



Federator
User Guide Version 2017.1
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ISV/Software Solutions

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Getting Help

We are sure that you will experience different problems with GeoCue that range from installation issues to defects that made it through our testing undetected. We hope that you will immediately contact us with any problems or questions and have the patience to work with us through a successful GeoCue deployment.

Please contact us via phone or email for assistance with or comments about GeoCue and Federator.

Email:

support@geocue.com

Phone:

1-256-461-8289

Just ask for GeoCue Support and you will get connected with someone who can assist you. There is usually someone in the office between the hours of 0600 and 1800 CDT, USA on weekdays. Weekends are sort of hit or miss.

Fax (always on):

1-256-461-8249

About this Document

Welcome to the Federator User Guide. Throughout this document we use the following conventions to highlight information:

Boxes outlined in **black** contain general production information and hints.

Boxes outlined in **blue** contain information about why we made a particular design decision and/or information about features that we are still working.

Boxes outlined in **green** contain information about special product features.

Boxes outlined in **red** contain cautionary information.

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1 Introduction

GeoCue Federator allows multiple GeoCue Servers to be connected to create a “federation” and allow them to share certain information. For example, licenses from one GeoCue server can be shared with other connected GeoCue Servers where they can be “borrowed”. Also, GeoCue Users are synchronized across all connected servers. In addition to connecting GeoCue Servers, multiple GeoCue Federators can be connected to allow specific information to be shared.

Another benefit that GeoCue Federator provides is the ability to allow web applications to connect directly to Federator and leverage the information of the “federation”. GeoCue Federator Dashboard is a great example of how this information can be used effectively. GeoCue Federator Dashboard can consolidate the status of specific entities of multiple GeoCue projects spanning multiple GeoCue Servers and multiple GeoCue Federators.

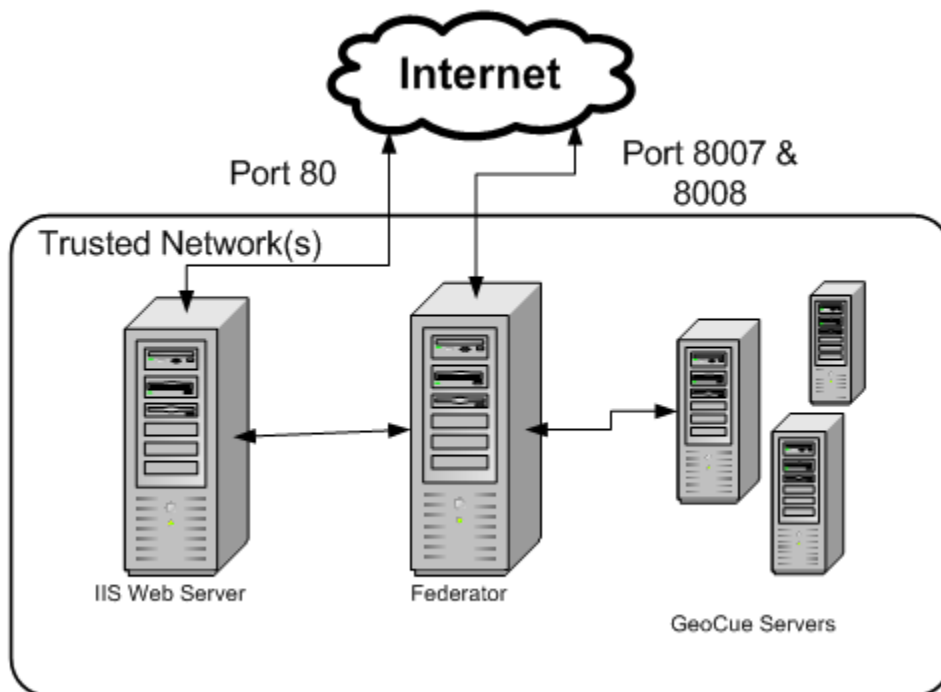
2 Network Requirements & Considerations

Although there are multiple ways to connect your servers using Federator, we recommend using one of the following configurations. Depending on which one you plan to use, there are some things to consider.

All port numbers referred to in this section will be the default port numbers set after initial installation. If your configuration requires you to change the port numbers that Federator uses, those port numbers will need to be used during the configuration steps below.

Make sure to configure your network and any firewalls to allow inbound and/or outbound communication in the configuration that you choose to implement.

2.1 “All Internal” Configuration



In this configuration, all the servers (IIS Web Server, Federator, and GeoCue Servers) are connected to the same network or to multiple trusted networks. If you want to be able to access the web applications (Federator Admin, Federator User Manager, and Federator License Manager) from outside your network(s), you will need to open a few ports to allow communication.

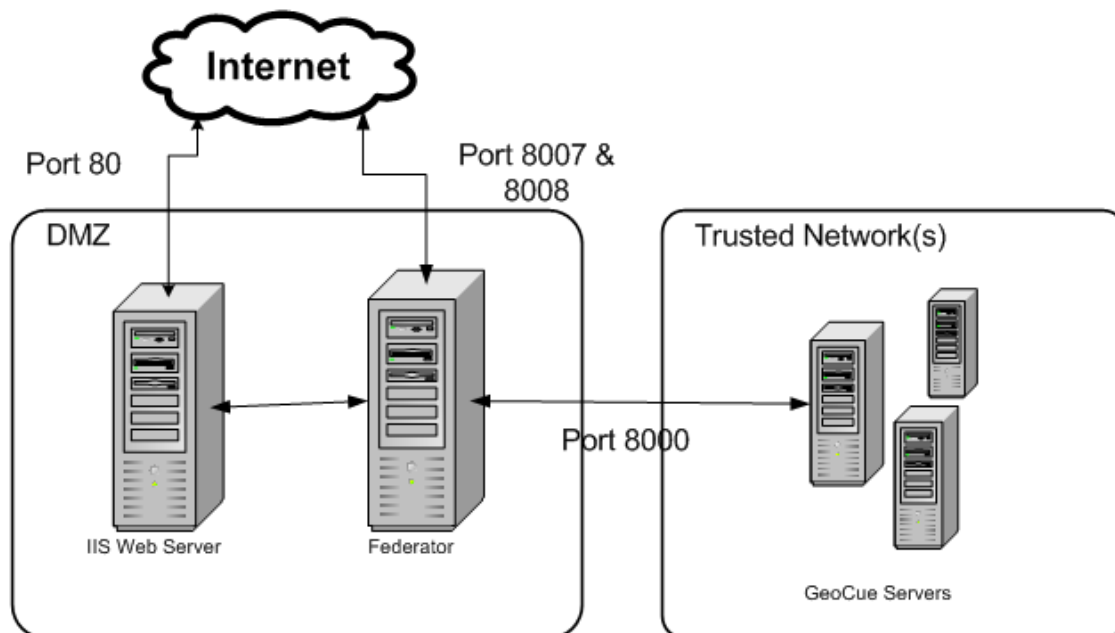
Communication with the IIS Web Server:

- Port 80: the default port used by IIS for HTTP traffic

Communication with the Federator:

- Port 8007: used for Federator
- Port 8008: used for User Manager and License Manager

2.2 DMZ Configuration



In this configuration, the IIS Web Server and the Federator are on a Demilitarized Zone (DMZ) network. The GeoCue Servers are connected to the trusted network(s). If you want to be able to access the web applications (Federator Admin, Federator User Manager, and Federator License Manager) from outside your network(s), you will need to open a few ports to allow communication.

Communication with the IIS Web Server:

- Port 80: the default port used by IIS for HTTP traffic

Communication with the Federator:

- Port 8007: used for Federator
- Port 8008: used for User Manager and License Manager

Communication between Federator and GeoCue Server(s):

- Port 8000: default port for clients to talk to a GeoCue Server

3 Installation & Setup

3.1 Prerequisites

The following items must be installed and configured prior to installing GeoCue Federator (**in the following order**):

- Internet Information Services (IIS)
- .NET Framework 3.5 (Available from the “Master Setup”)
- MSDE or SQL Server

For configuring IIS for GeoCue, please see the “[GeoCue IIS Installation Guide](#)”.

The following Services must be enabled:

- Net.Pipe Listener Adapter
- Net.Tcp Listener Adapter
- Net.Tcp Port Sharing Service

3.2 Installation

Each GC Server that you wish to connect to the Federator **must** have the required “Core User Interfaces I” and “Core User Interfaces II” components installed.

The GeoCue Federator installations are listed on the Master Setup under the GeoCue Federator Software section. Select the checkboxes for “Core”, “Core User Interfaces I”, and “Core User Interfaces II” to click the “Install Selected Products” button.

After the Federator Server installation finishes, Federator Database Manager will be started to allow you to install and/or update your database.

