

# **GELECEK**

# **CT OPC UA SERVER**

OPC UA SERVER FOR  
CONTROL TECHNIQUES DRIVES

Supports OPC UA Data Access Profile Version 1.02

## **GETTING STARTED MANUAL**

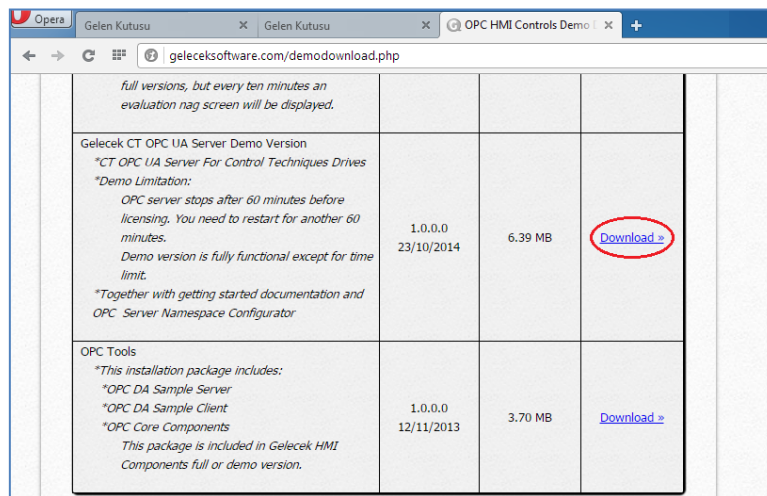
**gelecek software**

[www.geleceksoftware.com](http://www.geleceksoftware.com)

Last Update : 28.10.2014

## Step 1: Download Gelecek CT OPC UA Server Installer

- Visit our official website <http://geleceksoftware.com> and download Gelecek CT OPC UA Server Installer in downloads page.



## Step 2: Check .NET Framework version in your system

- To run Gelecek CT OPC UA Server, .NET Framework version 3.5 (or higher) must be installed on your computer. If you have lower version, please install version 3.5 or newer.

## Step 3: Install Gelecek CT OPC UA Server

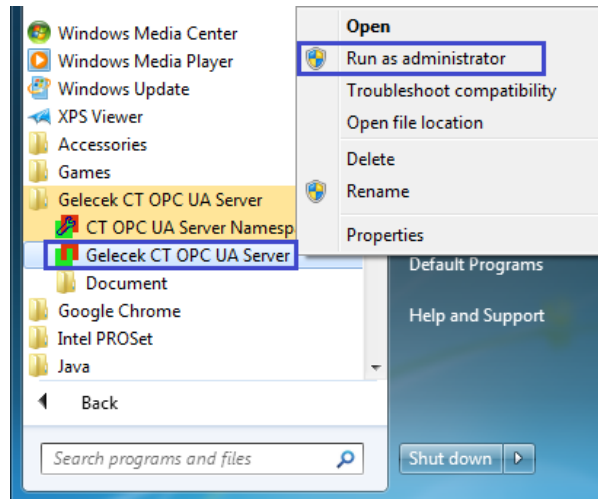
- Run Gelecek CT OPC UA Server Installer.exe after extracting .zip file and then install it.

## Step 4: Create a namespace file

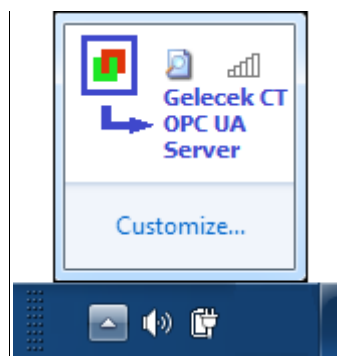
- Namespace file is list of parameters that OPC server uses to communicate with drives. For detailed information refer to : [Getting Started CT OPC UA Server Namespace Configurator.pdf](#)
- For testing, you can use test namespace files comes with install package, "Test Namespace File for TCP-IP" or "Test Namespace File for CT-RTU".

