

XF Rendering Server 2007 - Users Guide

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This document is designed to help system administrators to install XF Rendering Server 2007 and to perform various administrative tasks using several tools included in the distribution. Please contact [Technical Support](#) if you need additional assistance to install and use this product.

Table of Contents

About XF Rendering Server 2007	2
Product Features	2
Installation Prerequisites	2
Software Requirements	2
Hardware Requirements	2
Feedback and Support	2
Setting Up the Server	2
Post Installation Tasks	3
Testing the installation	4
Tools	5
XF Management Console - Configuring the server	5
Enabling Logging	5
Installing Private Fonts	5
Setting up Hot Folders	6
Tracking Performance	8
LicUtil - Installing demo licenses	8
LoadTest - Benchmarking your environment	9
Appendix A - Installing Licenses	10
Installing licenses	10
Installing offline registration tickets	10
Installing emergency temporary licenses	11

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About XF Rendering Server 2007

XF Rendering Server 2007 is a highly scalable, enterprise class rendering product. It can be used to automate the creation of electronic documents like technical manuals, brochures, proposals, business reports containing charts and graphs, by dynamically generating them from XML.

XF Rendering Server 2007 supports two major industry standards: XSL-FO (Extensible Style Language Formatting Objects) describing how an XML document should be formatted for a variety of media as well as SVG (Scalable Vector Graphics) used to describe two-dimensional vector and mixed vector/raster graphics in XML.

Product Features

- Supports XSL-FO and SVG as input
- Produces PDF, GIF, JPEG, PNG, BMP and other formats
- Supports partial document rendering
- Supports TrueType and Postscript Type1 font embedding.
- Scalable server architecture that can run across multiple CPUs, meeting the high-performance needs of your applications.
- Is accessible from a multitude of development environments: C++, VB, ASP, .NET, Java
- Includes XF Designer 2004 XSL-FO authoring tool.

Installation Prerequisites

Before installing this product, verify that the configuration and software prerequisites are satisfied.

Software Requirements

- Windows 2000, Windows XP or Windows 2003 Server. NTFS partitioning is recommended.
- Microsoft XML parser version 3 or 4.

Hardware Requirements

- Minimum Intel Pentium III, AMD Athlon 500 MHz or better. Intel Pentium IV 2.4 GHz recommended for development computers, dual XEON 3.0 GHz for production servers.
- Minimum 128 Mb RAM, 512 Mb recommended for development computers, 1Gb for productions servers.

Feedback and Support

Send error reports, feature requests, and comments about the XF documentation or samples directly to [Technical Support](#).

Further information about support options can be found on [Ecrion's Web site](#).

Setting Up the Server

The setup is packaged in a MSI (Microsoft Installer) file. If you downloaded the zip version, you must first extract the contained MSI file in a temporary location, then run-it from there. In addition, previous version of the product must be uninstalled using Add/Remove Programs from Control Panel.

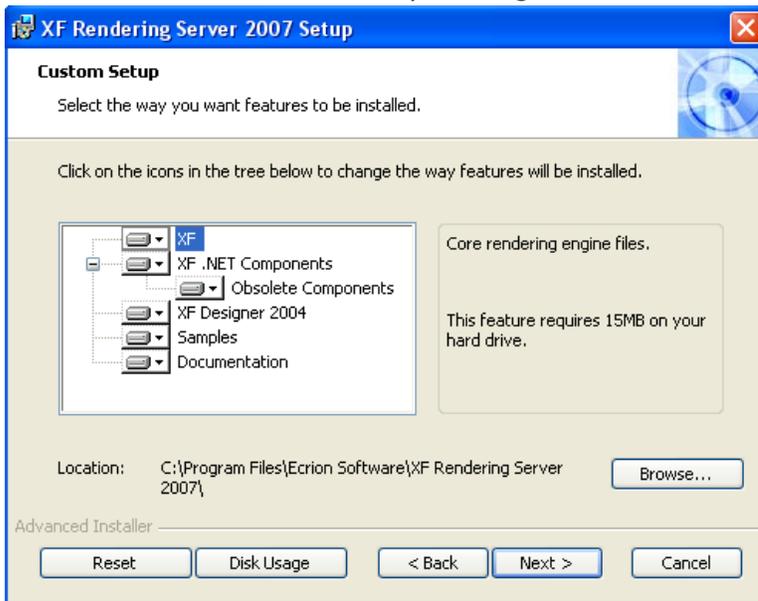


You have to be logged in as a user with Administrator rights to perform the installation.

