

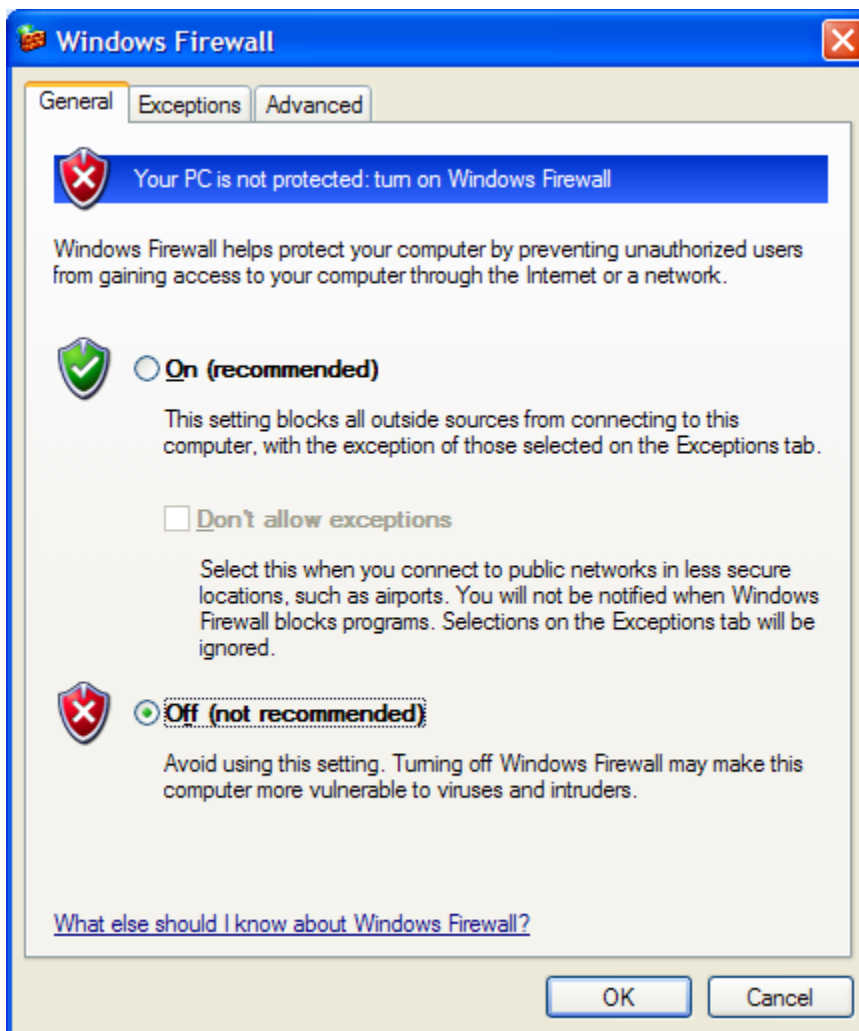
This document provides detailed DCOM configuration for setting up one or more machines for using Total Vu as an OPC Server. The DCOM settings primarily address all the issues with enhanced security in Windows XP Service Pack 2. Some settings may be overkill for other Windows versions, but we have empirical evidence that these settings work.

## 1. Anti-Virus Software

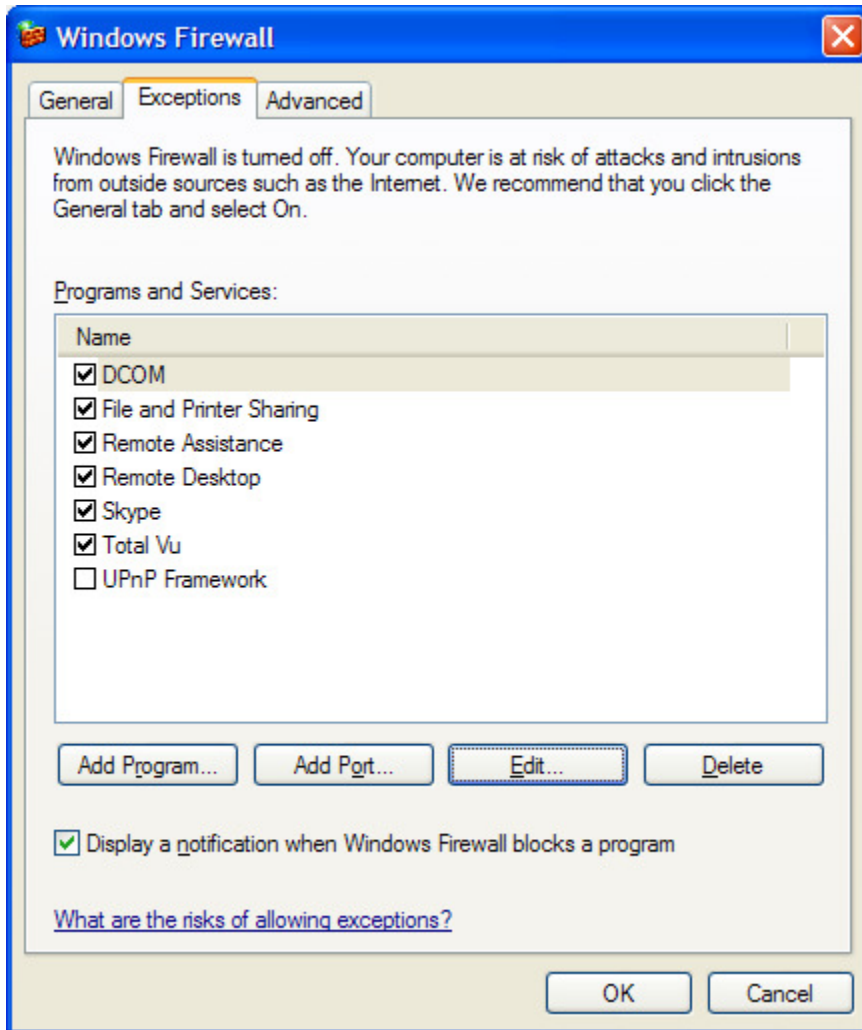
DCOM and Anti-Virus software do not get along! The interim solution is to disable all anti-virus software. In the future, we will investigate exception settings which allow Total Vu/DCOM communications while maintaining a secure system.