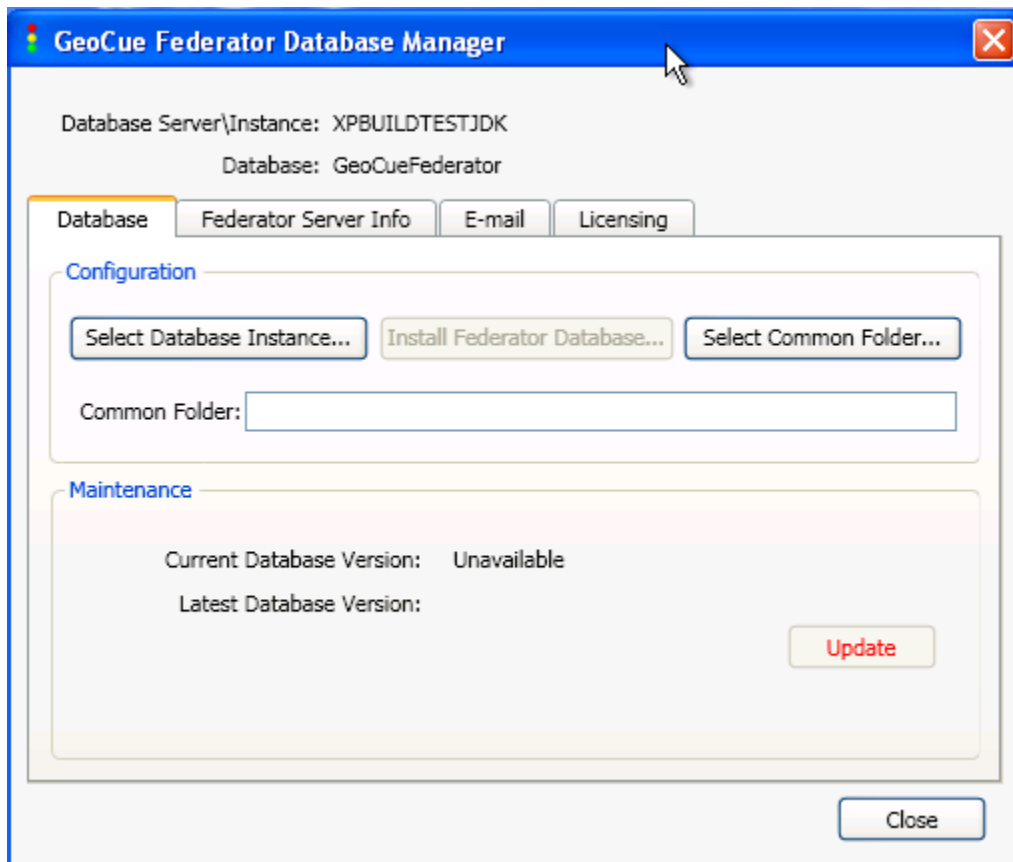
Please complete **all** the steps in “Federator Server Setup” below before starting the “Core User Interfaces I” and “Core User Interfaces II” installations.

3.3 Federator Server Setup

After the Federator Server Core install finishes, the Federator Database Manager will automatically be started to allow you to configure the necessary settings.

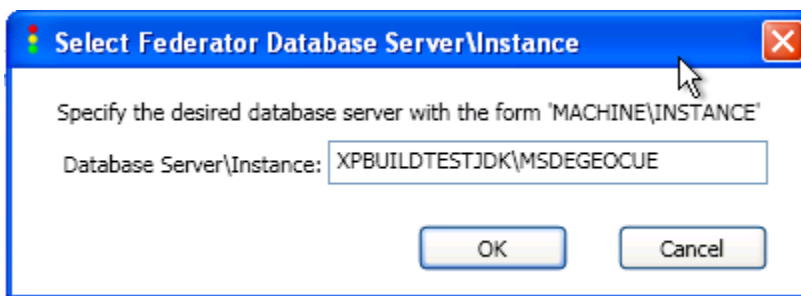
If you will be using MSDE or the full version of SQL on the same machine as the Federator, you will be able to fully setup and install the database used for Federator from within Federator Database Manager.

If you will be using full SQL from another machine than the one where Federator is installed, you will have to manually install the Federator database yourself. This process is explained below.



First, click “Select Database Instance” to specify the database server and instance.

- If you will be using MSDE, use the database instance “MSDEGEOCUE” in the form “<machine>\MSDEGEOCUE” where “<machine>” is the machine name.
- If you will be using full SQL, choose the name of the database instance you created in SQL in the form “<machine>\<instance>” where “<machine>” is the machine name where the SQL server is running and “<instance>” is the database instance in the SQL server.



3.3.1 Setup MSDE or local SQL Server

All you need to do is click “Install Federator Database” and select a folder location for the database. The folder specified must be located on a local physical drive. This will create and connect the database with the MSDE or SQL server.

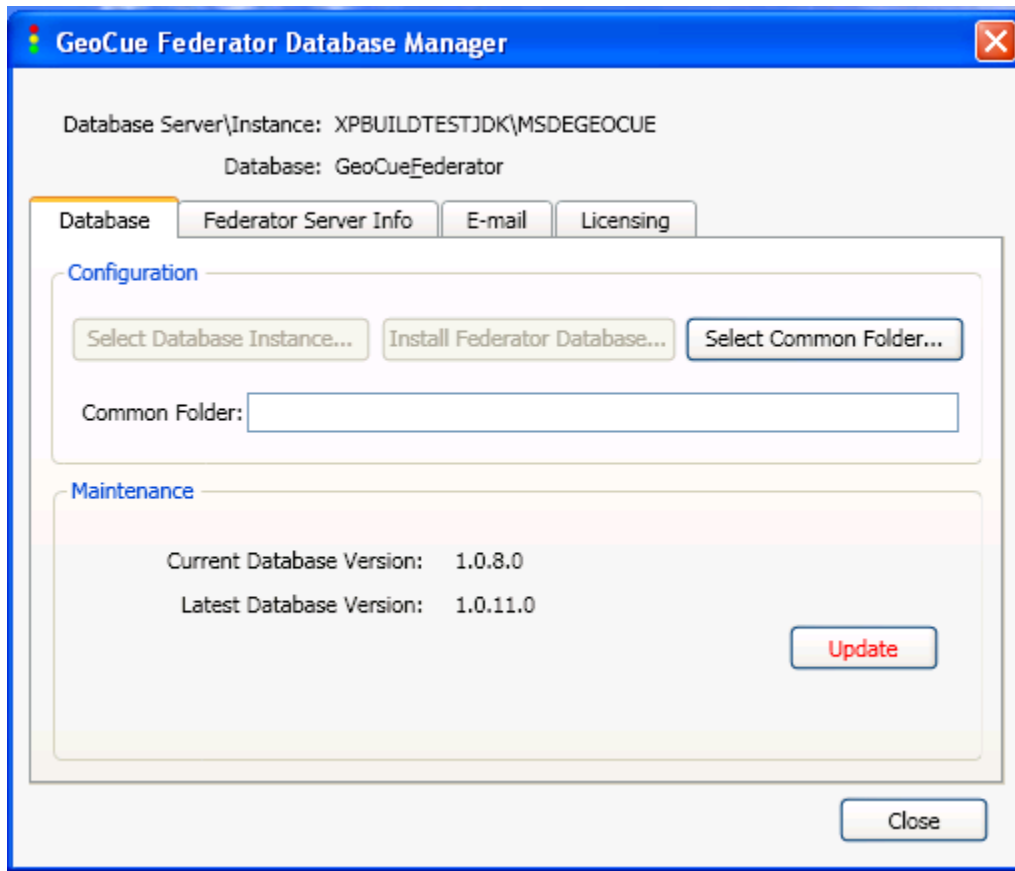
3.3.2 Setup Remote SQL Server

To use a remote SQL server from another machine, follow these steps on the remote machine:

1. Locate the Federator database template files (“GeoCue_Federator_Data.MDF” and “GeoCue_Federator_log.LDF”). They are located in the “DBTemplate” folder under the installation location of the “GeoCue Federator Server” folder. The default installation location for the “GeoCue Federator Server” is in the “Program Files” folder.
2. Copy the database template to the machine where the remote SQL server is located.
3. Using the SQL server management tools, attach the database template as a database named “GeoCue_Federator” in the database instance you want to use.

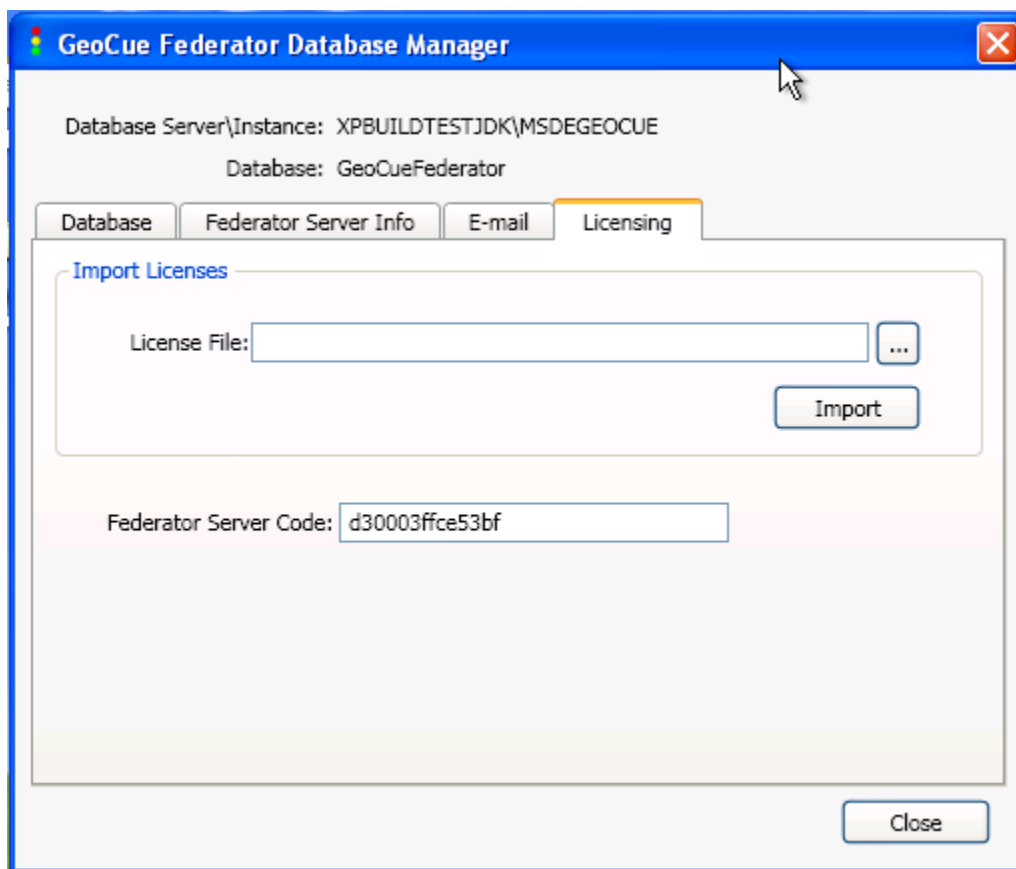
3.3.3 Continue After SQL Server Setup

After the database instance is selected and installed, click “Select Common Folder” to set the Common Folder at a UNC folder location. Then you are ready to update the database to the latest version by clicking the “Update” button.

