How to configure the Windows 7 system setting for OPC Client to connect with the WinPAC/ViewPAC?

Applies to :

Platform	*OS version*	*NAPOPC_CE5 version*
PC	*Windows 7 32/64 bits Professional SP1*	*NAPOPC_CE5 v2.20*

When connecting OPC Client on the Windows 7 to the WinPAC/ViewPAC controller(Server side), user has to configure the Windows 7 system setting first. This FAQ is a configuration description for the OPC Client on Windows 7 32/64 bits Professional SP1 Operating System to connect to the WinPAC/ViewPAC, including the firewall, DCOM, local security policy… configuration.

The Steps:

1. **Installation**

   Install the NAPOPC_ST DA Server on Windows 7 32/64 bits Professional SP1 OS.

2. **Firewall Configuration**

   Configure the firewall for the OPC Client-side(PC) on Windows 7 32/64 bits Professional SP1 OS.

3. **DCOM Configuration**

   Configure the DCOM for the OPC Client-side(PC) on Windows 7 32/64 bits Professional SP1 OS.

4. **Local Security Policy Configuration**

   Configure the local security policy for the OPC Client-side(PC) on Windows 7 32/64 bits Professional SP1 OS.

5. **WinPAC/ViewPAC Configuration**

   Configure the DCOM for the OPC Server-side on the WinPAC/ViewPAC.

6. **Connect to PAC Server**

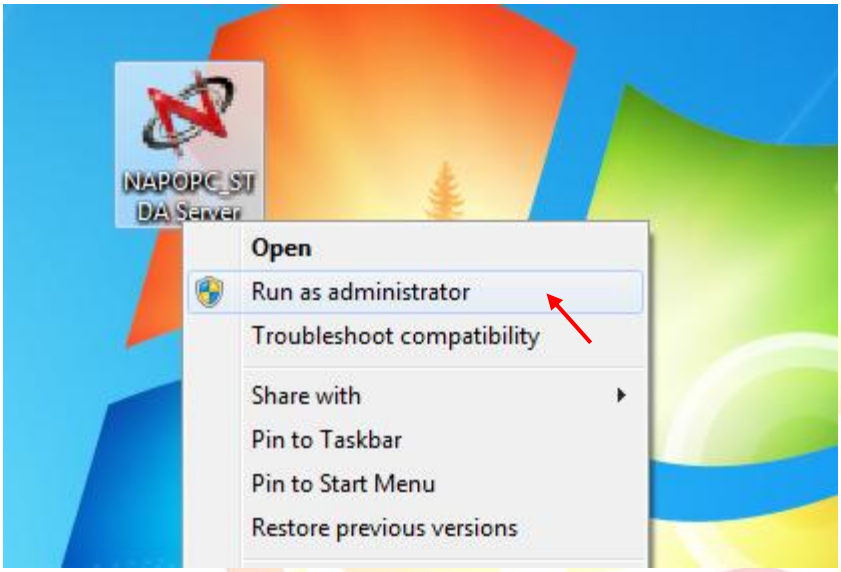
   At last, connect the OPC Client on the Windows 7 to the WinPAC/ViewPAC OPC Server.

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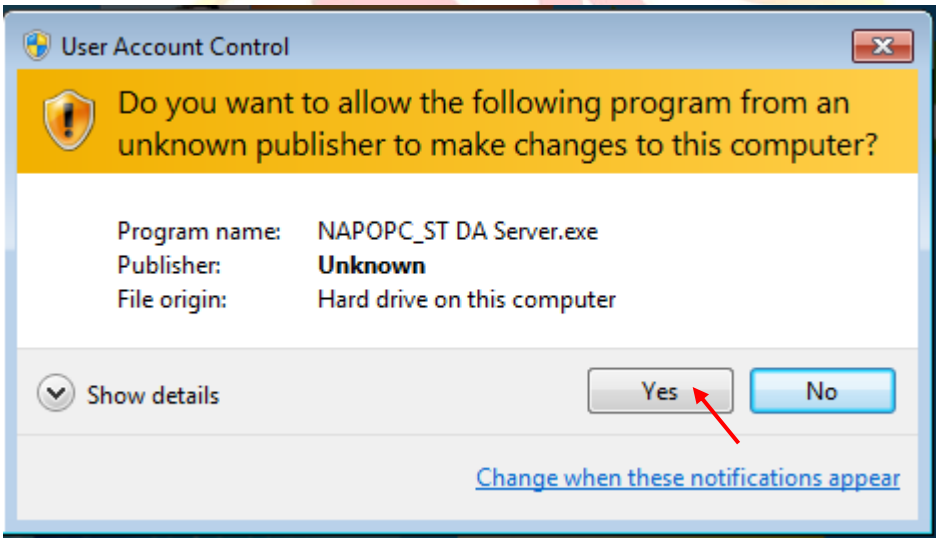
1. Installation

Step 1:

a. Use mouse to right-click on the installing program icon of NAPOPC_ST DA Server, select the item 'Run as administrator'.



b. Click on 'Yes' to follow the installation steps.



Note: If need to download the NAPOPC_ST DA Server for PC side, please go to website: http://opc.icpdas.com/download.htm#PC

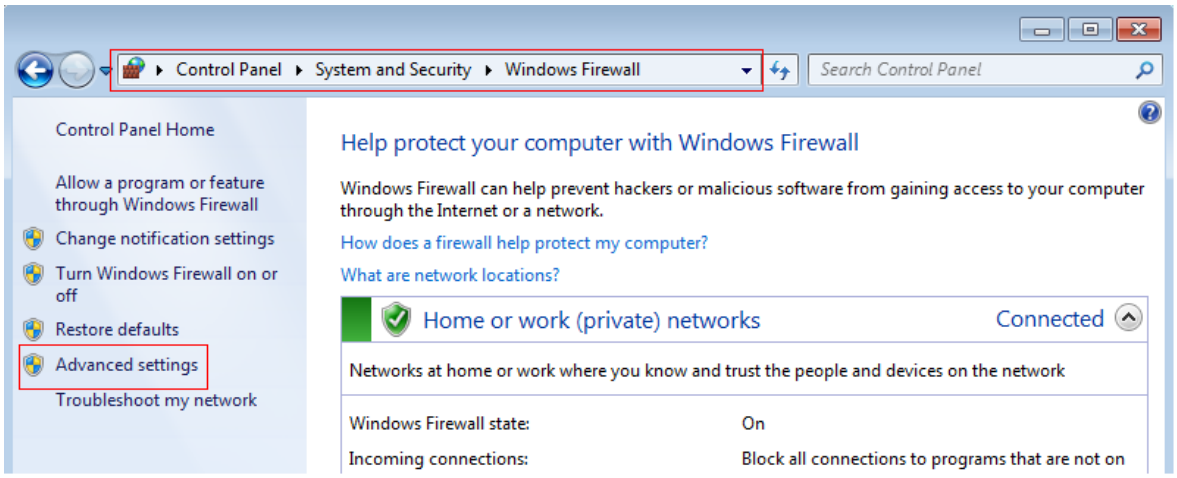
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2. Firewall Configuration

