

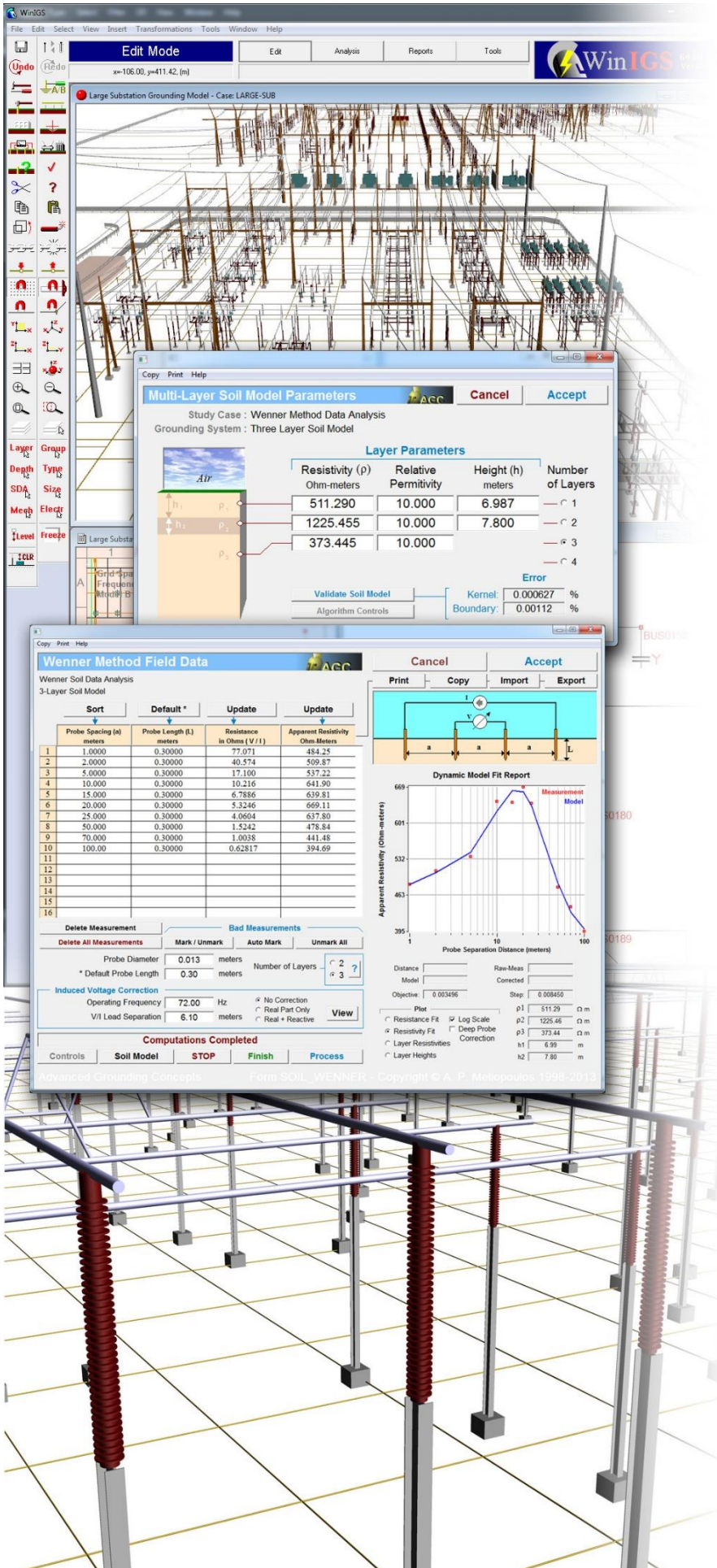
AgcCIs

Concurrent
License
Server
for WinIGS

AgcCIs Installation & User Manual

Software Version
2.04
June 2021

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A. P. Sakis Meliopoulos
1998-2021



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Disclaimer

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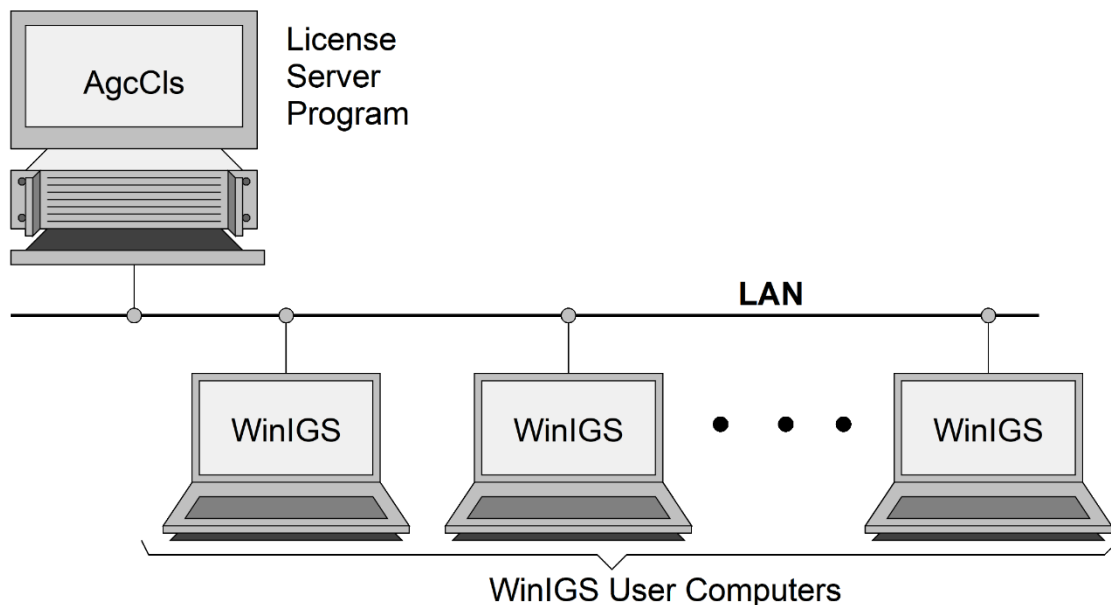
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1. Concurrent License Server Installation

WinIGS is optionally distributed with a **Concurrent License**. This option allows the main program application (**WinIGS**) to be installed on any number of computers and used by any number of users within an organization, as long as the total number of concurrent users does not exceed a specific limit. The usage limits are enforced by a second program, namely the **concurrent license server program (AgcClS)**

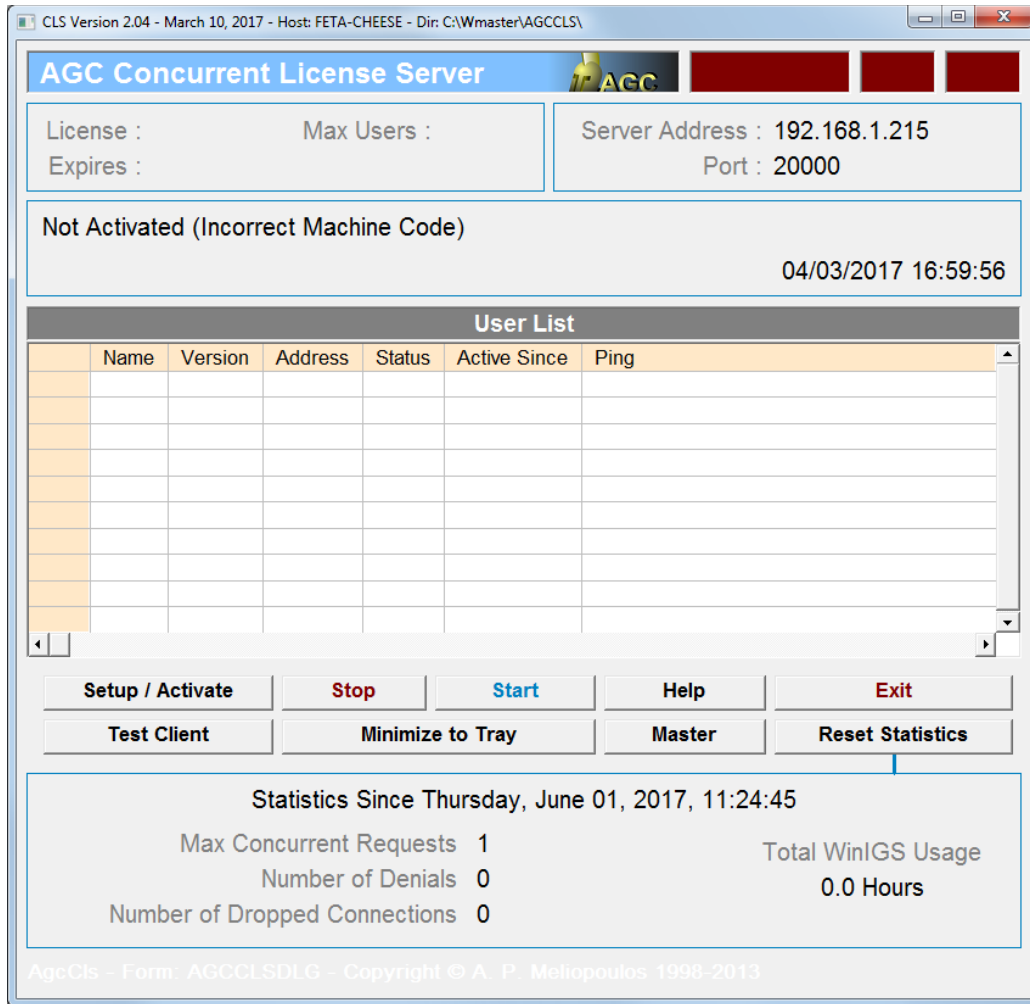
AgcClS must be installed on a single computer only. This computer must be accessible by all computers that WinIGS users will be using to run the **WinIGS** application via the local area network. WinIGS continuously communicates AgcClS via TCP/IP messages in order to obtain permission to operate. AgcClS keeps track of the active WinIGS users and prevents WinIGS operation if the number of active users exceeds the license limit.