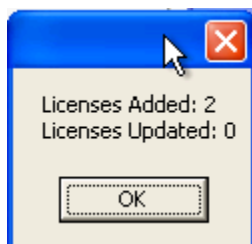


When the update finishes you will be taken to the Licensing tab to import your Federator licenses. If you do not have a GeoCue license file, contact GeoCue Support with your Federator Server Code listed on the Licensing tab. We will generate a license file for you to import.

Once you have your GeoCue license file, browse for your license file location and then click “Import”.

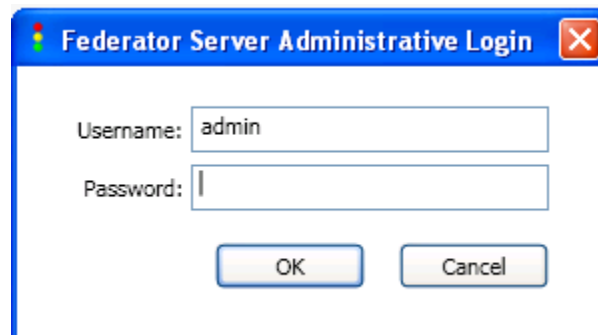


When licenses have successfully imported you will see a summary of the licenses added.

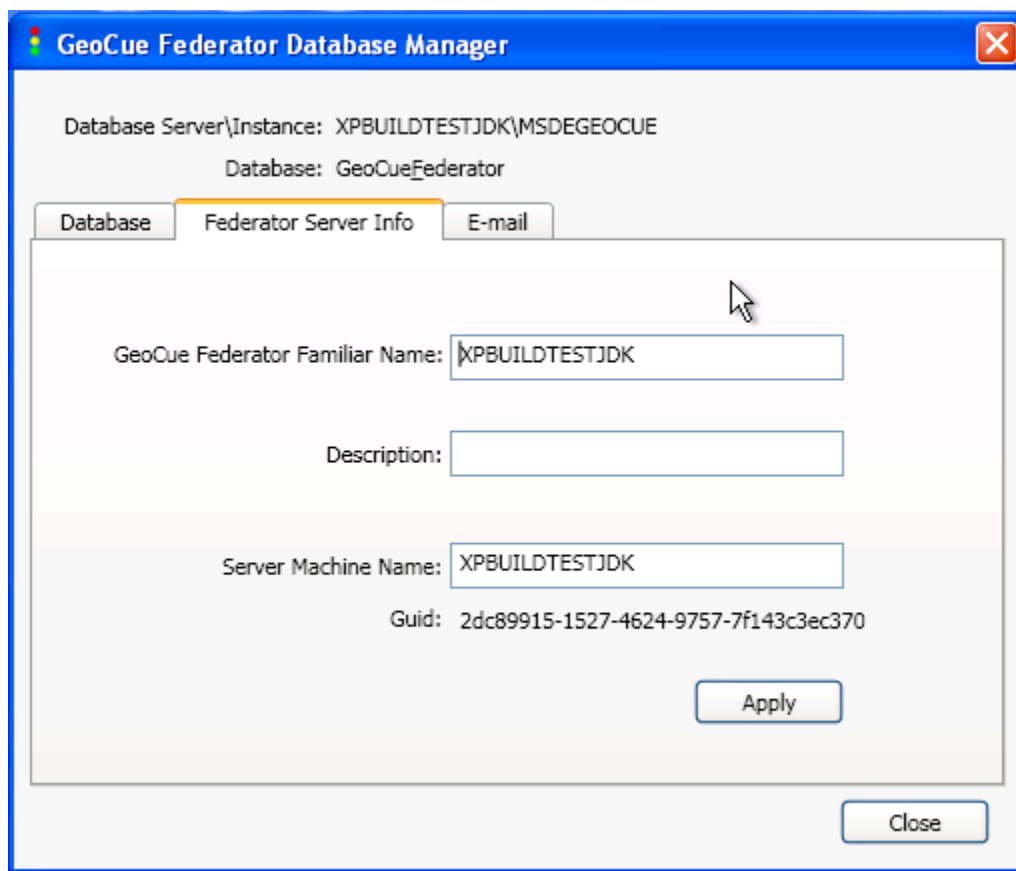


You will then be prompted for your Federator Administrator password as the server is started.

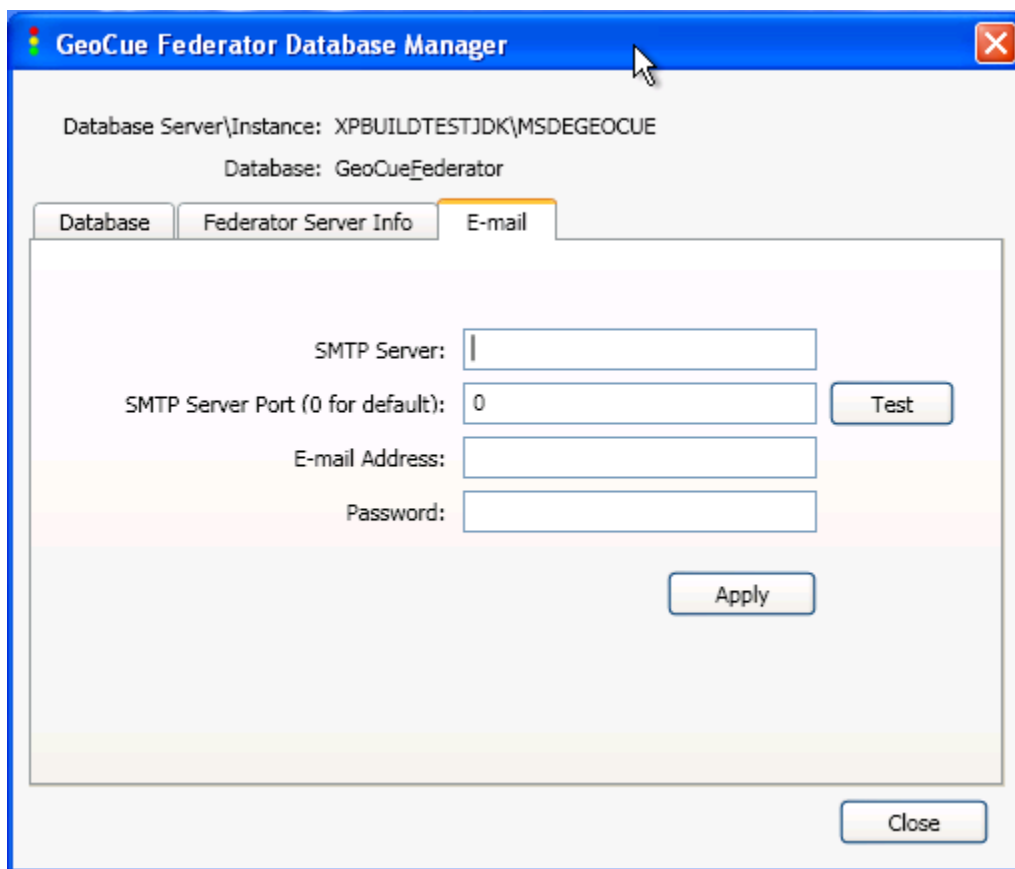
The default password for the “Admin” login is “geocueadmin”.



The Licensing Tab will now be hidden and the Federator Server Info tab will be populated with information.



If you will be using the email features of our Federator applications, the settings for your SMTP Server are entered on the Email tab.



Enter your SMTP Server address and port number. Also, enter the email address that the emails will be sent from and the password for that account. Clicking “Apply” will save these settings, and clicking “Test” will send a test email to the email account.

3.4 Core User Interfaces Setup

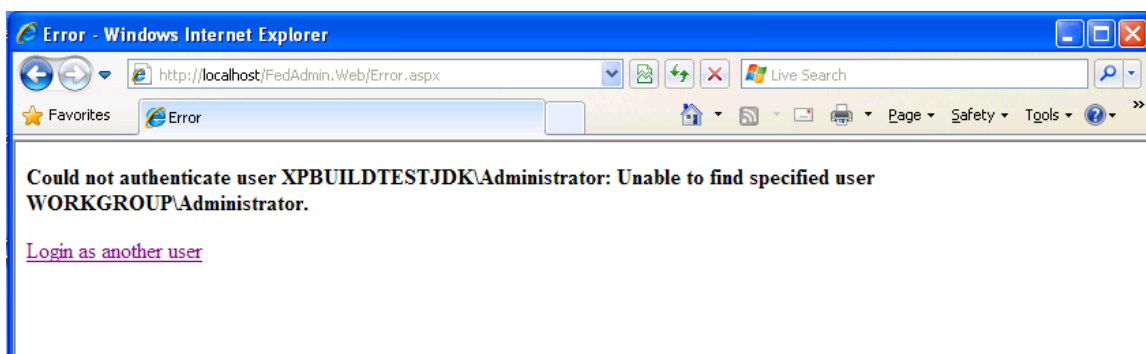
After the Federator Core User Interfaces I & II installations for the first time on a machine, follow the steps outlined in the “[GeoCue IIS Installation Guide](#)” to finish the necessary IIS setup configurations.