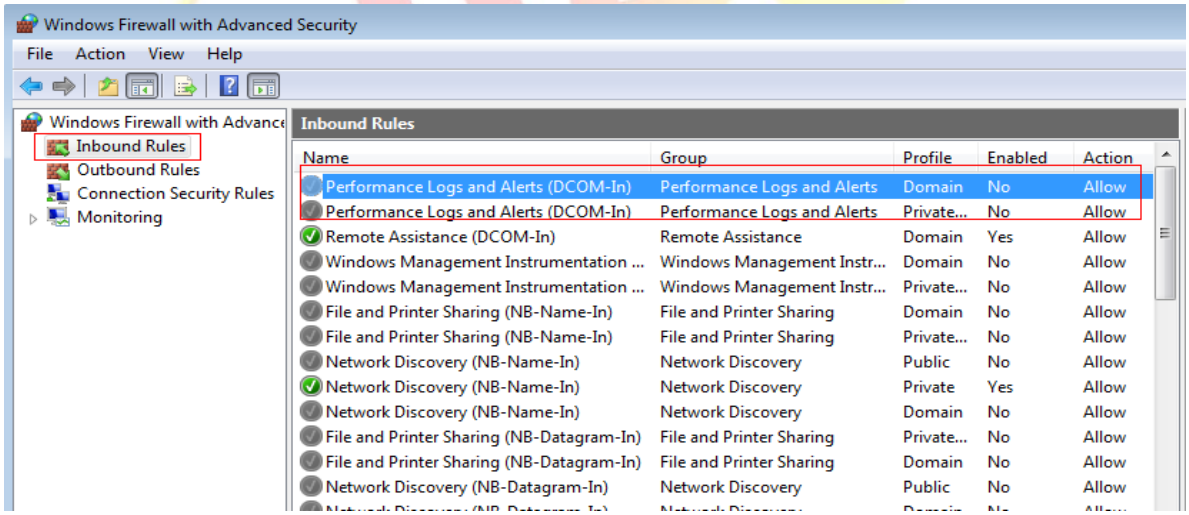
2.1 Setting the firewall (Client-side)

Step 1:

a. Set up DCOM Firewall: Click ‘Start’ > ‘Control Panel’ > ‘System and Security’ > ‘Windows Firewall’ > ‘Advanced settings’

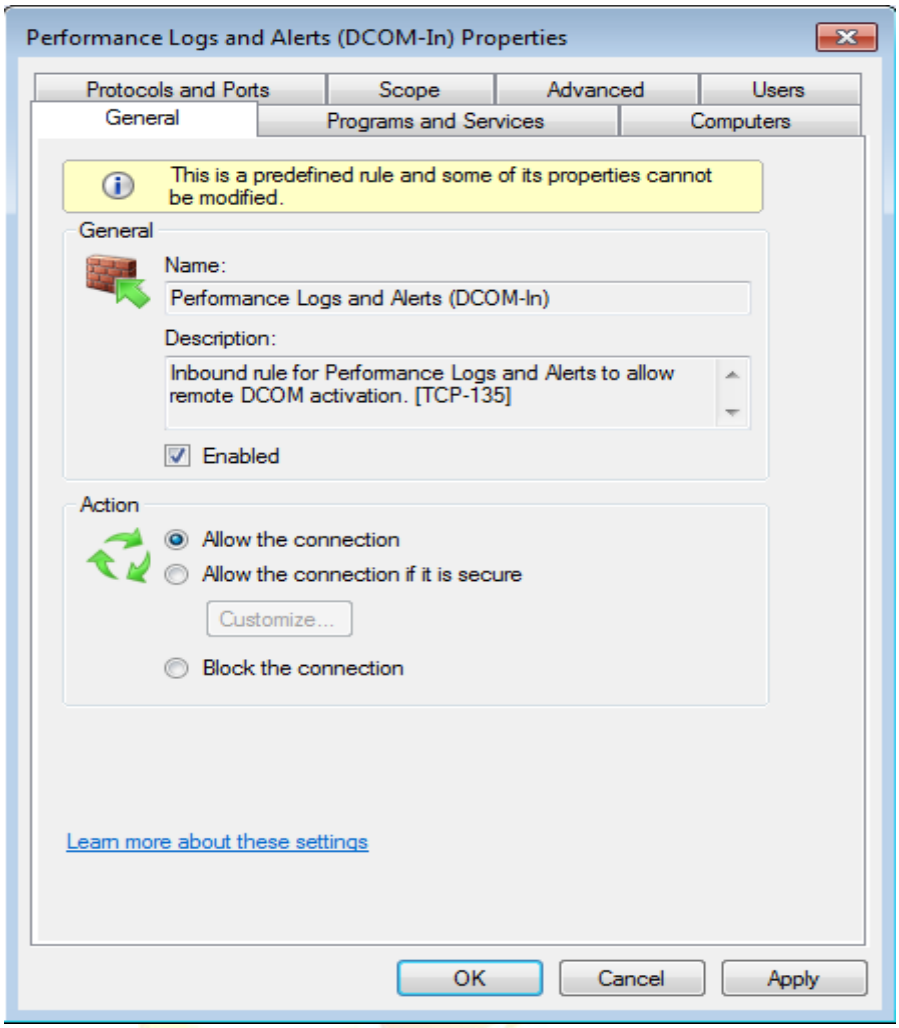


b. Select ‘Inbound Rules’ on the left side, then select ‘Performance Logs and Alerts (DCOM-In)’ on the right side.



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c. Double click on ‘Performance Logs and Alerts (DCOM-In)’ and set up the options as the picture below.



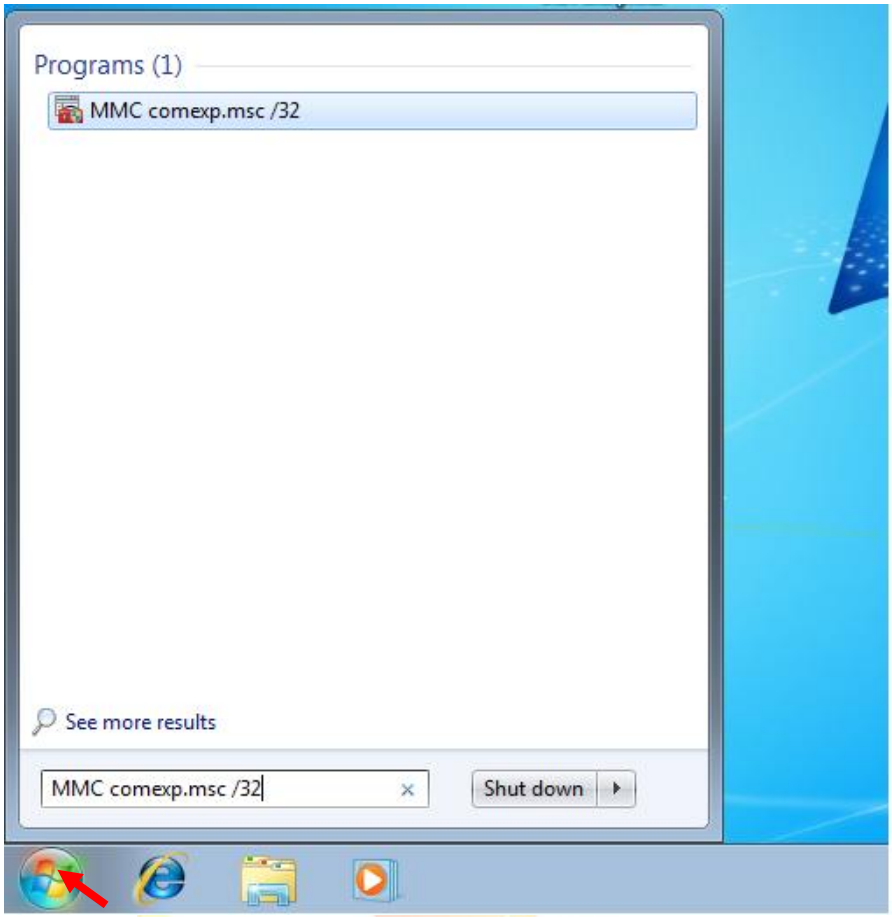
NOTE: User has to set up both profiles (Domain & Private…) of ‘Performance Logs and Alerts (DCOM-In)’.