### Step 5: Run Gelecek CT OPC UA Server as administrator

- For first use, right-click Gelecek CT OPC UA Server on start menu and run as administrator. To change server settings, you should run server as administrator.

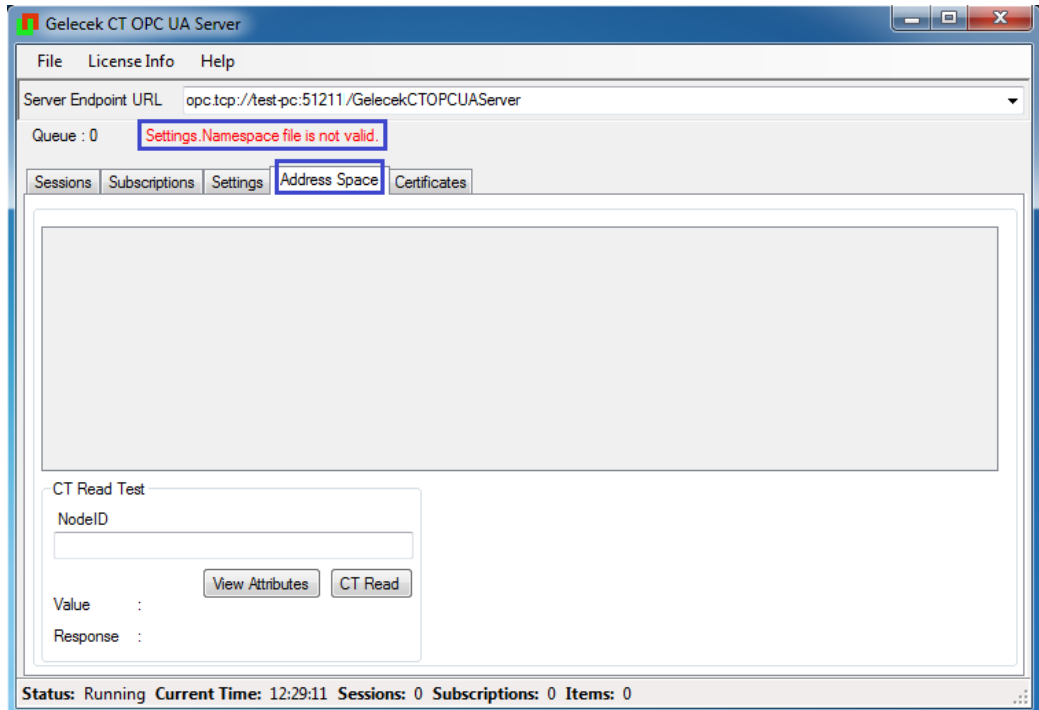


- Server will run without user interface. To open user interface double-click tray icon.