4 Configuration

4.1 Federator Admin

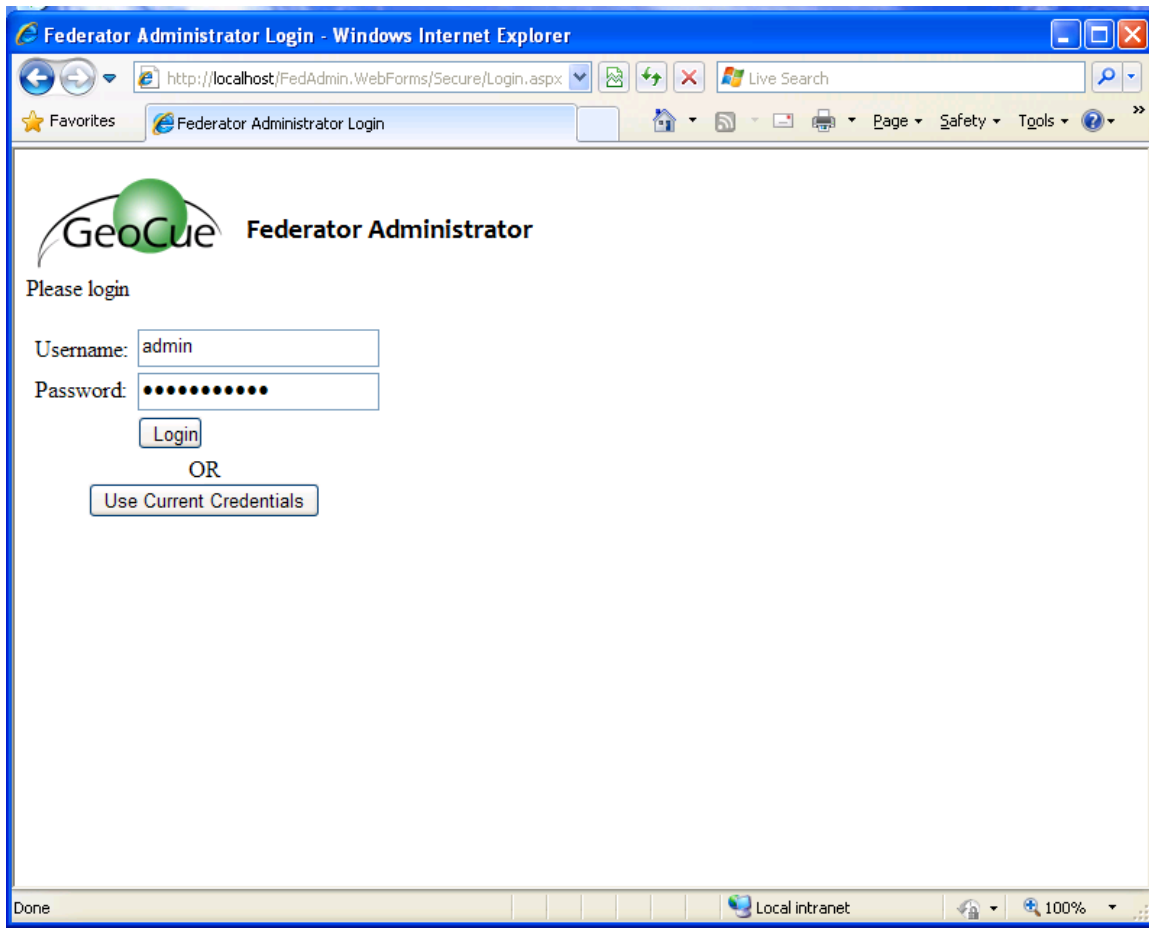
All configuration settings of the connected GeoCue Servers connected to the Federator is done in the Federator Admin web application. It can be accessed from the Start Menu using the “Federator Admin” shortcut.

The first time you access Federator Admin, you will receive an “Unable to find specified user” message. This is because no users have been created on the Federator yet.

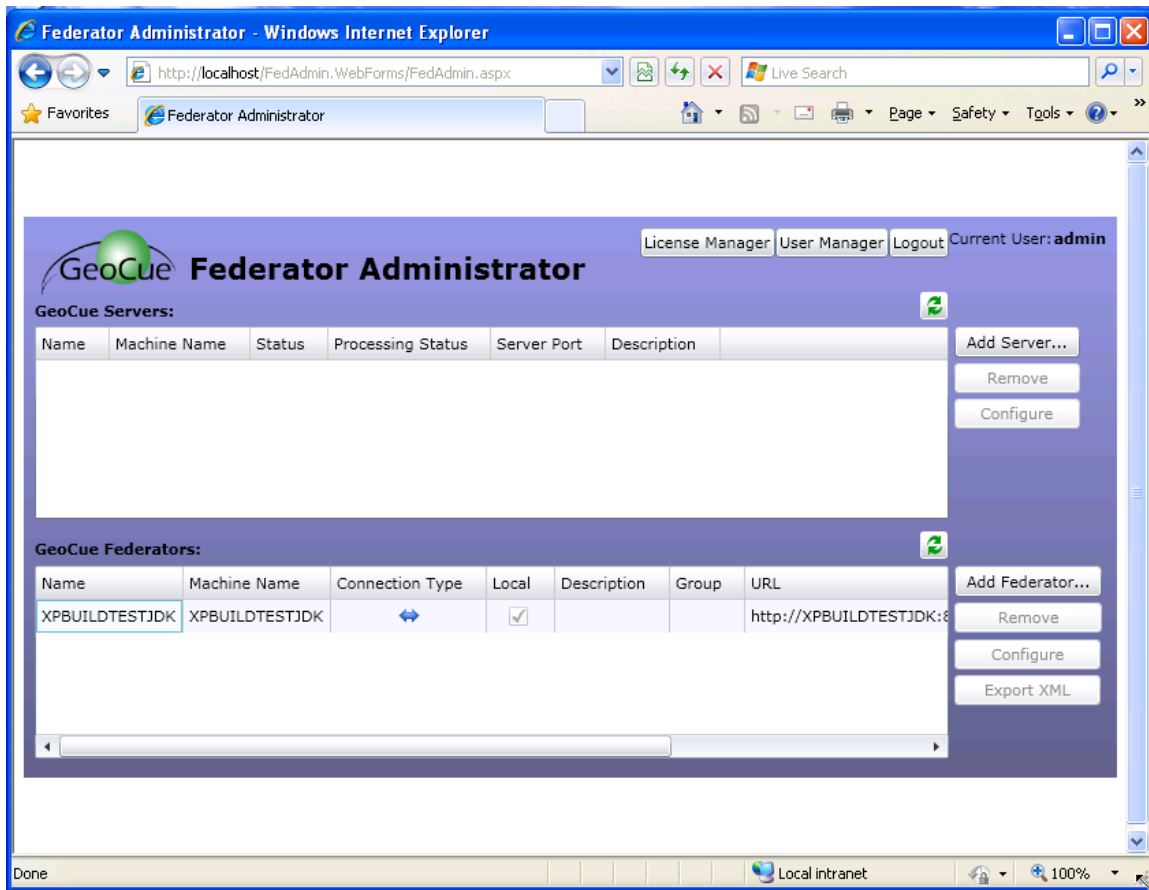


Click the “Login as another user” link under the error message and enter your Federator Administrator login.

The default password for the “Admin” login is “geocueadmin”.

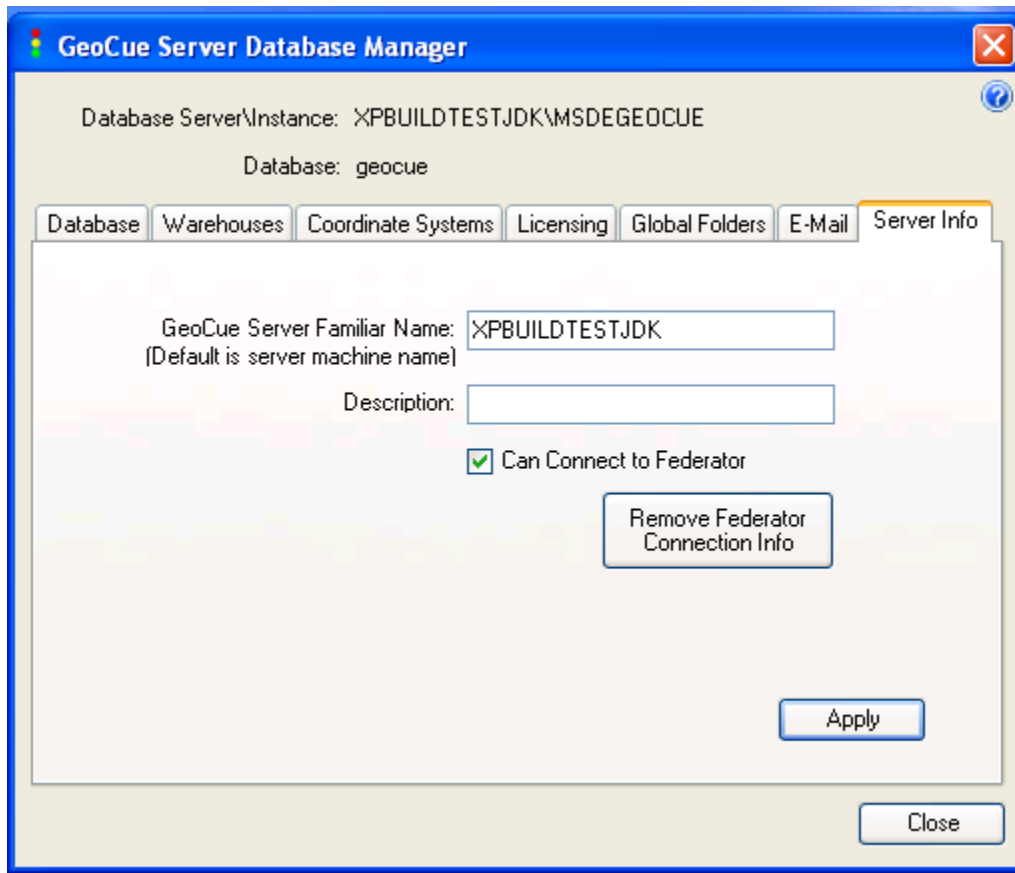


If you do not have the Microsoft Silverlight plug-in installed, you will see a button to access a web download to install. After installing Silverlight, you will see Federator Admin.