### Disable Windows Firewall

Go to Start ->Control Panel, Double-Click on Windows Firewall. Set to Off, as shown.



Select the Exceptions tab. At a minimum, specify the DCOM Port (135), and add the Total Vu program.

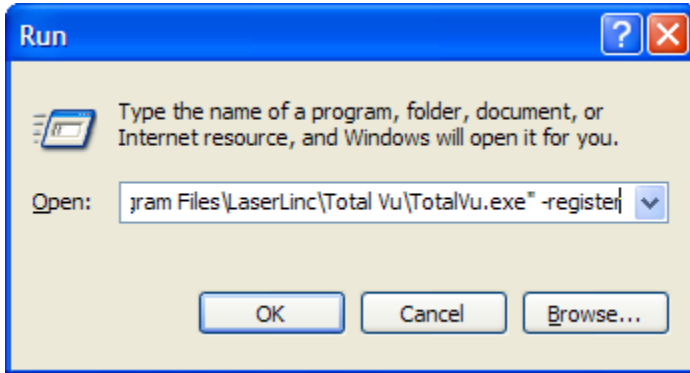


### Other Anti-Virus Software

Other anti-virus software (Norton Anti-Virus, etc.) must be disabled as well. See the appropriate software vendor's documentation.

## 2. Total Vu Server Registration

To register Total Vu as an OPC Server, go to Start->Run..., click Browse to locate TotalVu.exe. Add the parameter "-register" and click OK.



Once registered, Total Vu will display the following message.

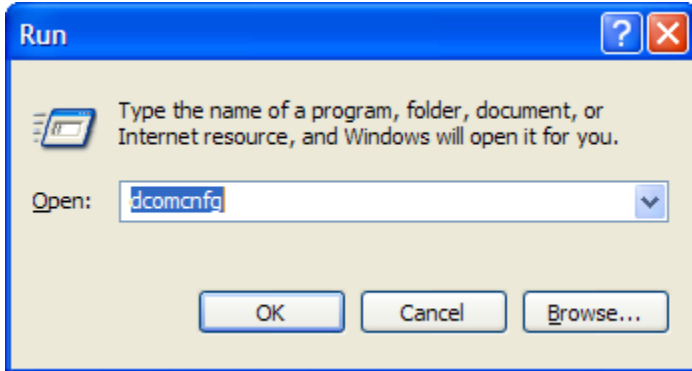


### NOTE to RSView32 Users

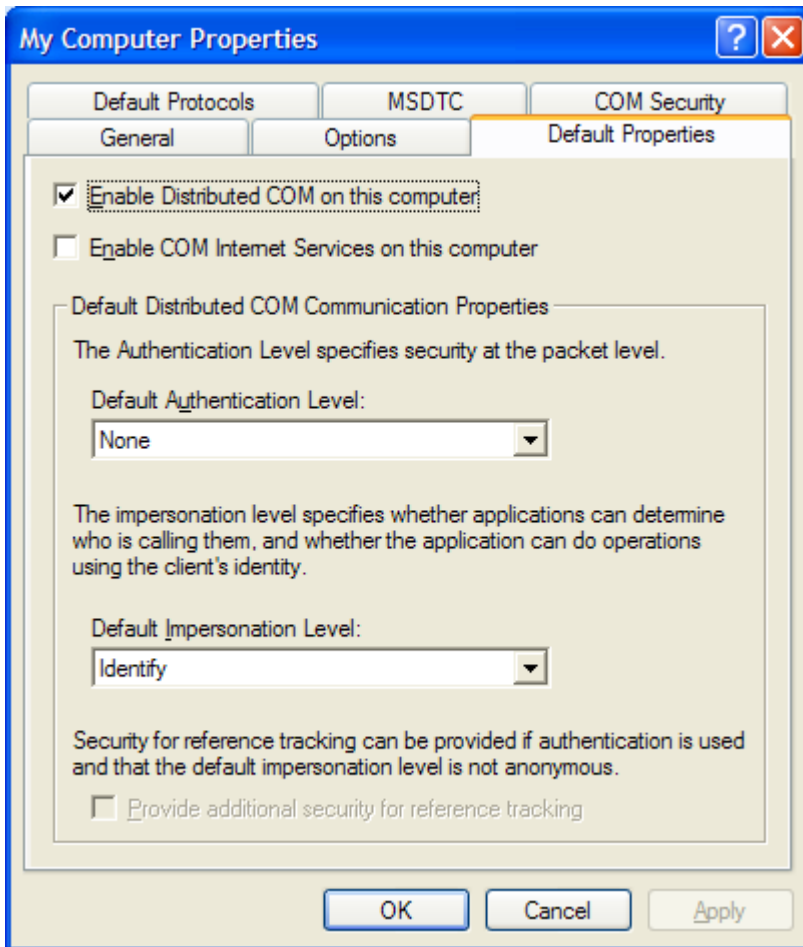
Rockwell Automation RSView®32™ uses local registry entries to find information about OPC servers. Therefore, in a client-server PC network configuration, Total Vu must be installed and registered as an OPC Server on both the client and server PCs.