- 1 Run XFSetup.msi. The following welcome screen will appear:



- 2 Click Next. You have to accept the End-User License Agreement (EULA) by clicking "I Accept". Then Click Next.
- 3 The Setup Type dialog will appear; you can decide to run with the default settings, or to customize the installation by clicking "Custom"

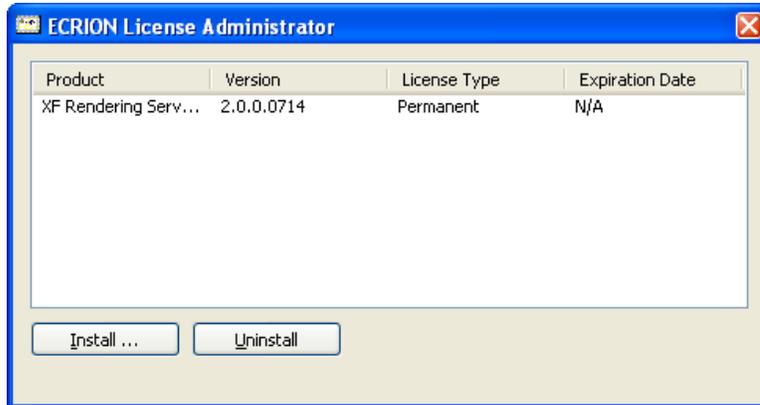


You can choose another folder by clicking "Browse", or you can select only the components you need.

- 4 Click "Install". The install will copy the files in the chosen location, and then will create the program groups for the administrative tools. Also, a new Windows service is created.

Post Installation Tasks

- 1 Install a license using License Administrator located in "XF Rendering Server 2007" start menu program group. You should receive a temporary license if you downloaded the product for evaluation, or a permanent license if you have purchased one.

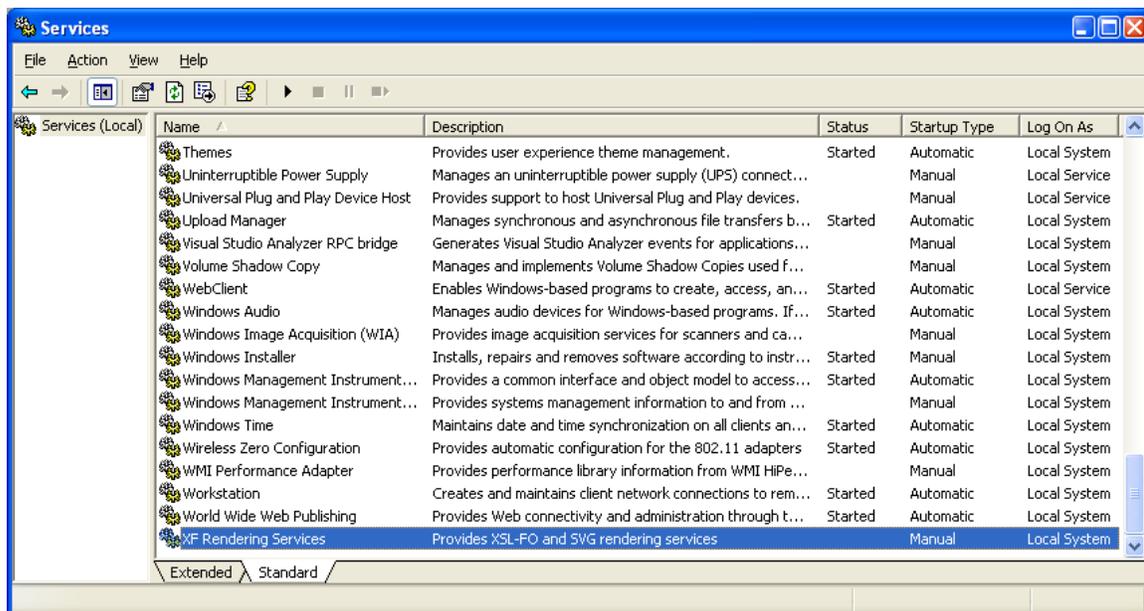


You can read more about different ways to install licenses in [Appendix A - Installing Licenses](#) chapter.

