

Altova LicenseServer

User and Reference Manual

Altova LicenseServer User & Reference Manual

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Table of Contents

1	Altova LicenseServer	2
1.1Network Information	4
1.2Installation (Windows)	5
1.3	.....Installation (Linux)	7
1.4	.....Installation (macOS)	10
1.5	.....Altova ServiceController	11
1.6	.....How to Assign Licenses	12
1.6.1	.....Start LicenseServer	13
1.6.2	.....Open LicenseServer's Config Page (Windows)	15
1.6.3	.....Open LicenseServer's Config Page (Linux)	18
1.6.4	.....Open LicenseServer's Config Page (Mac OS X)	21
1.6.5	.....Upload Licenses to LicenseServer	24
1.6.6	.....Register Product/s	27
	<i>Register Altova Desktop Products</i>	27
	<i>Register FlowForce Server</i>	28
	<i>Register MapForce Server</i>	32
	<i>Register MobileTogether Server</i>	34
	<i>Register RaptorXML(+XBRL) Server</i>	35
	<i>Register StyleVision Server</i>	36
1.6.7	.....Assign Licenses to Registered Products	39
1.7	.....Configuration Page Reference	45
1.7.1	.....License Pool	46
1.7.2	.....Client Management	53
1.7.3	.....Client Monitoring	58
1.7.4	.....Settings	59
1.7.5	.....Messages, Log Out	66
1.8	.....Password Reset	67

Index

Chapter 1

Altova LicenseServer

1 Altova LicenseServer

Altova LicenseServer (hereafter also called **LicenseServer** for short) provides a central location for the management of licenses for Altova products. Altova applications running in a network can have licenses assigned to them from the LicenseServer, thus giving administrators the flexibility to manage and monitor licenses.

Current version: 2.3

Licensing process with Altova LicenseServer

To assign a license to an Altova product via Altova LicenseServer, you need to do the following:

1. [Start LicenseServer](#)
2. Open the [LicenseServer Configuration page](#), which is the Web UI of LicenseServer, on [Windows](#), [Linux](#), or [macOS](#).
3. [Upload the Altova product license/s](#) you have received from Altova to the license pool of LicenseServer. Do this in the [License Pool](#) tab of the Configuration page.
4. [Register the Altova product/s](#) with LicenseServer.
5. In the [Client Management](#) tab of the Configuration page, [assign licenses](#) to the Altova product/s.

Licenses can thereafter be conveniently monitored and managed centrally with LicenseServer. See the [Configuration Page Reference](#) for available functionality.

Note: The [LicenseServer Configuration page](#) does not support SSL.

▼ LicenseServer versions and their compatibility with Altova products

New versions of Altova products can only be licensed with the version of LicenseServer that is the latest at the time of the Altova product's release. However, older versions of Altova products will work with newer versions of LicenseServer.

So, if you are installing a new version of an Altova product and if your current LicenseServer version is not the latest, de-install this older LicenseServer version and install the latest version that is available on the Altova website. All registration and licensing information held in your older version of LicenseServer will be saved at the time of de-installation to a database on your machine, and will be imported automatically into the newer version of LicenseServer. When you install a newer version of LicenseServer, the older version will be de-installed before the newer version is installed.

The version number of the currently installed LicenseServer is given at the bottom of the [LicenseServer configuration page](#) (all tabs).

Current version: 2.3

About this documentation

This documentation is organized into the following parts:

- Introductory information about: [network requirements](#); installation on [Windows](#), [Linux](#), and [macOS](#); and [Altova ServiceController](#).
- [How to Assign Licenses](#), which describes in a step-by-step way how to assign licenses with Altova LicenseServer.
- [Configuration Page Reference](#): A description of the administrator's interface with LicenseServer.

Last updated: 04 May 2017

1.1 Network Information

Altova LicenseServer must be installed on a server machine that is accessible by all clients running Altova products that require a license. Any firewall on both the client and server must allow the flow of network traffic to and from the LicenseServer that is necessary for the LicenseServer to operate correctly.

On the LicenseServer machine, **port 35355** is used to distribute licenses, and therefore it must be open for network traffic with client machines.

The following are the default networking parameters and requirements of LicenseServer:

- *For LicenseServer license distribution:*
 - Either one or both of
 - IPv4 TCP connection on port 35355
 - IPv6 TCP connection on port 35355

For administrative tasks, the LicenseServer is accessed by a web interface that uses port 8088. The port used can be [configured to suit your requirements](#).

Connection to the Master Licensing Server at altova.com

Altova LicenseServer needs to be able to communicate with the Master Licensing Server at `altova.com` to validate and authenticate license-related data and to ensure continuous compliance with the Altova license agreements. This communication occurs over HTTPS using port 443. If Altova LicenseServer, after making the initial verification with the `altova.com` Master Licensing Server, is unable to again connect with `altova.com` for a duration of more than 5 days (= 120 hours), then Altova LicenseServer will no longer permit the usage of any Altova software products connected to that Altova LicenseServer.

Any such loss of connection with the `altova.com` master servers will be logged in the [Messages tab](#) of the [Configuration page of Altova LicenseServer](#). In addition, the administrator can configure the Altova LicenseServer to automatically send an alert email when the connection to `altova.com` is lost. Alert Mail settings are available in the [Settings tab](#) of the [Configuration page](#).

1.2 Installation (Windows)

Altova LicenseServer can be installed on Windows systems in one of two ways:

- As an independent installation.
- As part of an Altova server product installation. (Altova server products are: Altova FlowForce Server, Altova MapForce Server, Altova StyleVision Server, Altova RaptorXML(+XBRL), and Altova MobileTogether Server.) If LicenseServer is not installed on your system at the time an Altova server product is installed, the option to install LicenseServer is selected by default during installation setup. If LicenseServer is already installed, the option to install it is deselected by default. You can change the default option if you like.

For information about assigning licenses via LicenseServer, see the section [How to Assign Licenses](#).

System requirements

▼ Windows

Windows Vista, Windows 7/8/10

▼ Windows Server

Windows Server 2008 R2 or newer

▼ LicenseServer versions and their compatibility with Altova products

New versions of Altova products can only be licensed with the version of LicenseServer that is the latest at the time of the Altova product's release. However, older versions of Altova products will work with newer versions of LicenseServer.

So, if you are installing a new version of an Altova product and if your current LicenseServer version is not the latest, de-install this older LicenseServer version and install the latest version that is available on the Altova website. All registration and licensing information held in your older version of LicenseServer will be saved at the time of de-installation to a database on your machine, and will be imported automatically into the newer version of LicenseServer. When you install a newer version of LicenseServer, the older version will be de-installed before the newer version is installed.

The version number of the currently installed LicenseServer is given at the bottom of the [LicenseServer configuration page](#) (all tabs).

Current version: 2.3

The version number of the LicenseServer that is appropriate for any particular version of a server product is displayed during the installation of that version of the server product. You can choose to install this version of LicenseServer along with the server product, or you can install the newer

version of LicenseServer separately. In both cases, the installer will automatically de-install the previous version and install the new version.

1.3 Installation (Linux)

Altova LicenseServer can be installed on Linux systems (Debian, Ubuntu, CentOS, RedHat).

System requirements

▼ Linux

- CentOS 6 or newer
- RedHat 6 or newer
- Debian 7 or newer
- Ubuntu 12.04 or newer

The following libraries are required as a prerequisite to install and run the application. If the packages below are not already available on your Linux machine, run the command `yum` (or `apt-get` if applicable) to install them.

Required by	CentOS, RedHat	Debian	Ubuntu
LicenseServer	krb5-libs	libgssapi-krb5-2	libgssapi-krb5-2

Uninstalling old versions of LicenseServer

On the Linux command line interface (CLI), you can check whether LicenseServer is installed with the following command:

```
[Debian, Ubuntu]:  dpkg --list | grep Altova
[CentOS, RedHat]:  rpm -qa | grep server
```

If LicenseServer is not installed, go ahead with the installation as documented in the next steps. If LicenseServer is installed and you wish to install a newer version of it, uninstall the old version with the command:

```
[Debian, Ubuntu]:  sudo dpkg --remove licenseserver
[CentOS, RedHat]:  sudo rpm -e licenseserver
```

Installing Altova LicenseServer

On Linux systems, LicenseServer must be installed independently of other Altova server products. It is not included as part of the installation packages of Altova server products. Download Altova LicenseServer from the [Altova website](#) and copy the package to any directory on the Linux system.

Distribution	Installer extension
--------------	---------------------

Debian	.deb
Ubuntu	.deb
CentOS	.rpm
RedHat	.rpm

In a terminal window, switch to the directory where you have copied the Linux package. For example, if you copied it to a user directory called `MyAltova` (that is located, say, in the `/home/User` directory), then switch to this directory as follows:

```
cd /home/User/MyAltova
```

Install LicenseServer with the following command:

```
[Debian]: sudo dpkg --install licenseserver-2.3-debian.deb
[Ubuntu]: sudo dpkg --install licenseserver-2.3-ubuntu.deb
[CentOS]: sudo rpm -ivh licenseserver-2.3-1.x86_64.rpm
[RedHat]: sudo rpm -ivh licenseserver-2.3-1.x86_64.rpm
```

The LicenseServer package will be installed in:

```
/opt/Altova/LicenseServer
```

A user named `altovalicenseserver` will be created. **LicenseServer must be accessed as this user.** This can be done, for example on CentOS 7, in the following way:

```
sudo runuser -l altovalicenseserver -c '/opt/Altova/LicenseServerOffline/bin/licenseserveroffline debug'
```

For information about how to proceed with assigning licenses, see the section [How to Assign Licenses](#).

▼ LicenseServer versions and their compatibility with Altova products

New versions of Altova products can only be licensed with the version of LicenseServer that is the latest at the time of the Altova product's release. However, older versions of Altova products will work with newer versions of LicenseServer.

So, if you are installing a new version of an Altova product and if your current LicenseServer version is not the latest, de-install this older LicenseServer version and install the latest version that is available on the Altova website. All registration and licensing information held in your older version of LicenseServer will be saved at the time of de-installation to a database on your machine, and will be imported automatically into the newer version of LicenseServer. When you install a newer version of LicenseServer, the older version will be de-installed before the newer version is installed.

The version number of the currently installed LicenseServer is given at the bottom of the [LicenseServer configuration page](#) (all tabs).

Current version: 2.3

1.4 Installation (macOS)

Altova LicenseServer can be installed on (Mac) OS X, macOS systems (version 10.8 or higher). Since you might need to uninstall a previous version, uninstalling is described first.

System requirements

▼ *(Mac) OS X, macOS*

OS X 10.10, 10.11, macOS 10.12 or newer

Uninstalling old versions of LicenseServer

Before uninstalling LicenseServer, stop the service with the following command:

```
sudo launchctl unload /Library/LaunchDaemons/com.altova.LicenseServer.plist
```

To check whether the service has been stopped, open the Activity Monitor terminal and make sure that LicenseServer is not in the list.

In **Applications**, right-click the LicenseServer icon and select **Move to Trash**. The application will be moved to Trash. You will, however, still need to remove the application from the `usr` folder. Do this with the command:

```
sudo rm -rf /usr/local/Altova/LicenseServer
```

Installing Altova LicenseServer

Open the download page <http://www.altova.com/download.html> and locate the Altova LicenseServer installer under "Server Software Products" for Mac. After downloading the disk image (`.dmg`) file, click to open it. This mounts a new virtual drive on your computer. On the virtual drive, double-click the package (`.pkg`) file, and follow the on-screen instructions. You will need to accept the license agreement for installation to proceed.

The LicenseServer package will be installed in the folder:

```
/usr/local/Altova/LicenseServer
```

A user named `altovalicenserver` will be created. **LicenseServer must be accessed as this user.**

To eject the virtual drive after installation, right-click it, and select **Eject**.

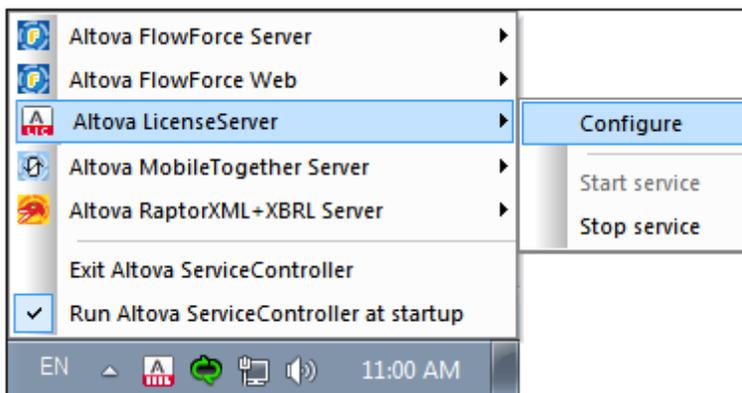
1.5 Altova ServiceController

Altova ServiceController (ServiceController for short) is an application for conveniently starting, stopping and configuring Altova services **on Windows systems**.

ServiceController is installed with Altova LicenseServer and with *Altova server products that are installed as services* (FlowForce Server, RaptorXML(+XBRL) Server, and Mobile Together Server). It can be started by clicking **Start | Altova LicenseServer | Altova ServiceController**. (This command is also available in the **Start** menu folders of *Altova server products that are installed as services* (FlowForce Server, RaptorXML(+XBRL) Server, and Mobile Together Server).) After ServiceController has been started, it can be accessed via the system tray (*screenshot below*).



To specify that ServiceController starts automatically on logging in to the system, click the **ServiceController** icon in the system tray to display the **ServiceController** menu (*screenshot below*), and then toggle on the command **Run Altova ServiceController at Startup**. (This command is toggled on by default.) To exit ServiceController, click the **ServiceController** icon in the system tray and, in the menu that appears (*see screenshot below*), click **Exit Altova ServiceController**.



Starting and stopping Altova services

Each installed Altova service component will have an entry in the ServiceController menu (see *screenshot above*). An Altova service can be started or stopped via a command in its ServiceController sub-menu. Additionally, important administration tasks of individual services can be accessed via the ServiceController menu. In the screenshot above, for example, Altova LicenseServer service has a sub-menu in which you can choose to access LicenseServer's Configuration page via the **Configure** command.

1.6 How to Assign Licenses

To assign a license to an Altova product via Altova LicenseServer, do the following:

1. [Start LicenseServer](#)
2. Open the [LicenseServer Configuration page](#), which is the administrator's interface with LicenseServer, on [Windows](#), [Linux](#), or [macOS](#).
3. [Upload the license/s](#) you have received from Altova to the license pool of your Altova LicenseServer. Do this in the [License Pool](#) tab of the LicenseServer Configuration page.
4. [Register the Altova product](#) with LicenseServer. Depending on the product's type, the method of registering it with LicenseServer will be different: respectively, via the product's Software Activation dialog, Web UI, or command line. See the documentation of your Altova product for additional information.
5. In the [Client Management](#) tab of the [LicenseServer Configuration page](#), [assign a license](#) to the Altova product.

