



OPC Support

Setting DCOM for OPC under Windows 7 (32/64 bit)

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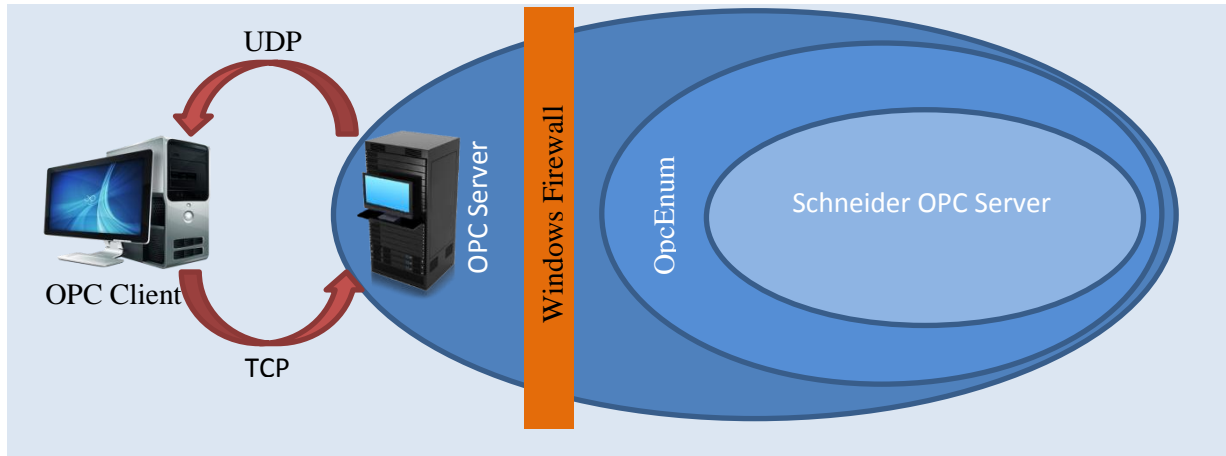
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1. Windows 7 (32/64 bit)configuration overview

This tutorial walks through the Schneider OFS 3.34 OPC Server DCOM configuration and security settings under Windows 7



- User access authorization control
- Windows firewall

The steps to securely configure the OPC Server are: first of all, setting the general DCOM protocol authorizations for the computer access (MyComputer) then create some exceptions on the firewall so the OPC client can access the OpcEnum which gives the list of the OPC servers running on the machine, and last, configure the DCOM access permissions for OpcEnum and the OPC server.

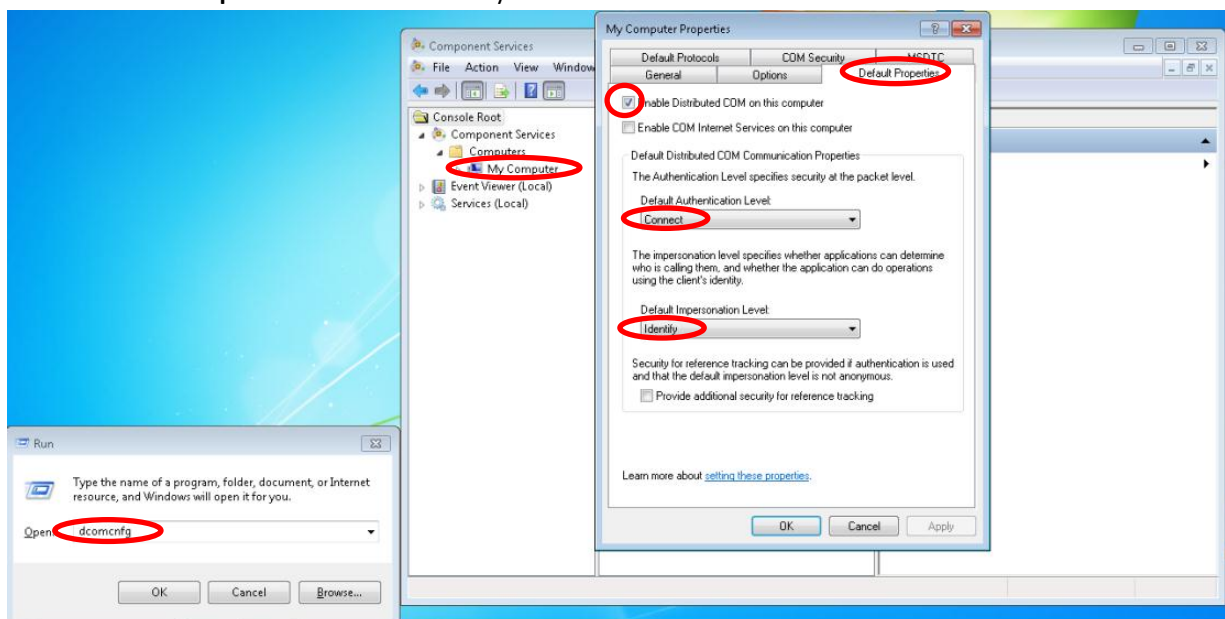
The steps described in this tutorial will not follow this order to make it shorter

