

# TAC Vista



## TAC Vista OPC Server

Technical Manual





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# INTRODUCTION

## 1 About this Manual



# 1 About this Manual

This manual describes a particular process. For information on certain products, we refer you to the manual or the Help for the product in question.

For information on how to install software, we refer you to the instructions delivered with the software.

For information on third party products, we refer you to the instructions delivered with the third party product.

If you discover errors and/or unclear descriptions in this manual, please contact your TAC representative.



## Note

- We are continuously improving and correcting our documentation. This manual may have been updated.
- Please check [www.tac.com](http://www.tac.com) for the latest version.

## 1.1 Structure

The manual is divided into the following parts:

- **Introduction**  
The Introduction section contains information on how this manual is structured and how it should be used to find information in the most efficient way.
- **Getting Started**  
The Getting Started section contains a step-by-step description of how to engineer or carry out different tasks. It also gives you guided instructions on how to complete a sample project. If you want more information, see the corresponding chapter in the Reference section of the manual.
- **Reference**  
The Reference section contains more comprehensive information about various parts of the Getting Started section. It also provides you with information on alternative solutions not covered by the Getting Started section.

## 1.2 Typographic Conventions

Throughout the manual the following specially marked texts may occur.



### Warning

- Alerts you that failure to take, or avoid, a specific action might result in physical harm to you or to the hardware.



### Caution

- Alerts you to possible data loss, breaches of security, or other more serious problems.



### Important

- Alerts you to supplementary information that is essential to the completion of a task.



### Note

- Alerts you to supplementary information.



### Tip

- Alerts you to supplementary information that is not essential to the completion of the task at hand.



### Advanced

- Alerts you that the following information applies to complex tasks or tasks restricted by access.

## 1.3 Terminology

Term	Description
AE	OPC Alarm and Events standard specification
COM	Component Object Model
DA	OPC Data Access standard specification

---

<b>Term</b>	<b>Description</b>
DCOM	Distributed Component Object Model
HDA	OPC Historical Data Access standard specification
OLE	Object Linking and Embedding
OPC	A set of open standards for exchanging process control information. Formerly known as OLE for Process Control.
OPCEnum	OPCEnum is a program supplied by the OPC Foundation to allow prospective client applications to obtain a list of available OPC servers on the local or a remote computer.



# GETTING STARTED

- 2 Planning the OPC Configuration
- 3 Configuring TAC Vista OPC Server
- 4 Configuring Windows Firewall
- 5 Configuring DCOM Permissions
- 6 Configuring OPCEnum for DCOM Communication



## 2 Planning the OPC Configuration

One of the major parts in setting up OPC communication is configuring the COM permissions for remote communication. This is also referred to as distributed COM (DCOM).

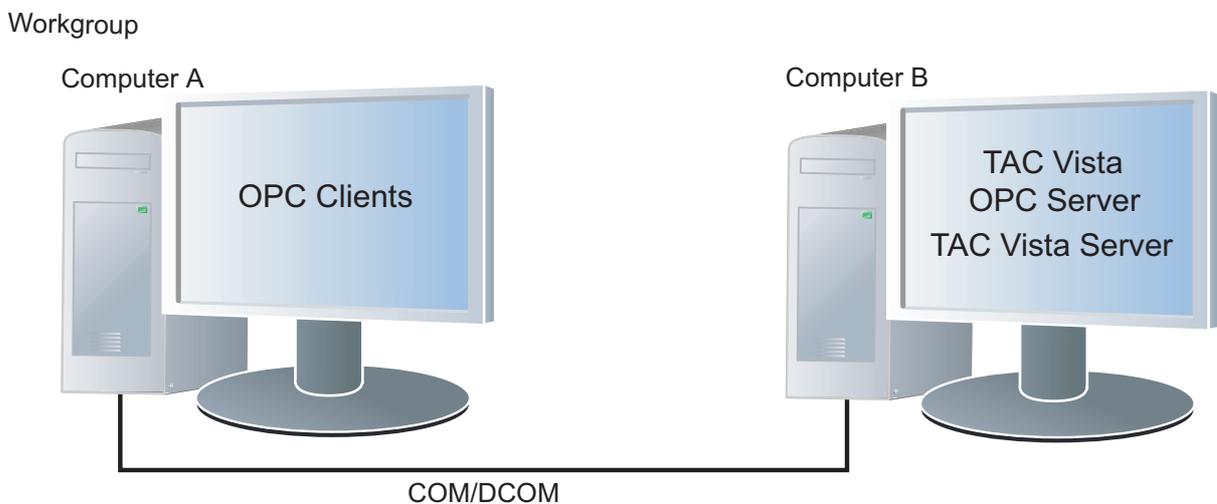
When setting up DCOM for OPC communication, there are a number of network environment options:

- OPC server and OPC client on the same domain
- OPC server and OPC client on different domains
- OPC server and OPC client in the same workgroup
- OPC server on a domain and OPC client in a workgroup
- OPC server in a workgroup and OPC client on a domain

For more information on different network environments, see the Reference part of this manual.

### 2.1 The Described Scenario

In the scenario described in this manual, both the computer running Vista OPC Server and the computer running the OPC client are connected to the network and belong to the same workgroup. The operating system on both of the computers is Windows XP SP2.



The following programs have to be installed and licensed:

- Vista Server with Workstation

- Vista OPC Server

For information on how to install Vista Server with Workstation and Vista OPC Server, see the *TAC Software, Installation Manual*.

**Tip**

- It is recommended that you run Vista Server and Vista OPC Server on the same computer.

You have to set up communication between Vista OPC Server and Vista Server. You do this in Vista OPC Server Setup by specifying the account that Vista OPC Server has to use to log in to Vista Server. The account is either a Windows account or a Vista account. In the described scenario, a Vista account is used.

Setting up Vista Server and Vista OPC Server includes:

- Creating a dedicated Windows user account under which you set Vista Server (TACOS) to run as a service
- Creating a dedicated Windows user account under which you set Vista OPC Server (TACOPC) to run as a service
- Configuring the Vista OPC Server COM servers (TAC Object Server OPC DA Services and TAC Object Server OPC AE Services) for DCOM
- Creating a Vista account for the Vista OPC Server login to Vista Server

OPC communication requires that you allow a number of programs to communicate over the network. If you run Windows Firewall, you have to allow exceptions in the firewall for the programs that participate in OPC communication. You also have to set up identical accounts on the computer running Vista OPC Server and the OPC client.

When you have set up the accounts, you have to configure DCOM for OPC by allowing communication over DCOM.

OPCEnum is a small program that makes it possible for an OPC client to locate OPC servers. You have to configure OPCEnum for DCOM on the computer running Vista OPC Server.

In the described scenario, setting up OPC communication includes:

- Configuring Windows Firewall
- Creating identical accounts for the OPC communication users
- Configuring DCOM permissions
- Configuring OPCEnum for DCOM

## 3 Configuring TAC Vista OPC Server

You have to perform a number of tasks to make data from the Vista database (Vista Server) available to OPC clients.

It is recommended that you set Vista Server (TACOS) to run as a service. Thus, you can avoid the problem of Vista Server closing down when a user logs off the computer where the program is installed.

For information on how to install Vista Server as a service, see the *TAC Vista, Technical Manual*.

Vista OPC Server is programmed to run as a service. It is recommended that you set it to run as a service under a designated Windows user account.

For more information on running an application under a designated user account see the *TAC Vista OPC Client - General, Technical Manual*.

In order to make the data from Vista Server available to OPC clients via Vista OPC Server, you have to create a login account under which Vista OPC Server can log into Vista Server. You also have to set Vista OPC Server to log in to Vista Server under the specified account.

### 3.1 Running Vista OPC Server as a Service

When you run Vista OPC Server as a service, you set the application to run in the background.



#### Important

- To prevent the server from closing down when a user logs off the computer, you have to run Vista OPC Server as a service.



#### Note

- You do not have to configure DCOM or OPCEnum for the account under which you run the service.

#### 3.1.1 Adding a Windows Account for Vista OPC Server

An application run as a service always runs under a specified user account. The user account provides the security context for the application. That is, you can limit the application's access to resources and

objects on the operating system by setting permissions for the account. Limiting the access helps safeguard your system if the individual service or process is compromised.

It is recommended that you run Vista OPC Server as a service under a designated Windows user account.



### Important

- It is recommended that you use one designated account for all OPC servers.
- The designated user account should be an Administrator account on the local computer.

### To add a Windows account for Vista OPC Server

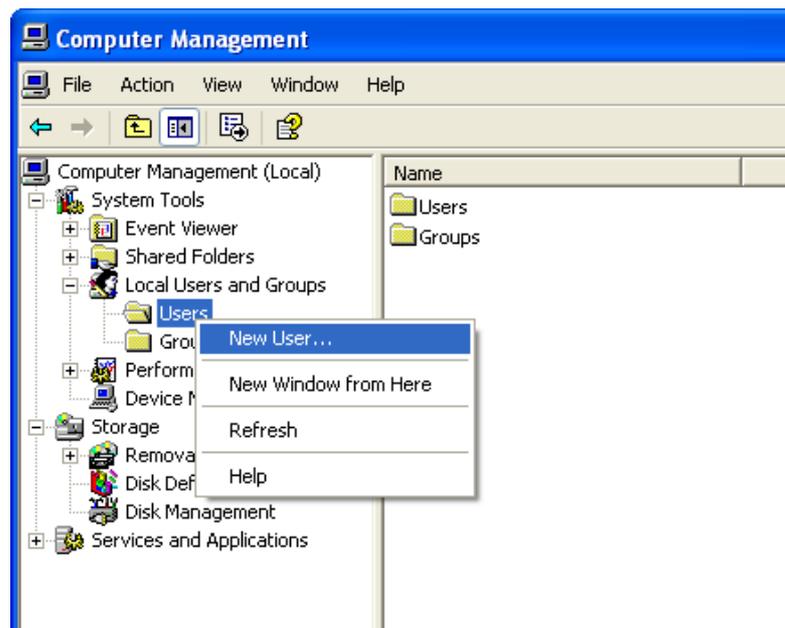
- 1 On the computer running Vista OPC Server, start Computer Management.



### Tip

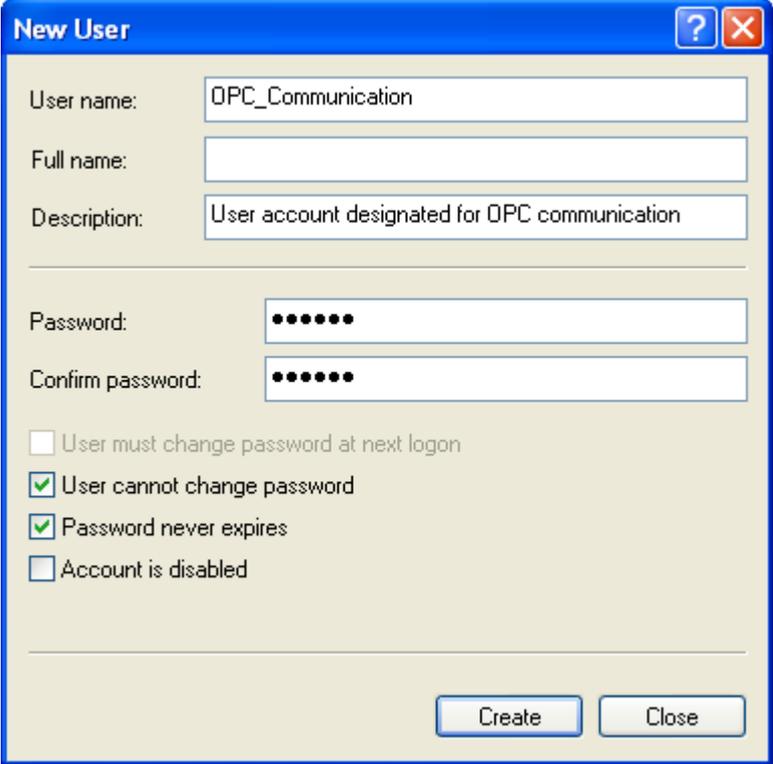
- You can access Computer Management in Control Panel under Administrative Tools.