- 2 Run XF Management Console if you want to override some default parameters. This step can be run at any time and is not required in most scenarios.

Testing the installation

- 1 Verify that the Windows service is installed by choosing Services in "Administrative Tools".



Verify that you can start and stop the service.

- 2 Run XF Designer and open any of the *.fo files located in the <install folder>/Samples directory.

If any of the tests above fails, contact Technical Support at support@ecrion.com.

Tools

XF Management Console - Configuring the server

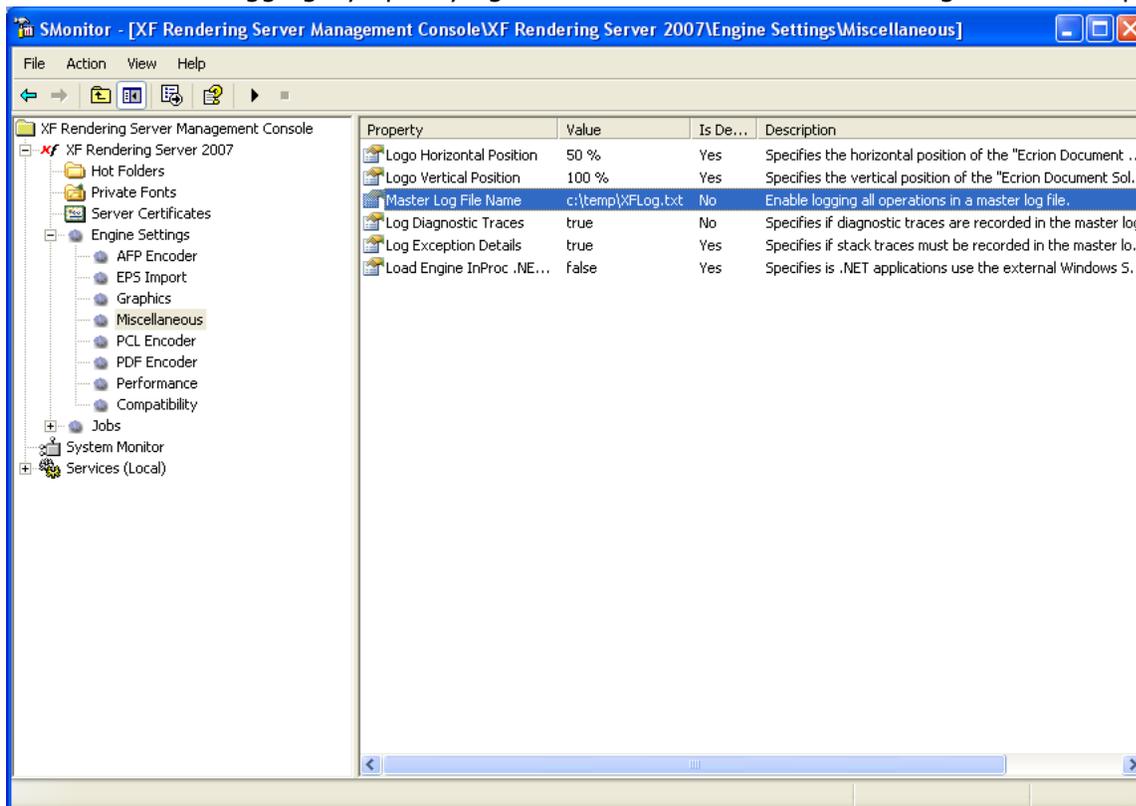
XF Management Console is a MMC (Microsoft Management Console) plug-in used to configure the rendering server. This chapter explains several configuration tasks.