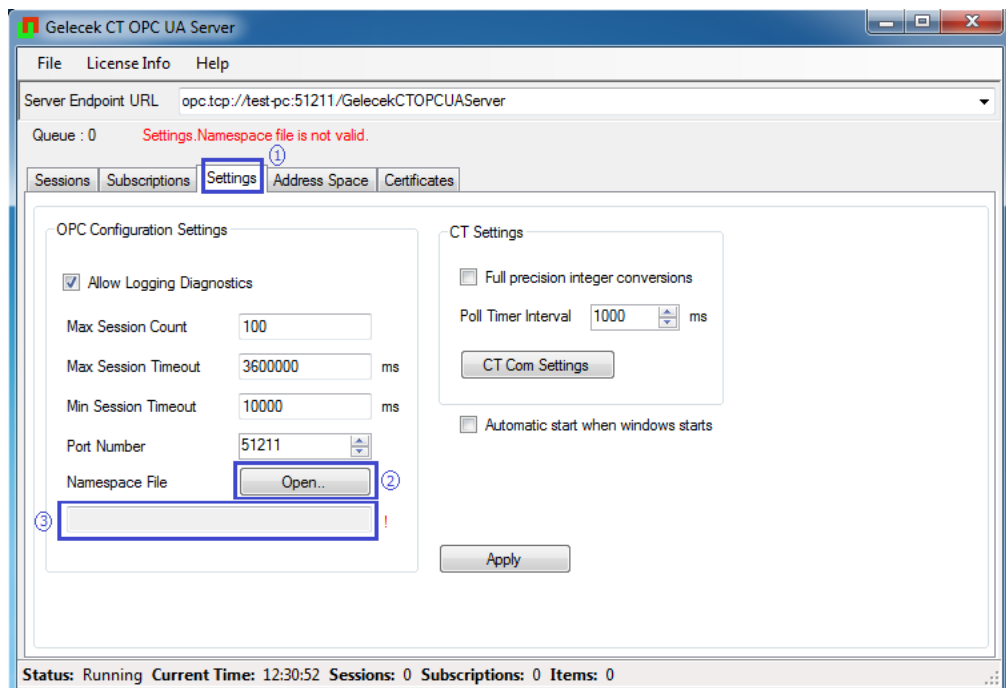


## Step 6: Load a valid namespace file

- When you first start OPC server, you will see "Setting.Namespace file is not valid." warning. You need to load a namespace file. Without a valid namespace file, Address Space is empty.

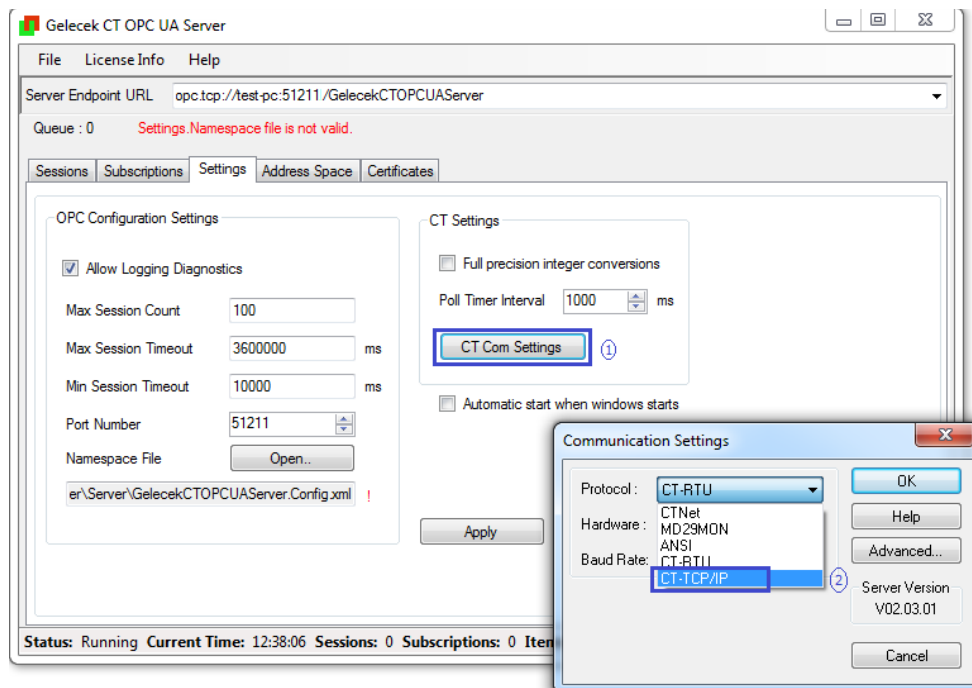


- To load a namespace file, click Open button and choose a file which you have previously defined using CT OPC UA Server Configurator in Step 3. Then you will see name of namespace file.

