

# Dassault Systemes License Server

V6R2012



Dassault Systemes License Server V6R2012  
Installation and Configuration Guide

Contains JAVA SE RUNTIME ENVIRONMENT (JRE) VERSION 6

Contains IBM(R) 64-bit SDK for AIX(TM), Java(TM) Technology Edition, Version 6

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# Overview

Welcome to the Dassault Systemes License Server Installation and Configuration Guide, designed to answer all your questions about installing and configuring the Dassault Systemes License Server.

The following table outlines the tasks required to install and configure the Dassault Systemes License Server.

Goal	Task	Contents
Installing the Dassault Systemes License Server	Before Starting the Installation	Conceptual information and preliminary remarks to take into account before installing or upgrading.
	Installing the Dassault Systemes License Server on Windows	Describes how to install Dassault Systemes License Server on Windows
	Installing the License Administration Tool Only	Describes how to install the License Administration Tool without the Dassault Systemes License Server on Windows
	Installing the Dassault Systemes License Server on UNIX	Describes how to install Dassault Systemes License Server on UNIX
	Uninstalling the Dassault Systemes License Server	Explains how to uninstall the Dassault Systemes License Server on both Windows and UNIX.
Configuring the Dassault Systemes License Server and Clients	Launching the License Administration Tool	Explains how to launch the License Administration Tool and retrieve the computer ID required for ordering your licenses.
	Configuring and Activating a Standalone License Server	Describes how to configure the license server and enroll the server activation license.
	Configuring and Activating a Cluster in Failover Mode	Explains how to configure and activate a cluster of three license servers to operate in failover mode.
	Starting and Stopping the License Server	Contains instructions for stopping and starting the license server.
	Configuring Clients	Explains how to configure clients to work with the license server.
	Communicating through Forward and Reverse Proxies	Describes how to communicate with a license server located behind a forward proxy and/or a reverse proxy.
Managing Licenses	Enrolling Product Licenses	Describes how to enroll your product licenses.
	Administering Licenses	Describes basic license administration tasks.
	Getting Information About License Usage	Contains useful information about how to track the number of licenses being used per product and per software editor.
	Recycling Named User Licenses	Describes how to recycle named user licenses when need occasionally arises, under exceptional circumstances.
	Authorizing Concurrent User Licenses	Explains how to authorize users, groups of users or specific license server host machines to use licenses, or to deny authorization, for concurrent user licenses.

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Goal	Task	Contents
	Getting Information About the Authorized Country of Use for Licenses	The <b>Geolocation</b> tab identifies for a given license server the country in which the licenses enrolled on the server are authorized.
Tracking License Server Operation	Tracking License Statistics	Describes how to generate statistics about license usage.
	Tracking Server Logs	Explains how to use and interpret the server logs.
	Monitoring the Server	Describes how to monitor license server performance.
Reference	DSLicSrv Command Syntax	Syntax of the DSLicSrv command.
	DSLicTarget Command Syntax	Syntax of the DSLicTarget command.
	File Locations, Settings and Registry Entries	Specifies where the different files, settings and registry entries are created when you install and administer the Dassault Systemes License Server.

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# What's New?

This section describes the new and enhanced functionality in the Dassault Systemes License Server.

## Enhanced Functionality

***License usage tracing* on page 39** Traces of license request and release operations and timeouts can now be logged.

***Authorizing Concurrent User Licenses* on page 62** Black lists and white lists have been replaced by enhanced authorization lists which now allow you to not only authorize users, groups of users or specific machines or groups of machines to use concurrent user licenses, or deny authorization, but also to reserve a given quantity of licenses to a list of users or computers, or limit a given quantity of licenses to a list of users or computers.

***Support for V5R21 processes* on page 56** The Dassault Systemes License Server is now able to grant floating and failover licenses to V5R21 processes.

Consequently, each time the Editor or EditorId field or pulldown is available, you will be able to choose between Dassault Systemes V5 (if V5 licenses are enrolled) and Dassault Systemes which stands for V6.

The following tabs are impacted:

- **License Administration** tab: the Editor or EditorId columns can also display V5 values
- **License Usage** tab and **Detailed License Usage** dialog box: the value Dassault Systemes V5 is available
- **Authorizations** tab: the value Dassault Systemes V5 is available in a dedicated tree
- **Statistics** tab: you can choose the editor which is Dassault Systemes V5 or Dassault Systemes.

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# Installing the Dassault Systemes License Server

This section explains how to install the Dassault Systemes License Server.

*[Before Starting the Installation](#) on page 6*

*[Installing the Dassault Systemes License Server on Windows](#) on page 7*

*[Installing Only the License Administration Tool on Windows](#) on page 15*

*[Installing the Dassault Systemes License Server on UNIX](#) on page 22*

*[Uninstalling the Dassault Systemes License Server](#) on page 24*

## Before Starting the Installation

This section briefly presents what a typical license server and license client setup looks like, and highlights certain points you must keep in mind before performing the installation.

### Operating System Prerequisites

The following operating systems are supported:

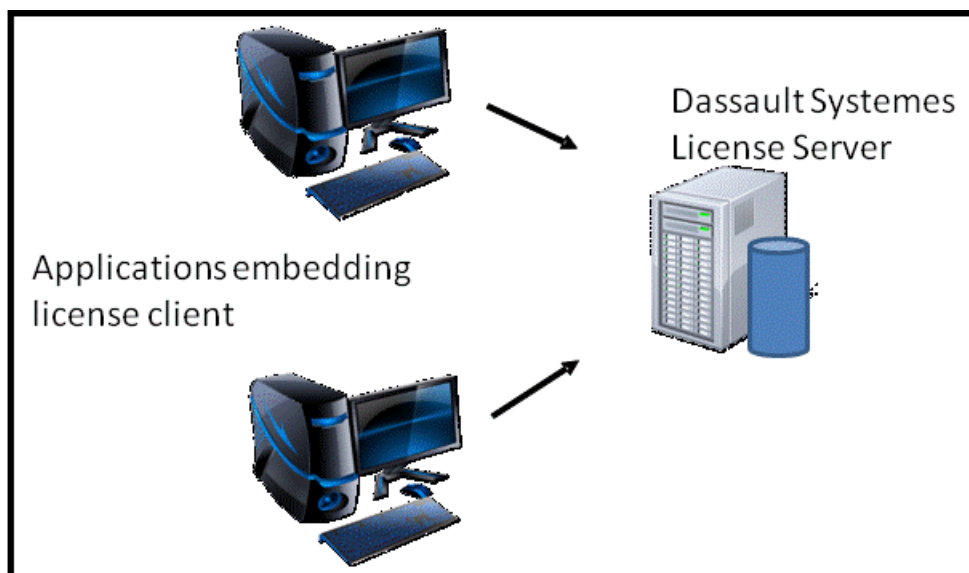
- Windows XP Professional SP3 32-bit x86
- Windows XP Professional SP2 64-bit x86
- Windows Vista SP1 32-bit x86
- Windows Vista SP1/SP2 64-bit x86
- Windows 7 64-bit x86
- Windows Server 2008 SP2 64-bit x86
- Windows Server 2008 R2 64-bit x86
- Red Hat Enterprise Linux 5.2 64-bit x86
- SuSE Linux Enterprise Server 10 SP3 64-bit x86
- SuSE Linux Enterprise Server 11 SP1 64-bit x86
- AIX 6.1 TL02 64-bit Power
- Solaris 10 5/08 64-bit Sparc.

For more detailed information, refer to the Program Directory.

### License Server and Client Typical Setup

A license server helps the administrator to guarantee the license control is implemented in compliance with purchased licensed products embedding the license client.

A typical license server and client setup looks like this:



The Dassault Systemes License Server is installed on a server machine on your network. The license administrator enrolls the product licenses on the server. The applications embedding license clients communicate with the license server over the network and retrieve the licenses from the license server.

### Preliminary Remarks

Before you start the installation, keep the following points in mind.

Virtual machines, such as VMWare, are not supported. It is not possible to either run or install the Dassault Systemes License Server on a virtual machine.

Only one Dassault Systemes License Server can be installed and configured on a given computer.

License servers and license client must be synchronized. An absolute time difference of one hour maximum is tolerated.

### Upgrading Your License Server

Keep in mind the following when you install a new version of the Dassault Systemes License Server:

- each version of (or hot fix for) the Dassault Systemes License Server is complete, in other words, it is installed in place of the existing version, so the existing version must be uninstalled beforehand
- uninstalling the Dassault Systemes License Server does NOT remove license keys, settings or log files
- you do not need to obtain a new activation license to install the latest version
- failover members can communicate with each other only if they are at the same license server code level. Be aware that upgrading failover cluster members from a given license server code level to a higher code level will prevent the failover cluster from functioning while you are upgrading the second member. Once the second cluster member has been upgraded, normal failover operation resumes.

### Installing the Dassault Systemes License Server on Windows

This task explains how to unload the Dassault Systemes License Server on a single computer running a supported Windows operating system.



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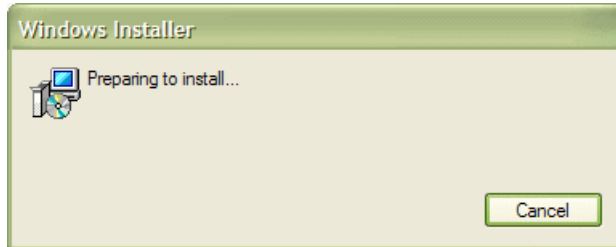
Installation and de-installation rely on Windows-compliant tools enabling anyone familiar with Windows procedures and concepts to install the software without assistance.

1. Log on as an administrator.

You must belong to the Administrators group, or have the privileges assigned to the Administrators group. Otherwise, you will not be able to start the installation.

2. Insert the media into the drive.

The following dialog box appears informing you that the installation is about to commence:



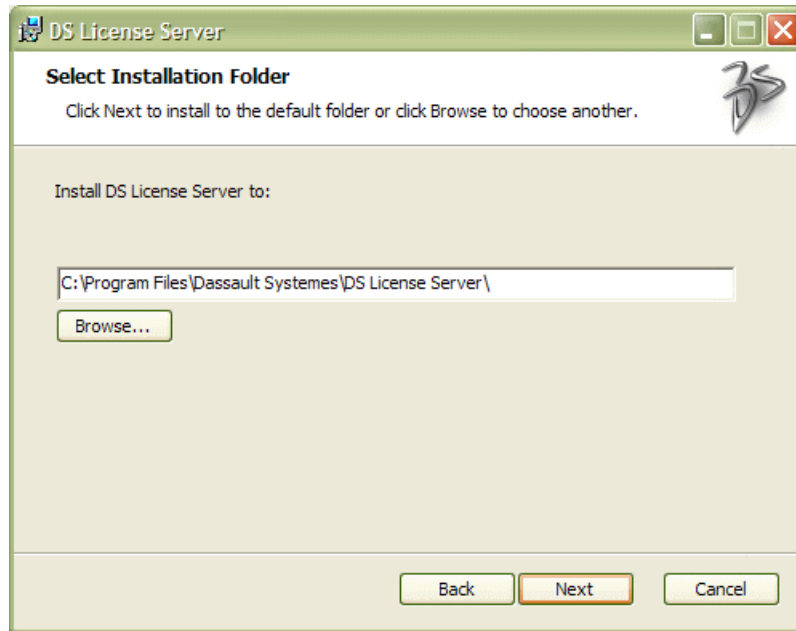
followed by the dialog box welcoming you to the **DS License Server** setup wizard:



Click the **Next** button to move to the next step.

3. Select the installation folder.

The **Select Installation Folder** dialog box appears:



The default destination folder is:

C:\Program Files\Dassault Systemes\DS License Server

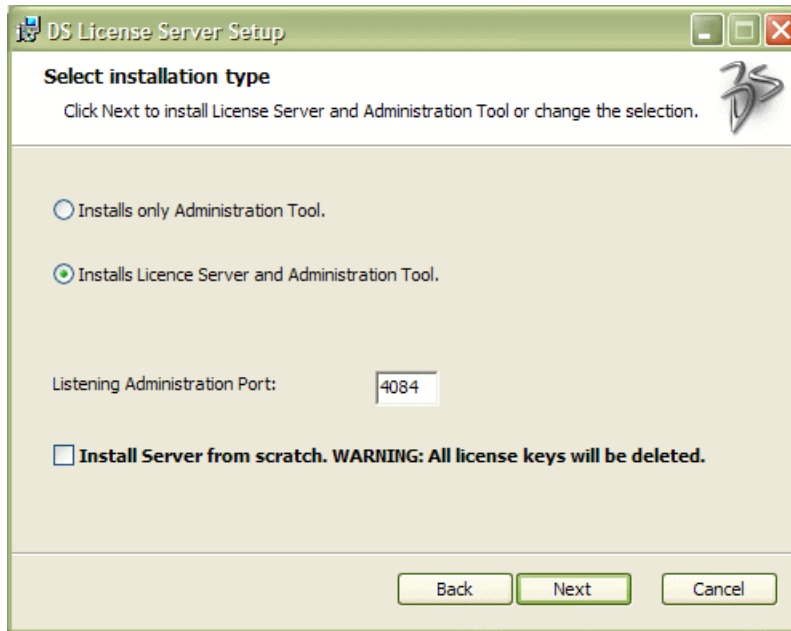
If the default destination folder is suitable, click the **Next** button to move to the next step, or click the **Browse...** button and navigate to select another folder and click OK.

The folder you choose must be empty. You can also specify a new folder: if the folder does not exist, you will be prompted to specify that you want the folder to be created, in which case you must click the **Yes** button to create the folder.

Click the **Next** button to move to the next step.

4. Select the installation type.

The **Select Installation Type** dialog box appears:



You have two choices:

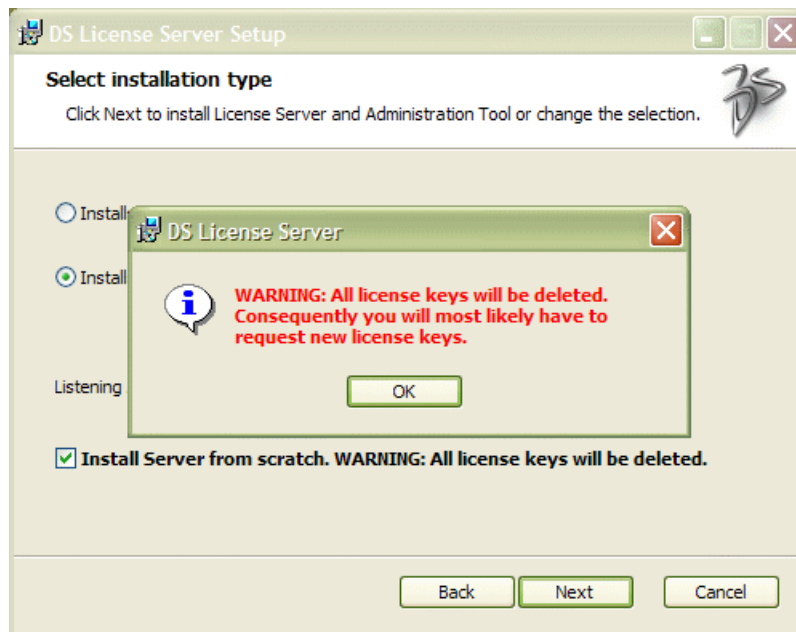
- **Installs only Administration Tool:** allows you to install only the **License Administration Tool**. Refer to [Installing Only the License Administration Tool on Windows](#) on page 15 for more details.
- **Installs License Server and Administration Tool** (default).

In our example, we are going to install both the License Server and the Administration Tool.

Set the **Listening Administration Port** number. The port number you set is used to listen to Dassault Systemes License Server administration tool requests. The default is 4084.

5. Decide whether to install from scratch or not.

Installing from scratch means that you are installing the Dassault Systemes License Server and also deleting all previous licenses in the license repository, including the activation license. This may be necessary if your licenses have been corrupted. To do so, check the **Install Server from scratch** check button. The warning is displayed again, informing that all licenses will be deleted if you continue:

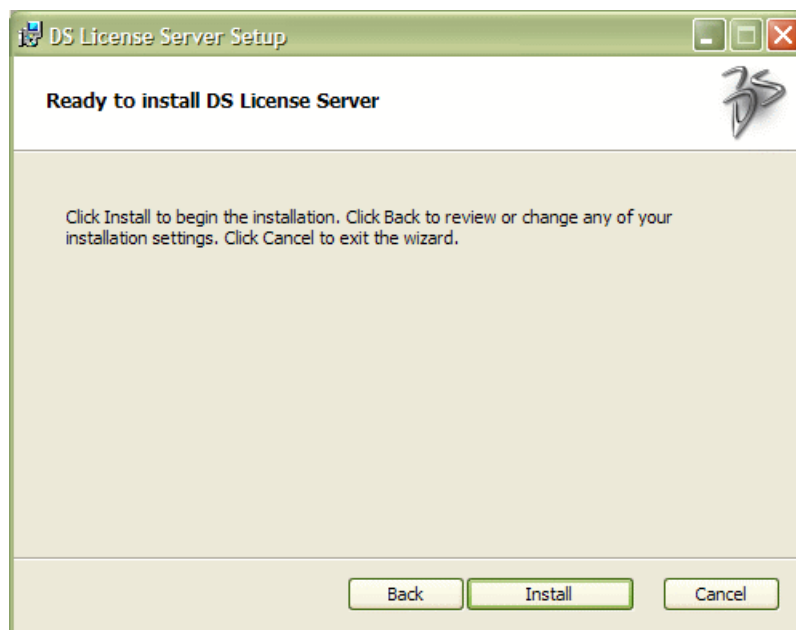


Click **OK**, then decide whether to continue installing from scratch, or uncheck the check box if you want to keep your existing licenses.

Click the **Next** button to move to the next step.

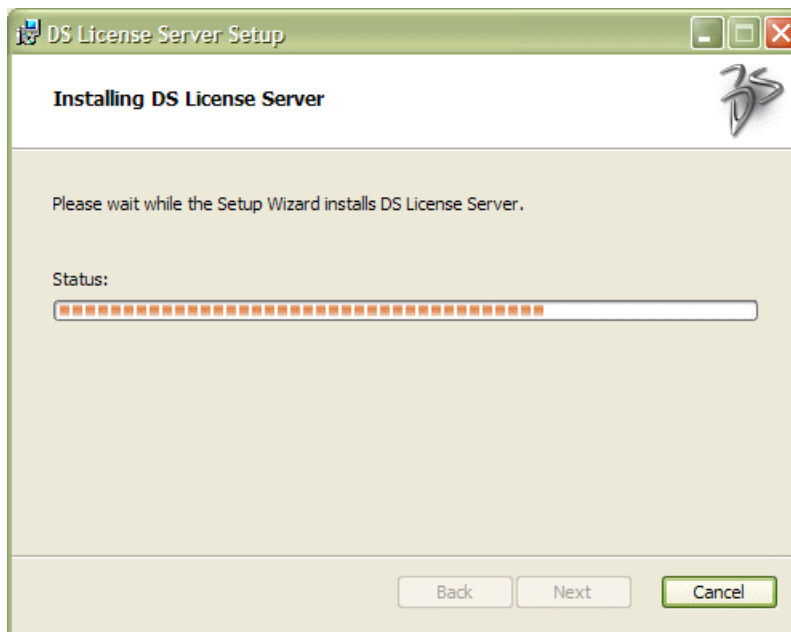
6. Install the DS License Server.

The **Ready to install DS License Server** dialog box appears:

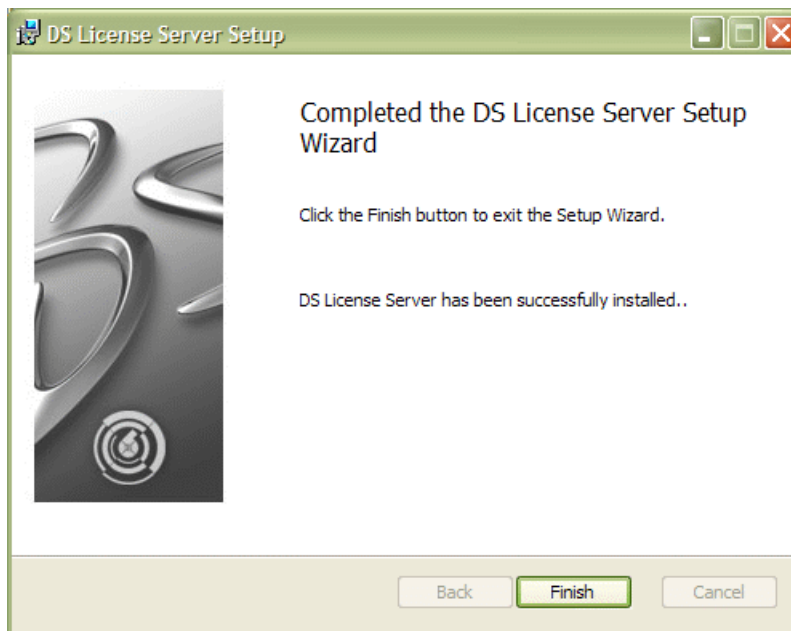


Click the **Install** button to install the Dassault Systemes License Server.

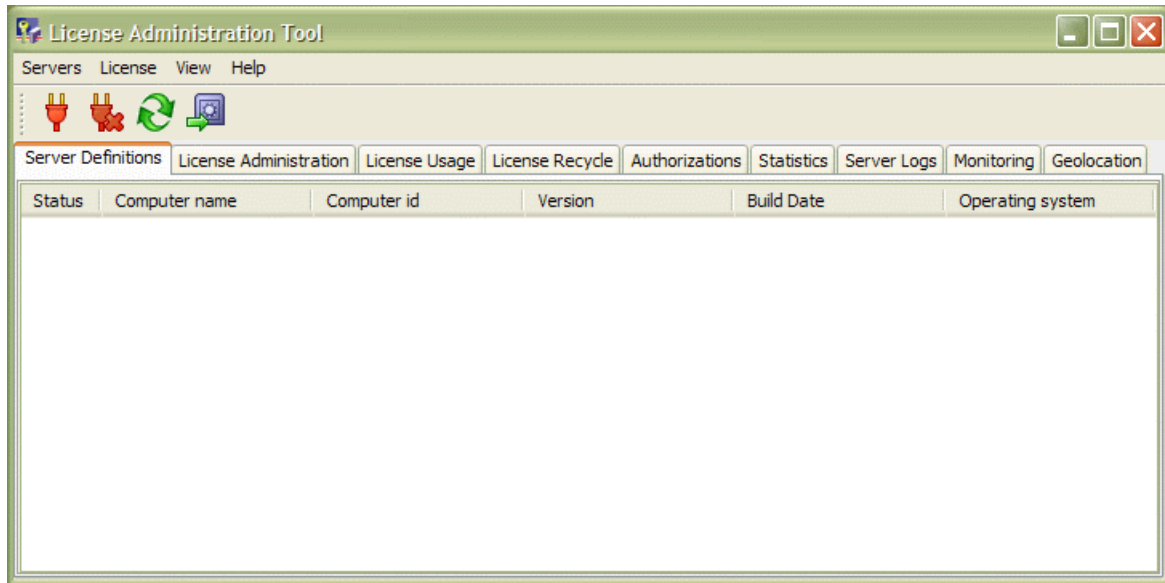
The **Installing DS License Server** dialog box appears:



A progress bar is displayed while the Dassault Systemes License Server files are installed and the corresponding Windows service is started. Once the installation has been completed, the following dialog box appears:



informing you that the installation has been completed, and the **License Administration Tool** is launched automatically, displaying the **Server Definitions** tab by default:

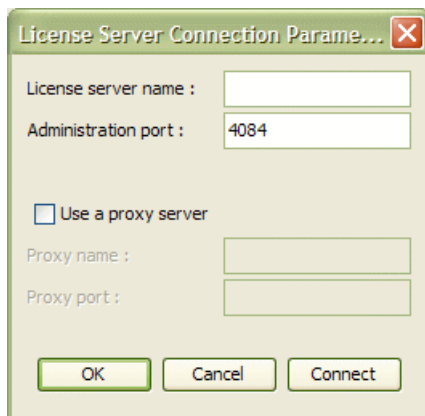


7. Click the **Finish** button to exit the setup wizard.

The **License Administration Tool** remains open. You now have to create a server definition for the license server you just installed on your computer.

8. Select the **Servers - New...** command.

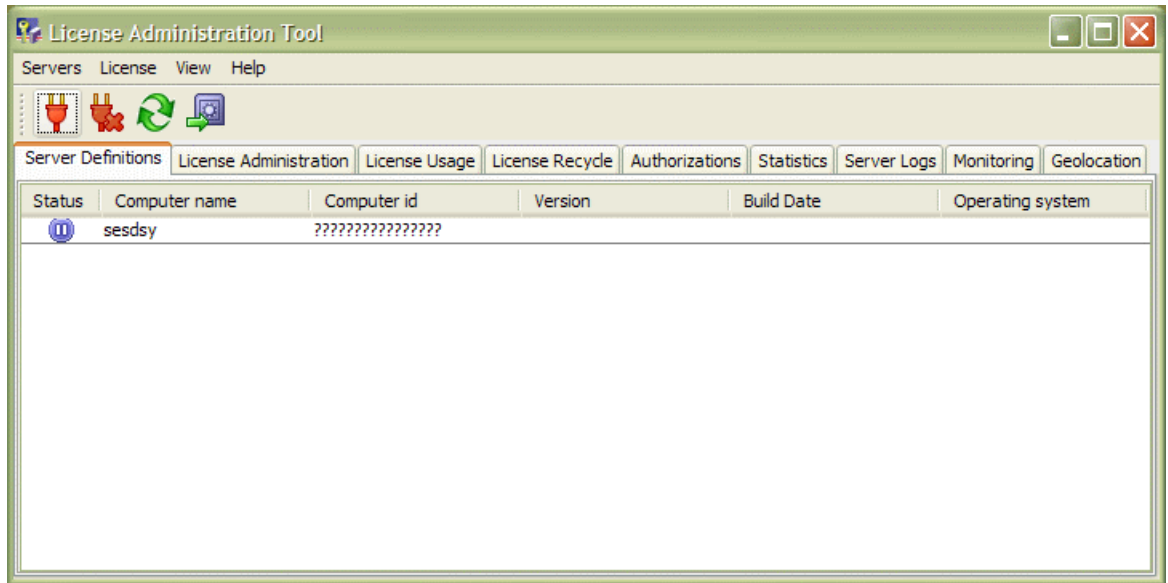
The **License Server Connection Parameters** dialog box appears:



9. Enter the name of the license server (the name of the machine hosting the server, typically). Note that the letters you type are displayed in red until the machine name is found. Then, set the listening port number for the **License Administration Tool** and click **OK**.

The **License Administration Tool** may communicate with forward and reverse proxies. For more information, refer to [Communicating through Forward and Reverse Proxies](#) on page 47.

The **Server Definitions** tab now looks like this:



#### 10. Connect to the license server.

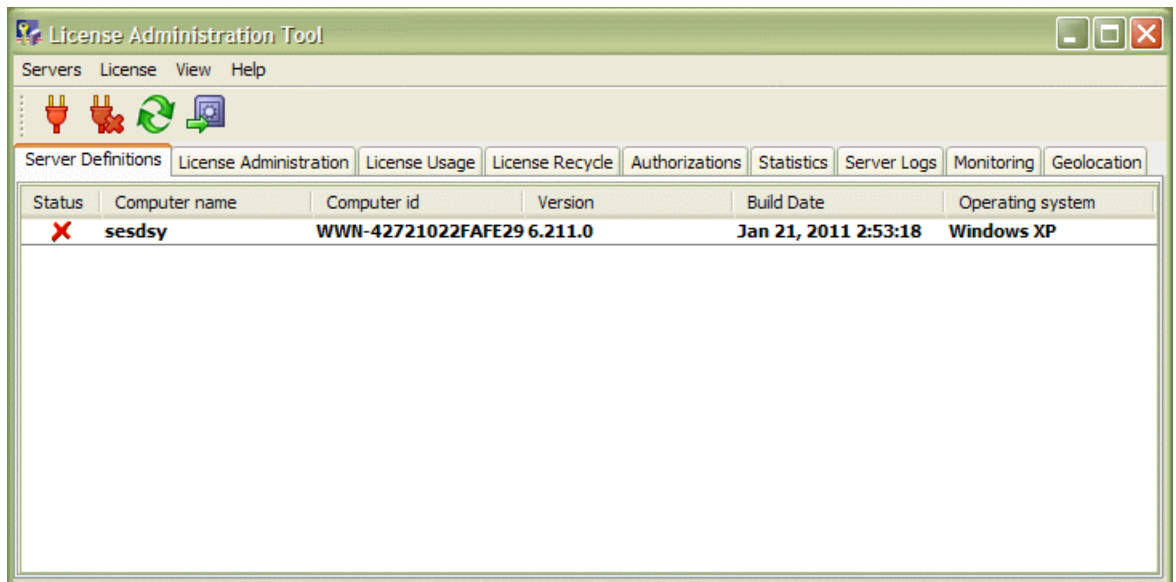
You must connect to the server to be able to use it. If you point to the icon in the status column, next to the computer name, a message like this will be displayed:

server xxx not connected

To connect to the server:




- Select the Servers - Connect command and select the server name from the list.
- Or, point to the icon, right click and select the Connect command.
- Or, you can also click the icon to connect all servers at the same time.

The icon appears:



---

The **Server Definitions** tab contains the following fields:

<b>Status</b>	Specifies the connection status of the <b>License Administration Tool</b> : <ul style="list-style-type: none"><li>•  icon: the license server has been defined but is not connected</li><li>•  icon: the server has been defined and connected but the license server has not yet been activated</li><li>•  icon: confirms that your server has been activated, as explained in <a href="#">Configuring and Activating a Standalone License Server</a> on page 27.</li></ul>
<b>Computer name</b>	Name of the computer hosting the license server.
<b>Computer id</b>	Computer id of the machine hosting the license server.
<b>Version</b>	Internal Dassault Systemes License Server software version number.
<b>Build date</b>	Internal software version build date.
<b>Operating system</b>	Identifies the operating system.