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3. DCOM Configuration

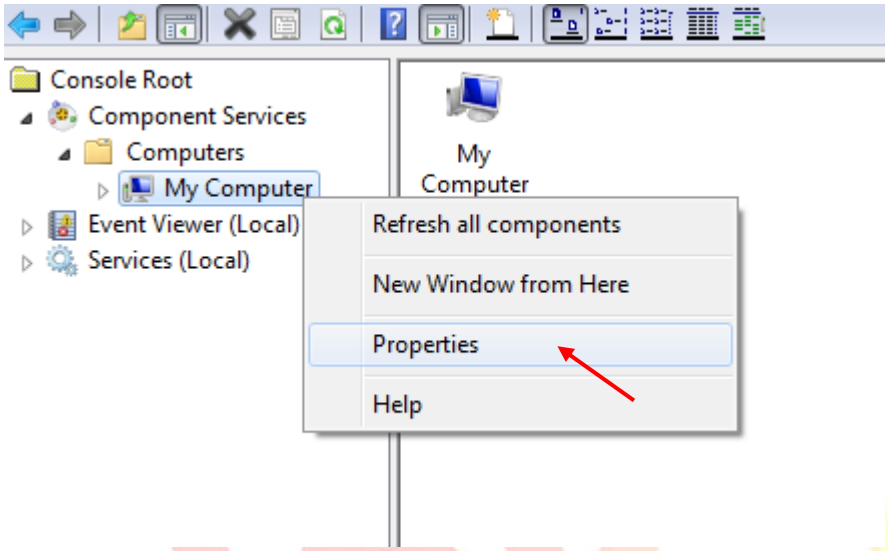
3.1 Setting the DCOM (Client-side)

Step 1: Click the ‘Start’, key in ‘MMC comexp.msc /32’, and then execute it.



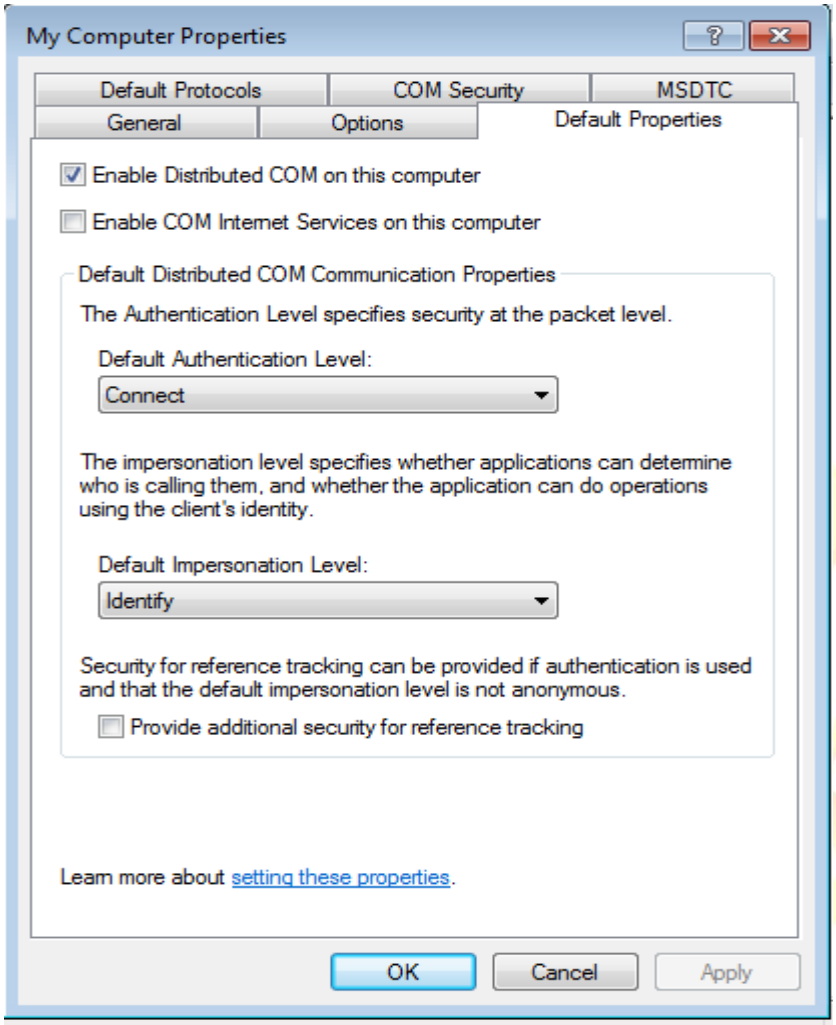
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Step 2: Click ‘Component Services’ > ‘Computers’ > ‘My Computer’, and mouse right-click to select the ‘Properties’.



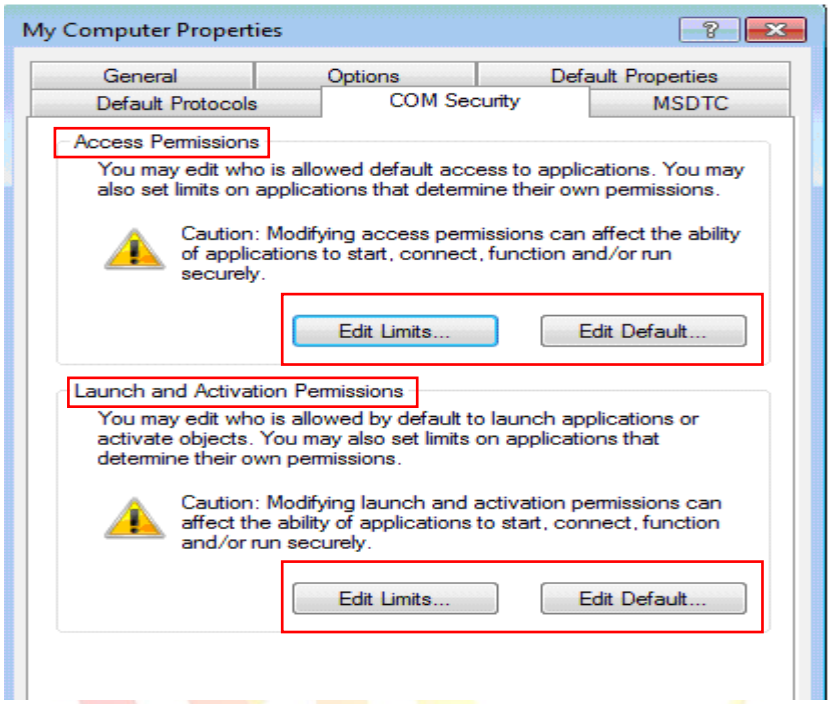
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Step 3: Click ‘Default Properties’ page, and set up the options as the picture below.