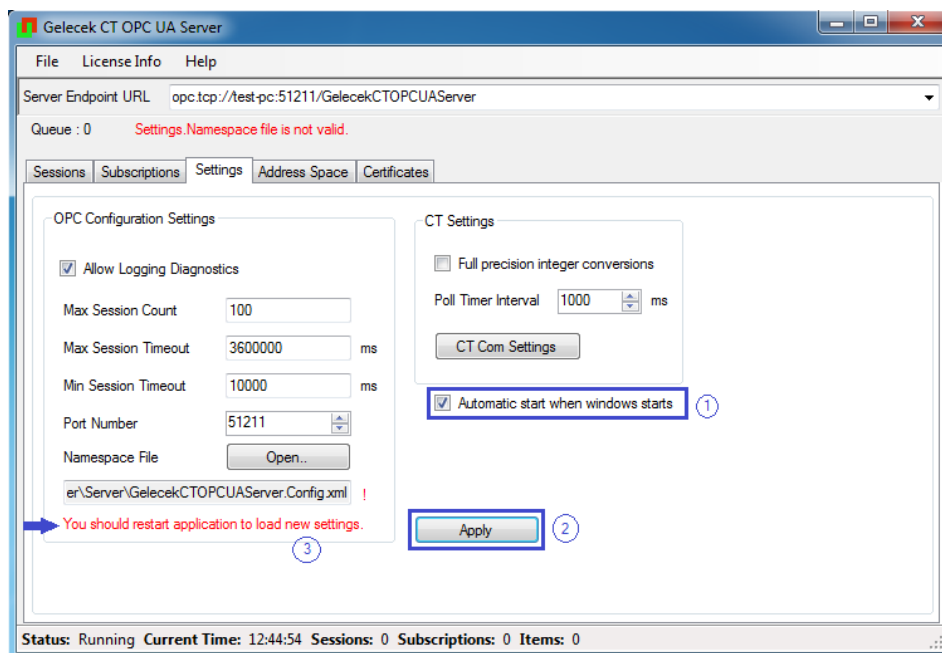


## Step 7: Select communication protocol

- Communication protocol should be same as protocol definition in namespace file.



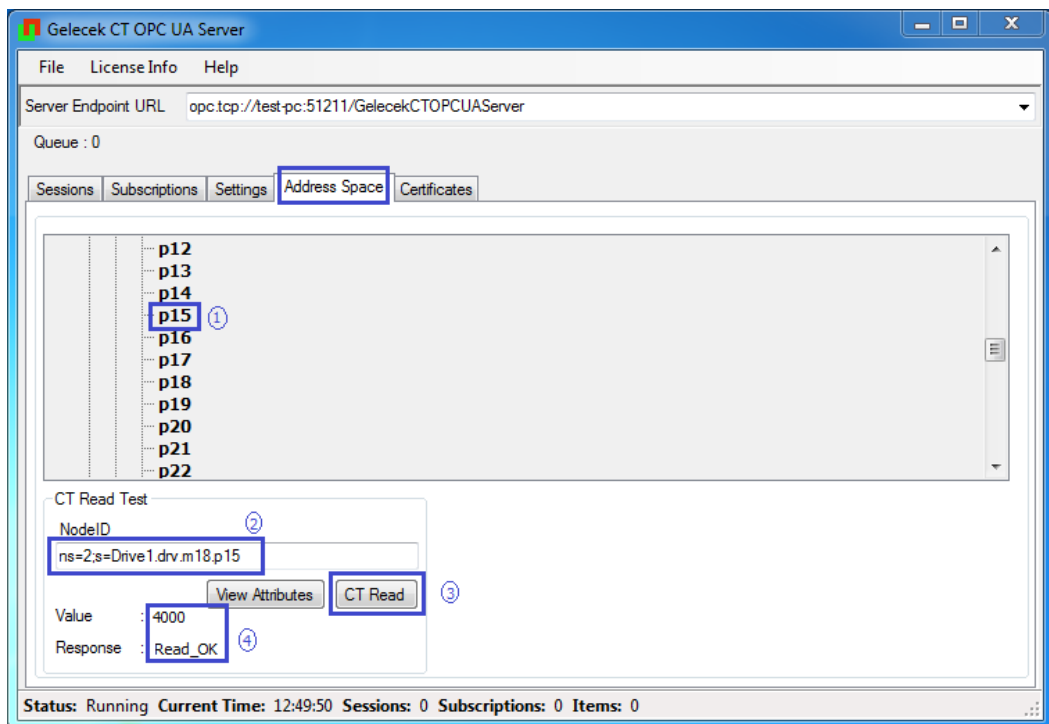
- If you want server runs automatically when Windows starts, check Automatic start when windows starts property. To save settings click Apply button.