Note on cores and licenses

The licensing of Altova server products is based on the number of processor cores available on the product machine. For example, a dual-core processor has two cores, a quad-core processor four cores, a hexa-core processor six cores, and so on. The number of cores licensed for a product must be greater than or equal to the number of cores available on that server machine, whether the server is a physical or virtual machine. For example, if a server has eight cores (an octa-core processor), you must purchase at least one 8-core license. You can also combine licenses to achieve the core count. So, two 4-core licenses can also be used for an octa-core server instead of one 8-core license.

If you are using a computer server with a large number of CPU cores but only have a low volume to process, you may also create a virtual machine that is allocated a smaller number of cores, and purchase a license for that number. Such a deployment, of course, will have less processing speed than if all available cores on the server were utilized.

Note: Each Altova server product license can be used for only one client machine—the machine on which the Altova server product is installed—at a time, even if the license has unused licensing capacity. For example, if a 10-core license is used for a client machine that has 6 CPU cores, then the remaining 4 cores of licensing capacity cannot be used simultaneously for another client machine.

MobileTogether Server licenses

MobileTogether Server licenses are based on the number of CPU cores on the MobileTogether Server machine. Core licenses allow an unlimited number of MobileTogether Client devices to connect to the server. However, if you check the *Limit to single thread execution* check box, then only one mobile device will be able to connect to the MobileTogether Server at any time. This is useful for evaluation and small-scale testing. Note that, if, in this case, a second device connects to MobileTogether Sever, then it will take over the license. The first device will not be able to connect any more and will receive an error message to this effect.

1.6.1 Start LicenseServer

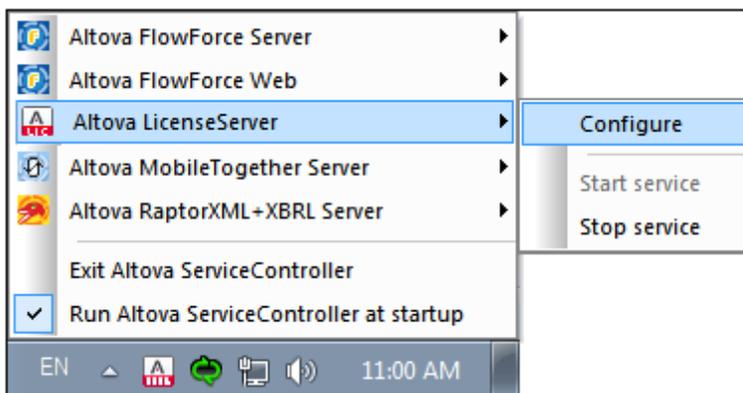
This section:

- How to start LicenseServer on [Windows systems](#)
- How to start LicenseServer on [Linux systems](#)
- How to start LicenseServer on [macOS systems](#)
- Note about [Connection to altova.com](#)

Windows systems

You can start LicenseServer via the Altova ServiceController, which is available in the system tray.

First, click **Start | All Programs | Altova LicenseServer | Altova ServiceController** to start Altova ServiceController and display its icon in the system tray (see screenshot below). If you select the *Run Altova ServiceController at Startup* option, Altova ServiceController will start up on system start and its icon will be available in the system tray from then onwards.



To start LicenseServer, click the Altova ServiceController icon in the system tray, hover over **Altova LicenseServer** in the menu that pops up (see screenshot below), and then select **Start Service** from the LicenseServer submenu. If LicenseServer is already running, the *Start Service* option will be disabled.

Linux systems

To start LicenseServer as a service on Linux systems, run the following command in a terminal window.

```
[Debian 7]:      sudo /etc/init.d/licenseserver start
[Debian 8]:      sudo systemctl start licenseserver
[Ubuntu <=14]:  sudo initctl start licenseserver
[Ubuntu 15]:    sudo systemctl start licenseserver
[CentOS 6]:     sudo initctl start licenseserver
[CentOS 7]:     sudo systemctl start licenseserver
[RedHat]:       sudo initctl start licenseserver
```

(If you need to stop LicenseServer, replace `start` with `stop` in the above command.)

macOS systems

To start LicenseServer as a service on macOS systems, run the following command in a terminal window:

```
sudo launchctl load /Library/LaunchDaemons/com.altova.LicenseServer.plist
```

If at any time you need to stop LicenseServer, use:

```
sudo launchctl unload /Library/LaunchDaemons/com.altova.LicenseServer.plist
```

Connection to the Master Licensing Server at altova.com

Altova LicenseServer needs to be able to communicate with the Master Licensing Server at altova.com to validate and authenticate license-related data and to ensure continuous compliance with the Altova license agreements. This communication occurs over HTTPS using port 443. If Altova LicenseServer, after making the initial verification with the altova.com Master Licensing Server, is unable to again connect with altova.com for a duration of more than 5 days (= 120 hours), then Altova LicenseServer will no longer permit the usage of any Altova software products connected to that Altova LicenseServer.

Any such loss of connection with the altova.com master servers will be logged in the [Messages tab](#) of the [Configuration page of Altova LicenseServer](#). In addition, the administrator can configure the Altova LicenseServer to automatically send an alert email when the connection to altova.com is lost. Alert Mail settings are available in the [Settings tab](#) of the [Configuration page](#).

1.6.2 Open LicenseServer's Config Page (Windows)

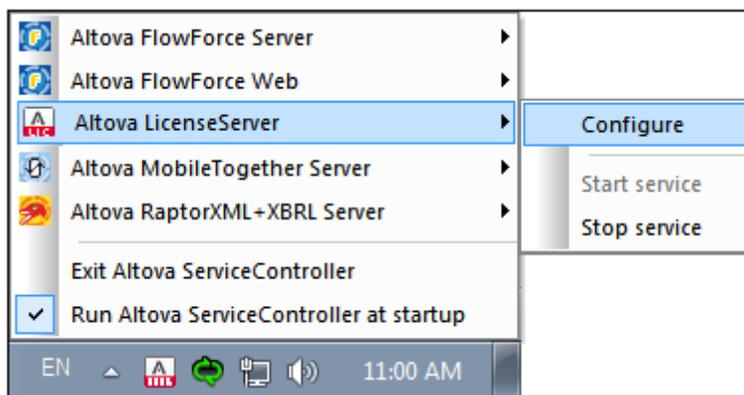
This section:

- [Opening the Configuration page if LicenseServer is on the same machine](#)
- [Opening the Configuration page if LicenseServer is on another machine](#)
- [Logging in with the initial password](#)
- [Setting a fixed port for the Configuration page](#)

Opening the Configuration page if LicenseServer is on the same machine

On Windows systems, if LicenseServer is on the same machine, you can open the [Configuration page](#) of LicenseServer in one of two ways:

- Click **Start | All Programs | Altova LicenseServer | LicenseServer Configuration Page**. The Configuration page opens in a new tab of your Internet browser.
- Click the Altova ServiceController icon in the system tray, mouse over **Altova LicenseServer** in the menu that pops up (*see screenshot below*), and then select **Configure** from the LicenseServer submenu.



The [Configuration page](#) opens in a new browser window, and its login mask is displayed (*screenshot below*).

Opening the Configuration page if LicenseServer is on another machine

To open the LicenseServer [Configuration page](#) from some other Windows machine on the local network (than that on which LicenseServer is installed), enter the URL of the LicenseServer [Configuration page](#) in the address bar of a browser and press **Enter**. By default, the URL of the Configuration page will be:

```
http://<serverIPAddressOrName>:8088/
```

The URL is present in the HTML code of the Configuration page itself, which is named `WebUI.html` and is located at:

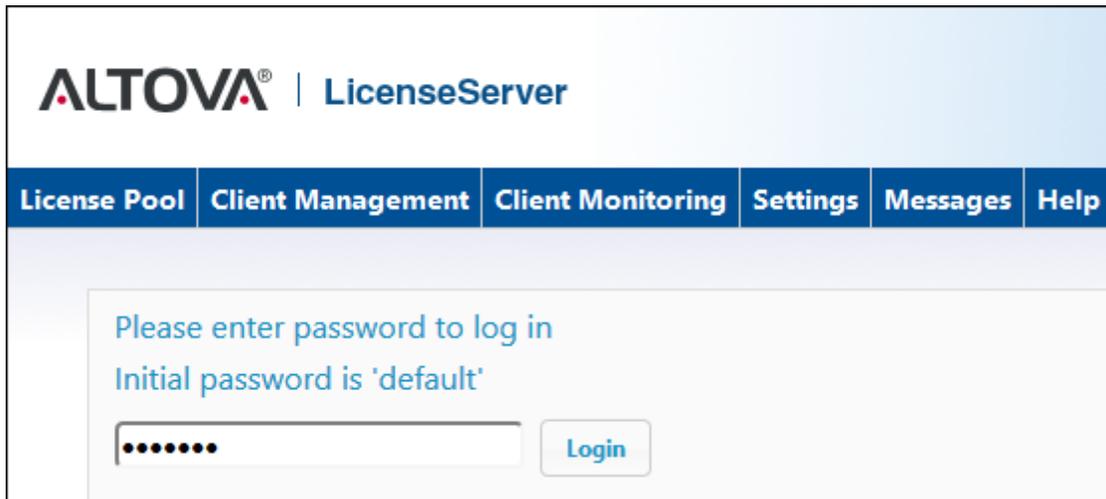
```
C:/ProgramData/Altova/LicenseServer/WebUI.html
```

If you have [set the URL of the Configuration page](#) to be generated dynamically (in the Settings tab of the Configuration page), then a new URL is generated each time LicenseServer is started. You will need to check the current version of `webUI.html` to find out the current URL of the [Configuration page](#).

The dynamically generated URL in `webUI.html` will have a form something like:
`http://127.0.0.1:55541/optionally-an-additional-string`, and it is located in the function `checkIfServiceRunning()` in a script near the end of the `<head>` element. While the port number in the URL is dynamically assigned, the IP address part identifies the server on which LicenseServer has been installed. If you wish to access the LicenseServer [Configuration page](#) from another machine, make sure that the IP address part of the URL has the correct IP address or name of the server on which LicenseServer has been installed. For example, the URL could be something like: `http://SomeServer:55541`.

Logging in with the initial password

After going through the steps above, the [Configuration page](#) is opened with the login mask displayed (*screenshot below*). You can log in with the initial password of `default`. After you have logged in, you can change your password in the [Settings](#) tab.



Setting a fixed or dynamic port for the Configuration page

The port of the Configuration page (Web UI)—and consequently its address—can be specified in the [Settings page](#). By default the port is 8088. You can set any other port you want for the LicenseServer [Configuration page](#) (see *screenshot below*). Alternatively, you allow the port to be selected dynamically each time LicenseServer starts up. In this case, you will need to find out the URL of the Configuration page from the file `webUI.html` (see [Open LicenseServer Config Page \(Windows\)](#), [Open LicenseServer Config Page \(Linux\)](#), and [Open LicenseServer's Config Page \(macOS\)](#)).

Web UI

Changing these settings will cause the LicenseServer to restart and any currently running and licensed applications will be shut down!

Configure the host addresses where the web UI is available to administrators.

All interfaces and assigned IP addresses

Only the following hostname or IP address:

Ensure this hostname or IP address exists or LicenseServer will fail to start!

Configure the port used for the web UI.

Dynamically chosen by the operating system

Fixed port

Ensure this port is available or LicenseServer will fail to start!

The advantage of a fixed port is that the page URL is known in advance and therefore can be accessed easily. If the port is assigned dynamically, the port part of the URL will have to be looked up in the file `webUI.html` each time LicenseServer is started.

1.6.3 Open LicenseServer's Config Page (Linux)

This section:

- [Opening the Configuration page for the first time with the returned URL](#)
- [URL of the LicenseServer Configuration page](#)
- [Logging in with the initial password](#)
- [Setting a fixed port for the Configuration page](#)

Opening the Configuration page for the first time with the returned URL

On Linux systems, when you register your Altova server product with LicenseServer via the CLI, the URL of the LicenseServer Configuration page is returned. On opening this URL in a browser, you are prompted to read and accept the license agreement. After accepting the license agreement, the Configuration page's login mask is displayed (*screenshot below*).

Note: Altova desktop products are available for Windows only.

URL of the LicenseServer Configuration page

To open the LicenseServer [Configuration page](#) at any time, enter its URL in the address bar of a browser and press **Enter**. By default, the URL of the Configuration page will be:

```
http://<serverIPAddressOrName>:8088/
```

The URL is present in the HTML code of the Configuration page itself, which is named `webUI.html` and is located at:

```
/var/opt/Altova/LicenseServer/webUI.html
```

If you have [set the URL of the Configuration page](#) to be generated dynamically (in the Settings tab of the Configuration page), then a new URL is generated each time LicenseServer is started. You will need to check the current version of `webUI.html` to find out the current URL of the [Configuration page](#).

The dynamically generated URL in `webUI.html` will have a form something like:

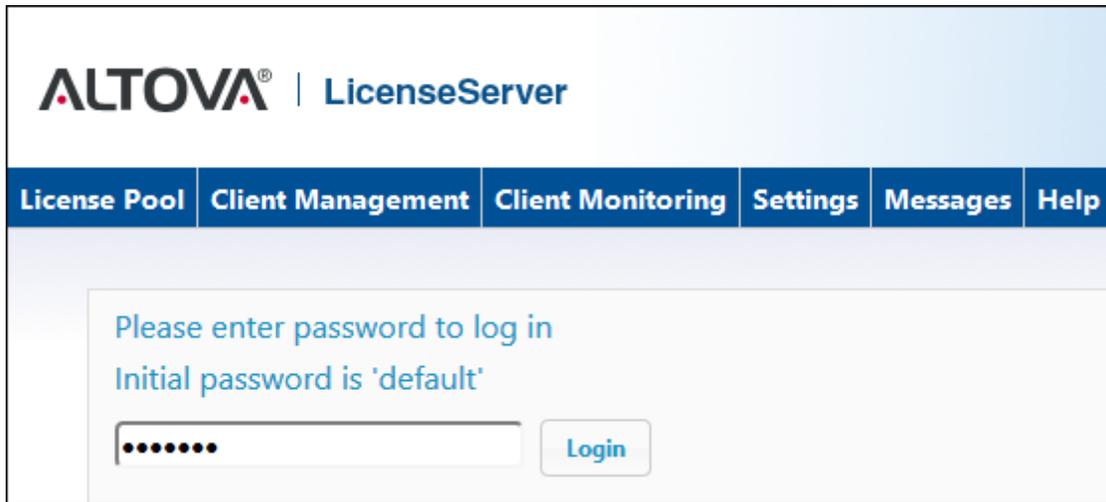
```
http://127.0.0.1:55541
```

and it is located in the function `checkIfServiceRunning()` in a script near the end of the `<head>` element. While the port number in the URL is dynamically assigned, the IP address part identifies the server on which LicenseServer has been installed. If you wish to access the LicenseServer [Configuration page](#) from another machine, make sure that the IP address part of the URL has the correct IP address or name of the server on which LicenseServer has been installed. For example, the URL could be something like: `http://MyServer:55541`.