2. OPC Server Settings

A. "MyComputer" settings

Managing the settings for the general access to the computer setting, users and permissions

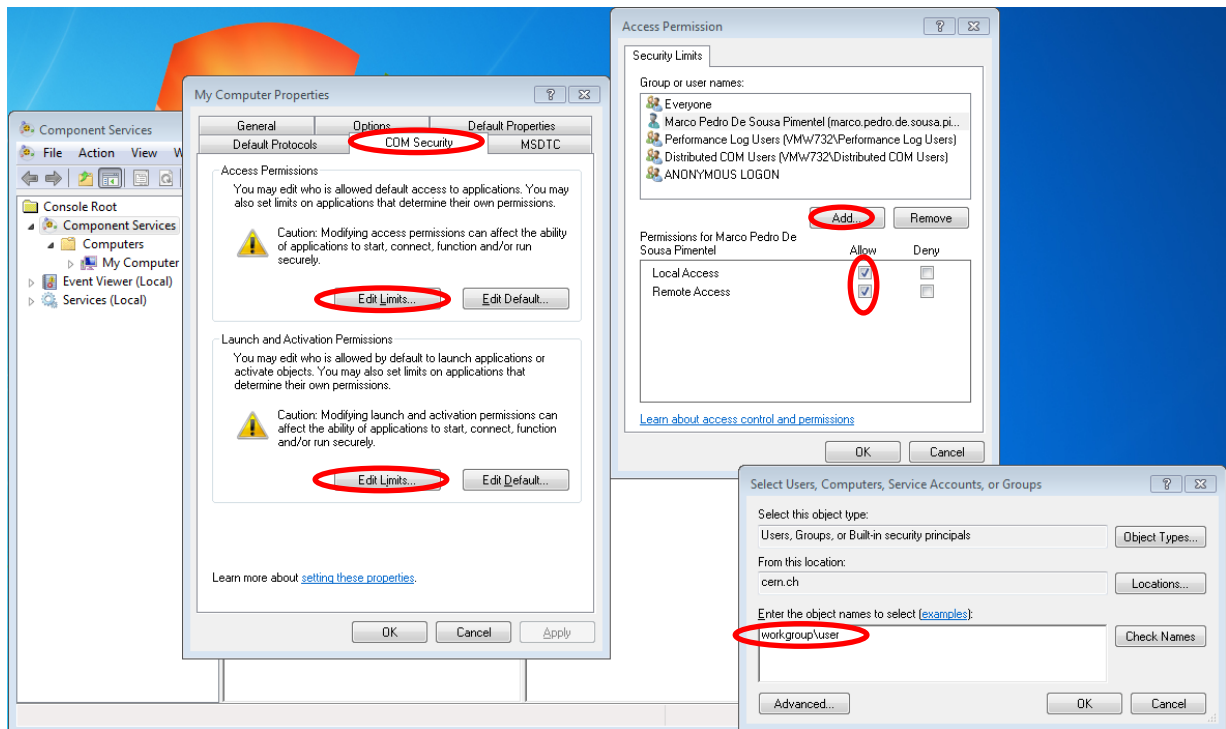
- Press **WIN + R** to open the Run menu type "**DCOMCNFG**" on the text area and press **ENTER** to open the Component Services window
- Under: **Component Services**→**Computers**, Right-click on "**My Computer**" and Choose the "**Properties**" from the menu.
- Click the "**Default Properties**" Tab and configure as follow:
 - Enable Distributed COM on this computer** checked.
 - Default Authentication Level** Connect
 - Default Impersonation Level** Identify



- Click on the "**COM Security**" tab

Configure as needed, giving permissions to the users and/or groups who should be able to access the COM service in this machine, setting the permissions. To assign permissions to a special group or user, add it and check the corresponding boxes.