You must now configure the server as a standalone server or a member of a cluster in failover mode and activate it by enrolling an activation license before being able to use it, as explained in [Configuring and Activating a Standalone License Server](#) on page 27 and [Configuring and Activating a Cluster in Failover Mode](#) on page 35 respectively.

The installation results in the following:

- a Dassault Systemes License Server is installed on the local machine
- the service **DS License Server** is added to the list of Windows services, and is started automatically
- an installation log file is created in:  
`%TEMP%\DSLsmsi.log`
- in the **Start (All) Programs** menu, the entry **DS License Server** is added, containing the commands **License Server Administration** and **License Server Documentation**.

## Installing Only the License Administration Tool on Windows

This task explains how to unload only the **License Administration Tool** (without the Dassault Systemes License Server) on a single computer running a supported Windows operating system.

Several **License Administration Tool** instances can be connected simultaneously to the same license server. Only one **License Administration Tool** instance has complete administration access to the license server: either the local **License Administration Tool** or the first one that connects to the license server remotely. The other **License Administration Tool** instances operate in restricted mode with the following limitations:

- no modifications are allowed in the **Server Configuration** dialog box
- no licenses can be deleted using the **License Administration** tab
- no licenses can be released using the **License Release** tab
- creation and/or modification operations in the **Authorizations** tab are not allowed.

1. Log on as an administrator.

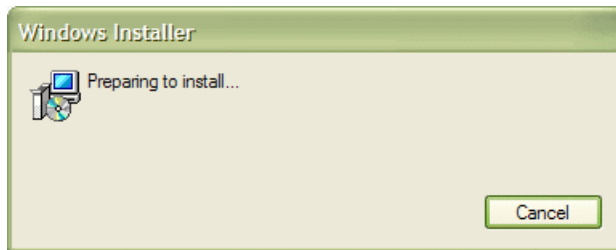


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You must belong to the Administrators group, or have the privileges assigned to the Administrators group. Otherwise, you will not be able to start the installation.

2. Insert the CD-ROM into the drive.

The following dialog box appears informing you that the installation is about to commence:



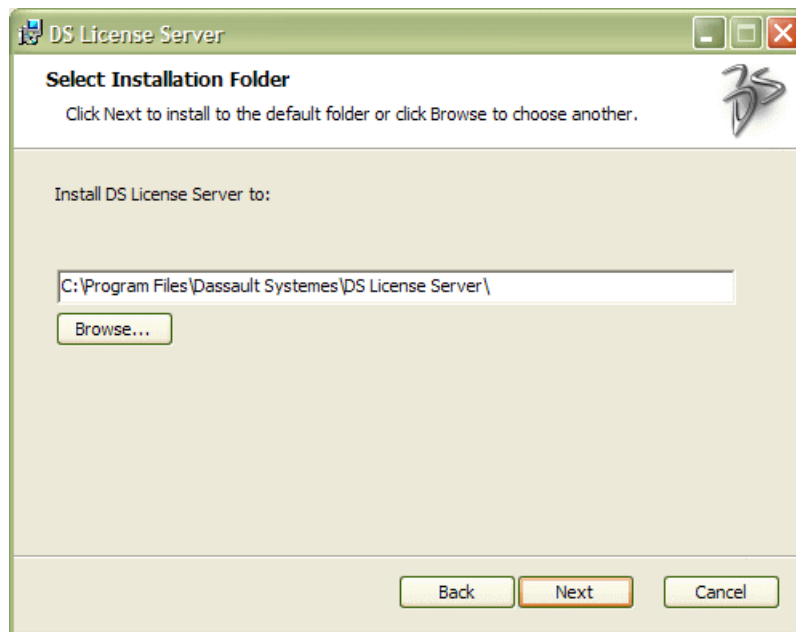
followed by the dialog box welcoming you to the DS License Server setup wizard:



Click the **Next** button to move to the next step.

3. Select the installation folder.

The **Select Installation Folder** dialog box appears:



The default destination folder is:

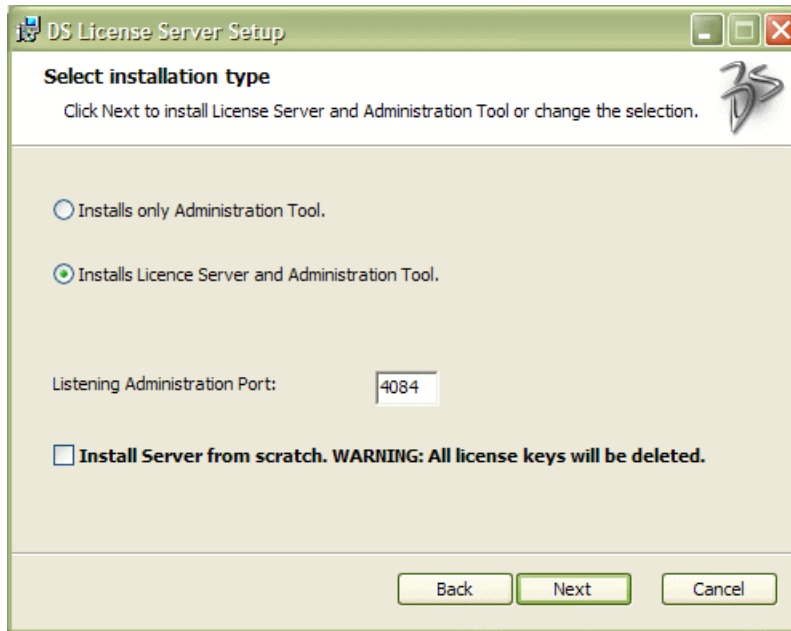
C:\Program Files\Dassault Systemes\DS License Server

If the default destination folder is suitable, click the **Next** button to move to the next step, or click the **Browse...** button and navigate to select another folder and click **OK**.

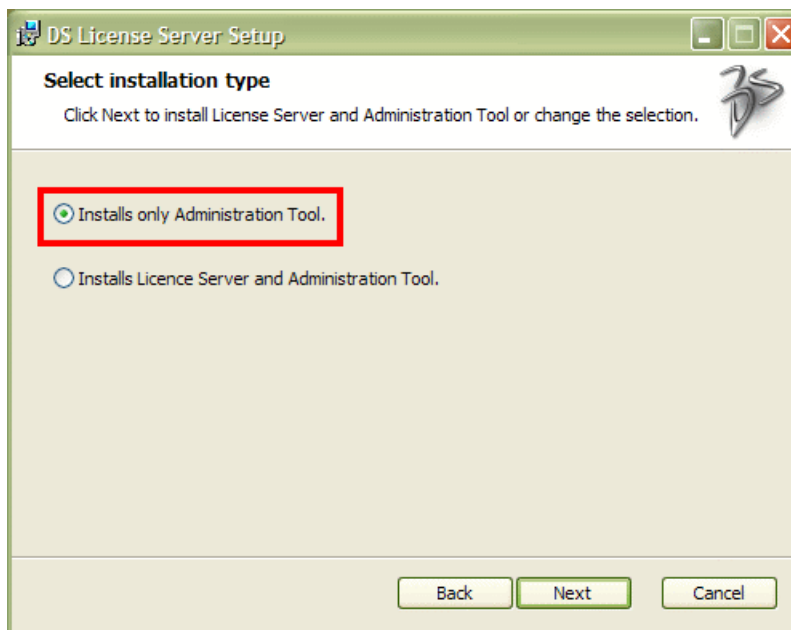
The folder you choose must be empty. You can also specify a new folder: if the folder does not exist, you will be prompted to specify that you want the folder to be created, in which case you must click the **Yes** button to create the folder.

Click the **Next** button to move to the next step.

The **Select Installation Type** dialog box appears:



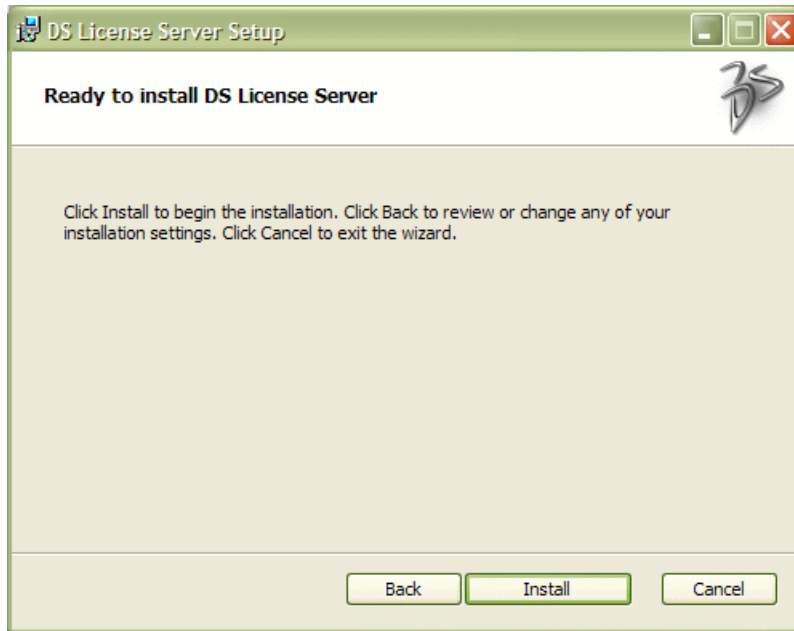
4. Check the **Installs only Administration Tool** check button.



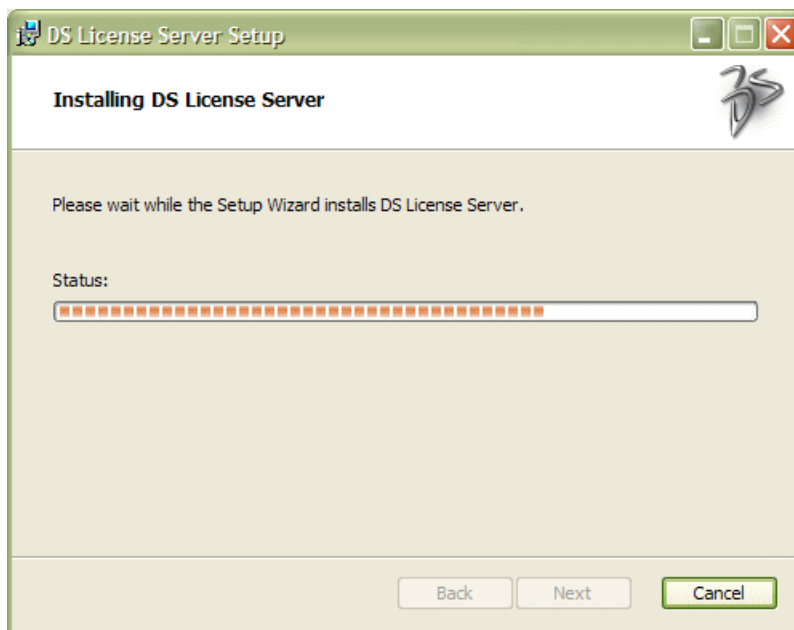
Click the **Next** button to move to the next step.

5. Install the Administration Tool.

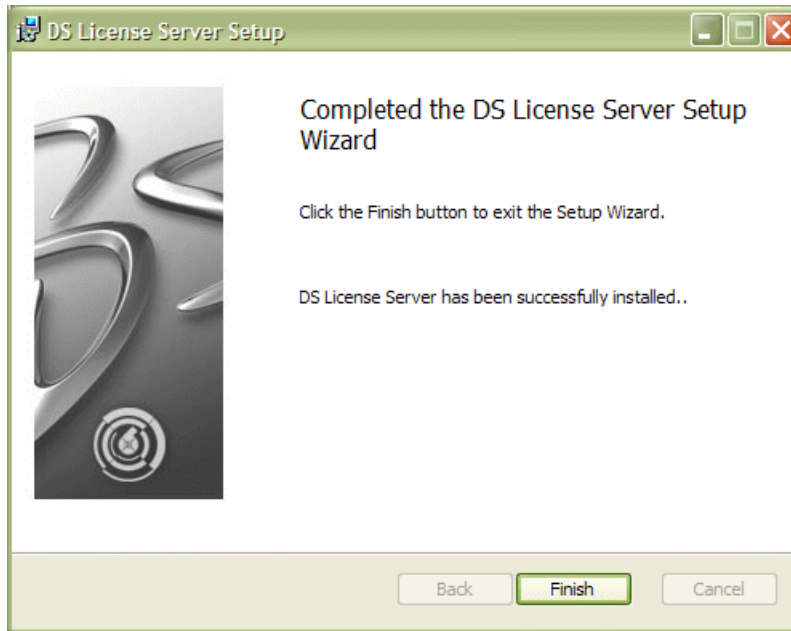
The **Ready to install DS License Server** dialog box appears:



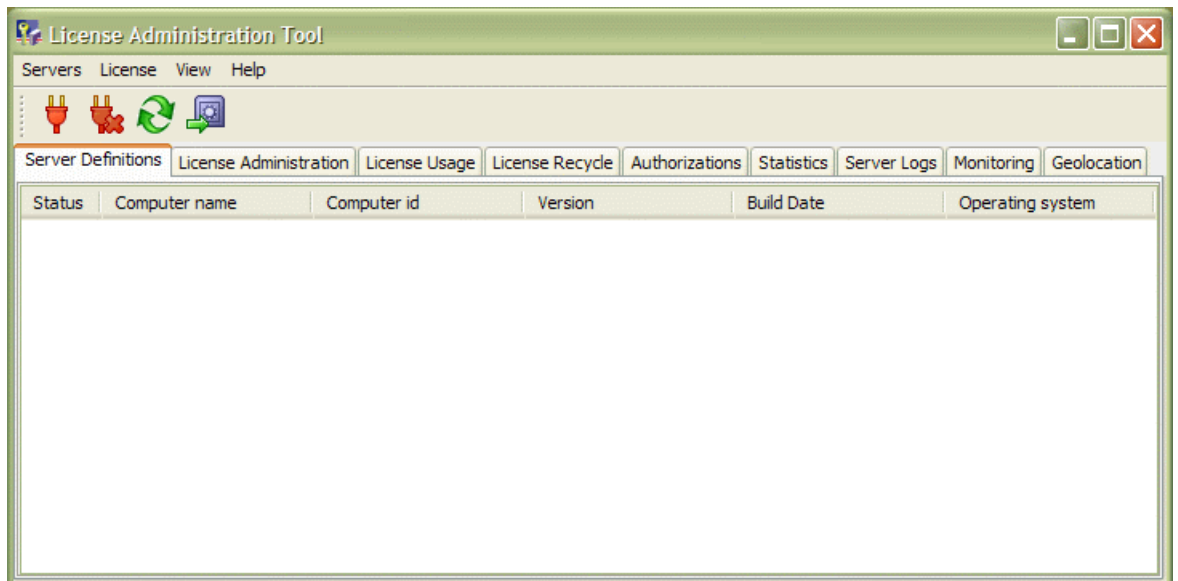
Click the **Install** button to install the **License Administration Tool**:



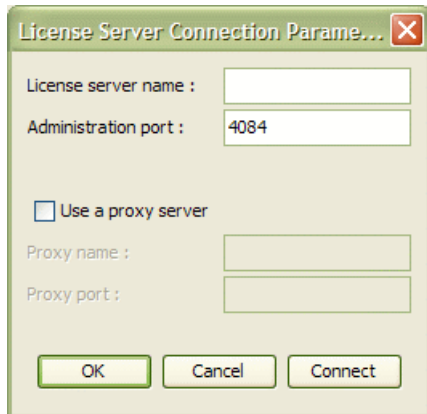
A progress bar is displayed while the **License Administration Tool** files are installed. Once the installation has been completed, the following dialog box appears:



informing you that the installation has been completed, and the **License Administration Tool** is launched automatically:



6. Click the **Finish** button to exit the setup wizard.  
The **License Administration Tool** remains open. You now have to create a server definition for the license server to which you want to connect.
7. Select the **Servers - New** command.  
The **License Server Connection Parameters** dialog box appears:

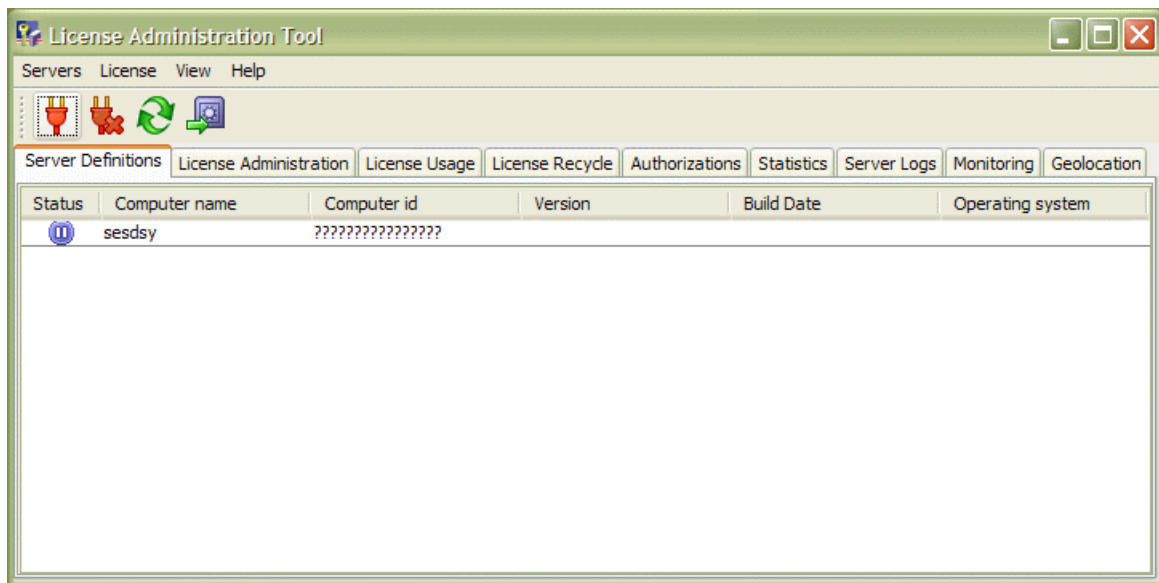


- Enter the name of the license server (the name of the machine hosting the server, typically), set the listening port number for the **License Administration Tool**, then click **OK**.

You will only be able to administer a remote license server if you checked the **Enable remote administration** check button when configuring the license server.

The **License Administration Tool** may communicate with forward and reverse proxies. For more information, refer to [Communicating through Forward and Reverse Proxies](#) on page 47.

The **License Administration Tool** now looks like this:




- Connect to the license server.

You must connect to the server to be able to use it. If you point to the icon in the status column, next to the computer name, a message like this will be displayed:

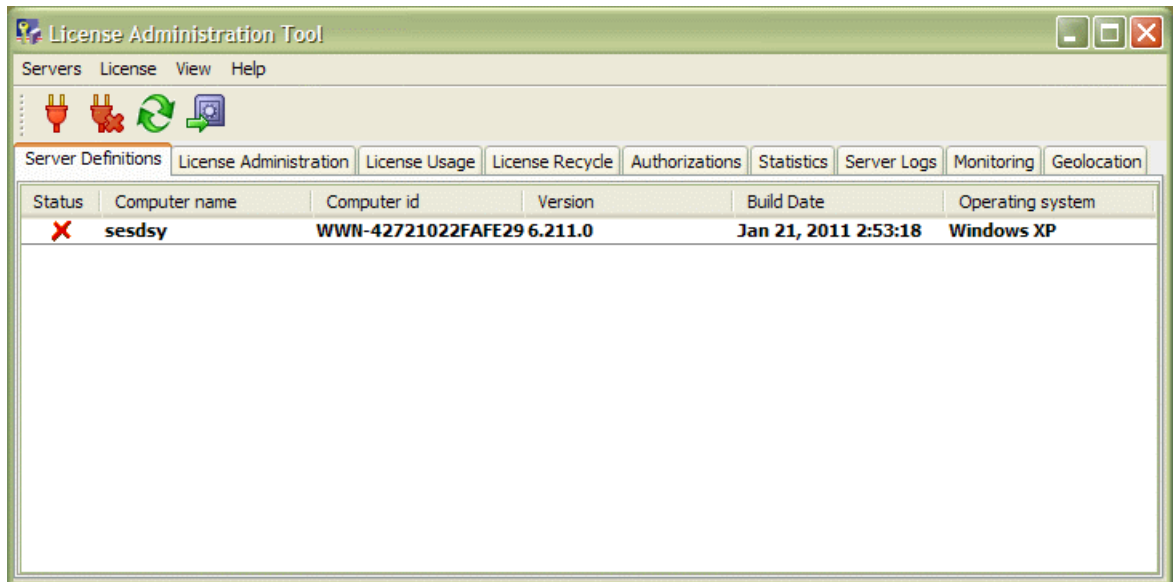
server xxx not connected

To connect to the server:

- Select the **Servers** - **Connect** command and select the server name from the list.
- Or, point to the icon, right click and select the **Connect** command.

- Or, you can also click the  icon to connect all servers at the same time.

The  icon appears:



The installation results in the following:

- a **License Administration Tool** is installed on the local machine
- an installation log file is created in:  
`%TEMP%\DSL$msi.log`
- in the **Start (All) Programs** menu, the entry **DS License Server** is added, containing the commands **License Server Administration** and **License Server Documentation**.

## Installing the Dassault Systemes License Server on UNIX

This task explains how to unload the Dassault Systemes License Server from scratch on a single computer running a supported UNIX operating system.

1. Log on as root.
2. Change directory to the media mount point.
3. Change directory to the appropriate sub-directory for your UNIX platform, for example on AIX:  
AIX
4. Check that the DISPLAY variable is exported appropriately before continuing (or perform the installation using the -noUI option).
5. Run the command:

```
./startInstLicServ
```

The command can be run with the following options

Option	Description
-p	Set the installation path. The default value is:  <code>/usr/DassaultSystemes/DSLICENSEServer</code>
-n	Set the licensing administration port number. The default value is: 4084
-x	Prevent system file update managing automatic startup when rebooting your machine
-onlyAdminTool	Installs only the <b>License Administration Tool</b> (without the license server)
-f	Installing from scratch means that you are installing the Dassault Systemes License Server and also deleting all previous licenses in the license repository, including the activation license. This may be necessary if your licenses have been corrupted.
-noUI	Do not launch the <b>License Administration Tool</b> GUI. Useful when no display is available.
-h	Display help

The installation starts and the system outputs the following:

```

/tmp/DSLS/AIX64
Check free port
Chosen port 4084

Installing server in /usr/DassaultSystemes/DSLICENSEServer
Creating directory /usr/DassaultSystemes/DSLICENSEServer
mkdir -p -m 755 /usr/DassaultSystemes/DSLICENSEServer
Directory /usr/DassaultSystemes/DSLICENSEServer was successfully created
Installation directory: /usr/DassaultSystemes/DSLICENSEServer

TarCmd: tar -xf /tmp/DSLS/AIX64/DSLS.tar
Untar DSLS.tar was successful
Server initialization:
/usr/DassaultSystemes/DSLICENSEServer/aix_a64/DSLicSrv -initServer
-adminPort 4084
2011/02/14 10:57:12:415 I INITSERVER Initializing license server on /var
args [-adminPort, 4084]
2011/02/14 10:57:12:760 I REPOSITORY LicenseDB.dat written to disk
2011/02/14 10:57:12:958 I REPOSITORY LicenseRT.dat written to disk
2011/02/14 10:57:12:972 I INITSERVER Server version 6.211.0 built on
Feb 14, 2011 6:02:43 PM Initialized
2011/02/14 10:57:12:972 I INITSERVER ComputerId CPE-0370E01819E46601
Server was successfully initialized

Server start:

Server was successfully started


Sending nohup output to nohup.out.
Admin Console start:
/usr/DassaultSystemes/DSLICENSEServer/aix_a64/code/bin/DSLicSrv -adminUI

```

The **License Administration Tool** dialog box is displayed. The **License Administration Tool** has the same graphic user interface and works the same way as on Windows.



---

 **Note:** If you intend to install the Dassault Systemes License Server on a UNIX machine which does not use a display, to avoid automatically displaying the **License Administration Tool**, perform the installation by running the following command:

```
/usr/DassaultSystemes/DSLicenseServer/aix_a64/code/bin/startInstLicServ  
-noUI
```

To access administration functions, launch the **License Administration Tool** in command line mode as follows:

```
/usr/DassaultSystemes/DSLicenseServer/aix_a64/code/bin/DSLicSrv -admin
```

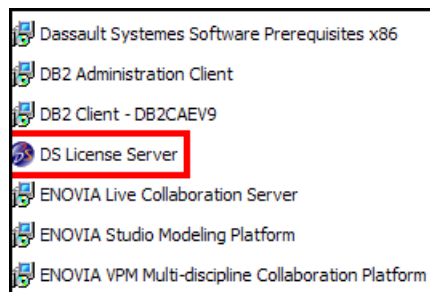
## Uninstalling the Dassault Systemes License Server

This section explains how to uninstall the Dassault Systemes License Server on both Windows and UNIX.

### Uninstall on Windows

Uninstalling relies on Windows-compliant tools enabling anyone familiar with Windows procedures and concepts to uninstall the software without assistance.

1. Log on as an administrator.  
You must belong to the Administrators group, or have the privileges assigned to the Administrators group. Otherwise, you will not be able to uninstall the software.
2. On the Windows desktop, select the **Start > Control Panel**, then double-click the **Add/Remove Programs** control.  
The **Add/Remove Programs** dialog box appears.
3. Select the item **DS License Server** from the list.  
The list looks something like this (depending on the software installed on your computer):



4. Click the **Change/Remove...** button.  
A message informs you that the folder:

```
C:\Program Files\Dassault Systemes\DS License Server
```

is going to be removed, and prompts you to confirm that you want to continue and remove all the software.

5. Click **Yes** to confirm.

The program removes:

- 
- the installation folder
  - the Windows service named DS License Server
  - all entries in the **Start > All Programs** menu
  - all registry entries.

Note that the following are NOT removed:

- license keys
- settings
- logs.

## Uninstall on UNIX

This section explains how to uninstall the Dassault Systemes License Server on UNIX.

1. Log on as root.
2. Stop the license server by running the following command:

```
/usr/DassaultSystemes/DSLicenseServer/OS/code/bin/DSLicSrv -stopServer
```

or by using the **Servers - Stop** command provided by a local or remote **License Administration Tool**. If you are using a local administration tool, exit this tool.

3. Delete the installation directory as follows:

```
rm -rf /usr/DassaultSystemes/DSLicenseServer
```

4. If you did not use the `-x` option with the `./startInstLicSrv` command when you installed the license server, delete the remaining system files created at this moment by running the following commands, depending on the UNIX platform:

On AIX:

```
rmitab DSLicSrv
```

On Solaris:

```
rm /etc/rc2.d/S98dsls
rm /etc/rc2.d/K96dsls
rm /etc/init.d/dsls
```

On Linux:

```
/usr/lib/lsb/remove_initd /etc/init.d/dsls
rm /etc/init.d/dsls
rm /etc/sysconfig/dsls
```

---

# Configuring the Dassault Systemes License Server and Clients

This section explains how to configure the Dassault Systemes License Server and clients.

[Starting the License Administration Tool](#) on page 26

[Configuring and Activating a Standalone License Server](#) on page 27

[Configuring and Activating a Cluster in Failover Mode](#) on page 35

[Starting and Stopping the Dassault Systemes License Server](#) on page 43

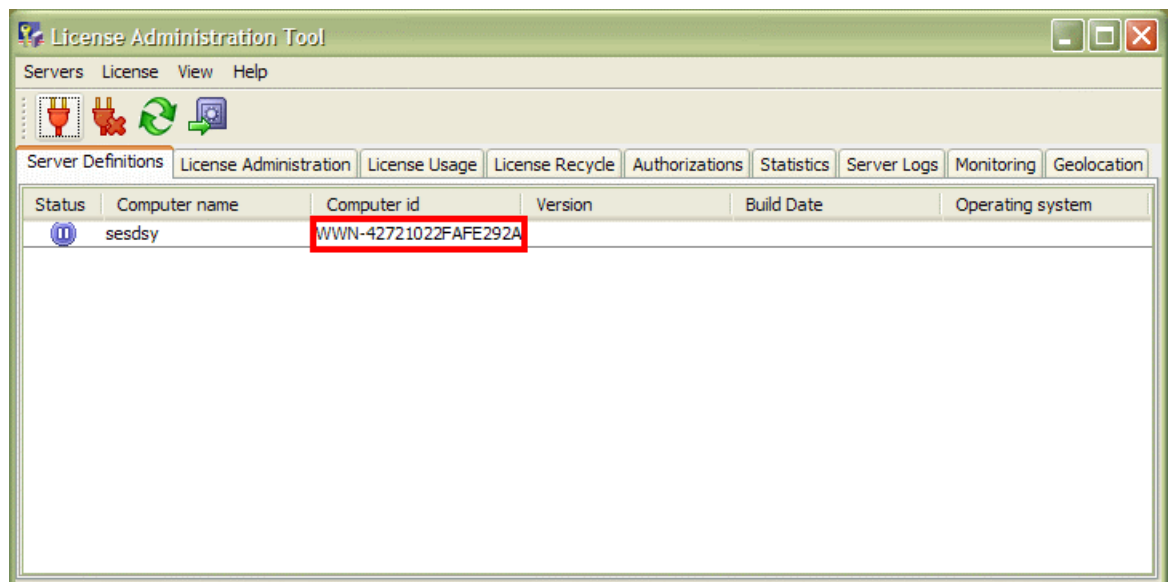
[Configuring Clients](#) on page 46

[Communicating through Forward and Reverse Proxies](#) on page 47

## Starting the License Administration Tool


This section explains how to launch the tool if it is not running, and obtain the computer id required for ordering licenses.

1. Select Start - (All) Programs - DS License Server - License Server Administration.
2. Locate the **Computer id** column in the dialog box:



The computer id will be required when you order your product licenses.

---

 **Note:** An alternative method of obtaining the computer id is to go to the following installation directory:

```
C:\Program Files\Dassault Systemes\DS License Server\intel_a\code\bin
```

and run the following command:

```
DSLicTarget -t
```

The DSLicTarget tool is also available in the appropriate operating system folders on your CD-ROM.

On Windows, the computer id is based on the network card. Teamed and bridged network cards are not supported.