All changes in XF Management Console will not have effect until you restart the Windows service. You can restart the service by pressing the Stop/Start buttons in the toolbar.

Enabling Logging

You can enable logging by specifying a valid file name for "Master Log File Name" property:

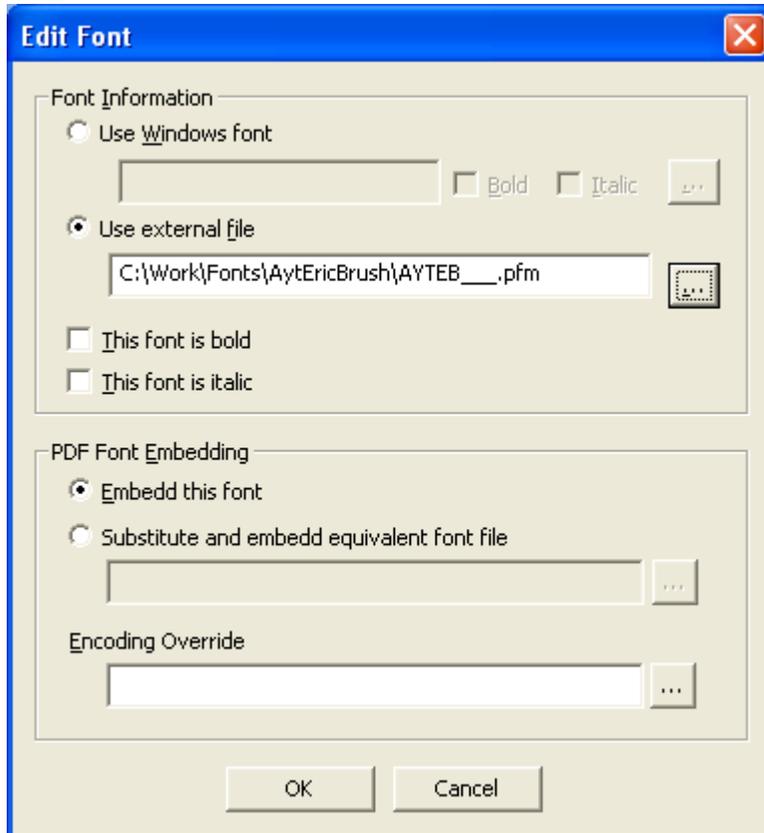


You can also set "Log Diagnostic Traces" for maximum details, although this may increase the log file considerably. Please note that logging decreases system performance, and it should be turned on only for troubleshooting issues.

Installing Private Fonts

Private fonts are a way to make TrueType and Type1 (Postscript) fonts available to XF without installing them in Windows Fonts folder.

- Right click Private Fonts node in the left panel and choose "Add Font Family". Enter the family name, for example "MyArial". This name will identify the font in your documents.
- Right click the new added "My Arial" node and choose "Add Font". The following dialog box will appear:



- You can either pick an installed Windows Font Family, or you can choose a font file.
- Specify if this font is a bold, italic, or bold-italic font.
- In general, you don't need to configure the PDF Font Embedding section. However, in some circumstances, you may want to substitute and embed a CFF font file instead of a Type1 font file because certain pre-press programs can not process PDF documents that contain fonts embedded in the new Type1 format.

Also, some fonts have an incorrect encoding which can be corrected by specifying an encoding file into the "Encoding Override" edit box. Please contact Technical Support for more details.