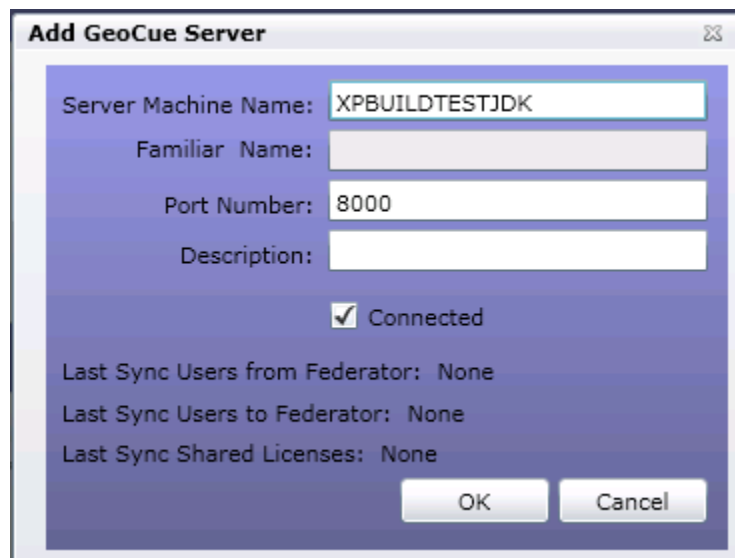


4.1.1 Connecting a GeoCue Server

To be able to connect a GeoCue Server to the Federator, you must first check the “Can Connect to Federator” checkbox in Database Manager for the GeoCue Server.



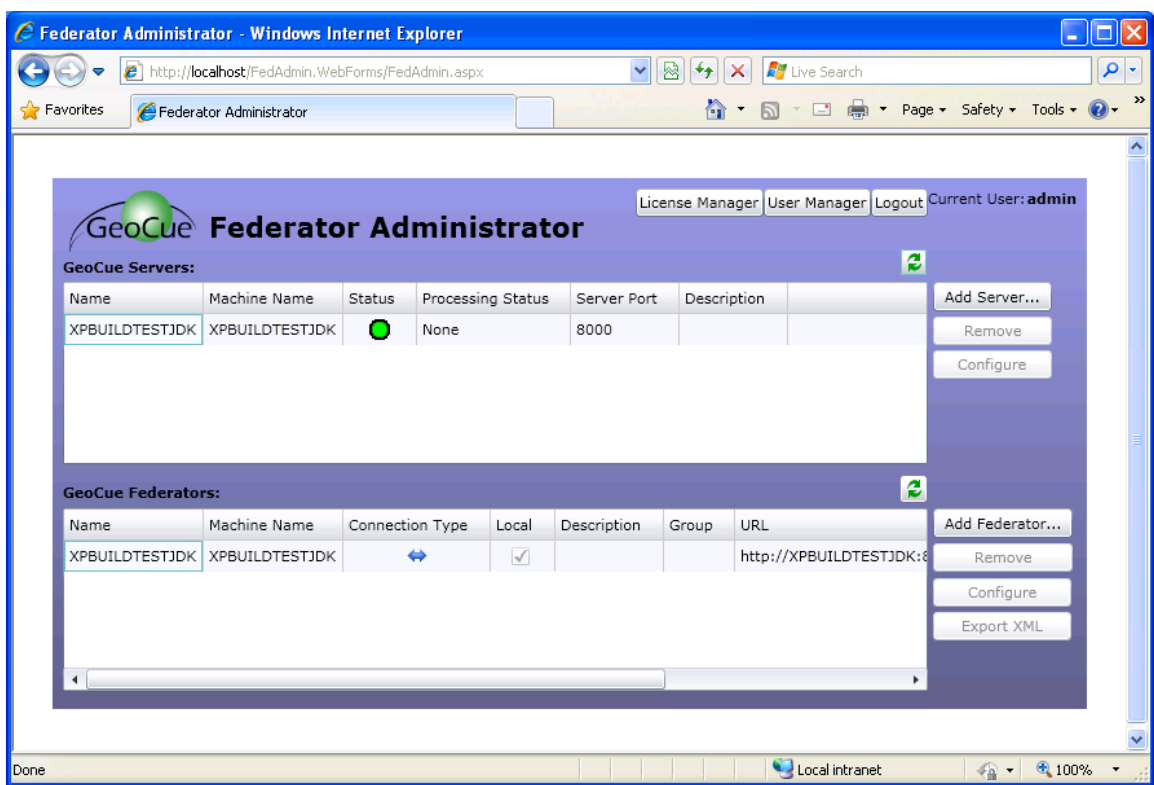
Then in Federator Admin, click the “Add Server” button to connect a GeoCue Servers. Input the machine name of the GeoCue Server and click OK.



Note: The “Familiar Name” is another name you can give to describe the server (other than the machine name). It is set in the GeoCue Server Database Manager on the Server Info tab. It will be displayed in the “Name” column in the list of connected GeoCue Servers in addition to the machine name.

When the connection to the server is complete, it will show up in the list of GeoCue Servers. Repeat these steps to add any other GeoCue Servers you want to be part of the federation.

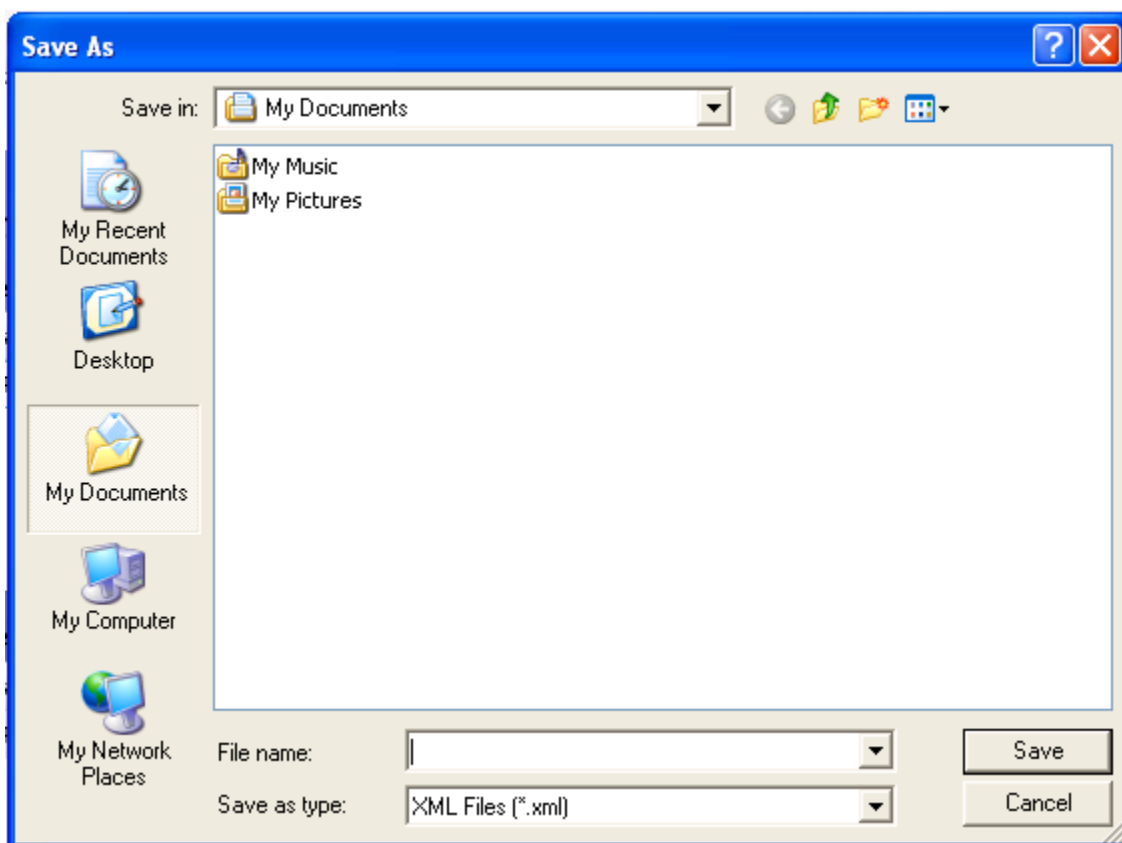
When a GeoCue Server is connected, GeoCue users and shared licenses are synchronized. When the synchronization is complete, those users and shared licenses will be available in User Manager and License Manager.



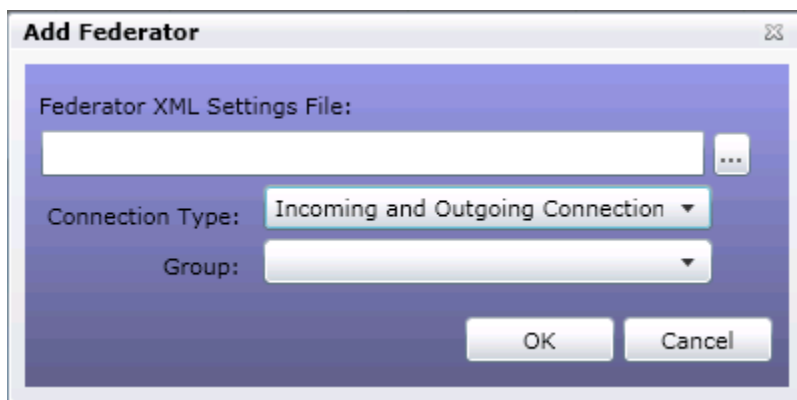
4.1.2 Connecting a Remote Federator

GeoCue Federators are connected by sharing an XML file with both Federators that need to be connected. This allows the connection to be confirmed at both sides as a security measure.

To export the XML file for the local Federator, select it on the Federator list and click the “Export XML” button. This will allow you to browse for a location to save the XML file.



Use the XML file from the remote Federator to add that Federator connection. Click “Add Federator” and browse for the location of the XML file and select the connection type needed.



The “Group” selection is a feature that we are working on to allow Federators to be assigned a group to aid in easily selecting multiple Federators in applications.

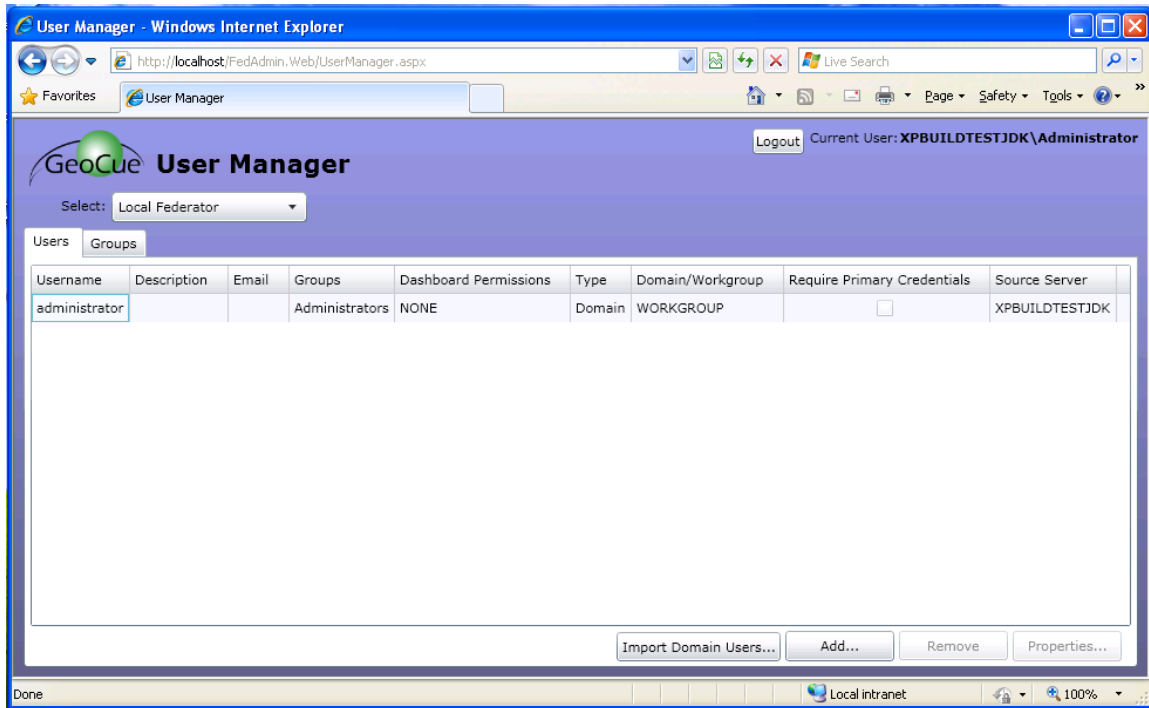
When the connection to the Federator is complete, it will show up in the list of connected GeoCue Federators.

To keep from having to log into Federator Admin using the Federator Administrator login, create a new Federator user. Creating a new user is described in Section 5.1 about User Manager.

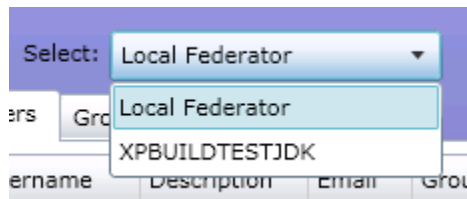
5 Using Federator

5.1 User Manager

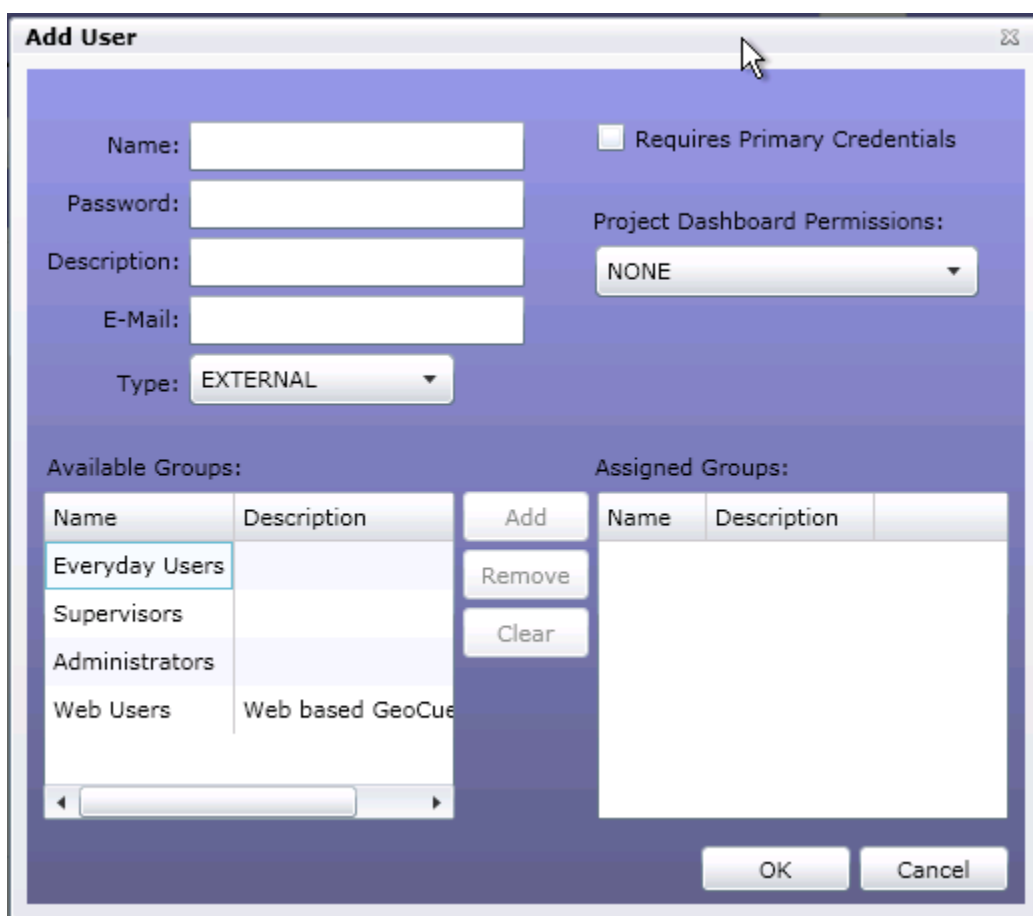
To access the Federator User Manager, you can click the “User Manager” button at the top of Federator Admin or click the “Federator User Manager” shortcut from the Start Menu.



The combo box defaults to “Local Federator”, which means that the users and groups displayed are on the Federator. All other connected GeoCue Servers will be listed in the combo box. When a GeoCue Server is selected, the users and groups for that server are displayed.



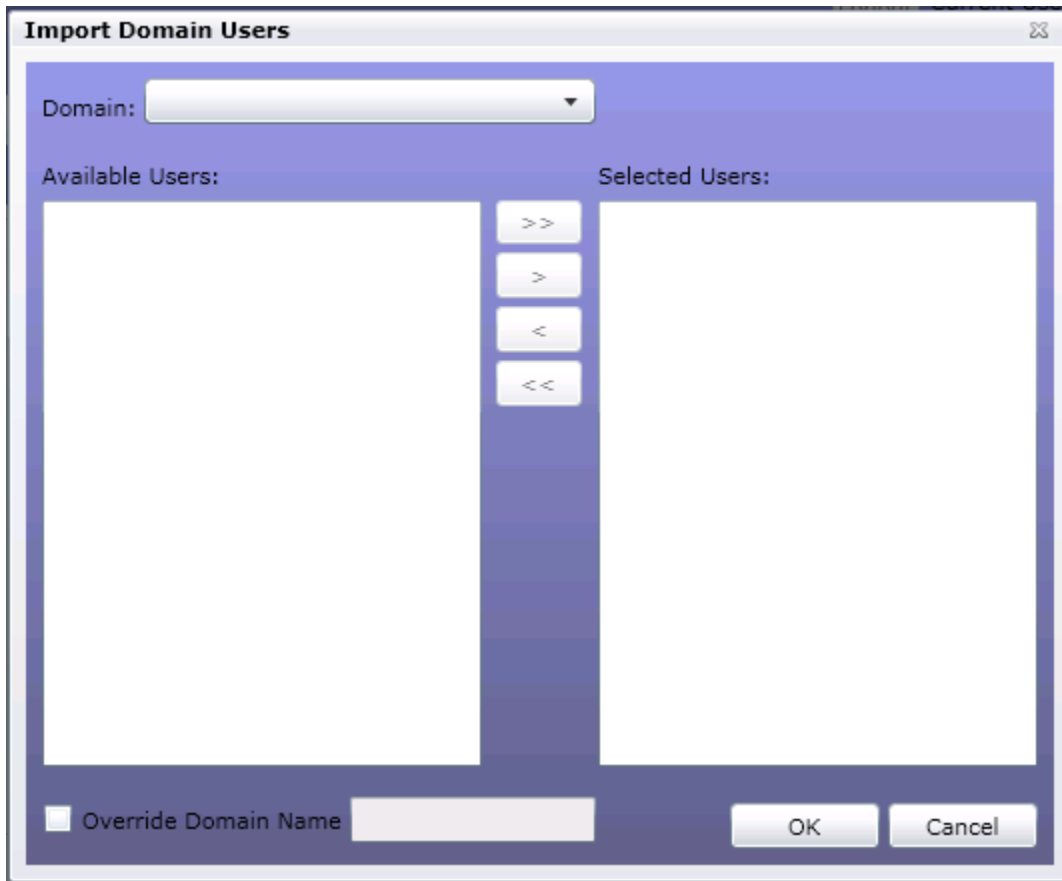
To add a user to the selected Federator or GeoCue Server, click the “Add” button.