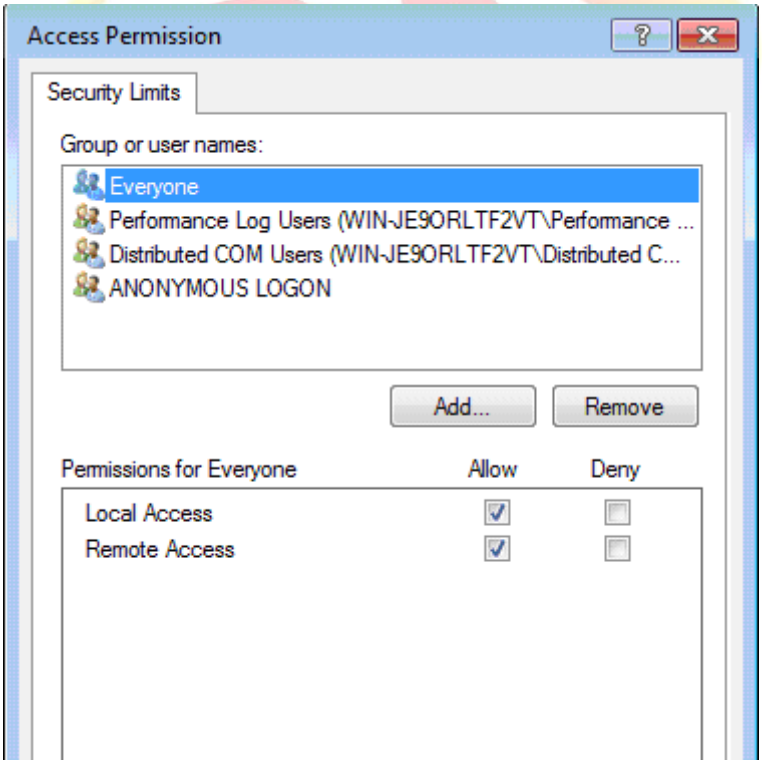


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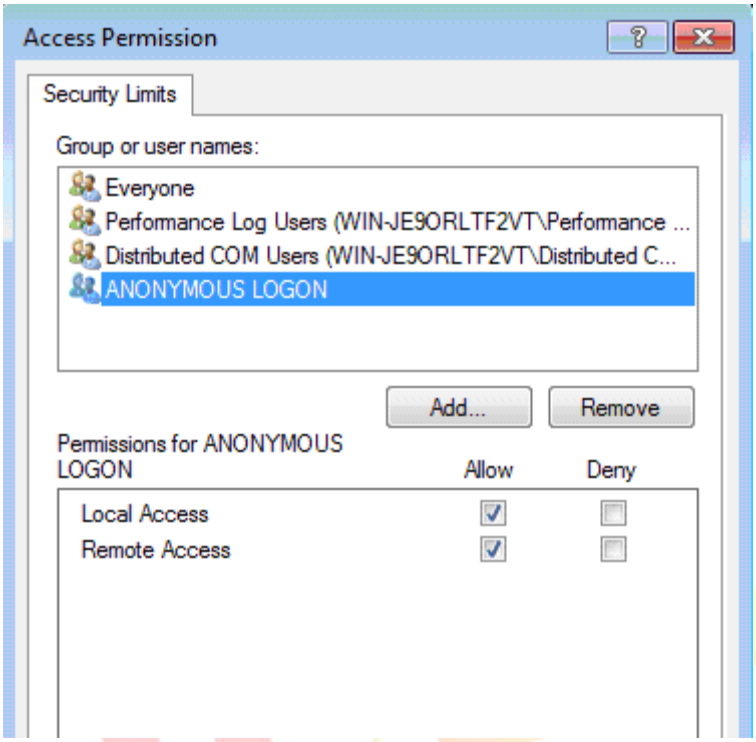
Step 4: Then Click the 'COM Security' page, and set up the security as the steps below.



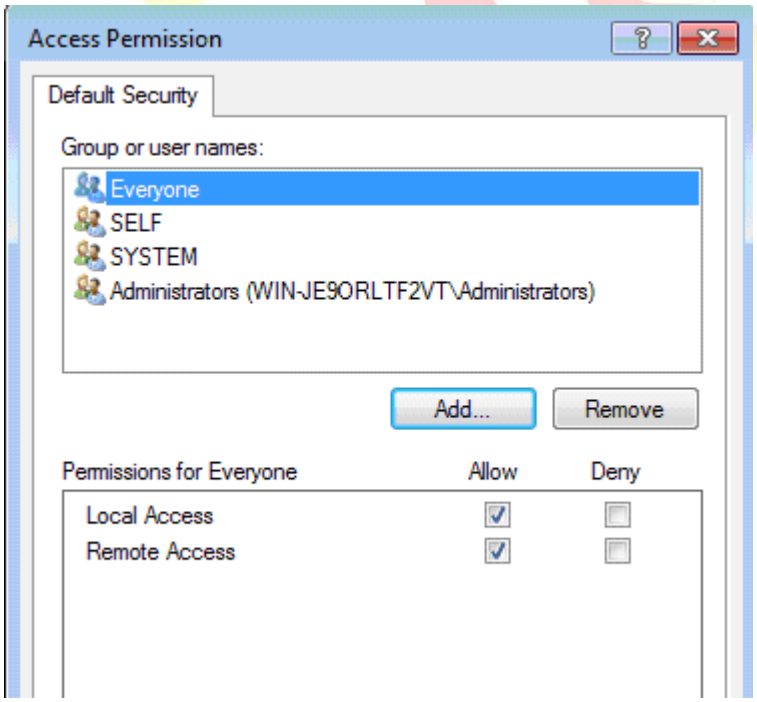
a. Set up 'Access Permissions' > 'Edit Limits' as blow. (If no 'Everyone' option, please add it.)



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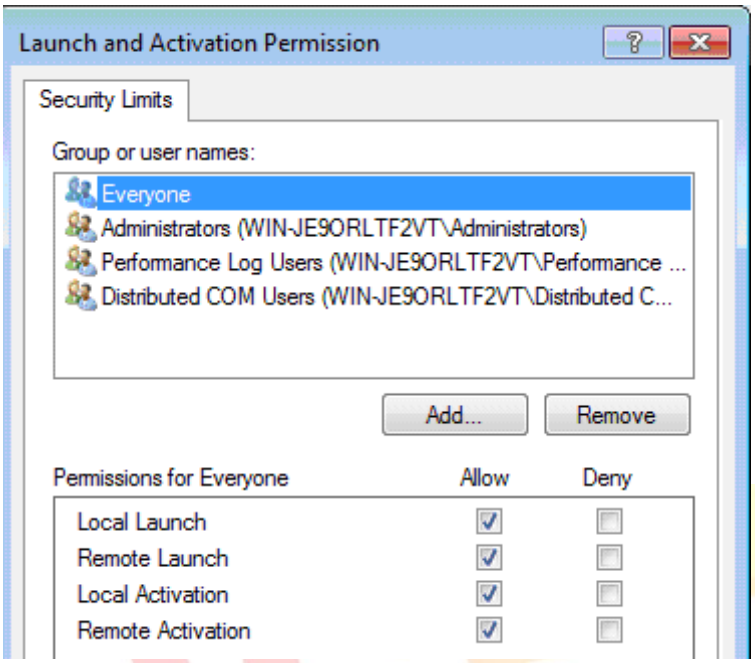


b. Set up ‘Access Permissions’ > ‘Default Security’ as below (if no ‘Everyone’ option, please add it.)