Logging in with the initial password

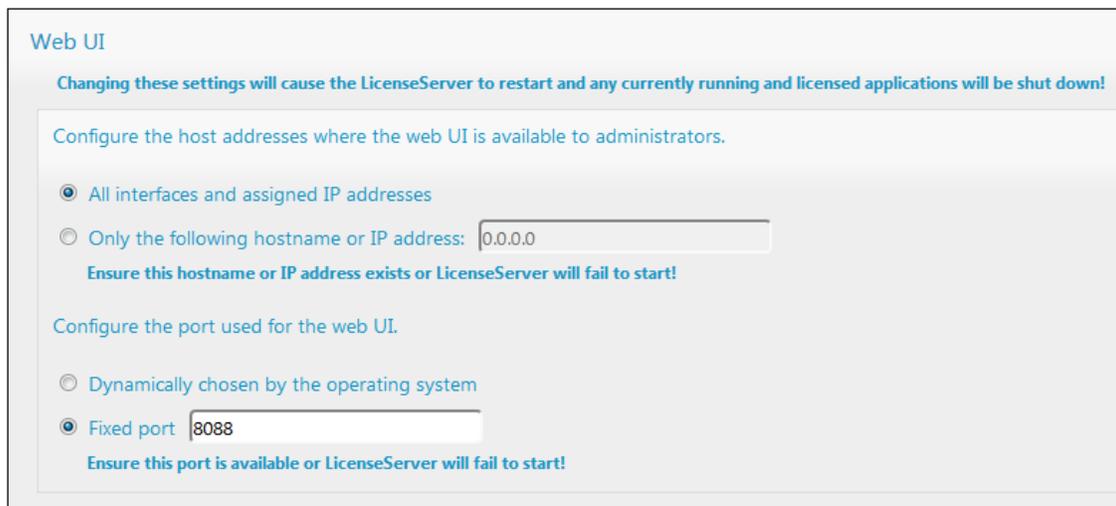
After going through the steps above, the [Configuration page](#) is opened with the login mask

displayed (*screenshot below*). You can log in with the initial password of `default`. After you have logged in, you can change your password in the [Settings](#) tab.



Setting a fixed or dynamic port for the Configuration page

The port of the Configuration page (Web UI)—and consequently its address—can be specified in the [Settings page](#). By default the port is 8088. You can set any other port you want for the LicenseServer [Configuration page](#) (see *screenshot below*). Alternatively, you allow the port to be selected dynamically each time LicenseServer starts up. In this case, you will need to find out the URL of the Configuration page from the file `WebUI.html` (see [Open LicenseServer Config Page \(Windows\)](#), [Open LicenseServer Config Page \(Linux\)](#), and [Open LicenseServer's Config Page \(macOS\)](#)).



The advantage of a fixed port is that the page URL is known in advance and therefore can be accessed easily. If the port is assigned dynamically, the port part of the URL will have to be looked up in the file `WebUI.html` each time LicenseServer is started.

1.6.4 Open LicenseServer's Config Page (Mac OS X)

This section:

- [Opening the Configuration page for the first time with the returned URL](#)
 - [URL of the LicenseServer Configuration page](#)
 - [Logging in with the initial password](#)
 - [Setting a fixed port for the Configuration page](#)
-

Opening the Configuration page for the first time with the returned URL

On macOS systems, when you register your Altova server product with LicenseServer via the CLI, the URL of the LicenseServer Configuration page is returned. On opening this URL in a browser, you are prompted to read and accept the license agreement. After accepting the license agreement, the Configuration page's login mask is displayed (*screenshot below*).

Note: Altova desktop products are available for Windows only.

URL of the LicenseServer Configuration page

To open the LicenseServer [Configuration page](#) at any time, enter its URL in the address bar of a browser and press **Enter**. By default, the URL of the Configuration page will be:

```
http://<serverIPAddressOrName>:8088/
```

The URL is present in the HTML code of the Configuration page itself, which is named `webUI.html` and is located at:

```
/var/Altova/LicenseServer/webUI.html
```

If you have [set the URL of the Configuration page](#) to be generated dynamically (in the Settings tab of the Configuration page), then a new URL is generated each time LicenseServer is started. You will need to check the current version of `webUI.html` to find out the current URL of the [Configuration page](#).

The dynamically generated URL in `webUI.html` will have a form something like:

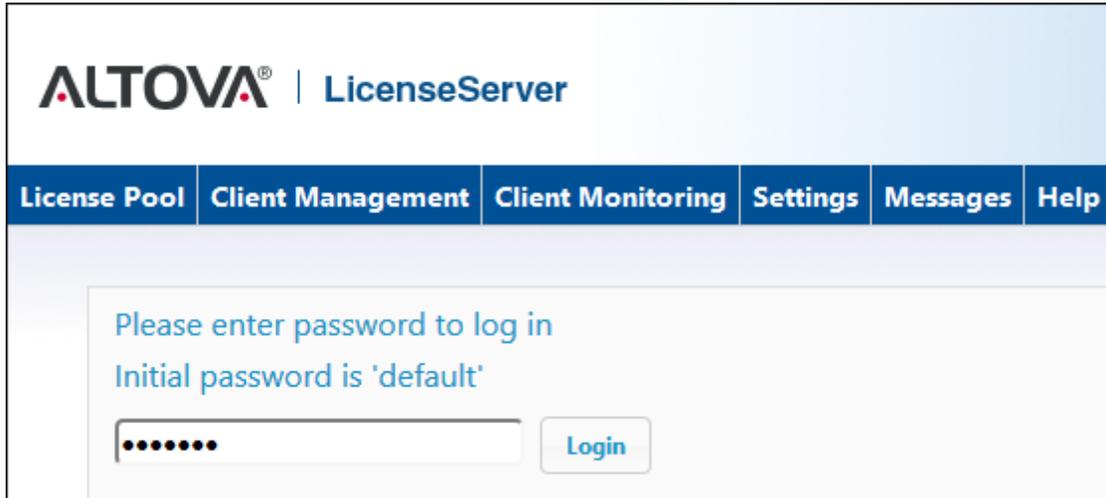
```
http://127.0.0.1:55541
```

and it is located in the function `checkIfServiceRunning()` in a script near the end of the `<head>` element. While the port number in the URL is dynamically assigned, the IP address part identifies the server on which LicenseServer has been installed. If you wish to access the LicenseServer [Configuration page](#) from another machine, make sure that the IP address part of the URL has the correct IP address or name of the server on which LicenseServer has been installed. For example, the URL could be something like: `http://MyServer:55541`.

Note: The [Configuration page](#) can also be accessed directly via the **Finder | Applications | Altova License Server** icon.

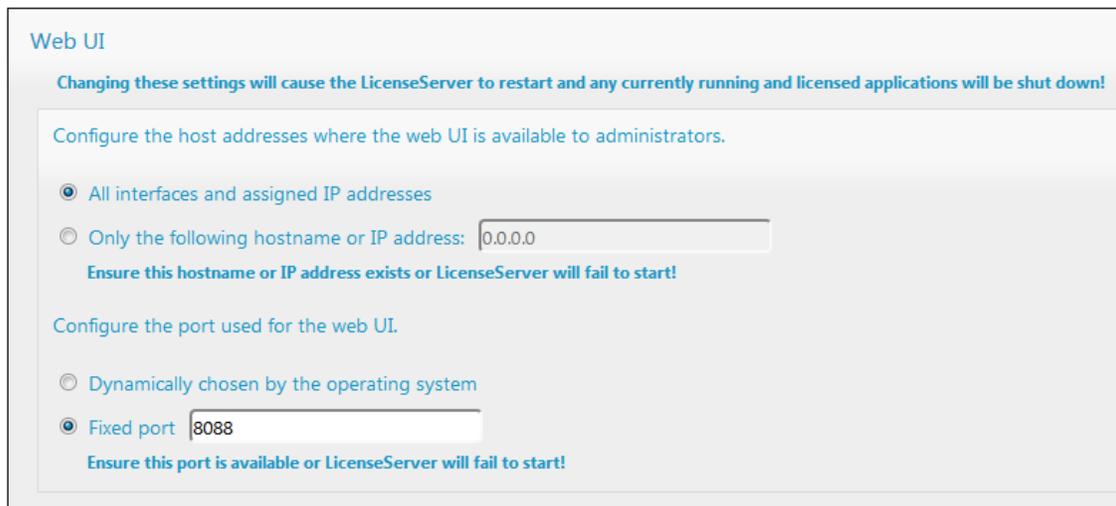
Logging in with the initial password

After going through the steps above, the [Configuration page](#) is opened with the login mask displayed (*screenshot below*). You can log in with the initial password of `default`. After you have logged in, you can change your password in the [Settings](#) tab.



Setting a fixed or dynamic port for the Configuration page

The port of the Configuration page (Web UI)—and consequently its address—can be specified in the [Settings page](#). By default the port is 8088. You can set any other port you want for the LicenseServer [Configuration page](#) (*see screenshot below*). Alternatively, you allow the port to be selected dynamically each time LicenseServer starts up. In this case, you will need to find out the URL of the Configuration page from the file `WebUI.html` (see [Open LicenseServer Config Page \(Windows\)](#), [Open LicenseServer Config Page \(Linux\)](#), and [Open LicenseServer's Config Page \(macOS\)](#)).



The advantage of a fixed port is that the page URL is known in advance and therefore can be

accessed easily. If the port is assigned dynamically, the port part of the URL will have to be looked up in the file `webUI.html` each time LicenseServer is started.

1.6.5 Upload Licenses to LicenseServer

This section:

- [Uploading a license file to the license pool of LicenseServer](#)
- [License status](#)
- [Activating the licenses you wish to use](#)
- [Next steps](#)

Uploading a license file to the license pool of LicenseServer

After you have obtained a license file from Altova, you must upload it to the Altova LicenseServer. Each license file can contain one or more licenses and depends on your purchase. When you upload a license file, all the licenses in it will be uploaded to the license pool of LicenseServer and can be assigned to an Altova product that has been registered with that LicenseServer. All the uploaded licenses, from one or more license files and for all Altova products, are collected in a license pool on the LicenseServer. The license pool is displayed in the License Pool tab of the LicenseServer Configuration page (*screenshot below*).

Status	Name	Company	Product	Edition	Version	Key Code	Bundle ID	Start Date	End Date	Expires in days	SMP days left	#	License Type	Clients
<input type="checkbox"/>	Active	Altova Gmb	DatabaseS	Enterprise Editi	2015 rel. 4	GWS36BI-	{D5FC74C	2015-06	-	-	355	50	Installed Us	0/50 users
<input type="checkbox"/>	Active	Altova Document	FlowForce Ser		2015 rel. 4	9FJUP0P-	-	2015-05	-	-	328	8	CPU Cores	
<input type="checkbox"/>	Active	Altova Gmb	MapForce	Enterprise Editi	2015 rel. 4	BCEB4BI-	{D5FC74C	2015-06	-	-	355	50	Installed Us	0/50 users
<input type="checkbox"/>	Active	Altova Document	MapForce Ser		2015 rel. 4	23A8TT1-	-	2015-05	-	-	328	8	CPU Cores	1/50 machir
<input checked="" type="checkbox"/>	Active	Altova Document	RaptorXML+X		2015 rel. 4	M2L0CMY-	-	2015-05	-	-	328	16	CPU Cores	running assigned
<input type="checkbox"/>	Active	Altova Document	RaptorXML Se		2015 rel. 4	847AXW4-	-	2015-05	-	-	328	16	CPU Cores	
<input type="checkbox"/>	Active	Altova Gmb	SchemaAg		2015 rel. 4	GWVBWBI-	{D5FC74C	2015-06	-	-	355	50	Installed Us	0/50 users

License files are uploaded to the LicenseServer using the *Upload License File* function of the License Pool tab (see *screenshot above*). Click the **Browse** button and select the license file you want. The license file will appear in the *Upload License File* text field and the **Upload** button will be enabled. Click the **Upload** button to upload the license file. All the licenses in the file are uploaded and displayed in the License Pool tab. The screenshot above shows multiple licenses, uploaded from multiple license files.

License status

License status values are as follows:

- *Activating*: When a license is uploaded to the license pool of LicenseServer, the server will transmit license-related data to the `altova.com` master licensing server to validate, authenticate, and activate the license that was supplied. This is necessary to ensure compliance with the Altova license agreements. During this initial activation and authentication transaction—which typically lasts between 30 seconds and a couple of minutes, depending on your Internet connection, speed, and overall network traffic—the status of the license will be indicated as *Activating...*
- *Failed Verification*: If a connection with the `altova.com` master licensing server cannot be made, then the status of the license in the pool will be shown as *Failed Verification*. If this happens, check your Internet connection and firewall rules to ensure that LicenseServer is able to communicate with the `altova.com` master licensing server.
- *Active*: Once the license has been authenticated and activated, the status will change to *Active*.
- *Inactive*: If a license has been verified, but is present on another LicenseServer on the network, the status will be shown as *Inactive*. An *Inactive* status also results when a license is manually deactivated in the license pool by the administrator.
- *Pending*: If the start date of a license is a date in the future, then the license is shown as *Pending*. The status will change to *Active* on the start date. A *Pending* license can be assigned to a product and ensures that the licensing of a product continues uninterrupted before an existing license expires. (A product is allowed to have two active licenses assigned to it at a given time.)
- *Blocked*: A license is shown in the license pool as *Blocked* if there was a problem authenticating the license and the `altova.com` master licensing server has not granted permission to the LicenseServer to use this license. This could be the result of a license agreement violation, over-usage of a license, or other compliance issues. Should you see a license showing up as *Blocked*, please contact Altova Support with your license information and any other relevant data.

These statuses are summarized in the table below:

Status	Meaning
<i>Activating...</i>	On upload, license information is sent to <code>altova.com</code> for verification. Refresh the browser to view the updated status. Verification and activation can take a few minutes.
<i>Failed Verification</i>	A connection to <code>altova.com</code> could not be made. After establishing a connection, either restart the service or activate the license (with the Activate button).
<i>Active</i>	Verification was successful, the license is active.
<i>Inactive</i>	Verification was successful, but the license is also on another LicenseServer on the network. Licenses can be made inactive with the Deactivate button.
<i>Pending</i>	A <i>Pending</i> license has a start date in the future, and it turns <i>Active</i> on that

	start date. It can be assigned to a product and ensures the automatic renewal of a product's licensing before an existing license expires.
<i>Blocked</i>	Verification was not successful. License is invalid and is blocked. Contact Altova Support .

Note: After a license has been sent to `altova.com` for verification, the browser must be refreshed to see the updated status. Verification and activation can take a few minutes.

Note: If a connection to `altova.com` could not be made, the status will be *Failed Verification*. After establishing a connection, either restart the service or try activating the license with the **Activate** button.

Note: When a license is given a status of *Inactive* or *Blocked*, a message explaining the status is also added to the Messages log.