The AgcClS program is provided on an installation CD, or may be downloaded from the AGC web site (www.ap-concepts.com). To install the CLS program, execute the installation program (AgcClSSetup.exe).

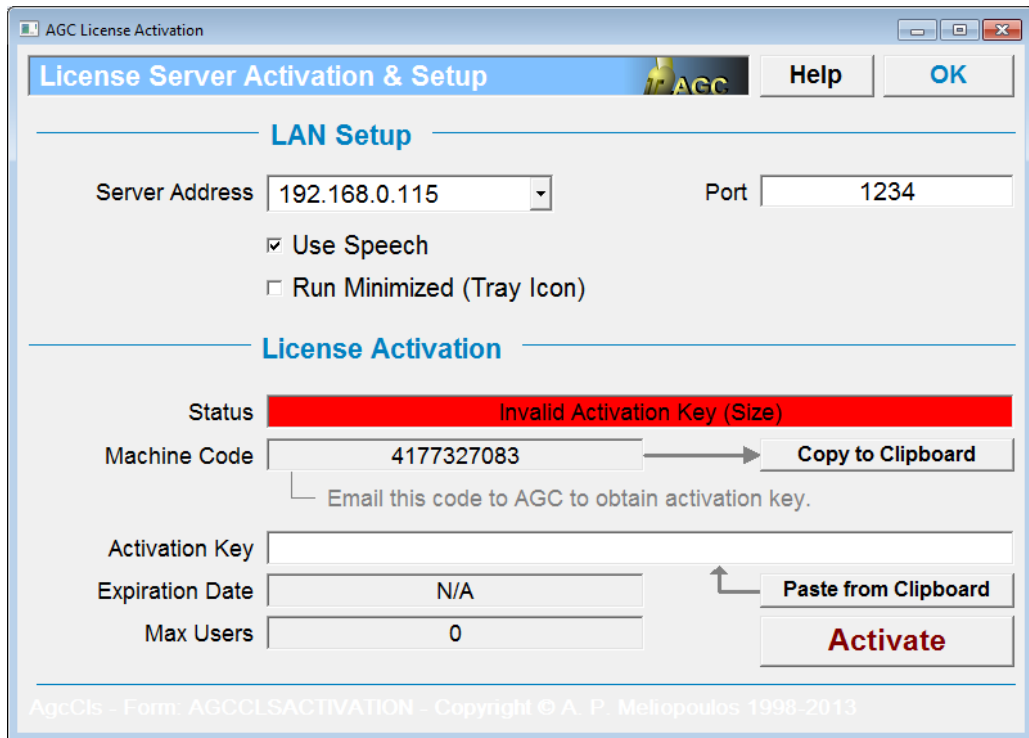
Once the AgcClS installation is completed, it must be activated. Activation is performed as follows:


1. Execute the AgcClS program. The program main window is illustrated below:

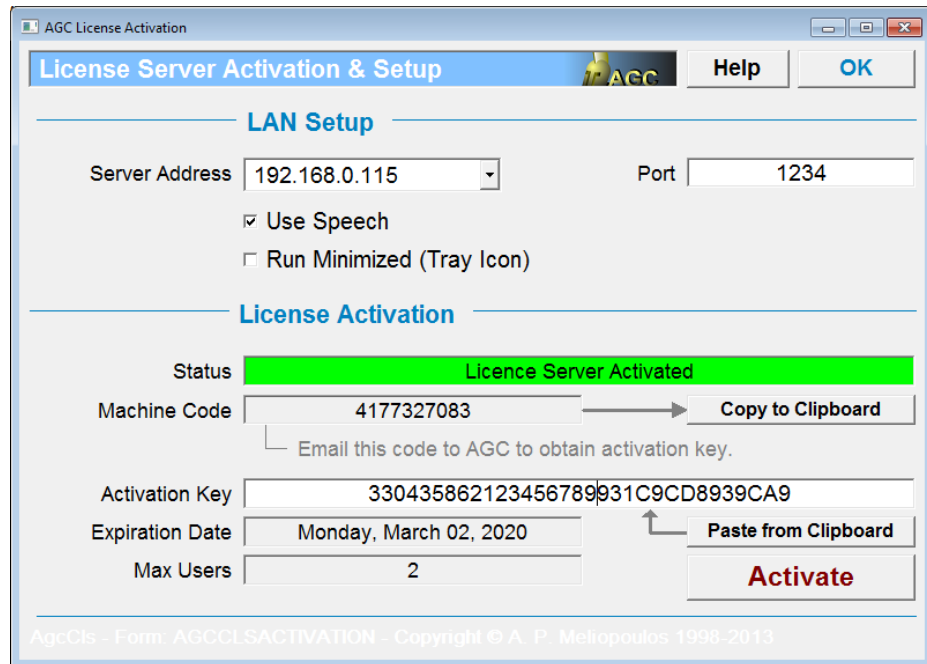


2. Click on the **Setup/Activate** button to open the activation window, illustrated below. Copy the Machine Code (use the Copy to Clipboard button), and email it to AGC at sakis@comcast.net

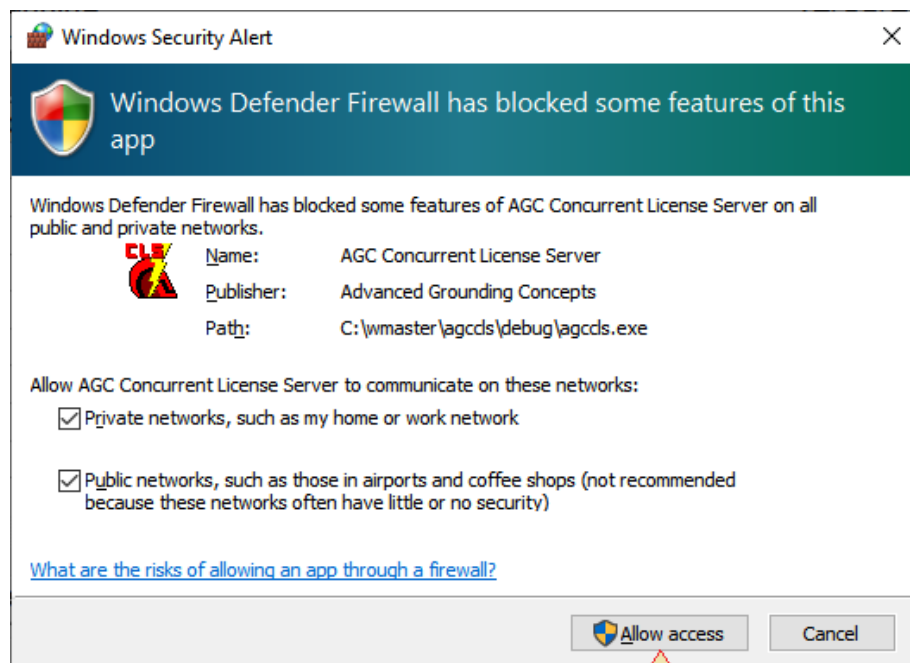
3. AGC will return an email with the activation key. The activation key is a 32 character hexadecimal code. Paste this code into the **Activation Key** field (Use the paste from clipboard button).



4. Select the host **Server Address** to use for communicating between the CLS server and the WinIGS computers. (This list box will contain as many entries as the network interface cards installed in the host computer).
5. Select the *local area network port number* to use for communicating between the CLS server and the WinIGS computers. Note that you may have to modify your network setup to allow use of the selected port number. Type the selected port number in the **Port** field.
Note: If you are installing multiple copies of AgcCls in order to service multiple licenses in the same server PC (using the same server IP Address), make sure that the port number is unique for each installed copy.
6. Make a note of the selected **Server Address** and **Port** number. This information is needed by the WinIGS users to access the CLS server.
7. If desired to run AgcCls in the background, check the **Run Minimized** checkbox. In this mode the program runs in the background, and an icon () is placed on the task bar tray. The program main window can be reopened by left-clicking on this icon. If this option is selected, AgcCls will automatically run in the background on the next time the program is executed. (**Note:** running in the background is not equivalent to running as a service. To setup AgcCls to run as a service, see section [Running AgcCls as a Service](#)).
8. Click on the Activate button. If the activation is successful, the expiration date and maximum number of user fields will automatically be updated, as shown in the example below. (The entered parameters are saved in the file **AgcCls.cfg**).
9. Click on the OK button to close the Activation window.