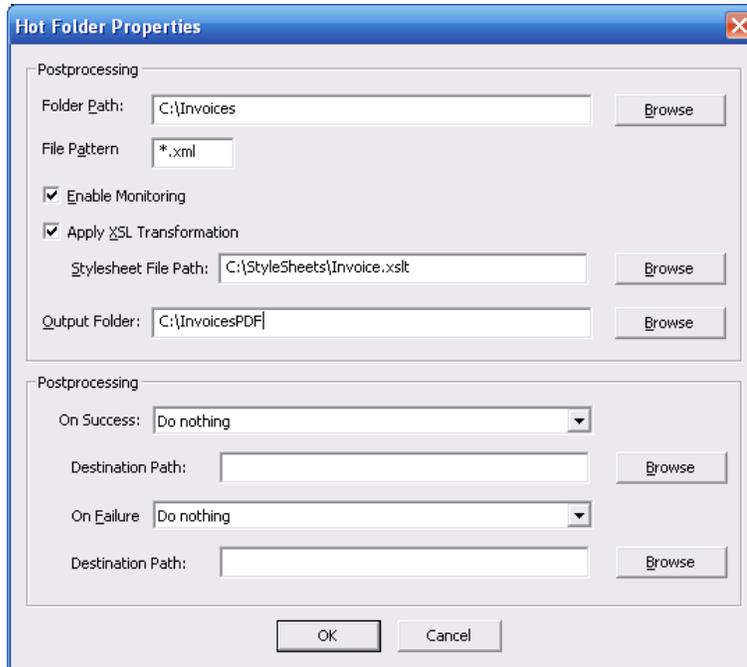
- Click "Ok", and repeat the steps above for all styles in the same font family.

Setting up Hot Folders

XF Rendering Server can monitor one or more folders and automatically render the documents arriving into those folders. It's meant to be incorporated into workflows where one application produces files in XML format, and XF watches for the new XML files and renders PDF documents. There are no restrictions on the number of folders being watched. XF Rendering server will process each folder completely independent in a separate thread. You can manage the folders being watched in XF Management Console.

To add a new folder:

- Right click Hot Folders node in the left panel and choose "Add Hot Folder". The following dialog window will appear:



At minimum, you have to enter at least the input folder path (for example "C:\Invoices"), the file pattern (for example "*.fo") and the output folder (for example C:\InvoicesPDF). Please note that when you click Ok, any existing files that match your pattern will be rendered almost immediately.

- You can also apply an XSL transform for all the input files before rendering them. For example, you may choose *.xml as the file pattern, then check "Apply XSL Transformation" and enter a valid file name in the Output Folder field (for example C:\StyleSheets\Invoice.xslt).
- In addition, you can decide to delete the input files or move them to a designated folder after rendering. In general, it is a good idea to remove the input files once they are rendered, so that they are not rendered twice when the server is restarted.
- Click "Ok", and repeat the steps above for all styles in the same font family.

To delete a hot folder:

- Right click on the folder you wish to delete, and choose "Delete". Please note that this operation will not erase the folder from your hard drive; it will only remove the folder from the list of folders being monitored.