Only an active or pending license can be assigned to a product installation. An inactive license can be activated or deleted from the license pool. If a license is deleted from the license pool, it can be uploaded again to the pool by uploading the license file containing it. When a license file is updated, only those licenses in it that are not already in the pool will be uploaded to the pool. To activate, deactivate, or delete a license, select it and then click the **Activate**, **Deactivate**, or **Delete** button, respectively.

Activate the license/s you wish to use

Before you can assign a license to an Altova product, it must be active. So do ensure it is active. If it is inactive, select it and click **Activate**.

Next Steps

After you have uploaded the license file to the LicenseServer and checked that the license you want is active, do the following:

1. Register the Altova server product ([FlowForce Server](#), [MapForce Server](#), [StyleVision Server](#)) with LicenseServer. (If you have already done this prior to uploading the license file, you can now start assigning licenses.)
2. [Assign a license](#) to your Altova product that has been registered with the LicenseServer.

1.6.6 Register Product/s

Before you can [assign a license](#) to an Altova product, you must register the product installation with LicenseServer. The registration is done from the Altova product, and the process differs according to the type of product.

- *Desktop products:* Registration is via the the product's Software Activation dialog.
- *Server products that have Web UIs:* Registration of FlowForce Server and MobileTogether Server is via the Web UI's *Setup* tab or the product's CLI.
- *Server products that have **no** Web UI:* Registration of MapForceServer, RaptorXML(+XBRL) Server, and StyleVisionServer is via the CLI of these products. You will need the server name or IP Address of the machine on which LicenseServer is installed to carry out the registration.

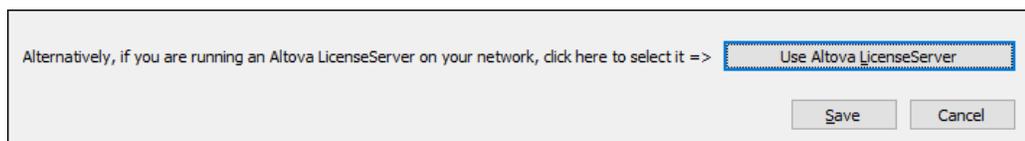
This section describes how to register different Altova products:

- [Register Altova Desktop Products](#)
- [Register FlowForce Server](#)
- [Register MapForce Server](#)
- [Register MobileTogether Server](#)
- [Register RaptorXML\(+XBRL\) Server](#)
- [Register StyleVision Server](#)

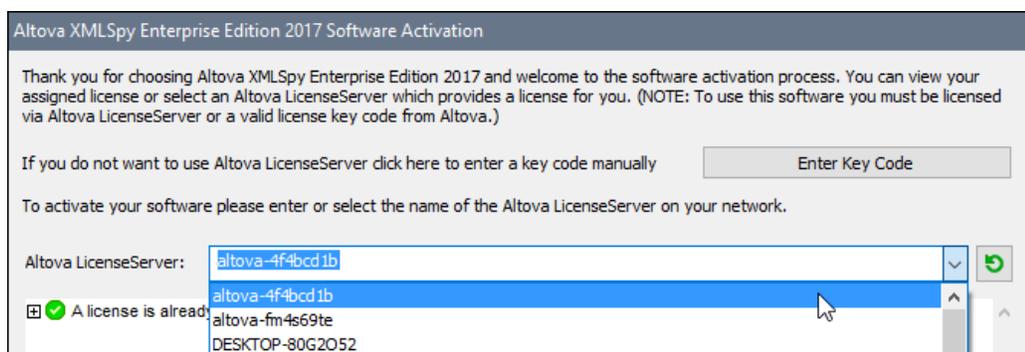
Register Altova Desktop Products

To register an Altova Desktop product with an Altova LicenseServer, do the following:

1. Select the menu command **Help | Software Activation** to go to the product's Software Activation dialog. You can activate your software either (i) via Altova LicenseServer, or (ii) by entering your product's key code details. In this documentation we describe only licensing via Altova LicenseServer.
2. To license your Altova product via LicenseServer, click **Use Altova LicenseServer** (located at the bottom of the dialog; see *screenshot below*)



3. This switches the dialog to LicenseServer activation mode (*screenshot below*). In the *Altova LicenseServer* combo box, select a LicenseServer from the dropdown list.



When the connection to the selected LicenseServer is made, the product is immediately registered with the selected LicenseServer, and, in the [Client Management tab](#), the product is displayed in that client machine's product list.

Unregistering a desktop product

To unregister a desktop product, go to the [Client Management tab](#) of LicenseServer and, in the right-hand *Product licensing* pane, click the product's **Unregister Product** button.

Register FlowForce Server

This section:

- [Methods of registering FlowForce Server with LicenseServer](#)
 - [Accessing the FlowForce Server Setup page \(Windows\)](#)
 - [Accessing the FlowForce Server Setup page \(Linux\)](#)
 - [Registering FlowForce Server via the Setup page](#)
 - [Registering FlowForce Server via the FlowForce CLI \(Windows\)](#)
 - [Registering FlowForce Server via the FlowForce CLI \(Linux\)](#)
 - [Next steps](#)
-

Methods of registering FlowForce Server

FlowForce Server can be registered with LicenseServer using any of the following methods:

- [Via the FlowForce Server Setup page](#)
 - [Via the FlowForce CLI \(Windows\)](#)
 - [Via the FlowForce CLI \(Linux\)](#)
-

Accessing the FlowForce Server Setup page (Windows)

The FlowForce Server Setup page can be accessed in one of the following ways:

- Via the **Start** menu:
Start | Altova FlowForce Server 2017 | FlowForce Server Setup Page
- Via [Altova ServiceController](#): Click the ServiceController icon in the system tray. In the menu that pops up, select *Altova FlowForce Web | Setup*.

This pops up the FlowForce Server Setup page (*screenshot above*).

Accessing the FlowForce Server Setup page (Linux)

After you have installed FlowForce Server on Linux (see the FlowForce Server user documentation

for information about how to do this), start FlowForce Web Server as a service with the following command:

```
sudo /etc/init.d/flowforcewebserver start
```

A message containing the URL of the FlowForce Server Setup appears in the terminal window:

```
FlowForceWeb running on http://127.0.1.1:3459/setup?key=52239315203
```

Enter the URL in the address field of a browser and hit **Enter** to access the FlowForce Server Setup page (*screenshot below*).

Registering FlowForce Server via the Setup page

In the Setup page (*screenshot below*)—how to access it is described above—the LicenseServer field specifies the Altova LicenseServer to be used for registration.

ALTOVA®
FlowForce®
SERVER 2014

Home Help

Setup

LicenseServer

Enter address here or search for LicenseServer

FlowForce Web Server

Bind address: All interfaces (0.0.0.0) ▾ 127.0.0.1 Port: 8082

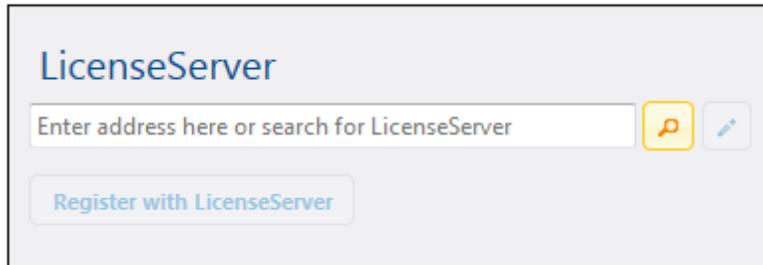
Default time zone: Europe/Berlin ▾

FlowForce Server

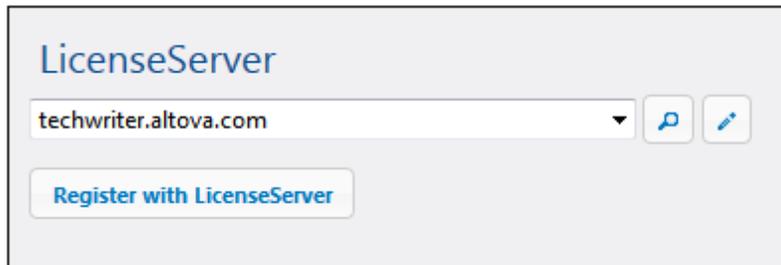
Bind address: All interfaces (0.0.0.0) ▾ 127.0.0.1 Port: 4646

The LicenseServer can be specified in one of two ways.

- You can search for Altova LicenseServers that are currently available on the network—that is, those that are currently running. Do this by clicking the **Search for Altova LicenseServers** button (*highlighted yellow in the screenshot below*).



The search returns a list of available Altova LicenseServers on the network. One LicenseServer will be selected (*screenshot below*) and the others will be available in the dropdown list of the combo box. Select the LicenseServer on which your FlowForce license is stored.



- Alternatively, you can enter the address of the LicenseServer in the LicenseServer field. If the currently running LicenseServers are available as a dropdown list, you must click the **Manually Enter Address** button to be able to enter an address in the LicenseServer field.

After you have specified the LicenseServer, click **Register with LicenseServer**. The Altova server application will be registered with the specified LicenseServer, and that LicenseServer's [Configuration page](#) will open in a browser with its [Client Management tab](#) active (*screenshot below*).

Note: You may need to allow pop-ups in order for the LicenseServer Configuration page to be displayed.

The screenshot displays the Altova LicenseServer web interface. At the top, the logo 'ALTOVA® | LicenseServer' is visible. Below it is a navigation bar with tabs: 'License Pool', 'Server Management', 'Server Monitoring', 'Settings', 'Messages(0)', 'Log Out', and 'Help'. The main content area shows a dropdown menu for 'DOC.altova.com'. Three server entries are listed:

- Altova FlowForce Server 2014**: This server has 2 CPU core(s). Licenses for 2 CPU core(s) are required. Limit to single thread execution. Key Code: [empty], CPU Cores: [empty], Max licensed CPU cores: 0.
- Altova StyleVision Server 2014**: This server has 2 CPU core(s). Licenses for 2 CPU core(s) are required. Limit to single thread execution. Key Code: [empty], CPU Cores: [empty], Max licensed CPU cores: 0.
- Altova MapForce Server 2014**: This server has 2 CPU core(s). Licenses for 2 CPU core(s) are required. Limit to single thread execution. Key Code: [empty], CPU Cores: [empty], Max licensed CPU cores: 0.

At the bottom of the server list, there are two buttons: 'Request evaluation licenses' and 'Unregister server and all products'.

In the screenshot below, three Altova products have been registered with the Altova LicenseServer at DOC.altova.com. How to assign licenses is described in the next section, [Assign Licenses to Registered Products](#).

Registering FlowForce Server via the FlowForce CLI (Windows)

On Windows machines, FlowForce Server can also be registered with an Altova LicenseServer on your network via the command line (CLI) by using the `licenseserver` command:

```
FlowForceServer licenseserver Server-Or-IP-Address
```

For example, if LicenseServer is running on `http://localhost:8088`, then register FlowForce Server with:

```
FlowForceServer licenseserver localhost
```

If FlowForce Server was installed with other Altova server products as sub-packages, registering

FlowForce Server will automatically also register the Altova server products. After successfully registering FlowForce Server, you can go to LicenseServer and assign a license to FlowForce Server. How to do this is described in the section [Assign Licenses to Registered Products](#).

Registering FlowForce Server via the FlowForce CLI (Linux)

On Linux machines, FlowForce Server can be registered with LicenseServer by using the `licenseserver` command of the FlowForce Server CLI. Note that FlowForce Server must be started with root rights.

```
sudo /opt/Altova/FlowForceServer2017/bin/flowforceserver licenseserver localhost
```

In the command above, `localhost` is the name of the server on which LicenseServer is installed. Notice also that the location of the FlowForce Server executable is:

```
/opt/Altova/FlowForceServer2017/bin
```

After successfully registering FlowForce Server, you can go to LicenseServer and assign a license to FlowForce Server. How to do this is described in the section [Assign Licenses to Registered Products](#).

Next Steps

After you have registered your Altova product with LicenseServer, do the following:

1. If you have not already uploaded your license file/s to the LicenseServer (see previous section, [Upload the license/s](#)), upload the license file now and check that the license you want is active. If you have already done this, carry on to the next step, [Assign Licenses](#).
2. [Assign a license](#) to your Altova product that has been registered with the LicenseServer.

Register MapForce Server

This section:

- [Registering MapForce Server from FlowForce Server \(Windows\)](#)
 - [Registering a standalone MapForce Server \(Windows\)](#)
 - [Registering MapForce Server \(Linux\)](#)
 - [Next steps](#)
-

MapForce Server can be installed as part of the FlowForce Server package, or as a standalone server product. In either case, it must be registered with Altova LicenseServer. After it has been registered with LicenseServer, you can [assign a license](#) to it from LicenseServer. On Windows systems, you can install MapForce Server as part of the FlowForce installation. If MapForce

Server is installed as part of the FlowForce Server package, it will automatically be registered with LicenseServer when FlowForce is registered with LicenseServer. On Linux systems, the two products must be installed separately. If MapForce Server is installed after FlowForce Server, then it will be registered automatically when FlowForce Server is registered. But if MapForce Server is installed before FlowForce Server, you will have to register both products separately.

Registering MapForce Server from FlowForce Server (Windows)

MapForce Server is packaged with FlowForce Server, so when FlowForce Server is registered with an Altova LicenseServer on your network, MapForce Server will automatically also be registered with LicenseServer. How to register FlowForce Server is described in the FlowForce Server documentation and in the section, [Register FlowForce Server with LicenseServer](#).

After the registration, you can go to LicenseServer and assign a MapForce Server license to MapForce Server. How to do this is described in the section, [Assign Licenses to Registered Products](#).

Registering a standalone MapForce Server (Windows)

If you have installed MapForce Server as a standalone package, you must register it with an Altova LicenseServer on your network and then license it from the Altova LicenseServer. You can register MapForce Server via its command line interface (CLI) by using the `licenseserver` command:

```
MapForceServer licenseserver Server-Or-IP-Address
```

For example, if LicenseServer is running on `http://localhost:8088`, then register MapForce Server with:

```
MapForceServer licenseserver localhost
```

After successfully registering MapForce Server, you can go to LicenseServer and assign a license to MapForce Server. How to do this is described in the section, [Assign Licenses to Registered Products](#).

Registering MapForce Server (Linux)

On Linux machines, MapForce Server can be registered with LicenseServer by using the `licenseserver` command of the MapForce Server CLI. Note that MapForce Server must be started with root rights.

```
sudo /opt/Altova/MapForceServer2017/bin/mapforceserver licenseserver localhost
```

In the command above, `localhost` is the name of the server on which LicenseServer is installed.

Notice also that the location of the MapForce Server executable is:

```
/opt/Altova/MapForceServer2017/bin
```

After successfully registering MapForce Server, you can go to LicenseServer and assign a license to MapForce Server. How to do this is described in the section [Assign Licenses to Registered Products](#).