- 2 In the tree structure, right-click System Tools\Local Users and Groups\Users, and then click **New User**.



- 3 In the **New User** dialog box, in the **User name** box, type a name.
- 4 In the **Description** box, type a description for the user.
- 5 In the **Password** box, type a password.

- 6 In the **Confirm password** box, type the password again.
- 7 Clear the **User must change password at next logon** check box.
- 8 Select the **User cannot change password** check box.
- 9 Select the **Password never expires** check box.



The screenshot shows the 'New User' dialog box. The 'User name' field is filled with 'OPC\_Communication'. The 'Full name' field is empty. The 'Description' field contains 'User account designated for OPC communication'. The 'Password' and 'Confirm password' fields both contain seven dots. Below these fields are four checkboxes: 'User must change password at next logon' (unchecked), 'User cannot change password' (checked), 'Password never expires' (checked), and 'Account is disabled' (unchecked). At the bottom right are 'Create' and 'Close' buttons.

- 10 Click **Create**, and then click **Close**.

Repeat the procedure on the computer running the OPC client.

### 3.1.2 Running Vista OPC Server as a Service

When you run Vista OPC Server as a service in manual startup mode, the application starts when an OPC client calls the service.

For more information on running an application as a service, see the *TAC Vista OPC Client - General, Technical Manual*.

#### To run Vista OPC Server as a service

- 1 On the computer running Vista OPC Server, start **Services**.

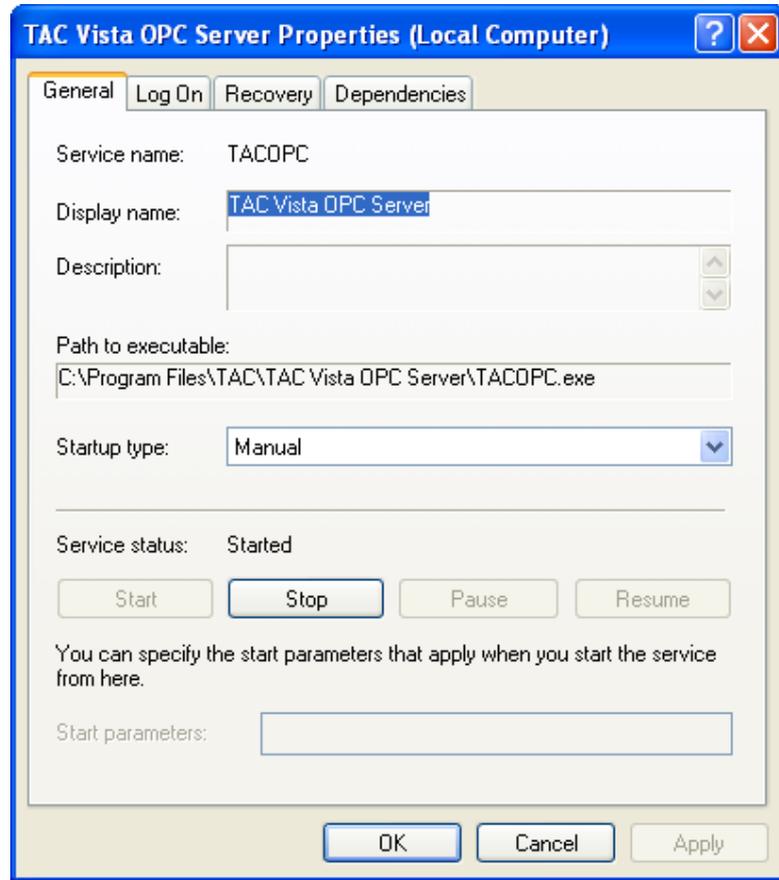


#### Tip

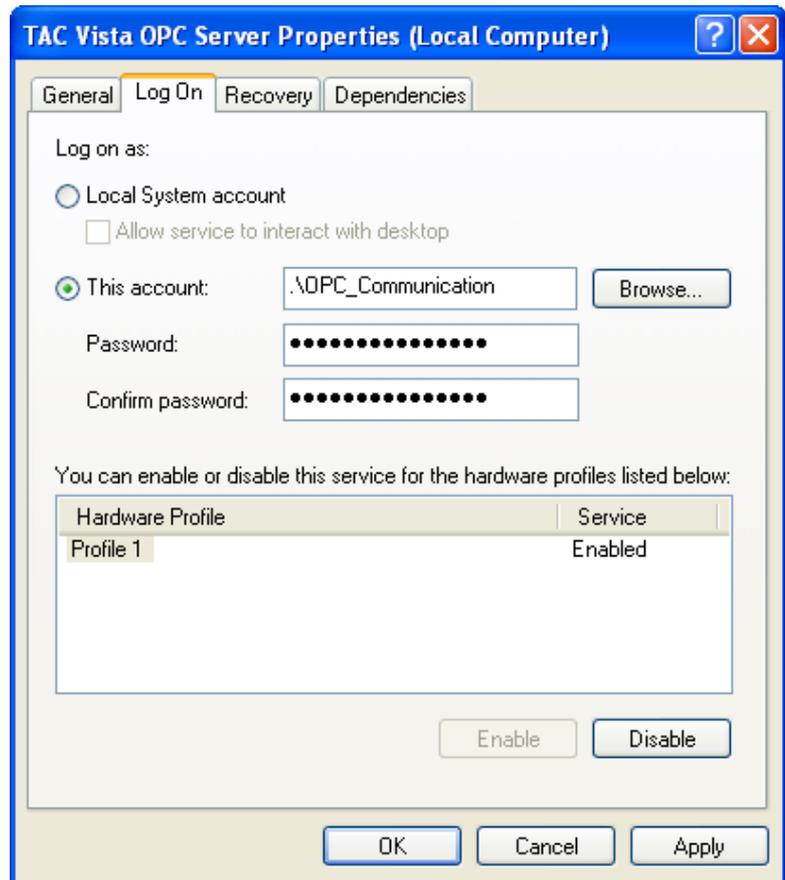
- You can access Services in Control Panel under Administrative Tools.

- 2 Right-click TAC Vista OPC Server, and then click **Properties**.

- 3 Click the **General** tab.
- 4 In the **Startup type** box, make sure that **Manual** is selected.



- 5 Click the **Log On** tab.
- 6 Click **This account**.
- 7 Click **Browse**.
- 8 In the **Select User** dialog box, in the **Enter the object name to select** box, type the name of the designated user account.

**9 Click Check Names.**

- 10** In the **Password** box, type the password.
- 11** In the **Confirm password** box, type the password again.
- 12** Click **OK**.

## 3.2 Configuring the COM Servers for DCOM Communication

The COM servers, that is, TAC Object Server OPC DA Services and TAC Object Server OPC AE Services, are the COM interface of Vista OPC Server.

When you have set Vista OPC Server to run as a service, you have to configure the COM servers for DCOM to enable communication to and from Vista OPC Server.

## To configure the COM servers for DCOM Communication

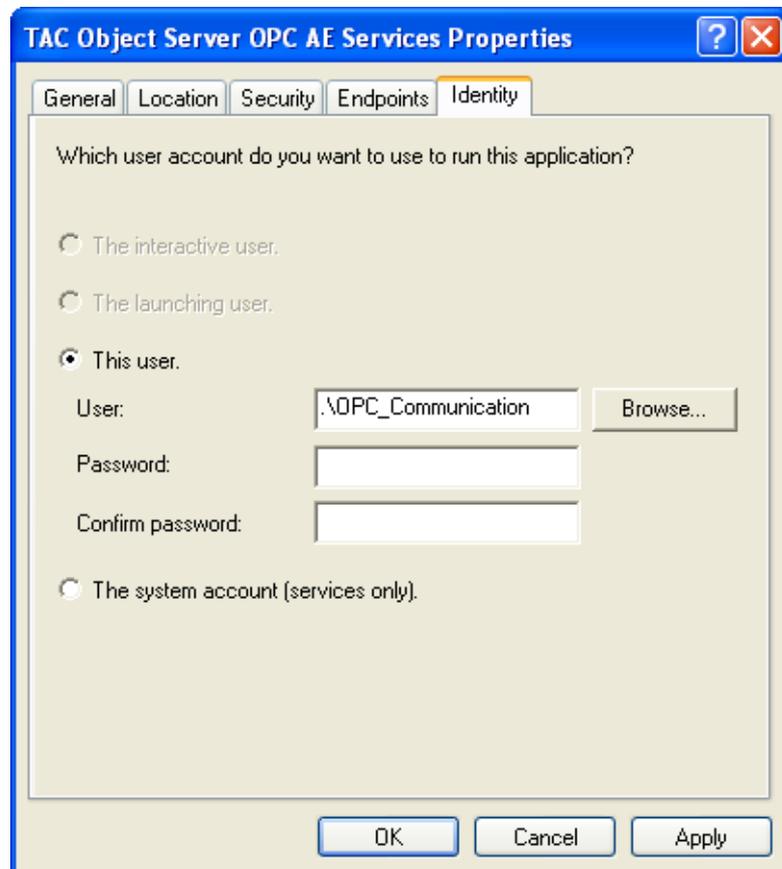
- 1 On the computer running Vista OPC Server, start Component Services.



### Tip

- You can access Component Services in Control Panel under Administrative Tools.

- 2 In the tree structure, double-click Component Services\Computers\My Computer\DCOM Config.
- 3 Locate the COM server. That is, TAC Object Server OPC DA Services or TAC Object Server OPC AE Services.
- 4 Click the **Identity** tab.
- 5 Click **This account**.
- 6 Click **Browse**.
- 7 In the **Select User** dialog box, in the **Enter the object name to select** box, type the name of the designated user account.
- 8 Click **Check Names**.



- 9 In the **Password** box, type the password.

**10** In the **Confirm** password box, type the password again.

**11** Click **OK**.



### Important

- You have to configure DCOM for both TAC Object Server OPC DA Services and TAC Object Server OPC AE Services.
- In order for the communication to work, you have to use the designated account under which you run Vista OPC Server as a service.
- The designated account should be an Administrator account on the local computer.



### Tip

- It is recommended that you use one designated user account to run all OPC servers.

## 3.3 Creating a Vista Account

Vista OPC Server (TACOPC) can log in to Vista Server (TACOS) in two ways:

- Using a Vista account
- Using a Windows account

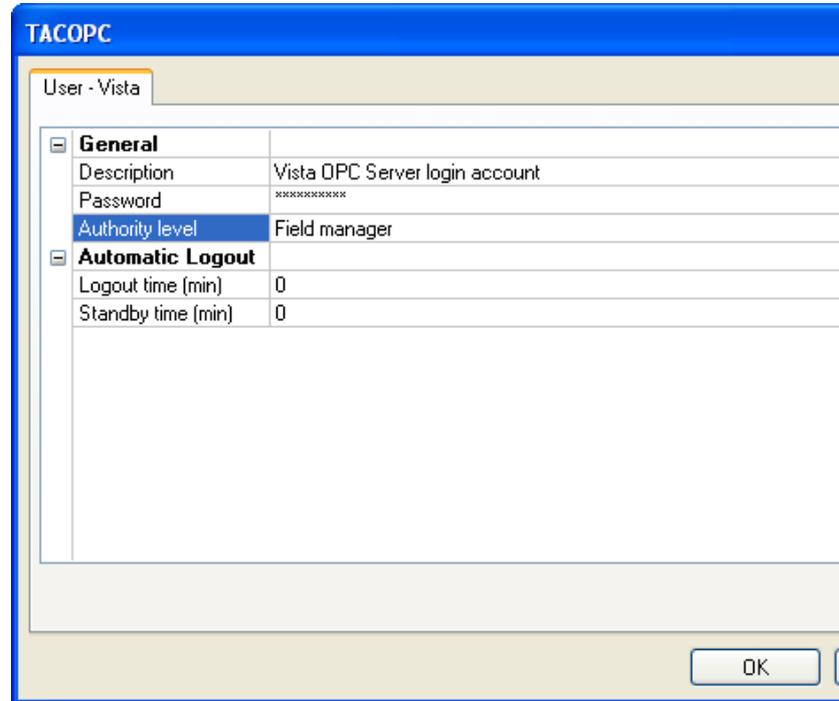
A Vista account is used when Vista Server is configured for low-level security.