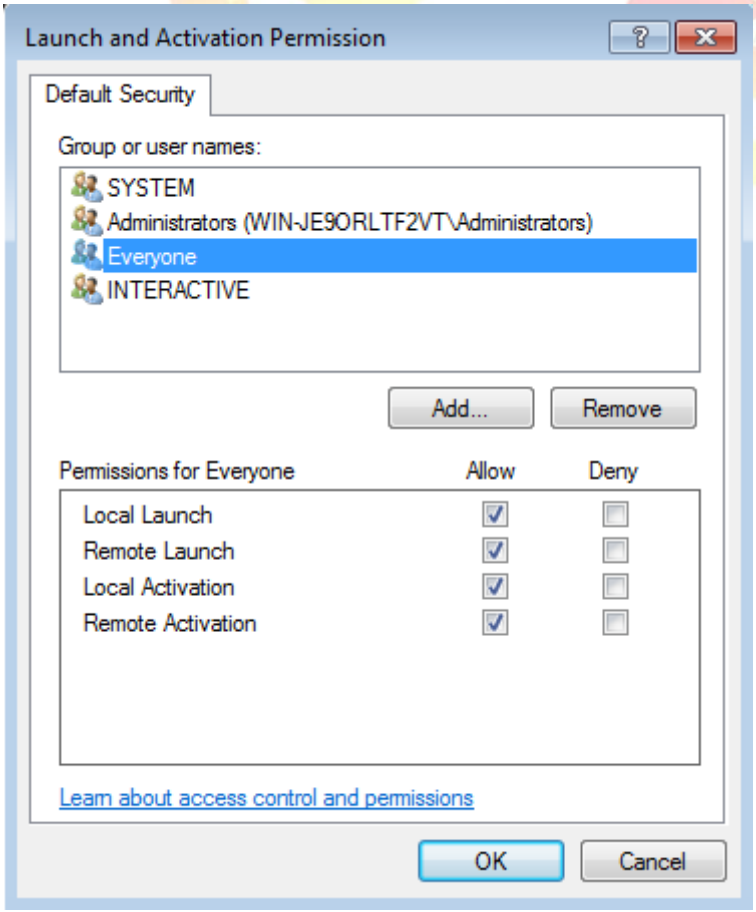


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c. Set up ‘Launch and Activation Permission’ > ‘Edit Limits’ as below (If no ‘Everyone’ option, please add it.)

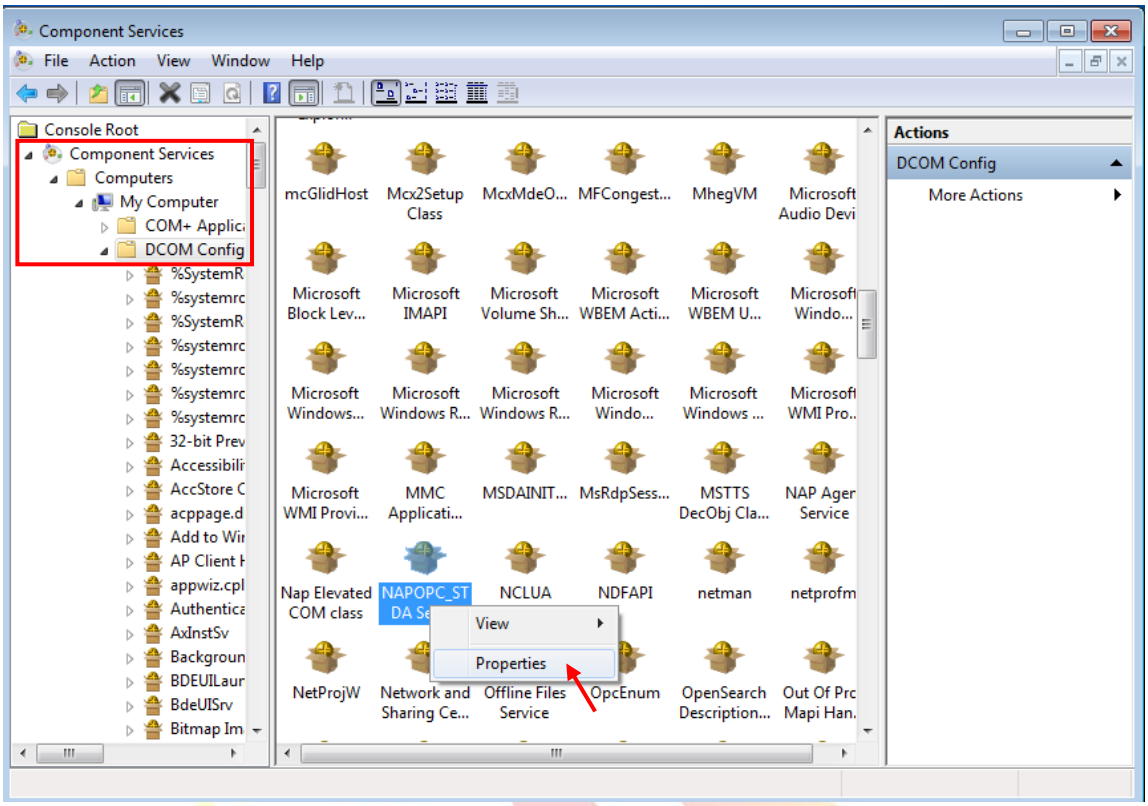


d. Set up ‘Launch and Activation Permission’ > ‘Default Security’ as below (If no ‘Everyone’ option, please add it.)

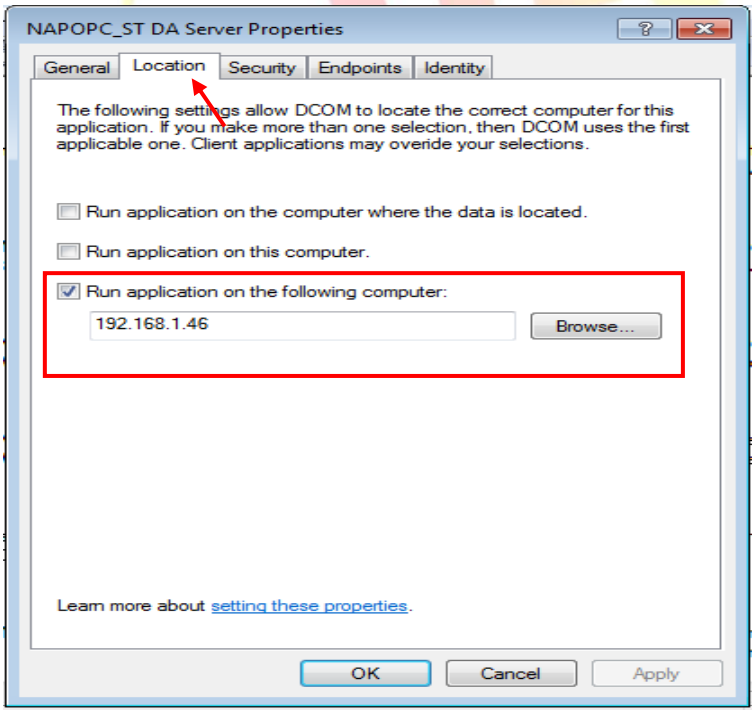


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Step 5: Click “My Computer” > “DCOM Config”, then right key click on “NAPOPC DA Server” and select “Properties”.