 **Note:** On UNIX, start the **License Administration Tool** by running the following command, for example on AIX:

```
/usr/DassaultSystemes/DSLICENSEServer/aix_a64/code/bin/DSLicSrv  
-adminUI
```

## Configuring and Activating a Standalone License Server

This section explains how to configure and activate your license server in standalone mode.

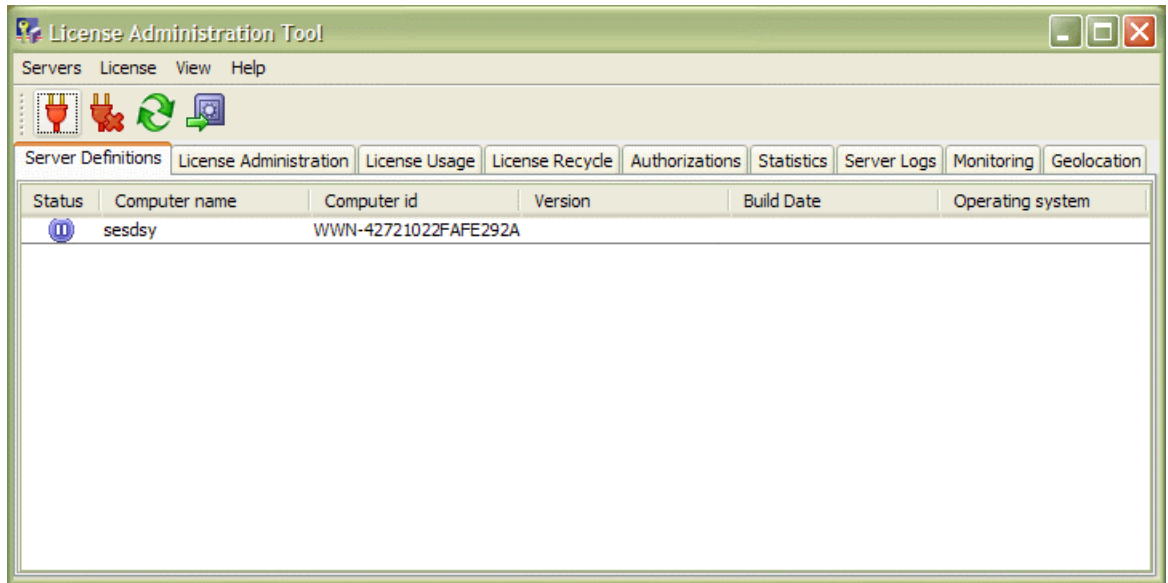
The installation created a Dassault Systemes License Server on your machine. But you must first configure and activate the license server before a client process can be served.

You must choose to configure the server:


- as a standalone server
- or in failover mode as a member of a cluster.

These choices are mutually exclusive. Once you have configured the server in either standalone or failover mode, you cannot modify your configuration. In particular, license keys are different.

1. Select Start - (All) Programs - DS License Server - License Server Administration to launch the **License Administration Tool** if it is not already launched:






2. Connect the **License Administration Tool** to the server.

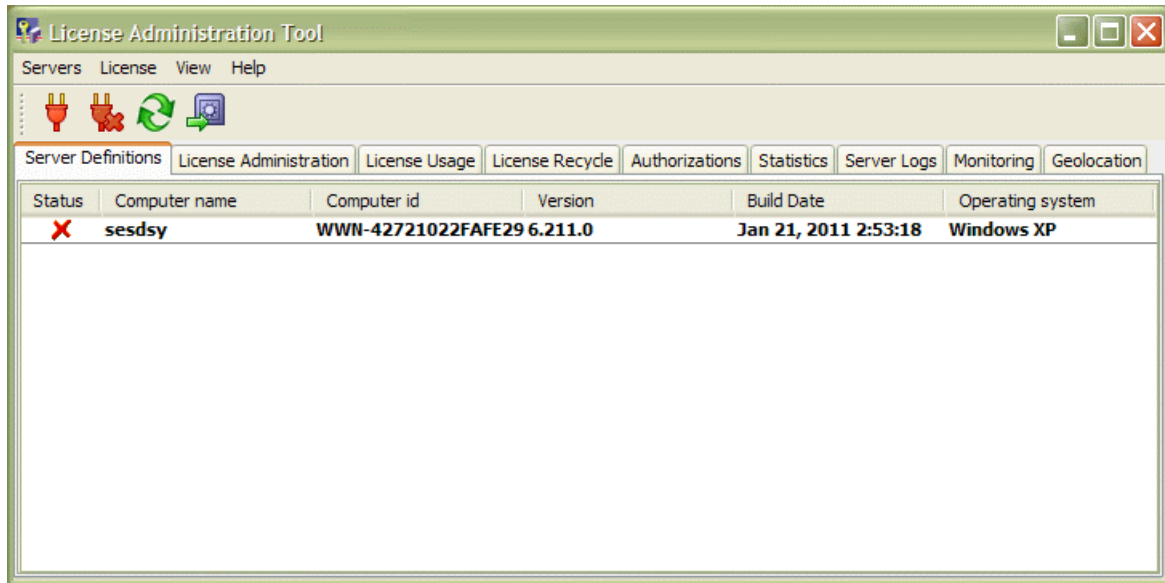
You must connect to the server to be able to use it. If you point to the  icon in the status column, next to the computer name, a message like this will be displayed:  
server xxx not connected

Only one **License Administration Tool** may be connected to a given license server.

To connect to the server:

- Select the **Servers** - **Connect** command and select the server name from the list.
- Or, point to the , right click and select the **Connect** command.
- Or , you can also click the  icon to connect all defined servers at the same time (only one in the current scenario).

Note that you can connect the tool to several license servers simultaneously. To disconnect from one license server, select the **Disconnect** command. To disconnect all license servers, click the  icon.  
The status now looks like this:

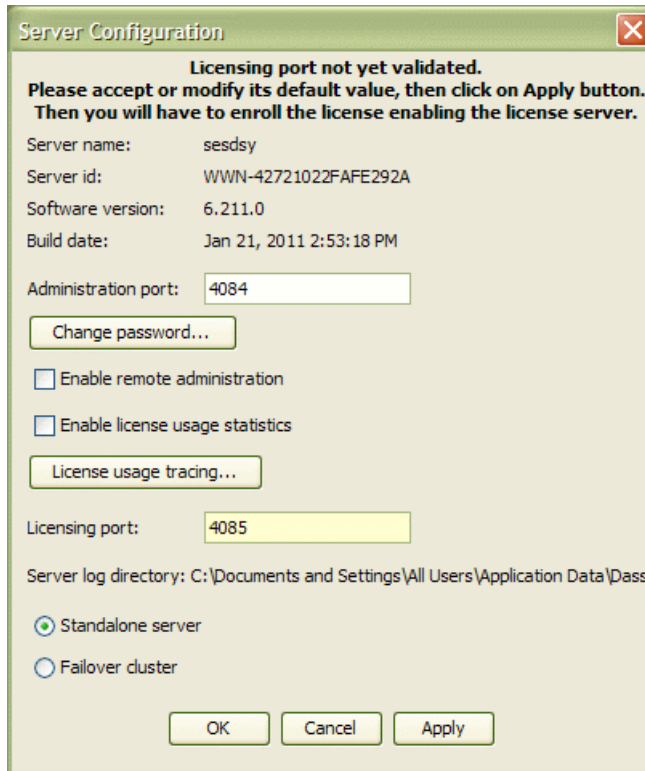


Pointing to the **X** icon displays the following message:  
licensing port not configured; check server properties

3. Configure the license server.

- Select the **Servers - Properties** command and select the server name from the list.
- Or, point to the **X** icon, right click and select the **Display properties** command.
- Or, double-click the line containing the computer name.

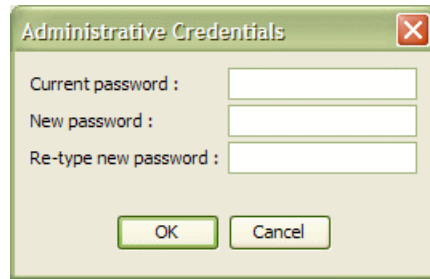
The **Server Configuration** dialog box appears:



The **Licensing port:** field is displayed in yellow, informing you that you can either accept the default port number (4085) or set another port number.

You do not have to set any other options for the moment, but for information purposes here is a list of the information and options in the dialog box:

- Server name:** Name of the machine hosting the license server.
- Server id:** Computer id of the machine hosting the license server.
- Software version:** Internal Dassault Systemes License Server software version number.
- Build date:** Internal software version build date.
- Administration port:** Listening port for the **License Administration Tool**.
- Change password...** Clicking this button opens the **Administrative Credentials** dialog box:





which lets you set a password required to administer your server using the **License Administration Tool**.

### Enable remote administration

Check this option to enable your license server to be administered from a remote **License Administration Tool**. The status of this checkbox is only taken into account once the license server has been activated. Before activation, remote administration is allowed.

Only one **License Administration Tool** may be connected to a given license server. Furthermore, a local **License Administration Tool** takes priority over one started on a remote computer.

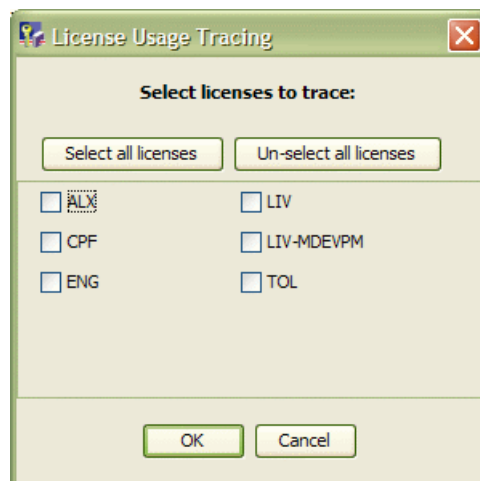
 **Note:** There's no connection timeout between a **License Administration Tool** remotely connected to a license server and this license server. However, if a network problem occurs or if the **License Administration Tool** runs from a laptop which disconnects, the connection between both processes is broken and the status in the **Server Definitions** tab returns to . Once disconnected, the **License Administration Tool** doesn't automatically reconnect to the license server(s).

### Enable license usage statistics

Enables license usage statistics using the **Statistics** tab.

### License usage tracing...

Displays the **License Usage Tracing** dialog box allowing you to select the licenses for usage tracing:






---

You have to select at least one license to activate usage tracing. You can select individual licenses by checking the box next to the license(s), or select and unselect all the licenses using the **Select all licenses** and **Un-select all licenses** buttons respectively.

If activated, the traces of license request and release operations and timeouts are logged and can be viewed using the **Server Logs** tab. Note that "timeout" means that the license server released the license itself, because was not contacted by the licensing client during the appropriate period.

If another **License Administration Tool** is already connected, the dialog box is in read-only mode and the contents are grayed out.

 **Note:** Release of licenses granted to ENOVIA Live Collaboration server are not traced. Instead, timeouts appear for these licenses.

**Server log directory**

Point to this option to display the path of the directory containing license server logs. The full pathname is displayed in a tooltip, and can also be selected when clicking on it (or double-clicking or triple-clicking). The path may be located either on the local machine or on a remote machine. The server log directory path can only be set in command line mode (using the `-logDir` option of the `DSLicSrv` batch command).

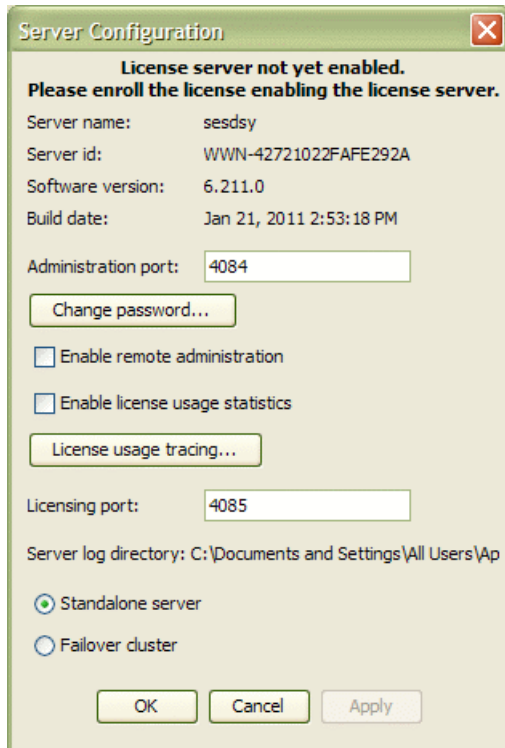
**Standalone server**

This option is checked by default and signifies that you are configuring a standalone server, not a server belonging to a failover cluster.


**Failover cluster**

Refer to [Configuring and Activating a Cluster in Failover Mode](#) on page 35.

4. Set the licensing port number, then click the **Apply** button.  
The **Server Configuration** dialog box now looks like this:



then click **OK**.


Pointing to the  icon now displays the following message:

No license enrolled

For the moment, the license server is configured but not activated. You cannot use the license server until it has been activated. To activate the license server, you must enroll a special license: the Activation license.

5. Enroll the activation license as follows:

a)

Select the License - Enroll command or click the  icon.

The **Open** dialog box is displayed.

b) Select the appropriate .LICZ file containing your licenses, then click the **Open** button.

License keys and their activation key are provided in the form of archives containing both the server ACTIVATION license and your product licenses.

A file will be named something like this (with the .LICZ suffix):

DLD-430814856494DBA7\_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3\_0001\_1.LICZ

The **License Enrollment** dialog box opens, containing messages confirming that the licenses have been enrolled on your server:

```
License enroll starting
sesdsy: License enroll starting
Sending files to server sesdsy
E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-1-of-13.LIC
E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-2-of-13.LIC
```

```

E:\licensing\Licensing
211\DLID-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-3-of-13.LIC

E:\licensing\Licensing
211\DLID-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-4-of-13.LIC

E:\licensing\Licensing
211\DLID-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-5-of-13.LIC

E:\licensing\Licensing
211\DLID-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-6-of-13.LIC

E:\licensing\Licensing
211\DLID-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-7-of-13.LIC

E:\licensing\Licensing
211\DLID-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-8-of-13.LIC

E:\licensing\Licensing
211\DLID-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-9-of-13.LIC

E:\licensing\Licensing
211\DLID-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-10-of-13.LIC

E:\licensing\Licensing
211\DLID-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-11-of-13.LIC


E:\licensing\Licensing
211\DLID-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-12-of-13.LIC

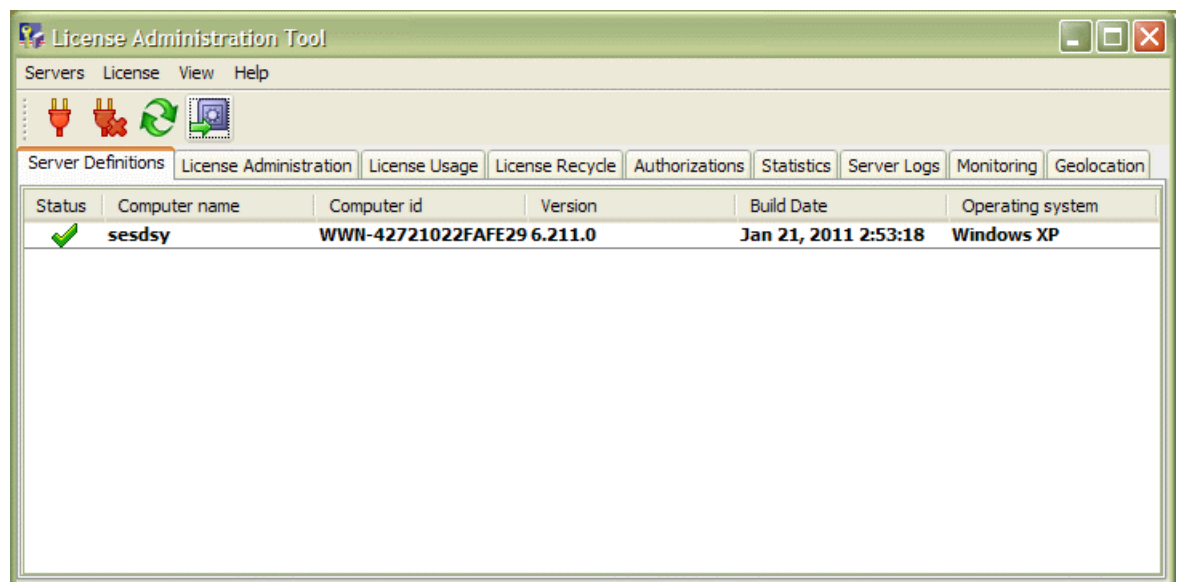
E:\licensing\Licensing
211\DLID-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-13-of-13.LIC

sedsy : 13 license data received (0 invalid)


```


c) Click OK.

The  icon confirms that your server has been activated:



---

If you point to the  icon, a tooltip like this will be displayed:  
server sesdsy (10.232.69.48) connected  
confirming that your license server is up and running.

 **Note:** Once you have configured and activated your server as a standalone server, you can no longer change your mind and configure it as part of a failover cluster. This is why the corresponding options are grayed out.

**Warning:** the Activation license included in the .LICZ file with the product licenses is valid for only 30 days. You must activate the license server within 30 days after having received the license file. If you need to activate the server a second time, after the first 30 days, the original activation license will no longer be valid, in which case another activation license is required. You only have to activate the license server once. The 30 days apply to the life of the activation license, not to how long the license server remains active.

## Configuring and Activating a Cluster in Failover Mode

This section explains how to configure and activate your license servers in failover mode.

When configuring the license server, you can configure the server:

- as a standalone server
- or in failover mode as a member of a cluster.

In the preceding section of this guide, you learned how to configure a license server in standalone mode.

These choices are mutually exclusive. Once you have configured the server in either standalone or failover mode, you cannot modify your configuration. In particular, license keys are different.

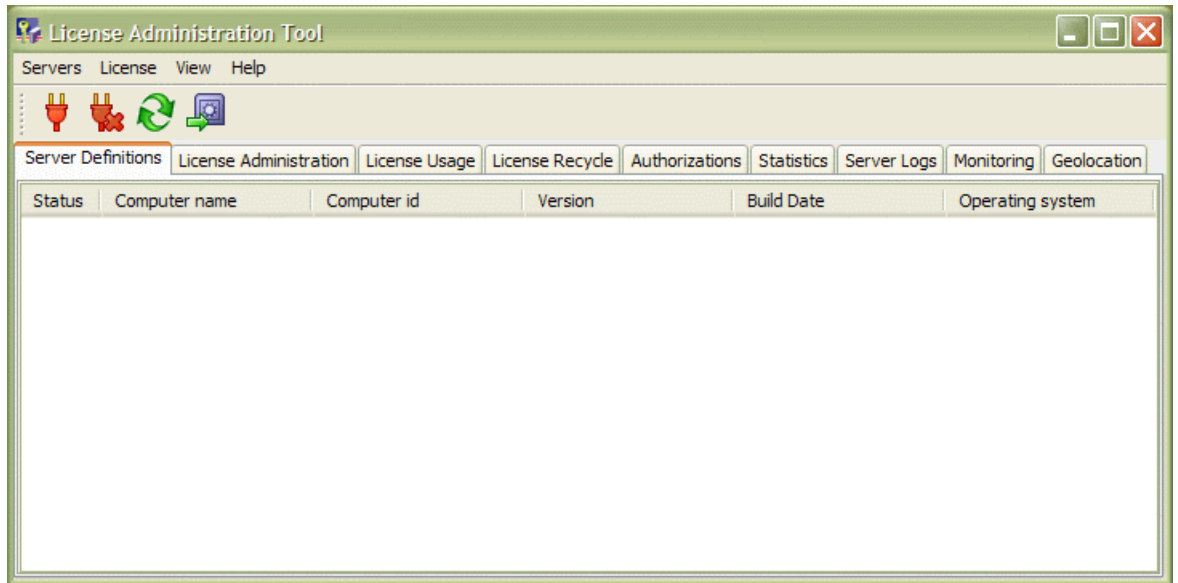
Before commencing this task, keep the following points in mind:

- You must install and start a license server on three different machines. A failover cluster of license servers is composed of exactly 3 computers. The three machines can be any supported Windows or UNIX machines: they do not have to be all Windows or all UNIX machines.
- In order to maximize quality of service, it is strongly recommended that the three machines be on the same subnetwork.
- At least two machines must be up and running and connected to each other in order to have a working failover cluster.
- The three machines have the same role: there is no master/slave concept.
- The three machines exchange messages everytime license data is modified (for example, in case of new license enrolled or license granted to a client). Only the modifications are transmitted and not all license data.
- Each machine has its own log file management: the logs are not synchronized between failover members.


In our scenario, you will start the **License Administration Tool** on a license server on Windows, then build the cluster using three existing UNIX machines.

1. On any machine on which a license server has been installed, launch the **License Administration Tool** if it is not already launched.

In our scenario, this tool is launched from a computer which will not be part of the cluster, but it can also be run from a future member of the cluster.





2. Create a connection to one of the license servers to be part of the cluster using the **Servers > New...** command.
3. Connect the **License Administration Tool** to the server.

You must connect to the server to be able to use it. If you point to the  icon in the status column, next to the computer name, a message like this will be displayed:

server xxx not connected

To connect to the server:


- Select the **Servers - Connect** command and select the server name from the list.
- Or, point to the , right click and select the **Connect** command.
- Or, you can also click the  icon to connect all servers at the same time.

The status now looks like this:

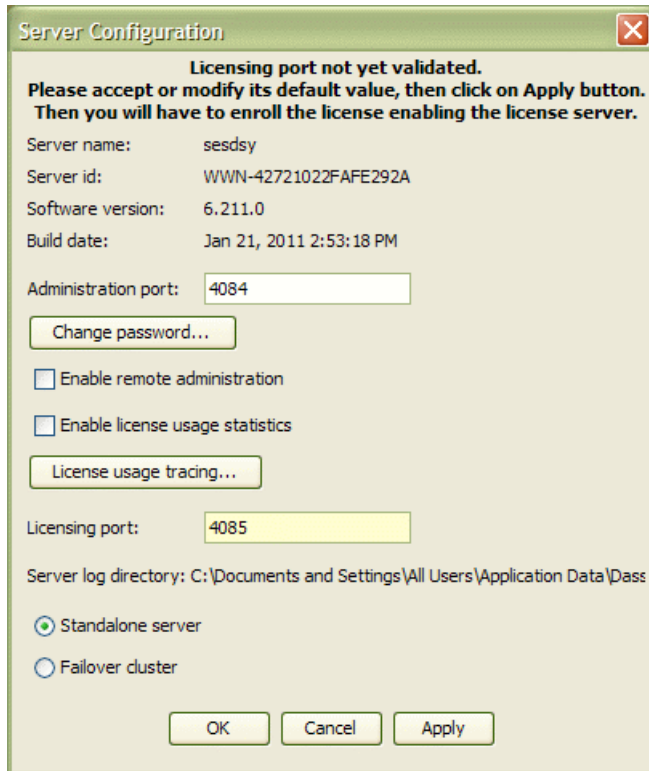
Status	Computer name	Computer id
	riffdsy	JFN-0370E018200EEA01

Pointing to the  icon displays the following message:

licensing port not configured; check server properties

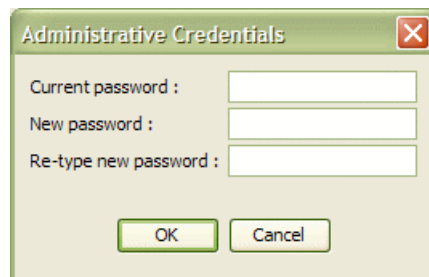
4. Configure the license server.
  - Select the **Servers - Property** command and select the server name from the list.
  - Or, point to the , right click and select the **Property** command.
  - Or, double-click the line containing the computer name.

The **Server Configuration** dialog box appears:



Here is a list of the information and options in the dialog box:

- Server name:** Name of the machine hosting the license server
- Server id:** Computer id of the machine hosting the license server
- Software version:** Internal Dassault Systemes License Server software version number
- Build date** Internal software version build date.
- Administration port:** Listening port for the **License Administration Tool**.
- Change password...** Clicking this button opens the **Administrative Credentials** dialog box:



which lets you set a password required to administer your server using the **License Administration Tool**.

---

**Enable remote administration**

Check this option to enable your license server to be administered from a remote license server. The status of this checkbox is only taken into account once the license server has been activated. Before activation, remote administration is allowed.

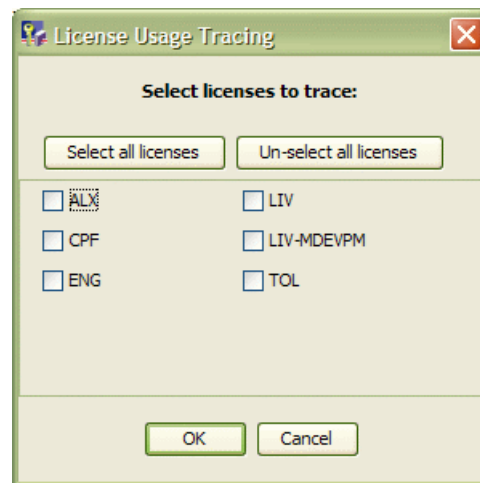
Only one **License Administration Tool** may be connected to a given license server. Furthermore, a local **License Administration Tool** takes priority over one started on a remote computer.

**Enable license usage statistics**

Enables license usage statistics using the **Statistics** tab.

**License usage tracing...**


Displays the **License Usage Tracing** dialog box allowing you to select the licenses for usage tracing:



You have to select at least one license to activate usage tracing. You can select individual licenses by checking the box next to the license(s), or select and unselect all the licenses using the **Select all licenses** and **Un-select all licenses** buttons respectively.

If activated, the traces of license request and release operations and timeouts are logged and can be viewed using the **Server Logs** tab. Note that "timeout" means that the license server released the license itself, because was not contacted by the licensing client during the appropriate period.

If another **License Administration Tool** is already connected, the dialog box is in read-only mode and the contents are grayed out.

 **Note:** Release of licenses granted to ENOVIA Live Collaboration server are not traced. Instead, timeouts appear for these licenses.

**Licensing port:**

The **Licensing port:** field is displayed in yellow, informing you that you can either accept the default port number (4085) or set another port number.

**Server log directory**

Point to this option to display the path of the directory containing license server logs. The path may be located either on the local machine or on a remote machine. The server log directory path can only be set in command line mode (using the `-logDir` option of the `DSLicSrv` batch command).

**Standalone server** This option is checked by default and signifies that you are configuring a standalone server, not a server belonging to a failover cluster.

**Failover cluster** Check this option to configure the server as member of a cluster in failover mode.

5. Set the licensing port number.

You can leave the default port number (4085).

6. Check the **Enable remote administration** option.

This is required to enable you to administer the license server on the remote machine you are connected to, once the license server has been activated.

7. Set the **Failover port:** number.

The default is 4086.

8. Check the **Failover cluster** option.

The **Server Configuration** dialog box now looks like this:

Administration port : 4084  
Change password...  
☒ Enable remote administration  
☐ Enable license usage statistics  
Licensing port : 4085  
Server log directory : /var/DassaultSystemes/LicenseServer/LogFiles  
☐ Standalone server  
☒ Failover cluster  
Failover port : 4086  
Server names : Server ids :  
riffdsy JFN-0370E018200EEA01  
????????????????????  
????????????????????  
OK Cancel Apply

9. Specify the remaining server names.

A failover cluster comprises three server names. Note that your server name and its server id are already declared. As you type in the names of the other two servers, the names appear in red while the software checks that the server machines exist. The letters are then displayed normally once the existence of the server machine has been checked.

10. Click the **Apply** button.

The **Server Configuration** dialog box now looks like this:



☒ Enable remote administration  
☐ Enable license usage statistics  
 Licensing port :   
 Server log directory : /var/DassaultSystemes/LicenseServ...  
☐ Standalone server  
☒ Failover cluster

Failover port :   
 Server names :      Server ids :  
 riffdsy              JFN-0370E018200EEA01  
 aldo3dsy            EHT-0370E01834BDDE01  
 anas2dsy            SAF-3218100083928E71

11. Click the **OK** button.

The **License Administration Tool** now contains the following:

Status	Computer name	Computer id
✗	<b>riffdsy</b>	<b>JFN-0370E018200EEA01</b>
	aldo3dsy	EHT-0370E01834BDDE01
	anas2dsy	SAF-3218100083928E71


The cluster is represented as a single connection comprising three machines. The first machine (in bold) is connected, the others (not in bold) are not connected.


12. Enroll the license for the cluster.

Pointing to the ✗ icon now displays the following message:

No license enrolled

For the moment, the failover cluster has been created and configured but not activated. You cannot use the failover cluster until it has been activated. To activate it, you must enroll your product license which contains the Activation license.

 **Note:** Note that this is a special failover cluster license. When ordering the failover cluster license, you must provide the computer id of each of the three machines.

a) Select the License - Enroll command or click the  icon.  
The **Open** dialog box is displayed.

b) Select the appropriate .LICZ file containing your licenses, then click the **Open** button.

License keys and their activation key are provided in the form of archives containing both the server ACTIVATION license and your product licenses.


A file will be named something like this (with the .LICZ suffix):

DLD-430814856494DBA7\_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3\_0001\_1.LICZ

The **License Enrollment** dialog box opens, confirming that the server has been activated and cluster licenses have been enrolled on your server.

- c) Click the **OK** button.


The green icon confirms that your failover cluster has been activated and is now up and running:

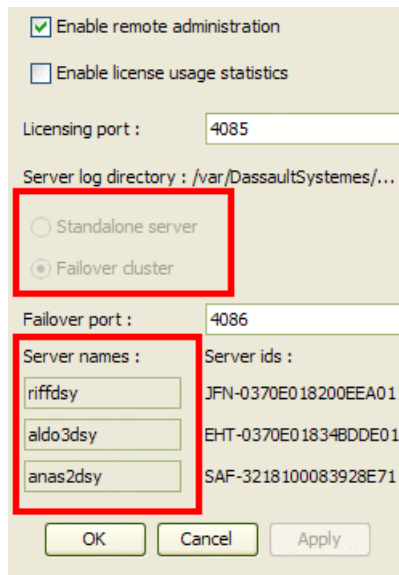
Status	Computer name	Computer id
	<b>riffdsy</b> aldo3dsy anas2dsy	<b>JFN-0370E018200EEA01</b> EHT-0370E01834BDDE01 SAF-3218100083928E71

If you point to the green icon, a message like this will be displayed:

cluster is up

confirming that your failover cluster is up and running.