- Restart server. Before restarting "You should restart application to load new settings." warning appears.

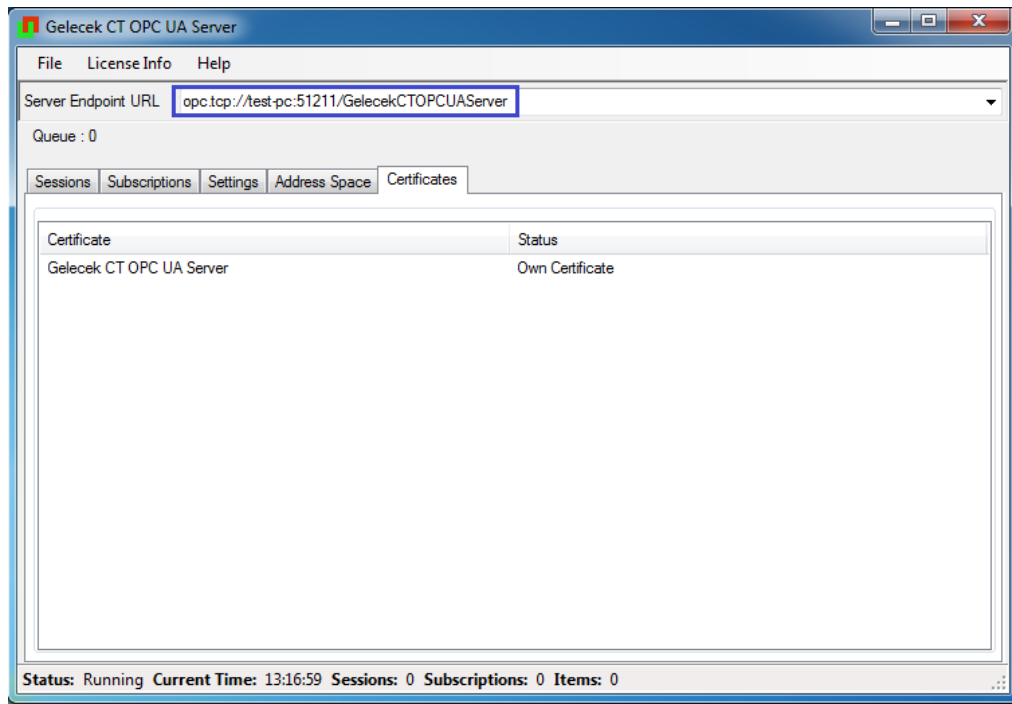
## Step 8: Testing of address space and communication

- After you restarted server, you will see the namespace tree in Address Space tab.
- To check communication between PC and drive, make physical connection of communication cables. If communication protocol is CT-TCP/IP, PC ethernet address should be compatible with drive address.
- Select a parameter from tree and click CT Read button to test communication between server and drive. If Response is "Read\_OK", server is ready to serve to any OPC UA client.