For more information on Vista Server security and on how to create a Vista User, see the *TAC Vista, Technical Manual*.

In the described scenario, Vista OPC Server logs in to Vista Server using a Vista account.

The authority level required for handling items in Vista depends on the required functionality in the OPC client. In the described scenario, the

**Field manager** authority level is used and **Logout time (min)** is set to 0 (zero).



## 3.4 Configuring the Vista OPC Server Login

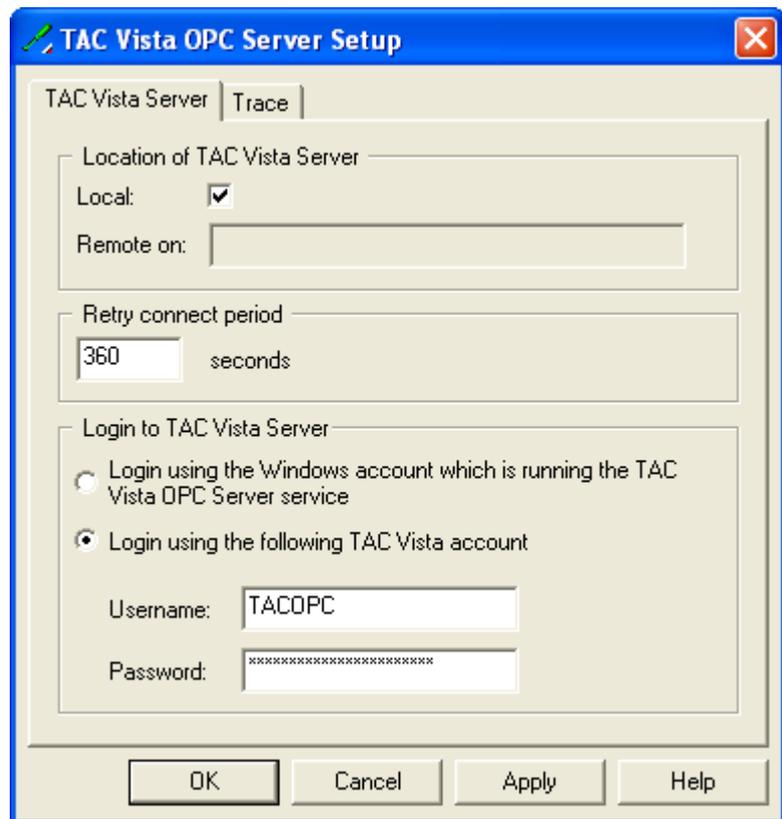
When you configure Vista OPC Server you use the TAC Vista Server Setup program to specify the account to use when Vista OPC Server (TACOPC) logs in to Vista Server (TACOS).

In the described scenario, Vista OPC Server uses a Vista account to log in to Vista Server.

### To configure the Vista OPC Server login

- 1 Start TAC Vista OPC Server Setup.
- 2 In the TAC Vista OPC Server Setup dialog box, click the **TAC Vista Server** tab.
- 3 In the **Location of TAC Vista Server** area, make sure that the **Local** box is selected.
- 4 In the **Retry connect period** area, make sure that the value is set to 360 seconds.
- 5 In the **Login to TAC Vista Server** area, click **Login using the following Vista account**.
- 6 In the **Username** box, type the name of the specified Vista user.

- 7 In the **Password** box, type the specified user's password.



- 8 Click **OK**.



# 4 Configuring Windows Firewall

By default, Windows Firewall stops incoming and outgoing OPC traffic that is not explicitly allowed. To enable OPC communication, you have to allow exceptions and set program exceptions and port exceptions in Windows Firewall.



## Important

- If you are running Vista OPC Server and the OPC client on the same computer, you do not have to configure Windows Firewall.
- Your Windows Firewall might be controlled by group policies and be turned off or turned on and may not allow any exceptions. In this case, contact your local IT department.



## Notes

- The programs you have to add to the **Exceptions** list can differ between OPC clients from different manufacturers.
- For more information, see the documentation provided by the OPC client manufacturer.

## 4.1 Allowing Exceptions in Windows Firewall

To be able to allow exceptions in Windows Firewall, you have to make sure that exceptions are allowed both on the computer running Vista OPC Server and on the computer running the OPC client.

### To allow exceptions in Windows Firewall

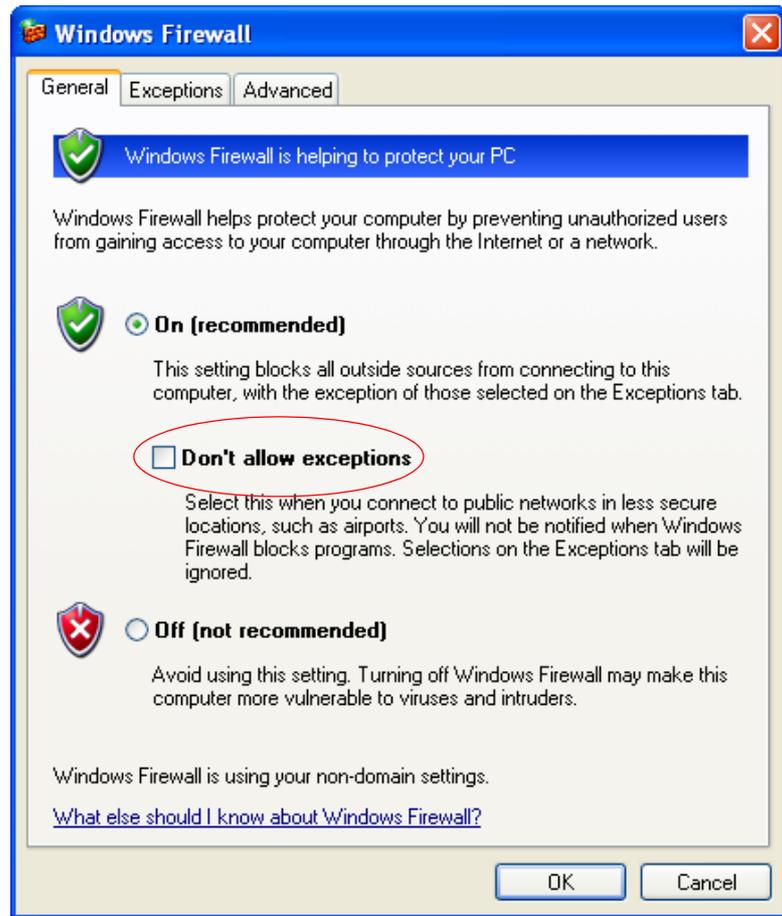
- 1 On the computer running Vista OPC Server, start **Windows Firewall**.



### Tip

- You can access Windows Firewall in Control Panel.
- 2 In Windows Firewall, click the **General** tab.

- 3 Clear the **Don't allow exceptions** check box.



- 4 Click **OK**.

Repeat the procedure above for the computer running the OPC client.

## 4.2 Enabling File and Printer Sharing

To enable OPC clients to browse to a remote computer with Vista OPC Server, you have to enable File and Printer Sharing on both the computer running Vista OPC Server and the computer running the OPC client.

### To enable File and Printer Sharing

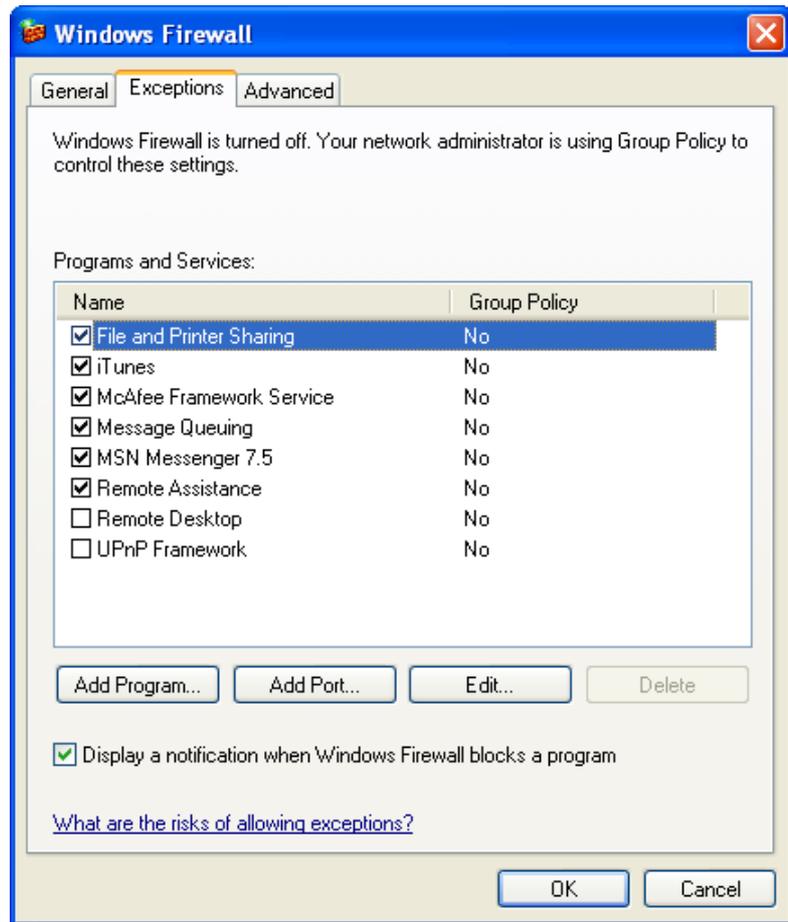
- 1 On the computer running Vista OPC Server, start Windows Firewall.



#### Tip

- You can access Windows Firewall in Control Panel.

- 2 In Windows Firewall, click the **Exceptions** tab.

**3** Select the **File and Printer Sharing** check box.**4** Click **OK**.

Repeat the procedure above for the computer running the OPC client.

## 4.3 Setting a Windows Firewall Program Exception

To enable communication between Vista OPC Server and the OPC client, you have to make a number of exceptions in Windows Firewall for programs that need to communicate with another computer or device. For example:

- Microsoft Management Console (required for using administrative tools on the computer)
- OPCEnum (used for browsing remote computers for OPC servers)
- TAC Vista OPC Server (TACOPC)
- OPC client programs
- Tools used for setting up the communication between an OPC server and an OPC client.
- Vista Server (TACOS)

You have to set exceptions both on the computer running Vista OPC Server and on the computer running the OPC client.



### Note

- It may be appropriate to permanently turn off Windows Firewall if the computer is sufficiently protected behind a corporate firewall. When turned off, the individual Windows Firewall settings outlined in this chapter need not be performed to enable OPC communication.

You have to make exceptions for the following programs on the computer running Vista OPC Server:

- Microsoft Management Console (mmc.exe)
- OPCEnum, required by many OPC clients for browsing a computer for OPC servers (OPCENUM.EXE)
- TAC Vista OPC Server (TACOPC.exe)
- Vista Server (TACOS)

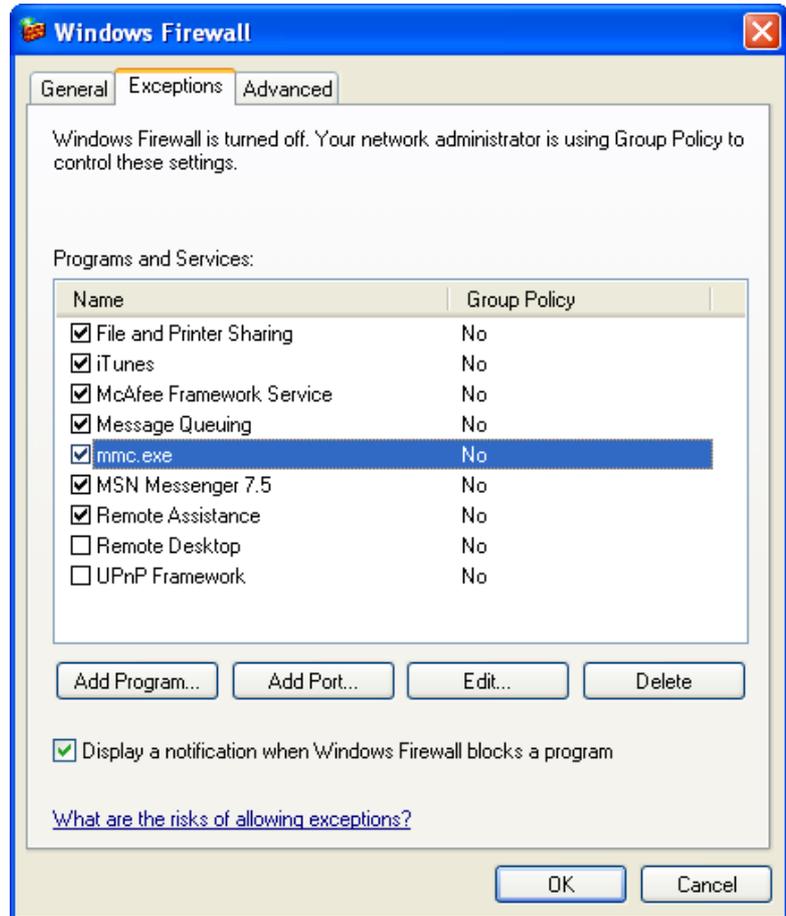
You may have to make exceptions on the computer running the OPC client for the following programs:

- Microsoft Management Console (mmc.exe)
- The OPC client program
- Any tools used for browsing computers for OPC servers or setting up OPC items in a client database

### To set a Windows Firewall program exception

- 1 In Control Panel, click the **Windows Firewall** icon on the computer running Vista OPC Server.