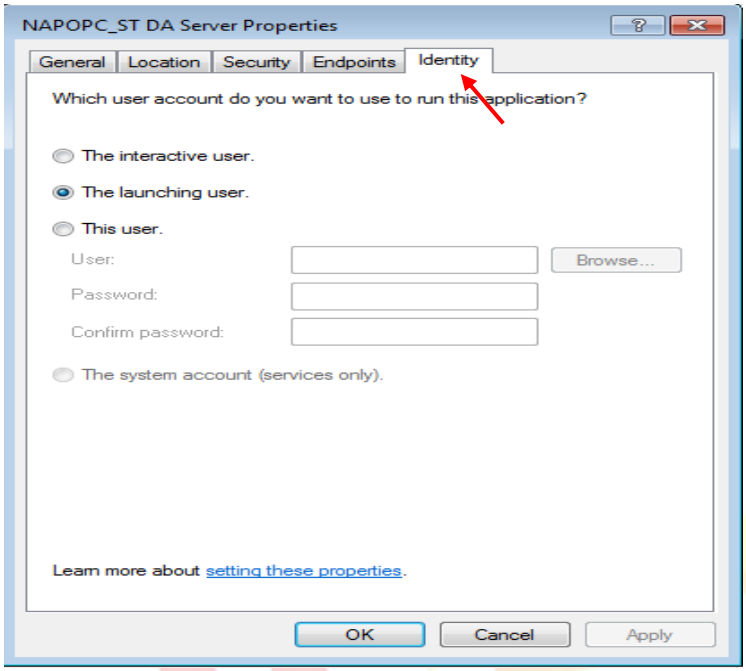


Step 6: Click "Location" tag, check the option “Run application on the following computer” and enter the IP address of the Server.



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Step 7: Click “Identity” tag to set up the user.



Description:

- **The interactive user**
  Click to specify that the application runs under the identity of the user who is currently logged on to the computer. This user's security credentials are used when the application is authenticated to access resources. (The Windows Desktop login is required, and the login account must be the same as the connecting account.)

- **The launching user**
  Click to specify that the application runs using the security context of the user who started the application (the launching user) so that the application can be authenticated in the domain. The launching user may be the same as the interactive user. (The application must be executed first, and the executing account must be the same as the connecting account.)

- **This user**
  Click to specify that the application runs using the security context of the specified user account so that it can be authenticated in the domain. Type the user name and password. (It can connect without login the Windows Desktop, and the application is executed and secured by the assigned user name and password.)

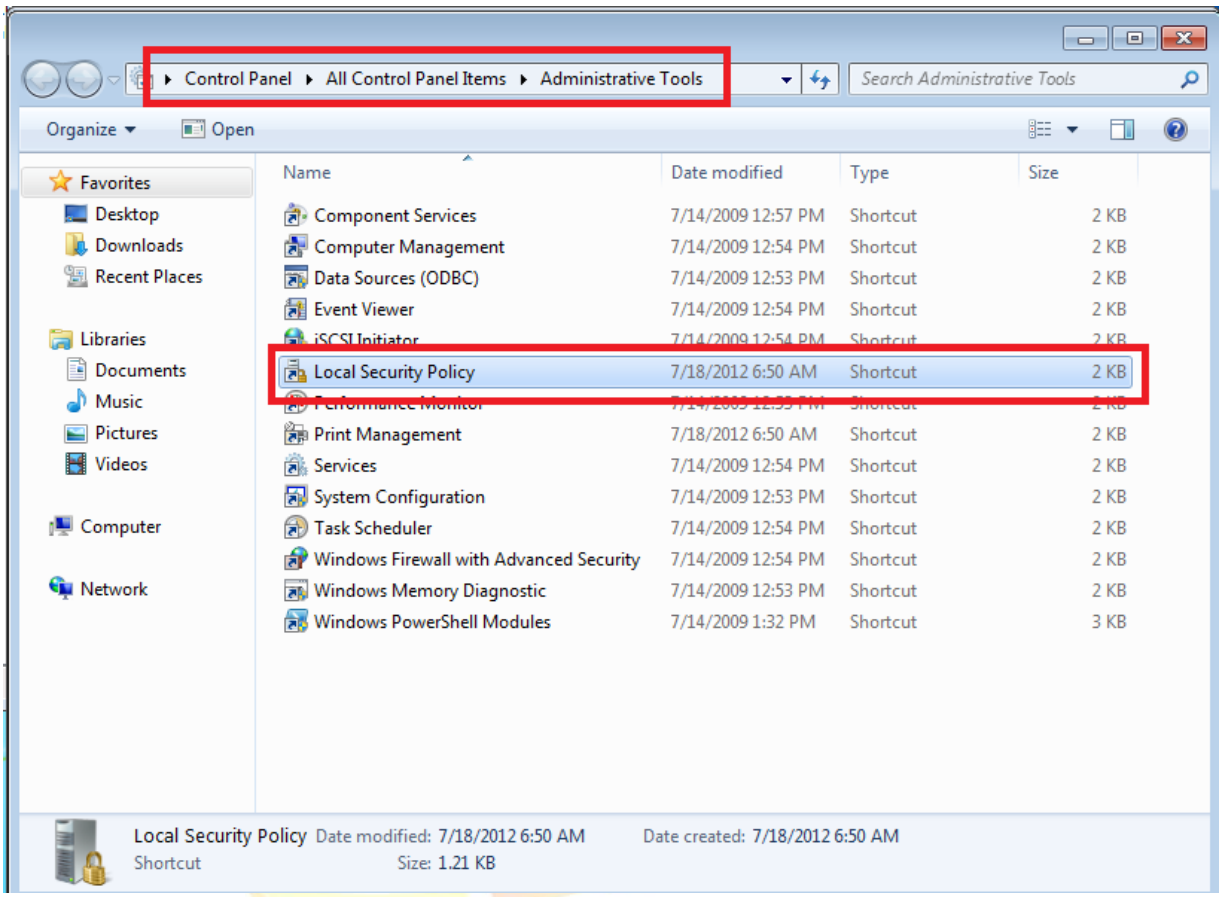
- **The system account**
  Click to specify that the server application runs using the security context of the built-in System account. This option is available only for applications that are installed as a service. (Not support)

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4. Local Security Policy Configuration