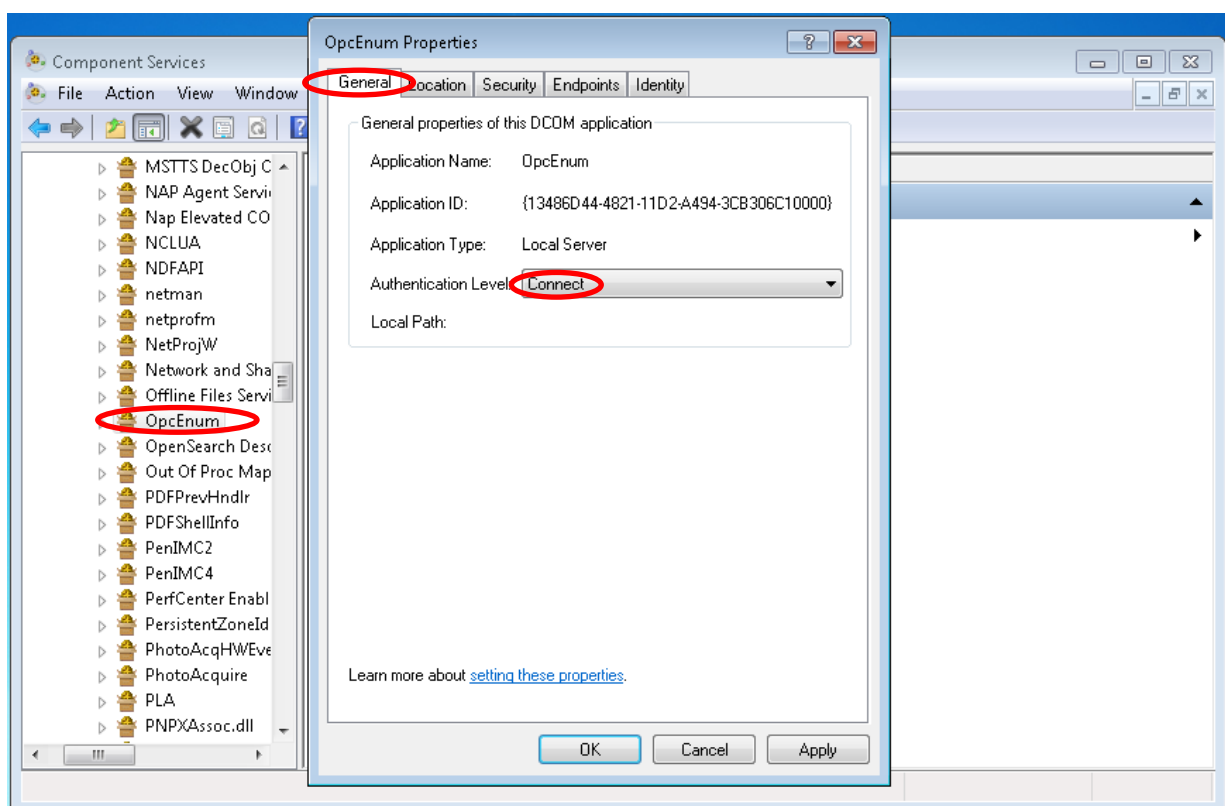
- In the example.
 - click "**Edit Limits**" button within the "**Access Permissions**"
 - hit **Add** enter the object name (ex: **workgroup\user**)
 - hit **OK**
 - check the desired allow or deny boxes
 - click **OK**
 - click "**Edit Limits**" button within the "**Launch and activation Permissions**"
 - Repetition of the previous operation for the desired users
- Press **OK** at the bottom to save settings.