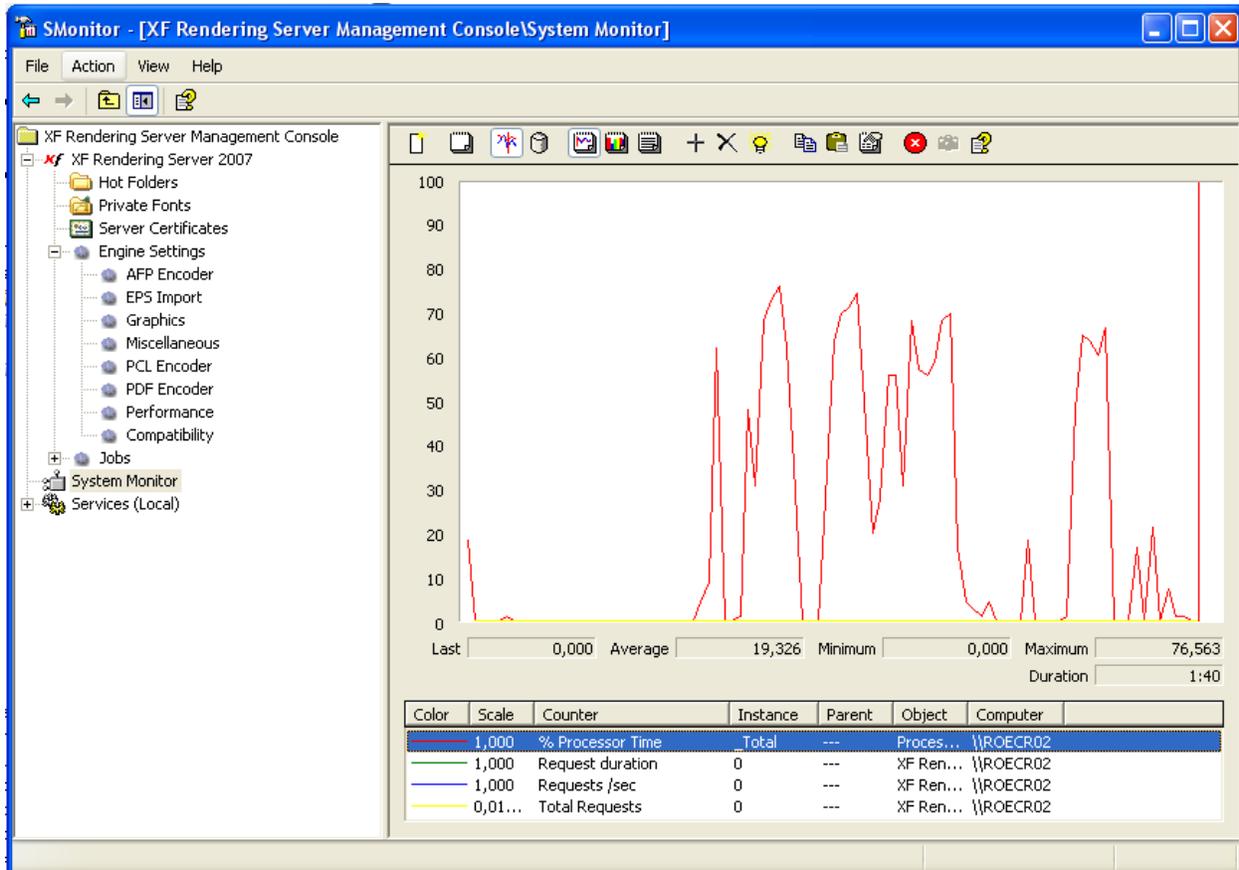
To edit a hot folder's properties:

- Right click on a folder and choose "Properties".

Hot folders can be deleted, added or changed while the server is running. XF will keep in sync with your requests almost immediately.

Tracking Performance

Windows performance counters allow your applications and components to publish, capture, and analyze the performance data that applications, services, and drivers provide. XF Rendering Server provides several performance counters which are accessible by clicking "System Monitor" in the left pane of the XF Management Console.



LicUtil - Installing demo licenses

Whenever you setup a demonstration system for your clients, you can use LicUtil to install one of the licenses you have purchased only for a limited time. The license will expire automatically after the given duration, and you will be able to use the license for the next demonstration.

In the bin folder you will find LicUtil.exe that can be used to install temporarily any license from your account, including developer licenses. Please note that developer licenses have several limitations (some speed optimizations are not available, concurrent requests are queued, etc), so plan accordingly.

Running the program without any command line argument will display the following usage screen:

```

C:\WINDOWS\system32\cmd.exe
C:\Program Files\Ecrion Software\XF Rendering Server 2007\Bin>LicUtil.exe
Perform license installation tasks.
LicUtil.exe fileName [-i|-u] [-d=days] [-l=login] [-p=password] [-url=serverUrl] [-q]
fileName      The license file to be installed.
-i           Install the file.
-u           Uninstall the file.
-d=days      Temporarily install the license only for the specified number of days.
-l=user       The login name to use to log-in to the licensing server.
-p=password   The password to use to log-in to the licensing server.
-url=serverUrl Licensing server url (default is http://www.ecrion.com/ELMServer/ELMServer.aspx).
-q           Quiet operation.

Example:
LicUtil.exe "C:\license.xml" -i -l=Joe -p=Doe
LicUtil.exe "C:\license.xml" -u -l=Joe -p=Doe
LicUtil.exe "C:\ticket.xml" -i

Return Codes:
0 - Success
1 - Generic Error - (Invalid command line or exception occured)
2 - Invalid license file.

C:\Program Files\Ecrion Software\XF Rendering Server 2007\Bin>

```

To install a license, download the license XML file from your customer area, and use -i flag.