- On the main AgcClS window, click on the **Start** button to turn on the concurrent license server. **IMPORTANT:** If the Windows Security Alert window illustrated below opens, click on the **Allow access** button, in order to allow the communication between WinIGS and the CLS program.



11. It is recommended that the AgcCls program is added to the windows start folder, so that it will automatically be executed if the computer is restarted.

This completes the installation of the Concurrent License Server. The activated and running server main display is illustrated below. Note that the **Port number** and the **Server Address** must be used with each WinIGS installation in order to access the CLS. The Active Users window displays the WinIGS users presently connected to the server. Furthermore, usage statistics are displayed at the lower part of the window. Specifically, statistics include:

- The maximum number of concurrent user requests, including denied requests due to the total number of users simultaneously attempting to use WinIGS.
- The total number of denied user attempts to use WinIGS
- The cumulative number of WinIGS usage hours.

The above statistics can be reset (Set to zero) by clicking on the **Reset Statistics** button.

1.1 Setting up a License Server Computer for Multiple licenses

If you have purchased more than one concurrent license and wish to use the same computer for all your licenses, you must perform a separate **AgcCls** installation for each separate concurrent license you have obtained from AGC. You can install **AgcCls** any number of times on the same server by selecting different installation directories. The default server installation directory is c:\AgcCls. If you are installing **AgcCls** two or more times in order to service multiple licenses, make sure you select a *unique installation directory* for each one.

1.2 Setting up AgcCls to Run as a Service

After verifying that AgcCls is installed and activated, you can setup AgcCls to run as a **Windows Service** as follows:

The following instructions assume that AgcCls has been installed in the directory c:\AgcCls\.

STEP 1

Exit the AgcCls Application, open a command widow (run Command Prompt as administrator) and type the following commands:

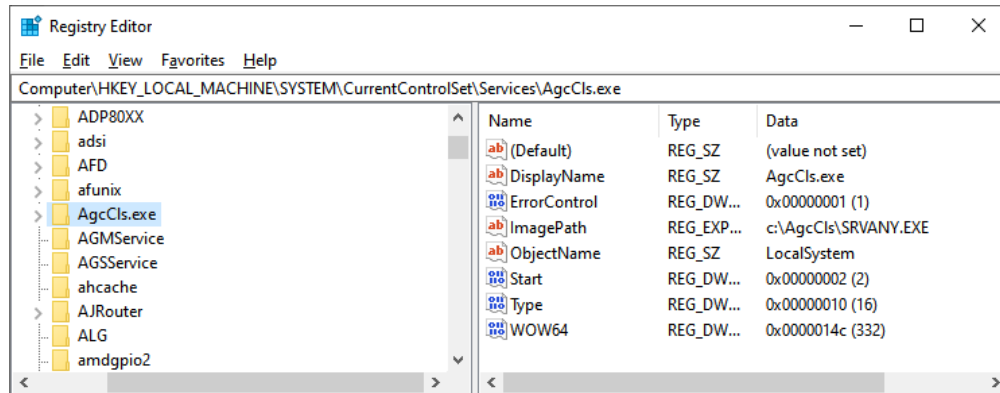
```
CD\AgcCls  
INSTSRV AgcCls.exe c:\AgcCls\SRVANY.EXE
```

STEP 2

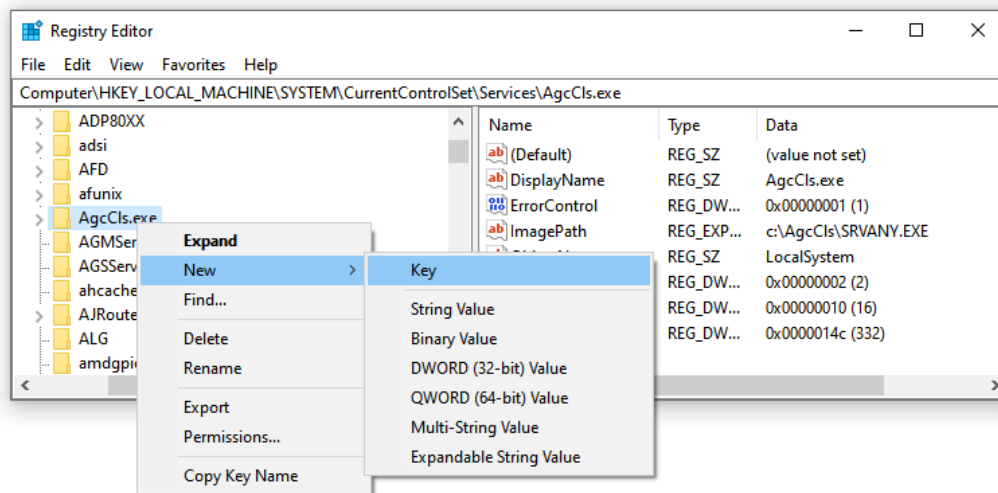
Run Registry Editor (run Regedit) and select the following key:

```
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\AgcCls
```

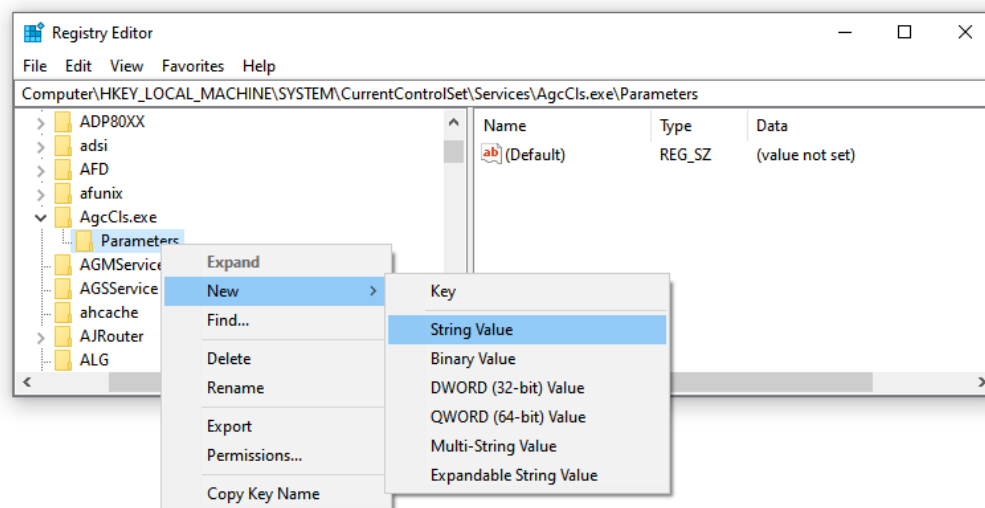

Verify that the **ImagePath** value points to c:\AgcCls\SRVANY.EXE (See also Registry Editor screen below)



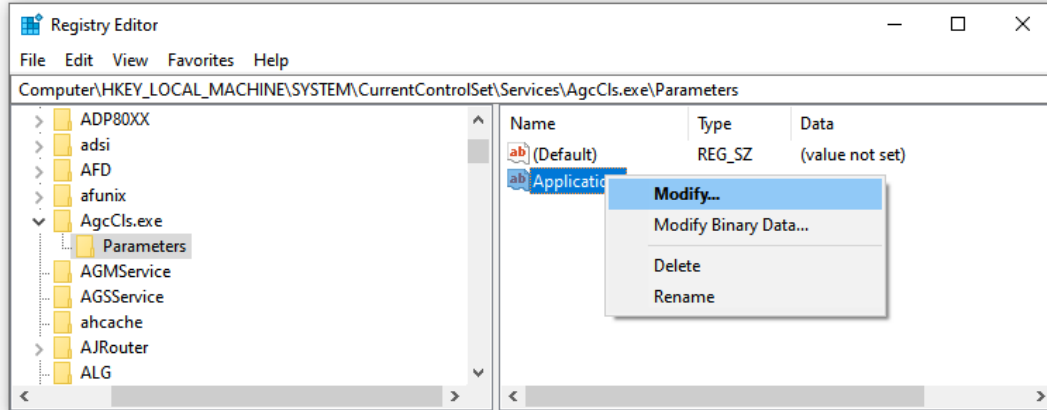
Select **AgcCls** and add a new **Key**, using right mouse click, as illustrated below