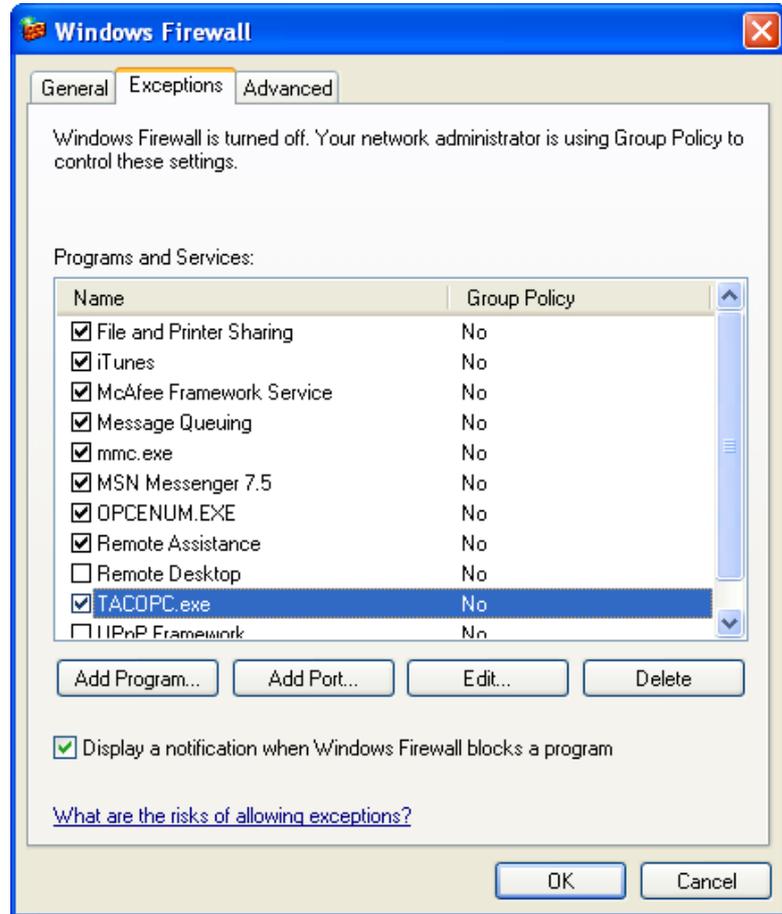
- 2 In Windows Firewall, click the **Exceptions** tab.
- 3 Click **Add Program**.
- 4 Browse to the \*.exe file for the program you want to add to the **Exceptions** list.
- 5 Click **Open**, and then click **OK**.



Repeat the procedure above to add all of the required programs to the **Exceptions** list on both the computer running Vista OPC Server and the computer running the OPC client. On the computer running Vista OPC Server you have to add:

- Microsoft Management Console - C:\WINDOWS\system32\mmc.exe
- OPCENUM - C:\WINDOWS\OPCENUM.EXE
- TAC Vista OPC Server - C:\Program Files\TAC\TAC Vista OPC Server\TACOPC.exe

- TAC Vista Server - C:\Program Files\TAC\TAC Vista [version number]\TACOS.exe



## 4.4 Setting a Windows Firewall Port Exception

To enable communication between Vista OPC Server and the OPC client, you have to make an exception in Windows Firewall for port 135 where DCOM communication takes place. You have to make the settings both on the computer running Vista OPC Server and on the computer running the OPC client.



### Note

- If the Vista system is a multi-computer network, the port has already been added to the **Exceptions** list.

## To set a Windows Firewall port exception

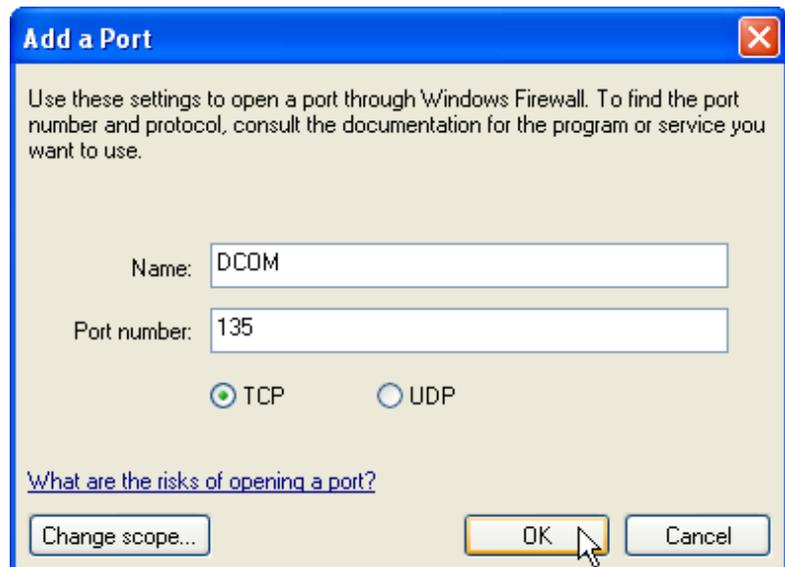
- 1 On the computer running Vista OPC Server, start Windows Firewall.

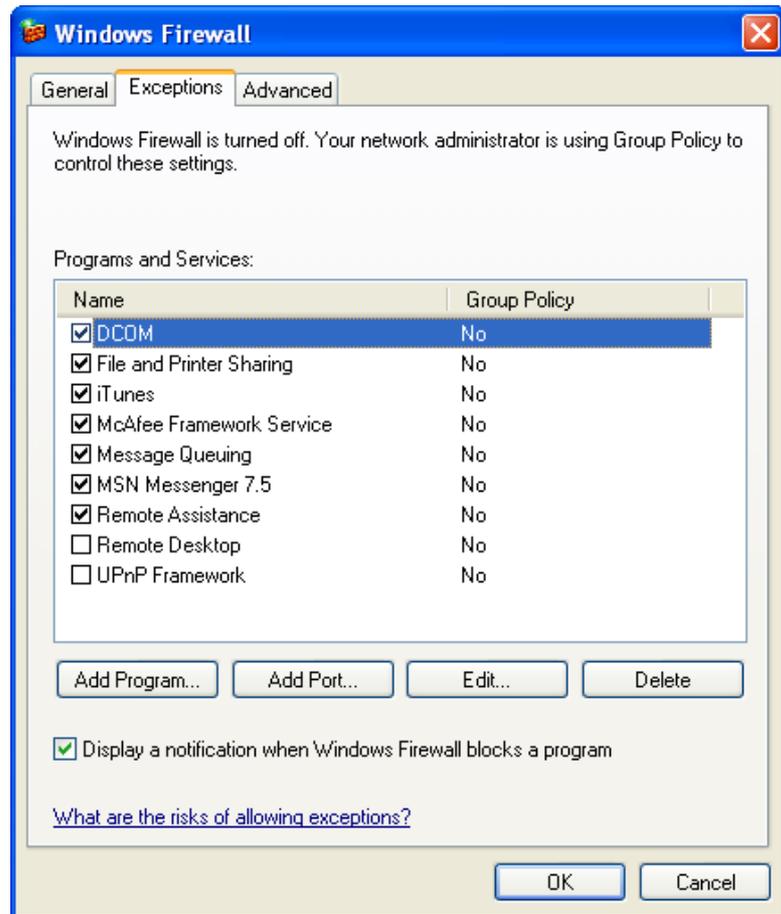


### Tip

- You can access Windows Firewall in Control Panel.

- 2 Click the **Exceptions** tab.
- 3 Click **Add Port**.
- 4 In the **Name** box, type "DCOM".
- 5 In the **Port Number** box, type "135".
- 6 Click **TCP**.



**7 Click OK.****8 Click OK.**

Repeat the procedure on the computer running the OPC client.

# 5 Configuring DCOM Permissions

When the computer running Vista OPC Server and the computer running the OPC client are members of the same workgroup, you have to use identical user accounts on the computer running Vista OPC Server and on the computer running the OPC client.

OPC servers and clients use the DCOM protocol to communicate. You have to set up DCOM security permissions for all the user accounts for which you want to grant the permission to use the DCOM protocol to communicate over the network.



## Important

- You have to be an Administrator on the computer where you want to set up DCOM.

For more information on permissions and DCOM, see the *TAC Vista OPC Client - General, Technical Manual*.

## 5.1 Adding a User Account

For security reasons, it is recommended that you limit the permissions to a group account or user account designated for OPC communication, rather than granting remote permissions to any of the system accounts.



## Important

- In a workgroup, you have to add identical user accounts (identical name and password) on the computer running Vista OPC Server and the computer running the OPC client.
- You have to configure DCOM permissions for all accounts that participate in OPC communication.



## Tip

- You can place the users that participate in OPC communication in a group to facilitate the administration of the accounts.

Regardless of whether an account belongs to a group or not, the account still has to be added both to the computer running Vista OPC Server and to the computer running the OPC client.

## To add a user account

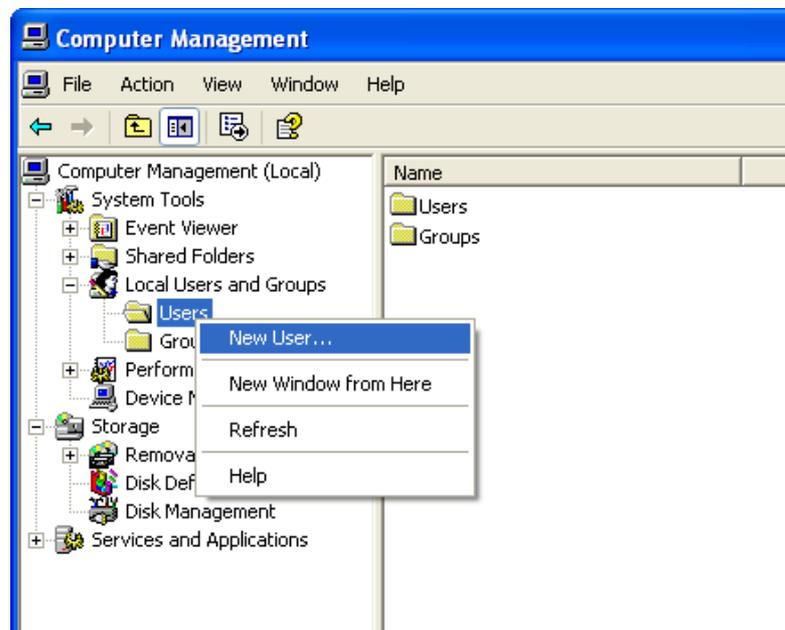
- 1 On the computer running Vista OPC Server, start Computer Management.