If you want the license to be used only temporarily, add -d flag.

LoadTest - Benchmarking your environment

LoadTest.exe and LoadTest.NET.exe are two programs that can be used to measure the performance of your system under heavy loads.

LoadTest.NET.exe is installed only if your system has .NET Framework 1.0 or greater. For both programs, running without any parameter will display an explanation of the command line. LoadTest.NET offers the same functionality as LoadTest, except that it calls the .NET libraries instead of the COM objects.

LoadTest uses two arguments: i)a "load" file and ii)the number of threads to run (optional).

Each line in the load file will be executed on a different thread up to the limit specified in the command line. When the limit is reached, the program will wait for threads to finish before resuming processing of the input file.

For example, the command:

```
loadtest.exe c:\temp\load.txt 10
```

will process the input at most on 10 threads. The following is a possible load file.

```
"C:\Test1.fo" "C:\Test1.pdf"
"C:\Test2.fo" "C:\Test2.pdf"
```

The paths inside the load file can be absolute (like in the example above), or relative. If relative paths are used, they must be relative to the load file.



An example file with relative paths can be found in C:\Program Files\Ecrion Software\XF Rendering Server 2007\Bin\load.txt

Appendix A - Installing Licenses

The License Administrator can install three types of licenses:

- Regular licenses
- Offline registration tickets
- Emergency temporary licenses

Each type of license is designed for a particular situation, as described below.

Installing licenses

In order to be able to install a license on your server, you must have access to the Internet. If you don't have access to the Internet, or if your server is located behind a firewall which is filtering outbound HTTP traffic, please read [Installing offline registration tickets](#).

During installation, the License Administrator will connect with the Ecrion's Licensing Server and mark the license as being in use.

A license can be installed only on one computer at a time, therefore if this license is already allocated to another computer, you will have to uninstall the license on that computer first.

Please follow these steps:

- 1 Before installing the downloaded files on your servers, please make sure that your server's clock indicates the correct date.
- 2 Using the License Administrator, install a license for each physical CPU in the system. If the number of licenses does not match the number of CPUs, XF Rendering Server will not process any requests.
- 3 Restart XF Rendering Services. An easy way to accomplish this is to type the following in the command prompt:

```
net stop "XF Rendering Services"
```

```
net start "XF Rendering Services"
```

Installing offline registration tickets

Offline tickets are a type of license that can be installed with the License Administrator without having an Internet connection. The ticket is generated by allocating one of your licenses to a server that you specify.

Once the license is allocated to your server, you can download the registration tickets as often as you want. This is very useful if you rebaseline your server and the installed licenses are lost in the process. In addition, when you extend your Premium Technical Support contract, installing offline registration tickets is the easiest way to upgrade your licenses.

Once allocated, you can not move the licenses to another server unless:

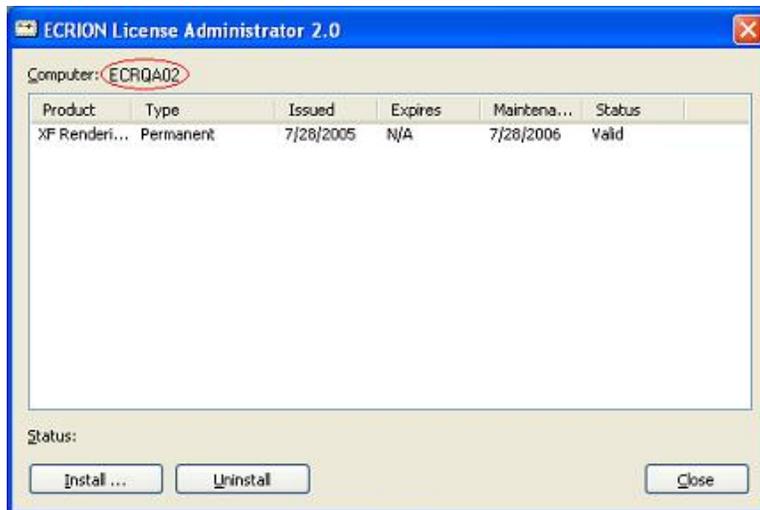
- You uninstall the license using the License Administrator. The license, now free, can be reused on another computer.
- Or, you contact Ecrion Technical Support to free the license for you. This is required for example when a server goes out of service and you didn't have a chance to uninstall the licenses.