-  **Note:** Once you have configured and activated your cluster, you can no longer change your mind and try to configure one of the three machines as a standalone server, or modify the cluster member names. This is why the corresponding options are grayed out when you display the cluster properties:



The dialog box shows the following configuration:

- ☒ Enable remote administration
- ☐ Enable license usage statistics
- Licensing port : 4085
- Server log directory : /var/DassaultSystemes/...
- ☐ Standalone server
- ☒ Failover cluster
- Failover port : 4086
- Server names : riffdsy, aldo3dsy, anas2dsy
- Server ids : JFN-0370E018200EEA01, EHT-0370E01834BDDE01, SAF-3218100083928E71

Buttons: OK, Cancel, Apply

13. Enroll your product licenses.

Licenses intended to be used in a cluster are special cluster licenses, just like the cluster activation license.

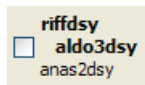
Enrolling the licenses on one cluster member also enrolls them automatically on the other cluster members.

14. Consult the **Status** column to evaluate cluster status.

The first server name is in bold because you connected to it when building the failover cluster. The other server names are not in bold: they are members of the cluster but you have not connected to them.

The circles represent the cluster members. Note that the presence of a server in a cluster does not stop you from being able to connect to it to benefit from the other services provided by the **License Administration Tool** not directly involved in cluster license management, for example logging and monitoring.








A symbol like this:





displayed in certain tabs indicates that a cluster is present. Servers to which you are connected are in bold. Check the option button to use the relevant function with the cluster.



Furthermore, in certain tabs, the servers can be chosen from a pull-down list. The list contains servers to which you are connected.

The meaning of colors and symbols is described in the following table:

Symbol	Meaning
	A filled circle indicates that the cluster member is connected to the <b>License Administration Tool</b>
	An empty circle indicates that the cluster member is not connected to the <b>License Administration Tool</b>
	A communications link has been established between two members of the cluster.
	Not enough information has been transmitted to the license administration tool by the server(s) to determine their exact status
	Green icons indicate that the cluster is up and running. At least two links exist.
	Yellow icons indicate that the cluster is up and running, but indicate that there is a problem: only one link exists. For example, one of the three servers may be unreachable for a variety of reasons, but the cluster remains up and running as long as at least two servers can exchange information between them.
	Red icons indicate IN ALL CASES that the cluster is down. No links exist.

The following table illustrates some typical examples of cluster status symbols that may be displayed during cluster operation:

This symbol...	means that...
	You have not connected to a cluster member. Cluster status is undetermined.
	The cluster is up and running (the symbol is green). One of the servers is connected to the other two, but we don't know if these two servers are inter-connected or not. Not enough information exists about the link between the non-connected servers.

This symbol...	means that...
	The cluster is still up and running but one of the servers is not linked to any other (maybe it was shut down or is unreachable over the network for some reason or other). Even though two up and running servers are enough to keep the cluster up, if another server goes down, the cluster will go down also.
	Red icons indicate that the cluster is down

In case one failover member goes down and can no longer start, it is possible to get failover data (configuration and license keys) from one of the remaining working members of the cluster:

1. Ensure that remote administration is enabled on working members
2. Ensure that no password is set on working members.
3. Run the following command on the member which refuses to start:

```
DSLicSrv -initServer -adminPort AdminPortNumber -fromHost
WorkingMemberName -force
```

where AdminPortNumber is the administration listening port number and WorkingMemberName is the name of one of the remaining working cluster members from which you retrieve the failover data.

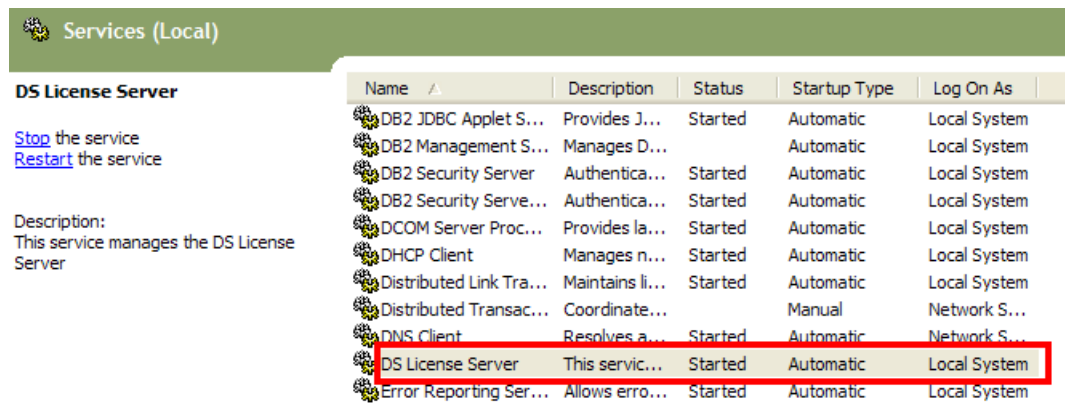
4. Start the license server on this computer.

## Starting and Stopping the Dassault Systemes License Server

Tools are provided to start and stop the Dassault Systemes License Server as required.

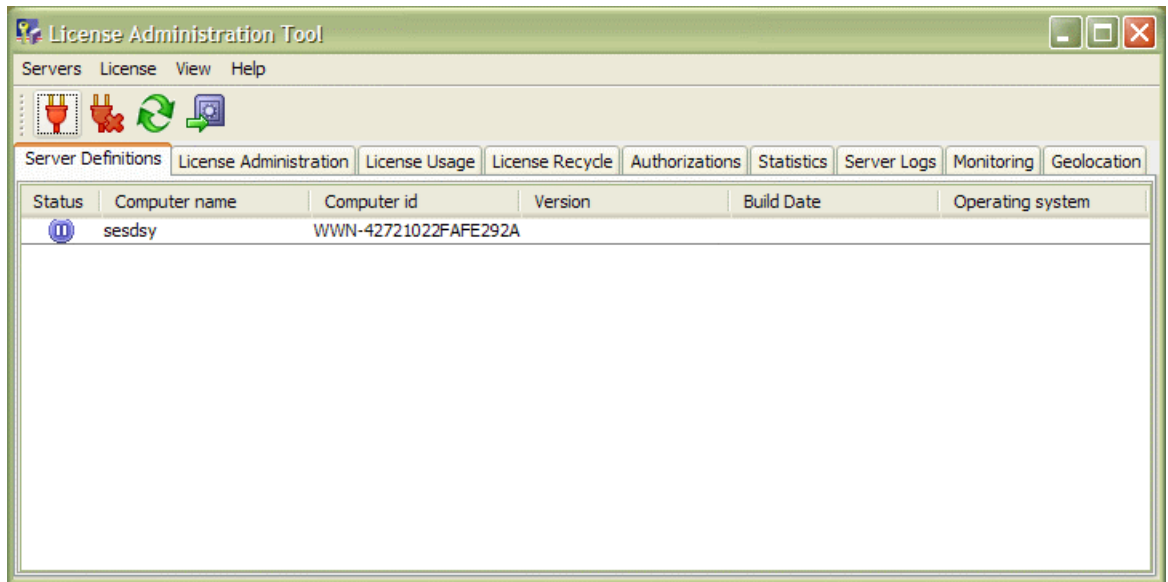
1. The first and simplest way is to use the standard Windows Services management tool and stop the **DS License Server** Windows service.

When you installed the Dassault Systemes License Server, a Windows service named **DS License Server** was created and configured automatically to start the license server. The service guarantees that the Dassault Systemes License Server is always started automatically when you log on:

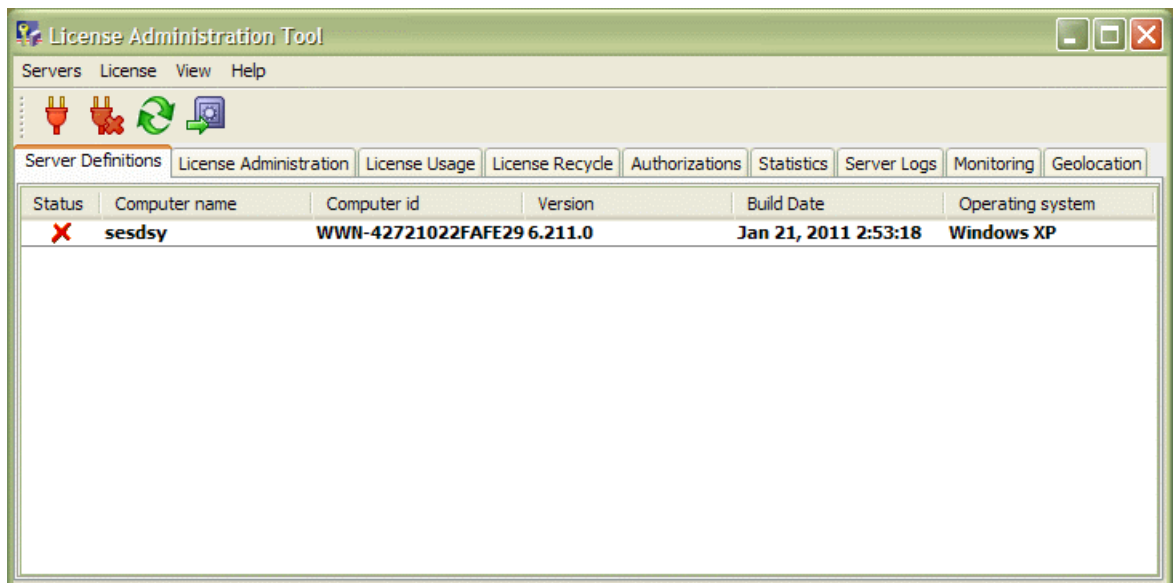


Information and errors related to the **DS License Server** service are logged in the Windows event log and can be viewed using the Event Viewer, under License Server in the Source column in the Application section.

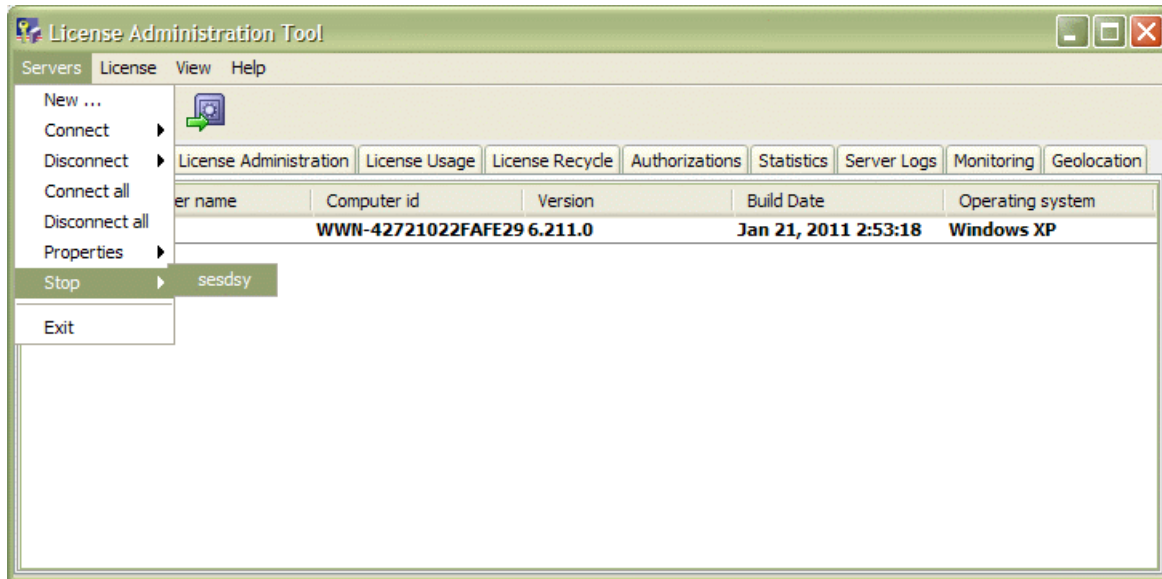
2. Additionally, particularly when you are administering a remote license server, to stop the license server, you can also select Start - (All) Programs - DS License Server - License Server Administration to launch the **License Administration Tool** if it is not already launched:



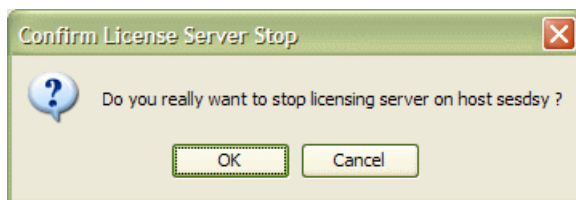
3. Connect to the license server by pointing to the icon, right clicking and selecting the Connect command:



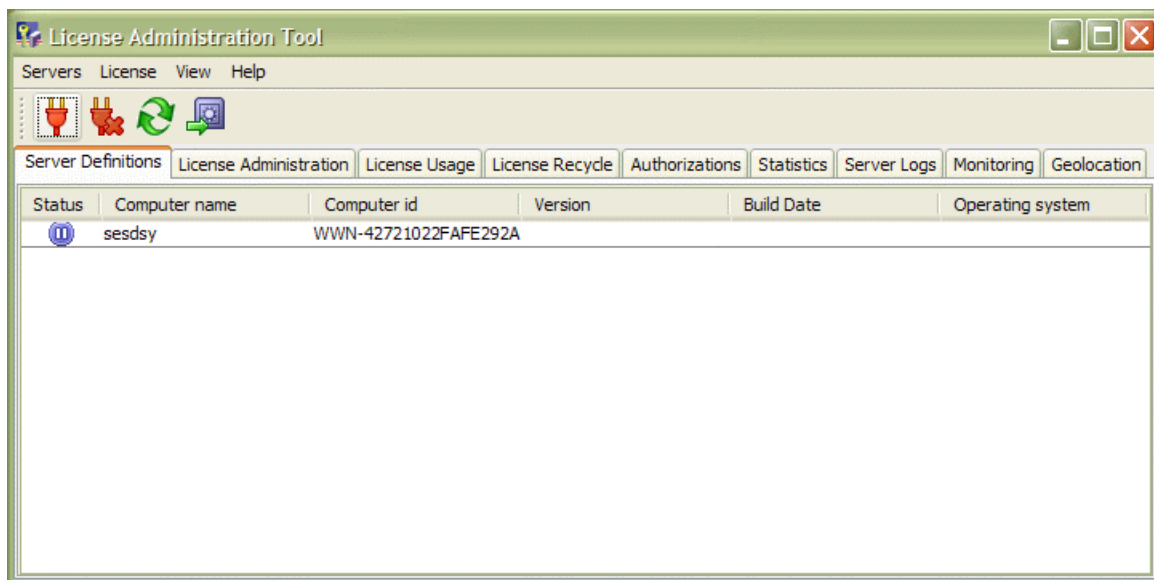
4. Select the Servers - Stop command and select the server name.



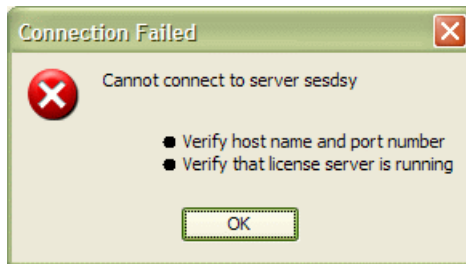
A dialog box appears prompting you to confirm that you want to stop the server:



5. Click **OK**.  
You are immediately disconnected from the server:




If you try to connect to the server, the following dialog box appears:




prompting you to check the server hostname and port number, and to check if the server is running, which is not the case, because it has just been stopped. Click **OK** to access the license server configuration parameters enabling you to check the server hostname and port number. Click **Cancel** to exit.

If you access the Windows services and refresh the list, you will notice that the **DS License Server** service has been stopped.

 **Note:** The **License Administration Tool** remains active because you can use it to connect to a remote server even if your local license server has been stopped.

6. To start the license server again, restart the **DS License Server** using the Windows Services GUI tool.

 **Note:** On UNIX, start the license server by running the following command, for example on AIX:

```
/usr/DassaultSystemes/DSLICENSEServer/aix_a64/code/bin/DSLicSrv  
-startServer
```

and stop the license server using the command:

```
/usr/DassaultSystemes/DSLICENSEServer/aix_a64/code/bin/DSLicSrv  
-stopServer
```

or the Servers - Stop command using the **License Administration Tool**.

## Configuring Clients

Once your license server is up and running, and your licenses have been enrolled, you must configure the license clients.

1. On Windows XP, on each client machine, create the following directory:  
C:\Documents and Settings\All Users\Application  
Data\DassaultSystemes\Licenses

On Windows Vista, Windows 7 and Windows Server 2008, on each client machine, create the following directory:

```
C:\ProgramData\DassaultSystemes\Licenses
```

On UNIX, create the following directory:

```
/var/DassaultSystemes/Licenses
```

2. Go to the directory and create a file named:

---

DSLicSrv.txt

3. Edit the file to declare the license servers to which the client can connect.

The syntax of the declaration is as follows:

```
servername:portnumber
```


for example:

```
sesdsy:4085
```

The port number is the license server listening port, not the administration port. If several standalone license servers need to be accessed, add a new line for each license server.

Note that if the license server is on the same computer as the client computer, you can use the special keyword `localhost` instead of the computer name, for example:

```
localhost:4085
```

-  **Note:** The syntax for failover servers is different. The three failover servers must all be referenced on the same line as follows:

```
server1:4085,server2:4085,server3:4085
```

## Communicating through Forward and Reverse Proxies

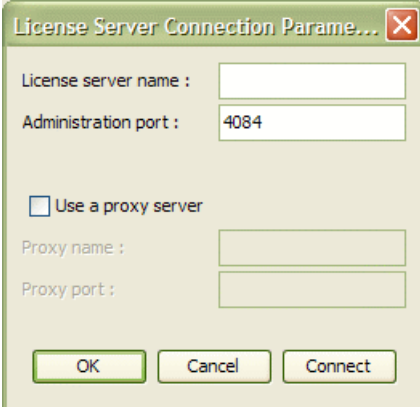
The machine hosting the **License Administration Tool** can communicate with a license server located behind a forward proxy, and the license client and the **License Administration Tool** can communicate with a license server located behind a reverse proxy, as explained in the following sections.

### Implement a Forward Proxy for the License Administration Tool

The machine hosting the **License Administration Tool** can communicate with a license server located behind a forward proxy.

1. Configure the forward proxy in HTTPS mode.
2. Start the **License Administration Tool**.
3. Select the **Servers** - **New** command.

The **License Server Connection Parameters** dialog box appears:



The dialog box titled "License Server Connection Parameters" contains the following fields and controls:

- License server name :** A text input field.
- Administration port :** A text input field containing the value "4084".
- ☐ **Use a proxy server**
- Proxy name :** A text input field (disabled).
- Proxy port :** A text input field (disabled).
- Buttons: **OK**, **Cancel**, and **Connect**.



4. Enter the name of the license server (the name of the machine hosting the server, typically), set the listening port number (default is 4084), then check the option **Use a proxy server** and enter the proxy name and proxy port number, then click OK.



The image shows a dialog box titled "License Server Connection Parameters". It contains the following fields and options:

- License server name :
- Administration port :
- ☒ Use a proxy server
- Proxy name :
- Proxy port :
- Buttons: OK, Cancel, Connect

The **License Administration Tool** can now communicate with a license server located behind a forward proxy.

## Implement a Reverse Proxy for the DS License Server

The license client and the **License Administration Tool** can also communicate with a license server located behind a reverse proxy.


1. Configure the reverse proxy in HTTPS mode and map the communications between the reverse proxy and the license server.

The maps are:

`https://myreverseproxyname:443/DSLS/client https://mylicenseserver:4085/DSLS/client`

`https://myreverseproxyname:443/DSLS/admin https://mylicenseserver:4084/DSLS/admin`

where `myreverseproxyname` is the reverse proxy hostname and `mylicenseserver` is the license server hostname.

 **Note:** All of the following configuration examples reflect the configuration of an Apache 2.2 reverse proxy, purely for illustration purposes, and are in no way intended to reflect other reverse proxy configurations.

Uncomment the following lines in the reverse proxy configuration file (`httpd.conf`):

```
#LoadModule proxy_module modules/mod_proxy.so
#LoadModule proxy_http_module modules/mod_proxy_http.so
#LoadModule ssl_module modules/mod_ssl.so
#Include conf/extra/httpd-ssl.conf
#Include conf/extra/httpd-default.conf
```

then edit the `httpd-default.conf` file and reset the value of the `KeepAliveTimeout` parameter:

```
KeepAliveTimeout 5
```

by a more appropriate value, for example:

```
KeepAliveTimeout 60
```

---

Add the following lines in the SSL configuration file for the reverse proxy (`httpd-ssl.conf`), before the `</VirtualHost>` tag:

```
SSLProxyEngine on
ProxyPass /DSL/ client https://mylicenseserver:4085/DL/ client
ProxyPassReverse /DSL/ client https://mylicenseserver:4085/DL/ client

ProxyPass /DSL/ admin https://mylicenseserver:4084/DL/ admin
ProxyPassReverse /DSL/ admin https://mylicenseserver:4084/DL/ admin
```

where `mylicenseserver` is the name of your license server.

Install your own certificate or a self-signed certificate you can generate by following the instructions on this site:

[http://httpd.apache.org/docs/2.0/ssl/ssl\\_faq.html#selfcert](http://httpd.apache.org/docs/2.0/ssl/ssl_faq.html#selfcert)

This certificate will be presented by the reverse proxy to the license client and the **License Administration Tool**.

2. Configure all licensing client computers to point to the reverse proxy.

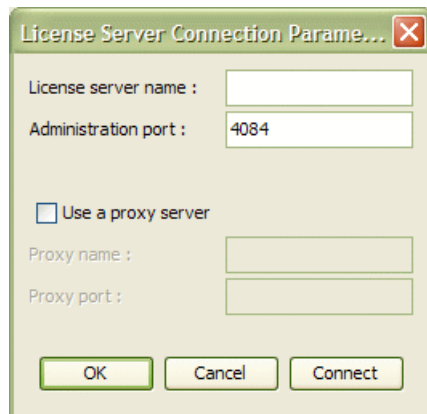
To do so, add the following declaration to the `DSLicSrv.txt` file on each licensing client:

```
myreverseproxyname:443
```

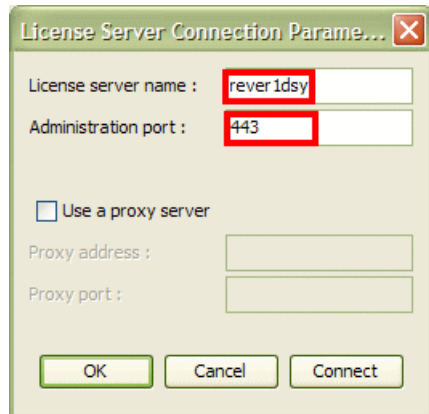
where `myreverseproxyname` is the reverse proxy name and 443 is the proxy port number (443 by default).

3. If you also want the **License Administration Tool** to be able to cross the reverse proxy, configure the **License Administration Tool** to point to the reverse proxy.

To do so, start the **License Administration Tool**, and select the **Servers - New** command. When the **License Server Connection Parameters** dialog box appears:



specify the reverse proxy hostname (`rever1dsy` in our example) in the **License server name** field (instead of the license server name), and set the SSL port number (443 by default) in the **Administration port** field, for example like this:



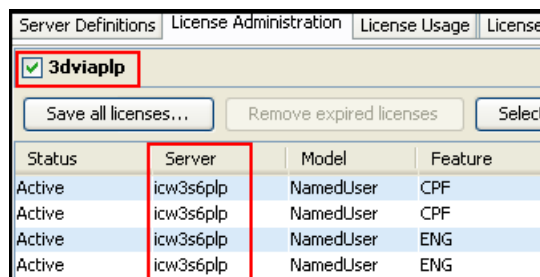
License Server Connection Parameters dialog box. The 'License server name' field contains 'rever1dsy' and the 'Administration port' field contains '443'. Both fields are highlighted with red boxes. There is an unchecked checkbox for 'Use a proxy server'. Below it are empty fields for 'Proxy address' and 'Proxy port'. At the bottom are 'OK', 'Cancel', and 'Connect' buttons.

Only check the Use a proxy server option if you are also using a forward proxy.

**Note:** If you are using a failover cluster, you need to set up three ports on the reverse proxy, corresponding to the three license servers. For example, the `DSLicSrv.txt` file on each licensing client may contain in this case:

```
myreverseproxy:443, myreverseproxy:444, myreverseproxy:445
```

Once the reverse proxy has been implemented, there are two different names for the servers displayed in the **License Administration** and **License Recycle** tabs and in the detailed view in the **License Usage** tab. The name of the reverse proxy is displayed at the top, and the real license server name is displayed below, for example:



Screenshot of the License Administration tool. The 'Server Definitions' tab is active. A checkbox next to '3dviapl' is checked and highlighted with a red box. Below the tab are buttons for 'Save all licenses...', 'Remove expired licenses', and 'Select'. A table below shows the list of servers.

Status	Server	Model	Feature
Active	icw3s6plp	NamedUser	CPF
Active	icw3s6plp	NamedUser	CPF
Active	icw3s6plp	NamedUser	ENG
Active	icw3s6plp	NamedUser	ENG

The licensing clients and the **License Administration Tool** can now communicate with a license server located behind a reverse proxy.

---

# Managing Licenses

This section explains how to manage licenses.

[Enrolling Product Licenses](#) on page 51

[Administering Licenses](#) on page 53

[Getting Information About License Usage](#) on page 57

[Recycling Named User Licenses](#) on page 61

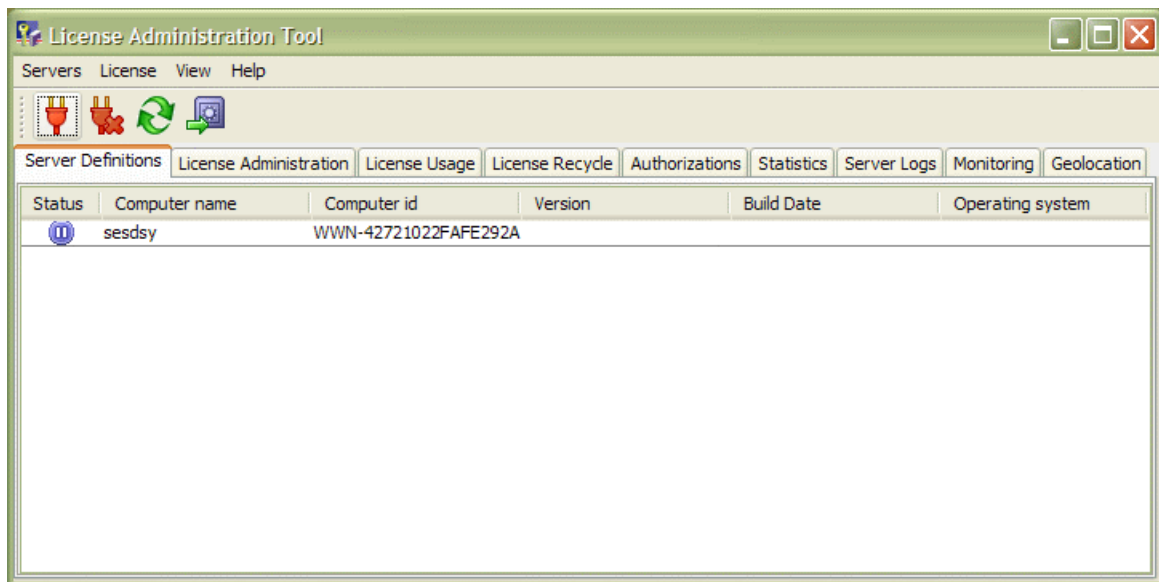
[Authorizing Concurrent User Licenses](#) on page 62

[Getting Information About the Authorized Country of Use for Licenses](#) on page 70

## Enrolling Product Licenses



Once your license server has been configured and activated, you can enroll your product licenses.


1. Select Start - (All) Programs - DS License Server - License Server Administration to launch the **License Administration Tool** if it is not already launched:

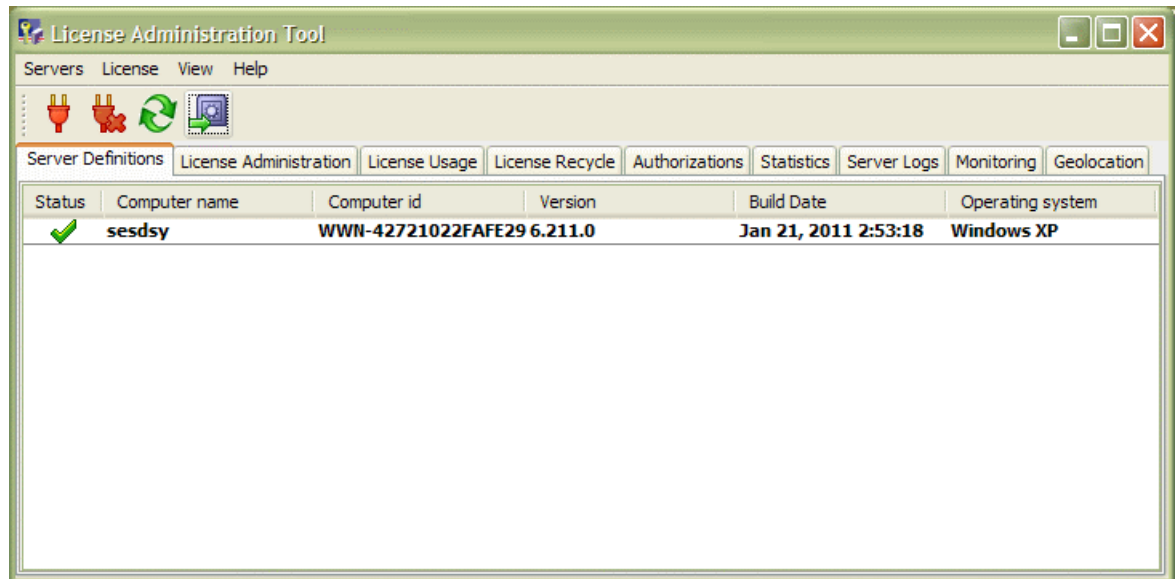


2. Connect to the server.



To connect to the server:

- Select the Servers - Connect command and select the server name from the list.
- Or, point to the  icon, right click and select the Connect command.
- Or, you can also click the  icon to connect all servers at the same time.