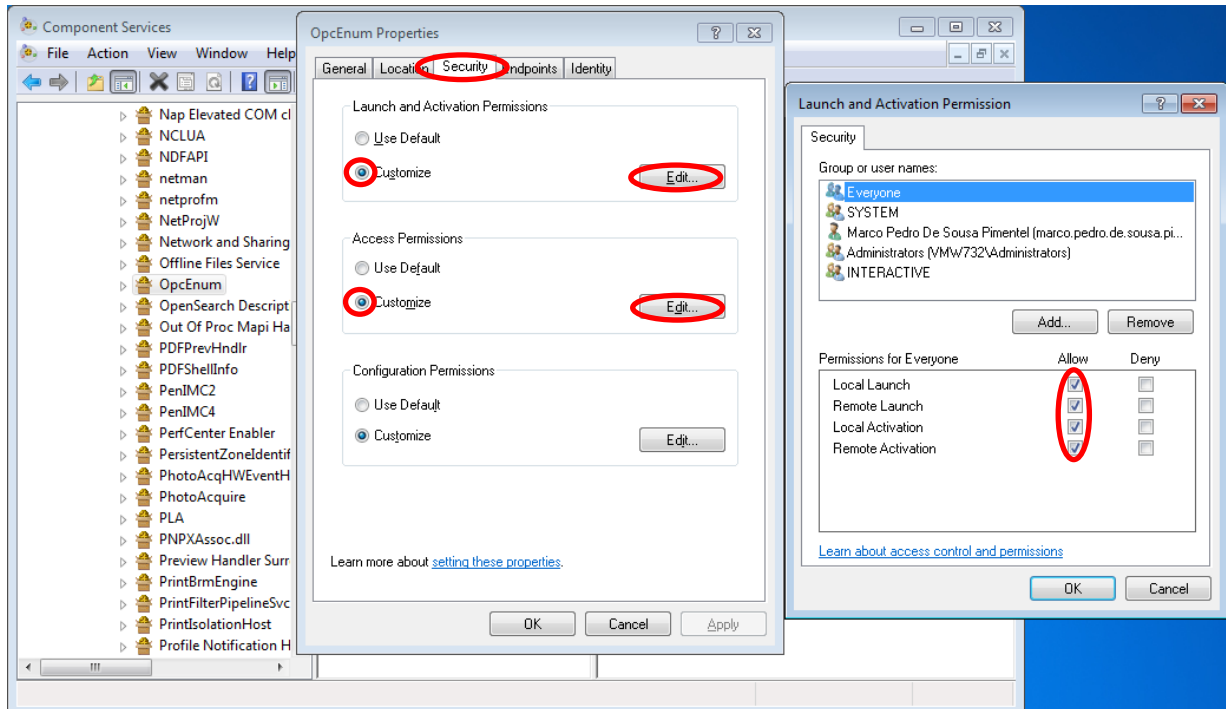
B. "OpcEnum" Settings

Manage the users/groups that should be able to see the OPC servers running on the machine (It is possible to give authorisation to many users/groups to see the existing OPC servers running but authorise different users/groups to access to different servers. See: [4. Permissions settings](#))

- Under: **Component Services**→**Computers**→**My Computer**→**DCOM Config**, find "**OpcEnum**" on the list **right click** on it and Choose "**Properties**" from the menu.
- On the tab "General" Certify that the combo box have the value "connect" if not choose it.



- Select the "**security**" tab, on the Launch and Activation Permissions area hit the "**Customize**" button then the "**Edit**" button.



- Manage permissions. See: [4. Permissions settings](#) click **OK** at end
- On the Access Permissions area hit the “**Customize**” button then the “**Edit**” button. Permissions settings
- Manage permissions. See: [4. Permissions settings](#) click **OK** at end

C. “Schneider-Aut OPC Factory Server” Settings

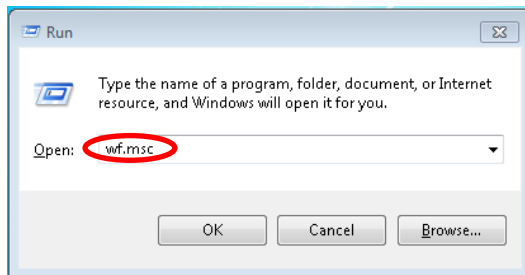
- Find “Schneider-Aut OPC Factory Server” on the list **right click** on it and Choose “**Properties**” from the menu.
- Repeat the steps in B knowing that the authorizations are now for this particular server