### Tip

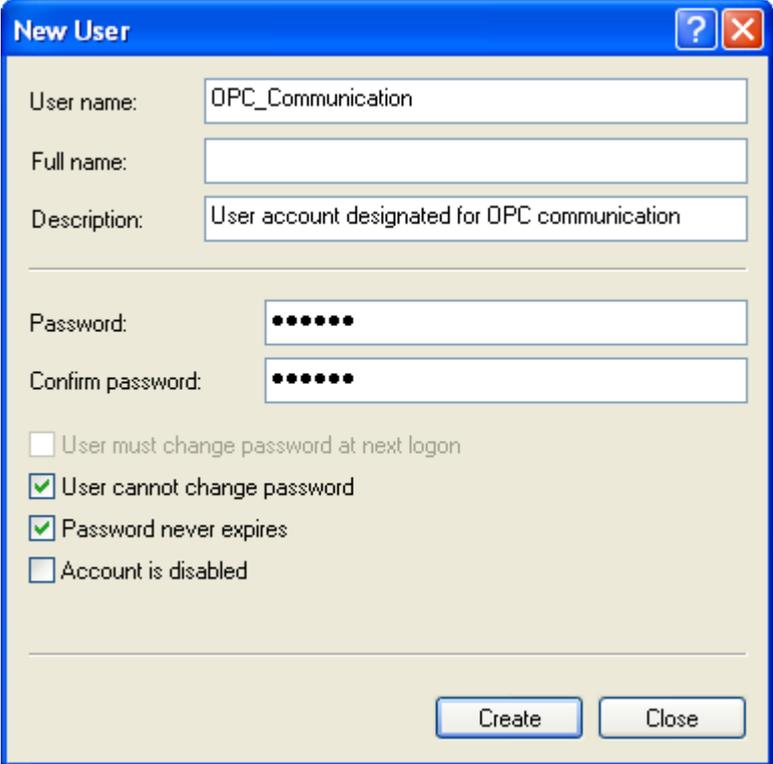
- You can access Computer Management in Control Panel under Administrative Tools.

- 2 In the tree structure, right-click System Tools\Local Users and Groups\Users, and then click **New User**.



- 3 In the **New User** dialog box, in the **User name** box, type a name.
- 4 In the **Description** box, type a description for the user.
- 5 In the **Password** box, type a password.
- 6 In the **Confirm password** box, type the password again.
- 7 Clear the **User must change password at next logon** check box.
- 8 Select the **User cannot change password** check box.

- 9 Select the **Password never expires** check box.



The screenshot shows the 'New User' dialog box with the following fields and options:

- User name: OPC\_Communication
- Full name: (empty)
- Description: User account designated for OPC communication
- Password: (masked with 7 dots)
- Confirm password: (masked with 7 dots)
- User must change password at next logon
- User cannot change password
- Password never expires
- Account is disabled
- Buttons: Create, Close

- 10 Click **Create**, and then click **Close**.

Repeat the procedure on the computer running the OPC client.

## 5.2 Setting Access Permissions

Access permissions define the access an account has to a launched application. You have to set access permissions on both the computer running Vista OPC Server and the computer running the OPC client.

### To set access permissions

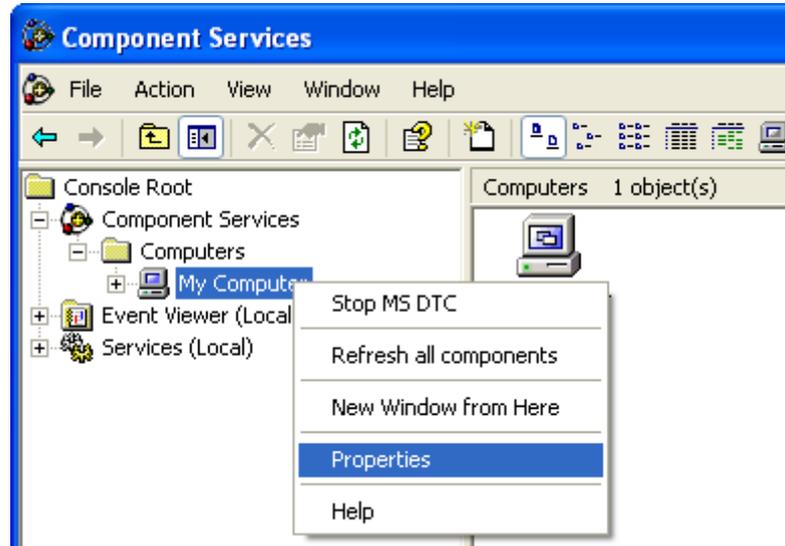
- 1 On the computer running Vista OPC Server, start Component Services.



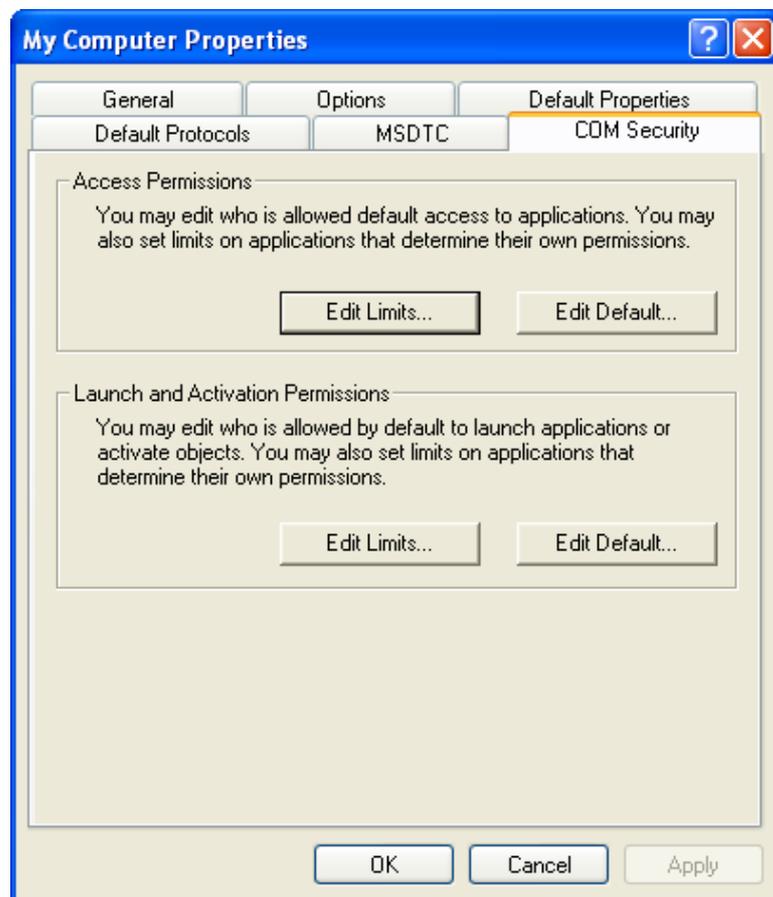
#### Tip

- You can access Component Services in Control Panel under Administrative Tools.

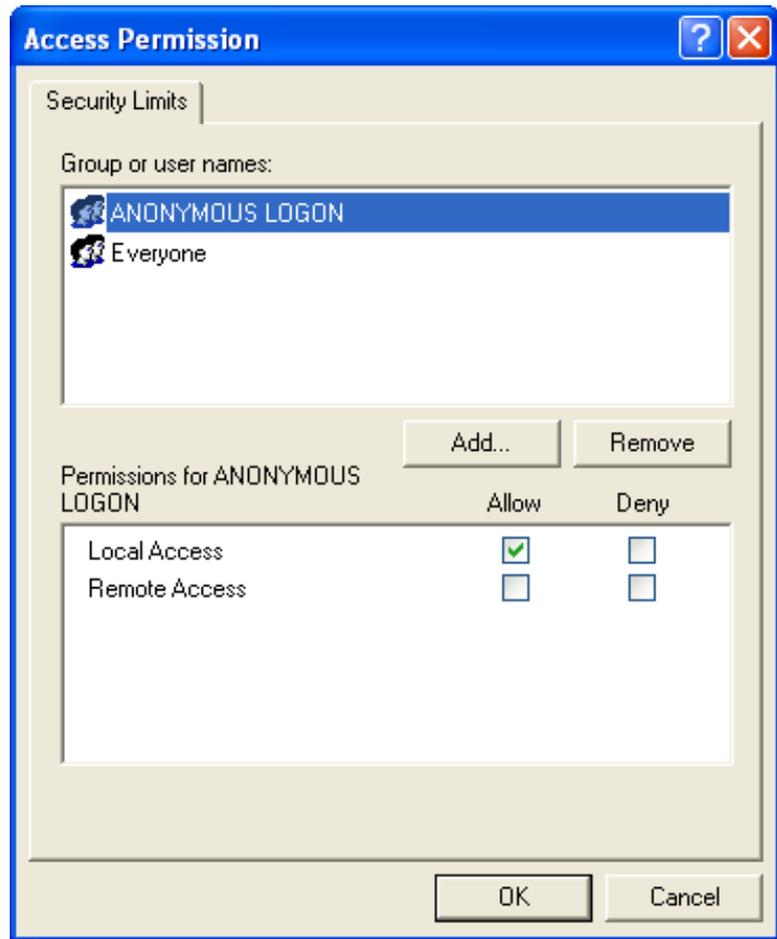
- 2 In the tree structure, right-click Component Services\Computers\My Computer, and then click **Properties**.



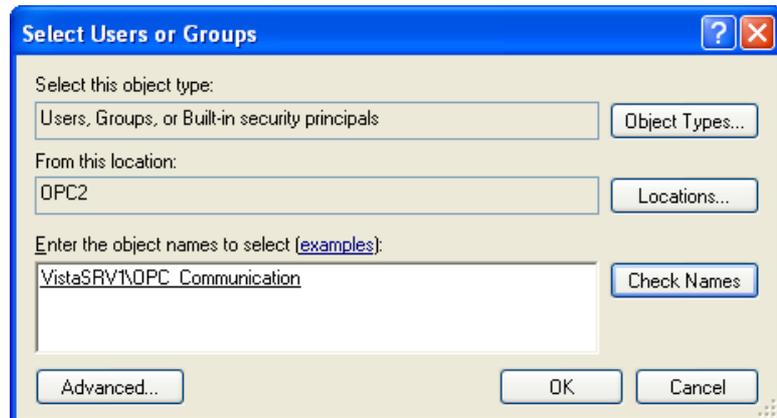
- 3 Click the **COM Security** tab.



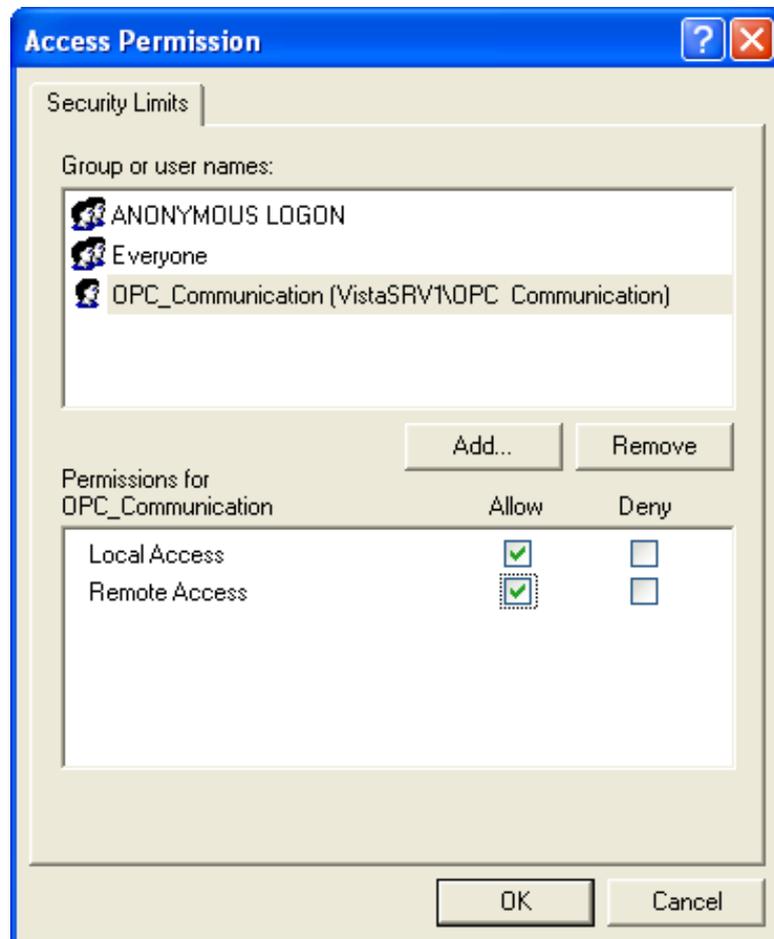
- 4 In the **Access Permissions** area, click **Edit Limits**.



