

Mitel Applications Licensing

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1. INTRODUCTION

The Mitel Applications Licensing provides a new method for distributing and controlling the usage of Mitel applications.

Some of the highlights of Applications Licensing are:

- It is separate from and runs side by side with the Mitel core product licensing system.
- The Application Licensing software is compatible with all Connect release versions.
- Web based administration interface which integrates into Connect Director.
- The Application Licensing software is pre-requisite to proper deployment of any new licensed application.
- Mitel Order Administration will fulfill orders for licensed applications in much the same way they fulfill system software orders today. An application license key will be sent with the sales order acknowledgement along with links to download applications.
- All existing and new Applications will be licensed. The Mitel Web Dialer is the first licensed application beginning on 2/1/2010.
- Customers running original, un-licensed versions of applications today will move to the new licensed versions over time as they require enhancements or bug fixes that become available
- Partners/Customers are encouraged to periodically check the Mitel Support site (<https://www.mitel.com/support/mitel-technical-support>) for updated versions of both the License Server and Application Software.
- Applications licenses are cumulative in nature and a license with a later date will replace and invalidate any license with an earlier date. For example, suppose a 20 user Web Dialer license was installed and a new order was placed for an additional 10 licenses. The new 30 user Web Dialer license would replace the old 20 user Web Dialer license.

The Applications Licensing system consists of the licensing software, licensed applications, and license keys.

1.1 LICENSING SOFTWARE

The Applications licensing software encompasses both a Windows service which determines based on a specific policy if a licensed application can run and a Web application for administering application licenses. This software must be downloaded from the Mitel Partner/Support website (<https://www.mitel.com/support/mitel-technical-support>) and installed on the Connect Director (HQ) Server. Licensed applications require the licensing software.

Unlike the approach used for Mitel features, users are not configured for licensed applications. Instead, the Application License Service assigns licenses to a User (or service) when an application is first run. Licenses thereafter remain assigned this User or service until the licenses are manually released by an Administrator.

1.2 LICENSED APPLICATIONS

Current versions of all licensed Applications are available for download from the Mitel Partner/Support website (<https://www.mitel.com/support/mitel-technical-support>). Downloading the software is the only method for software distribution. Licensed applications require a license key to run.

1.3 LICENSE KEYS

License keys determine the policy for using an application. The license key is a long text string which is installed using the Application Licensing Administration website. The key contains the application name, number of licenses, customer/system names, license type, and other information.

There are four types of licenses:

- **Permanent licenses** are issued when the application is purchased and allows the running of the application up to the specified number of licenses. These licenses are generated for a specific Mitel system.
- **Subscription licenses** allow a purchased application to run for a specific time. The application will no longer run when the license expires. When an application is purchased for a system which does not have a system key, a temporary 45-day subscription license is issued. The time for this temporary license begins when the license key is installed. The permanent license key will be issued along with the system key.
- **Temporary licenses** are issued when the application is purchased for a new system which does not have a ShoreTel system key. OA issues the permanent license keys with the Mitel system key. Temporary keys expire in 45 days and are replaced when the permanent license key is installed.
- **Trial licenses** allow the application to run on any Mitel system for a specific time (for example, 45 days). An application trial key can only be used once. Trial keys are kept with the licensed applications and are downloaded from the Mitel Partner/Support website.

The number of purchased licenses may have different meanings for applications. For example, the number of licenses might be used to determine the number of applications instances allowed to run (for example, desktop instances of Mitel Web Dialer) or to specify some resource/capacity limit for an application (for example, Mitel Emergency Notification Application).

2. INSTALLATION

2.1 OVERVIEW

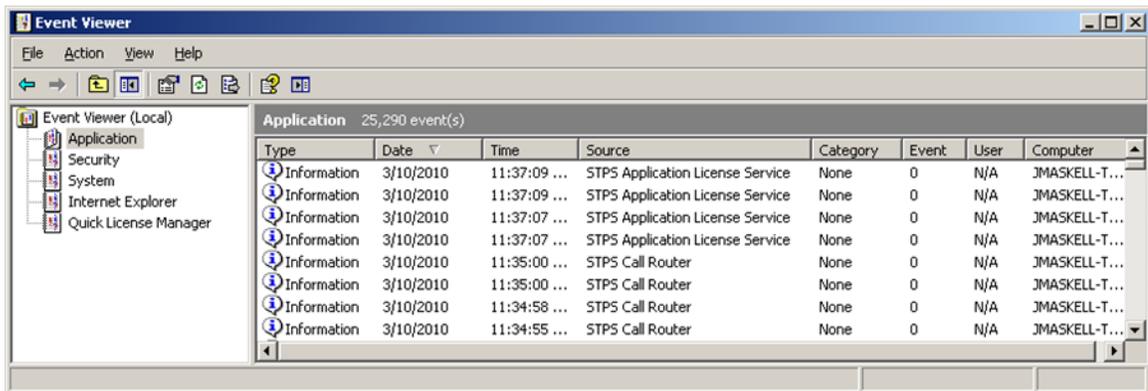
There are several steps to installing and configuring the Mitel Application Licensing system:

1. [Install the Mitel Application License Service](#)
2. [Install the Mitel Application License Administration Website](#)
3. [Configure the Application License Administration Website Authentication](#)
4. [Administering Application Licenses](#)

2.2 INSTALL THE MITEL APPLICATION LICENSE SERVICE

To install the Mitel Application License service:

1. You should have received a zip file named *STPSLicensingX.Y.Z.zip*. Unzip this file into a folder.
2. From the folder run the **STPSLicenseServiceSetup.exe** file.
3. If you have not already installed the Microsoft .NET 2.0 runtime on the server, you will be prompted to do so. If so, follow the prompts which should automatically download and install the necessary .NET components from the Internet. After the .NET installation is complete, continue with the installation.
4. Follow the remaining installation prompts.
5. After the Mitel Application License service is installed, it should be automatically started and assigned a start type of automatic. This should make it run automatically whenever the server machine is restarted. You can verify that the service is installed and started by running the Windows Services application. Look for the **STPS Application License Service** service.



Note! You can confirm the overall health of the server and diagnose problems by examining the log file created by the server. See the [Application Server Log File](#) section for configuration details.