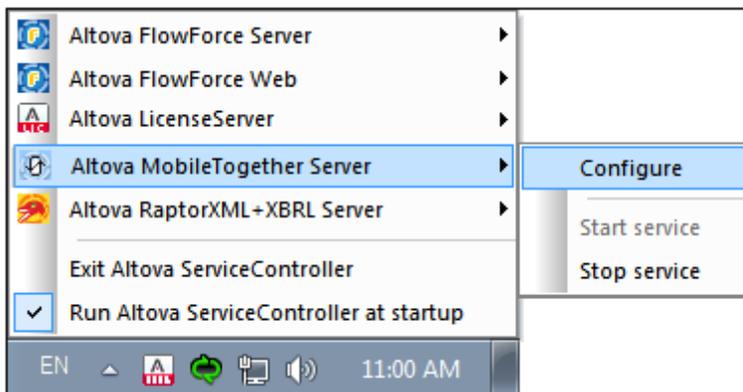
Next Steps

After you have registered your Altova product with LicenseServer, do the following:

1. If you have not already uploaded your license file/s to the LicenseServer (see previous section, [Upload the license/s](#)), upload the license file now and check that the license you want is active. If you have already done this, carry on to the next step, [Assign Licenses](#).
2. [Assign a license](#) to your Altova product that has been registered with the LicenseServer.

Register MobileTogether Server

To start MobileTogether Server, click the **ServiceController** icon in the system tray, hover over **Altova MobileTogether Server** in the menu that pops up (see screenshot below), and then select **Start Service** from the MobileTogether Server submenu. If MobileTogether Server is already running, the *Start Service* option will be disabled.



Register MobileTogether Server via:

- The Settings tab of the MobileTogether Server Web UI: (i) Start MobileTogether Server via ServiceController (see *previous point*); (ii) Enter your password to access the Configuration page; (iii) Select the Settings tab; (iv) Go to the LicenseServer pane at the bottom of the page, select the LicenseServer name or address, and click **Register with LicenseServer**.
- its CLI, using the `licenseserver` command:
MobileTogetherServer licenseserver [options] ServerName-Or-IP-Address
For example, if `localhost` is the name of the server on which LicenseServer is installed:

```
MobileTogetherServer licenseserver localhost
```

After successful registration, go to the [Client Management tab of LicenseServer's configuration page](#) to assign a license to MobileTogether Server.

Register RaptorXML(+XBRL) Server

This section:

- [Registering RaptorXML\(+XBRL\) Server \(Windows\)](#)
- [Registering RaptorXML\(+XBRL\) Server \(Linux\)](#)
- [Next steps](#)

RaptorXML(+XBRL) Server must be installed on the server machine or network to which LicenseServer is connected and then be started as a service. It must then be registered with LicenseServer. Only after registration can a [license be assigned](#) to it from LicenseServer. This section describes how to register RaptorXML(+XBRL) Server with LicenseServer.

Registering RaptorXML(+XBRL) Server (Windows)

You can register RaptorXML(+XBRL) Server via its command line interface (CLI) by using the `licenseserver` command:

```
RaptorXML Server:    RaptorXML licenseserver Server-Or-IP-Address
RaptorXML+XBRL     RaptorXMLXBRL licenseserver Server-Or-IP-Address
Server:
```

For example, if LicenseServer is running on `http://localhost:8088`, then register RaptorXML(+XBRL) Server with:

```
RaptorXML Server:    RaptorXML licenseserver localhost
RaptorXML+XBRL     RaptorXMLXBRL licenseserver localhost
Server:
```

After successfully registering RaptorXML(+XBRL) Server, you can go to LicenseServer and assign a license to RaptorXML(+XBRL) Server. How to do this is described in the section [Assign Licenses to Registered Products](#).

Registering RaptorXML(+XBRL) Server (Linux)

On Linux machines, RaptorXML(+XBRL) Server can be registered with LicenseServer by using the `licenseserver` command of the RaptorXML(+XBRL) Server CLI. Note that RaptorXML(+XBRL) Server must be started with root rights.

```
sudo /opt/Altova/RaptorXMLServer2017/bin/raptorxmlserver licenseserver
localhost
sudo /opt/Altova/RaptorXMLXBRLServer2017/bin/raptorxmlxbrlserver licenseserver
localhost
```

In the command above, `localhost` is the name of the server on which LicenseServer is installed. Notice also that the location of the RaptorXML(+XBRL) Server executable is:

```
/opt/Altova/RaptorXMLServer2017/bin
/opt/Altova/RaptorXMLXBRLServer2017/bin
```

After successfully registering RaptorXML(+XBRL) Server, you can go to LicenseServer and assign a license to RaptorXML(+XBRL) Server. How to do this is described in the section [Assign Licenses to Registered Products](#).

Next Steps

After you have registered your Altova product with LicenseServer, do the following:

1. If you have not already uploaded your license file/s to the LicenseServer (see previous section, [Upload the license/s](#)), upload the license file now and check that the license you want is active. If you have already done this, carry on to the next step, [Assign Licenses](#).
2. [Assign a license](#) to your Altova product that has been registered with the LicenseServer.

Register StyleVision Server

This section:

- [Registering StyleVision Server from FlowForce Server \(Windows\)](#)
 - [Registering a standalone StyleVision Server \(Windows\)](#)
 - [Registering StyleVision Server \(Linux\)](#)
 - [Next steps](#)
-

StyleVision Server can be installed as part of the FlowForce Server package or as a standalone server product. In either case, it must be registered with Altova LicenseServer. Only after it has been registered with LicenseServer can a [license be assigned](#) to it from LicenseServer. On Windows systems, if StyleVision Server was installed as part of the FlowForce Server package, it will automatically be registered when FlowForce is registered. On Linux systems, only if StyleVision Server is installed after FlowForce Server will it be registered automatically when FlowForce Server is registered subsequently.

Registering StyleVision Server from FlowForce (Windows)

StyleVision Server is packaged with FlowForce Server, so when FlowForce Server is registered

with an Altova LicenseServer on your network, StyleVision Server will automatically also be registered with LicenseServer. How to register FlowForce Server is described in the FlowForce Server documentation and in the section, [Register FlowForce Server with LicenseServer](#).

After the registration, you can go to LicenseServer and assign a StyleVision Server license to StyleVision Server. How to do this is described in the section [Assign Licenses to Registered Products](#).

Registering a standalone StyleVision Server (Windows)

If you have installed StyleVision Server as a standalone package on Windows, you must register it with an Altova LicenseServer on your network and then license it from the Altova LicenseServer. You can register StyleVision Server via its command line interface (CLI) by using the `licenseserver` command:

```
StyleVisionServer licenseserver Server-Or-IP-Address
```

For example, if LicenseServer is running on `http://localhost:8088`, then register StyleVision Server with:

```
StyleVisionServer licenseserver localhost
```

After successfully registering StyleVision Server, you can go to LicenseServer and assign a license to StyleVision Server. How to do this is described in the section [Assign Licenses to Registered Products](#).

Registering StyleVision Server (Linux)

On Linux machines, StyleVision Server can be registered with LicenseServer by using the `licenseserver` command of the StyleVision Server CLI. Note that StyleVision Server must be started with root rights.

```
sudo /opt/Altova/StyleVisionServer2017/bin/stylevisionserver licenseserver  
localhost
```

In the command above, `localhost` is the name of the server on which LicenseServer is installed. Notice also that the location of the StyleVision Server executable is:

```
/opt/Altova/StyleVisionServer2017/bin
```

After successfully registering StyleVision Server, you can go to LicenseServer and assign a license to StyleVision Server. How to do this is described in the section [Assign Licenses to Registered Products](#).

Next Steps

After you have registered your Altova product with LicenseServer, do the following:

1. If you have not already uploaded your license file/s to the LicenseServer (see previous section, [Upload the license/s](#)), upload the license file now and check that the license you want is active. If you have already done this, carry on to the next step, [Assign Licenses](#).
2. [Assign a license](#) to your Altova product that has been registered with the LicenseServer.

1.6.7 Assign Licenses to Registered Products

This section:

- [Before assigning a license](#)
- [The Client Management tab](#)
- [Icons in the Client Management tab](#)
- [Note on cores and licenses](#)
- [Assigning a license](#)
- [Unregistering products from LicenseServer](#)

Before assigning a license

Before you assign a license to an Altova product, make sure that:

- The relevant license has been uploaded to the [license pool of LicenseServer](#) and that the license is active.
- Your Altova product has been registered with LicenseServer.

The Client Management tab

Licenses are assigned in the [Client Management tab](#) of the LicenseServer Configuration page (*screenshot below*). The screenshot shows, in the left pane, that there is one client machine, which has three Altova products that have been registered with LicenseServer.

The screenshot displays the Altova LicenseServer interface. The top navigation bar includes 'License Pool', 'Client Management' (selected), 'Client Monitoring', 'Settings', 'Messages(0)', 'Log Out', and 'Help'. Below the navigation, there are buttons for 'Request evaluation licenses' and 'Unregister client and all products'. The main content area is divided into two panes. The left pane, titled 'Registered Clients', shows a table with columns 'Address', 'User', and 'Registered Products'. The right pane shows details for the selected product, 'RaptorXML+XBRL Server 2016 rel. 2', including its key code, state, and CPU cores.

Address	User	Registered Products
		All Products
doc-aab	adoc	RaptorXML+XBRL Server 2016 rel. 2 MobileTogether Server 2.2 XMLSpy Enterprise Edition 2016 rel. 3

Key Code	State	CPU Cores
M2L0CMY-W78MPXJ-A8H3C40-W5X55XY-C9C93D1	Active	16
Max licensed CPU cores		16

This server has 6 CPU core(s). Licenses for 6 CPU core(s) are required.

Limit to single thread execution

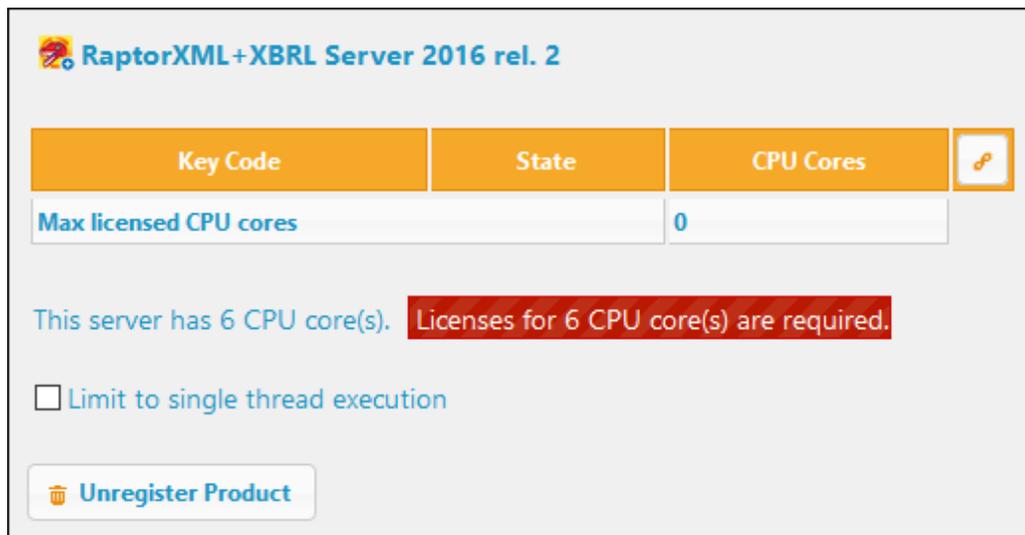
Unregister Product

Note the following points about the Client Management tab:

- In the left pane, each product is listed under the name of its client machine. In the screenshot above, one client machine is listed. This client machine has three Altova

products registered with LicenseServer. If an Altova product on a different client machine is registered with this LicenseServer, then that client machine, with its registered products, will also be listed in the left pane.

- When you select a client machine in the left pane, the licensing details of that machine's registered products are displayed in the right-hand pane. Here, you can edit the license assignments of each product.
- Each registered Altova product on a client machine has its own *Key Code* entry, which takes the key code of a license. A registered product is assigned a license by clicking its **Edit Assigned Licenses** button (see icon list below) and selecting the required license from those available for that product in the license pool. This procedure is explained in more detail below.
- Server products also have a line stating how many CPU cores need to be licensed to run that product on that client. If the number of licensed cores is less than the number required, then the information is marked in red (see screenshot below). (The number of CPU cores that need to be licensed is the number of CPU cores on that client and is obtained from the client machine by LicenseServer.)



- If **multiple versions** of a single product (for example, StyleVision Server 2013 and StyleVision Server 2014) have been installed on one machine and if each of these installations has been registered with a single LicenseServer, then the multiple registrations are consolidated in a single registration in the Client Management tab and displayed as a single registration. When a license is assigned to this single registration, all the installations indicated by that registration will be licensed. However, multiple instances of only one installation can be run simultaneously on the client machine. For example, multiple instances of StyleVision Server 2013 or multiple instances of StyleVision Server 2014 can be run simultaneously, but not one instance of StyleVision Server 2013 and one instance of StyleVision Server 2014. Note that newly installed versions must be registered for them to run.
- New versions of Altova server products can only be licensed with the version of LicenseServer that is the latest at the time of the product's release. Older Altova server products will work with newer versions of LicenseServer. So, if you are installing a new version of an Altova server product and if your current LicenseServer version is not the latest, de-install the older version of LicenseServer and install the latest version. All registration and licensing information held in your older version of LicenseServer will be saved, at the time of de-installation, to a database on the client machine, and will be imported automatically into the newer version. (The version number of the LicenseServer

that is appropriate for any particular version of a server product is displayed during the installation of that server product. You can choose to install this version along with the server product. The version of the currently installed LicenseServer is given at the bottom of the [LicenseServer configuration page](#).)

Icons in the Client Management tab



Edit Assigned Licenses. Available with each product listing. Pops up the [Edit Assigned Licenses dialog](#), in which new licenses can be assigned and already assigned licenses can be edited.



Show Licenses. Appears with each license listing. Switches to the [License Pool tab](#) and highlights the selected license. Details of the license can be read here.



Unregister Product. The selected product will be unregistered from LicenseServer.

Note on cores and licenses

The licensing of Altova server products is based on the number of processor cores available on the product machine. For example, a dual-core processor has two cores, a quad-core processor four cores, a hexa-core processor six cores, and so on. The number of cores licensed for a product must be greater than or equal to the number of cores available on that server machine, whether the server is a physical or virtual machine. For example, if a server has eight cores (an octa-core processor), you must purchase at least one 8-core license. You can also combine licenses to achieve the core count. So, two 4-core licenses can also be used for an octa-core server instead of one 8-core license.

If you are using a computer server with a large number of CPU cores but only have a low volume to process, you may also create a virtual machine that is allocated a smaller number of cores, and purchase a license for that number. Such a deployment, of course, will have less processing speed than if all available cores on the server were utilized.