- 5 Click **Add**.
- 6 In the **Select Users and Groups** dialog box, in the **Enter the object names to select** box, type the name of the user you want to grant permissions to.
- 7 Click **Check Names**.

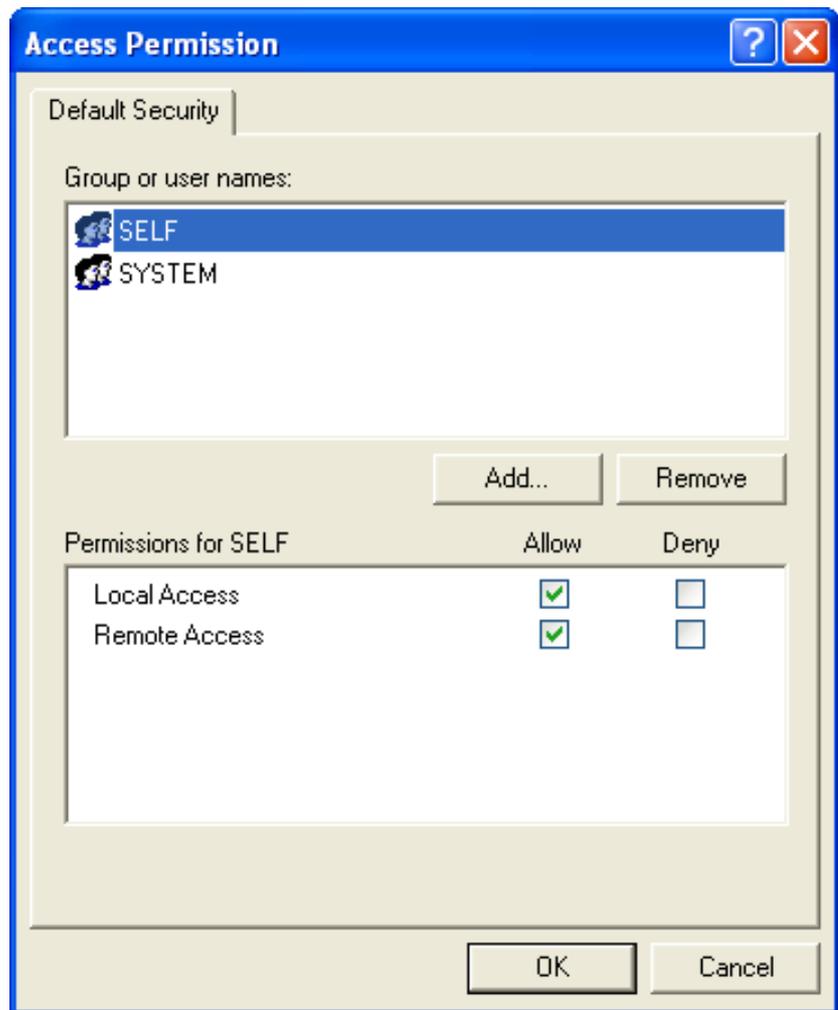


- 8 Click **OK**.
- 9 Select the desired user.
- 10 In the **Allow** column, select **Local Access** and **Remote Access**.



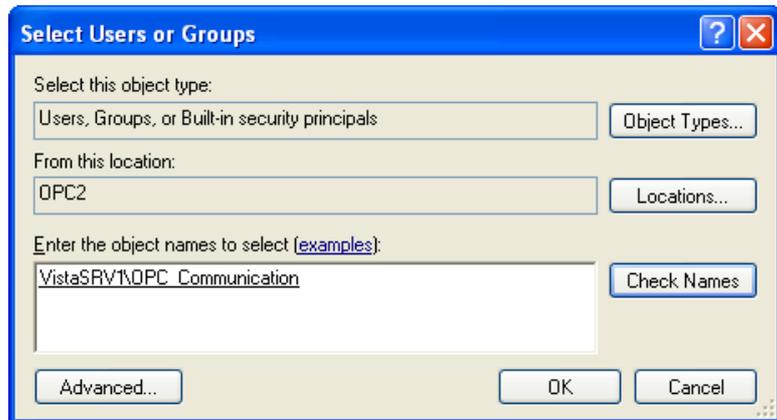
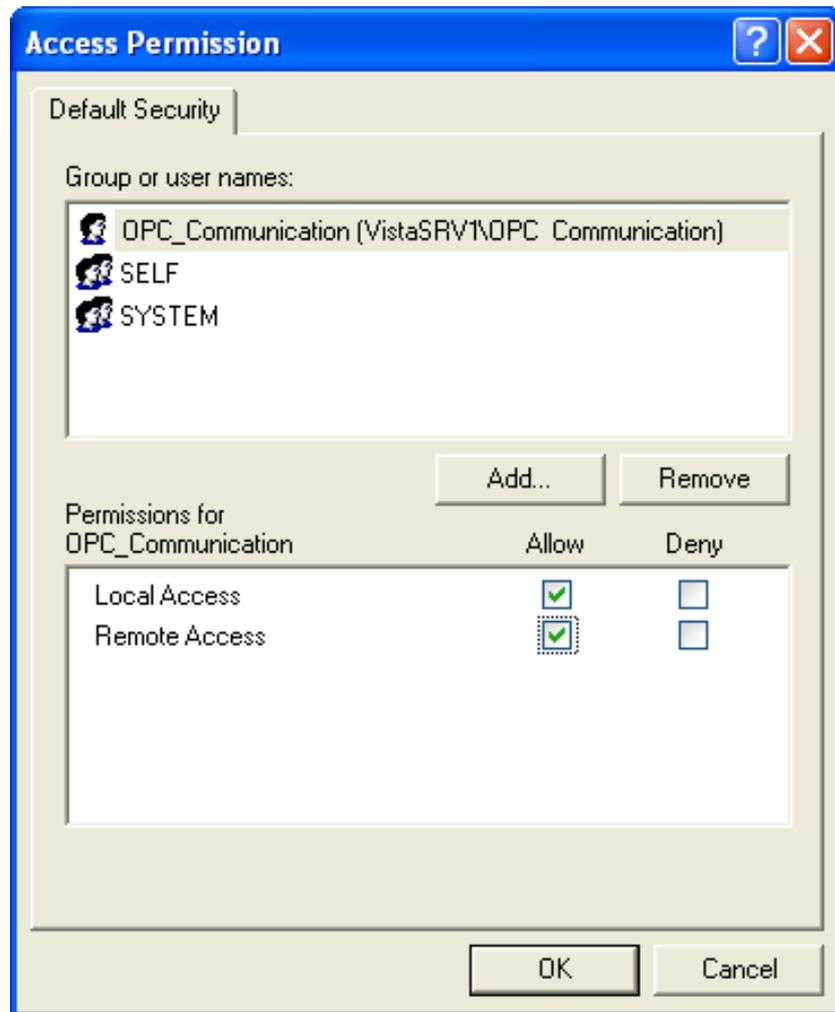
- 11 Click **OK**.

**12** In the **Access Permissions** area, click **Edit Default**.



**13** Click **Add**.

**14** In the **Select Users and Groups** dialog box, in the **Enter the object names to select** box, type the name of the user you want to grant permissions to.

**15 Click Check Names.****16 Click OK.****17 Select the desired user.****18 In the Allow column, select Local Access and Remote Access.**

**19** Click **OK**.

**20** Click **OK** to close the **My Computer Properties** dialog box.



#### **Important**

- You have to restart your computer for global changes in DCOM settings to take effect.

Repeat the procedures on the computer running the OPC client.



#### **Important**

- You have to create identical user accounts and passwords on the computer running Vista OPC Server and the computer running the OPC client.
- Some settings can be OPC client-specific. For more information on how to set access permissions and launch and activation permissions for the computer running the OPC client, consult the literature provided by your OPC client manufacturer.

## **5.3 Setting Launch and Activation Permissions**

The launch and activation permissions define which account that can launch a COM-based application, for example, Vista OPC Server, either on the network or locally. You have to set launch and activation permissions on both the computer running Vista OPC Server and the computer running the OPC client.

### **To set launch and activation permissions**

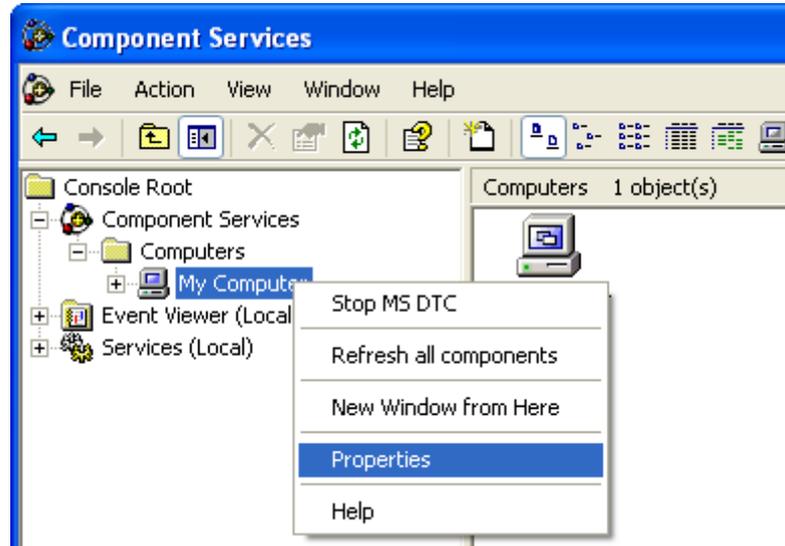
- 1** On the computer running Vista OPC Server, start Component Services.



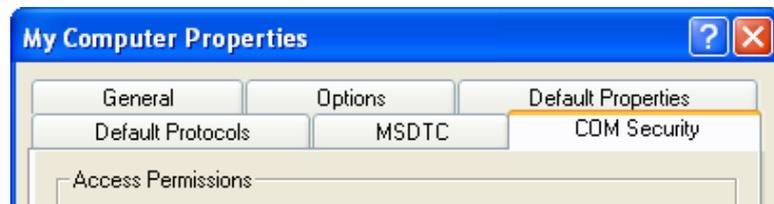
#### **Tip**

- You can access Component Services in Control Panel under Administrative Tools.

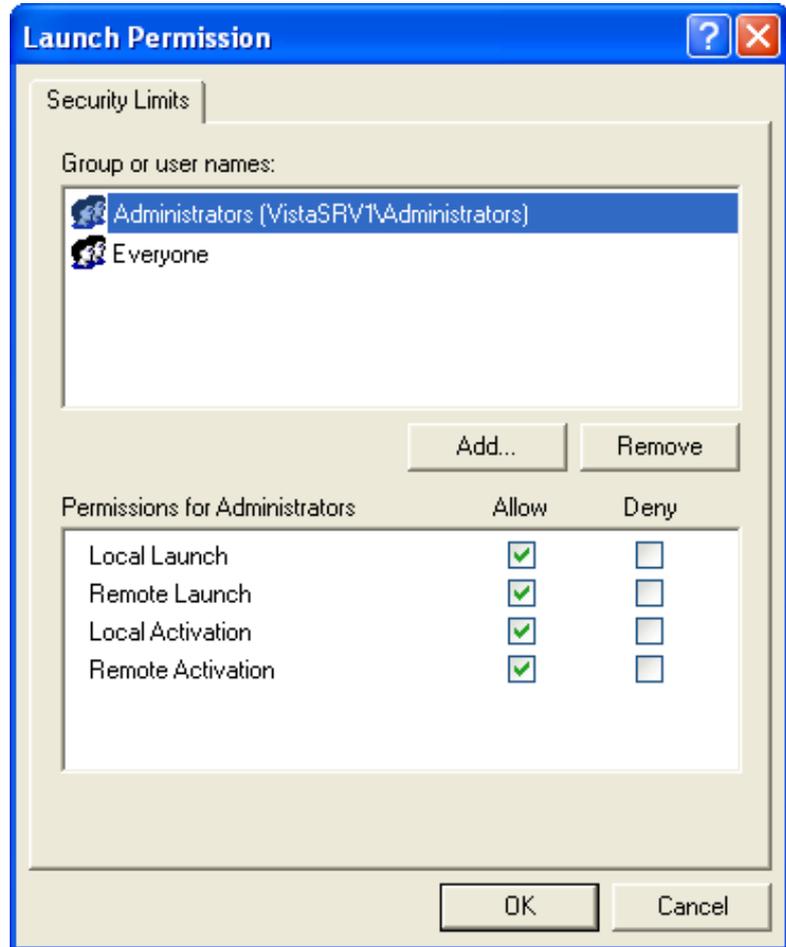
- 2 In the tree structure, right-click Component Services\Computers\My Computer, and then click **Properties**.