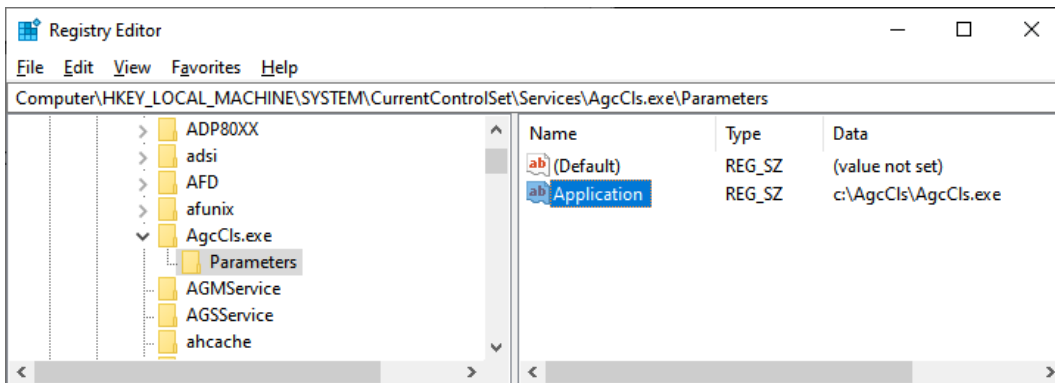
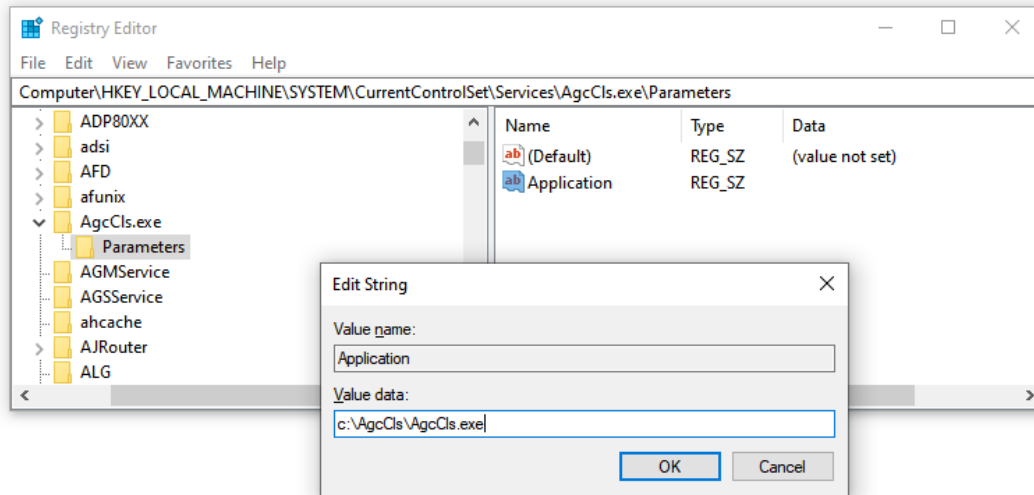
Name the new key: **Parameters**. Next, select the Parameters key and add a **string value**



Name the new string value: **Application**, then right click on it and select **Modify**.



Type the full path to AgcCls.exe in the **Value data** field, as shown below:



Close the registry editor. Note that the AgcCls will now run automatically as a service when the system is restarted. To manually start or stop the AgcCls service use the Windows **Services** tool.

1.3 Monitoring License Statistics

If AgcCls is running as a service, the user interface is not accessible. However, executing a second instance of AgcCls allows monitoring of the user list and usage statistics. Note that the second instance of AgcCls senses the presence of the first instance running as a service and opens in **“Report Mode”**. While in report mode it communicates with the service application, receives and displays the present user list and usage statistics. The AgcCls user interface in Report Mode is illustrated below. Note that the Setup/Activate, Start and Stop buttons are not functional in Report Mode.

CLS Version 2.02 - July 14, 2015 - Running on PAPAKI

AGC Concurrent License Server

License : 1000 Max Users : 2 Server Address : 192.168.0.109
Expires : Monday, March 02, 2020 Port : 4321

Activation Successful
Report Mode

| User List | | | | | |
|-----------|---------------|---------|---------------|----------------|-------------------|
| | Computer Name | Version | Address | Status | Active Since |
| 1 | PAPAKI | 2.02 | 192.168.0.109 | Authorized | July 21, 13:15:20 |
| 2 | PAPAKI | 2.02 | 192.168.0.109 | Authorized | July 21, 13:15:25 |
| 3 | PAPAKI | 2.02 | 192.168.0.109 | Too Many Users | July 21, 13:15:30 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Setup / Activate Stop Start Help Exit
Test Client Minimize to Tray Master Reset Statistics

Statistics Since Tuesday, July 21, 2015, 13:10:53

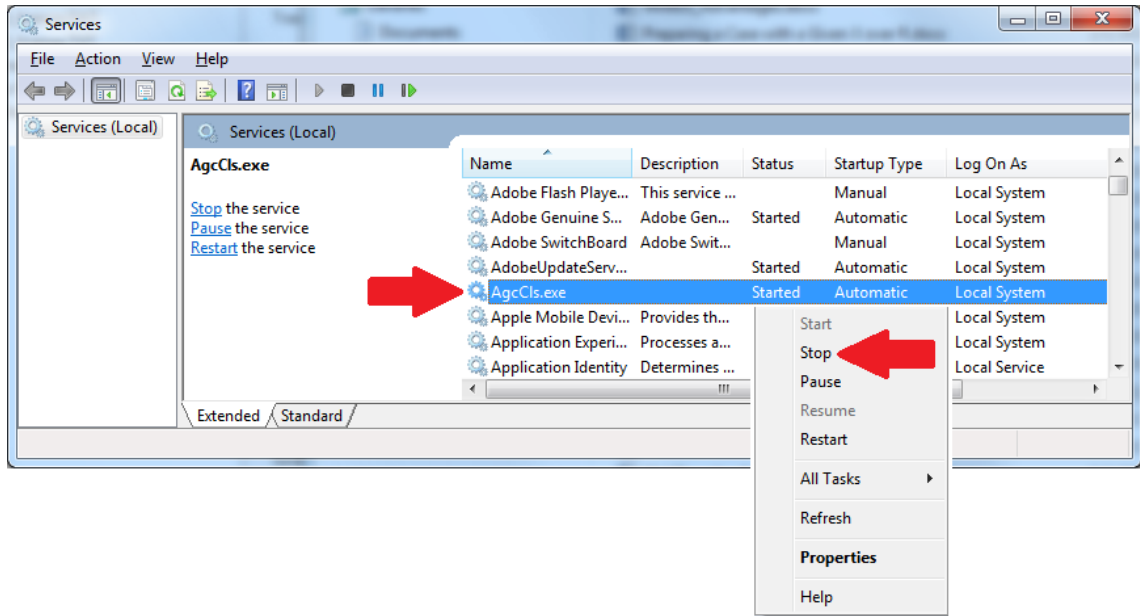
| | | | |
|-------------------------------|---|--------------------|-----------|
| Max Concurrent Requests | 3 | Total WinIGS Usage | |
| Number of Denials | 1 | | 0.0 Hours |
| Number of Dropped Connections | 0 | | |

AgcCls - Form: AGCCLSDLG - Copyright © A. P. Meliopoulos 1998-2013

1.4 Uninstalling the AgcClS Service

You can uninstall the AgcClS service if installed as described above, as follows:

1. Stop the AgcClS Service using the Windows **Services** tool (illustrated below). Right Click on the AgcClS.exe line, and click on the **Stop** command.

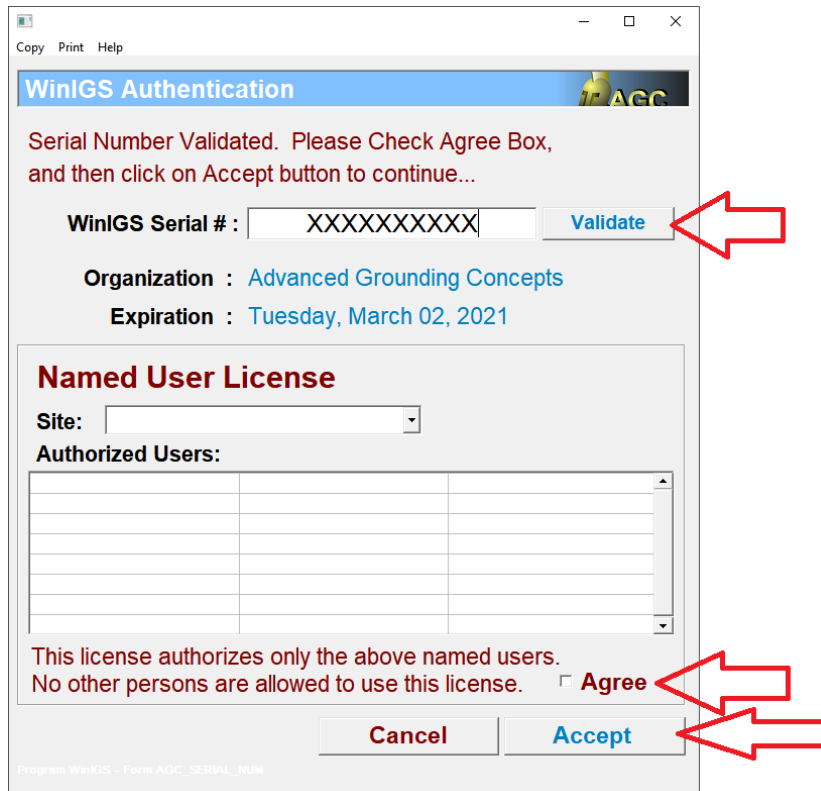


2. Open a command window (run CMD as administrator) and type the following commands:

```
CD\AgcClS  
INSTSRV AgcClS.exe REMOVE
```