2.2.1 APPLICATION LICENSE SERVER LOG FILE

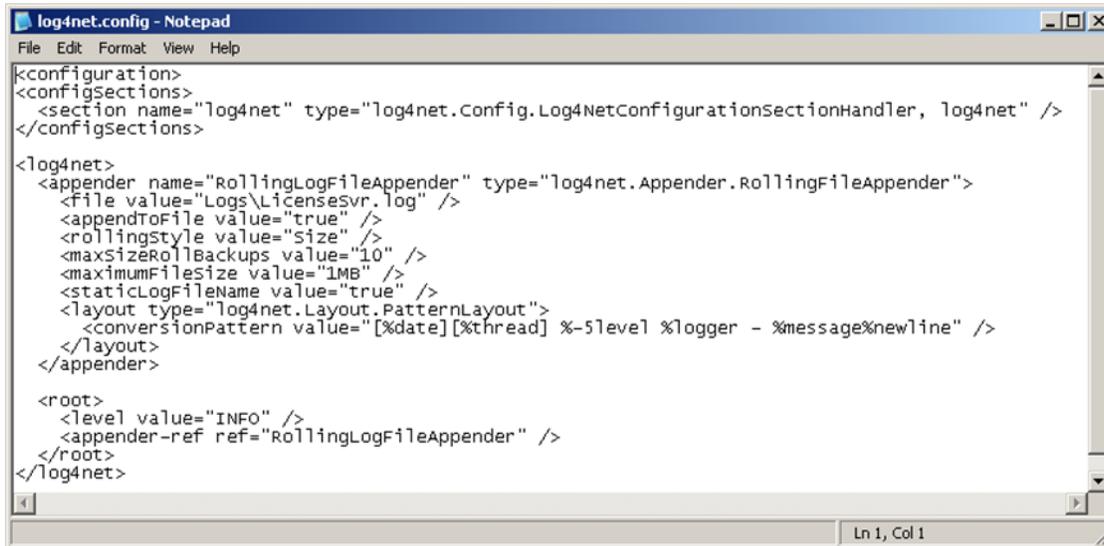
By default, the server will write a log file. As installed, this file will reflect startup, shutdown and any errors encountered by the service. The logging feature allows more or less details to be logged by editing the logging XML file.

As configured, the server will maintain a rolling history of up to 10 log files with a maximum of 1 Megabytes in each file.

The log file is stored in the **Logs** directory of the application's install directory. Assuming the service is installed in the default location this is:

C:\Program Files\ShoreTel\ ShoreTel Application License Service \Logs

The XML file which controls the logging is located in the application's **log4net.config** directory. If you edit the file with (for example, notepad.exe), this shows the contents of the file:



To change the level of detail logged, you must change the "level value" in the root section and save the changes. Changes to the log level do not require a service restart. The above screenshot shows the value. The valid values in order of increasingly detailed logging (each level includes lower levels) are as follows:

Value	Description
FATAL	Only fatal errors are logged.
ERROR	Errors are logged.
WARN	Warnings are logged.
INFO	Informational events are logged including logging of each call handled.
DEBUG	All logging is enabled.

2.3 INSTALL THE MITEL APPLICATION LICENSE ADMINISTRATION

The Application License Administration Website is installed on the customer's Connect Director (HQ) server.



Note! See [Appendix A – Windows 2012 / 2016 IIS Configuration](#) if installing on Windows 2012 Server section for configuration details.

To install the Mitel Application License Administration Website:

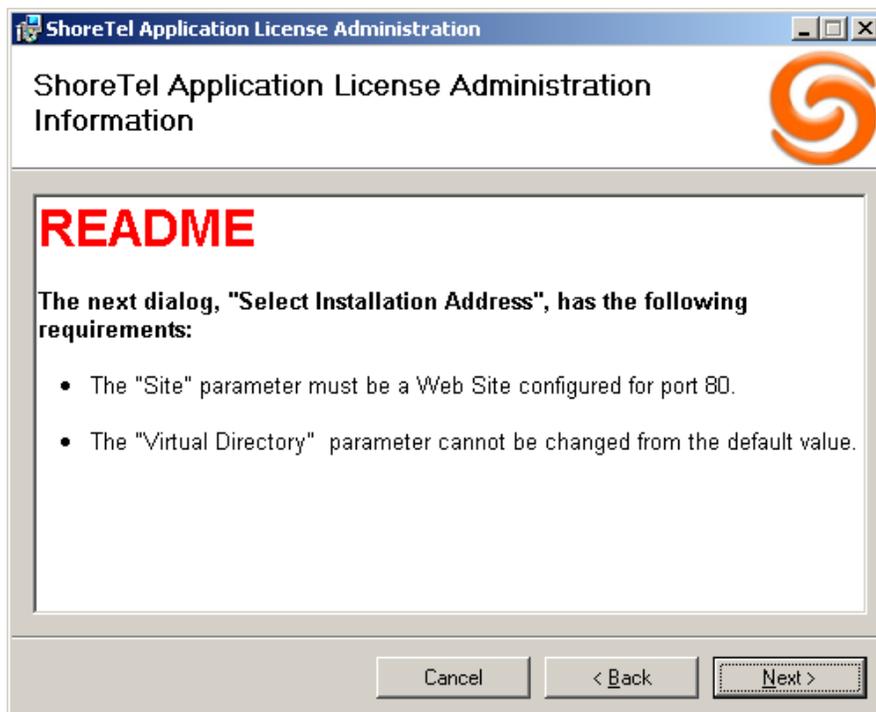
1. Run the *STPSLicenseAdminSetup.exe* file from the previous created folder containing the *STPSLicensingX.Y.Z* unzipped files.
2. Optional: If you have not already installed the Microsoft .NET 2.0 runtime on the server, you will be prompted to do so. If so, follow the prompts which should automatically download and install the necessary .NET components from the Internet. After the .NET installation is complete, continue with the installation.
3. Follow the installation prompts. It is generally advisable to accept the default values unless there is some reason to change them. The virtual directory name must not be changed from the default name.
4. In the **Mitel Application License Administration** window, click **Next**.