4.1 Setting the Local Security Policy (Client-side)

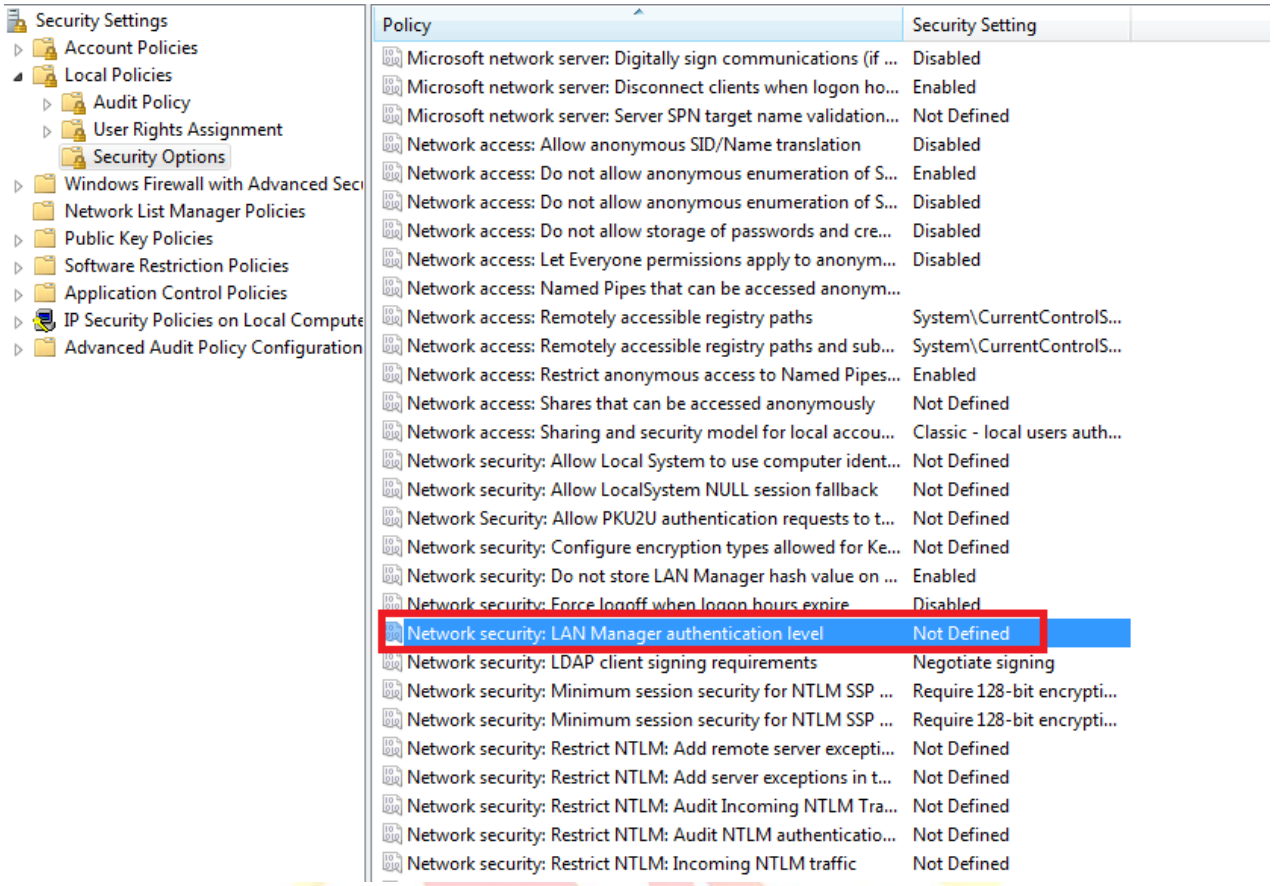
Step 1: Click ‘Start’ > ‘Control Panel’ > ‘System Management Tool’.
Select “Local Security Policy”



Step 2: Click ‘Security Settings’ > ‘Local Policies’ > ‘Security Options’

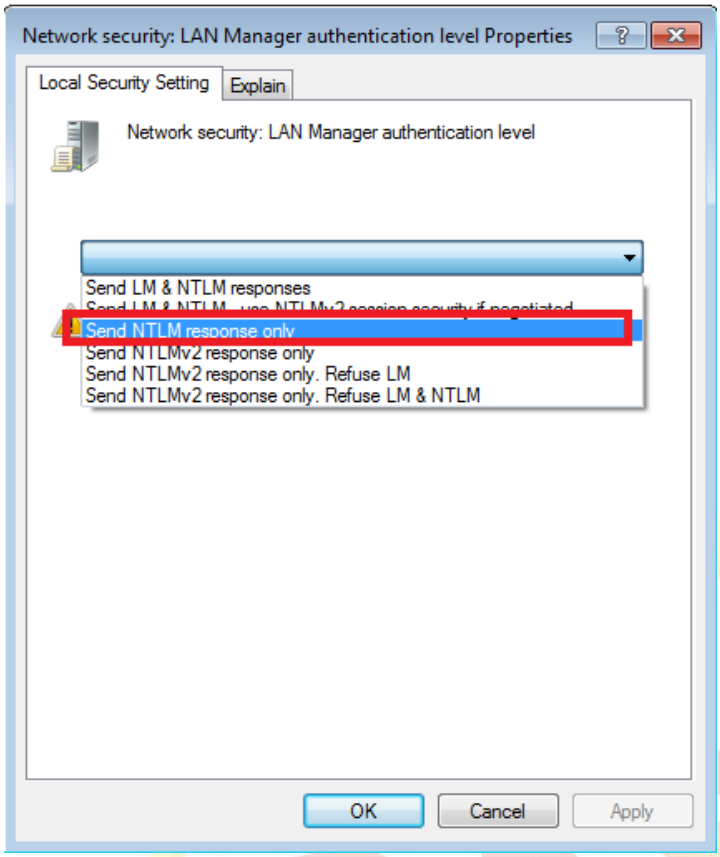
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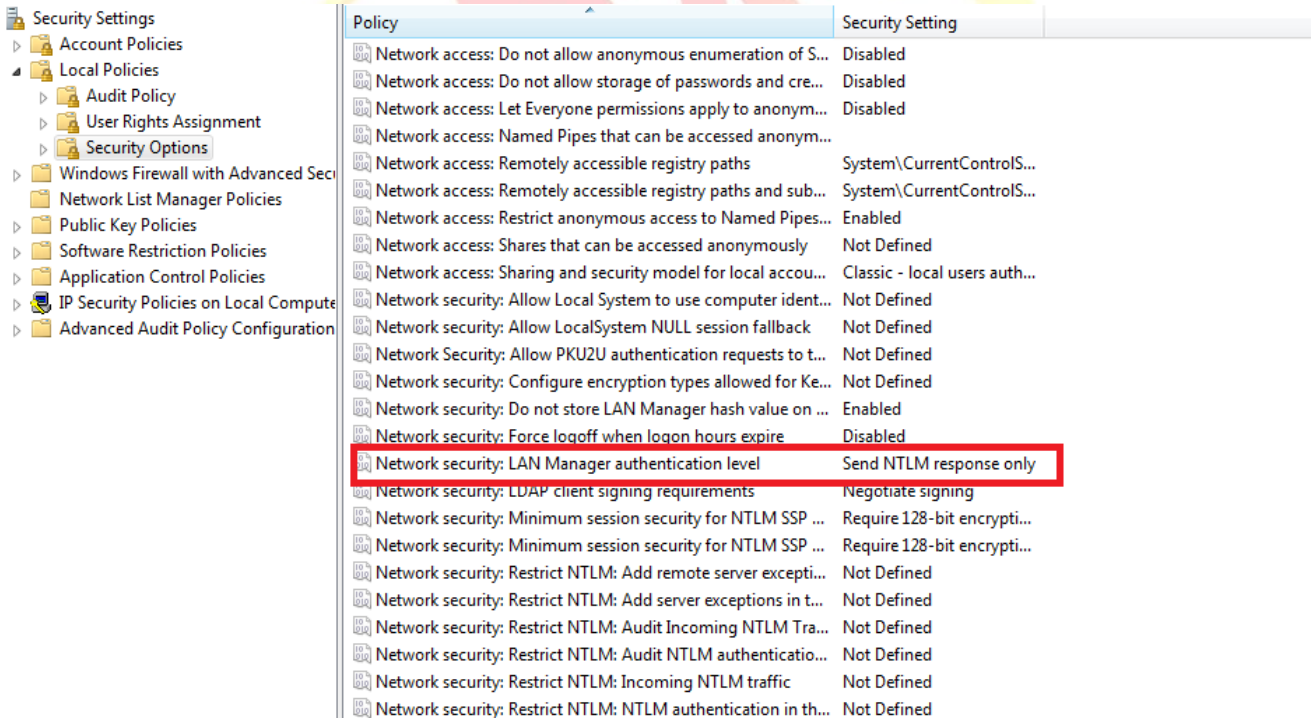
Select “Network security: LAN Manager authentication level”.