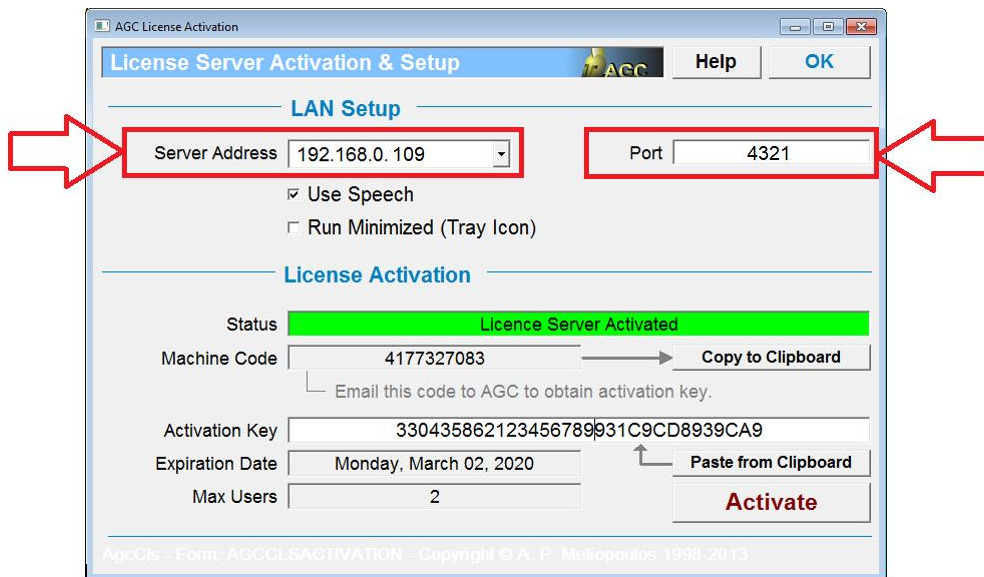
1.5 Setting Up the WinIGS Application

Once the AgcClS has been installed and activated, you can install the WinIGS application on all WinIGS user computers. The first time WinIGS is executed after a new installation, you must validate the WinIGS serial number in order to authenticate the installation. The following pop-up window will open upon the first time WinIGS is executed:

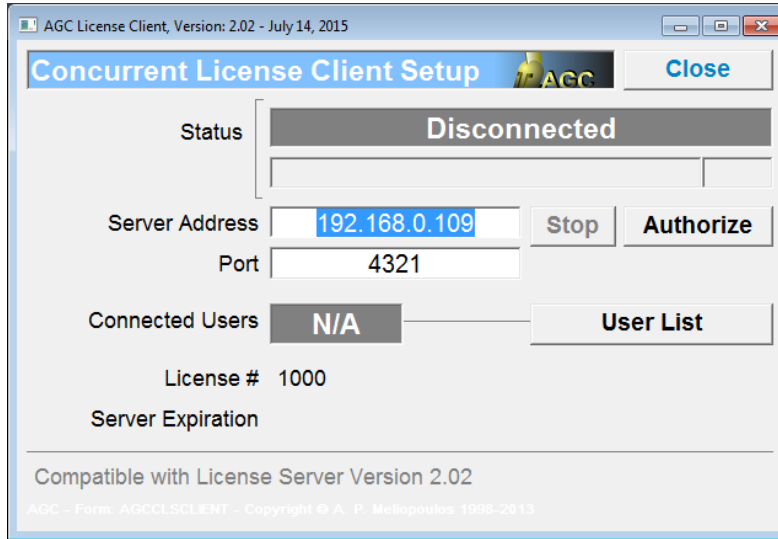


Verify or enter your WinIGS serial number, click on the **Validate** button, check the **Agree** checkbox, and then click on the **Accept** button.

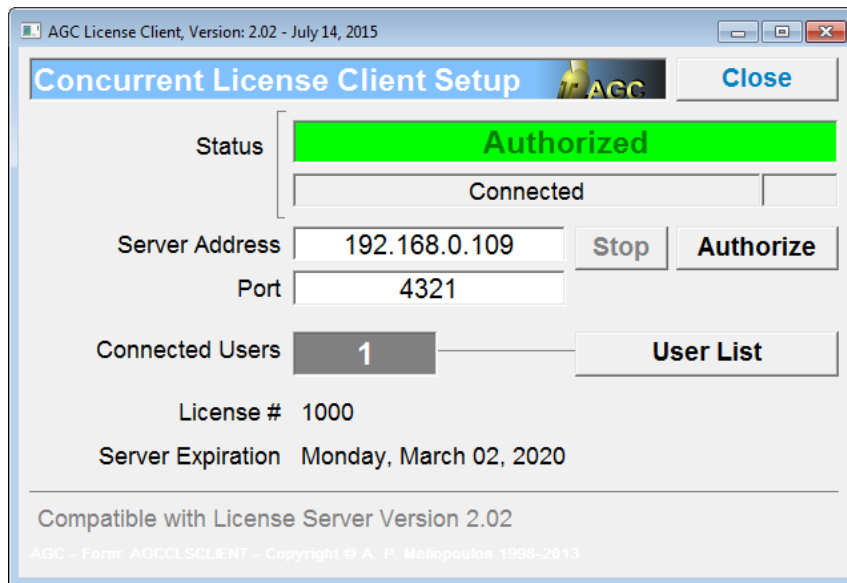
Once the installations are completed, you must verify that WinIGS can access the license server program AgcClS via the local area network in order to obtain permission to operate. For this purpose you need to verify that the server computer **IP Address** and **Port Number** are entered in the WinIGS concurrent license server setup dialog. Note that the license server IP Address and Port Number are displayed on the AgcClS user interface (See Figure below).



Execute WinIGS and click on the **CLS Setup** command, located under the **Help** Menu. This command opens the window illustrated below:



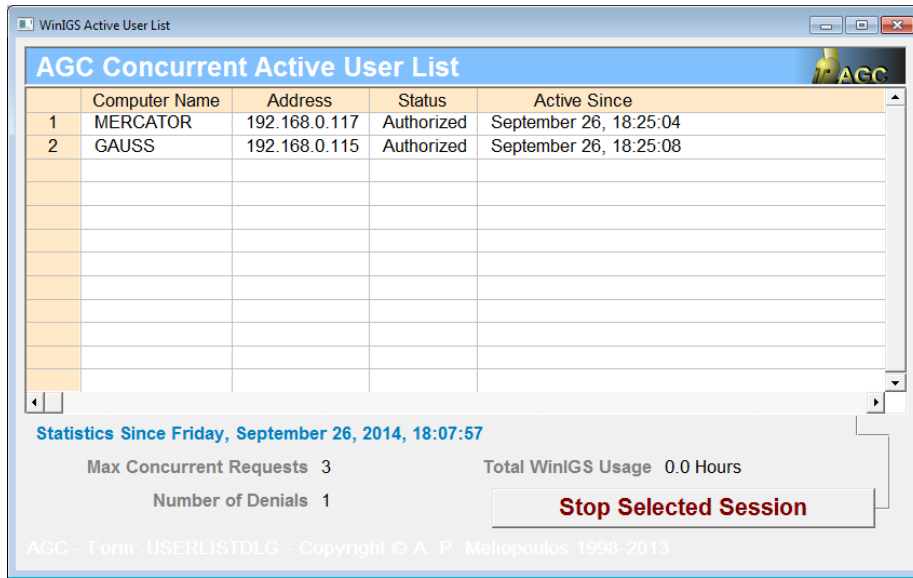
Type the **server address** and **port number** in the corresponding fields and click on the **Authorize** button. Then click on the **OK** button to close the window. (The server address and port number are permanently stored in the WinIGS Configuration file, so this procedure does not need to be repeated every time WinIGS is started).



Successfully Authorized Setup Dialog

You can see a list of active users by clicking on the **Active User List** button. A dialog then opens, illustrated below that contains a list of the WinIGS sessions. For each WinIGS session the list contains the computer name, the IP address of the computer, the authorization status, and the date and time that each WinIGS session started. Note that before clicking on the **Active User List** button a connection to the server must have been established. A connection is established by

clicking on the Authorize button.



NOTE: The button titled **Stop Selected Session** (located at the bottom of the Concurrent Active User List dialog allows a user to stop a selected WinIGS Session. This option should be used with care to avoid causing other WinIGS concurrent users to lose their work.