### 3. DCOM Settings

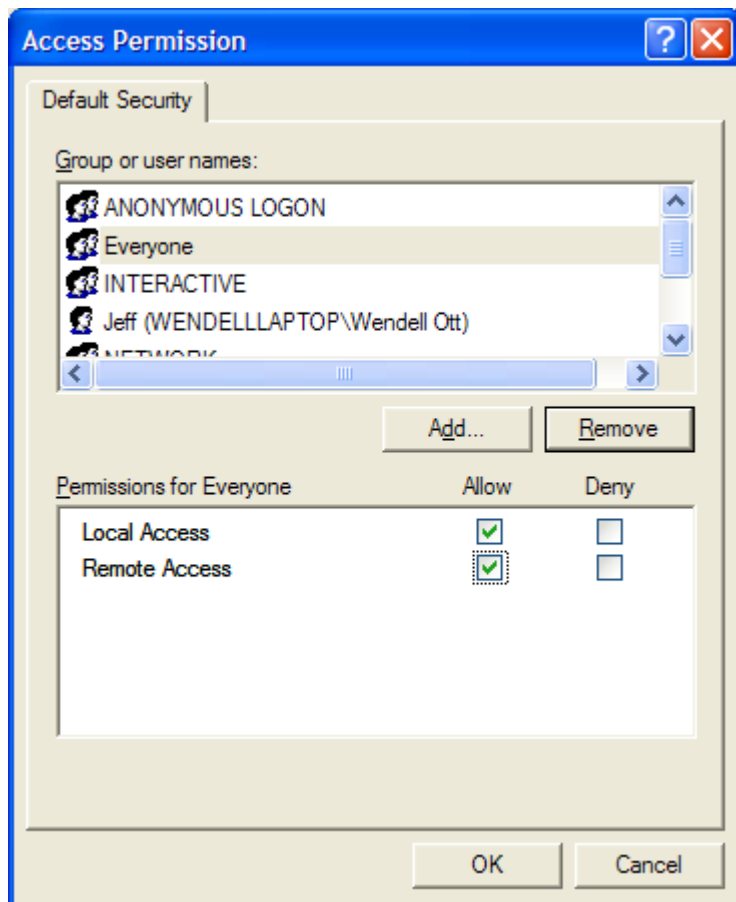
OPC uses ActiveX COM and DCOM for communication. To configure DCOM, go to Start->Run...; enter dcomcnfg; then click OK.



Go to Console Root->Component Services->Computers->My Computer. Right-click on My Computer and select Properties. Select the Default Properties Tab. Enable Distributed COM, set the Default Authentication Level to "None", and set the Default Impersonation Level to "Identify".

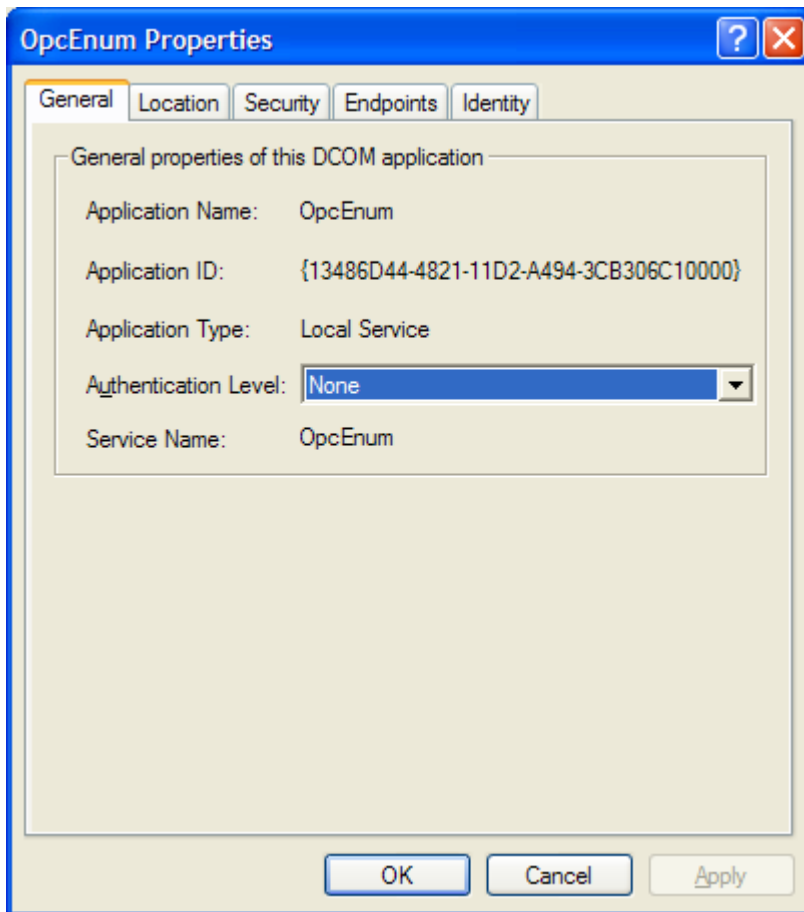


Select the COM Security Tab. For each of Edit Limits... and Edit Default..., in Access Permissions and Launch and Activation Permissions, check all the Allow check boxes for the following Groups or User Names: ANONYMOUS LOGON, Everyone, Interactive, NETWORK, SYSTEM, and an Administrator account. If the Group or User Name is not in the list, add it using the Add... button.

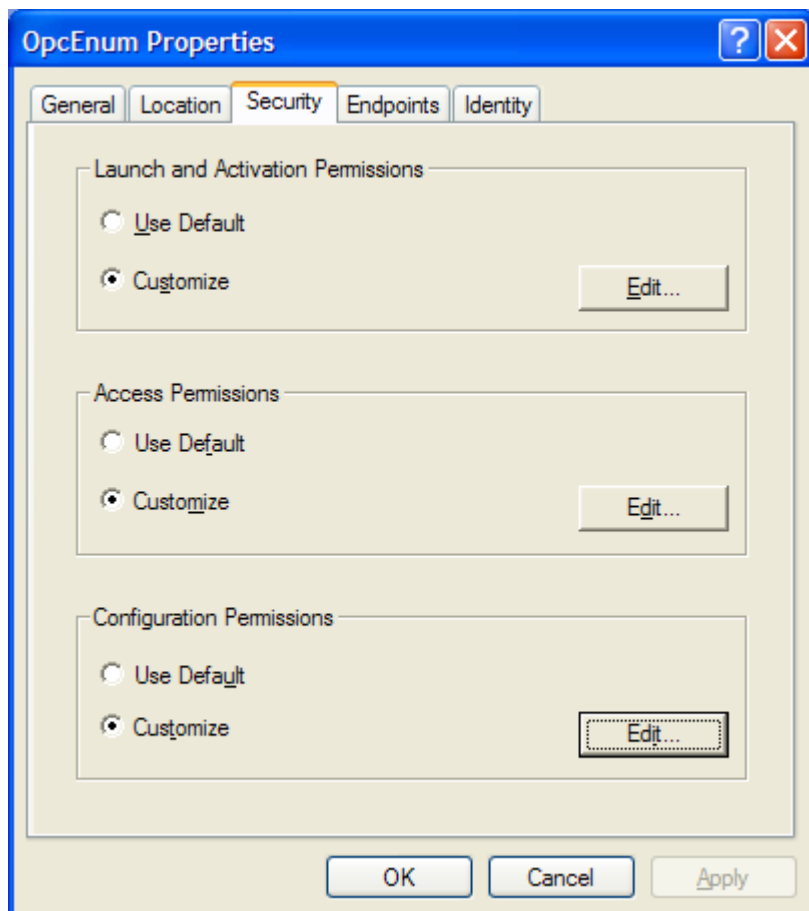


## 4. OpcEnum Properties

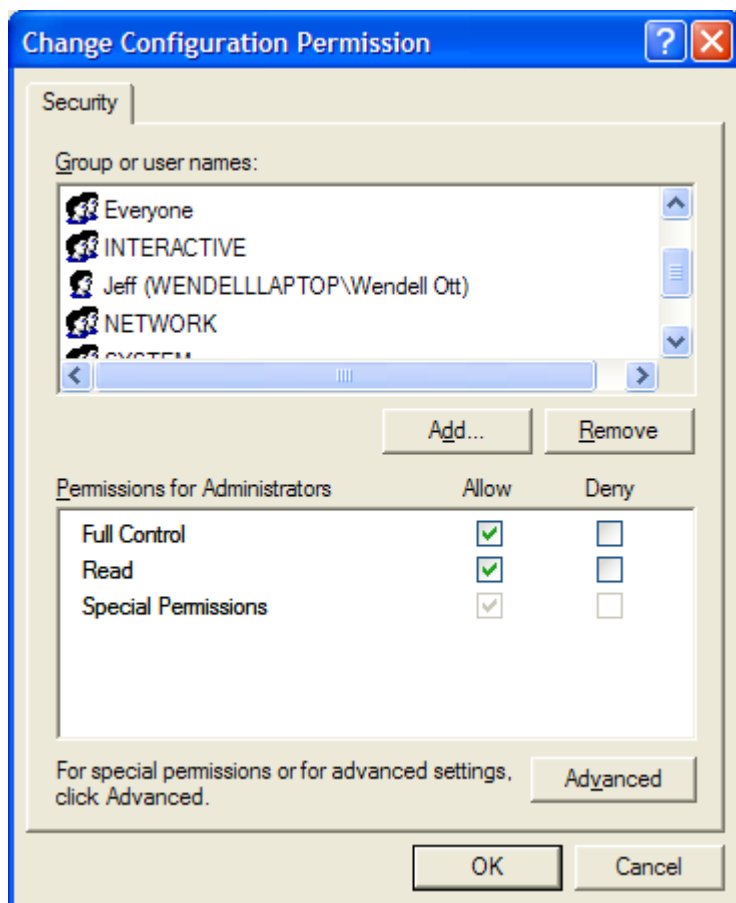
Run dcomcnfg, select Component Services->Computers->My Computer->DCOM Config. Right-click on OpcEnum and select Properties. On the General Tab, set Authentication Level to "None".



Select the Security Tab. For Launch and Activation Permissions, Access Permissions, and Configuration Permissions, select Customize and then click the Edit... button.

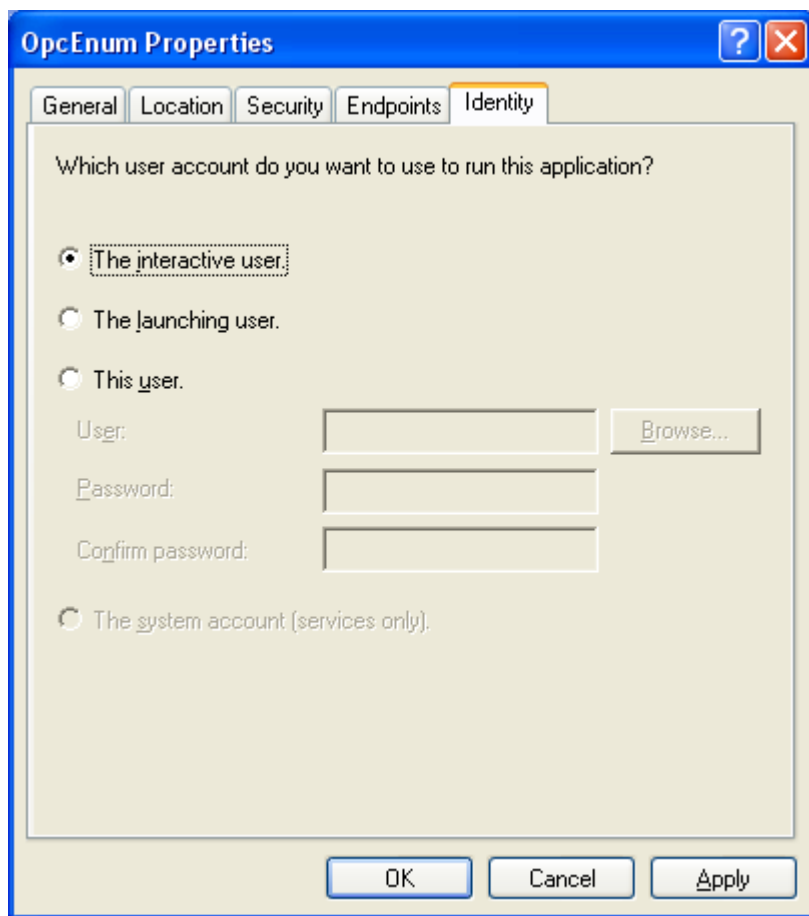


Check all the Allow check boxes for the following Groups or User Names: ANONYMOUS LOGON, Everyone, Interactive, NETWORK, SYSTEM, and an Administrator account. If the Group or User Name is not in the list, add it using the Add... button.



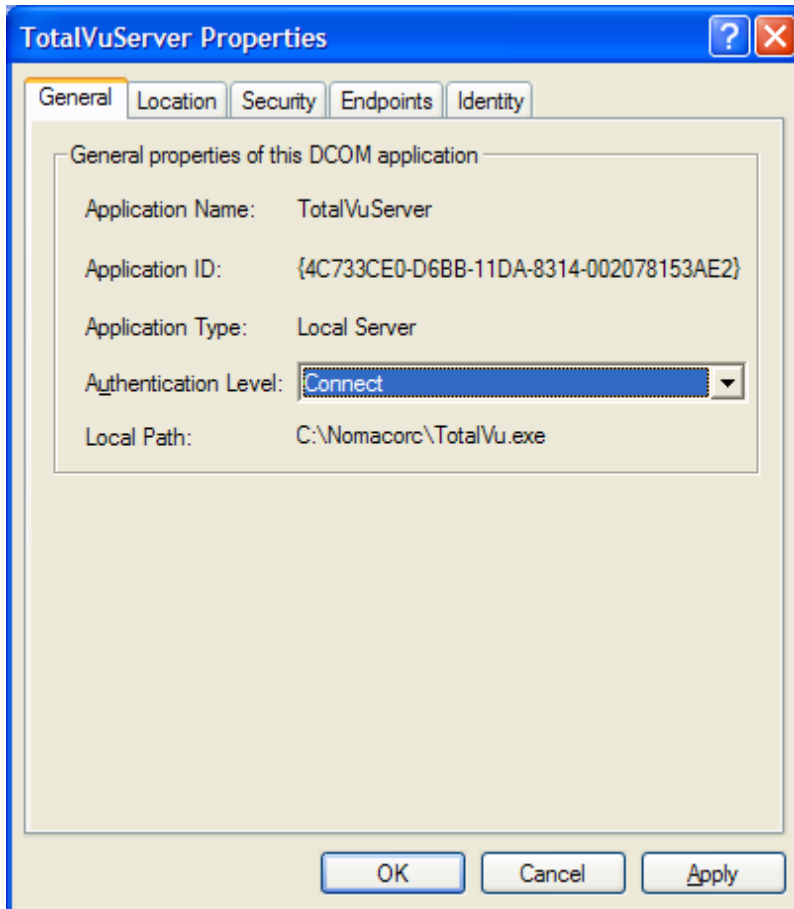


Select the Identity Tab, and select The interactive user.

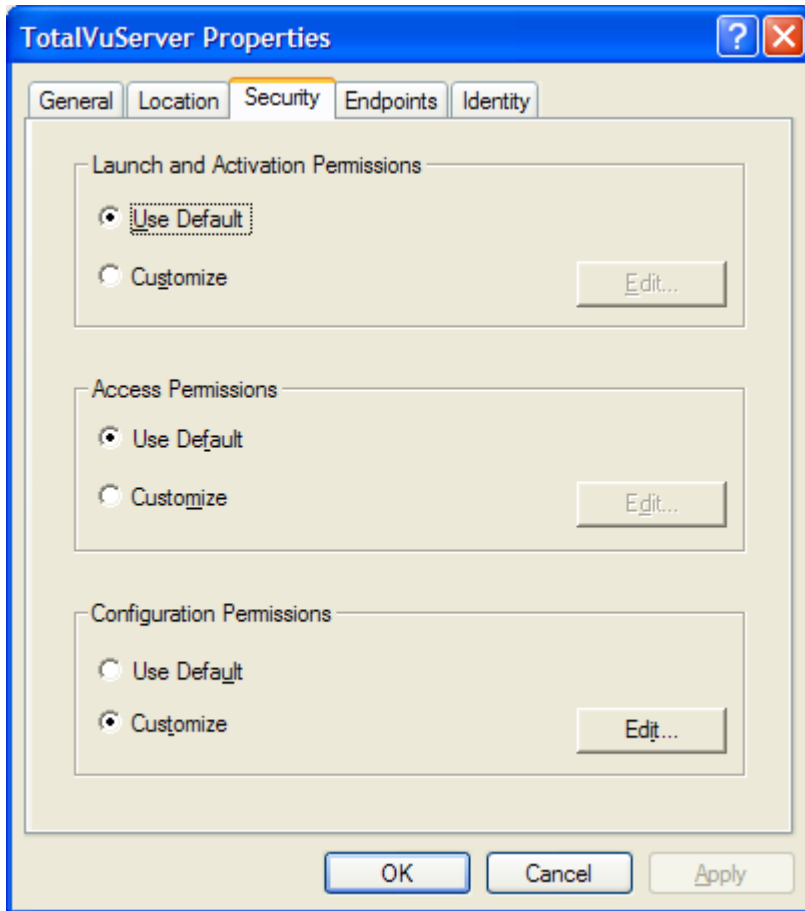


## 5. TotalVuServer Properties

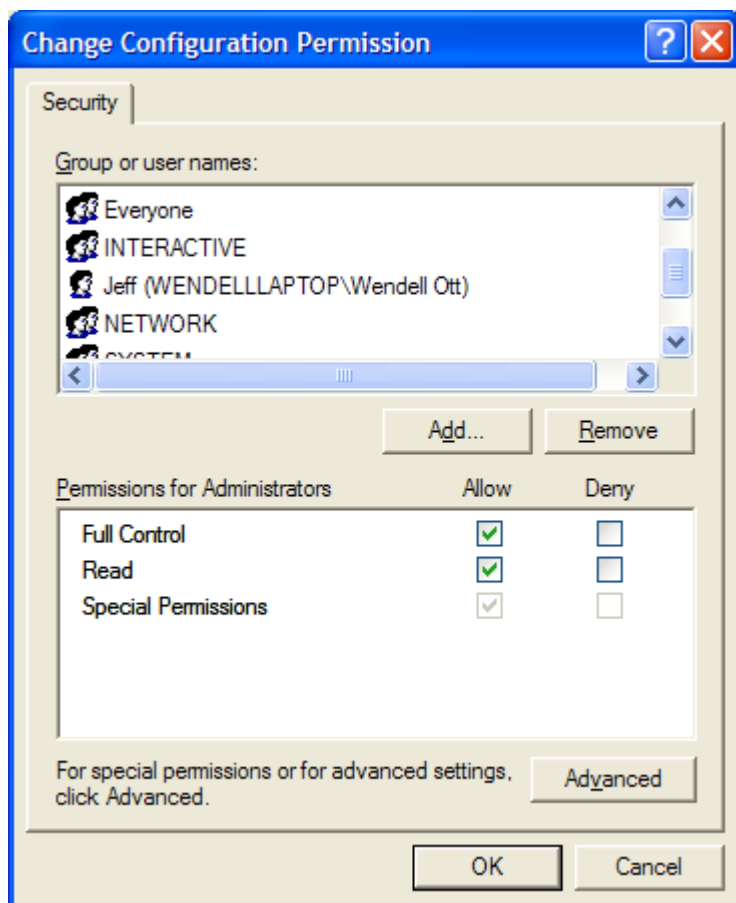
Right-click on TotalVuServer and select Properties. On the General Tab, set Authentication Level to "Connect".



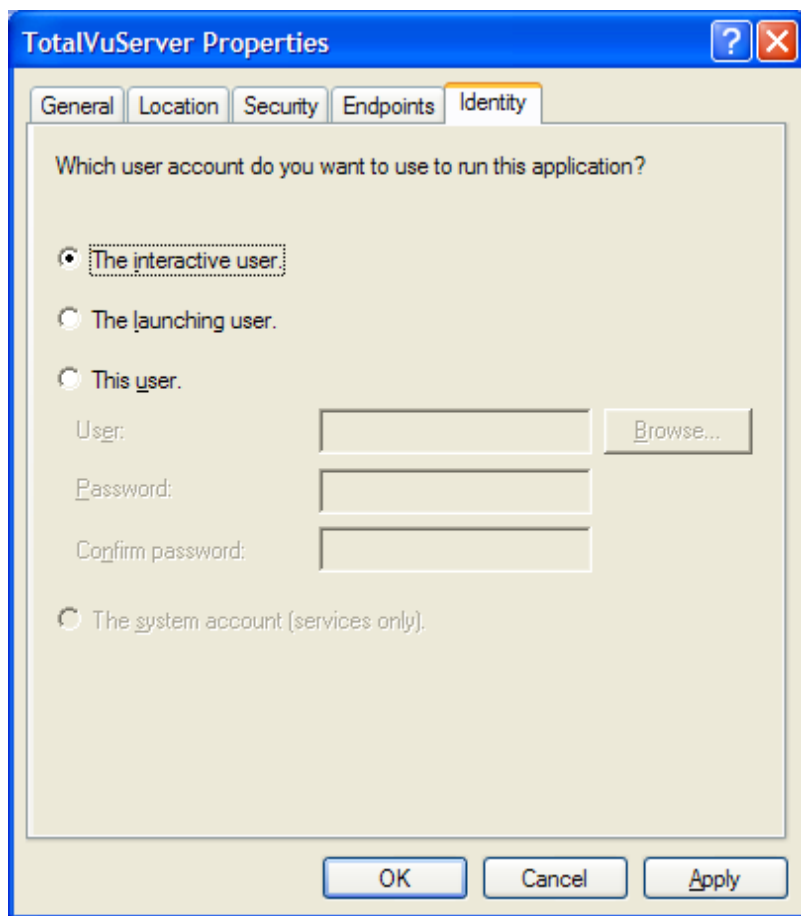
Select the Security Tab. For Launch and Activation Permissions and Access Permissions, select Use Default. For Configuration Permissions, select Customize and then click the Edit... button.



Check all the Allow check boxes for the following Groups or User Names: ANONYMOUS LOGON, Everyone, Interactive, NETWORK, SYSTEM, and an Administrator account. If the Group or User Name is not in the list, add it using the Add... button.



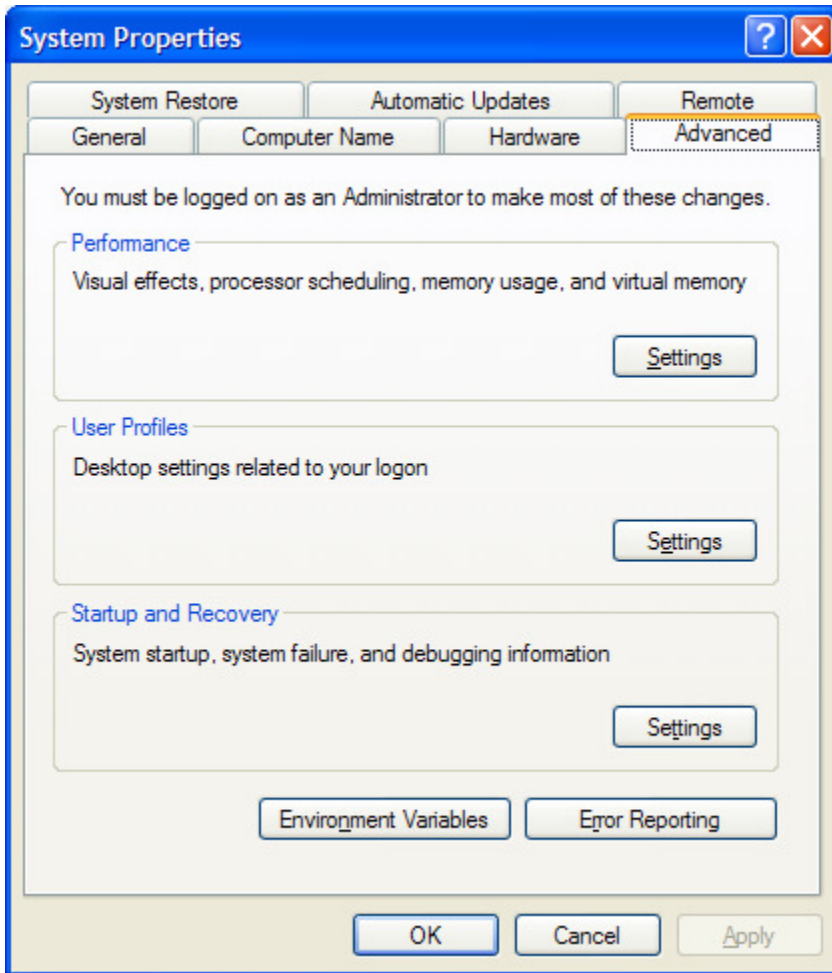
Select the Identity Tab and select The interactive user.



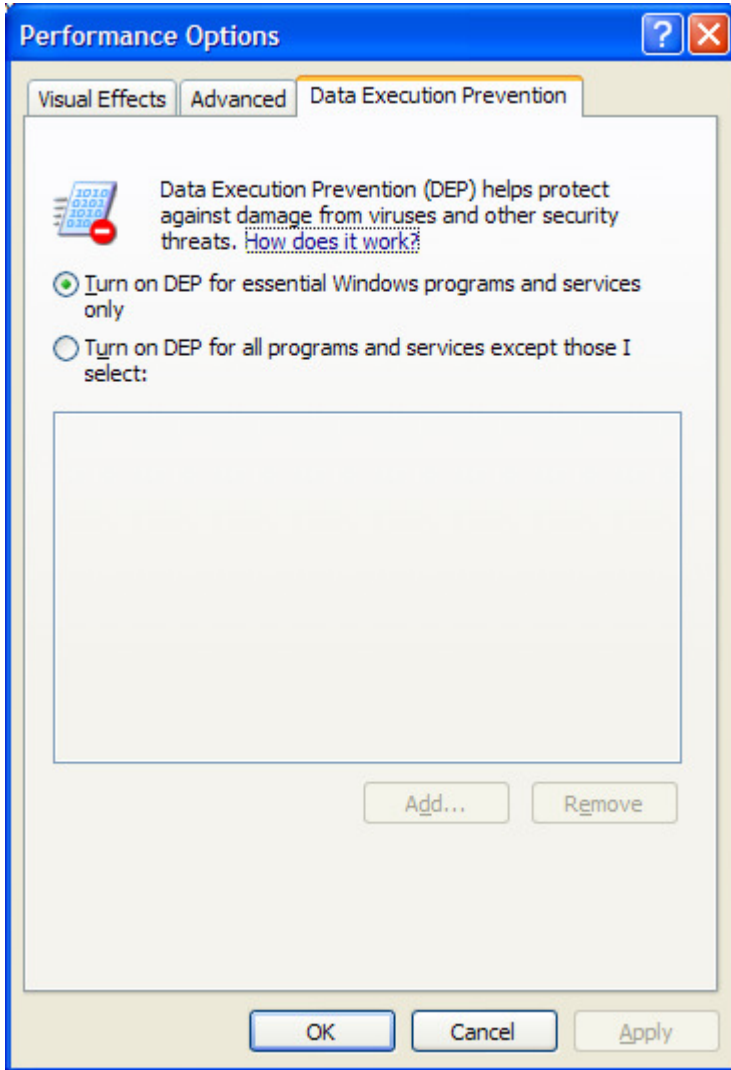
## 6. Data Execution Prevention

Data Execution Prevention (DEP) is a set of hardware and software technologies that perform additional checks on memory to help prevent malicious code from running on a system. In Microsoft Windows XP, DEP must be disabled for OPC to function properly.

Go to Start, right-click on My Computer, and select Properties. Select the Advanced Tab and click on Settings under Performance.



Select the Data Execution Prevention tab, and select the "Turn on DEP for essential ..." radio button.



## 7. Reboot

Reboot the machine to install the new DCOM settings. Once rebooted, OPC should function properly. In the event of problems, Matrikon offers several free tools from their web-site for diagnosing OPC/DCOM problems: [www.matrikonopc.com](http://www.matrikonopc.com).