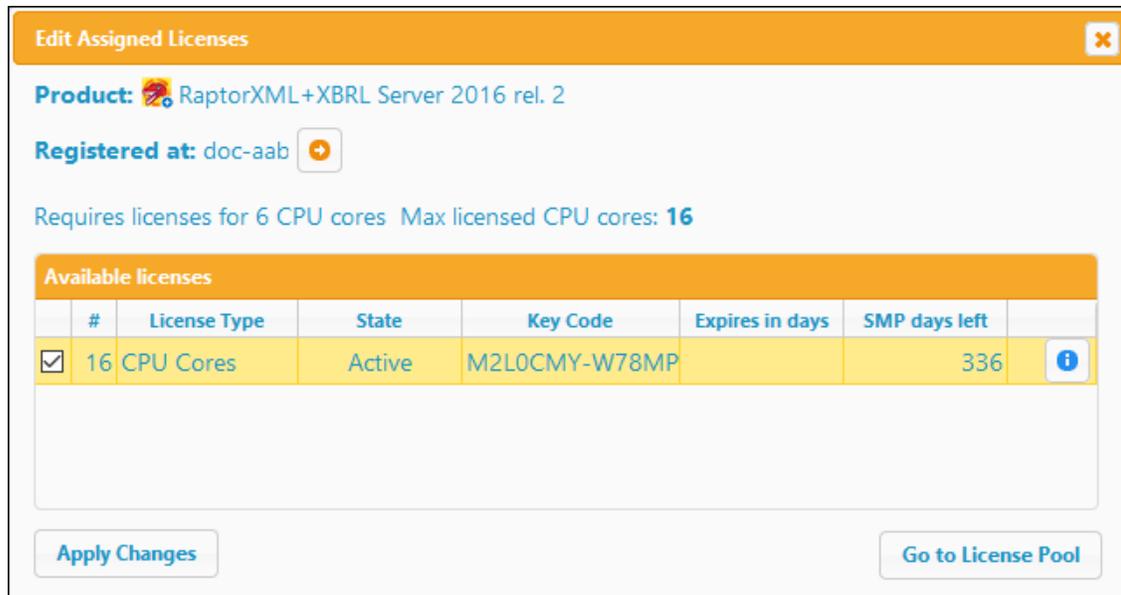
Note: Each Altova server product license can be used for only one client machine—the machine on which the Altova server product is installed—at a time, even if the license has unused licensing capacity. For example, if a 10-core license is used for a client machine that has 6 CPU cores, then the remaining 4 cores of licensing capacity cannot be used simultaneously for another client machine.

MobileTogether Server licenses

MobileTogether Server licenses are based on the number of CPU cores on the MobileTogether Server machine. Core licenses allow an unlimited number of MobileTogether Client devices to connect to the server. However, if you check the *Limit to single thread execution* check box, then only one mobile device will be able to connect to the MobileTogether Server at any time. This is useful for evaluation and small-scale testing. Note that, if, in this case, a second device connects to MobileTogether Sever, then it will take over the license. The first device will not be able to connect any more and will receive an error message to this effect.

Assigning a license

To assign a license to a registered product, click the **Edit Assigned Licenses** button of that product. This pops up the Manage Licenses dialog (*screenshot below*).



Note the following points about the licenses displayed in the Manage Licenses dialog:

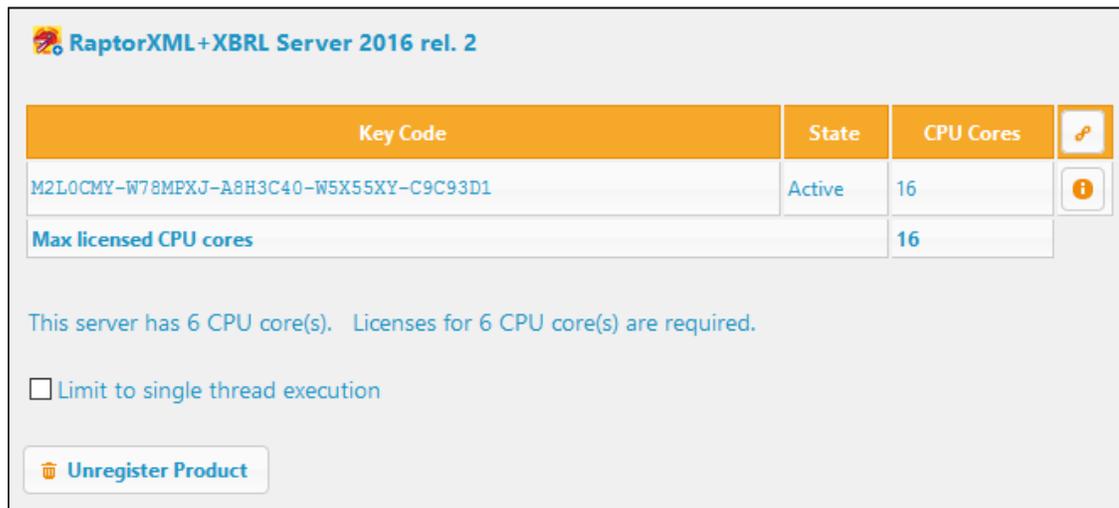
- The product to be licensed is listed at the top left of the dialog. In the screenshot above the product is Altova RaptorXML+XBRL Server.
- The machine on which the server is installed (doc-aab in the screenshot above) is listed next.
- The dialog displays all the currently active licenses for that product that are in the license pool. In our screenshot, there is one currently active RaptorXML+XBRL Server license in the license pool. (LicenseServer will automatically detect from each license in the pool the product for which it has been issued.)
- The license type can be either *Cores* (all Altova server products, including MobileTogether Server) or *Users* (MobileTogether Server only). The license type is shown in the *License Type* column. The license in the screenshot above has been licensed for 16 CPU cores.
- You need to know the number of processor cores on the server on which the Altova server product has been installed. If the machine has a dual-core processor, you need a two-core (the CPU Cores count) license. How many cores the registered server product requires is listed below the machine name. The license you assign to this server must be valid for a sufficient number of cores. Note that you can combine licenses to reach the required number of cores. So, if the machine's processor is octa-core (eight-core), you can combine two 4-core licenses.
- The Edit Assigned Licenses dialog will list only currently active licenses for **that** product. Licenses for other Altova products will not be listed.
- Licenses that have been assigned already—for example, to another installation of the

product on the network—will have their check boxes checked. So only unchecked licenses may be selected.

- The *CPU Cores* (or # for MobileTogether Server users) column indicates for how many CPU cores (or MobileTogether Clients) a license is valid.
- If you wish to make modifications to the license pool—for example, to upload, activate, deactivate, or delete a license—click the **Go to License Pool** button.

Select the license you wish to assign. The license's check box will be checked. Also, the total number of CPU cores licensed for that product on that client is listed near the top left of the dialog as *Max licensed CPU cores* (see screenshot above). You can select more licenses if you wish to increase the number of licensed CPU cores for that product on that client. The *Max licensed CPU cores* in this case will be the sum of the CPU cores of all the selected licenses.

After selecting the license/s, click **Apply Changes**. The license/s will be assigned to that product and displayed in the Client Management tab (see screenshot below). The screenshot shows that a 16-CPU-core license for Altova RaptorXML+XBRL has been assigned to the client machine.



RaptorXML+XBRL Server 2016 rel. 2

Key Code	State	CPU Cores	
M2L0CMY-W78MPXJ-A8H3C40-W5X55XY-C9C93D1	Active	16	
Max licensed CPU cores		16	

This server has 6 CPU core(s). Licenses for 6 CPU core(s) are required.

Limit to single thread execution



Unregistering products

Each Altova product registered with LicenseServer is listed in the right-hand (*Product licensing*) pane under its client machine name and has an **Unregister Product** button at the bottom of its entry (see screenshot above). Click this button to unregister the product from LicenseServer. If a license was assigned to the product, the assignment will be terminated when the product is unregistered. To unregister all products, click the **Unregister client and all products** button at the top of the right-hand (*Product licensing*) pane (see first screenshot in this section).

To re-register a product with LicenseServer, do the following:

- *Server products*: Go to the Settings page in the server product's Web UI. If the server product has no Web UI, open a command prompt window and use the product's CLI to register it. The steps for each server product are described here: [Register FlowForce Server](#), [Register MapForce Server](#), [Register MobileTogether Server](#), [Register StyleVision Server](#), and [Register RaptorXML\(+XBRL\) Server](#).

- *Desktop products:* Open the product's [Software Activation dialog](#) (**Help | Software Activation**), switch to Activation via LicenseServer mode, and, in the *Altova LicenseServer* field, select the LicenseServer you want to register the product with. The product will be registered, and it will appear in LicenseServer's Client Management tab, in that client's registered-product list.

1.7 Configuration Page Reference

The LicenseServer Configuration page is the administrator's interface with LicenseServer (Web UI). It allows the management of LicenseServer and the licensing of Altova products that have been registered with LicenseServer. The LicenseServer Configuration page is viewed in a web browser. How to open the Configuration page is described in the sections, [Open LicenseServer Config Page \(Windows\)](#), [Open LicenseServer Config Page \(Linux\)](#) and [Open LicenseServer's Config Page \(macOS\)](#).

This section is a user reference for the Configuration page and is organized by the tabs of the Configuration page:

- [License Pool](#)
- [Client Management](#)
- [Client Monitoring](#)
- [Settings](#)
- [Messages, Log Out](#)

For a step-by-step guide of how to assign licenses with LicenseServer, see the section [How to Assign Licenses](#).

1.7.1 License Pool

This section:

- [Uploading a license](#)
- [License status](#)
- [Activating, de-activating, and deleting a license](#)
- [Icons in the License Pool tab](#)
- [License information](#)
- [Note on desktop product licenses](#)
- [Note on cores and licenses](#)

The **License Pool** tab displays information about the licenses that are currently available on LicenseServer (see screenshot below). When a license file is uploaded to LicenseServer with the **Upload** button on this page, all the licenses contained in that license file are placed in the license pool on LicenseServer. The License Pool page therefore provides an overview of all Altova product licenses that are currently available on LicenseServer, together with the details of each of these licenses. On this page, in addition to being able to upload licenses to the license pool, you can activate, deactivate, and delete selected licenses.

Status	Name	Company	Product	Edition	Version	Key Code	Bundle ID	Start Date	End Date	Expires in days	SMP days left	#	License Type	Clients
<input type="checkbox"/>	Active	Altova GmbH	DatabaseS...	Enterprise Editi	2015 rel. 4	GWS36BI-	{D5FC74C	2015-06	-	-	355	50	Installed User	0/50 users
<input type="checkbox"/>	Active	Altova Document	FlowForce Ser		2015 rel. 4	9FJUP0P-	-	2015-05	-	-	328	8	CPU Cores	1/50 machir
<input type="checkbox"/>	Active	Altova GmbH	MapForce	Enterprise Editi	2015 rel. 4	BCEB4BI-	{D5FC74C	2015-06	-	-	355	50	Installed User	0/50 users
<input type="checkbox"/>	Active	Altova Document	MapForce Ser		2015 rel. 4	23A8TT1-	-	2015-05	-	-	328	8	CPU Cores	1/50 machir
<input checked="" type="checkbox"/>	Active	Altova Document	RaptorXML+X		2015 rel. 4	M2L0CMY-	-	2015-05	-	-	328	16	CPU Cores	running assigned
<input type="checkbox"/>	Active	Altova Document	RaptorXML Se		2015 rel. 4	847AXW4-	-	2015-05	-	-	328	16	CPU Cores	
<input type="checkbox"/>	Active	Altova GmbH	SchemaAg...		2015 rel. 4	GWVBWBI-	{D5FC74C	2015-06	-	-	355	50	Installed User	0/50 users

Uploading a license

To upload a license file (a `.altova_licenses` file which you receive from Altova GmbH for your Altova product), click the **Browse** button, browse for the license file, and select it. On clicking **Upload**, all the licenses contained in the license file are placed in the license pool and displayed on the License Pool page (screenshot above).

License status

License status values are as follows:

- Activating*: When a license is uploaded to the license pool of LicenseServer, the server will transmit license-related data to the `altova.com` master licensing server to validate, authenticate, and activate the license that was supplied. This is necessary to ensure compliance with the Altova license agreements. During this initial activation and authentication transaction—which typically lasts between 30 seconds and a couple of minutes, depending on your Internet connection, speed, and overall network traffic—the status of the license will be indicated as *Activating...*
- Failed Verification*: If a connection with the `altova.com` master licensing server cannot be made, then the status of the license in the pool will be shown as *Failed Verification*. If this happens, check your Internet connection and firewall rules to ensure that LicenseServer is able to communicate with the `altova.com` master licensing server.
- Active*: Once the license has been authenticated and activated, the status will change to *Active*.
- Inactive*: If a license has been verified, but is present on another LicenseServer on the network, the status will be shown as *Inactive*. An *Inactive* status also results when a license is manually deactivated in the license pool by the administrator.
- Pending*: If the start date of a license is a date in the future, then the license is shown as *Pending*. The status will change to *Active* on the start date. A *Pending* license can be assigned to a product and ensures that the licensing of a product continues uninterrupted before an existing license expires. (A product is allowed to have two active licenses assigned to it at a given time.)
- Blocked*: A license is shown in the license pool as *Blocked* if there was a problem authenticating the license and the `altova.com` master licensing server has not granted permission to the LicenseServer to use this license. This could be the result of a license agreement violation, over-usage of a license, or other compliance issues. Should you see a license showing up as *Blocked*, please contact Altova Support with your license information and any other relevant data.

These statuses are summarized in the table below:

Status	Meaning
<i>Activating...</i>	On upload, license information is sent to <code>altova.com</code> for verification. Refresh the browser to view the updated status. Verification and activation can take a few minutes.
<i>Failed Verification</i>	A connection to <code>altova.com</code> could not be made. After establishing a connection, either restart the service or activate the license (with the Activate button).
<i>Active</i>	Verification was successful, the license is active.

<i>Inactive</i>	Verification was successful, but the license is also on another LicenseServer on the network. Licenses can be made inactive with the Deactivate button.
<i>Pending</i>	A <i>Pending</i> license has a start date in the future, and it turns <i>Active</i> on that start date. It can be assigned to a product and ensures the automatic renewal of a product's licensing before an existing license expires.
<i>Blocked</i>	Verification was not successful. License is invalid and is blocked. Contact Altova Support .

Note: After a license has been sent to `altova.com` for verification, the browser must be refreshed to see the updated status. Verification and activation can take a few minutes.

Note: If a connection to `altova.com` could not be made, the status will be *Failed Verification*. After establishing a connection, either restart the service or try activating the license with the **Activate** button.

Note: When a license is given a status of *Inactive* or *Blocked*, a message explaining the status is also added to the Messages log.

Only an active or pending license can be assigned to a product installation. An inactive license can be activated or deleted from the license pool. If a license is deleted from the license pool, it can be uploaded again to the pool by uploading the license file containing it. When a license file is updated, only those licenses in it that are not already in the pool will be uploaded to the pool. To activate, deactivate, or delete a license, select it and then click the **Activate**, **Deactivate**, or **Delete** button, respectively.