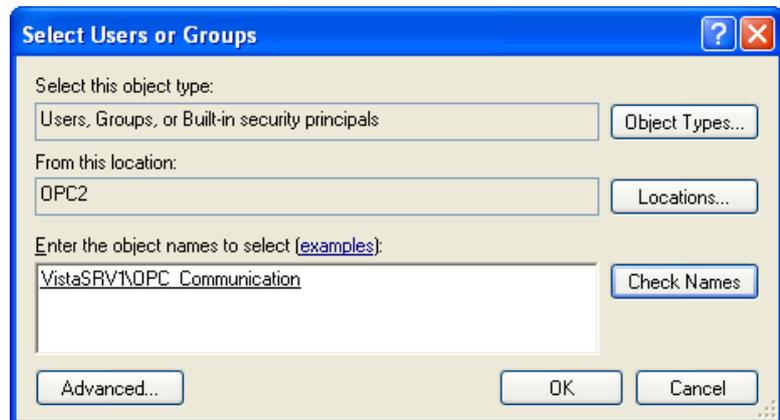
- 3 Click the **COM Security** tab.



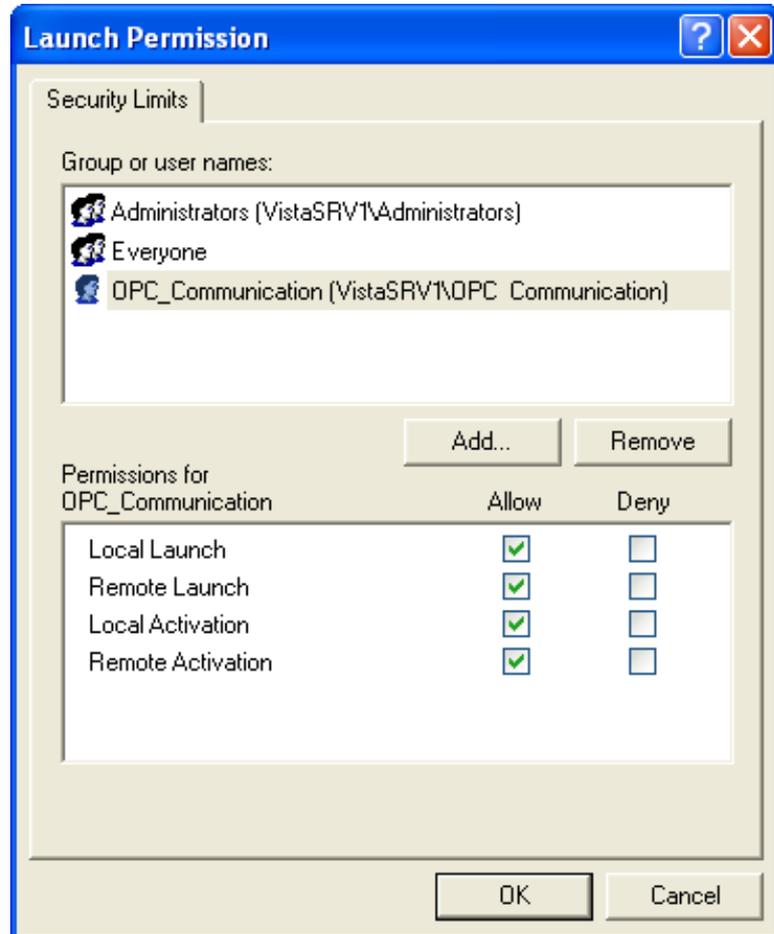
- 4 In the **Launch and Activation Permissions** area, click **Edit Limits**.



- 5 Click **Add**.
- 6 In the **Select Users and Groups** dialog box, in the **Enter the object names to select** box, type the name of the user.
- 7 Click **Check Names**.

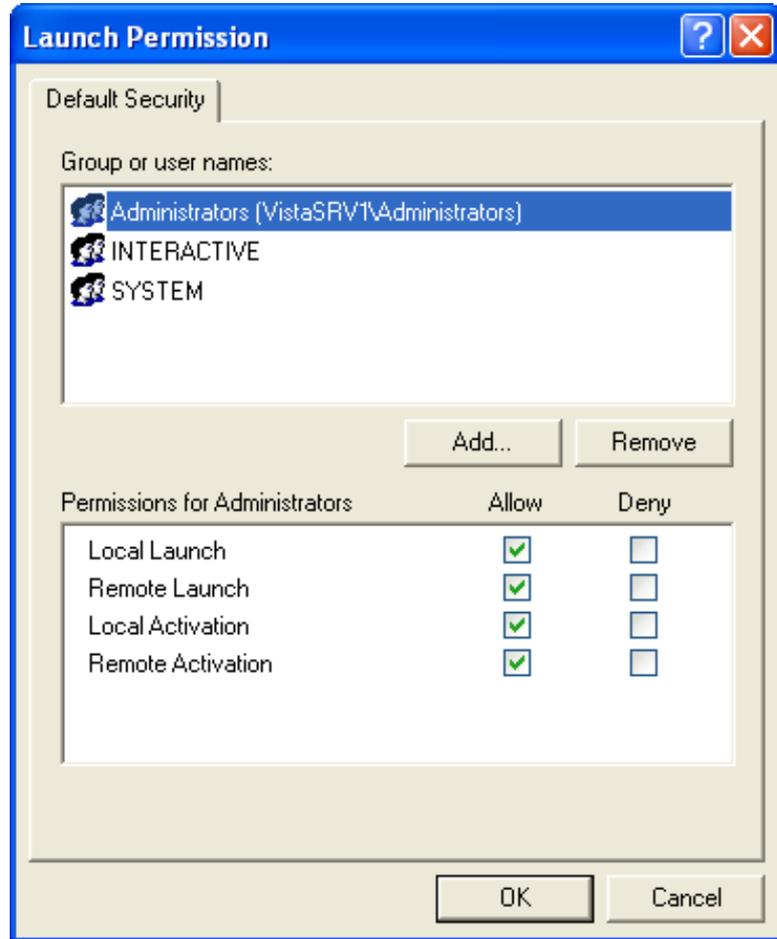


- 8 Click **OK**.
- 9 Select the desired user.
- 10 In the **Allow** column, select **Local Launch**, **Remote Launch**, **Local Activation**, and **Remote Activation**.

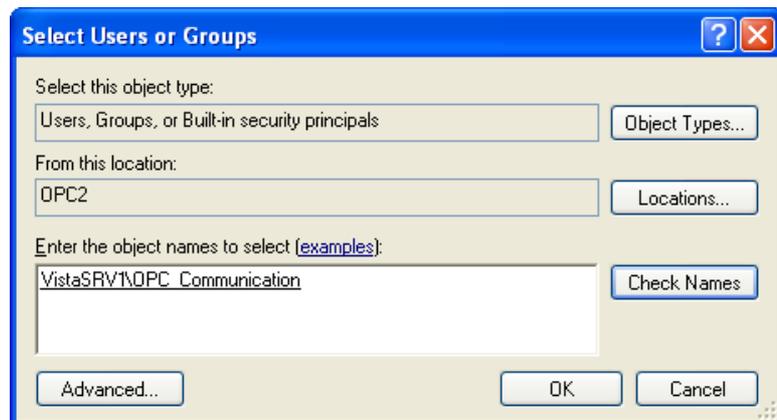


- 11 Click **OK**.

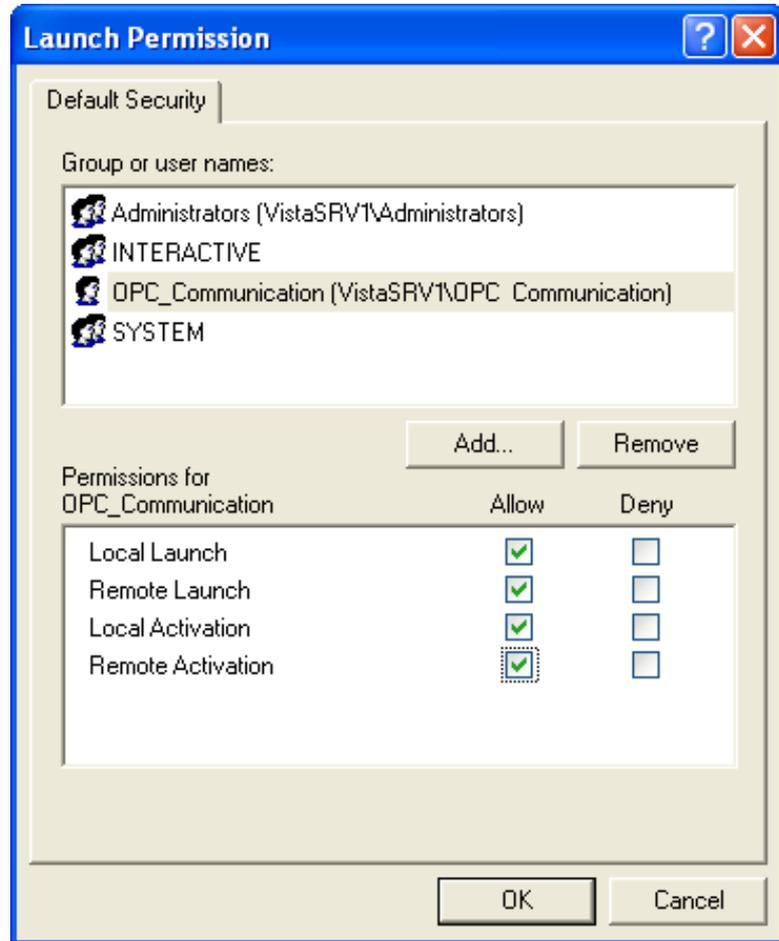
- 12 In the **Launch and Activation Permissions** area, click **Edit Defaults**.



- 13 Click **Add**.
- 14 In the **Select Users and Groups** dialog box, in the **Enter the object names to select** box, type the name of the user.
- 15 Click **Check Names**.



- 16 Click **OK**.
- 17 Select the desired user.
- 18 In the **Allow** column, select **Local Launch**, **Remote Launch**, **Local Activation**, and **Remote Activation**.



- 19 Click **OK**.
- 20 Click **OK** to close the **My Computer Properties** dialog box.



### Important

- You have to restart your computer for global changes in DCOM settings to take effect.

Repeat the procedures on the computer running the OPC client.



### Important

- You have to create identical user accounts and passwords on the computer running Vista OPC Server and the computer running the OPC client.
- Some settings can be OPC client-specific. For more information on how to set access permissions and launch and activation permissions for the computer running the OPC client, consult the literature provided by your OPC client manufacturer.

## 5.4 Setting Local User Authentication

When a computer involved in OPC communication tries to log in to another computer involved in OPC communication, it has to authenticate as itself on the contacted computer. If the authentication fails, the contacted computer will not allow the contacting computer access. You have to set local user authentication on both the computer running Vista OPC Server and the computer running the OPC client.

