

Description: Guide to setup DCOM on a Windows XP or Windows Server 2003 Operating System when computers are in a workgroup on the Local Area Network.

OS Requirement: Windows XP/Server 2003

General Requirement: In order to communicate OPC data between different PCs via DCOM in a workgroup, the following requirements apply:

- All GENESIS32 systems must be in the same workgroup on the LAN.
- All GENESIS32 systems must be logged in to the operating system with the same user name and password.
- The password must not be blank or “admin”.
- The user must have administrative privileges to the local PC to change the DCOM settings.
- Windows XP systems must have SP1 installed.

Introduction

For GENESIS32 Applications to communicate via DCOM, it is necessary to allow Access and Launch permissions for specific users. This application note explains how to setup DCOM on a Windows XP or a Windows Server 2003 Operating System, for the most wide-open permissions. It is usually helpful to develop your application with wide-open communications to be sure that it all works properly. After you have completed your development, you will want to tighten these permissions until you reach a desired level of security.

Editing DCOM Settings

1. Click on Start → Run and type in “DCOMCNFG”, then hit enter. The Distributed COM Configuration Properties window will open.
2. Expand Console Root → Component Services → Computers
3. Right-click on **My Computer** and select **Properties** to set the DCOM properties

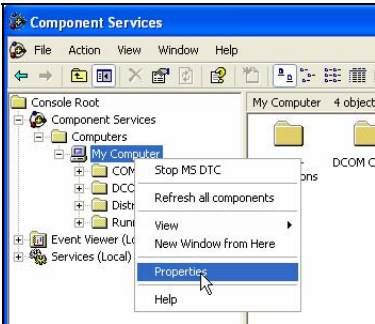
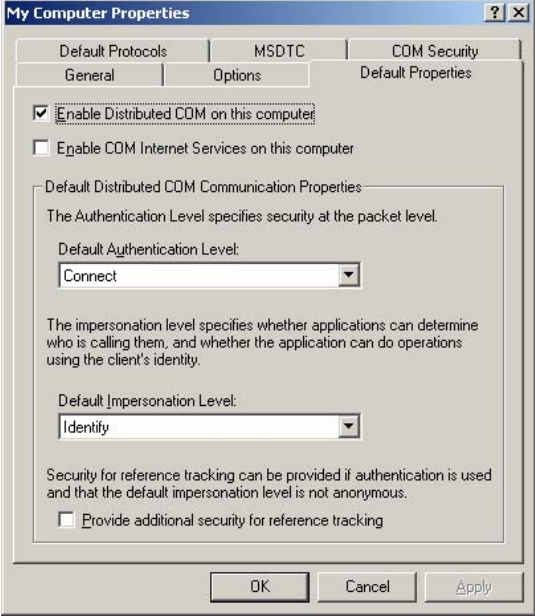


Figure 1 - Component Services Console

The My Computer Properties window will open. Click on the Default Properties tab, and match the properties as shown in



4. Figure 2.

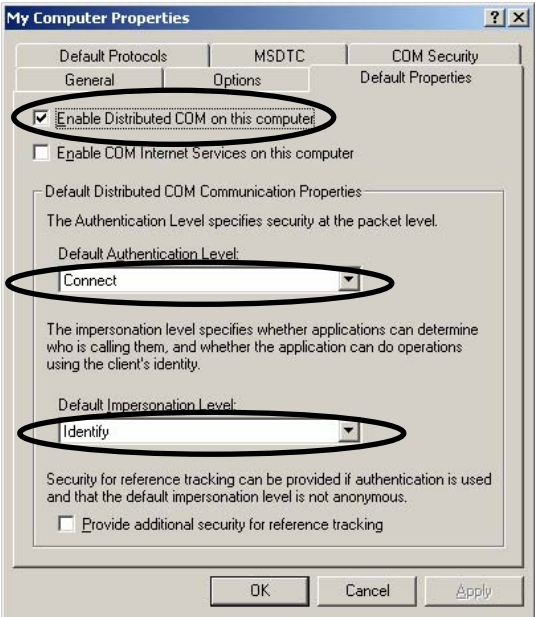


Figure 2 - My Computer Default Properties

5. Next we have to add user permissions to the Default Security. Click the Default COM Security tab as shown in Figure 3.