The  icon confirms that your server is operational:



3. Enroll your product licenses as follows:

- a)  icon.  
Select the **License - Enroll** command or click the  icon.  
The **Open** dialog box is displayed.

- b) Go to the directory containing your licenses and select the appropriate licenses, then click the **Open** button.

Note that you may receive either individual license keys (which are in files with the `.LIC` extension), or license keys grouped in a single file (which has the `.LICZ` extension). A `.LICZ` group of license keys typically also contains the `ACTIVATION` license. If this is the case, you enroll all the licenses at the same time.

A `.LICZ` file will be named something like this (with the `.LICZ` suffix):

DLD-430814856494DBA7\_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3\_0001\_1.LICZ

The **License Enrollment** dialog box opens, informing you that license enrollment has been started, followed by confirmation that your product licenses have been successfully enrolled on your server:

```
License enroll starting
sesdsy: License enroll starting
Sending files to server sesdsy
  E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-1-of-13.LIC

  E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-2-of-13.LIC

  E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-3-of-13.LIC

  E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-4-of-13.LIC

  E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-5-of-13.LIC
```

```

E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-6-of-13.LIC

E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-7-of-13.LIC

E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-8-of-13.LIC

E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-9-of-13.LIC

E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-10-of-13.LIC

E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-11-of-13.LIC

E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-12-of-13.LIC

E:\licensing\Licensing
211\DLD-430814856494DBA7_7KLXM-UVSBG-8VFDL-GPMGS-V1ED3_0001_1.LICZ\FEAT-13-of-13.LIC

sesdsv : 13 license data received (0 invalid)

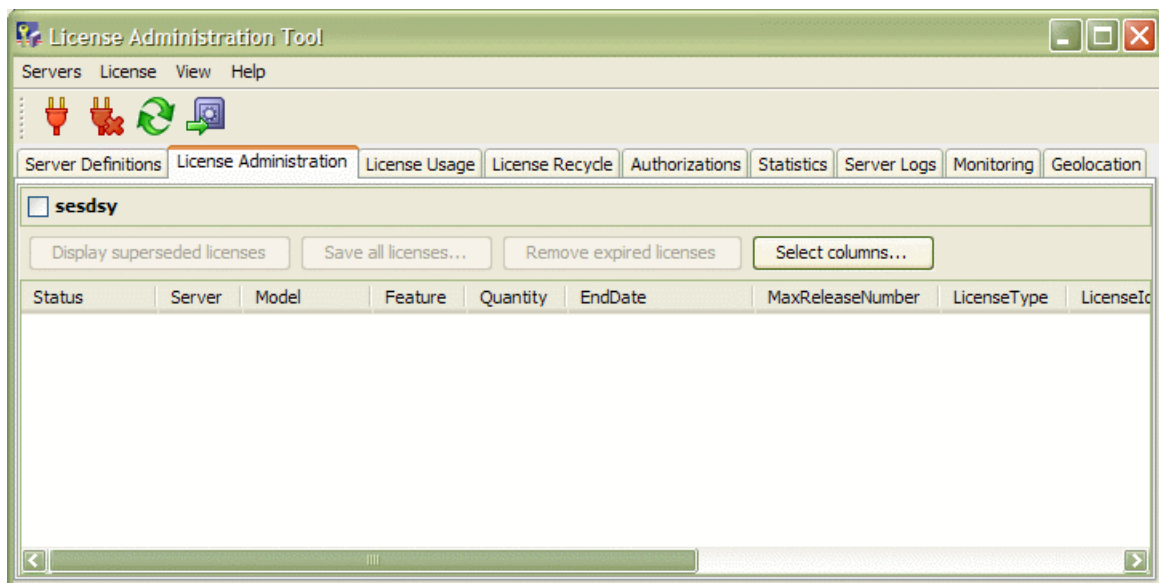
```

- Click **OK** to return to the **License Administration Tool**.

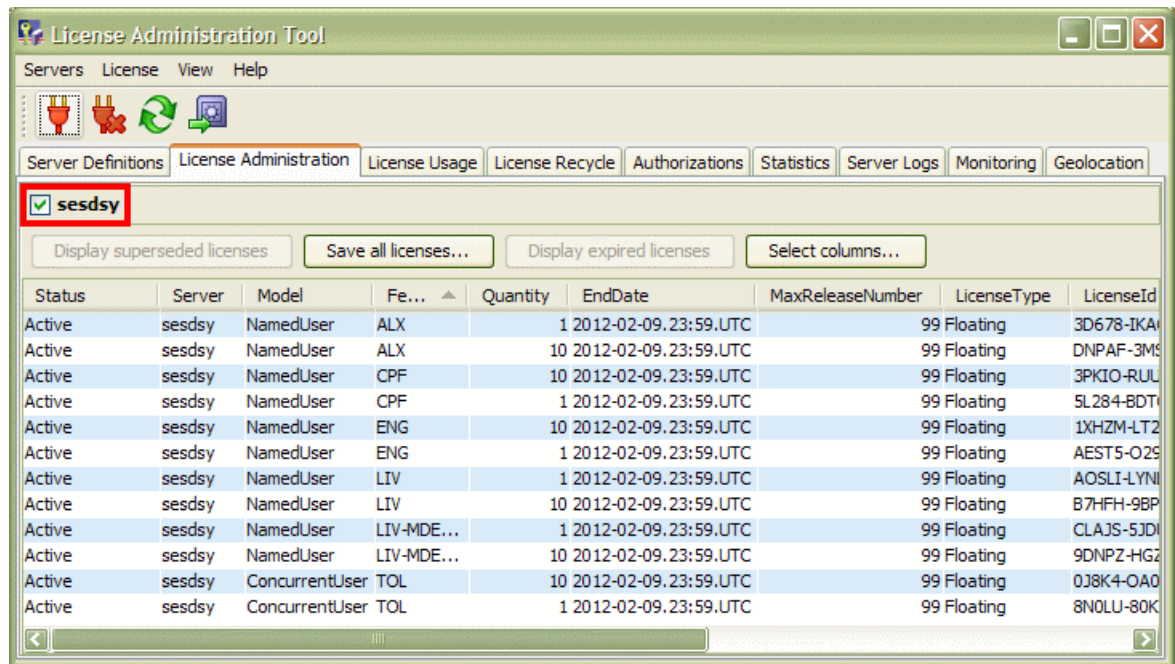
## Administering Licenses

You can perform simple license administration tasks on licenses after enrolling them.

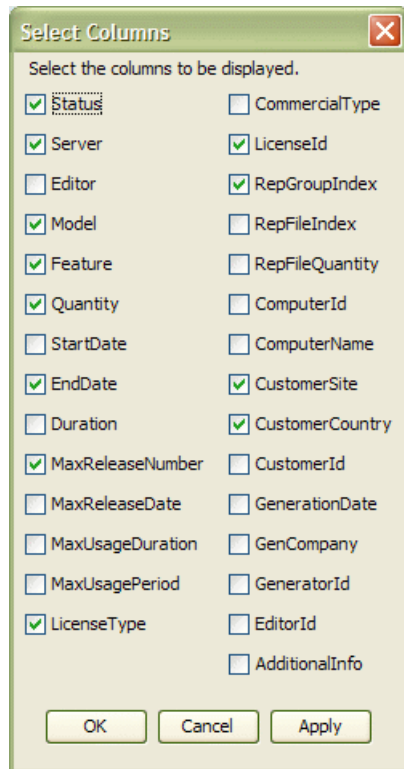
- Click the **License Administration** tab:



2. Check the check box next to the desired server name (there may be several server names) to view the licenses enrolled on that server.  
The product licenses you enrolled are listed:



3. Right-click a license and select the **Save** command to save a single license. If the license belongs to a replacement group, all lines corresponding to this group are automatically selected, and all lines selected will be saved as a whole.
4. Right-click a license and select the **Delete** command to delete the license. If the license belongs to a replacement group, all lines corresponding to this group are automatically selected, and all lines selected will be deleted as a whole.
5. Click the **Display superseded licenses** button if you wish to list licenses belonging to a replacement group which is not the highest. Click again to revert back to the default (**Hide superseded licenses**).  
This button is grayed out if no superseded licenses exist.
6. Click the **Save all licenses...** button to save all licenses to a separate directory of your choice.
7. The next button to the right displays one of three choices:
  - if any licenses have expired, and can be removed, the **Remove expired licenses** button will be displayed. Click this button to remove any licenses from the list which have expired. This option is grayed out in read-only mode (when another **License Administration Tool** is connected).
  - click the **Hide expired licenses** button to hide from the GUI the expired licenses belonging to a replacement group containing non-expired licenses and which cannot be removed. Expired licenses belonging to a replacement group can be removed only if all licenses in this group have expired, since a replacement group can only be removed as a whole.
  - click the **Display expired licenses** button to display the expired licenses belonging to replacement groups also containing non-expired licenses.
 When the button remains grayed out, no licenses have expired.
8. Click the **Select columns...** button to choose which columns to display in the tab.  
The **Select Columns** dialog box is displayed:



The columns you can display are:

#### **Status**

The license status can be:

- **Active:** the license has been enrolled and is valid
- **Expired:** the license validity date has expired. The line appears in red.
- **Not yet available:** the license has been enrolled, but its validity date has not yet been reached. The line appears in blue.
- **Invalid:** replacement group has been partially enrolled. You have to remove it and re-enroll it properly. The line appears in red.
- **Superseded:** the license is no longer available, because a replacement group with the same `LicenseId` and a higher `RegGroupIndex` has been enrolled. `Expired` and `Not yet available` status are not valued for `Superseded` licenses. If desired, superseded licenses can be safely deleted by right-clicking on them. By default, line is not displayed.

#### **Server**

Name of the license server.

#### **Editor**

The editor can be, for example:

- Dassault Systemes
- Dassault Systemes V5.

#### **Model**

Licensing model with which the license complies:

- `NamedUser`
- `ConcurrentUser`
- `Token`.



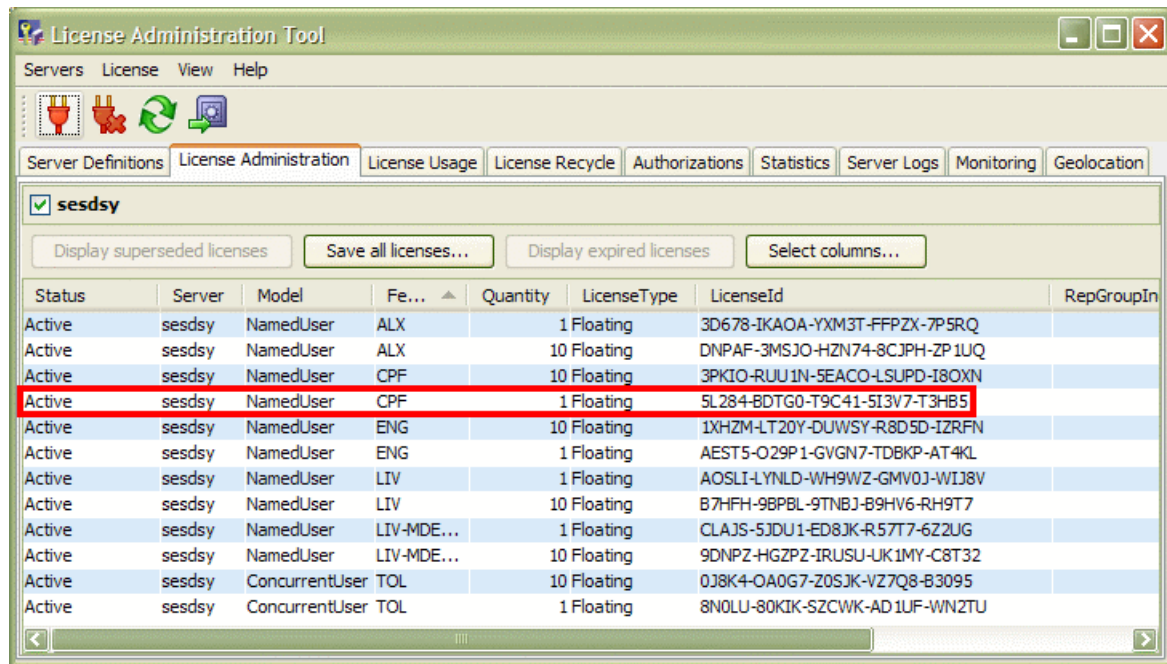
---

<b>Feature</b>	Feature name, such as product trigram or custom configuration.
<b>Quantity</b>	Number of licenses enrolled.
<b>StartDate</b>	Date from which the license is valid.
<b>EndDate</b>	Date after which the license is no longer valid.
<b>Duration</b>	License validity duration (in hours).
<b>MaxReleaseNumber</b>	Feature release level authorized by the license. Only licensing clients having a release level lower or equal to this number are allowed.
<b>MaxReleaseDate</b>	Client release date authorized by the license. Only licensing clients having a release date lower or equal to this number are allowed.
<b>MaxUsageDuration</b>	For future use.
<b>MaxUsagePeriod</b>	For future use.
<b>LicenseType</b>	Type of license enrolled on the license server, depending on how your license server is configured: <ul style="list-style-type: none"> <li>• Floating (for standalone license servers)</li> <li>• Failover (for failovers clusters).</li> </ul>
<b>CommercialType</b>	Commercial types are: <ul style="list-style-type: none"> <li>• STD (for standard commercial product licenses)</li> <li>• DEMO (for demonstration product licenses)</li> <li>• EDU (for educational product licenses).</li> </ul>
<b>LicenseId</b>	This character string is the license identifier. A license id can exist either for a single feature or a group of features.
<b>RepGroupIndex</b>	License replacement group index. For a given <code>LicenseId</code> , the highest number is active and the other numbers are superseded (if they have not been removed).
<b>RepFileIndex</b>	Number of a particular feature in the replacement group.
<b>RepFileQuantity</b>	Number of individual features included in the replacement group.
<b>ComputerId</b>	Computer id of the machine hosting the license server.
<b>ComputerName</b>	Name of the computer hosting the license server (when available).
<b>CustomerSite</b>	License owner.
<b>CustomerCountry</b>	Country of license owner (3-letter international code).
<b>CustomerId</b>	License owner id.
<b>GenerationDate</b>	Date on which the license was generated.
<b>GenCompany</b>	Company which generated the license.
<b>GeneratorId</b>	Id of the company which generated the license.
<b>EditorId</b>	Editor id.
<b>AdditionalInfo</b>	For future use.

### What are License Replacement Groups?

The `RepGroupIndex` column displays the *license replacement group* index.

A given license id can exist either for a single feature or a group of features. For example, here is the license id for the single CPF feature:



When you enroll the feature licenses for a given license id and for the first time, the number in the RepGroupIndex column is set to "0", and the Status is Active. When your licensing needs evolve, you may need to replace an existing feature or group of features referenced by the same license id. This is referred to as a *license replacement group*. When you enroll the new license replacement group for the same license id:

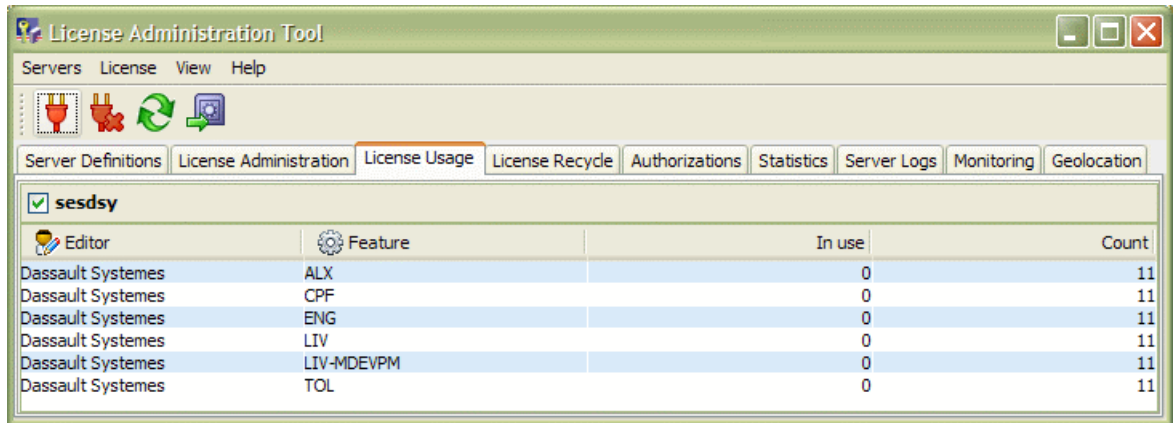
- the Status of the previous license changes to Superseded and is no longer displayed. If you wish to display superseded replacement groups, click on the **Display superseded licenses** button. After a given period of validation, you may wish to remove superseded licenses.
- a new line containing the same license id is added, the number in the RepGroupIndex column is incremented, and the Status of the license is Active.

## Getting Information About License Usage

The **License Usage** tab allows you to monitor license usage.

1. Select Start - (All) Programs - DS License Server - License Server Administration to launch the **License Administration Tool** if it is not already launched.
2. Connect to the server.
3. Click the **License Usage** tab.

Based on the licenses previously enrolled, the **License Usage** tab looks like this:



You can sort columns by clicking on the column headers. If you want to sub-sort several columns, press the Ctrl key while clicking.

**Editor** Dassault Systemes, for example.

**Product** Trigram of the product or custom configuration license. Keep in mind that the license can be a named user license (the majority of cases) or a concurrent user license.

Note that ACTIVATION is never displayed in this tab, nor elsewhere.

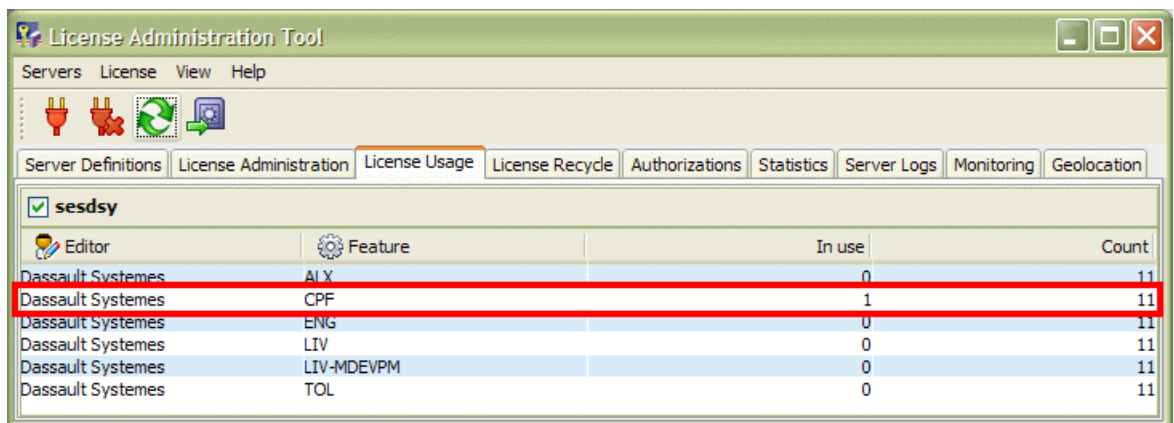
**In use** The number of licenses currently being used for a particular product.

**Count** Total number of licenses enrolled for a particular product.

4. Start a process (from the client or elsewhere) requiring a CPF license.

For example, log onto your ENOVIA Live Collaboration server using one of the users created at ENOVIA Live Collaboration server installation, for example PLMADM, the administration user.

When the license server grants a CPF license, for example, to a license client, the **License Usage** tab looks like this:



The number in the **In use** column for the CPF license is incremented by 1. Each time a license is consumed, the number is incremented.

5. To find out details about the license (who is using the license, what type license it is, etc.), double-click the line containing the CPF license (which is a named user license).

The **Detailed License Usage** box appears:

Detailed License Usage						
License usage for product CPF from editor Dassault Systemes						
Server	License type	User	Host	Granted since	Active process	Granted at
sesdsy	NamedUser	Administrator	WIN-KNKSL07ILFV (FFFFFFFFFFFFFFFF-c0a8da80.1)	2/15/11 6:30 PM	C:\Java\jdk1.6.0_19_64\bin\java.exe	2/15/11 6:30 PM

<b>Server</b>	Name of license server computer.
<b>License type</b>	Type of license: NamedUser or Concurrent.
<b>User</b>	Named user or concurrent user to whom the license is granted.
<b>Host</b>	Name of the client computer on which the licensed process is running.
<b>Granted since</b>	Time and date at which the license was originally granted to the user.
<b>Active process</b>	Name of the active client process to which the license is granted. The prefix <i>Offline</i> is used to identify extracted offline licenses.
<b>Granted at</b>	Time and date at which the license was granted to the current process(es).
<b>MaxReleaseNumber</b>	Feature release level authorized by the license. Only licensing clients having a release level lower or equal to this number are allowed.
<b>MaxReleaseDate</b>	Client release date authorized by the license. Only licensing clients having a release date lower or equal to this number are allowed.
<b>Internal Id</b>	Reserved for internal use.

6. This time, start the LIV product and connect to a data source different from an ENOVIA Live Collaboration server (you are not connected to this server), for example by opening a 3DXML file.

You will be prompted to choose a LIV license using the **License Manager** tab.

The **License Administration Tool** box now looks like this:

License Administration Tool				
Servers License View Help				
Server Definitions License Administration <b>License Usage</b> License Recycle Authorizations Statistics Server Logs Monitoring Geolocation				
<input checked="" type="checkbox"/> <b>sesdsy</b>				
Editor	Feature	In use	Count	
Dassault Systemes	ALX	0	11	
Dassault Systemes	CPF	1	11	
Dassault Systemes	ENG	0	11	
Dassault Systemes	LIV	1	11	
Dassault Systemes	LIV-MDEVPM	0	11	
Dassault Systemes	TOL	0	11	

A license for the LIV product is consumed, so the number in the **In use** column is incremented by 1.

- To find out details about the license (who is using the license, what type license it is, etc.) double-click the line containing the LIV license.

The **Detailed License Usage** box appears and looks like this (divided in two parts in the following screenshots):

This is the left section:

Server	License type	User	Host	Granted since	Active process
sesdsy	NamedUser	ses	SESDSY (42721022FAFE292A-0ae84530.0)	2/15/11 6:42 PM	C:\Program Files\Dassault Systemes\B211\intel_a\code\bin\PLM3D.exe

and this is the right section:

Granted at	Max Release Date	Max Release Number	Internal Id
2/15/11 6:42 PM	2/10/12 12:59 AM	99	SES@DS.S-1-5-21-842925246-2139871995-725345543-13721.0AE84530.0.WWN-42721022FAFE292A-0ae84530.0


You will find the same type of information (the license type is NamedUser), except that the user is not a named user (because you are not connected to the ENOVIA V6 server) but the operating system user. When you exit the session, therefore releasing the license, the number in the **In use** column becomes "0".

- Then, start the LIV-MDEVPM configuration and log on as DemoReviewer (this time, you are connected to the ENOVIA Live Collaboration server as a named user).

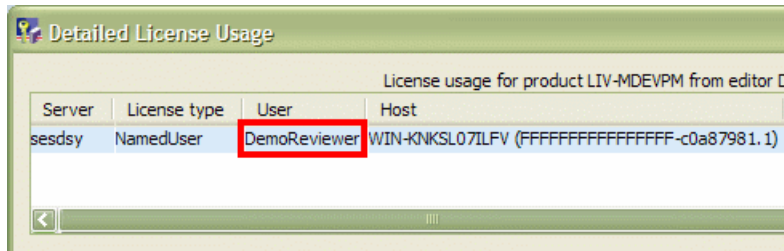
The **License Administration Tool** box now looks like this:

Editor	Product	In use	Count
Dassault Systemes	ALX	0	11
Dassault Systemes	CPF	2	11
Dassault Systemes	ENG	0	11
Dassault Systemes	LTV	1	10
Dassault Systemes	LIV-MDEVPM	1	11
Dassault Systemes	PIX	0	11
Dassault Systemes	TOL	0	12

The LIV-MDEVPM license is a named user license. The number of LIV-MDEVPM licenses in use is now "1", and the number of CPF licenses in use is now "2" because when DemoReviewer consumes a LIV-MDEVPM license, a CPF license is also consumed.

 **Note:** It may occur for a given product that the numbers in the **In use** and the **Count** columns are identical. This means that no more license are available. When this is the case, the corresponding product line is highlighted in bold.

- Finally, double-click the line containing the LIV-MDEVPM license.  
The **Detailed License Usage** box appears and looks like this:



## Recycling Named User Licenses

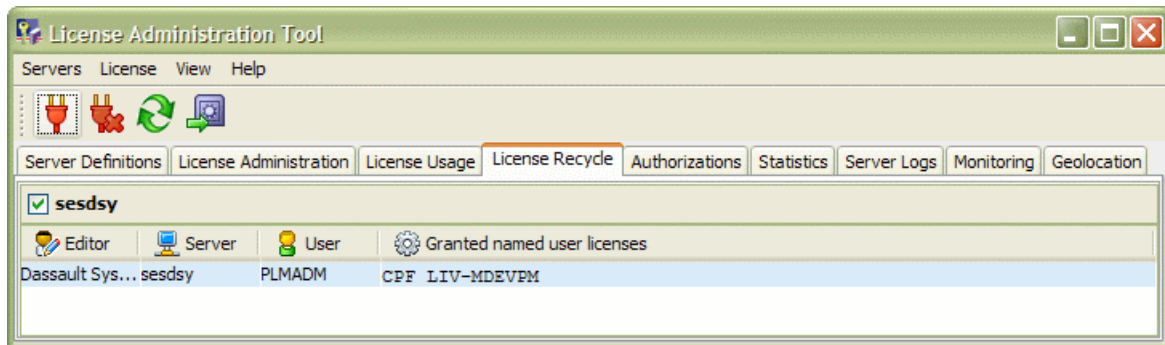
This section describes how named user licenses are consumed and the steps you must take to recycle them when you need to reassign them to other users.

Named user licenses are consumed immediately when a user starts a product, remain consumed after the user logs out, and continue to be consumed until the license expiration date.

The need occasionally arises, under exceptional circumstances (for example, when employees leave the company), to unassign product licenses to sever the tie between these employees and product licenses assigned to them, and reassign the licenses to another user.

The ENOVIA Live Collaboration server-side **Assign Licensing by Product** tool (discussed in the *Dassault Systemes Licensing Essentials Guide*) is used to assign licenses to and unassign licenses from users, but this is not sufficient: the licenses also have to be recycled on the license server. This is the role of the **License Recycle** tab which allows you to recycle named user licenses only.

- Select the **License Recycle** tab.  
In this example, two named user licenses have been granted to the user PLMADM:



- To recycle a license, double-click the line containing the licenses for user PLMADM, or right-click the line and select the `recycle licenses` command.

You are prompted to confirm:

Do you really want to recycle named user licenses granted to PLMADM on server sesdsy?

Another dialog box informs you that all the licenses for the selected user on the selected server will be recycled.

- 
3. Click **OK**.

The license may or may not be recycled. If it cannot be recycled, another dialog box appears with a message like this:

Licenses granted to PLMADM on server sesdsy were not recycled:

CPF is locked until 3/7/11 6:30 PM

LIV-MDEVPM is locked until 3/7/11 6:58 PM

If you did not close your session, you will be informed that the license is locked by a running process.

4. Click **OK** to exit.

## Authorizing Concurrent User Licenses

This section describes how to set up a concurrent user license for groups of users or specific machines.

Named user licenses are typically granted to users using the ENOVIA Live Collaboration server-side **Assign Licensing by Product** tool. The users are thereby authorized to use the licenses.

Concurrent user licenses can be shared among users and are not tied to specific users. Certain products can be sold as shareable products, which can be granted and released during a V6 rich client session using the **Shareable Products** tab. Shareable product licenses comply with the Concurrent User Licensing model and are network licenses served by the Dassault Systemes License Server.

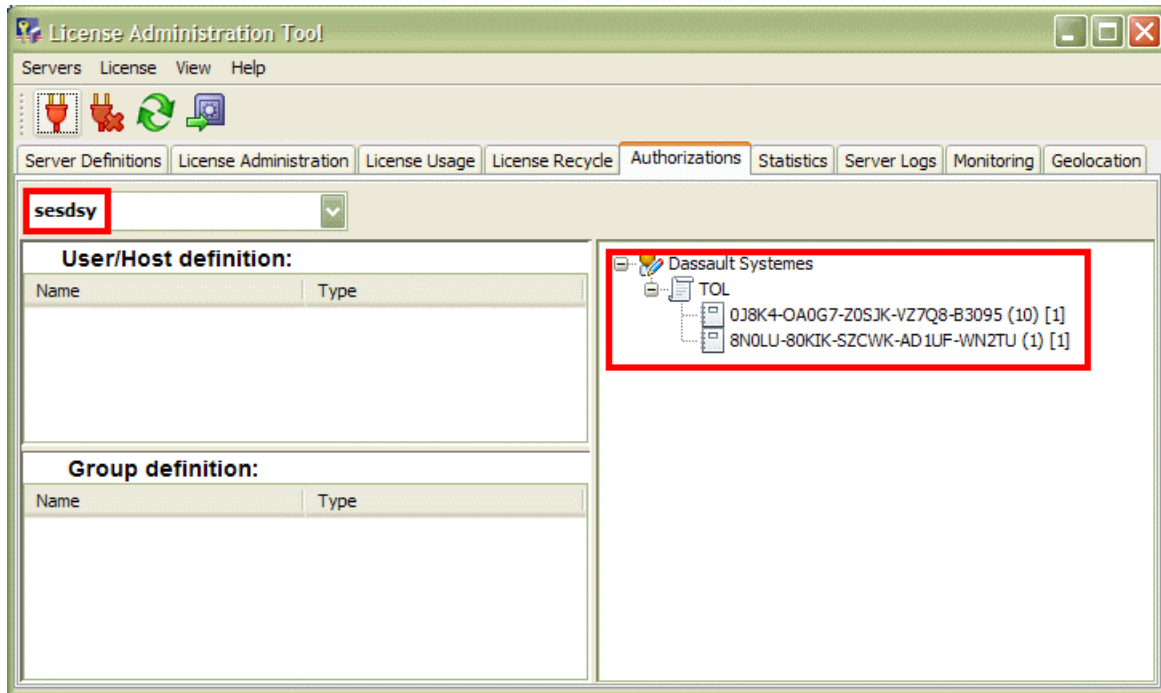
By default, concurrent user licenses can be used without prior authorization by the Dassault Systemes License Server. The role of the **Authorizations** tab is to set authorization rules for concurrent user licenses. There are four types of rules:

- **Allow:** authorize users, groups of users or specific machines or groups of machines to use concurrent user licenses
- **Deny:** deny authorization
- **Reserve:** reserve a given quantity of licenses to a list of users or computers
- **Limit:** limit a given quantity of licenses to a list of users or computers.