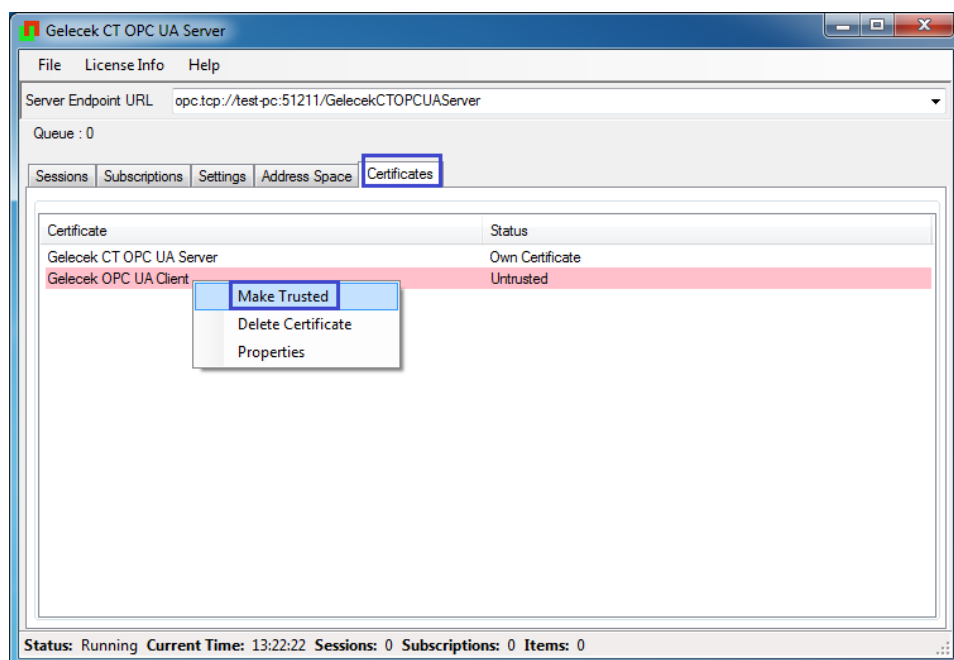
## Step 9: Server Endpoint URL

- When you want to connect to Gelecek CT OPC UA Server with any OPC UA client, you should use Server Endpoint URL as connection endpoint on client. This URL is generated by server according to system.
- Your OPC UA client will use this endpoint URL to connect to server.



## Step 10: Managing certificates

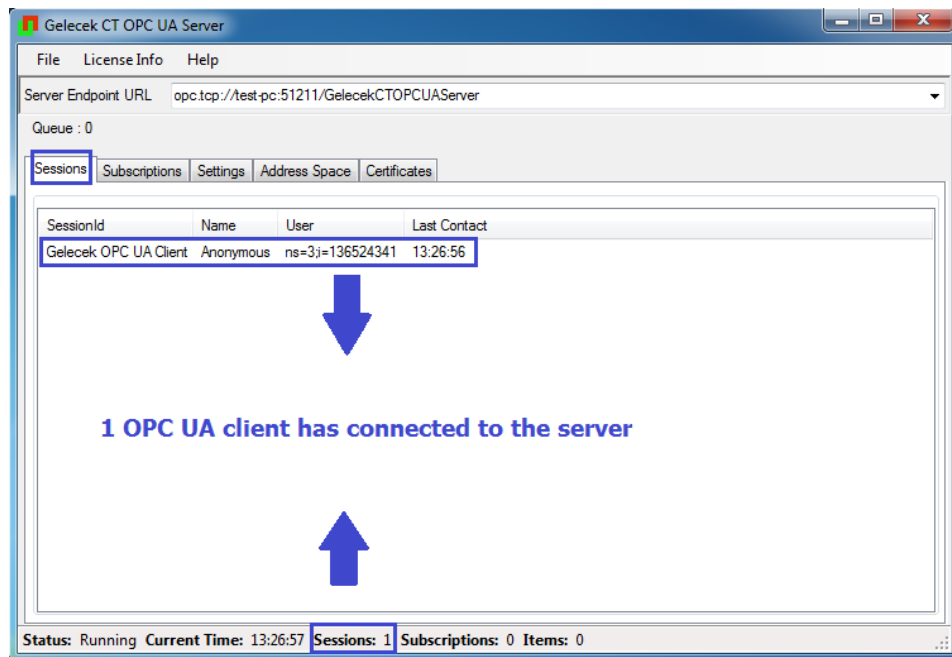
- When an OPC UA client sends first connection request to Gelecek CT OPC UA Server, client certificate is also delivered to server and defined as untrusted by server. Server does not let client connect to itself until this certificate is defined as trusted by user.
- At this point, you should define it as trusted. You can see client certificate in Certificates tab. To make trusted the client's certificate, right-click your client's (pink colored) certificate and click "Make Trusted". Client is trusted and allowed to connect to server from then on. And lastly, try to connect to server with UA client again, connection will be properly established.