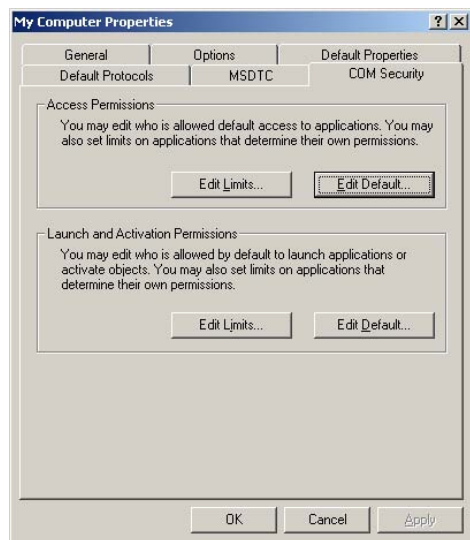


Figure 3 - Default COM Security

6. Click Edit Limit for Access Permission. Make sure the Access Limit Permissions Window includes at least the following entries::
 - Administrators
 - Everyone
 - Interactive
 - Network
 - System
7. If these entries are not shown by default, click the “Add...” button and then Advanced to add them to the list.
8. **Everyone**, **Interactive**, **Network**, and **System** are users on the local machine, so choose the local machine name as the **Location**. Click **Find Now**, select all four users while holding the Ctrl-key, and click **OK**.
9. For the domain users, choose the domain name as the **Location** and follow the same procedure. When all users to be added are listed in the **Select Users and Groups** window, click **OK** to add them.

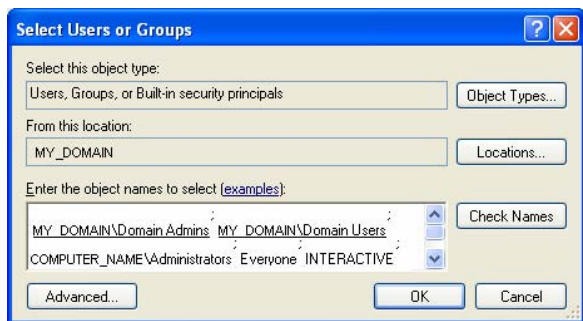


Figure 4 - Select Users or Groups

10. Repeat Steps 6-9 to edit the Access Default Permission, the Launch Limit Permissions, and the Launch Default Permissions. Close the **My Components Properties**

window, and the **Component Services** window when finished.

NOTE: You may not have any “Edit Limits” button. That is ok, in this case, just click on the “Edit Default” buttons and add the users for default permissions.

Local Security Settings

NOTE: Windows XP has advanced security features compared to Windows 2000.

1. Click Start → Control Panel → Administrative Tools → Local Security Policy to open the Local Security Settings window. Expand the tree control and select Security Options in the left hand pane as shown in Figure 5.

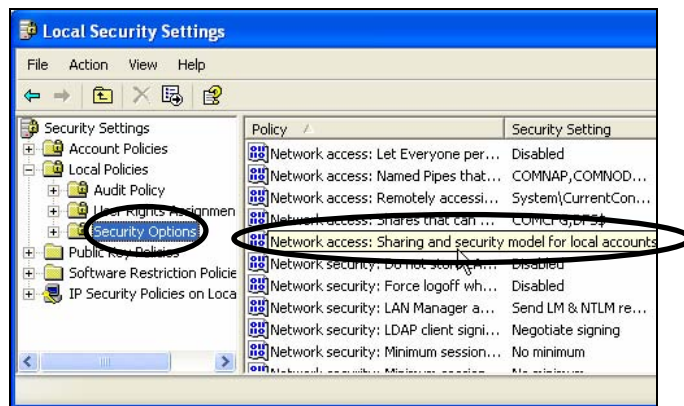


Figure 5 - Local Security Settings

2. In the right hand pane, scroll to find Network Access: Sharing and security settings for local accounts. Right-click and select Properties.
3. Select Classic - local users authenticate as themselves as shown in Figure 6, and click OK. Close the Local Security Settings window when finished.

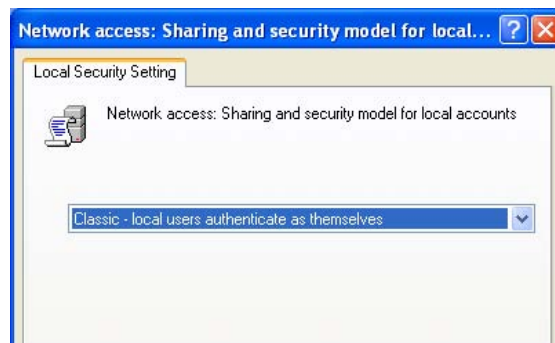


Figure 6 - Sharing and Security for Local Accounts

4. Restart the PC and login with a domain user name as mentioned in the **General Requirements** of this document. Please refer to **OS Requirements** and **General Requirements** on page 1 of this document to make sure everything is correct.