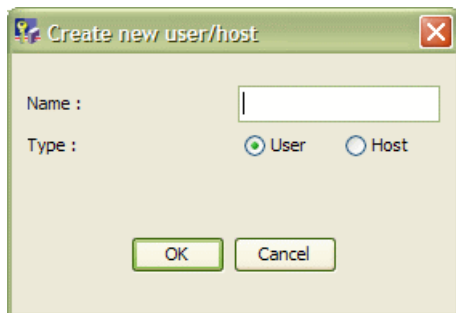
Only one rule type can be applied to a given license.

1. Select the **Authorizations** tab.

The license servers available are listed to the left (highlighted in red). The list to the right contains the concurrent licenses you can authorize or deny for the selected license server. This list is classified by editors. In this example, the concurrent licenses enrolled on the server for the TOL product for the editor Dassault Systemes are visible:



- Right-click in the space below User/Host Definition and select the Add command to create a User or Host.  
The **Create new user/host** dialog box appears:



**Note:** When the licensing client is connected to the ENOVIA V6 server, the user name is the P&O login name. When not connected, the user name is the operating system login name.

- Enter the name and check the appropriate option for what you are creating: user or host name, then click **OK**.

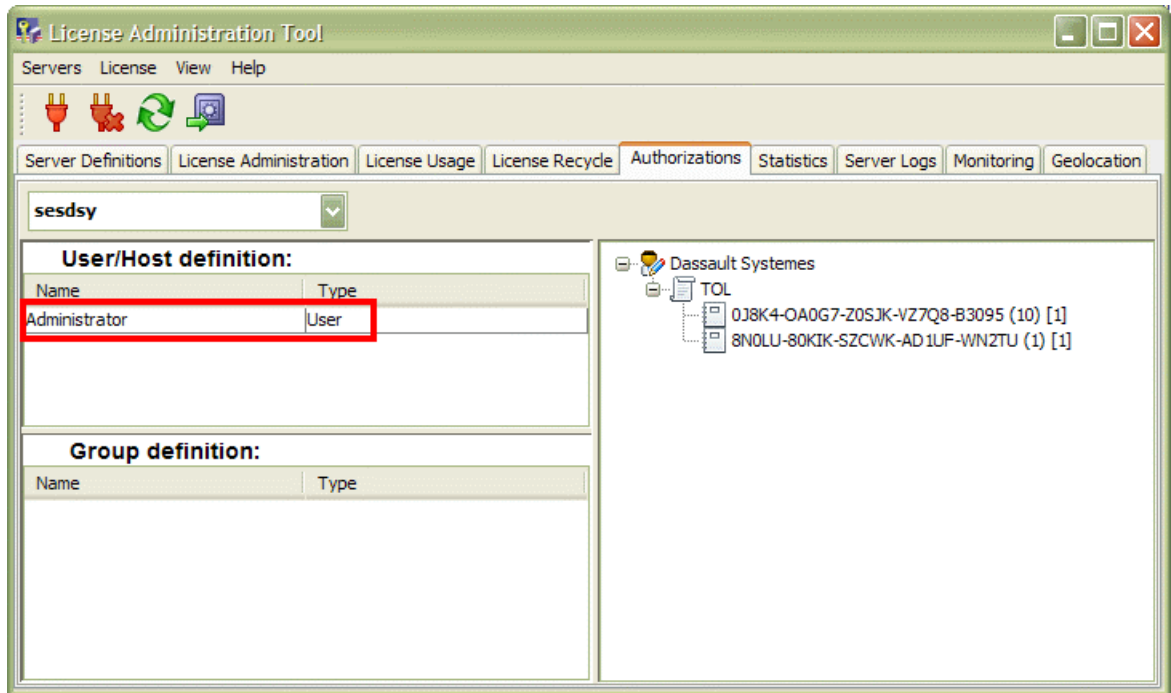
**User** User name.

**Host** License client host name. For example:  
SESDSY

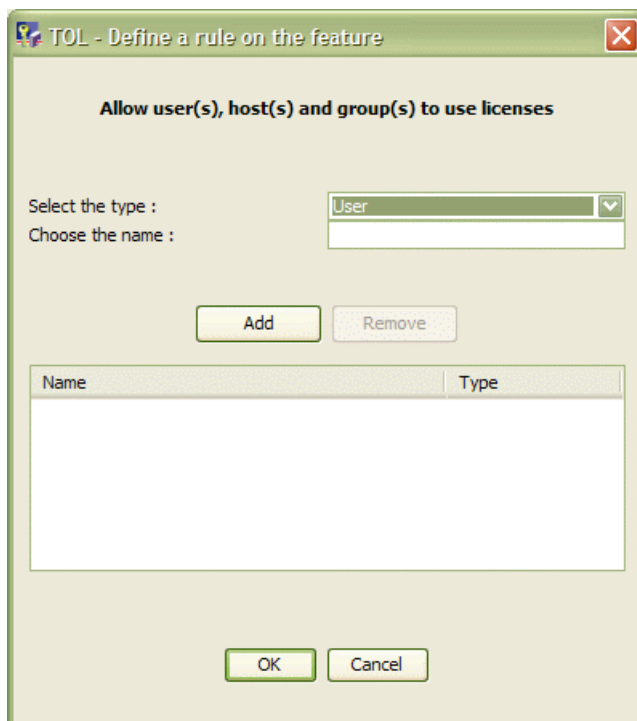
User and host values are case-insensitive. For example, Bob and BOB are considered to be the same user.

In our example, the User/Host Definition field now contains a user:





- Click on one of the TOL licenses to the right and select the **Add new rule - Allow** command. The **Define a rule on the feature** dialog box appears:



**Select the type:**

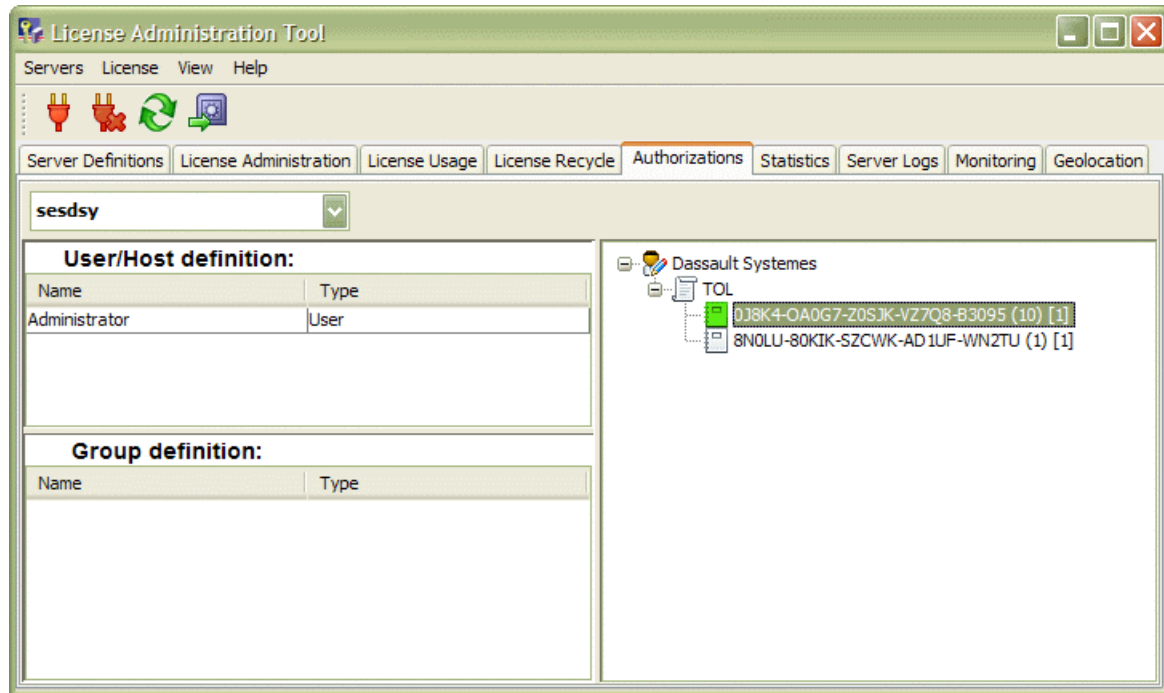
Select the type: User, Host, User Group or Host Group.

**Choose the name:**

Click and choose the User, Host, User Group or Host Group name.

5. To authorize the user we created to use the TOL license, select the type, choose the name, click the **Add** button then click **OK**.

The **Authorizations** tab now looks like this:



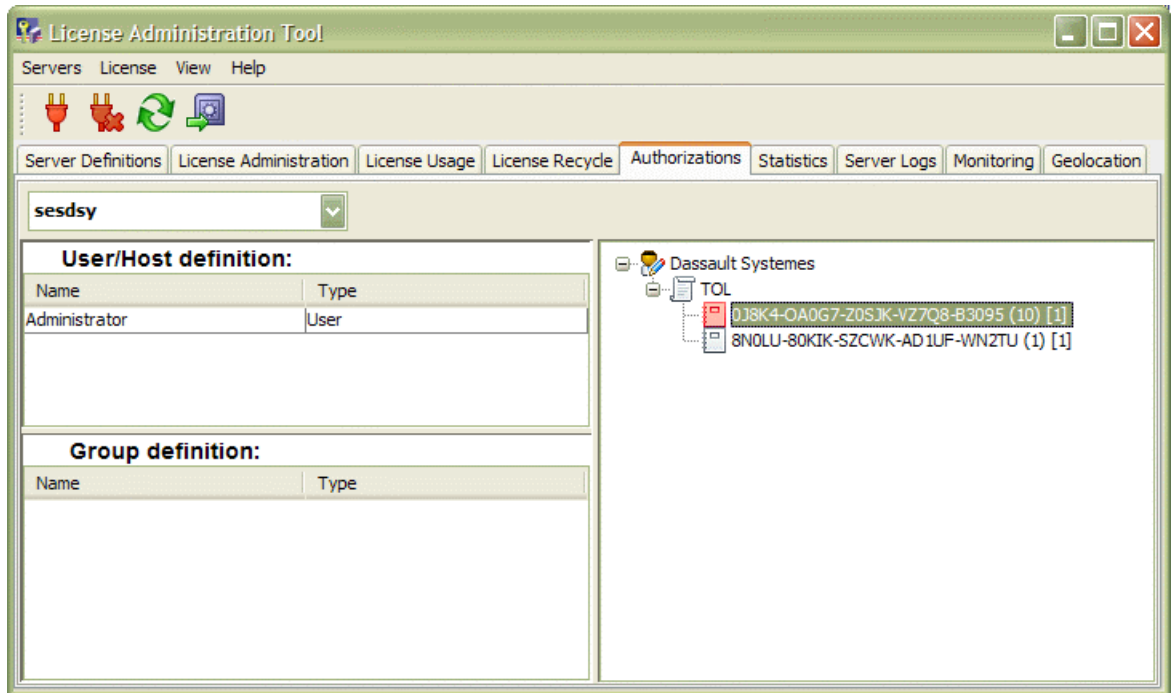
The TOL license is now highlighted in green, signifying that a rule has been created allowing the user to use the license.

6. To cancel the rule, click the TOL license and select the `Remove rule` command.

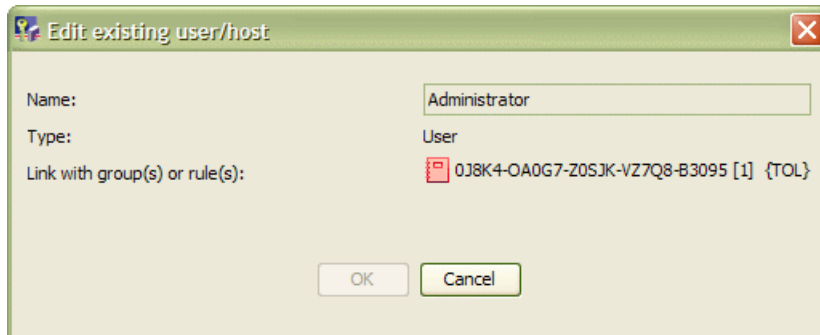
The TOL license is no longer highlighted in green.

7. To deny authorization, click the TOL license and select the `Add new rule - Deny` command. Select the type, choose the name, click the **Add** button then click **OK**.

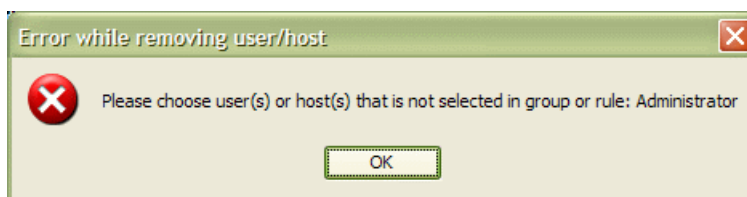
The **Authorizations** tab now looks like this:



The TOL license is now highlighted in red, signifying that a "deny" rule has been created. Click the user name and select the Properties command to display the user properties:



Note that the user is referenced by a license authorization rule. If you attempt to remove the user by selecting the Remove command, the following message appears:



informing you that you cannot remove the user because it is referenced by a rule.

If the same user then selects the Shareable Products tab and tries to reserve the license for the TOL product, a popup message appears:

---

No license available at this time for this product

Click OK and a second popup message appears confirming that the license is not authorized:

Failed to request license for TOL (version: 7 or higher) Error: License not authorized for this user License server configuration file path: C:\Documents and Settings\All Users\Application

Data\DassaultSystemes\Licenses\DSLicSrv.txt (default path) List of license servers: [01/01] sesdsy:4085

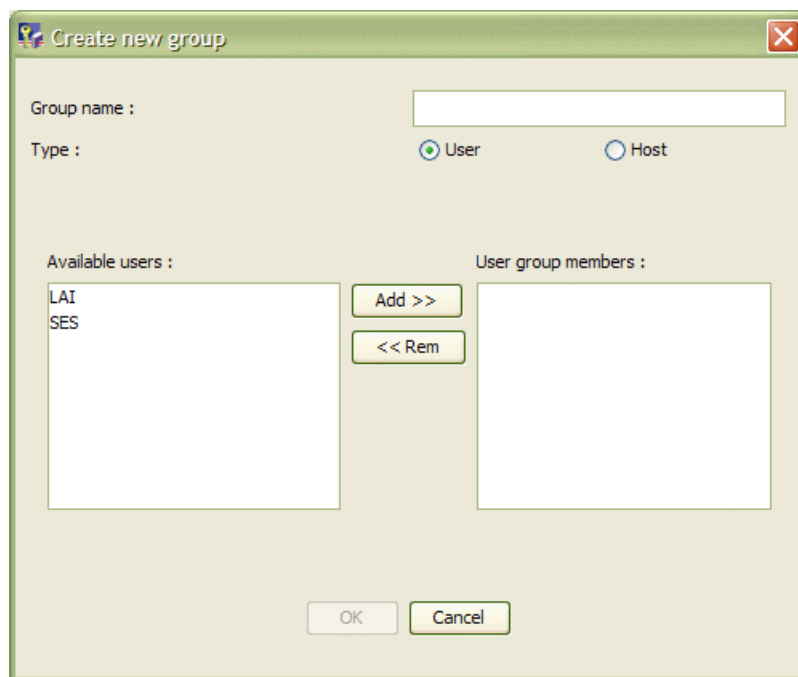
OK: License server is running


If you click the **Server Logs** tab and scroll the log, you will see a message like this:

2010/04/07 18:04:40:402 W LICENSESERV TOL not granted, user Administrator not authorized (from client SESDSY (42721022FAFE292A-0ae84648.0):Administrator:Administrator:C:\Program Files\Dassault Systemes\B211\intel\_a\code\bin\CNEXT.exe)

8. To create a group, right-click in the space below Group definition and select the Add command.

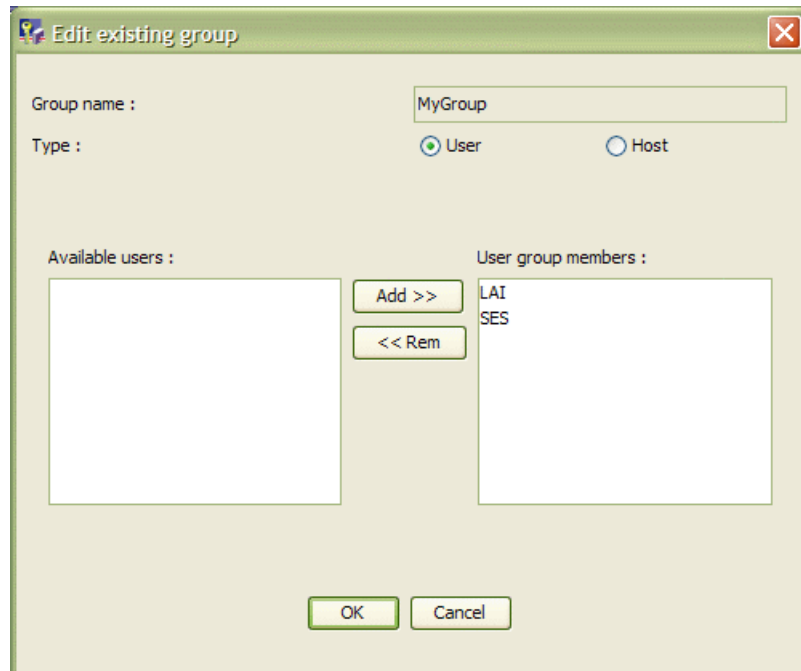
The **Create new group** dialog box appears:



 **Note:** Note that operating system user groups are not supported.

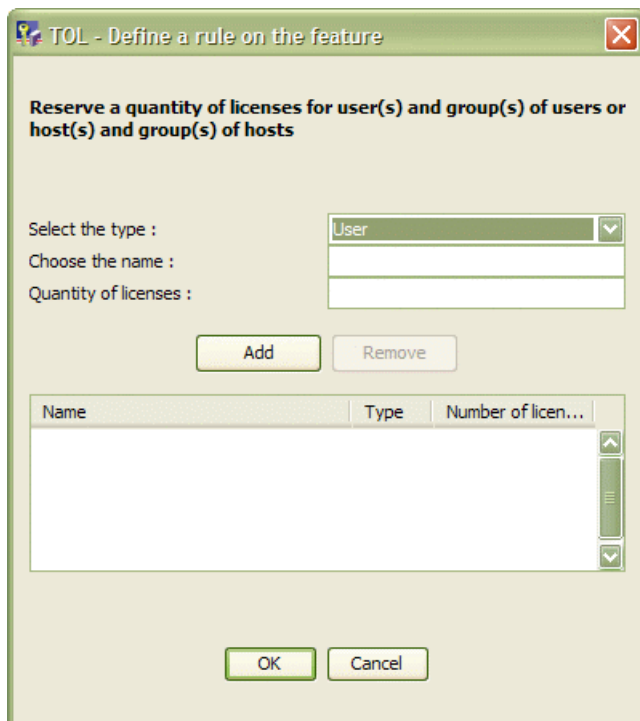
- a) Enter a name for the group.
- b) Check the **User** or **Host** option.
- c) Select the user or host name, then click the **Add>>** button and click **OK**.

The group is created. Click the group name and select the **Properties** command to display the group's properties:



9. You can also copy user, host and group definitions and rules to another license server by clicking the appropriate item and selecting the `Copy to server` command.
10. To reserve a quantity of licenses, click on one of the TOL features to the right and select the `Add new rule - Reserve` command.

The **Define a rule on the feature** dialog box appears:



**Select the type:**

Select the type: User, Host, User Group or Host Group.

**Choose the name:**

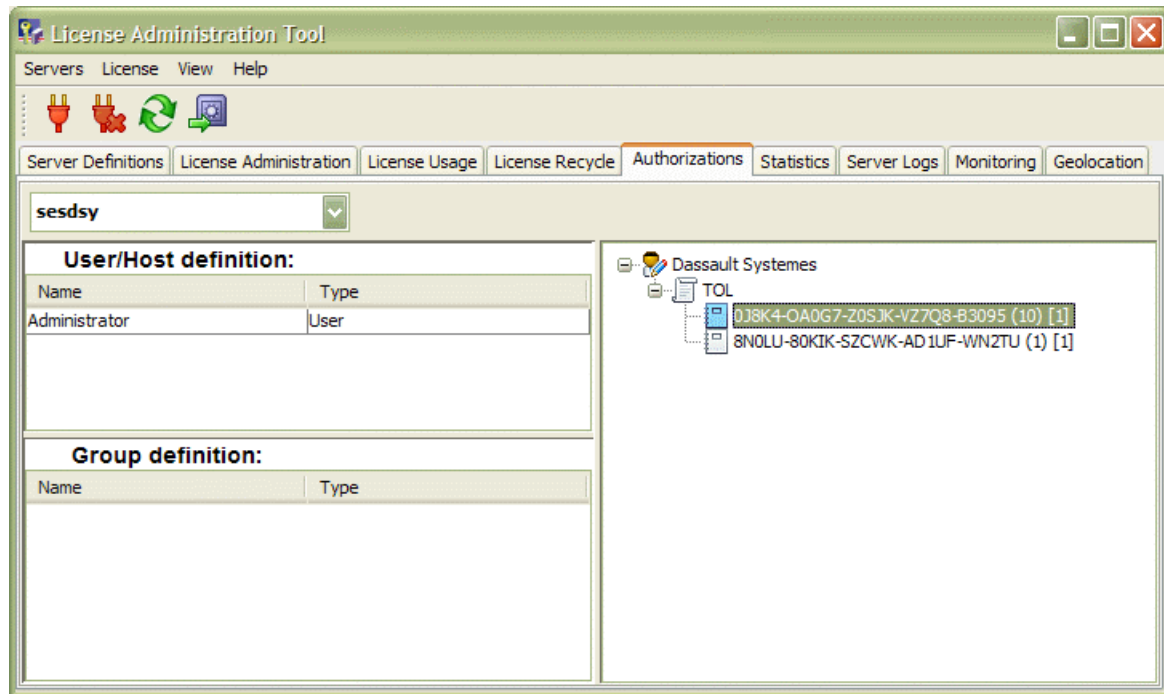
Click and choose the User, Host, User Group or Host Group name.

**Quantity of licenses:**

Specify the number of licenses to reserve.


Select the type, choose the name, specify the quantity of licenses then click the **Add** button then **OK**.

The **Authorizations** tab now looks like this:

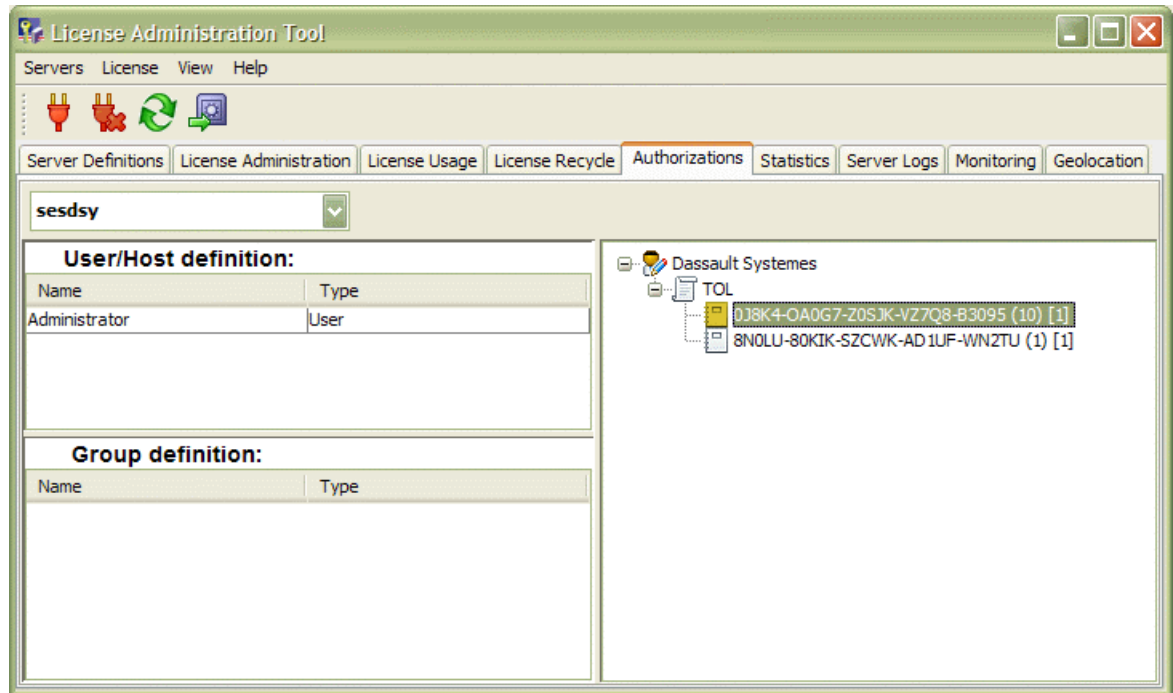


The TOL license is now highlighted in blue, signifying that a "reserve" rule has been created.

11. To ensure that either a list of users or a list of hosts cannot consume more than a limited quantity of licenses, proceed in exactly the same way, this time by selecting the **Add new rule - Limit** command.

 **Note:** Mixing users and computers is not allowed. Icon appears in brown when set.

The **Authorizations** tab now looks like this:



The TOL license is now highlighted in brown, signifying that a "limit" rule has been created.

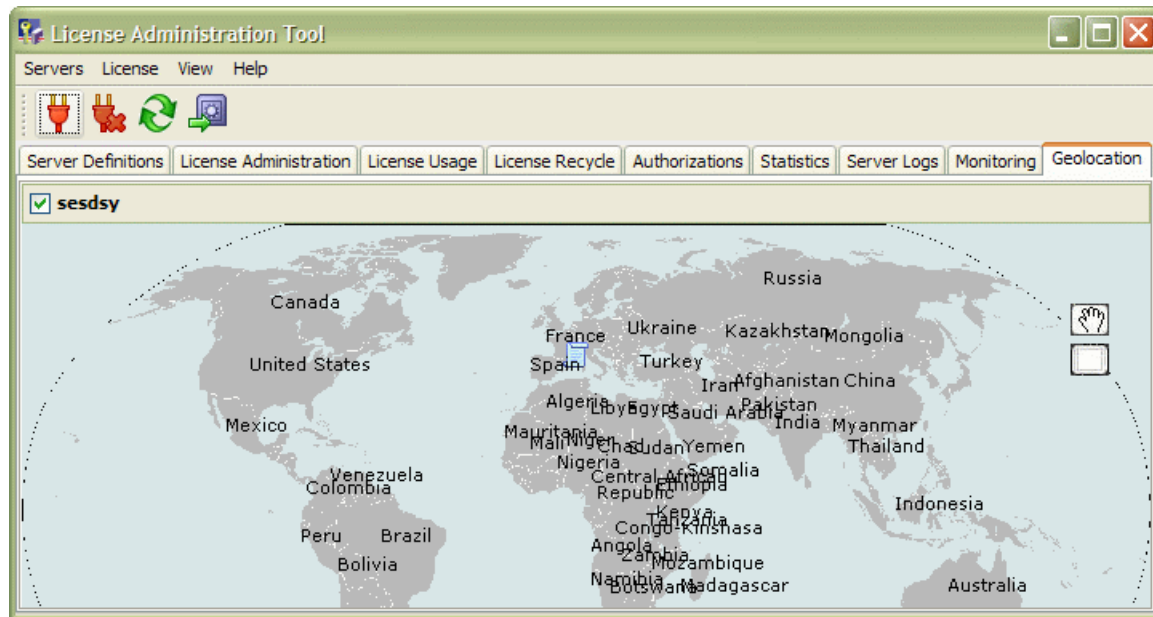
If a license is removed or expires, and a rule had been assigned to that license, the rule is not deleted. It becomes a *ghost rule* and is displayed in the lower right-hand corner. This allows the administrator to avoid having to create the rule again if a new license is added.

## Getting Information About the Authorized Country of Use for Licenses


The **Geolocation** tab identifies for a given license server the country in which the licenses enrolled on the server are authorized, not the country in which the licenses are really being used.

1. Select Start - (All) Programs - DS License Server - License Server Administration to launch the **License Administration Tool** if it is not already launched.
2. Connect to the server.
3. Click the **Geolocation** tab, then select if necessary the desired server.