2. Concurrent License Server License Update

If you have previously installed **AgcClS** and you are now renewing the license, you only need to enter a new Activation Key in the AgcClS license server application.

Note that if you are reactivating an existing WinIGS license you must also reinstall the latest version of the WinIGS application on each user's machine. This is because the license expiration information is also encoded in the WinIGS application, thus the older versions cannot be used with the renewed license.

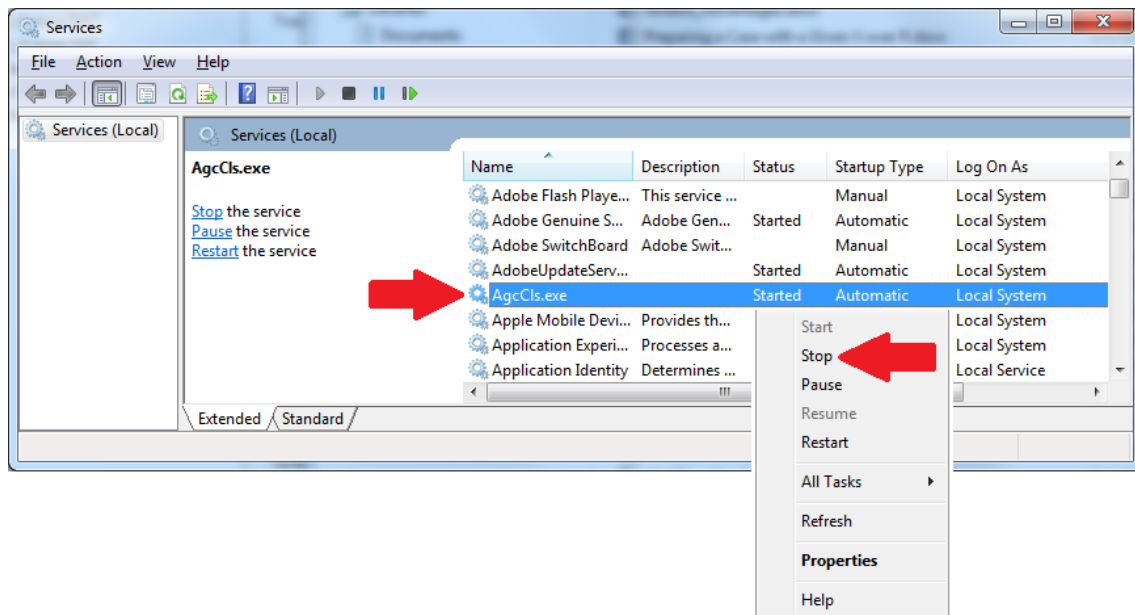
If you have not previously installed **AgcClS** please refer to the section "Concurrent License Server Installation".

The activation key is provided by AGC based on your server computer machine code. The activation key is a 32 character string, and contains your license expiration date and number of concurrent seats in encrypted format. After you receive your new activation key from AGC, follow the procedure described below:

2.1 AgcClS Reactivation

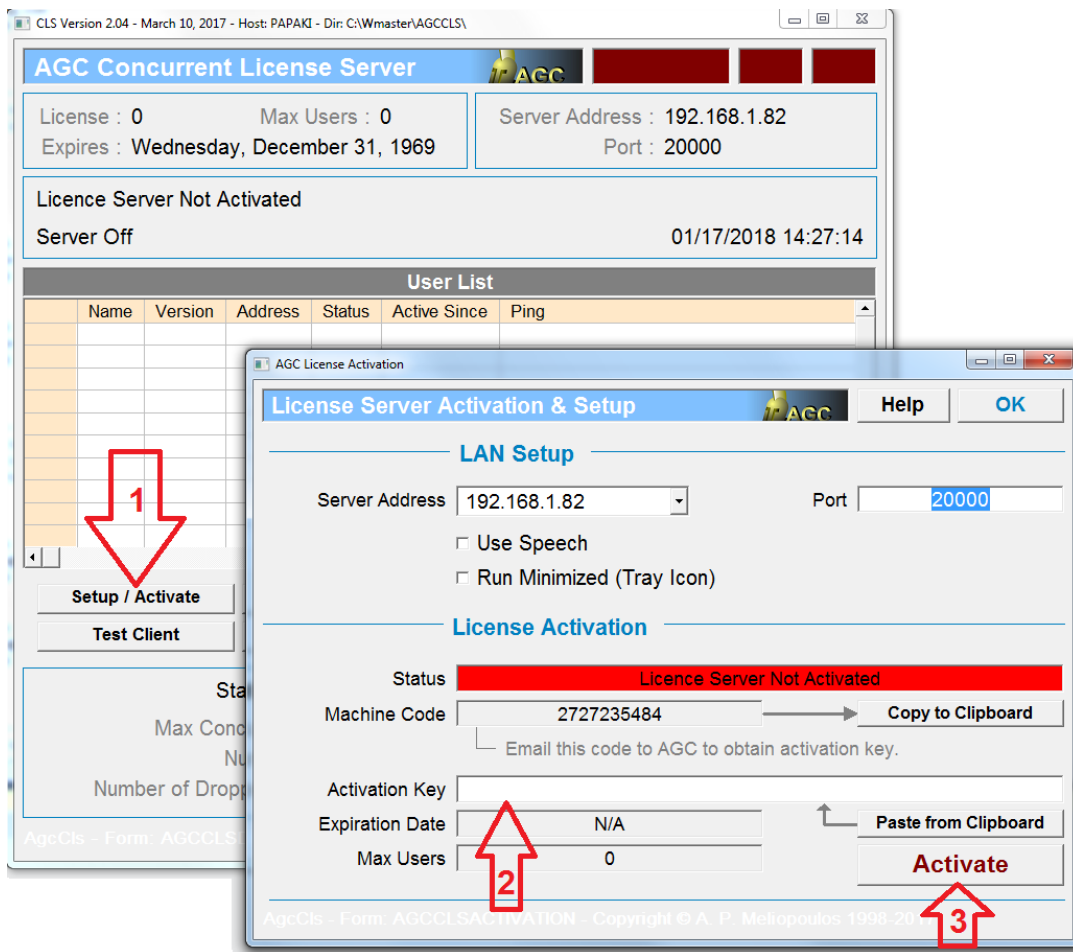
Assuming that you have an existing AgcClS installation running as a **service**, in order to re-activate it you must first **STOP** the service, then run the AgcClS program to update the activation key. You can stop or start a service using the Windows **Services** application, illustrated below.

To stop the AgcClS service program right click on the AgcClS row and left click on the Stop command of the pop-up menu.

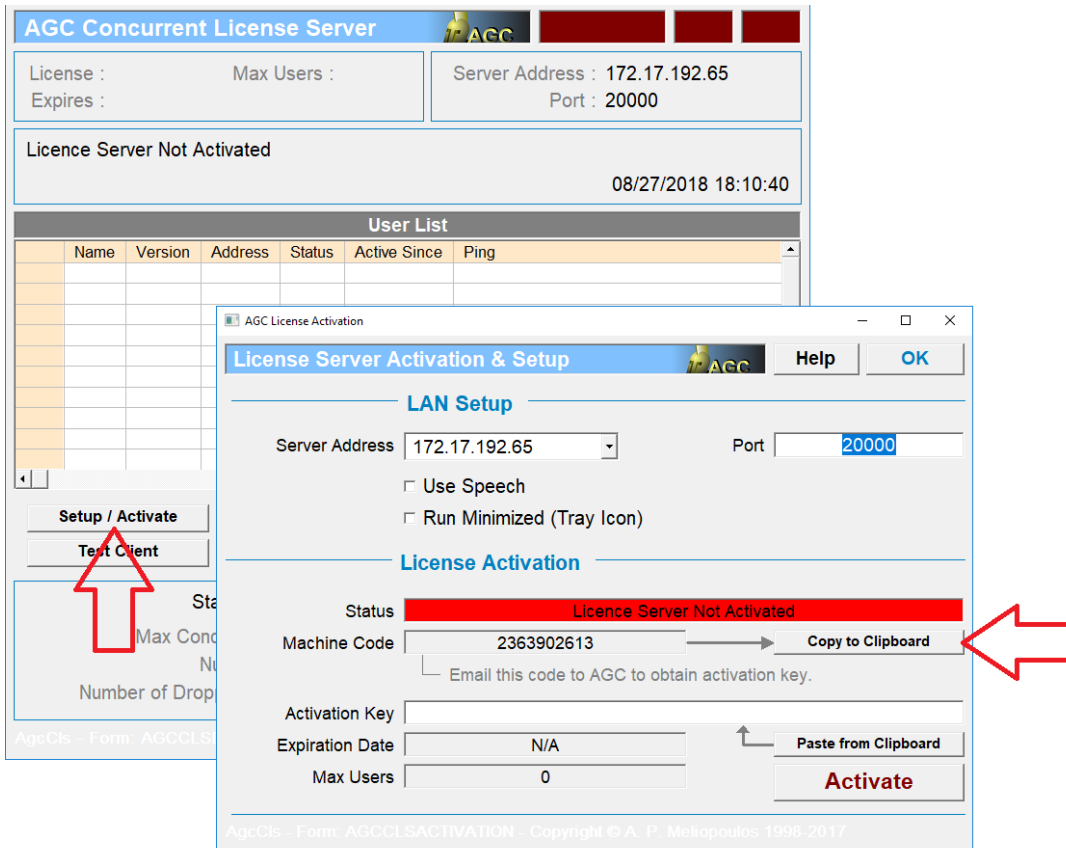


Once the AgcClS service has been stopped, run the AgcClS application, click on the Setup/Activate button, and enter your **new activation key** in the activation key field as shown below. Click on the Activate key, then close the activation dialog, terminate the AgcClS

Application and restart the AgcCls service, again using the Windows **Services** app.