Please follow these steps:

- 1 Log-in into your customer area.
- 2 Click on the license you want to use. It should be either a free license or a license allocated to the computer where you are planning to install-it.

- 3 Expand "Register the license offline" and download the offline ticket, by pressing the "Download" button.

You will have to enter the computer name as displayed by the License Administrator in the top left corner:



- 4 The offline ticket must be registered with five (5) days.
- 5 Repeat for all CPUs in your system.
- 6 Before installing the downloaded files on your servers, please make sure that your server's time indicates the correct date.
- 7 The downloaded files must be installed using the License Administrator, one for each physical CPU in the system.
- 8 Restart XF Rendering Services. An easy way to accomplish this is to type the following in the command prompt:

```
net stop "XF Rendering Services"  
net start "XF Rendering Services"
```

Installing emergency temporary licenses

You can now generate temporary CPU licenses for emergency situations when Ecrion Technical Support can not be reached (for example, due to time zone difference, or off-hours).

These licenses will expire in 7 days, therefore is imperative to contact us as soon as possible, to find a permanent solution. Please follow these steps:

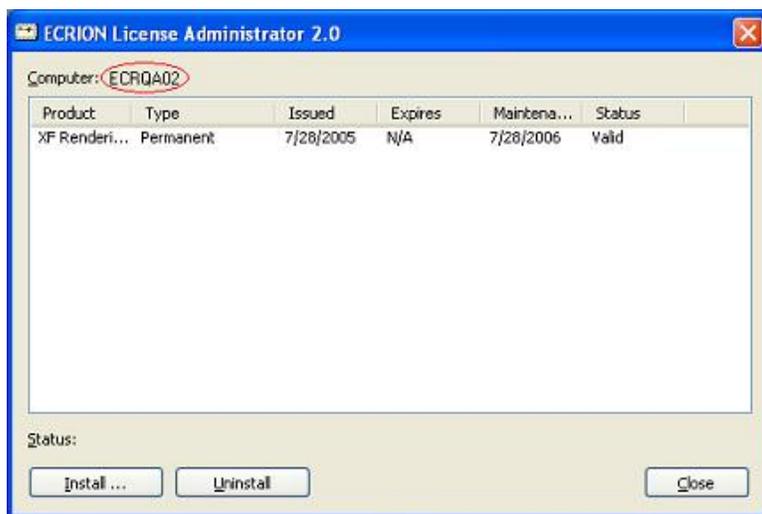
- 1 Make sure you don't have any license installed on your server. The Licenses Administrator should not display any license. If some cases, you may not be able to uninstall a license due to lack of network connectivity. In this case, you can delete the following registry keys (if present):

HKEY_LOCAL_MACHINE\SOFTWARE\Ecrion\Licenses and

HKEY_LOCAL_MACHINE\SOFTWARE\Ecrion\Licenses20

- 2 Log-in into your customer area and click "temporary emergency licenses".
- 3 Generate as many licenses as needed by pressing the "Generate" button.

You will have to enter the computer name as displayed by the License Administrator in the top left corner:



- 4 Once you press "Generate", the new temporary license will be added to the list of temporary licenses.
- 5 Click on the License ID to download the file on your local hard drive. Repeat for all CPU licenses and all computers in your environment.
- 6 Before installing the downloaded files on your servers, please make sure that your server's time indicates the correct date.
- 7 The generated files must be installed using the License Administrator, one for each physical CPU in the system.
- 8 Restart XF Rendering Services. An easy way to accomplish this is to type the following in the command prompt:

```
net stop "XF Rendering Services"
```

```
net start "XF Rendering Services"
```

- 9 Remember: the licenses will expire in 7 days. Please contact Ecrion's Technical Support at support@ecrion.com to figure out a permanent solution.