The **Geolocation** tab looks, for example, like this:



4. Zoom in on the world map by left-clicking and dragging a box around the region you are interested in.

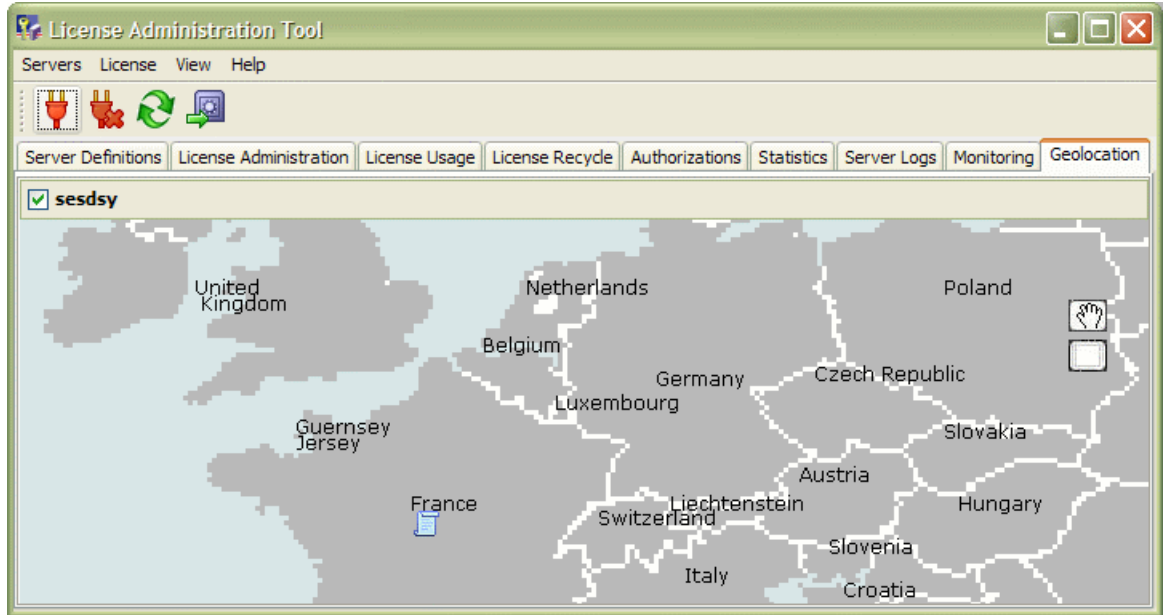
The  symbol identifies a country for which licenses are authorized:




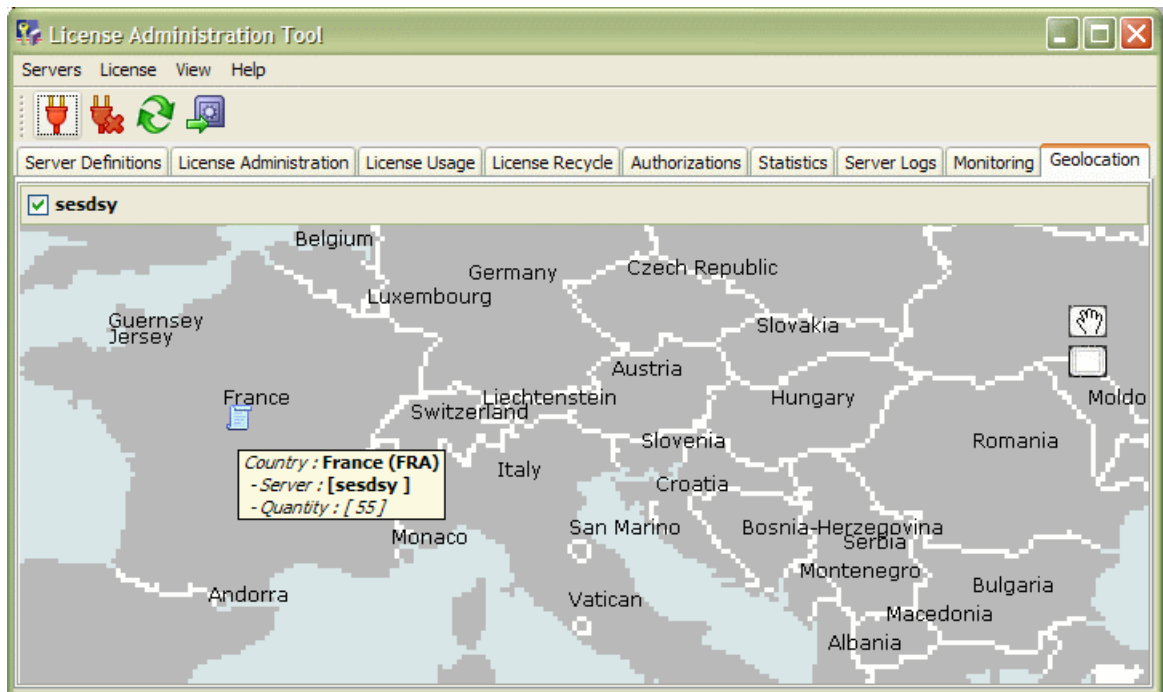
The country is the one indicated in the **Customer Country** column in the **License Administration** tab.

Zooming on France displays the following:








5. Point to the  symbol to obtain additional information:



This displays:

- the authorized country
  - the name of the license server on which the licenses are enrolled
  - the number of licenses.
6. Click the  symbol to the right to reframe the map.

- 
7. Click the  symbol to toggle to be able to move the map by dragging it.
  8. To return to zoom mode, click the  symbol.

---

# Tracking License Server Operation

This sections presents the tools and techniques used for tracking license server operation.

[Tracking License Statistics](#) on page 74

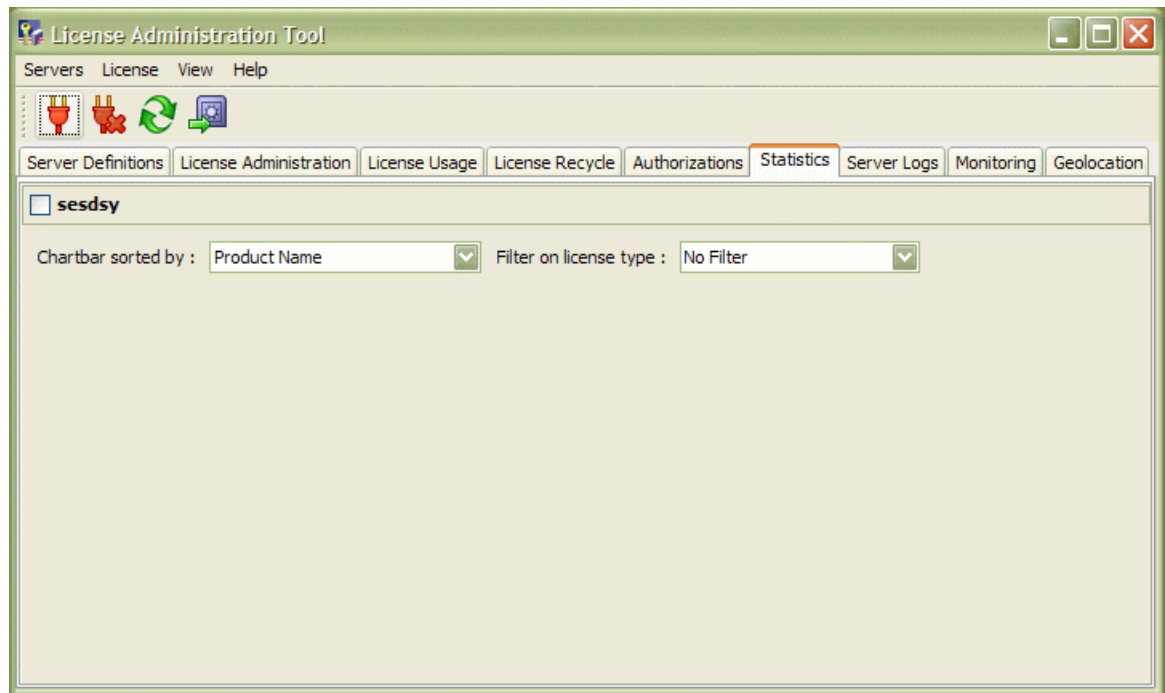
[Tracking Server Logs](#) on page 77

[Monitoring the Server](#) on page 78

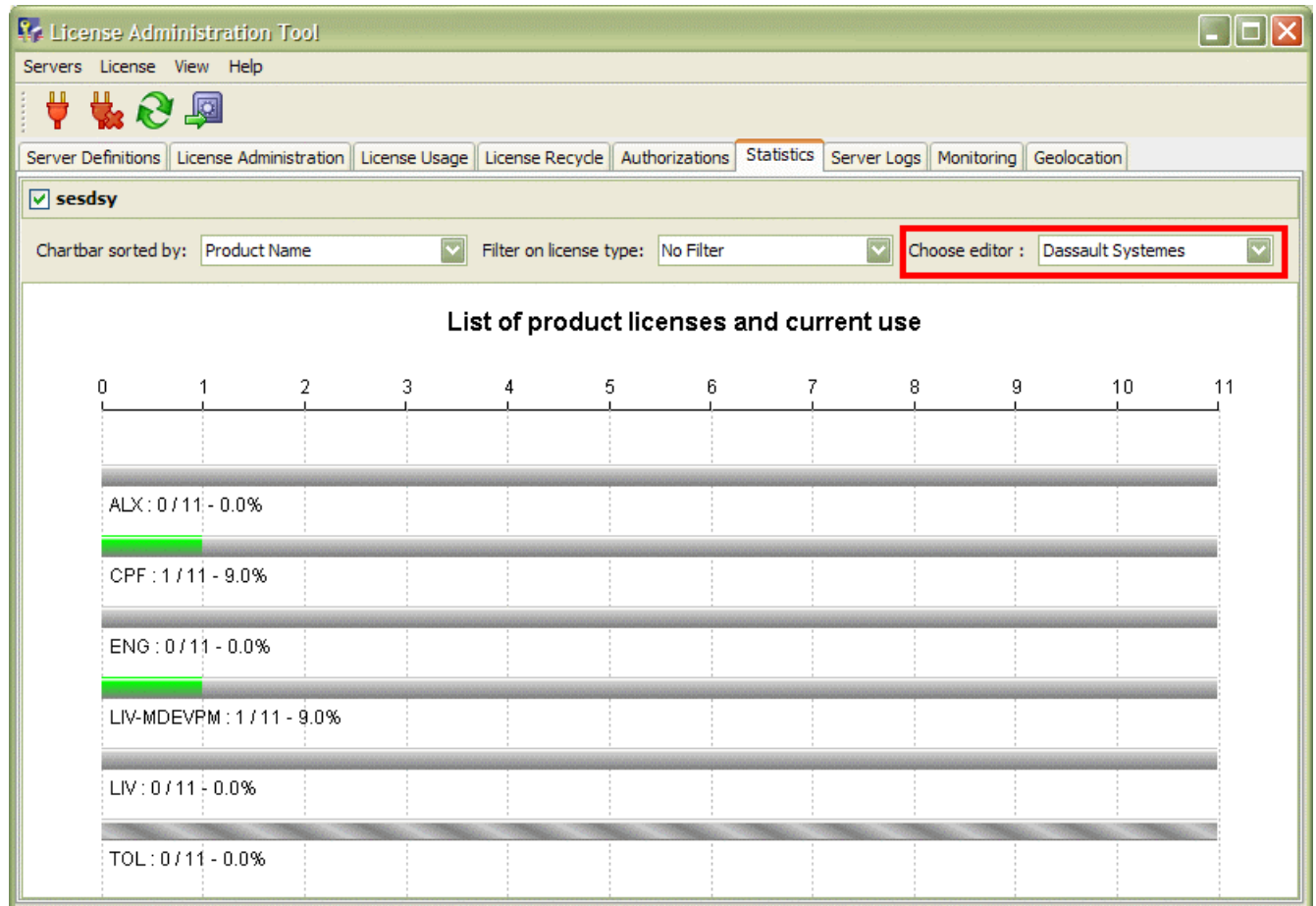
## Tracking License Statistics

Different types of license statistics are available using the **Statistics** tab.

1. In the **Server Configuration** dialog box, accessible when viewing your license server properties, check the **Enable license usage statistics** option.
2. Select the **Statistics** tab.
3. Check the check box for the name of the license server:



This displays the statistics tools for the selected server:



- Use the **Chartbar sorted by:** pulldown list to select how the license statistics are presented in the chart:
 

<b>Product name</b>	License statistics are presented according to the product name (this is the default and is illustrated above).
<b>Number of licenses used</b>	The products for which the highest number of licenses is currently being used are presented at the top of the list.
<b>Number of licenses available</b>	The products for which the highest number of licenses are available are presented at the top of the list.
<b>Percentage of licenses used</b>	The products for which the highest percentage of available licenses are currently being used are presented at the top of the list.
- Use the **Filter on license type:** pulldown list to specify the types of licenses for which you want to view statistics:
 

<b>No Filter</b>	No filter is applied: all licence types are displayed.
<b>Named user</b>	Only named user license statistics are displayed.
<b>Concurrent</b>	Only concurrent license statistics are displayed.
<b>Token</b>	Only token license statistics are displayed.
- Use the **Choose editor:** pulldown list to specify the editor of licenses for which you want to view statistics:

### Dassault Systemes

Only Dassault Systemes V6 license statistics are displayed.

### Dassault Systemes V5

Only Dassault Systemes V5 license statistics are displayed.

#### 7. Analyze the statistics.

Whichever way you filter the results, named user licenses are represented by a solid light grey chartbar, and concurrent licenses by a light grey chartbar with stripes. A three-letter code for the product license is displayed, alongside figures specifying the number of licenses used/available, for example:

CPF : 2/11

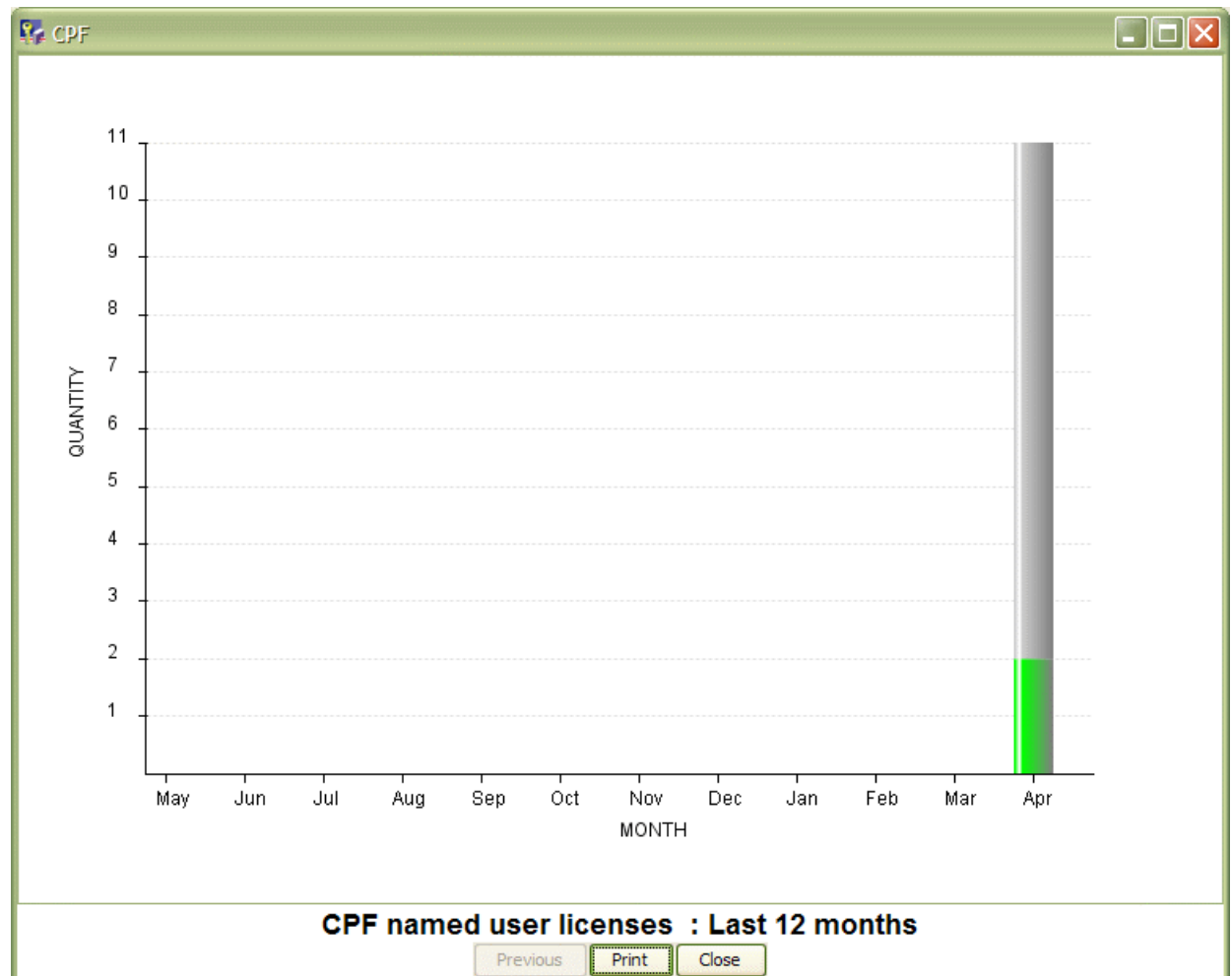
LIV-MDEVPM : 1/11

When licenses are currently being used, a section of the chartbar proportional to the percentage of available licenses being used for a given product is displayed in green.

#### 8. Point to the chartbar to display a magnifying glass which in turn displays information about the licenses.

#### 9. Click the chartbar.

Another dialog box opens displaying month-by-month statistics:



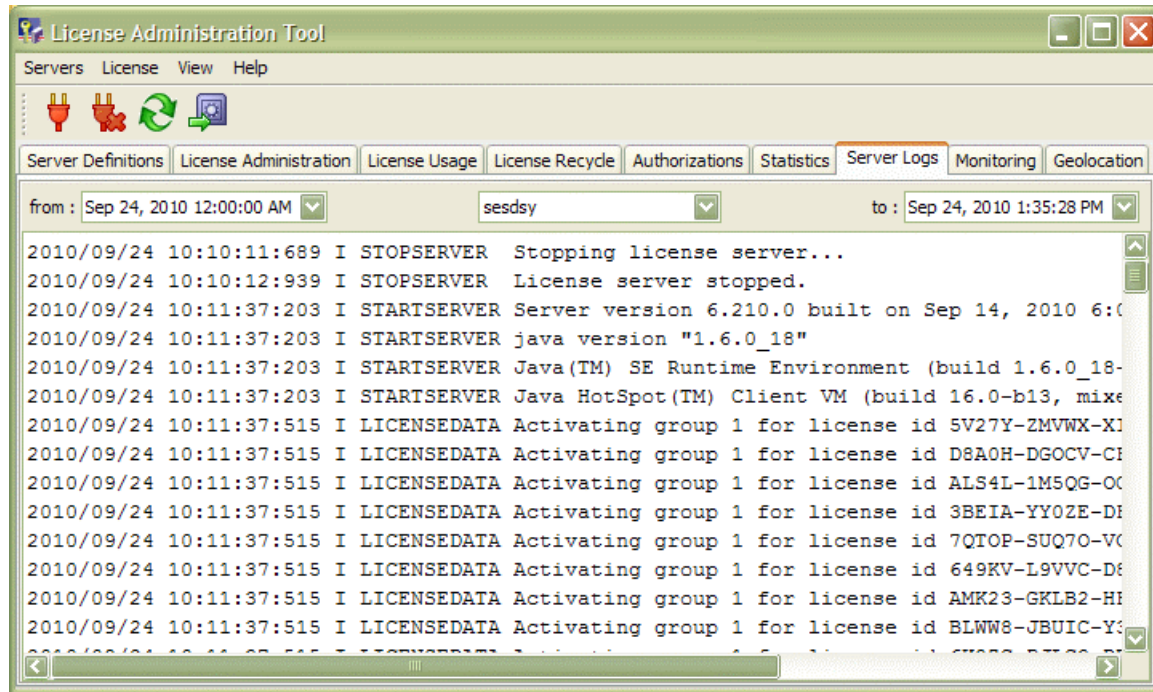
The dialog box displays license usage statistics over the past 12 months. Click the chartbar for the desired month for monthly information about license usage for a specific product license.

## Tracking Server Logs

You can consult license server logs using the **Server Logs** tab.

1. Select the **Server Logs** tab.

The tab looks like this:



2. Specify the dates from when and until when you want to view log information, and select the server:



Every event is time-stamped.

The log contains:

- information (identified by the letter I) about license server events such as starting and stopping the server, enrolling licenses, etc.
- warning messages (identified by the letter W) displayed in blue
- error messages (identified by the letter E) displayed in red.

If you activated the **License usage tracing...** option in the **Server Configuration** dialog box, traces of license request and release operations and timeouts will be logged. The following example shows the log trace when an LIV license has been requested and granted (if you selected the LIV license for license usage tracing):

```
2011/02/16 15:26:53:836 I LICENSESERV LIV (Dassault Systemes) granted to
client SESDSY(42721022FAFE292A-0ae84530.0)
:ses:SES@DS.S-1-5-21-842925246-2139871995-725345543-13721.0AE84530.0.WWN-42721022FAFE292A:
C:\Program Files\Dassault Systemes\B211\intel_a\code\bin\PLM3DNav.EXE
```

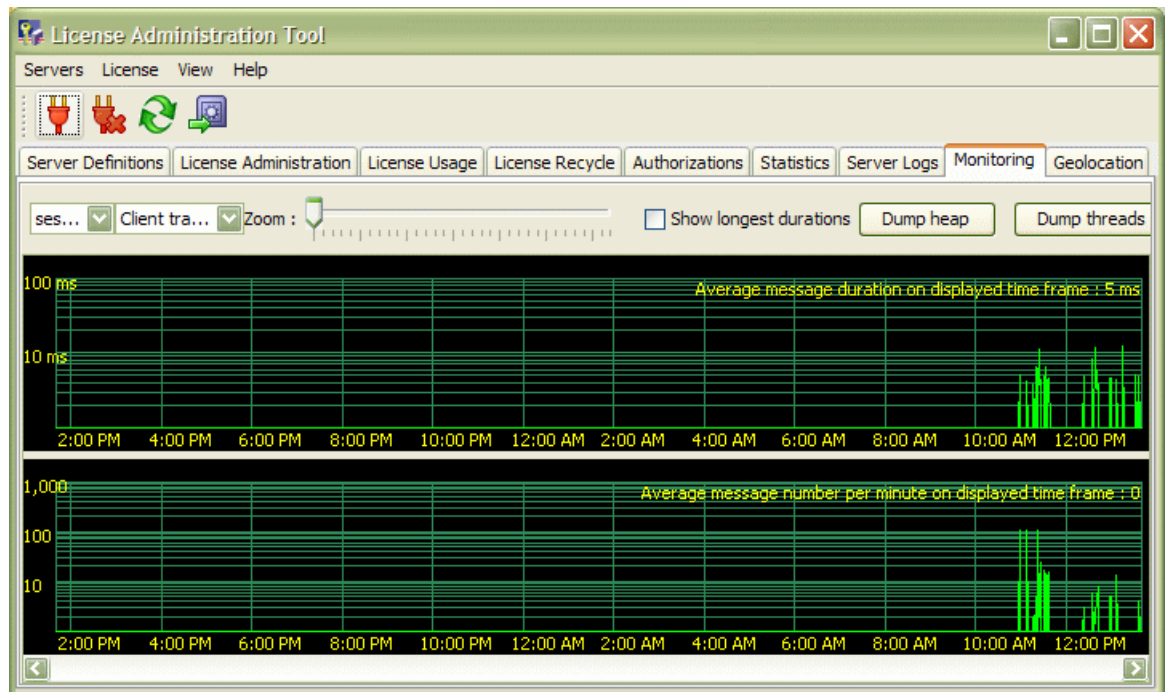
Refer to [Error, Information and Warning Messages](#) on page 89 for a full description of traces.

## Monitoring the Server

You can monitor license server performance using the **Monitoring** tab.

1. Select the **Monitoring** tab.
2. Select a standalone server to monitor.

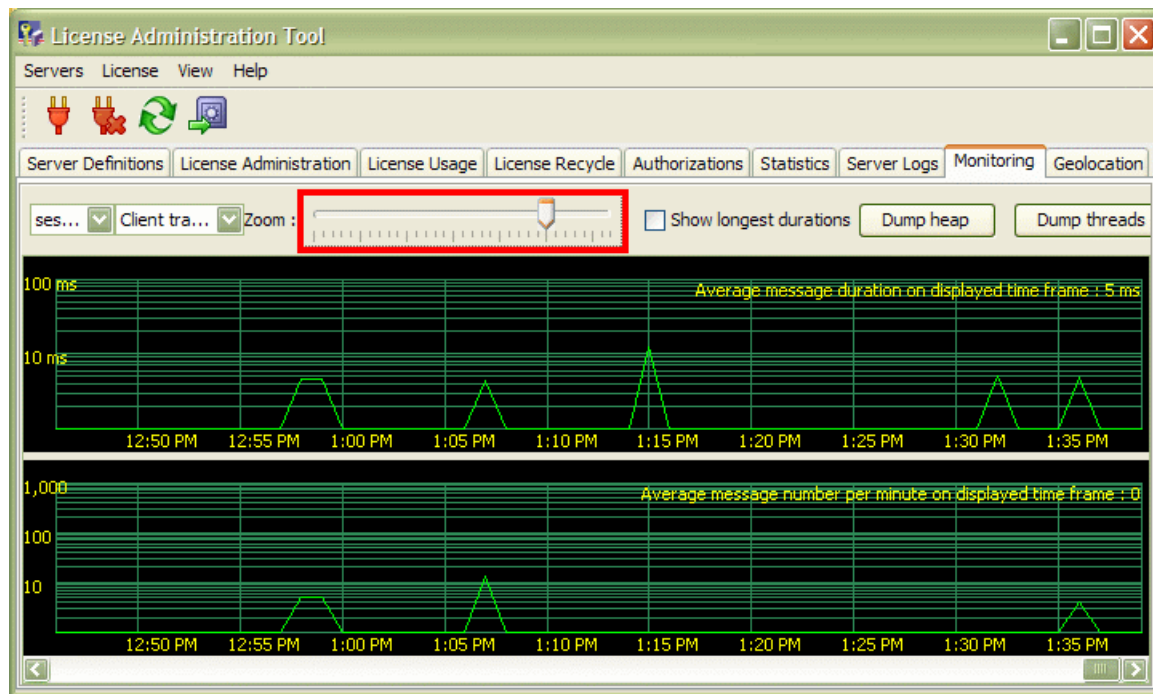
The tab looks like this by default when you are monitoring a standalone license server:



Activity over the last 24 hours is displayed in green bar graphs. The monitoring interval is one minute.

3. Use the zoom sidebar to zoom on a particular period over the last 24 hours.

You can zoom down to display a period in intervals of 5 minutes:



The upper part of the display monitors the average duration of processing, by the license server, of client messages which the license server receives.

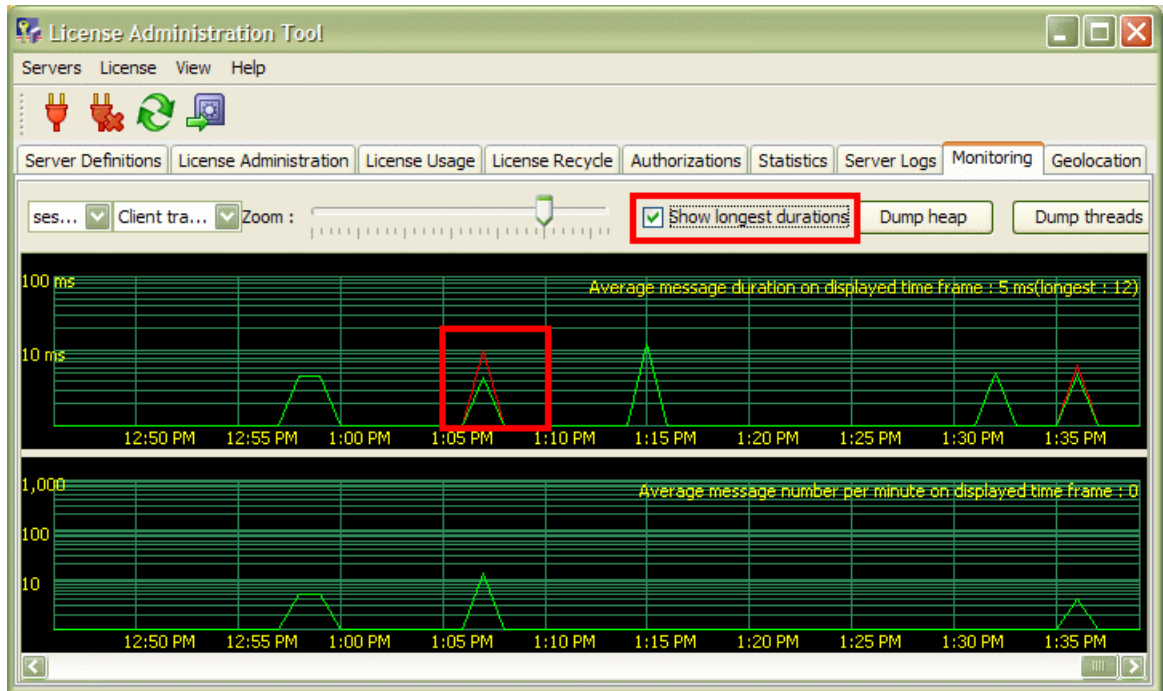
The lower part of the display monitors the average number of client messages per minute processed by the license server.

The different graphs are displayed on a logarithmic scale to be able to show both very high and very low traffic. With a non-overloaded server, the average message processing duration should be a few milliseconds.

4. Set the **Show longest durations** check button to display the longest message processing durations.

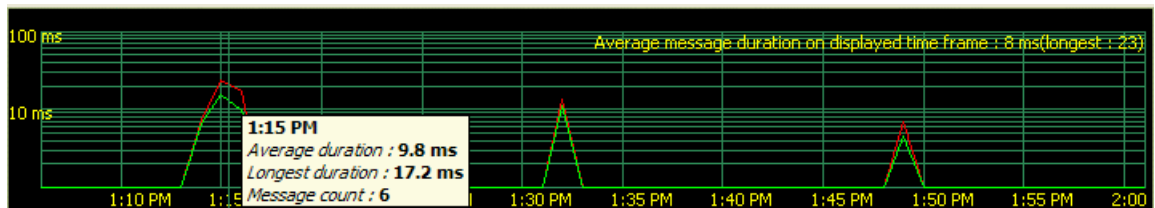
The red bar graph represents the longest duration of a client message for each minute of the displayed activity period:





5. Point anywhere over the window to move a vertical line over the specific minute of interest and display additional information.