Connection to the Master Licensing Server at `altova.com`

Altova LicenseServer needs to be able to communicate with the Master Licensing Server at `altova.com` to validate and authenticate license-related data and to ensure continuous compliance with the Altova license agreements. This communication occurs over HTTPS using port 443. If Altova LicenseServer, after making the initial verification with the `altova.com` Master Licensing Server, is unable to again connect with `altova.com` for a duration of more than 5 days (= 120 hours), then Altova LicenseServer will no longer permit the usage of any Altova software products connected to that Altova LicenseServer.

Any such loss of connection with the `altova.com` master servers will be logged in the [Messages tab](#) of the [Configuration page of Altova LicenseServer](#). In addition, the administrator can configure the Altova LicenseServer to automatically send an alert email when the connection to `altova.com` is lost. Alert Mail settings are available in the [Settings tab](#) of the [Configuration page](#).

Activating, deactivating, and deleting a license

An active license can be deactivated by selecting the license and clicking **Deactivate**. An inactive license can be activated (**Activate** button) or deleted (**Delete** button). When a license is deleted it is removed from the license pool. A deleted license can be added again to the license

pool by uploading the license file containing it. If a license file is re-uploaded, only licenses that are not already in the license pool will be added to the license pool; licenses that are already in the pool will not be re-added.

Icons in the License Pool tab

-  *Altova MissionKit logo.* Appears next to individual Altova desktop product names when the desktop product license is part of a MissionKit license. See [Note on desktop product licenses](#) below.
 -  *Show Assigned Client.* Appears in the *Clients* column of a license that has been assigned. Goes to the [Client Management](#) tab, in which the licenses of a client's registered products can be managed.
 -  *Show Running Client.* Appears in the *Clients* column of a license that has been assigned to software that is currently running. Goes to the [Client Monitoring](#) tab of the client machine running that software. Here, information about the selected client and its registered software is displayed.
 -  *Show Info.* Appears in the *Clients* column of a license that has not been assigned. Displays information about the license, such as the user count and whether the license is part of a license bundle.
-

License information

The following license information is displayed:

- *Status:* Can be one of the following values: *Activating | Failed Verification | Active | Inactive | Blocked*. See [License status](#) above.
- *Name, Company:* The name and company of the licensee. This information was submitted at the time of purchase.
- *Product, Edition, Version:* The version and edition of the licensed products. At the top of each column is a combo box to filter licenses by category.
- *Key Code, Bundle ID:* The license key to unlock the product. All products in a single Altova MissionKit bundle have the same Bundle ID. Non-bundled products have no Bundle ID.
- *Start Date, End Date:* Together they give the validity period of the license. Permanent licenses have no end date.
- *Expires in days, SMP (days left):* The number of days left before the license expires. Each licensed purchase comes with a Support & Maintenance Package, which is valid for a certain number of days. The *SMP* column notes how many *SMP* days are still left.
- *#, License Type:* The number of users or CPU cores that are allowed for the license is listed in the *#* column. Whether it is users or cores that the license regulates is given in the *License Type* column. In the case of Altova's MobileTogether Server product, licenses are also assigned on the basis of the number of MobileTogether client **devices** that connect to MobileTogether Server. In the case of all other Altova server products, licenses are assigned on the basis of **CPU cores** only (see *note below*). In the case of Altova desktop products, licenses are assigned on the basis of **users**. See [Note on desktop product licenses](#) below.

- *Clients*: This column has entries only for [MobileTogether Server licenses](#) and [desktop product licenses](#). It does not have entries for [server product licenses](#). For [MobileTogether Server device licenses](#), this column displays whether the license is assigned. For Desktop products, the column displays the machine count and user count as described below.

Desktop products: machine count and user count

- The *machine count* indicates the number of machines that are currently licensed to run the software with a given license. For example, 7/10 *machines* means that the license can be used for software instances on 10 machines, and is currently being used for software instances on 7 machines. Click the [Show Assigned Client](#) button to go to the [Client Management](#) tab and see the details of the client machine's license/s.
- The *user count* indicates the number of users that are currently using the license out of the total number of allowed users. Only licensed software installations that are currently running are counted. For example, 3/10 *users* means that the license is currently being used by 3 users out of a total of 10 allowed users. If a licensed software installation is currently running, you can click the [Show Running Client](#) button to open the [Client Monitoring tab](#) and see details of Altova products that are running on client machines on the network.
- The *user count* and *machine count* together tell you the current licensing capacity and usage of a given license. For example, if the machine count of an [installed user license](#) is 7/10 and if the user count is 3/10, then we know the following: (i) The product software is allowed to be licensed on 10 machines; (ii) The software has been licensed on 7 machines; (iii) 3 of the 7 licensed software installations are currently running.

Unassigning a license

To unassign a license from a software installation on a machine, go to the [Client Management](#) tab. Select the machine and then the software to be unassigned. Then click the **Edit Assigned Licenses** button, deselect the license, and click **Apply Changes**.

Note on desktop product licenses

There are three types of desktop user licenses:

- *Installed User*: Licenses are purchased for an exact number of computers on which you would like to install the software. For example, if you purchase a *10-Installed-User* license, you may install and use the software on up to 10 computers. On each licensed machine you may start as many simultaneous software instances as you wish. The license, for each "installed user" allows the software product to be used on that machine.
- *Concurrent User*: This license allows you to install the software on up to that number of computers that is equal to 10 times the allowed number of concurrent users. All the installations must be on the same physical network. At any given time, the software can be used by only the allowed number of concurrent users. For example, if you purchase a *20-Concurrent-User* license, then the software may be installed on up to 200 computers on the same physical network and used on up to 20 computers at any given time. If you would like to use *Concurrent User* licenses on different physical networks, you must purchase a separate license for each network. Note that you cannot use one *Concurrent User* license to span multiple networks.
- *Named User*: For each *Named-User* license you may install the software on up to 5

computers, but only the user named in the license may use the software. With this license, a user can work on different computers provided that **only one instance** of the software is used at any given time.

Note about Altova MissionKit licenses

[Altova MissionKit](#) is a suite of Altova desktop products. An Altova MissionKit license comprises individual licenses for each of the desktop products in the MissionKit suite. Each of these individual product licenses has a different and unique key code, but the same MissionKit Bundle ID. If you upload an Altova MissionKit license to the license pool, then the individual licenses of each product comprising MissionKit is listed in the License Pool (with the [Altova MissionKit logo](#) next to it). If you assign one of these product licenses to a particular user, then all the other products of that MissionKit bundle are also assigned to that user. As a result, no other product in that particular MissionKit bundle can be assigned to another user.

License check-outs

You can check out a license from the license pool for a period of up to 30 days so that the license is stored on the product machine. This enables you to work offline, which is useful, for example, if you wish to work in an environment where there is no access to your Altova LicenseServer (such as when your Altova product is installed on a laptop and you are traveling). While the license is checked out, LicenseServer displays the license as being in use, and the license cannot be used by any other machine. The license automatically reverts to the checked-in state when the check-out period ends. Alternatively, a checked-out license can be checked in at any time via the **Check in** button of the Software Activation dialog. To check out a license from the license pool to your product machine, go to the **Help** menu of your Altova desktop product and select **Software Activation**. Refer to the user manual of your Altova product for more information.

Note on cores and licenses

The licensing of Altova server products is based on the number of processor cores available on the product machine. For example, a dual-core processor has two cores, a quad-core processor four cores, a hexa-core processor six cores, and so on. The number of cores licensed for a product must be greater than or equal to the number of cores available on that server machine, whether the server is a physical or virtual machine. For example, if a server has eight cores (an octa-core processor), you must purchase at least one 8-core license. You can also combine licenses to achieve the core count. So, two 4-core licenses can also be used for an octa-core server instead of one 8-core license.

If you are using a computer server with a large number of CPU cores but only have a low volume to process, you may also create a virtual machine that is allocated a smaller number of cores, and purchase a license for that number. Such a deployment, of course, will have less processing speed than if all available cores on the server were utilized.

Note: Each Altova server product license can be used for only one client machine—the machine on which the Altova server product is installed—at a time, even if the license has unused licensing capacity. For example, if a 10-core license is used for a client machine that has 6 CPU cores, then the remaining 4 cores of licensing capacity cannot be used simultaneously for another client machine.

MobileTogether Server licenses

MobileTogether Server licenses are based on the number of CPU cores on the MobileTogether Server machine. Core licenses allow an unlimited number of MobileTogether Client devices to connect to the server. However, if you check the *Limit to single thread execution* check box, then only one mobile device will be able to connect to the MobileTogether Server at any time. This is useful for evaluation and small-scale testing. Note that, if, in this case, a second device connects to MobileTogether Sever, then it will take over the license. The first device will not be able to connect any more and will receive an error message to this effect.

1.7.2 Client Management

This section:

- [Icons in the Client Management tab](#)
- [Managing licenses in the Product Licensing pane](#)
- [Assigning licenses](#)
- [Single thread execution](#)
- [One client machine under different names](#)
- [Requesting an evaluation license](#)
- [Unregistering products](#)

The **Client Management** tab (*screenshot below*), is divided into two panes:

- *Registered clients:* The left-side pane displays a tabular listing of machines on the network that have at least one Altova product which is [registered with LicenseServer](#). Such machines are called *registered clients*. Each registered client is listed in the left pane with all its registered products. How to register products with LicenseServer is described in [Register Product/s](#). The display in this pane can be filtered by selecting or entering a filter at the top of one of the pane's columns.
- *Product licensing:* This is the right-side pane. When a registered client is selected in the left (*Registered Clients*) pane, then the licensing details of that client's registered products are displayed in the right pane. Here you can manage the licensing of each registered product (*described below*).

Icons in the Client Management tab

-
-  *Edit Assigned Licenses.* Available with each product listing. Pops up the [Edit Assigned Licenses dialog](#), in which new licenses can be assigned and already assigned licenses can be edited.
 -  *Show Licenses.* Appears with each license listing. Switches to the [License Pool tab](#) and highlights the selected license. Details of the license can be read [here](#).
 -  *Unregister Product.* The selected product (on the selected client machine) will be unregistered from LicenseServer. See [Unregistering products](#) below. To unregister a client and all its products, click **Unregister client and all products** at the top of the pane.
-

Managing licenses in the Product Licensing pane

In the right-side *Product licensing* pane, you can do the following:

- *Assign, unassign, change a product's license:* Click the product's **Edit Assigned Licenses** button to do this. See [Assigning licenses](#) below. Note that each server product has a line stating how many CPU cores need to be licensed to run that product on that client. If the number of licensed cores is less than the number required, then the information is marked in red. (The number of CPU cores that need to be licensed is the number of CPU cores on that client and is obtained from the client machine by LicenseServer.)
 - *Set up a single-core, server-product license to use only one core of a client:* See [Single thread execution](#) below.
 - *Unregister a product from LicenseServer:* Use a product's **Unregister Product** button for this. See [Unregistering products](#) below.
-

Assigning licenses

To assign a license to a registered product, click the **Edit Assigned Licenses** button of that product. This displays the Edit Assigned Licenses dialog (*screenshot below*).

Edit Assigned Licenses
✕

Product:  RaptorXML+XBRL Server 2016 rel. 2

Registered at: doc-aab +

Requires licenses for 6 CPU cores Max licensed CPU cores: **16**

Available licenses

#	License Type	State	Key Code	Expires in days	SMP days left	
<input checked="" type="checkbox"/>	16 CPU Cores	Active	M2LOCMY-W78MP		336	i

Apply Changes
Go to License Pool

Select the license/s you wish to assign, then click **Apply Changes**. The license/s will be assigned to that product and displayed in the *Product licensing* tab of the Client Management tab (see screenshot below).

 RaptorXML+XBRL Server 2016 rel. 2 +

Key Code	State	CPU Cores	
M2LOCMY-W78MPXJ-A8H3C40-W5X55XY-C9C93D1	Active	16	i
Max licensed CPU cores		16	

This server has 6 CPU core(s). Licenses for 6 CPU core(s) are required.

Limit to single thread execution

🗑 **Unregister Product**

Single thread execution

If an Altova server-product license for only one core is available in the license pool, a machine with multiple cores can be assigned this one-core license. In such a case, the machine will run that product on a single core. Processing will therefore be slower, because multi-threading (which is possible on multiple cores) will not be available. The product will be executed in single thread mode on that machine.

To assign a single-core license to a multiple-core machine, select the *Limit to single thread execution* check box for that product.

In the case of **MobileTogether Server (MTS)**, if single-thread execution is selected for an MTS core license, then only one mobile device will be able to connect to the MobileTogether Server at any time. Note that, if, in this case, a second device connects to MobileTogether Sever, then it will take over the license. The first device will not be able to connect any more and will receive an error message to this effect.

One client machine under different names

If a client machine is registered more than once with LicenseServer, it might appear in the Client Management tab under multiple names, that is, with multiple entries. This could happen, for example, if a machine is re-registered with the host name given in a different form.

To ensure that additional licenses are not redundantly assigned to the same machine under its different names, you should unregister redundant client machine entries by clicking the **Unregister client and all products** button at the top of the right-hand (*Product licensing*) pane. Also, if the same license is assigned multiple times to the same machine under its different names, licensing conflicts could arise. So, to avoid these two situations (redundant licensing and multiple assignments of a single license), it is recommended that redundant entries of a single client machine be unregistered.

Given below are forms a machine name might take in the Client Management tab:

- *Host name with domain name (the fully qualified domain name, FQDN), such as: "win80-x64_1.my.domain.com" or "Doc3.my.domain.com".* This happens when the host name of the machine (with or without the domain information) is passed as the argument of the `licenseserver` CLI command that is used to register the server product with LicenseServer. For example: `<AltovaServerProduct> licenseserver Doc3`. This produces an FQDN such as: `Doc3.my.domain.com`.

An FQDN is also produced when `localhost` is supplied on Windows 7 and 10 systems as the host name.

- *Host name without domain name. For example: "win80-x64_1" or "Doc3".* This happens on Windows 8 systems when `localhost` is given as the machine name.
- *localhost.* In some cases, `localhost` is also displayed as a machine name.

Note: If, during installation of an Altova server product on Windows machines, the machine is automatically registered with LicenseServer, `localhost` is used by the installer as the machine name.

Requesting an evaluation license

You can obtain a 30-day free evaluation license for each of a client's installed Altova products that

have been registered with LicenseServer. Click the **Request Evaluation Licenses** button at the top of the right-hand (*Product licensing*) pane. A dialog appears that contains a list of the Altova products (on that client machine) which have been registered with LicenseServer. Make sure that the products for which you want an evaluation license are checked, then fill in the registration fields, and send the request. You will receive an e-mail from Altova containing the 30-day evaluation license/s. For server products, the number of cores for which the license is valid will be exactly the number required by the product at the time the request is sent. Save the license/s to disk and [upload them to the license pool](#).

Unregistering products

Each Altova product registered with LicenseServer is listed in the right-hand (*Product licensing*) pane under its client machine name and has an **Unregister Product** button at the bottom of its entry. Click this button to unregister the product from LicenseServer. If a license was assigned to the product, the assignment will be terminated when the product is unregistered. To unregister all products, click the **Unregister client and all products** button at the top of the right-hand (*Product licensing*) pane (*see first screenshot in this section*).