5. In the **License Agreement** page that opens, select **I Agree** and click **Next**.

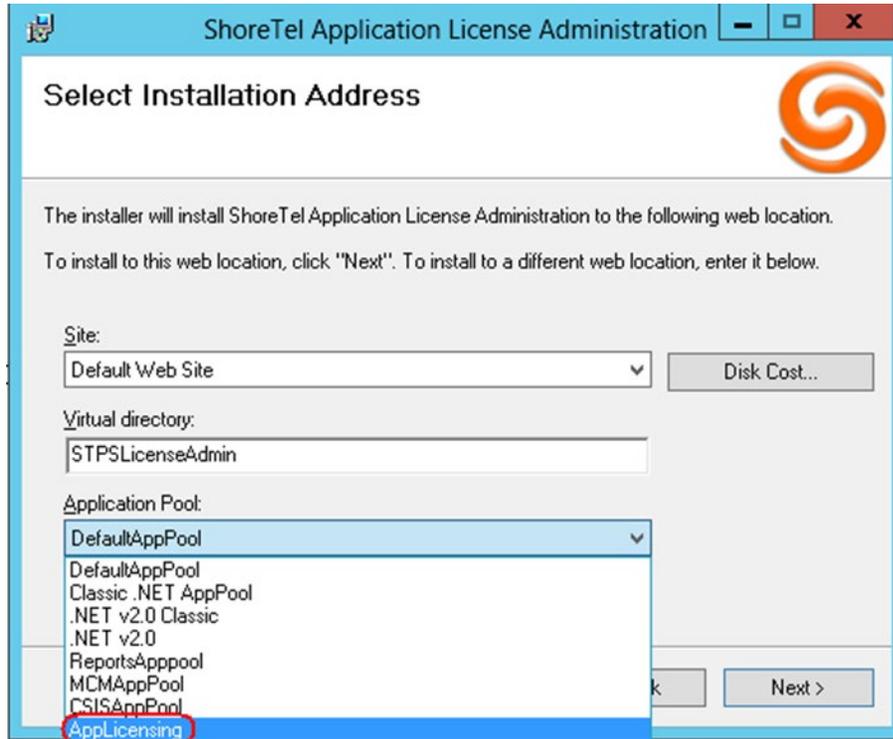


6. In the **Mitel Application License Administration Information** page that opens, clic **Next**.

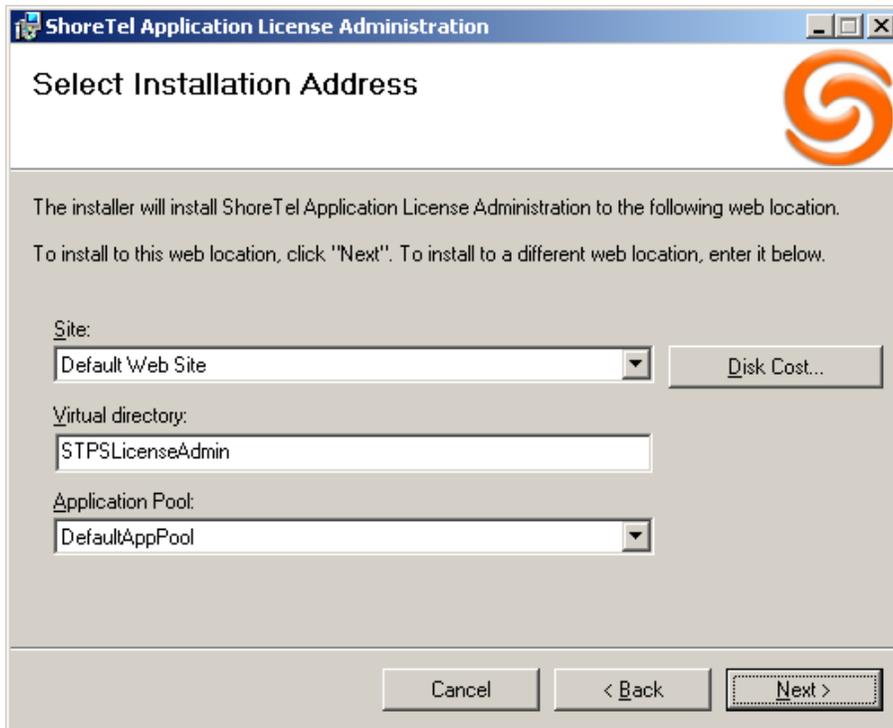


7. In the **Select Installation Address** page that opens, do either the following and click **Next**:

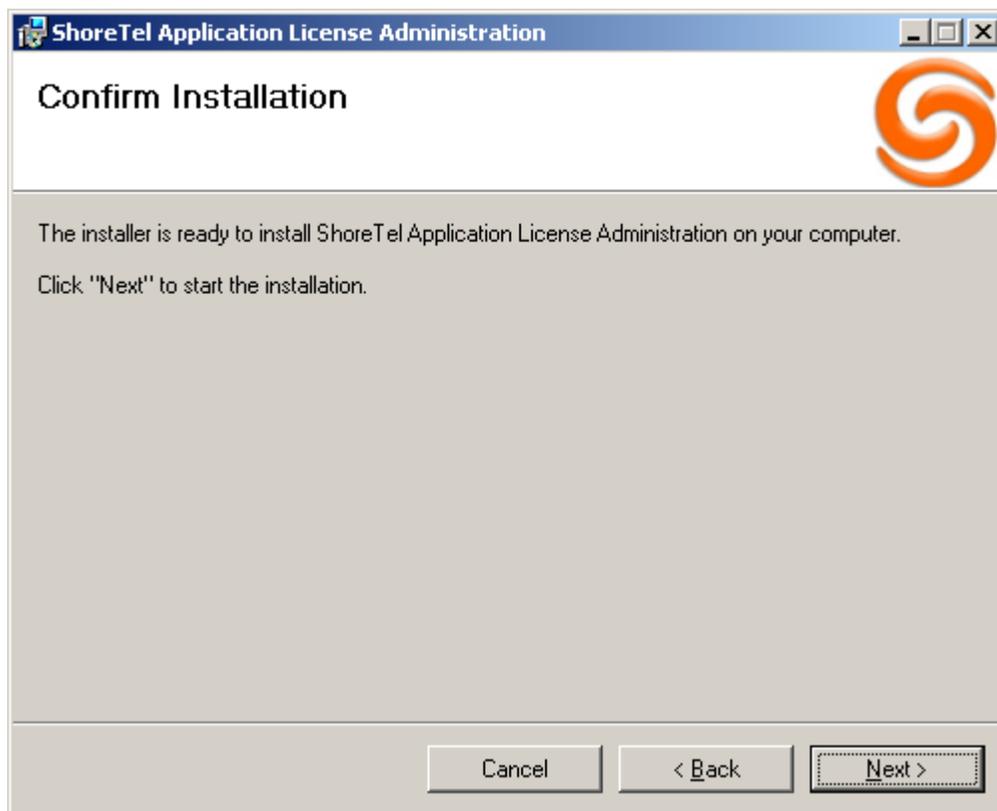
- For Windows 2012 server, set the **Application Pool** field to the newly created AppLicensing pool.



- For Windows 2012 server, set the **Application Pool** field to **DefaultAppPool**.



8. In the **Confirm Installation** page that opens, click **Next** to start the installation.



Note!

- See If you encounter an **installer was interrupted** installation error, see the [License Administration Installation Failure](#) section to fix the issue.
- The Application License Administration URL is `http://<server name>/STPSLicenseAdmin` where “<server name>” is the name of the Connect Directot Headquarters server.

2.4 CONFIGURE THE APPLICATION LICENSE ADMINISTRATION WEBSITE AUTHENTICATION

The License Administration website uses Windows forms authentication which requires a valid username and password. After installation, the initial username is **admin** and the initial password is **changeme**. These settings are kept in the Windows registry and may be changed using the windows *regedt32* utility.

To configure the Application License Administration website authentication:

1. To run regedt32, go to **Programs**, and enter **regedt32**.
2. In the window that opens, navigate to **HKEY_LOCAL_MACHINE > SOFTWARE > ShoreTel > Application License Administration**.



3. This shows regedt32 open to that key.

2.5 ADMINISTERING APPLICATION LICENSES

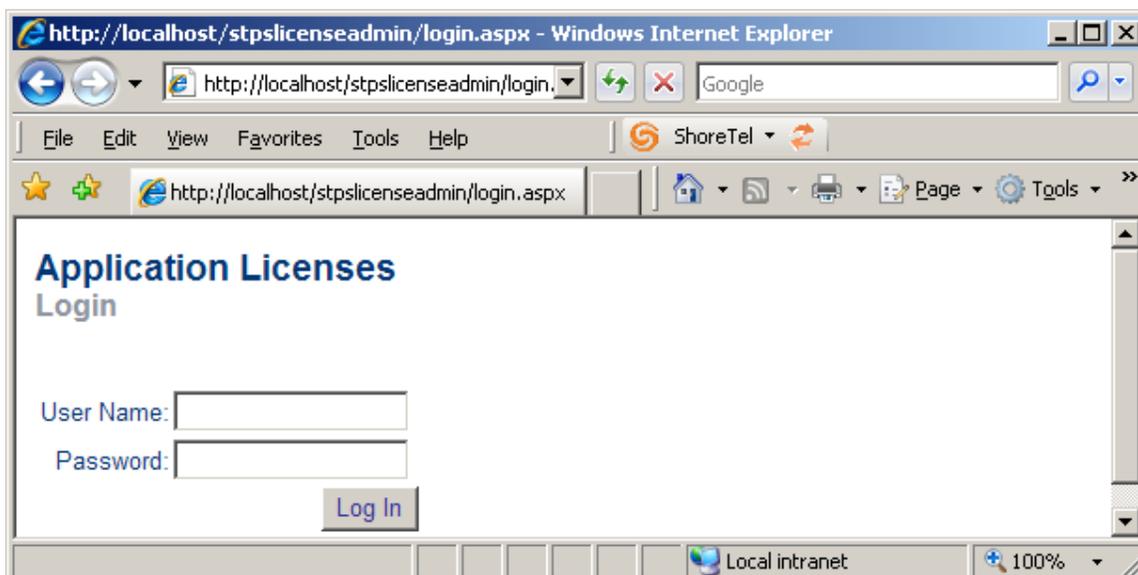


Note! The Application License Administration website requires that cookies are enabled in the browser to operate correctly when accessed from within Connect Director (see below).

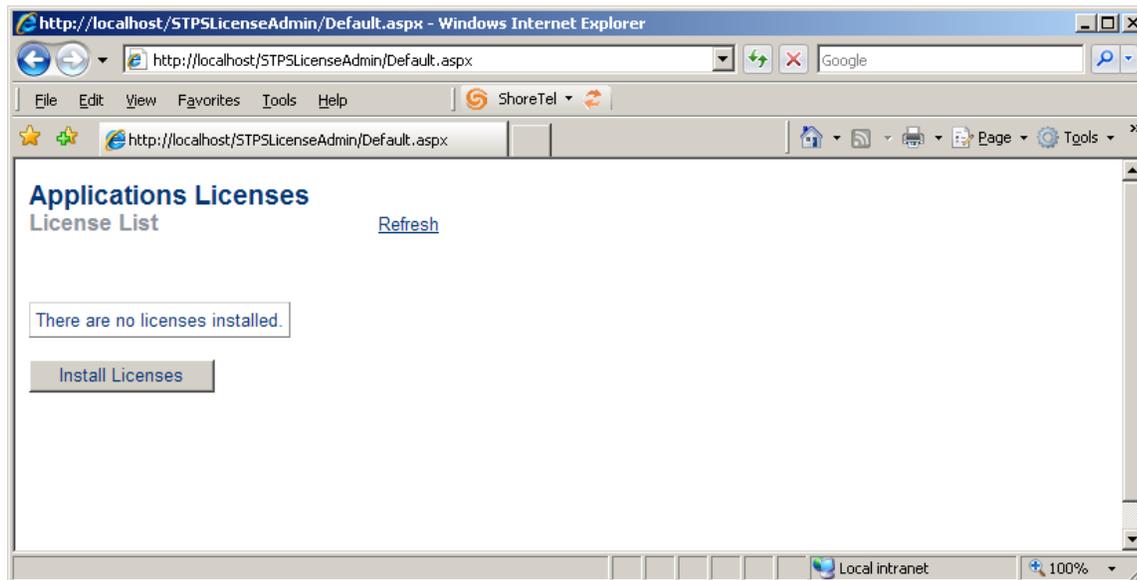
Cookies can be enabled for the Connect Director (HQ) server's website using the **Sites** option from the Internet Explorer's **Privacy** tab settings.

To administer application licenses:

1. Use a web browser and navigate to the Application License Administration website (for example, <http://<ShoreTel Headquarter Server Name>/stpslicenseadmin>)
2. In the window that opens, enter the username and password in the **User Name** and **Password** fields.

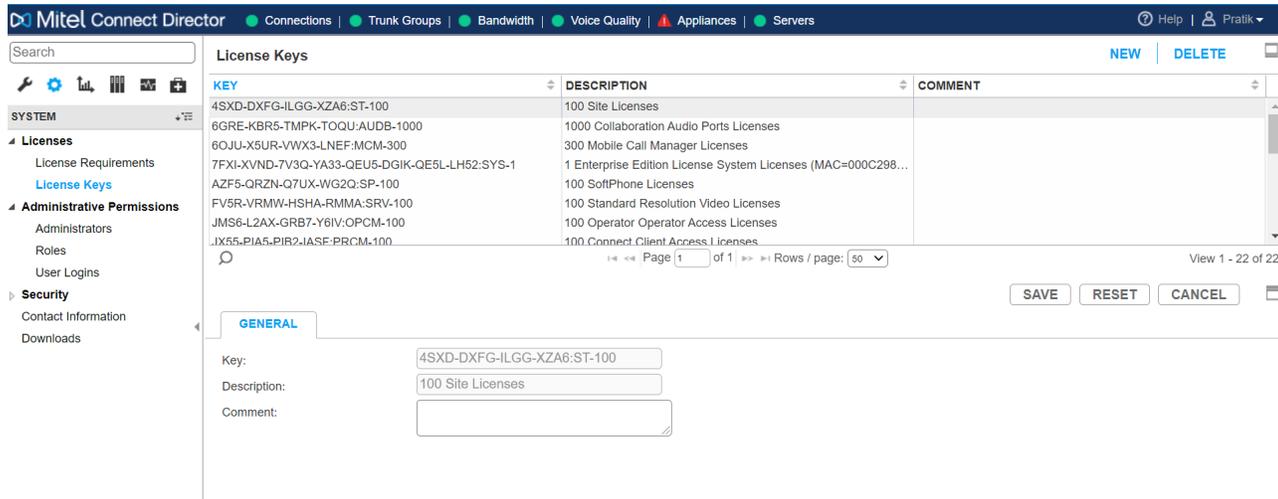


3. The **Application Licenses License List** page that opens will display the list of licenses installed.



You can access Application License Administration from Connect Director:

1. Launch Connect Director.
2. In the navigation pane, click **System > Licenses > License Keys**. The **License Keys** page is displayed.



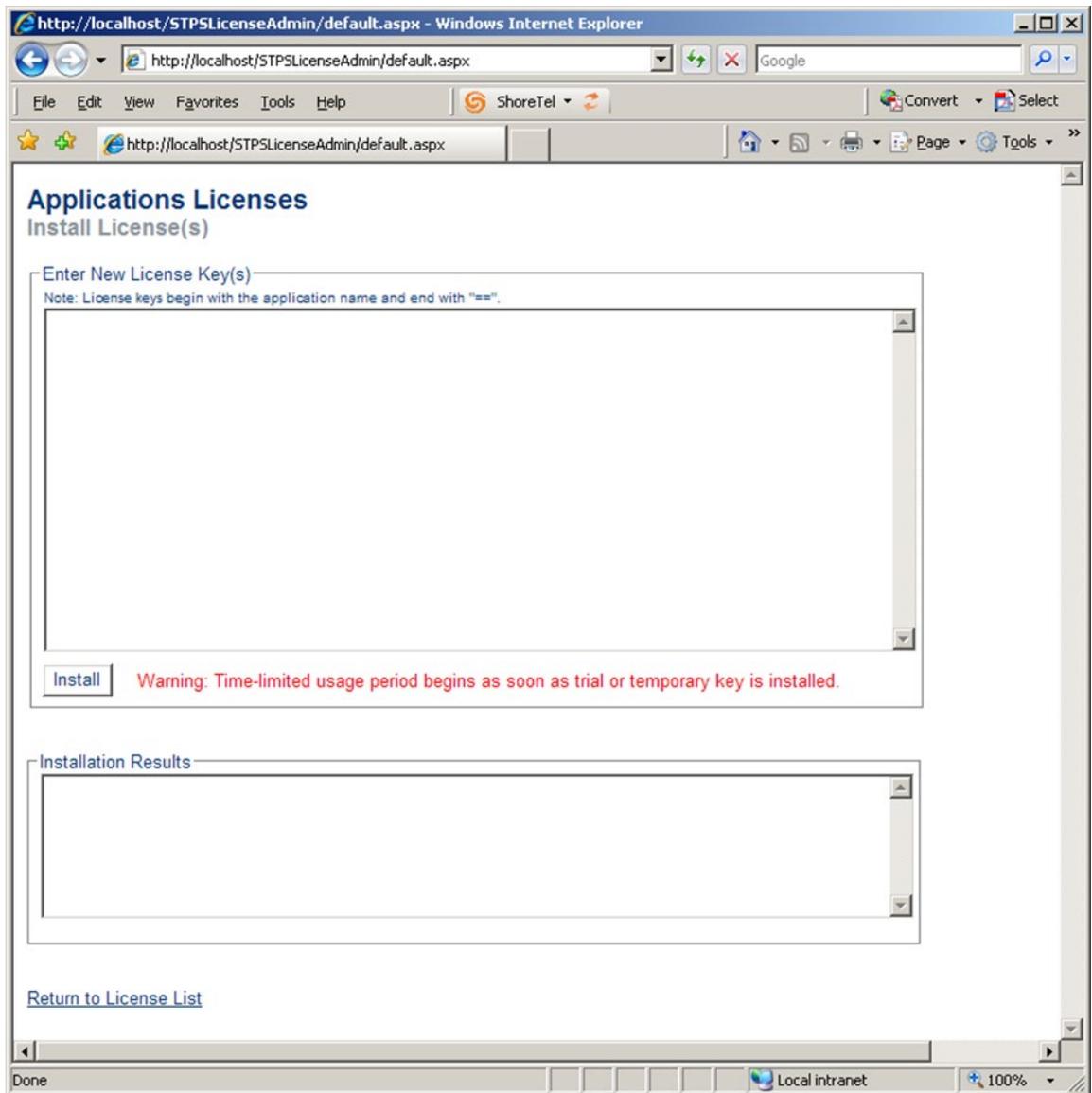
Note! If the License Administration pages do not display within Director, see the [License Administration Web Pages Hang \(Do Not Load\) From Within Director](#) section to fix the issue.

2.5.1 INSTALLING LICENSES

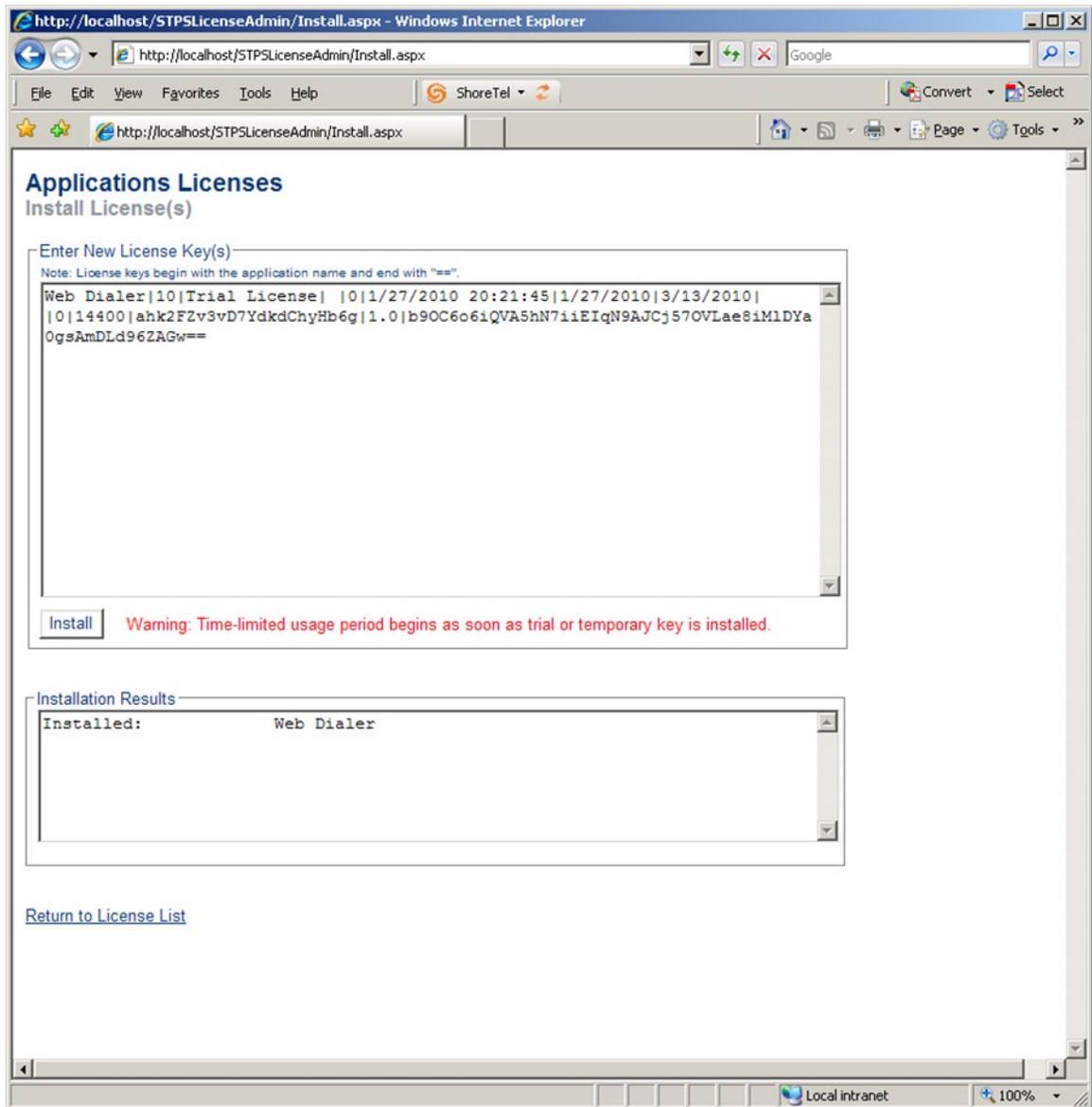
To install the licenses:

1. Use a web browser and navigate to the Application License Administration website (for example, <http://<ShoreTel Headquarter Server Name>/stpslicenseadmin>)

2. In the window that opens, enter the username and password in the User Name and Password fields.
3. In the **Application Licenses License List** page that opens, click **Install Licenses**.
4. In the **Application Licenses Install License(s)** page that opens, enter the license keys in the **Enter New License Key(s)** field.



5. The results of the installation are shown in the **Installation Results** field.



Many license keys can be installed at the same time. The example above shows the results of installing the Web Dialer trial license.

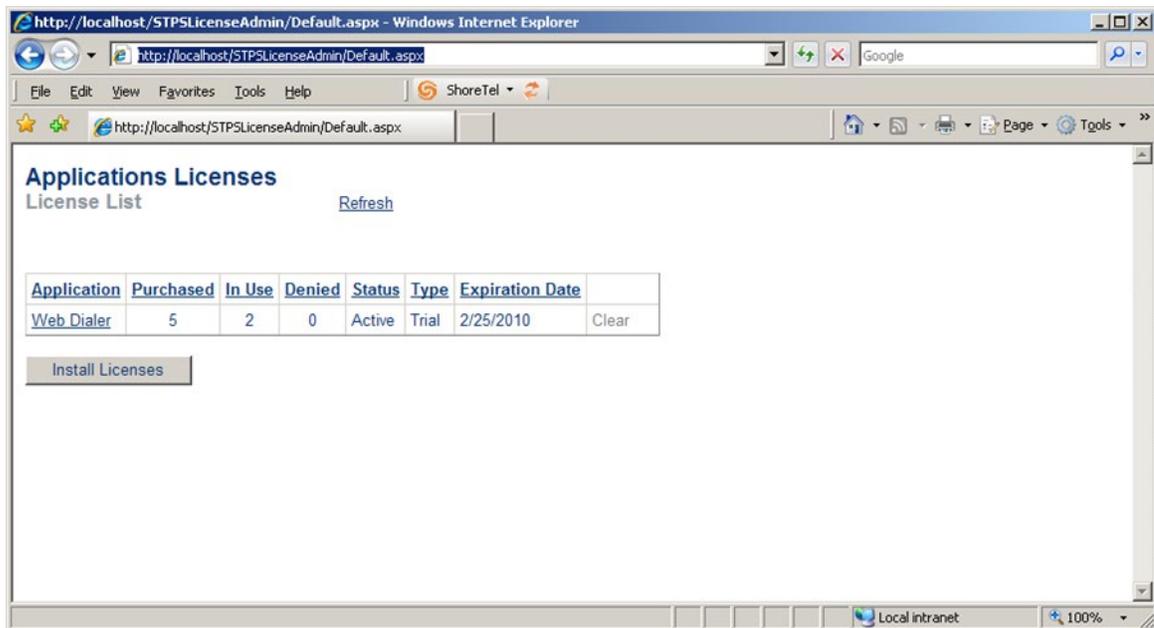
The following are some of the possible installation results:

Value	Description
Installed	The license key has been successfully been installed.
Invalid license key	The digital signature of the license key is incorrect meaning the key was not entered or pasted correctly.
Invalid system ID	The system ID in the license key does not match this system's ID.
Obsolete license key	This error is cause by the following conditions:

	<ul style="list-style-type: none"> • Trying to install a trial license which has previously been installed • Trying to install a trial license over a temporary license • Trying to install a trial license over a permanent license • Trying to install an earlier version of a permanent license
Duplicate license key	The license key has been previously installed.
Error, see log file	Detailed error information is in the Mitel Application License Server Log File .

2.5.2 INSTALLED LICENSE LIST

1. Use a web browser and navigate to the Application License Administration website (for example, <http://<ShoreTel Headquarter Server Name>/stpslicenseadmin>)
2. In the window that opens, enter the username and password in the User Name and Password fields.
3. The **Application Licenses License List** page opens displaying the list of installed licenses.



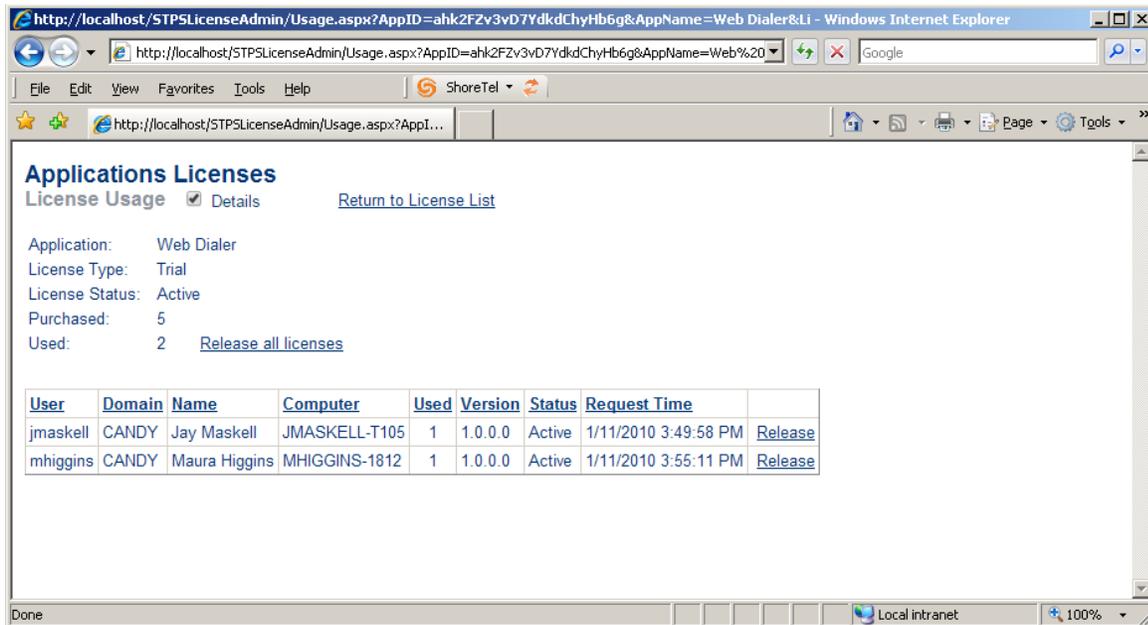
Note! Only the most current license keys are shown. Clicking the column header sorts the table alternating between ascending and descending order.

The column definitions are:

Value	Description
Application	The name of the application
Purchased	The number of purchased licenses for the application
In Use	The number of licenses being used
Denied	The current number of Users who failed to obtain a license because either the number of licenses was exceeded, or the license has expired. The Denied count can be cleared by selecting the Clear link at the end of the row.
Status	<p>One of the following license statuses: </p> <ul style="list-style-type: none"> • Active: license is active • Inactive: a subscription license which start date has not begun • Expired: a subscription or trial license which has expired. • Mismatch: the license key's system ID no longer matches this system's ID. This can occur if the licensing software is physically copied (not recommended) to another system.
Type	<p>One of the following license types:</p> <ul style="list-style-type: none"> • Permanent: A license which does not expire • Subscription: A license which is only active between specific start and end dates • Temporary: A license issued for a new Mitel system which runs for a specific time. The permanent or subscription license is issued with the Mitel system key. • Trial: A free license to trial an application for a specific time period. A permanent license must be purchased to continue using the application after the trial license expires.
Expiration Date	The date on which the application will stop operating. This applies only to subscription and trial license types.

2.5.3 LICENSE USAGE

The **Applications Licenses License Usage** page shows detailed information about license usage by users. All licenses or license held by specific users may be release from this page. Clicking the column header sorts the data in either ascending or descending order.

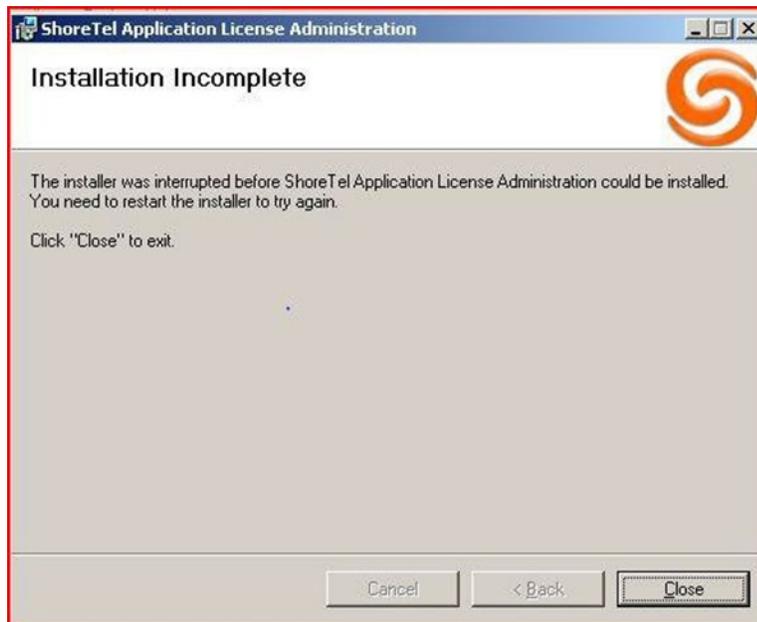


The column definitions are:

Value	Description
User	The user ID of the user who requested the license.
Domain	The Microsoft Windows domain of the user.
Name	The active directory name (if it exists).
Computer	The name of the computer that requested the license.
Used	The number of licenses used by this user
Version	The version of the application requesting the license
Status	The status of the last license request. Values are: <ul style="list-style-type: none"> • Active: User has a license • Exceeded: All the licenses were in use. This is an indication that more licenses may need to be purchased. • Expired: The license has expired. • Reset: The license was released by the administrator or a new license key that contains fewer licenses than are currently in use.

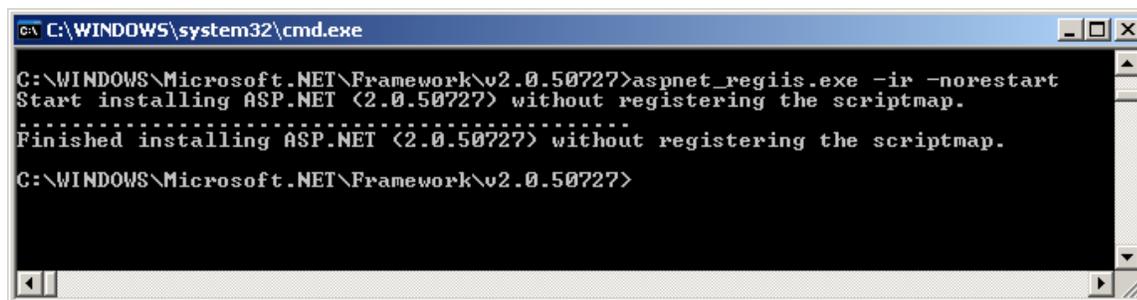
2.6 ERRORS

2.6.1 LICENSE ADMINISTRATION INSTALLATION FAILURE



This is an ASP.NET issue. The problem is corrected by running commands (see below) to repair the ASP.NET installation:

- `cd c:\Windows\Microsoft.NET\Framework\v2.0.50727`
- `aspnet_regiis.exe -ir -norestart`



2.6.2 LICENSE ADMINISTRATION WEB PAGES HANG (DO NOT LOAD) FROM WITHIN DIRECTOR

This error occurs because the browser is not accepting cookies from the Mitel server website. The problem is corrected by configuring the browser to accept cookies from the Mitel server website. The **Sites** option on the Internet Explorer's **Privacy** tab is used to enable cookies from the Connect Director (HQ) server's website.

2.6.3 LICENSING COMMUNICATION ERROR

The **ShoreTel Application License Error: Licensing communication error. Failed to communicate to the ShoreTel licensing host at shoretel, error: ProtocolError** error message indicates the application cannot

communicate with the license server. The error message provides the licensing server name (e.g., shoretel above) and the communication error (for example, ProtocolError).