For example:



This displays, for the specified minute, the average processing duration, the longest processing duration and the number of client messages received.

6. In standalone server mode, choose Client traffic or Admin traffic.

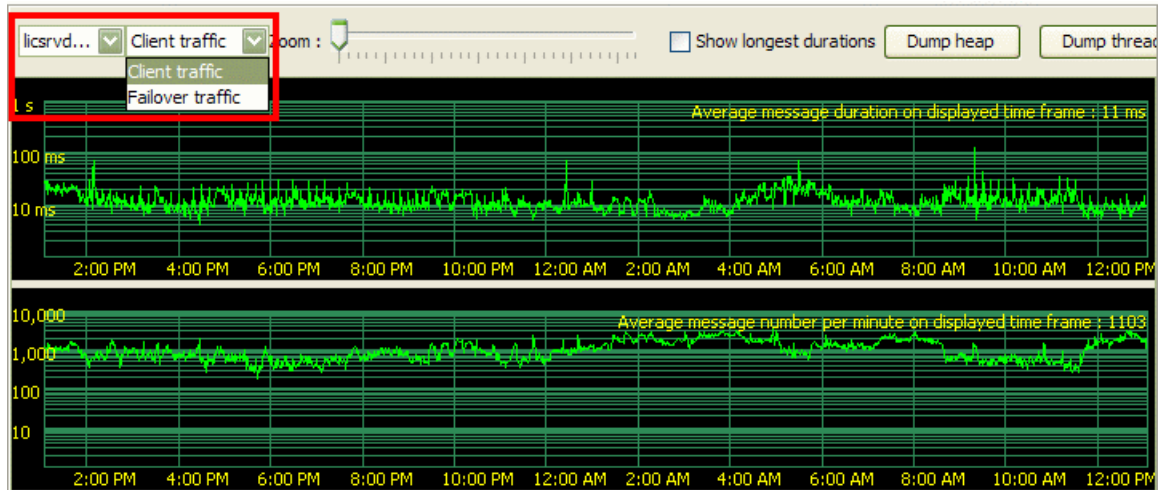
#### Client traffic

Monitors messages exchanged between the license client and the license server.

#### Admin traffic

Monitors messages exchanged between the **License Administration Tool** and the license server.

7. If you select a failover server, similar tools become available:



The following modes are available in the pulldown menu:

**Client traffic**

This performs the same monitoring functions as for a standalone server, except that it monitors messages received and processed by the failover member.

**Admin traffic**

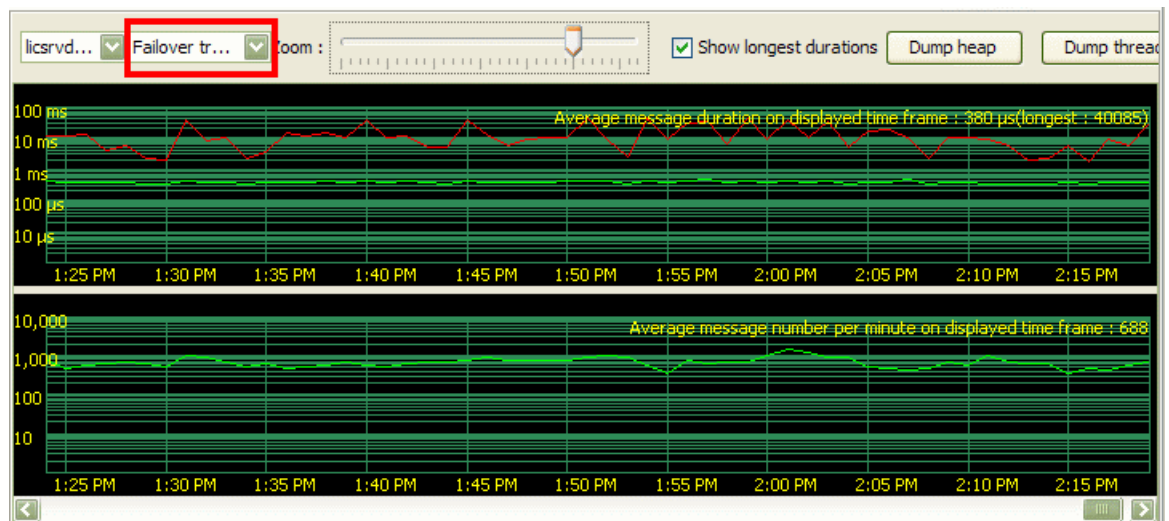
Monitors messages exchanged between the **License Administration Tool** and the license server.

**Failover traffic**

Because the selected server is configured as a member of a failover cluster:

- the upper part of the display monitors the average duration of processing, by the failover server, of client messages which it receives
- the lower part of the display monitors the number of client messages per minute exchanged between the server and the two other members of the failover cluster.


as illustrated below:



- 
8. In case of suspected server performance problems or if the server hangs, and if requested, you can dump server performance information using the dump buttons:

**Dump heap**

The server memory is dumped in a file named `HeapDumpxxxxxxxx.hprof` in the same folder as the ordinary server logs.

 **Note:** It has no effect on AIX platforms.

**Dump threads**

The state of all threads of the license server is written to a file named `ThreadDumpxxxxxx.txt`. This information could be requested from you in exceptional cases where the server performance is poor and no explanation can be found in server machine system reports.

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# Reference

This section contains reference information about batch commands and file locations.

[DSLicSrv Command Syntax](#) on page 83


[DSLicTarget Command Syntax](#) on page 87

[File Locations, Settings and Registry Entries](#) on page 87

[Error, Information and Warning Messages](#) on page 89



## DSLicSrv Command Syntax


The `DSLicSrv` command initializes and starts the license server and its associated administration tool.

Option	Description
<code>-initServer -force</code>	Initializes the license server. Licenses must be re-enrolled (including the activation license).
<code>-initServer -adminPort AdminPortNumber -fromHost WorkingMemberName -force</code>	Initializes a license server which is a member of a failover cluster that has gone down and refuses to start; the command gets configuration data and license keys from one of the remaining working members, where: <ul style="list-style-type: none"><li>• <code>AdminPortNumber</code> is the administration listening port number</li><li>• <code>WorkingMemberName</code> is the name of one of the remaining working cluster members from which you retrieve the failover data.</li></ul>
<code>-startServer [-echo] [-logDir path_to_log]</code>	Starts the license server: <ul style="list-style-type: none"><li>• <code>-echo</code>: displays messages in addition to logging them</li><li>• <code>-logdir</code>: specifies a different log directory.</li></ul>  <b>Note:</b> If you specify a remote directory, the license server may hang if the remote directory can no longer be accessed.
<code>-adminPort AdminPortNumber</code>	Declares the license administration tool listening port, where <code>AdminPortNumber</code> is the port number, for example 4084
<code>-adminUI</code>	Starts the License Administration Tool GUI
<code>-admin</code>	Starts the License Administration Tool in command line mode.

## Examples

The following examples illustrate the principal functions of the `DSLicSrv` command.

To perform this operation...	Run this command...
Initialize the license server	<code>DSLicSrv -initServer -adminPort 4084</code>  <b>Note:</b> You must run this command as root on UNIX
Start the license server	<code>DSLicSrv -startServer</code>  <b>Note:</b> You must run this command as root on UNIX

To perform this operation...	Run this command...
Stop the license server	DSLicSrv -stopServer   <b>Note:</b> You must run this command as root on UNIX
Start the License Administration Tool user interface	DSLicSrv -adminUI
Start the License Administration Tool user interface and reset tool settings	DSLicSrv -adminUI -resetSettings
Start the License Administration Tool in command line mode	DSLicSrv -admin
Start the License Administration Tool in command line mode and send results to an output file in addition to the console	DSLicSrv -admin -t output file
Start the License Administration Tool in command line mode and execute a command parameter file	DSLicSrv -admin -I input file [-o output file]  The input file contains commands executed in command line mode.  -o output file is equivalent to > output file

## Using the License Administration Tool in Command Line Mode

The majority of the tasks explained in this guide involve the use of the GUI version of the License Administration Tool. However, you can perform the same tasks in command line mode.

To do so, run the following command:

```
DSLicSrv -admin
```

The following command prompt appears:

```
License Administration Tool Version 6.211.0 Built on Jan 21, 2011 2:53:18 PM
admin >
```

To list the commands available, enter the command:

```
admin > ?
```

Operation	Command Syntax	Options
Connect to a license server	connect   c server port [-proxy proxyHost proxyPort]	server: license server host name port: administration port number proxyHost: proxy host name proxyPort: proxy port number
Disconnect from connected license server	disconnect   disc   d	
Get license server configuration	getConfig   gc	
Get license information	getLicenseInfo   gli	
Retrieve license data (save license keys in a directory)	getLicenseData   gld [-editorID editor] [-release release] [-licenseID license] [-groupIndex index] [-fileIndex index] -out directory	-editorID: editor identifier -release: release number -licenseID: license identifier

Operation	Command Syntax	Options
		-groupIndex: replacement group number -fileIndex: replacement file index -out: output directory
Show current license usage	<code>getLicenseUsage   glu [-all]</code>	-all: (optional) display detailed client usage
Get license usage tracing flags	<code>getLicenseUsageTraces   glut</code>	
Activate/Deactivate license usage trace	<code>setLicenseUsageTracing   sut all license1 license2 ... -trace -t yes no [-editorId -e editor]</code>	license1 license2 ...: licenses to manage usage tracing, or all to manage all licenses -trace yes no: to activate or deactivate trace -editorID: editor
Display logged server messages	<code>showLog   sl [-from fromDate] [-to toDate]</code>	-from: lower limit (default midnight) -to: upper limit (default now) Date format: YYYY/MM/DD HH : MM : SS
Modify server configuration	<code>setConfig   sc [-licensingPort -lp port] [-adminPort -ap port] [-failoverPort -fp port] [-password -pwd] [-enableRemoteAdmin -era yes no] [-failoverMode -fm yes no] [-clusterName1 -cn1 name] [-clusterName2 -cn2 name] [-clusterName3 -cn3 name]</code>	-licensingPort: listening port for license client access -adminPort: listening port for administration usage -failoverPort: listening port for intra cluster communications. -password: ask to be prompted to enable/disable password protection administration -enableRemoteAdmin: enable/disable administration from a remote machine -failoverMode: change floating/failover mode -clusterName1: host name of the first machine of the failover configuration. -clusterName2: host name of the second machine of the failover configuration -clusterName3: host name of the third machine of the failover configuration.
Enroll licence files	<code>enrollLicense   e -dir inputDir -file file1 file2 ...</code>	-dir: input directory -file: input files or regular expression
Erase licence data	<code>deleteLicense   dl -licenseID uid [-group index]</code>	-licenseID: license identifier -group: replacement group number (optional)
Delete expired licenses	<code>deleteExpiredLicenses   dxl</code>	

Operation	Command Syntax	Options
Create group of users to manage authorization lists	<code>createUserGroup   cug groupName -users user1 user2 ... [-replace] [-update]</code>	-users: list of users contained in that group -replace: replace existing group of users if any -update: update license server
Create group of hosts to manage authorization lists	<code>createHostGroup   chg groupName -hosts host1 host2 ... [-replace] [-update]</code>	-hosts: list of hosts contained in that group -replace: replace existing group of hosts if any -update: update license server
Create an authorization list to manage a product	<code>createAuthorizationList   cal name -type t -editorId id -product prd [-licenseId id] [-repFileIndex n] [-users user1[,number] ...] [-hosts host1[,number] ...] [-usergroups usrgp1[,number] ...] [-hostgroups hostgrp1[,number] ...] [-replace]</code>	-type: type of authorization list (ALLOW DENY RESERVE LIMIT) -editorId: unique editor identifier -product: product name to manage -licenseId: license product number (optional). -users: list of individual users with optional number of licenses -hosts: list of individual hosts with optional number of licenses -usergroups: list of groups of users with optional number of licenses -hostgroups: list of groups of hosts with optional number of licenses -replace: replace existing list if any
Delete group of users	<code>deleteUserGroup   dug groupName [-update]</code>	-update: update license server
Delete group of hosts	<code>deleteHostGroup   dhg groupName [-update]</code>	-update: update license server
Delete an authorization list	<code>deleteAuthorizationList   dal listname</code>	listname: name of list
List groups of users	<code>listUserGroups   lug</code>	
List groups of hosts	<code>listHostGroups   lhg</code>	
List all authorization lists	<code>listAuthorizationLists   lal</code>	
Stop licence server	<code>stopServer   ss</code>	
Exit the license administration tool	<code>quit   q   exit   x   bye</code>	
Display help information	<code>help   h   ? [command]</code>	command: (optional) display help information relative to this command

---

## DSLicTarget Command Syntax

The DSLicTarget command returns the computer id.

Option	Description
-t	Display the computer id
-l	List available network adapters
-c	Clear Windows registry key
-s {...}	Use a specific device identifier to generate the computer id, for example: <code>DSLicTarget -s {558CBA02-9E12-33F7-49A9-1154BED416A6}</code>
-h	Display help


## File Locations, Settings and Registry Entries

This section specifies where the different files, settings and registry entries are created when you install and administer the Dassault Systemes License Server.

Entries marked (\*) indicate items that are intentionally left in place after uninstallation.

File Type	Location
License Repository (*)	<p>The license repository containing enrolled licenses is located in:</p> <p>On Windows XP:</p> <p><code>C:\Documents and Settings\All Users\Application Data\DassaultSystemes\LicenseServer\Repository</code></p> <p>On Windows Vista, Windows 7 and Windows Server 2008:</p> <p><code>C:\ProgramData\DassaultSystemes\LicenseServer\Repository</code></p> <p>On UNIX:</p> <p><code>/var/DassaultSystemes/LicenseServer/Repository</code></p> <p>: Warning: THIS FOLDER AND THE FILES INCLUDED IN IT MUST NOT BE CHANGED NOR EVEN MOVED, RENAMED NOR ACCESS RIGHTS MODIFIED. CERTAIN BACKUP SOFTWARE PRODUCTS PERFORM SUCH FORBIDDEN CHANGES. CONFIGURE YOUR BACKUP SOFTWARE TO NOT BACKUP THIS FOLDER. IF YOU WISH TO BACKUP YOUR LICENSE KEYS, YOU CAN EITHER SAVE THE LICENSE KEYS YOU RECEIVED (.LIC OR .LICZ FILES), OR YOU CAN USE THE LICENSE &gt; SAVE COMMAND IN THE LICENSE ADMINISTRATION TOOL. IF THIS RULE IS NOT FOLLOWED, THE NEED FOR A NEW ACTIVATION LICENSE KEY AND FOR RE-ENROLLING THE LICENSE KEYS WILL BE MANDATORY.</p>
Log Files (*)	<p>On Windows, an installation log file is created in:</p> <p><code>%TEMP%\DSL\$msi.log</code></p> <p>This file is not created if the installation was performed by double-clicking the .msi file.</p> <p>Furthermore, server statistics files (if enabled) and log files are stored by default in:</p> <p>On Windows XP:</p> <p><code>C:\Documents and Settings\All Users\Application Data\DassaultSystemes\LicenseServer\LogFiles</code></p> <p>On Windows Vista, Windows 7 and Windows Server 2008:</p>



File Type	Location
	<p>C:\ProgramData\DassaultSystemes\LicenseServer\LogFiles</p> <p>On UNIX:</p> <p>/var/DassaultSystemes/LicenseServer/LogFiles</p> <p>A new log file is created each time the license server is started, and also once the size of the active log file exceeds 1MB. Old files can be freely removed or archived.</p>
Settings (*)	<p>The License Administration Tool user interface settings file (LicenseAdminUI) is located in:</p> <p>On Windows XP:</p> <p>C:\Documents and Settings\userid\Application Data\DassaultSystemes</p> <p>On Windows Vista, Windows 7 and Windows Server 2008:</p> <p>C:\Users\userid\AppData\Local\DassaultSystemes</p> <p>On UNIX:</p> <p>\$HOME</p>
License Client Configuration (*)	<p>Enrolled offline licenses and the licensing client configuration file (DSLicSrv.txt) are located in:</p> <p>On Windows XP:</p> <p>C:\Documents and Settings\All Users\Application Data\DassaultSystemes\Licenses</p> <p>On Windows Vista, Windows 7 and Windows Server 2008:</p> <p>C:\ProgramData\DassaultSystemes\Licenses</p> <p>On UNIX:</p> <p>/var/DassaultSystemes/Licenses</p> <p> <b>Note:</b> You can change the default value for the path of the client configuration file by setting the environment variable DSLS_CONFIG to the full pathname of the file, for example on Windows:</p> <pre>set DSLS_CONFIG=C:\SpecialProject\DSLicSrv.txt</pre>
Windows Registry Entries	<p>Standard Windows entries for managing the DSLS service.</p> <p>Standard Windows entries for managing the DSLS installation.</p> <p>The key:</p> <p>HKEY_LOCAL_MACHINE\SOFTWARE\Dassault Systemes\Admin (*)</p> <p>manages ComputerID related info.</p>
Windows Shortcuts	<b>Start &gt; Programs &gt; DS License Server</b>
UNIX system files	<p>The following system files are modified if you do not perform the installation using the -x option.</p> <p>On AIX:</p> <p>The file /etc/inittab is updated</p> <p>On Sun:</p> <p>The file /etc/init.d/dsls is created</p> <p>The symbolic link /etc/rc2.d/S98dsls is created</p> <p>The symbolic link /etc/rc2.d/K96dsls is created</p>

File Type	Location
	<p>On Red Hat:</p> <pre> The file /etc/init.d/dsls is created The file /etc/sysconfig/dsls is created The symbolic link /etc/rc.d/rc0.d/K02dsls is created The symbolic link /etc/rc.d/rc1.d/K02dsls is created The symbolic link /etc/rc.d/rc2.d/K02dsls is created The symbolic link /etc/rc.d/rc3.d/S98dsls is created The symbolic link /etc/rc.d/rc4.d/K02dsls is created The symbolic link /etc/rc.d/rc5.d/S98dsls is created The symbolic link /etc/rc.d/rc6.d/K02dsls is created </pre> <p>On SuSE:</p> <pre> The file /etc/init.d/dsls is created The file /etc/sysconfig/dsls is created The symbolic link /etc/init.d/rc3.d/Kxxdsls is created The symbolic link /etc/init.d/rc3.d/Syydsls is created The symbolic link /etc/init.d/rc5.d/Sxxdsls is created The symbolic link /etc/init.d/rc5.d/Kyydsls is created </pre> <p>(where xx and yy depend on your system configuration)</p>

## Port Management

There are three ports involved when managing the Dassault Systemes License Server:

- Administration port (https protocol): default 4084, used by the License Administration Tool GUI to connect to the server
- Licensing Port (https protocol): default 4085, used by license clients to request licenses
- Failover port (https sockets): default 4086, used by intercommunication between cluster members.

## Error, Information and Warning Messages

This section contains a list of error messages classified into different categories.

Message types are identified by a one-letter prefix:

- E (error)
- I (information)
- W (warning)

and are organized into the following categories, each describing a specific area being monitored:

- INITSERVER: server initialization
- STARTSERVER: server startup
- STOPSERVER: server shutdown
- REPOSITORY: license repository management
- RUNTIMEDATA: license server runtime management
- ADMINSERVER: server administration
- ENROLL: license enrollment
- LICENSEDATA: license data management

- MONITORING: server monitoring
- STATISTICS: server statistics
- LICENSESERV: license server
- FAILOVERSRV: failover server management.

Type	Category	Message
I	INITSERVER	Server version 6.211.0 built on yymdddhmmss
I	INITSERVER	Initializing license server on pathName args [...]
I	INITSERVER	ComputerId XXX - XXXXXXXXXXXXXXXXXXXX
I	INITSERVER	Server successfully initialized.
I	INITSERVER	License server already initialized on pathName
I	INITSERVER	Use -force option for reinitialization.
E	INITSERVER	-adminPort option invalid : pppp
E	INITSERVER	-adminPort option missing
E	INITSERVER	Cannot create pathName
E	INITSERVER	Cannot create lock file fileName
E	INITSERVER	Cannot initialize repository
E	INITSERVER	Cannot initialize server on pathName
E	INITSERVER	Cannot obtain a valid computer ID
E	INITSERVER	Cannot retrieve computer name (...)
E	INITSERVER	Cannot retrieve data from hostName on port pppp ( . . . )
E	INITSERVER	Cannot retrieve data from hostName. Authentication is required
E	INITSERVER	Cannot retrieve data from hostName. Remote administration is not allowed
E	INITSERVER	Cannot retrieve data from hostName. Unknown host
E	INITSERVER	Existing license data has been created by a license server with a higher level than the one being installed. Either install a higher level license server or install license server from scratch.
E	INITSERVER	Network adapter or motherboard previously used for generating Computer ID is no longer available. Either re-install this piece of hardware or install license server from scratch for changing Computer ID.
E	INITSERVER	Check integrity of license data has failed. License server must be re-installed from scratch.
E	INITSERVER	Data received from hostName cannot be used by this computer
E	INITSERVER	File version ver cannot be read by current software version ver
E	INITSERVER	Invalid computerId; XXX - XXXXXXXXXXXXXXXXXXXX cannot be used
E	INITSERVER	Invalid folder pathName
E	INITSERVER	Invalid port specified pppp for option -adminPort
E	INITSERVER	Unknown option(s) : -option
E	INITSERVER	Write time : yymdddhmmss, Change time : yymdddhmmss

Type	Category	Message
I	STARTSERVER	Server version 6.209.0 built on Jan 17, 2010 5:28:47 PM started
I	STARTSERVER	java version "1.6.0_18"
I	STARTSERVER	Java(TM) SE Runtime Environment (build 1.6.0_18-b07)
I	STARTSERVER	Java HotSpot(TM) Client VM (build 16.0-b13, mixed mode)
I	STARTSERVER	ComputerId XXX - XXXXXXXXXXXXXXXXXXXX ( based on device ... )
I	STARTSERVER	Ready : administration port pppp, licensing port pppp
I	STOPSERVER	Stopping license server...
I	STOPSERVER	License server stopped
E	REPOSITORY	IOException writing file fileName
E	REPOSITORY	Invalid repository directory pathName
E	REPOSITORY	cannot delete file ( fileName )
E	REPOSITORY	cannot rename file ( fileName -> fileName )
I	REPOSITORY	fileName written to disk
E	RUNTIMEDATA	Check integrity of license data has failed. License server must be re-installed from scratch.
E	RUNTIMEDATA	Clock has been changed
E	RUNTIMEDATA	Clock has been moved to the future (nnn ms)
E	RUNTIMEDATA	Clock has been moved to the past (nnn ms)
E	RUNTIMEDATA	Computer ID XXX - XXXXXXXXXXXXXXXXXXXX no more available.
E	RUNTIMEDATA	ComputerId XXX - XXXXXXXXXXXXXXXXXXXX is not compatible with the cluster configuration
E	RUNTIMEDATA	ComputerId XXX - XXXXXXXXXXXXXXXXXXXX is not compatible with the server configuration
E	RUNTIMEDATA	Existing license data has been created by a license server with a higher level than the current one. Either install a higher level license server or install license server from scratch.
E	RUNTIMEDATA	File version ver cannot be read by current software version ver
E	RUNTIMEDATA	License data cannot be read: invalid format. License server must be re-installed from scratch.
E	RUNTIMEDATA	Network adapter or motherboard previously used for generating Computer ID is no longer available. Either re-install this piece of hardware or install license server from scratch for changing Computer ID.
E	RUNTIMEDATA	Serialization error on runtime data
E	RUNTIMEDATA	Write time : yymmddhhmmss, Change time : yymmddhhmmss
E	RUNTIMEDATA	writeRuntime error :...
E	RUNTIMEDATA	XXX - XXXXXXXXXXXXXXXXXXXX cannot be used
W	RUNTIMEDATA	Error : AAA has no runtime
W	RUNTIMEDATA	Error : feature "AAA" refers to "SSSSSSS" which is not owned by a client

Type	Category	Message
W	RUNTIMEDATA	Error : inconsistent feature AAA expected count = nnn registered nnn
W	RUNTIMEDATA	Error : inconsistent feature AAA no license
I	RUNTIMEDATA	System has been suspended
I	RUNTIMEDATA	System has been resumed
W	ADMINSERVER	Administration request denied from hostName (IP address) : invalid credentials
W	ADMINSERVER	Connection from hostName (IP address) terminated : a local administration console is connecting
W	ADMINSERVER	Remote administration not allowed : refuse connection from hostName (IP address)
I	ADMINSERVER	Administration connection ended with hostName (IP address)
I	ADMINSERVER	Administration connection started with hostName (IP address)
I	ADMINSERVER	Administration port changed to pppp
I	ADMINSERVER	Failover port changed to pppp
I	ADMINSERVER	Licensing port changed to pppp
I	ADMINSERVER	adminCommand command issued
I	ADMINSERVER	License usage trace turned on for AAA
I	ADMINSERVER	License usage trace turned off for AAA
W	ENROLL	Enrollment authorization license has expired for editor Dassault Systemes
W	ENROLL	License XXXXX-XXXXX-XXXXX-XXXXX-XXXXX is not valid
I	ENROLL	Enrollment authorized for editor Dassault Systemes
E	LICENSEDATA	Cryptographic error : . . .
E	LICENSEDATA	Error in signature key extraction . . .
W	LICENSEDATA	RepGroupIndex n of license id XXXXX-XXXXX-XXXXX-XXXXX-XXXXX has been invalidated
W	LICENSEDATA	incomplete data for license id XXXXX-XXXXX-XXXXX-XXXXX-XXXXX, RepGroupIndex n missing RepFileIndex n
I	LICENSEDATA	Activating group n for license id XXXXX-XXXXX-XXXXX-XXXXX-XXXXX
I	LICENSEDATA	Adding data for license id XXXXX-XXXXX-XXXXX-XXXXX-XXXXX RepGroupIndex n RepFileIndex n Features AAA Quantity nnn
I	LICENSEDATA	Deactivating group n for license id XXXXX-XXXXX-XXXXX-XXXXX-XXXXX
I	LICENSEDATA	Deleting data for license id XXXXX-XXXXX-XXXXX-XXXXX-XXXXX RepGroupIndex n
W	MONITORING	dumpAllThreads not available on this platform

Type	Category	Message
W	MONITORING	dumpHeap not available on this platform
E	STATISTICS	Exception occurred; license usage no more logged
E	STATISTICS	Exception occurred; license usage not logged
E	STATISTICS	pathName specified is invalid; license usage not logged
E	LICENSESERV	Cannot listen on port pppp
W	LICENSESERV	Waiting for failover server(s)
W	LICENSESERV	Invalid or expired client token nnnnnnnnnnnnnnnnn (from client ...)
W	LICENSESERV	No license for editor XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX (from client ...)
W	LICENSESERV	AAA not granted, host hostName not authorized (from client ...)
W	LICENSESERV	AAA not granted, host not authorized (from client ...)
W	LICENSESERV	AAA not granted, internal failover error (from client ...)
W	LICENSESERV	AAA not granted, license already used by user userName on host userName (from client ...)
W	LICENSESERV	AAA not granted, license used on another host (from client ...)
W	LICENSESERV	AAA not granted, no ConcurrentUser license available (from client ...)
W	LICENSESERV	AAA not granted, no NamedUser license available (from client ...)
W	LICENSESERV	AAA not granted, no NamedUser nor ConcurrentUser license available (from client ...)
W	LICENSESERV	AAA not granted, no license enrolled (from client ...)
W	LICENSESERV	AAA not granted, no license enrolled for tenant tenantId (from client ...)
W	LICENSESERV	AAA not granted, no license for editor XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX (from client ...)
W	LICENSESERV	AAA not granted, no license of type TYPE can be granted (from client ...)
W	LICENSESERV	AAA not granted, no more available license (from client ...)
W	LICENSESERV	AAA not granted, no suitable release date yymddhhmmss (from client ...)
W	LICENSESERV	AAA not granted, no suitable release number n (from client ...)
W	LICENSESERV	AAA not granted, user userName not authorized (from client ...)
W	LICENSESERV	AAA queued request suppressed , no more available license (from client ...)
I	LICENSESERV	Editor editorName not registered
I	LICENSESERV	Invalid or expired session nnnnnnnnnnnnnnnnn
I	LICENSESERV	Licensing service started
I	LICENSESERV	AAA granted to client ...
I	LICENSESERV	AAA detached from client ...
I	LICENSESERV	AAA detached by timeout from client ...

Type	Category	Message
I	LICENSESERV	n tokens of AAA granted to client ...
I	LICENSESERV	n tokens of AAA detached from client ...
I	LICENSESERV	n tokens of AAA detached by timeout from client ...
I	LICENSESERV	AAA granted; offline license XXXXX-XXXXX-XXXXX-XXXXX-XXXXX has been generated for host hostName XXX-XXXXXXXXXXXXXXXXXXXX
I	LICENSESERV	AAA detached; offline license XXXXX-XXXXX-XXXXX-XXXXX-XXXXX restituted (generated for host hostName XXX-XXXXXXXXXXXXXXXXXXXX)
I	LICENSESERV	AAA detached; offline license XXXXX-XXXXX-XXXXX-XXXXX-XXXXX expired (generated for host hostName XXX-XXXXXXXXXXXXXXXXXXXX)
E	FAILOVERSRV	Cannot listen on port pppp
E	FAILOVERSRV	Cannot retrieve member of cluster
W	FAILOVERSRV	Cluster host hostName : computer id changed to XXX-XXXXXXXXXXXXXXXXXXXX
W	FAILOVERSRV	Cluster host hostName changed to hostName
W	FAILOVERSRV	Cluster host hostName repaired
W	FAILOVERSRV	Cluster host hostName replaced with hostName (XXX-XXXXXXXXXXXXXXXXXXXX)
W	FAILOVERSRV	Connection lost with hostName
W	FAILOVERSRV	Unsuccessful handshake with hostName
W	FAILOVERSRV	hostName does not run a compatible runtime version ( version : nnn, release : n, servicePack : n
W	FAILOVERSRV	hostName's computerId XXX-XXXXXXXXXXXXXXXXXXXX does not match expected XXX-XXXXXXXXXXXXXXXXXXXX
W	FAILOVERSRV	hostName is not synchronized
I	FAILOVERSRV	Connection established with hostName