NOTE: If you are moving the AgcCls license server application to a different computer, first you need to uninstall the AgcCls application from the old server. Then, you will need a new activation key. In order to obtain a new activation key, install AgcCls on the new server (computer), run the installed AgcCls program, click on the **Setup/Activate** button, then on the **Copy to Clipboard** button in order to copy your machine code to the windows clipboard. Paste the machine code in an email message to support@ap-concepts.com in order to be provided with the activation key for the new license server.



IMPORTANT: You must perform a separate **AgcCls** activation for each separate concurrent license you have obtained from AGC. You can install **AgcCls** any number of times on the same server by selecting different installation directories. The default server installation directory is c:\AgcCls. If you are installing **AgcCls** two or more times in order to service multiple licenses, make sure you select a *unique installation directory* for each one.

2.2 WinIGS Re-Installation

Every time you are reactivating an existing WinIGS license you must also reinstall the latest version of the WinIGS application on each user's machine. This is because the license expiration information is also encoded in the WinIGS application, thus the older versions cannot be used with the renewed license.

The WinIGS installation program (IGSsetup.exe) is provided on a CD. If you do not have a CD drive you can also download IGSsetup.exe form the AGC website as follows:

Go to the site www.ap-concepts.com and navigate to the **WinIGS Downloads** page. (Note: you can go there directly using the link:

http://www.ap-concepts.com/win_igs_dloads.htm

Follow on-site instructions to download and save the WinIGS installation program. (IgsSetup.exe).

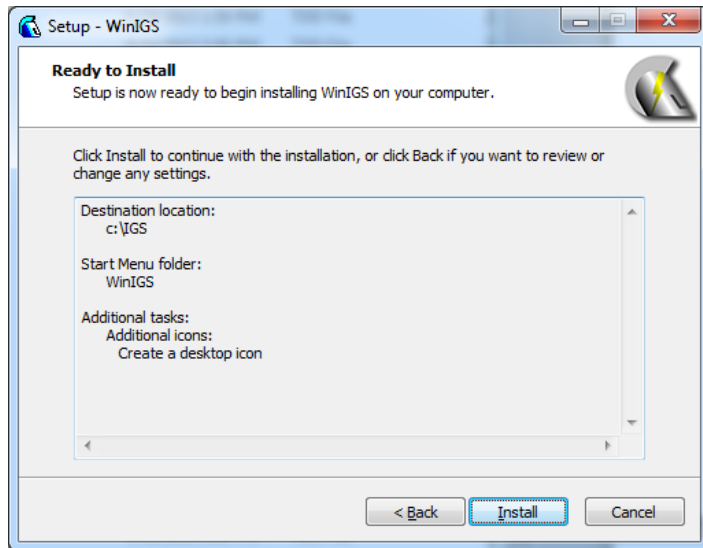
Run IgsSetup.exe to install WinIGS on any number of potential WinIGS user's computers. Setup the communications parameters (Server IP address and LAN Port number) so that Win IGS can communicate with the AgcCls over the LAN.

Note that you do not have to uninstall the previous version, before installation. *In fact, it is recommended to install the new version over the existing version (same directory) so that the cable and tower libraries will be merged.*

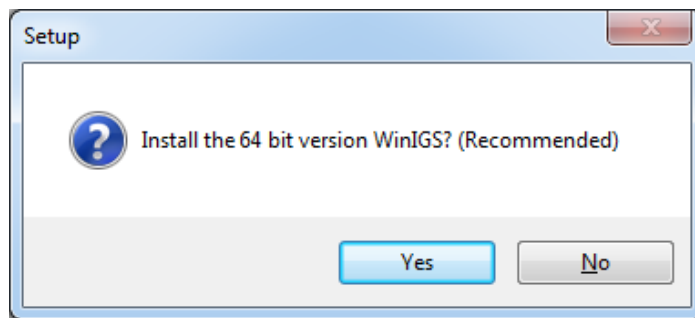
The installation program user interface window is illustrated below:



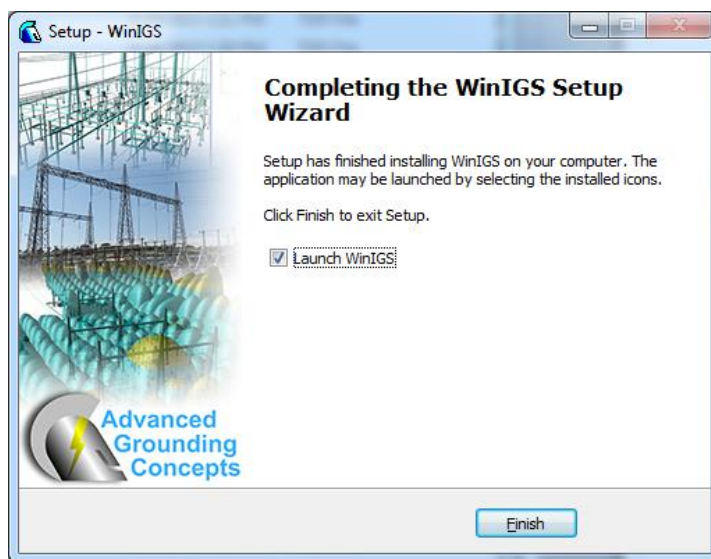
Click on Next to proceed. A sequence of windows will next appear allowing selection of the installation directory, creation of program icons, etc. Finally, the following window will appear:



Click on the Install button to proceed. If you are installing on a 64 bit system the following window will next appear. It is recommended to select the 64 bit option (Click YES to proceed).



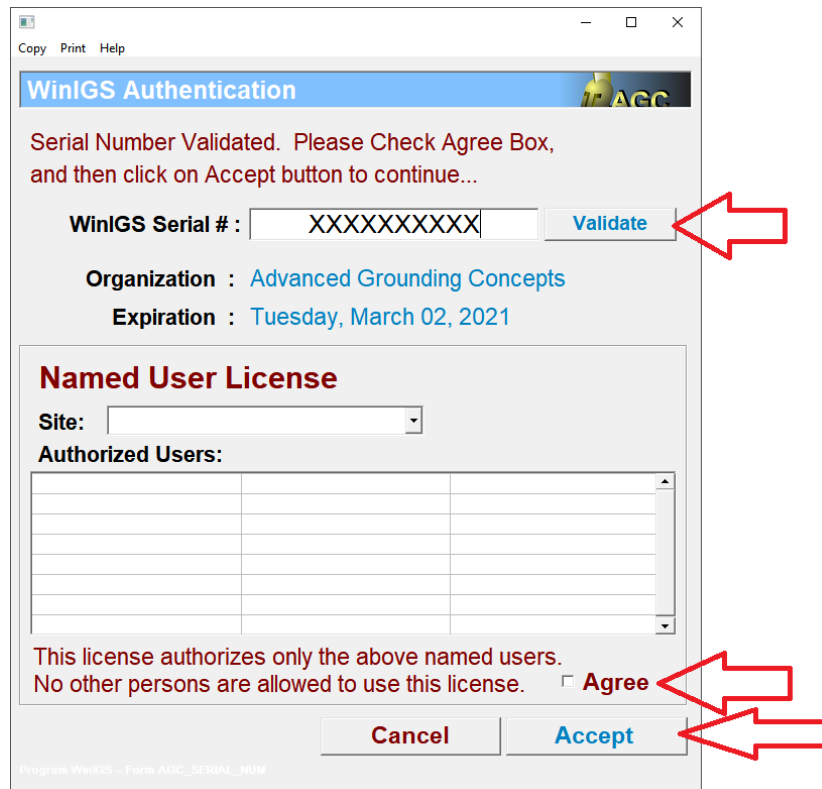
Once the installation procedure is completed the following window will open. Click on Finish to complete the installation



2.3 Setting Up WinIGS Application

Note that the first time you run the program, and if you installed over an existing installation, a series of windows will open asking for permission to merge the various program libraries (cables, tower structures etc.). Click yes on all pop-up windows to allow library merging.