To re-register a product with LicenseServer, do the following:

- *Server products:* Go to the Settings page in the server product's Web UI. If the server product has no Web UI, open a command prompt window and use the product's CLI to register it. The steps for each server product are described here: [Register FlowForce Server](#), [Register MapForce Server](#), [Register MobileTogether Server](#), [Register StyleVision Server](#), and [Register RaptorXML\(+XBRL\) Server](#).
- *Desktop products:* Open the product's [Software Activation dialog \(Help | Software Activation\)](#), switch to Activation via LicenseServer mode, and, in the *Altova LicenseServer* field, select the LicenseServer you want to register the product with. The product will be registered, and it will appear in LicenseServer's Client Management tab, in that client's registered-product list.

For more information, see the section, [Assigning Licenses to Registered Products](#).

1.7.3 Client Monitoring

The **Client Monitoring** tab provides an overview of the selected client machine. The tab displays the following:

Checked-out Clients

End users of an Altova desktop product (not server product), such as XMLSpy or MapForce, can check out a license that is registered with LicenseServer. This would typically be done in situations where it is foreseen that the end user machine will be offline for a certain period of time. The license can be checked out from LicenseServer for the period during which the machine will be offline. For this period, the end user can continue using the Altova desktop product without making contact with LicenseServer. The licenses and users that are currently checked out, together with the check-out period, are listed under this heading.

Note: License check-out is carried out by the end user via the Software Activation dialog (**Help | Software Activation**) of the Altova desktop product.

Running clients

A list of the Altova products that are currently running on that client. If multiple instances of a product are running then each of these instances is listed.

Running Clients								
Product	Edition	Version	User	Address	State	Failover	Last seen (seconds ago)	
 RaptorXML+XBRL Serv		2016 rel. 2	DOBRA	doc-aab	Running		8	 
 XMLSpy	Enterprise Editio	2016 rel. 3	adoc	doc-aab	Running		11	 

Note: [Failover LicenseServers](#) work with client applications that are v2015rel3 or later (in the case of Altova MobileTogether Server, version 1.5 or later); older clients are flagged.

Note: If a license for a desktop product is checked out, then it will be displayed in a separate *Checked-out Clients* section of the Client Monitoring tab. The license will be indicated as running, and will not be able for use to any other machine on the network.

Icons in the Client Monitoring tab



Show License(s). Available for each product instance. Goes to the [License Pool](#) tab, and highlights the license of the selected product instance.



Manage Client. Available for each product instance. Goes to the [Client Management](#) tab, and highlights the client of the selected product instance.

1.7.4 Settings

This section:

- [Failover LicenseServer settings](#)
 - [Network settings](#)
 - [Alert Mail settings](#)
 - [Miscellaneous settings](#)
-

The **Settings** tab is described below. You can set the following:

- A **time period to wait till LicenseServer shuts down**. A shutdown would be implemented typically for server maintenance. The time to shutdown can be used to save work on clients running Altova desktop products. The shutdown time you select is the maximum time to shutdown. LicenseServer will shut down earlier, as soon as LicenseServer is no longer connected to any client running a desktop product. The countdown to shutdown starts when you click **Shutdown**. To cancel shutdown, click **Abort Shutdown**. To enable clients to run during a LicenseServer shutdown, configure a [Failover LicenseServer](#).
 - A second LicenseServer can be configured to take over from the Primary LicenseServer if the Primary LicenseServer becomes unavailable. This second LicenseServer is called the [Failover LicenseServer](#). How to specify its settings are described [here](#).
 - The password for logging in to LicenseServer. Enter the desired password and click **Change Password**.
 - Test connectivity to Altova by clicking **Test Connection to Altova**. Note that you must save new settings (by clicking the **Save** button at the bottom of the pane) before testing the connection. The **Test Connection to Altova** button is disabled while the test is in progress, and becomes enabled again when the test has been completed.
 - Network settings for the web-based configuration page (Web UI), for the proxy server (if any) that is used to connect to the Internet, and for License Service availability. These settings are described in [Network settings](#) below.
 - Email server settings and the alert mail recipient to contact in the event of a significant LicenseServer occurrence. These settings are described in [Alert Mail settings](#) below.
 - After you change a setting, click **Save** at the bottom of the pane. Note that a changed setting will not take effect till it is saved.
-

Failover LicenseServer settings

A second LicenseServer can be configured to take over from the Primary LicenseServer if the Primary LicenseServer becomes unavailable. This second LicenseServer is called the **Failover LicenseServer**.

Failover LicenseServer Settings

To reduce the risk of an unavailable LicenseServer you can configure a second LicenseServer as a backup or "Failover LicenseServer".
In the event that the Primary LicenseServer becomes unavailable a Failover LicenseServer can take over.

LicenseServer Mode

Primary LicenseServer

Failover LicenseServer

Please note: The Failover LicenseServer periodically synchronizes all licenses, registered clients and license assignments from the Primary LicenseServer. Whenever a Failover LicenseServer takes over from a Primary LicenseServer any changes to these items made on the Failover LicenseServer during this period will be lost as soon as the Primary LicenseServer regains control. Other settings such as Proxy Server and Mail settings are independently set in each server and are not synchronized.

This is a Failover LicenseServer for the LicenseServer at kubu6.altova.com

Last seen 2/5/2015, 11:56:04 AM

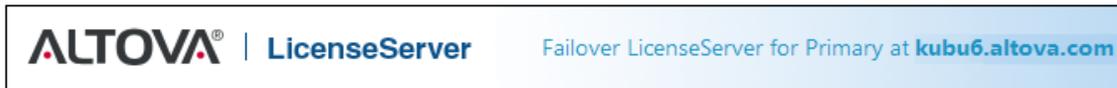
To set up a LicenseServer as the Failover LicenseServer, do the following:

1. Install LicenseServer as described in the Installation section.
2. Set the LicenseServer's mode to *Failover LicenseServer* by selecting the corresponding radio button (see *screenshot above*). (By default the LicenseServer Mode is set to *Primary LicenseServer*.)
3. In the Find Primary LicenseServer dialog that appears (*screenshot below*), enter the Primary LicenseServer you want to back up with this Failover LicenseServer. You can do this in one of two ways: (i) Click **Search for LicenseServers** and then select, in the combo box, the LicenseServer you want to backup from the list of found LicenseServers; (ii) Click **Manually Enter Address**, and enter the address of the LicenseServer you want to backup. After entering the Primary LicenseServer, click **Connect to Primary LicenseServer**.



4. A confirmation dialog appears, asking you to confirm that you wish to set the current LicenseServer as the Failover LicenseServer (of the Primary LicenseServer you have just selected). Click **Yes** if you wish to confirm. Note that going ahead with the confirmation will remove any installed licenses and registered clients on the current LicenseServer.

Once a Failover LicenseServer has been configured, both the Primary LicenseServer and Failover LicenseServer will have notifications about their respective modes at the top of the Configuration Page. In the two screenshots below, the Failover LicenseServer is shown first, then the Primary LicenseServer.



Note the following points:

- After a Failover LicenseServer has been configured, it periodically synchronizes all licenses, registered clients, and license agreements from the Primary. If the Primary becomes unavailable, then the Failover takes over the role of LicenseServer. Once the Primary becomes available again, the Primary retakes control from the Failover. Any license-related modifications made on the Failover in this period will be lost when the Primary regains control.
- The Failover LicenseServer will provide licenses only to clients that are of version 2015 rel 3 or later (in the case of Altova MobileTogether Server, version 1.5 or later). Older clients are flagged as such in the [Client Monitoring tab](#) of the Primary LicenseServer (*screenshot below*). We recommend that you upgrade your client applications to version 2015 rel 3 or later if you wish to use the Failover LicenseServer feature (in the case of Altova MobileTogether Server, version 1.5 or later).

License checkout

You can select whether to allow desktop licenses to be checked out from the license pool to the machine on which the Altova desktop product is installed. If you allow this, then a client that has

acquired a license from your LicenseServer can check out this license and remain unmonitored for any period up to the maximum period you specify in this setting. The maximum allowed period for check outs is 30 days. (This enables a client to continue using the desktop product even when access to LicenseServer is not possible (say, when traveling) or not wanted.) The client can do the check out via the **Help | Software Activation** command of the Altova desktop application.

After a license has been checked out, it is moved to the *Checked-out Clients* section of the [Client Monitoring](#) tab. It will be considered to be in use, and it will not be available for use by any other client on the network.

Network settings

Administrators can specify network access points to the LicenseServer configuration page and to LicenseServer.

Web UI

Changing these settings will cause the LicenseServer to restart and any currently running and licensed applications will be shut down!

Configure the host addresses where the web UI is available to administrators.

All interfaces and assigned IP addresses
 Only the following hostname or IP address:
Ensure this hostname or IP address exists or LicenseServer will fail to start!

Configure the port used for the web UI.

Dynamically chosen by the operating system
 Fixed port
Ensure this port is available or LicenseServer will fail to start!

Proxy Server

Configure the proxy server connection details if a proxy server is needed to communicate with Altova's servers.

Hostname
 Port Number If the port number is left blank the default port 1080 will be used.
 User Name
 Password Leave the user name and password blank if no authentication is required.

License Service

Configure the host addresses where the LicenseServer service is available to clients.

All interfaces and assigned IP addresses
 Local only (localhost)
 Only the following hostnames or IP addresses:
Ensure the hostnames or IP addresses exist or LicenseServer will fail to start!

- *Web UI*: Allowed IP addresses can vary from: all interfaces and IP addresses on that

machine to a fixed address. Ports can be either dynamically calculated or fixed. This allows a wide range of allowed `IP-Address:Port` settings. The default port setting is **8088**.

- *Proxy Server (available from v1.3 onwards)*: If a proxy server is being used to connect to the Internet, the details of the proxy server must be entered in the Proxy Server pane (see *screenshot above*). Otherwise, the proxy server settings can be left blank. To configure LicenseServer to use a proxy server, enter the proxy server's host name, and, if required, a port number. If the proxy server does not need authentication, then the *User Name* and *Password* fields can be left blank.
- *License Service*: The machine on which License Server is installed can be connected to multiple networks via one or more network interfaces. On each network, the License Server machine is known by a host name and an IP address. The *License Service* setting lets you configure on which networks the license service is available. The `localhost` option allows the service on the local machine only. If you list hostnames and/or IP addresses, use a comma-separated list without any spaces (for example: `hostname1,IPAddress1,hostname2`). The port number of the service is fixed at **35355**.

The default settings allow unrestricted access to LicenseServer and its configuration page from within the networks to which LicenseServer is connected. If you wish to restrict access to either LicenseServer or its configuration page, enter the appropriate settings and click **Save**.

Run a connectivity test (see *above*) to check that the settings are correct.

Alert Mail settings

Altova LicenseServer needs to be connected to the `altova.com` server. If the connection is broken for more than 24*5 hours (5 days), LicenseServer will not allow licenses. As a result, work sessions with Altova products licensed by LicenseServer could be disrupted.

In order to alert the administrator that a connection is broken, an alert mail can be sent to an email address. The Alert Mail pane (see *screenshot below*) is where you enter settings for sending alert mails to an administrator's email address.

Alert Mail

Configure email settings for communication with administrator.

SMTP Host

SMTP Port

User authentication

User password

From

To

Miscellaneous

Show hint how to receive evaluation licenses for a server product

Send a warning email if contact with a running product is lost.

SMTP Host and *SMTP Port* are the access details of the email server from which the email alert will be sent. *User Authentication* and *User Password* are the user's credentials for accessing the email server. The *From* field takes the address of the email account from which the email will be sent. The *To* field takes the recipient's email address.

Click **Save** when done. After saving the Alert Mail settings, email alerts will be sent to the address specified whenever a significant event occurs, such as when connection to `altova.com` is lost. Note that such events are also recorded in the [Messages tab](#), and can be looked up there.

Miscellaneous settings

Show hints for receiving and deploying evaluation licenses

Checking this box (see screenshot above) displays, at the top of the configuration page, brief instructions about how to evaluate and deploy evaluation licenses.

Send a warning email if contact with a running product is lost

A warning message is sent from the *From* address to the *To* address if a connection with a product that is licensed and running is lost.

1.7.5 Messages, Log Out

The **Messages** tab displays all messages relevant to licenses in the license pool of the LicenseServer. Each message has a **Delete** button that allows you to delete that particular message.

The **Log Out** tab serves as the Log Out button. Clicking the tab logs you out immediately and then displays the Login mask.

1.8 Password Reset

If you forget your LicenseServer password, you can use the `passwordreset` command from the CLI to reset the password to `default`.

1. Open a command line window.
2. Change to the directory where the LicenseServer application package or executable is installed.
3. Enter the command: `licenseserver passwordreset`
This resets the LicenseServer administrator password to `default`.
4. You can now log in to the Administrator Web UI with the password `default`.

Index

A

Administrator interface, 45
Alert emails, 59
Altova LicenseServer,
 (see LicenseServer), 2
Altova ServiceController, 11
Assigning licenses, 39

C

Client machine monitoring, 58
Client management pane, 53
Configuration page, 45
 opening on Linux, 18
 opening on Mac OS X, 21
 opening on Windows, 15
 URL of, 15
 URL of (Linux), 18
 URL of (Mac OS X), 21

D

Default password, 15
Desktop products,
 registering with LicenseServer, 27

E

Evaluation licenses, 53

F

FlowForce Server,
 registering with LicenseServer, 28

L

License Pool, 24, 46

Licenses,
 assigning, 39, 53
 managing, 53
 uploading, 24, 46

LicenseServer,

 Configuration page, 45
 installation on Linux, 7
 installation on Mac OS X, 10
 installation on Windows, 5
 interface with, 45
 registering desktop products with, 27
 registering FlowForce Server with, 28
 registering MapForce Server with, 32
 registering MobileTogether Server with, 34
 registering RaptorXML(+XBRL) Server with, 35
 registering StyleVision Server with, 36
 settings, 59
 starting, 13
 steps for assigning licenses, 12

LicenseServer configuration page,
 (see Configuration page), 15, 18, 21

Logout, 66

M

MapForce Server,
 registering with LicenseServer, 32

Messages, 66

MobileTogether Server,
 registering with LicenseServer, 34

N

Network information, 4

Network settings, 59

P

Password,

default at startup, 15

Password reset, 67

R

RaptorXML(+XBRL) Server,

registering with LicenseServer, 35

Registering desktop products with LicenseServer, 27

Registering FlowForce Server with LicenseServer, 28

Registering MapForce Server with LicenseServer, 32

Registering MobileTogether Server with LicenseServer, 34

Registering RaptorXML(+XBRL) Server with LicenseServer, 35

Registering StyleVision Server with LicenseServer, 36

Reset in the password, 67

S

Server Management tab, 39

ServiceController, 11

Settings, 59

StyleVision Server,

registering with LicenseServer, 36

U

Unregistering products and clients, 53

Uploading licenses, 24, 46