. The Floating Licenses dialog box appears.
3. In the corresponding boxes, specify the failover server name, port, and then click **Add**.
The server is added to the list.
4. Click **OK**.



Removing License

1. Launch License Administrator (Server) on a computer with the floating license server.
2. Click **Advanced**, and then click **Remove License**. The Remove License dialog box appears.
3. Click the licenses to be removed, and then click **OK**.

The label *Failover server* disappears from the title bar of License Administrator.

Failover Server for Linux Operating System

Setting Up the Failover Server

Run the script `install.sh` as root user. The license server will be installed in the directory `/opt/Cortona3DIs`. See `readme.txt` from installation package for more information.

Activating Failover Licenses via E-mail

1. Request and receive the files that contain licenses.
Enter from the command line:

```
/opt/Cortona3DIs/bin/make_req.sh
```

Enter **2**.

Fill in the registration form.

The completed registration form is saved in the file `/tmp/reg_form.txt`. Send this file by e-mail to the address indicated in the file `reg_form.txt`. In reply to your request, you will get an appropriate license that should be saved in the following directory:

`/etc/Cortona3DIs`

2. Start the license server.
Enter from the command line as root user:

```
systemctl start Cortona3DIs.service
```

3. Enable the license server autoloader.
Enter from the command line as root user:

```
systemctl enable Cortona3DIs.service
```

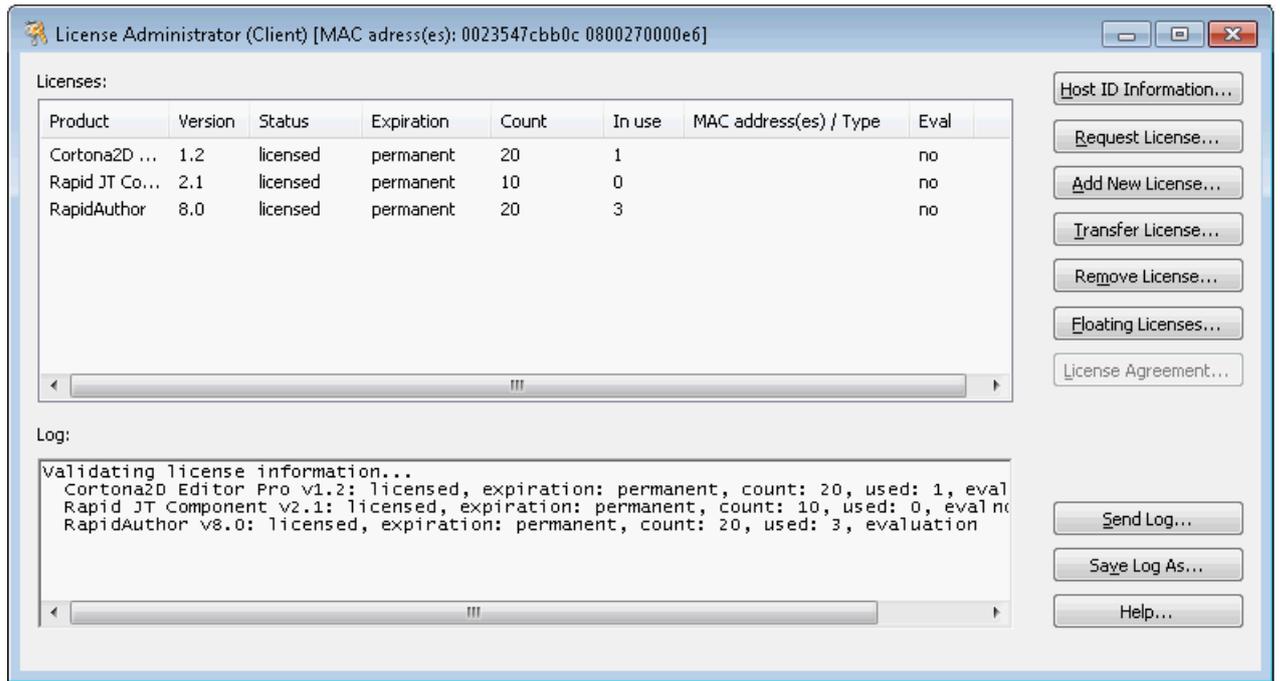
Copying Licenses from Primary Server to Failover Server

1. Copy all files with licenses from the primary server to the failover server:
 - If the main server is running on Linux, copy the files from the `/etc/Cortona3DIs` directory of the primary server to the corresponding directory of the failover server.
 - If the primary server is running on Windows, export the licenses from the main server (see "[Copying Licenses from Primary Server to Failover Server](#)"), and then copy the license files to the `/etc/Cortona3DIs` directory of the failover server.
2. Restart the license server on the failover server.
Enter from the command line as root user:

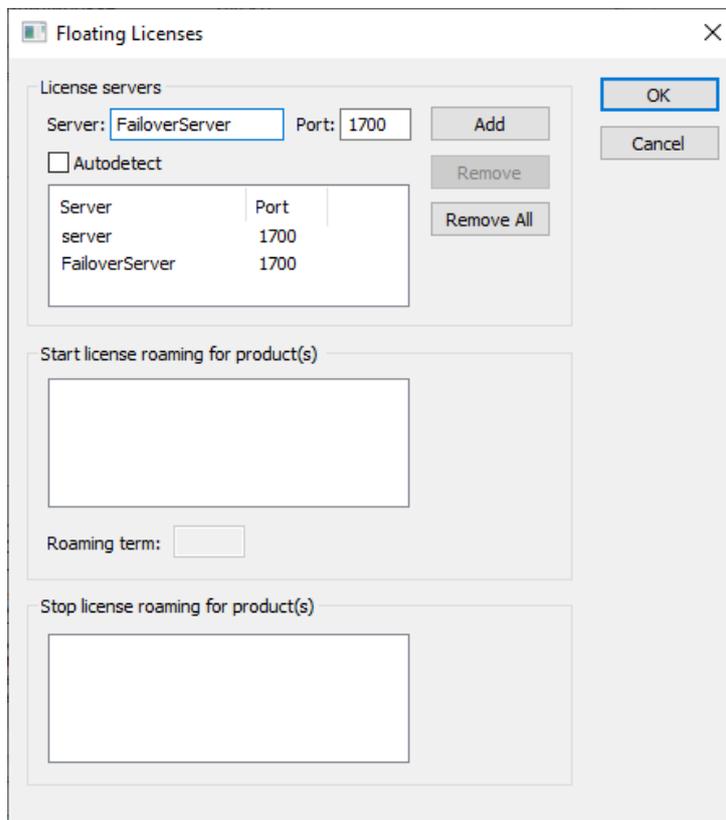
```
systemctl restart Cortona3DIs.service
```

Adding Failover Server to Server List on Client Computer

1. Launch License Administrator (Client) on a client computer.



2. Click **Floating Licenses**. The Floating Licenses dialog box appears.
3. In the corresponding boxes, specify the failover server name, port, and then click **Add**.
The server is added to the list.
4. Click **OK**.



Removing License

1. Stop the license server.
Enter from the command line as root user:

```
systemctl stop Cortona3DIs.service
```

2. Remove the file that contains the license from the directory */etc/Cortona3DIs*.
3. Start the license server if it contains valid licenses.
Enter from the command line as root user:

```
systemctl start Cortona3DIs.service
```

Chapter 7. Appendix

Updating Primary and Failover Servers

This section details the update procedure of the primary and failover servers used for floating licensing. If both primary and failover server are used in the system, the interruption in delivering the licenses to the clients does not exceed one minute.

 Update the Cortona3D products only after updating the primary and failover servers.

Procedure

To update the primary and failover servers on Windows:

1. Make sure that the failover server contains all the licenses from the primary server (for more details see the topic [Failover Server for Windows Operating System](#), section Copying Licenses from Primary to Failover Server).
2. Make sure that both servers are indicated in License Administrator on the client computers.
3. Update the failover server by running the received setup file: LicenseServer.exe. The setup process does not require stopping the service.
4. Update the primary server by running the received setup file: LicenseServer.exe. The setup process does not require stopping the service.
5. Get the new product licenses on the new primary server.
6. Copy the product licenses from the primary to failover server (for more details see the topic [Failover Server for Windows Operating System](#), section Copying Licenses from Primary to Failover Server).

To update the primary and failover servers on Linux:

1. Make sure that the failover server contains all the licenses from the primary server (for more details see the topic [Failover Server for Linux Operating System](#), section Copying Licenses from Primary to Failover Server).
2. Make sure that both servers are indicated in License Administrator on the client computers.
3. Update the failover server by running the received script *install.sh*.
4. Update the primary server by running the received script *install.sh*
5. Get the new product licenses on the new primary server.
6. Copy the product licenses from the primary to failover server (for more details see the topic [Failover Server for Linux Operating System](#), section Copying Licenses from Primary to Failover Server).

TCP and UDP Ports Usage and Configuration

By default, the license server uses four ports:

Discovery Server port – 5053/udp

License server port – 1700/tcp

ISV server port – selected from the range of ephemeral ports

If you choose to assign ISV server port static, you should change the line "ISV pgraphics" to "ISV pgraphics port=xxxxx" in each file of the floating licenses, where xxxxx is the TCP port number (make sure you specify a free port number). If you have a few license files, the same port number should be specified.

Sample (a modified fragment from the floating license file)

```
HOST srv001 001122334455 1700
ISV pgraphics port=12345
LICENSE pgraphics rapidauthor 5.0 29-apr-2014 1 issuer=Cortona3D
  contract=xxxx-xxxx-xxxx-xxxx issued=27-jan-2010 replace
  _line_item=RapidAuthor _ck=c6d65e2b61 sig="60P04503398AM16N2EK6HC9P6
  QT9G5PJHJ7Y1E822G0PPK480QB9C23Y24BD17Y4ERVUVHD2R4"
```

Licensing Requirements

Activating Licenses via Internet

An automatic activation is available in the following cases:

- Computers have a direct connection to the Internet.
- Computers have a connection to the Internet via a proxy server that supports the basic access authorization, or does not require authorization.

Proxy Server Requirements

- Use the proxy servers that support the basic access authorization, or do not require authorization.
- The name of the proxy server should be specified in accordance with the recording on the DNS server. Otherwise, use the IP address of the proxy server.

Restrictions

- The node-locked licenses cannot be used to run the software on a remote computer via Windows Terminal Servers. The floating licenses should be used instead.