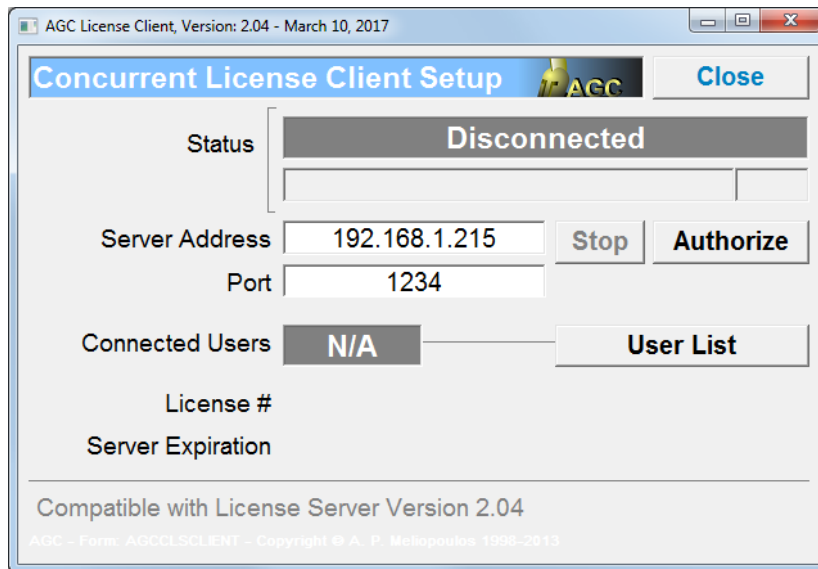
The first time WinIGS is executed after a new installation, you must also validate the WinIGS serial number in order to authenticate the installation. The following pop-up window will open upon the first time WinIGS is executed:



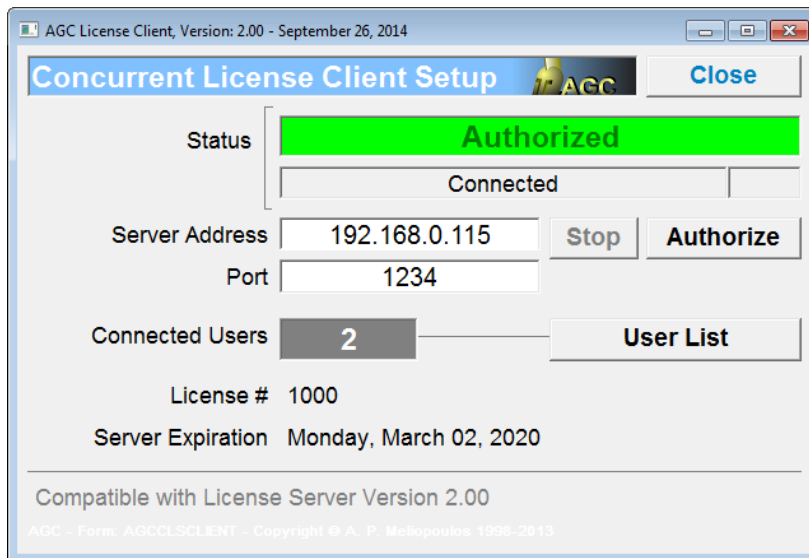
The image shows a Windows-style dialog box titled "WinIGS Authentication". At the top, it says "Serial Number Validated. Please Check Agree Box, and then click on Accept button to continue...". Below this, there is a field for "WinIGS Serial #:" containing "XXXXXXXXXX" and a "Validate" button. A red arrow points to the "Validate" button. Underneath, it displays "Organization : Advanced Grounding Concepts" and "Expiration : Tuesday, March 02, 2021". A section titled "Named User License" includes a "Site:" dropdown menu and a table for "Authorized Users" with several empty rows. Below the table, it states "This license authorizes only the above named users. No other persons are allowed to use this license." followed by an unchecked "Agree" checkbox. A red arrow points to the "Agree" checkbox. At the bottom, there are "Cancel" and "Accept" buttons. A red arrow points to the "Accept" button. The status bar at the bottom left reads "Program WinIGS - Form AGC_SERIAL_NUM".

Verify or enter your WinIGS serial number, click on the **Validate** button, check the **Agree** checkbox, and then click on the **Accept** button.

Next click on the WinIGS **CLS Setup** command, located under the **Help** Menu. This command opens the window illustrated below:



Type the **server address** and **port number** in the corresponding fields and click on the **Authorize** button. Then click on the **OK** button to close the window. (The server address and port number are permanently stored in the WinIGS Configuration file, so this procedure does not need to be repeated every time WinIGS is started).

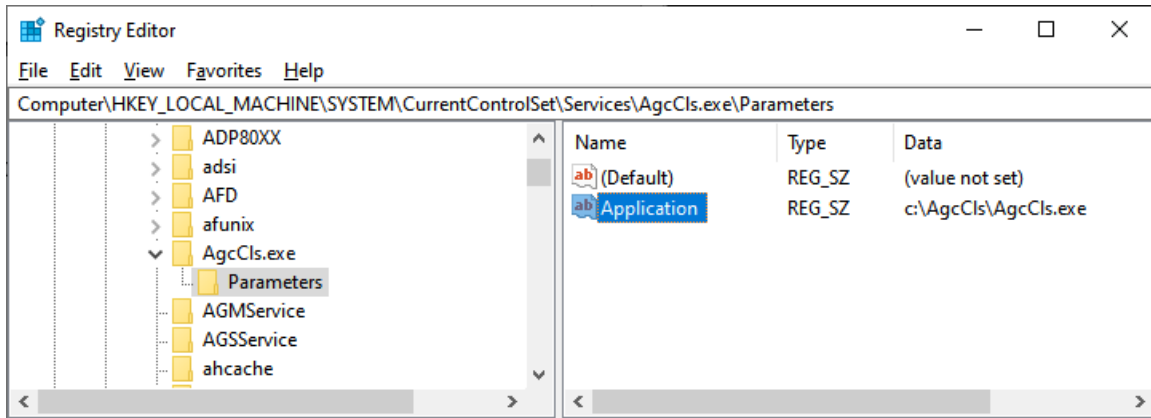


Successfully Authorized Setup Dialog

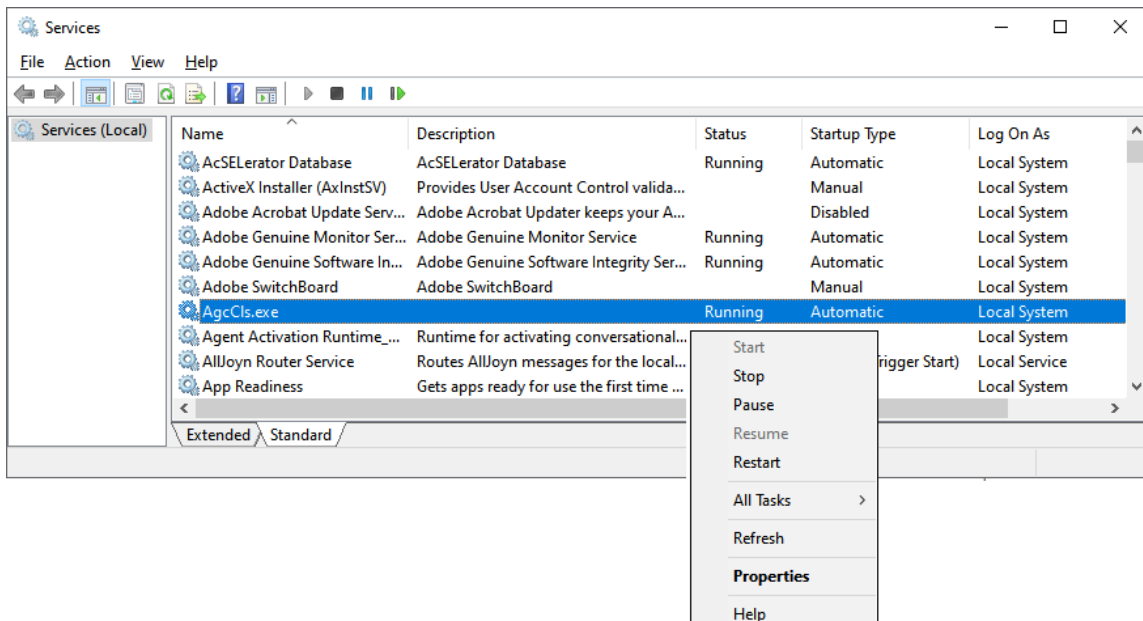
3. Troubleshooting Tips

If WinIGS users cannot connect to AgcCls and obtain authorization, please verify the following items. Note that items 1 and 2 are applicable if AgcCls is set to run as a service.

1. Open **Registry Editor** and verify AgcCls.exe entry is as follows



2. Open Windows **Services** and verify AgcCls.exe entry is **Startup Type** is “**Automatic**” and **Status** is “**Running**”. You can Start and Stop the service manually by the right click popup menu shown below.



3. Verify that AgcClS is allowed to communicate through Windows Defender Firewall. Run the windows “**Allowed Apps and Features**” application and verify that the AGC Concurrent License Server is listed, and all associated check boxes are checked, as shown below:

