

AnaliteX TEM Server

EDT/Collect controls your microscope mainly through the EMControl plug-in (Gatan). However, some functionalities that are not implemented in the EMControl will be controlled through the TEM server of AnaliteX. Therefore, the TEM server should be launched when you want to collect the data.

Note: The TEM server requires Microsoft .NET Framework 4 or 4.5.

Installation

The TEM-Server folder contains two folders, Server Program and Installation. The Server Program folder contains a TEM server (AnaliteX.TEM.Server.exe) and related DLLs. The Installation folder includes an Inatall TEM server.pdf (this document) and some sample config files (AnaliteX.TEM.Server.exe.config) in the TEM Server Config folder.

The TEM server is simply installed into the TEM PC by copy-and-paste of all the files in the TEM-Server folder to the folder under your user name, say "C:\\Users\\<USER NAME>\\TEM-Server."

Configuring TEM server

In order to configure the TEM server, launch the TEM server (AnaliteX.TEM.Server.exe). Then, the following window will appear:



One needs to “**Allow access**” (only starting for the first time). This will create the folder with **NO** configuration file:

"C:\\Users\\<USER NAME>\\AppData\\Local\\AnaliteX\\AnaliteX.TEM.Server\\1.0\\"

where <USER NAME> is the current Windows user name. Please note that "AppData" folder is in default set to be hidden.

Close the program at this point. (You may have to end the process from the Windows Task Manager.)

Copy the configuration file "**AnaliteX.TEM.Server.exe.config**" from the **Installation** folder for the TEM server to the folder created above

Note: The config file in the installation folder is for JEOL 2100/2200. If your microscope differs from JEOL 2100/2200, you have to edit the config file accordingly as explained below. If you need a help to configure the TEM server for your microscope, please consult AnaliteX (not HREM Research).

The file "**AnaliteX.TEM.Server.exe.config**" specifies the settings of the TEM Server as follows.

Under the tag **<AnaliteX.TEM.Server.Properties.Settings>**

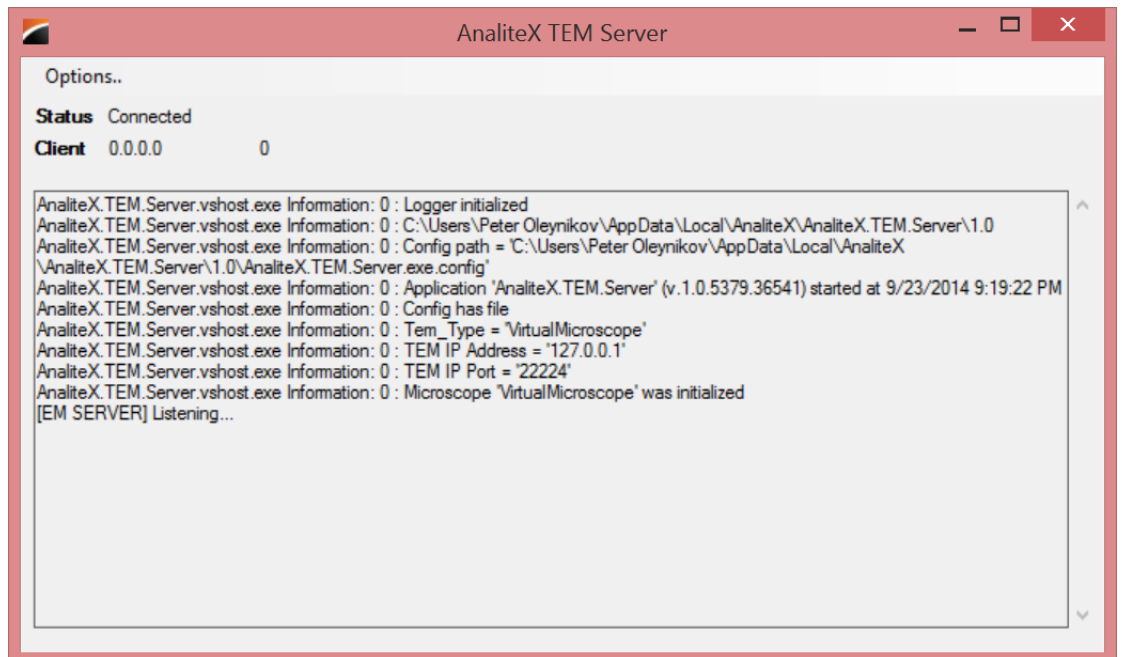
```
<setting name="Tem_Type" serializeAs="String">
  <value>JeolComTem</value>
</setting>
<setting name="TEM_IP" serializeAs="String">
  <value>172.17.41.2</value>
</setting>
<setting name="TEM_Port" serializeAs="String">
  <value>22224</value>
</setting>
```