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Step 3: Set it to “Send NTLM response only”.





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5. WinPAC/ViewPAC Configuration

5.1 Set up the DCOM of the WinPAC/ViewPAC (Server side)

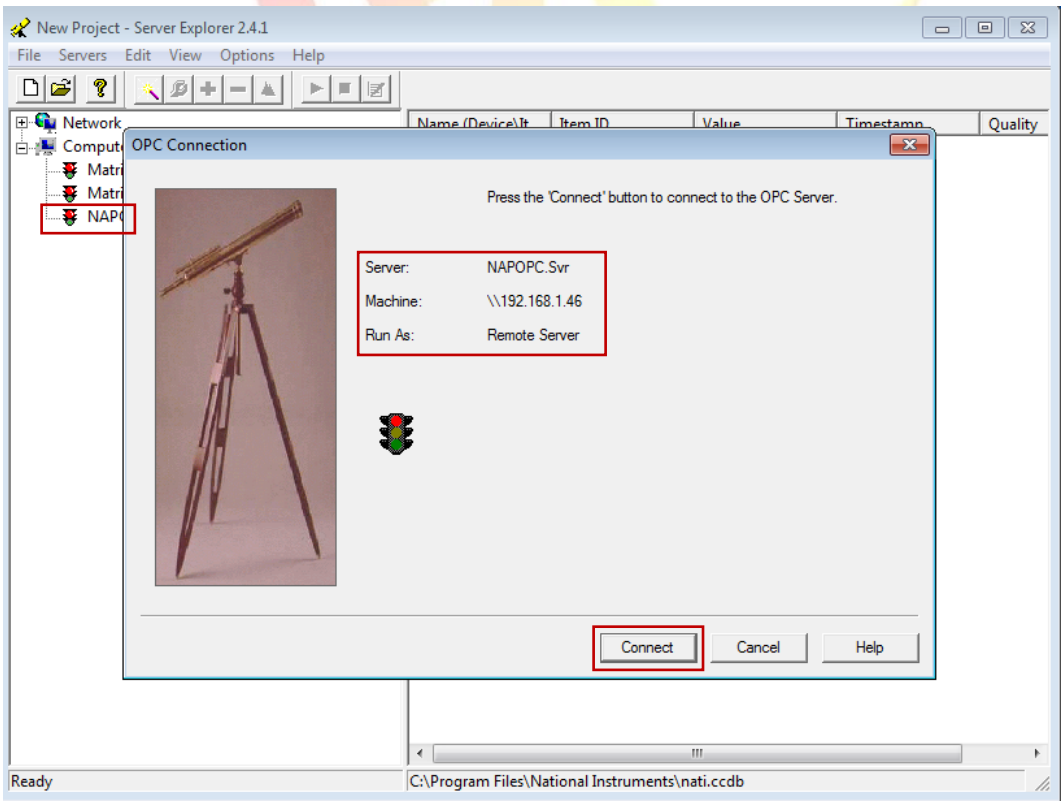
On the Server side, set up the DCOM of the WinPAC/ViewPAC. Please refer to the Section 3.2.1 “Set up the Server side (WinPAC)” in the user manual of NAPOPC_CE5.

The download website: http://opc.icpdas.com/download.htm#WinPAC

6. Connect to PAC Server

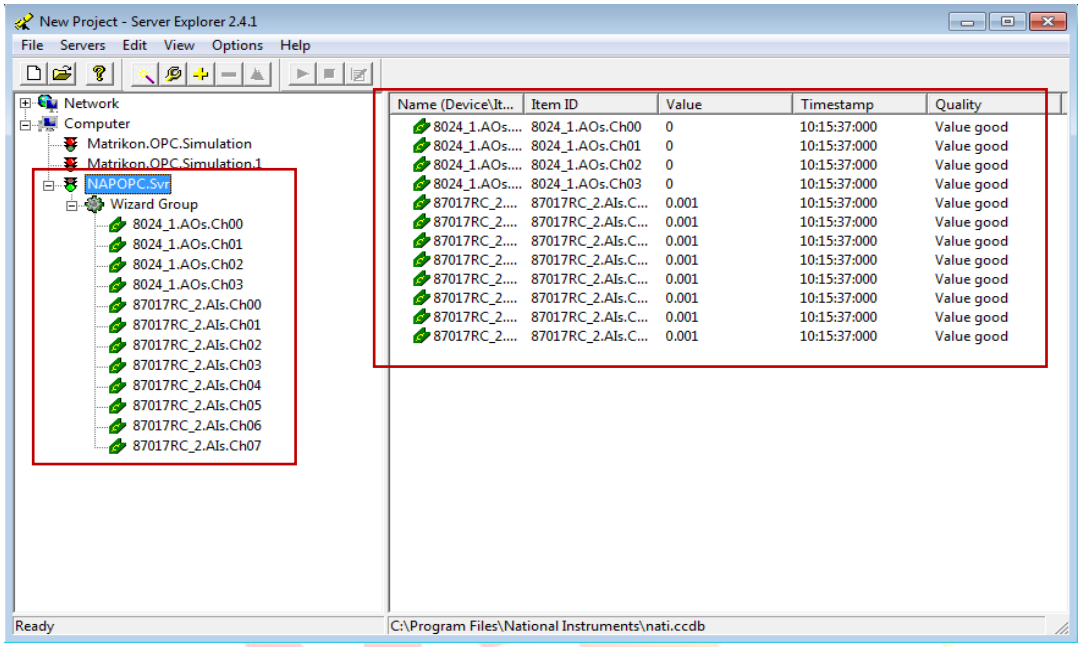
6.1 Run the “NI Server Explorer” (2.4.1) for the connection

Step 1: Select the Server name “NAPOPC.Svr” to connect (as the picture)



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Step 2: when the connection is ok, you can get the NAPOPC data of WinPAC/ViewPAC.



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