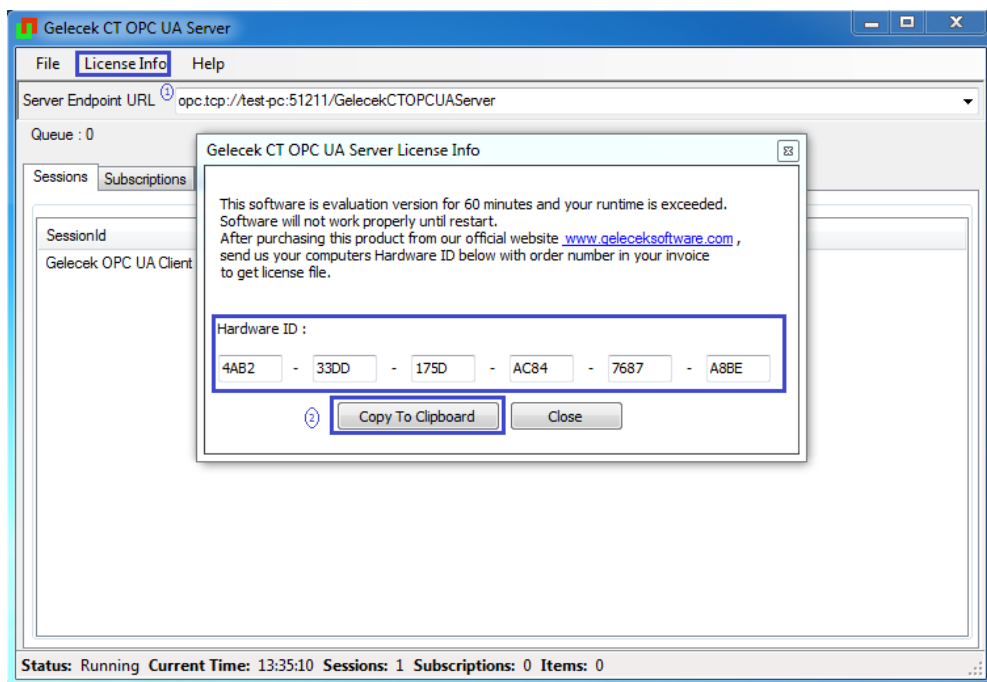
## Step 11: Confirmation of client – server connection

- When connection is established between client and server, you will see session information in Sessions tab and Sessions attribute in bottom.

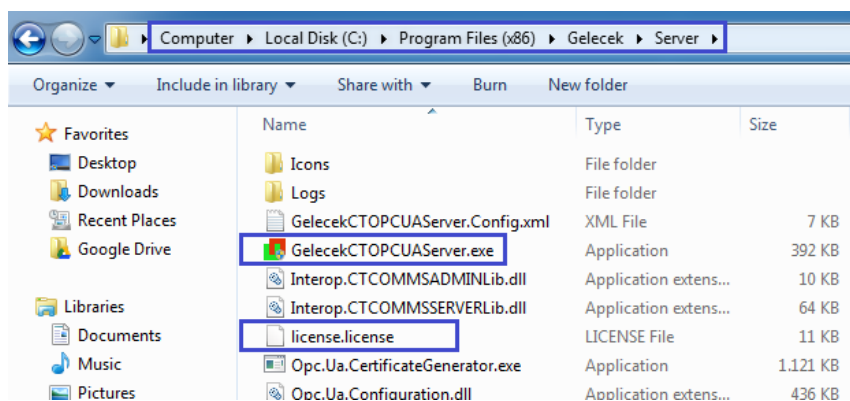


## Step 12: License Information

- OPC server stops after 60 minutes before licensing. You need to restart for another 60 minutes. Evaluation version is fully functional except for time limit.
  - For licensing a license file is needed.
  - To get license file :
1. Buy license from our website, note your order number.
  2. Read your computers Hardware ID.



3. Send us Hardware ID and order number by e-mail.
4. We will send you a license file. This license file is created for your computer, and doesn't run on any other computer.
5. Put the license file to folder where "GelecekCTOPCUAServer.exe" file is located.



6. Restart server.
7. Check license information.