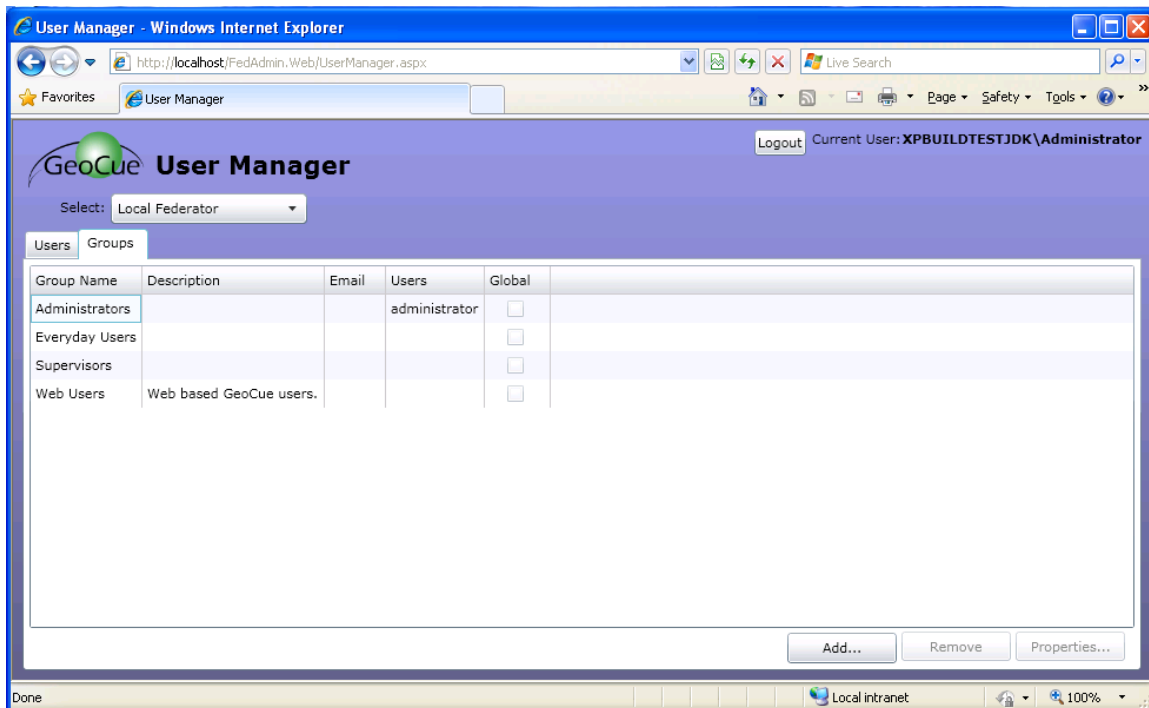
These users are just like users that you create on you GeoCue Server, and they have all the same properties.

The “Requires Primary Credentials” check box is used for a username that will be shared among multiple users, but requires that you use other credentials to gain access.

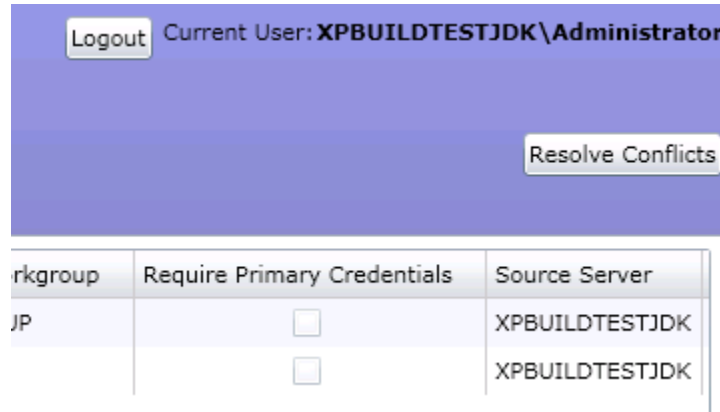
Multiple users can also be imported from a Domain that the machine is connected to currently. Users can be selected from the list of domain users available. They will all be created automatically as GeoCue Domain users. You can also override the domain name to use if it is different depending on your configuration.



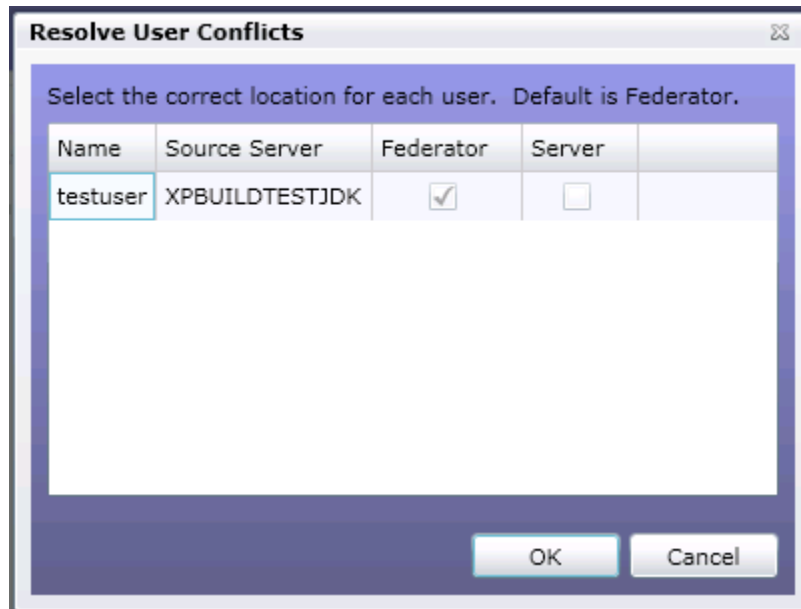
User groups are good ways to organize your GeoCue users.



If there are conflicts during the user synchronization with any GeoCue Server, you will see a “Resolve Conflicts” button appear.

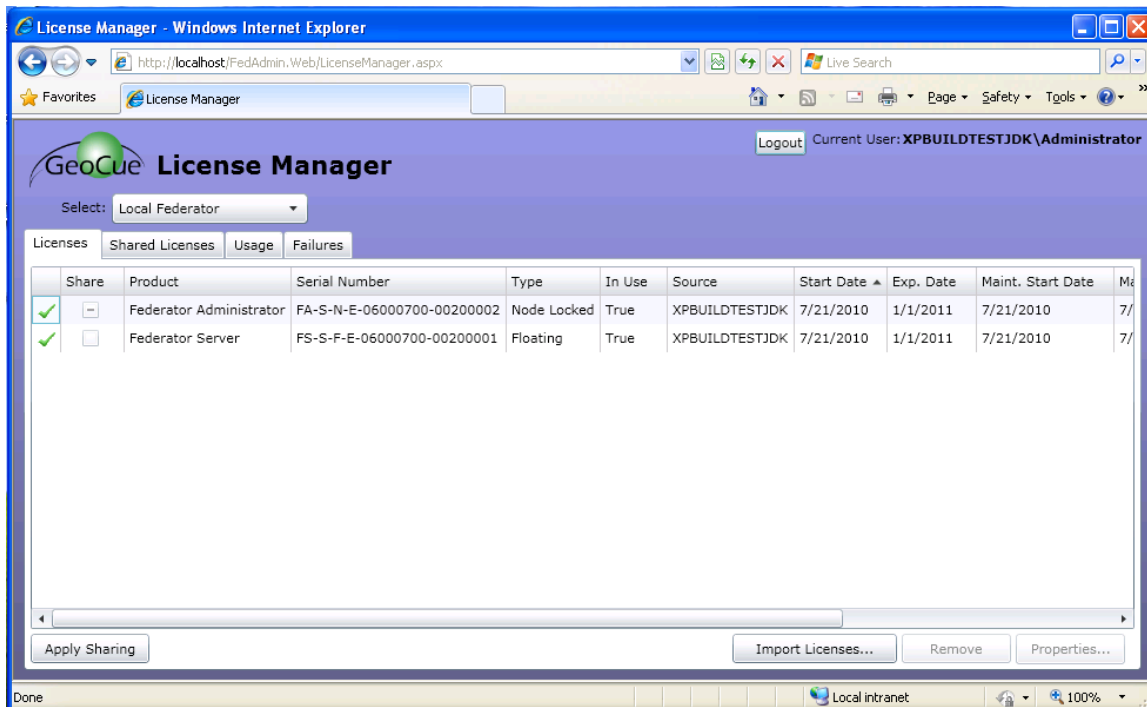


When you click the “Resolve Conflicts” button, you are able to choose whether the user should be located on the Federator or the Server.

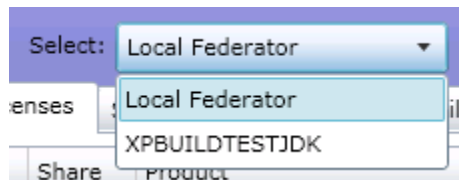


5.2 License Manager

To access the Federator License Manager, you can click the “License Manager” button at the top of Federator Admin or click the “Federator License Manager” shortcut from the Start Menu.