Exit the DCOMCNFG

3. Server Firewall Settings

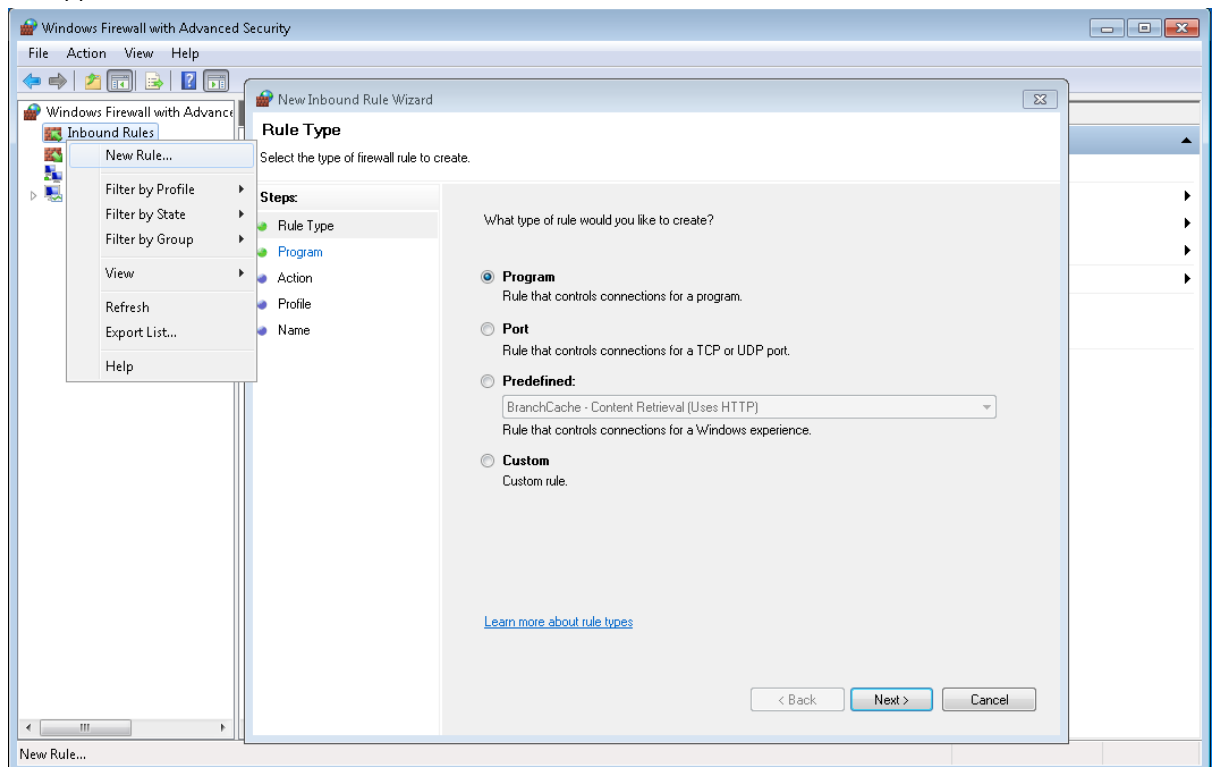
Configure the firewall exceptions

- Press **WIN + R** to open the Run menu type " **wf.msc**" on the text area and press **ENTER** to open the Component Services window



A. OPC Server Enumerator exception

- **Right click Inbound Rules** and choose **New Rule** from the drop down menu, the Inbound Rules wizard will appear



- Go to inbound rules and add to the exceptions list **Chose program** and **hit next>**
- chose **This program path**, hit **Brows** find **opcenum.exe** **double click** it and **hit next>**
 (the path should be:
 Windows7 32 bit machine → c:\windows\system32\opcenum.exe
 Windows7 64 bit machine and Windows Server 2008 R2 →C:\Windows\SysWOW64\opcenum.exe)
- Chose **Allow the connection** and hit **Next>**

- Check the desired boxes (in our example we only check Domain) hit **Next>**
- Give a name to the connection rule and a description if you desire to then **hit Finish.**

B. OFS Server exception

- **Right click Inbound Rules** and choose **New Rule** from the drop down menu, the Inbound Rules wizard will appear
- **Chose program** and **hit next>**
- chose **This program path**, hit **Brows** find **OFS.exe** **double click** it and **hit next>** (the path should be:
(32 bit)→C:\Program Files\Schneider Electric\OFS\Server\ofs.exe
(64 bit)→ C:\Program Files (x86)\Schneider Electric\OFS\Server\ofs.exe)
- Chose **Allow the connection** and hit **Next>**
- Check the desired boxes (in our example we only check Domain) hit **Next>**
- Give a name to the connection rule and a description if you desire to then **hit Finish.**

Exit the firewall configuration window

Restart windows

4. Permissions settings

The server permissions can be managed according to the level of access we want to give, for example if we have a worckgroup (WG) how can access a server and we want user A (UA) to be able to access OPCserverA and user B (UB) to be able to access only OPCserverB, we should set. permissions as follow:

OpcEnum → WG
OPCserverA → WG\UA
OPCserverB → WG\UB

And allow remote and/or local operations for each one of them.

5. End lines and comments

To test the connections use the free [MatriconOPC Explorer](#) running on a remote machine. In the Matrikon Explorer go to the menu Server→add/Connect server, on the connection dialogue fill the host name like this \\hostname and in the server write **Schneider-Aut.OFS**