Setting names and their meanings:

Setting name	
"Tem_Type"	This corresponds to the current TEM type. <value>JeolComTem</value> in case of JEOL 2100/2200. <value>JeolSerialTem </value> in case of JEOL JEOL 2010/3010/4010. <value>FeiMicroscope</value> in case of FEI microscope.
"TEM_IP"	The IP address to communicate with DM plugin for JEOLCommand interface for JEOL 2010/3010/4010 (Tem_Type = JeolSerialTem). Otherwise, can be initialized as 127.0.0.1 .
"TEM_Port"	This is the port number that TEM server will listen and communicate with 3 rd party software. (Any reasonable unoccupied value from the range 0-65535) Currently this is 22224.

Running the TEM server

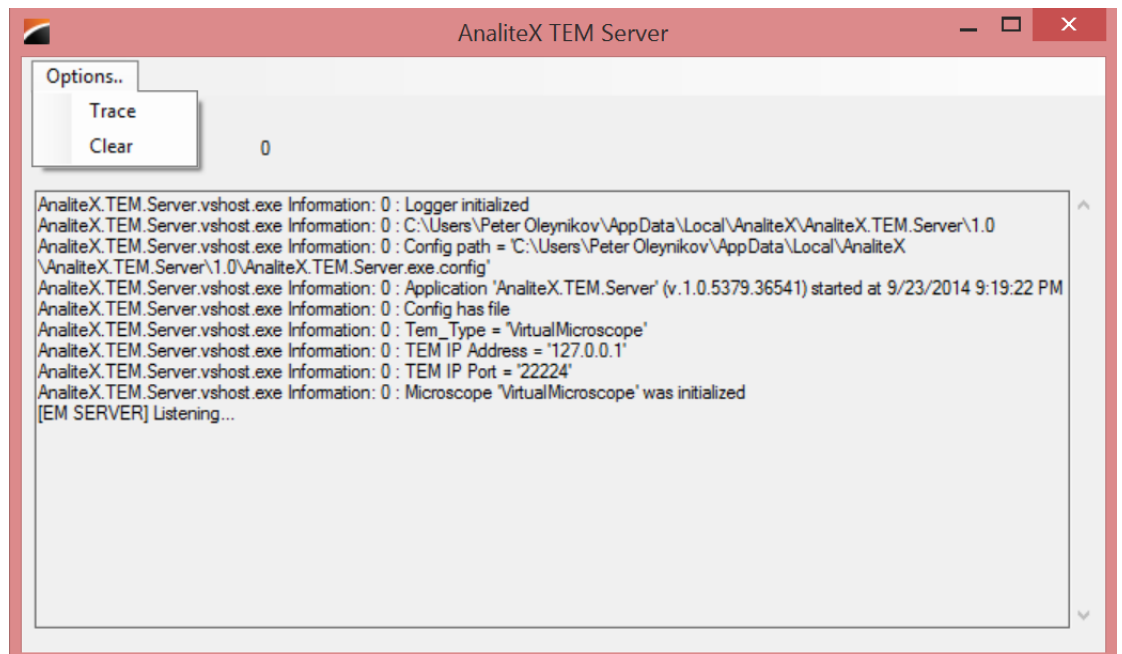
When you run the TEM server after configuration, the main window of the program is as follows (When the window is not opened, the old TEM server process may be still running. Then, end the process from the Windows Task Manager, and launch the TEM server again.)



The **Status** shows if the server is connected.

The **Client** line shows who is connected to the server (IP/port).

Options menu contains only 2 items:



Selecting the **Trace** menu item will switch **ON/OFF** the tracing of all commands. Default value is **OFF**.

NOTE: the trace will be displayed in the window and can be long which will SLOW DOWN the server if the number of trace lines will be large. It is not recommended to switch it ON unless for debugging purposes.

Selecting the **Clear** menu item will clear the trace lines log.

Minimizing the TEM server will put it into the Windows tray.