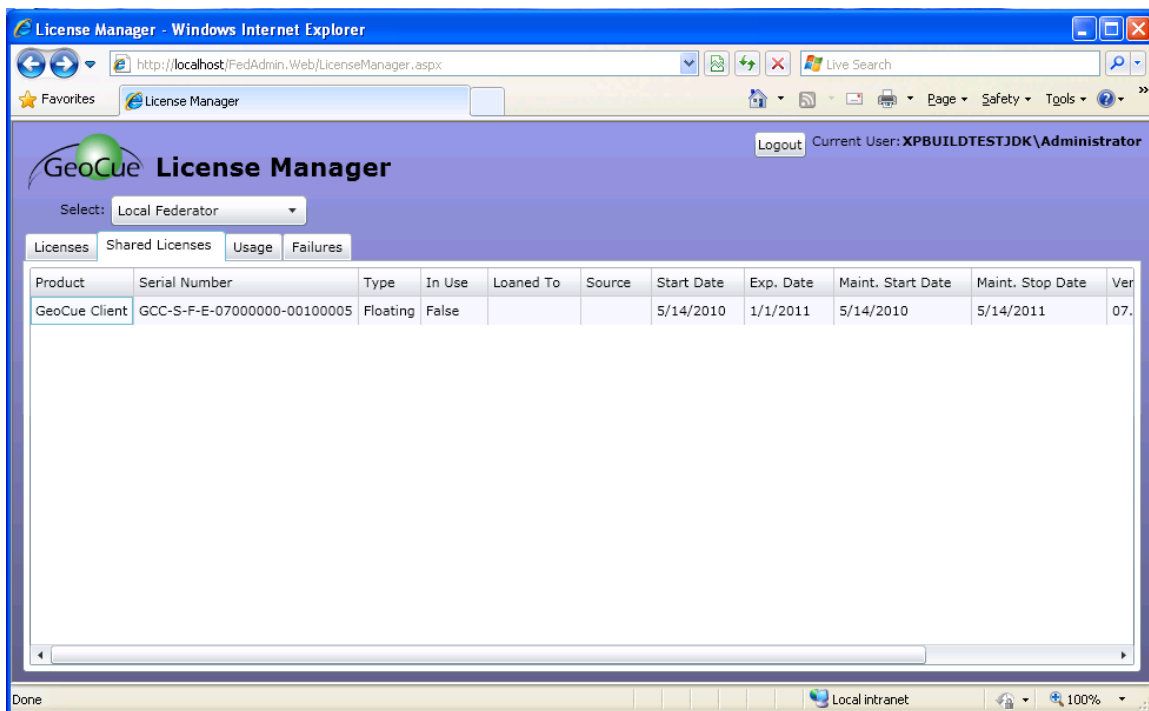
The combo box defaults to “Local Federator”, which means that the licenses displayed are on the Federator. All other connected GeoCue Servers will be listed in the combo box. When a GeoCue Server is selected, the licenses for that server are displayed.



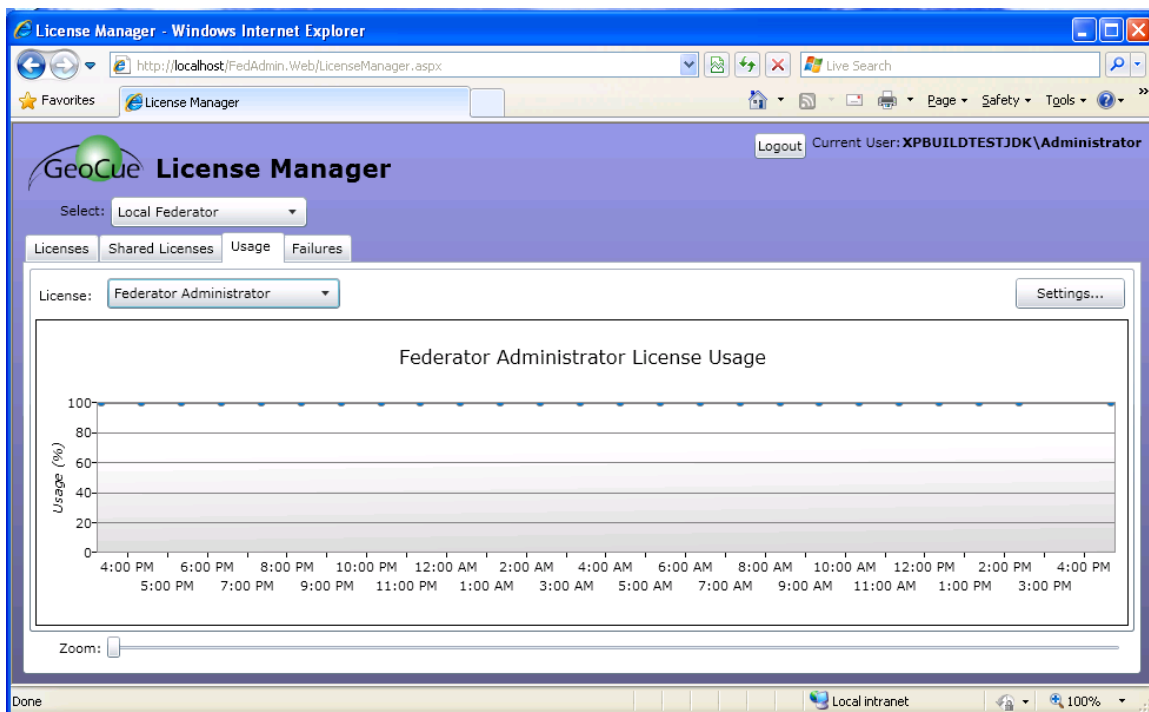
To import more licenses, click the “Import Licenses” button and then browse for the GeoCue License (GCL) file.

Sharing a license allows a license to be used by any GeoCue Server in the federation. To share a license, check the check box next to the license(s) to share. Then click the “Apply Sharing” button. When a license is shared it will show up on the “Shared Licenses” tab.

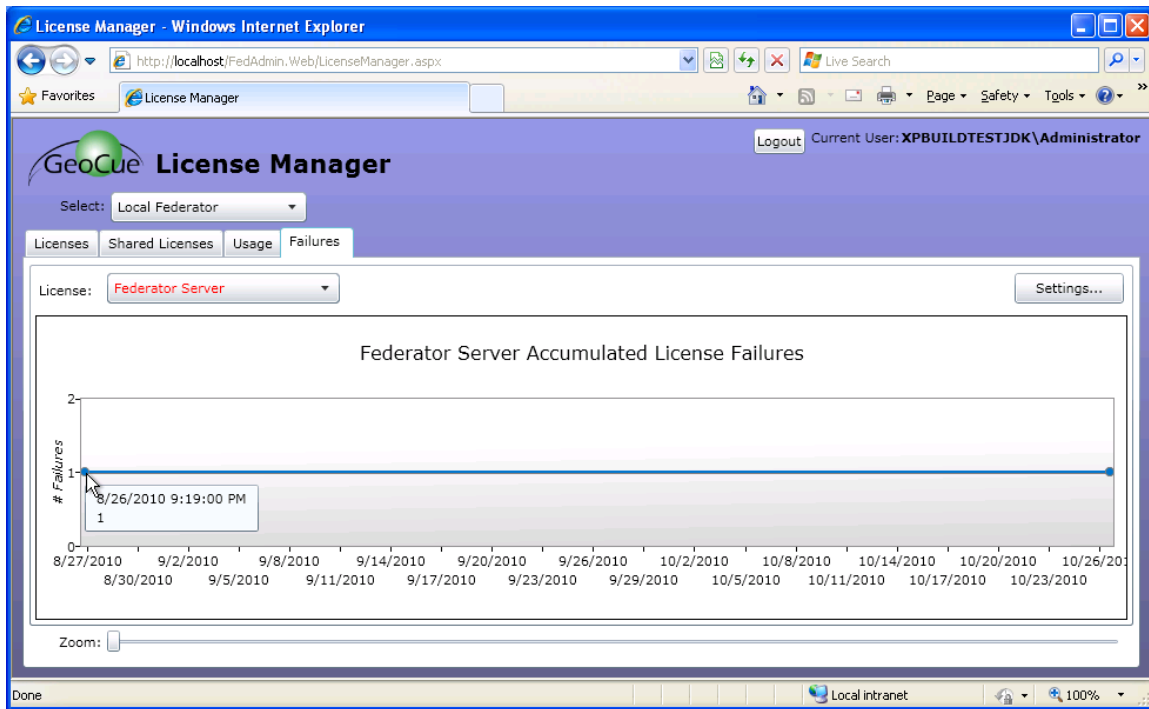
Only “floating” licenses can be shared. “Node locked” and “Server” licenses cannot be shared.



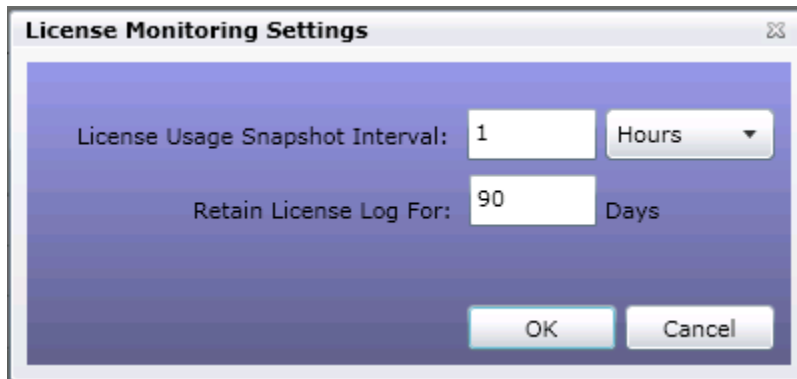
The “Usage” tab and the “Failure” tab display charts where you can see the history of license file usage and license request failures.



If a license has failures, the product name will be red in the combo box. If a license does not have failures, the product name will be black.



Settings for monitoring license usage can be changed by clicking the “Settings” button.



6 Concluding Remarks

We hope that you are finding working with the GeoCue product family to be a significant increase in productivity and ease of use. Hopefully you have not discovered too many software defects (bugs).