This error is caused by one of the following reasons:

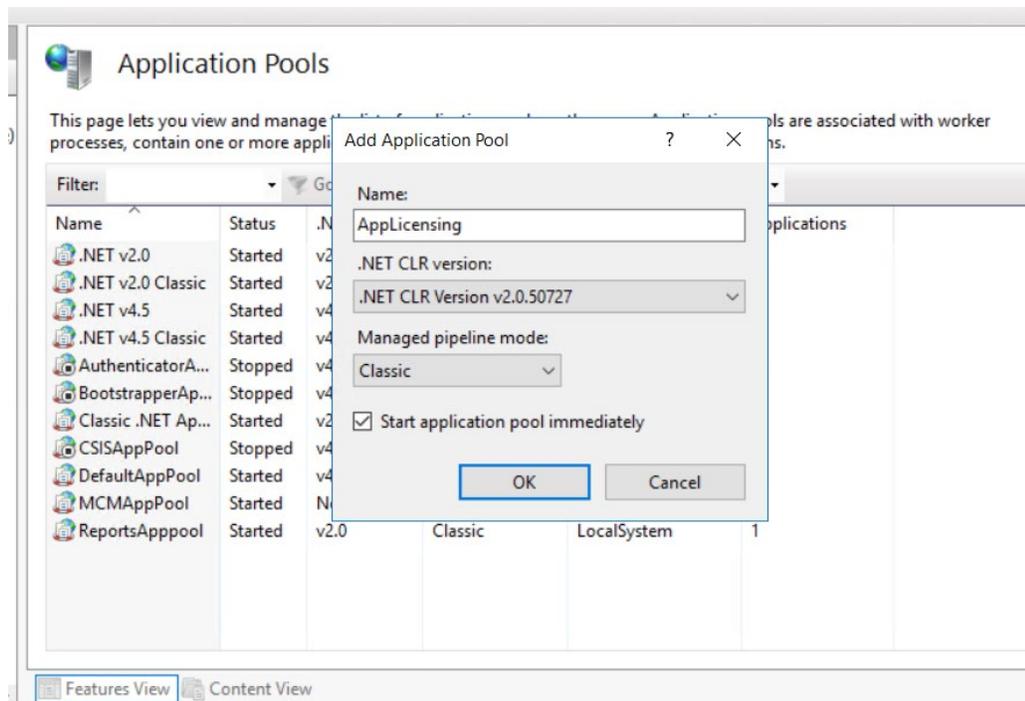
- The Application Licensing software is not installed or is not running on the HQ Server.
- PCM (Communicator) is not configured (Options->Telephony) with the Mitel HQ server name or IP address. Licensing uses this information to determine the location of the HQ server.
- The user has never logged into PCM and set the HQ Server location. The error message will indicate the Mitel licensing host as "127.0.0.1".

3. APPENDIX A: WINDOWS 2012 / 2016 IIS CONFIGURATION

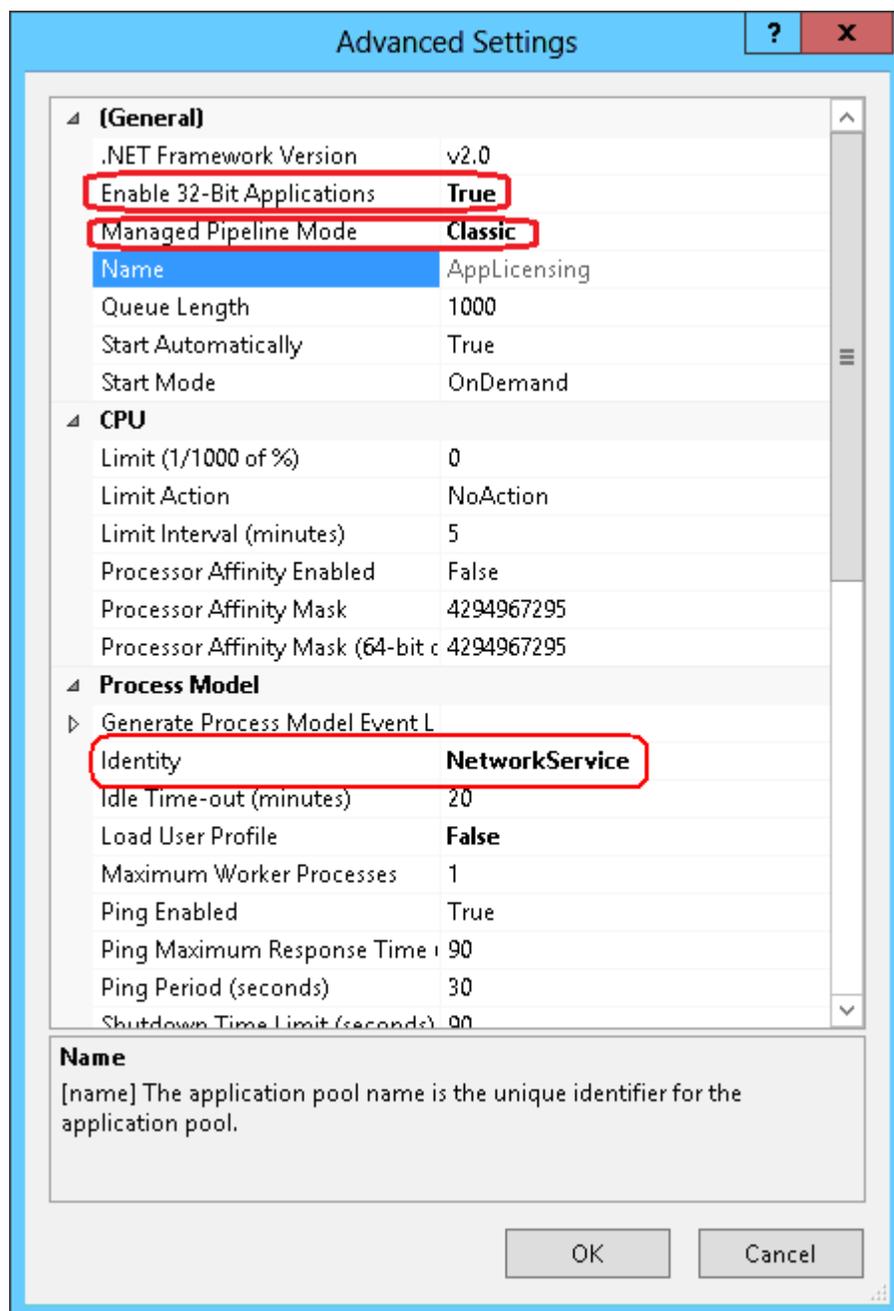
Windows Server 2012 and Windows Server 2016 require the creation of an IIS Application Pool that is compatible with earlier versions of IIS.

To configure Windows Server 2012 and Windows Server 2016:

1. Create a new IIS Application Pool by following these steps:
 - a) Enter **AppLicensing** in the **Name** field
 - b) Select **.Net CLR Version v2.0.50727** in the **.NET CLR version** field.
 - c) Select **Classic** in the **Managed pipeline mode** field.
 - d) Click **OK**.



2. In the page that opens, update the advanced Application Pool settings:
 - a) Set the **Enable 32-Bit Applications** field to **True**.
 - b) Set the **Managed Pipeline Mode** field to **Classic**.
 - c) Change the **Identity** field to **NetworkService**.



3. Click **OK** to complete the configuration.