### To set local user authentication

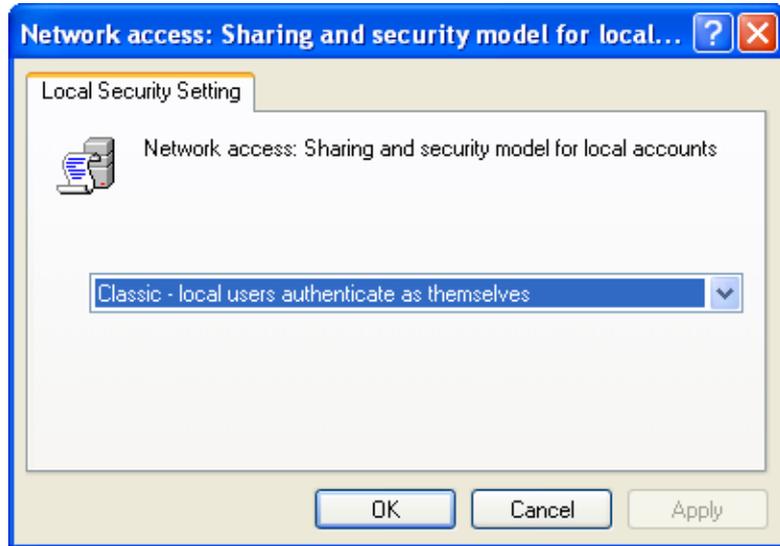
- 1 On the computer running Vista OPC Server, start Local Security Policy.



### Tip

- You can access Local Security Policy in Control Panel under Administrative Tools.

- 2 Double-click Local Policies\Security Options\Network access: Sharing and security model for local accounts.



- 3 Click **Local Security Settings - Classic - local users authenticate as themselves**.

- 4 Click **OK**.

Repeat the procedure on the computer running the OPC client.

## 6 Configuring OPCEnum for DCOM Communication

OPCEnum is a program that has to be installed on both the computer running Vista OPC Server and the computer running the OPC client. Vista OPC Server installs OPCEnum on the computer. If your OPC client application does not install OPCEnum, you have to manually install and register it on the computer running the OPC client.

On the computer running the OPC client, OPCEnum is used by the operating system to interpret responses from the computer running Vista OPC Server. Tools used for browsing OPC servers require OPCEnum on the computer running the OPC server in order to locate and browse OPC servers on that computer. You have to configure OPCEnum on the computer running Vista OPC Server.

For more information on OPCEnum, please visit [www.opcfoundation.org](http://www.opcfoundation.org).



### Important

- You have to be an Administrator on the computer where you want to set up DCOM.

### To configure OPCEnum for DCOM Communications

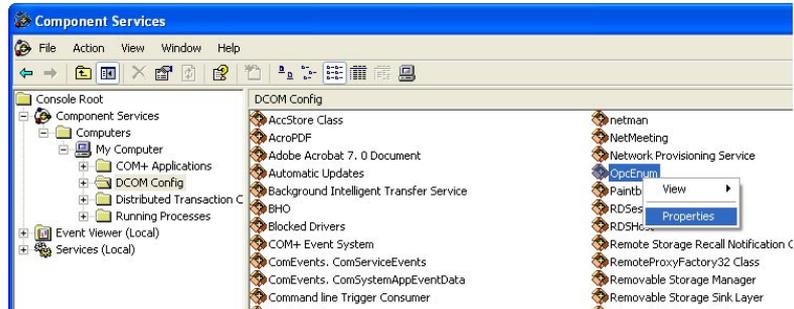
- 1 On the computer running Vista OPC Server, start Component Services.



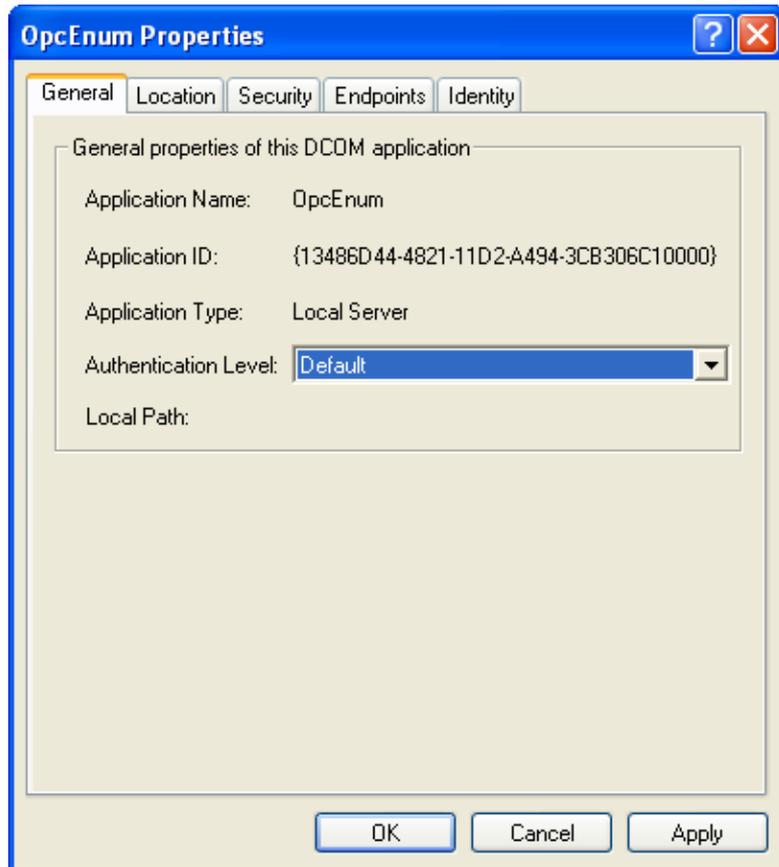
### Tip

- You can access Component Services in Control Panel under Administrative Tools.

- 2 In the tree structure, double-click Component Services\Computers\My Computer\DCOM Config.

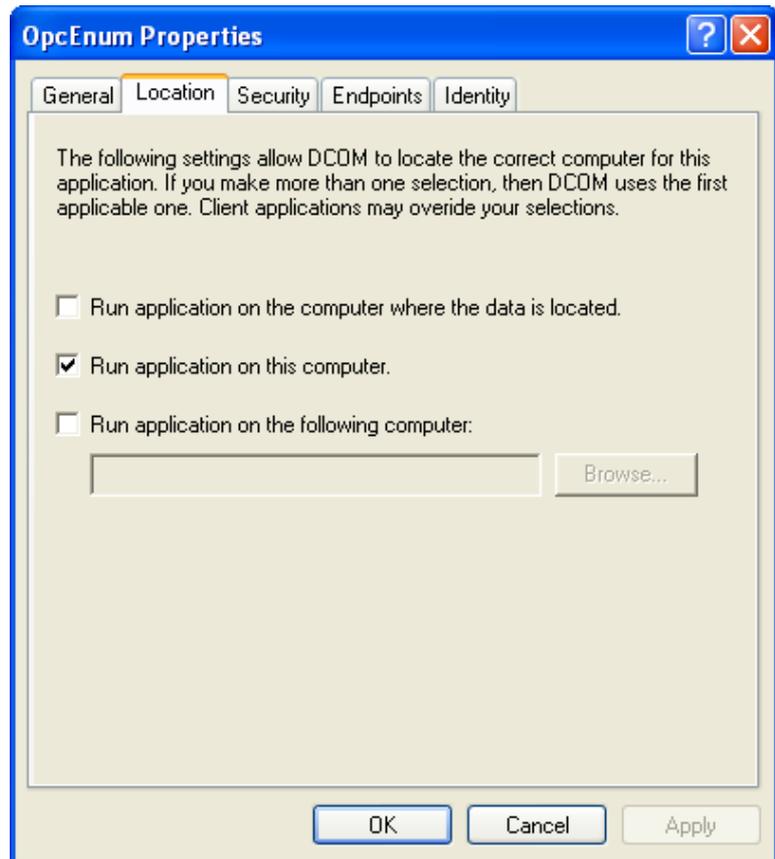


- 3 Right-click OPCEnum, and then click **Properties**.
- 4 In the OPCEnum **Properties** dialog box, click the **General** tab.
- 5 In the **Authentication Level** box, click **Default**.



- 6 In the **OPCEnum Properties** dialog box, click the **Location** tab.

- 7 Make sure that **Run application on this computer** is selected.



- 8 In the **OPCEnum Properties** dialog box, click the **Identity** tab.
- 9 In the **Which user account do you want to use to run this application?** area, click **This user**.
- 10 Click **Browse**.
- 11 In the **Select User** dialog box, in the **Enter the object name to select** box, type the name of the desired user account.



### Important

- It is recommended that you use the designated user account under which you run other OPC servers.

- 12 Click **Check Names**.



**13** In the **Password** box, type the password.

**14** In the **Confirm password** box, type the password again.

**15** Click **OK**.



### Important

- You have to restart the computer in order for changes in global settings to take effect.



### Caution

- If you have more than one OPC server installed on the computer you may also have more than one OPCENUM.exe installation.
- You have to make sure that the OPCEnum installation for which you configure DCOM is identical to the OPCEnum installation for which you have made an exception in Windows Firewall.

# REFERENCE

## 7 TAC Vista OPC Server



## 7 TAC Vista OPC Server

Vista OPC Server is an add-on module to Vista Server, enabling third party OPC-compliant presentation systems to interface with TAC products. The server consists of two separate interfaces:

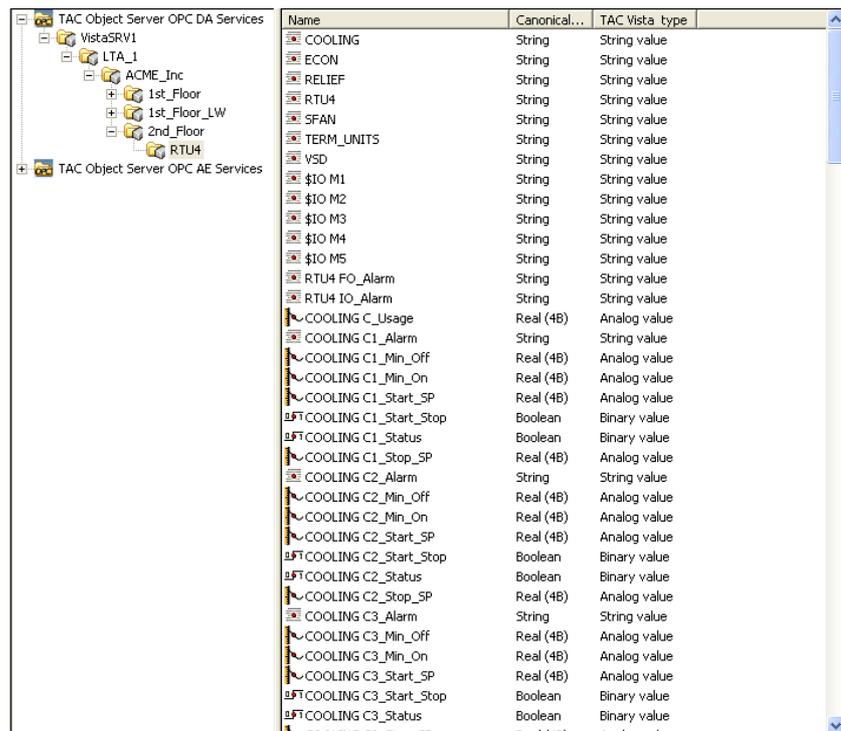
- OPC Data Access (DA), version 1.0A and 2.05A.
- OPC Alarms and Events (AE), version 1.10.

Objects and signals in the Vista Server database can be read and changed via the OPC Data Access interface. The OPC Alarms and Events interface makes it possible to subscribe to and acknowledge alarms from Vista OPC Server.

Vista OPC Server is implemented as a Windows service and can be started from the Computer Management console.

For information on OPC, see the *TAC Vista OPC Client - General, Technical Manual*.

The illustration below shows OPC items in a typical Vista database when accessed by an OPC client.



Name	Canonical...	TAC Vista type
COOLING	String	String value
ECON	String	String value
RELIEF	String	String value
RTU4	String	String value
SFAN	String	String value
TERM_UNITS	String	String value
VSD	String	String value
\$IO M1	String	String value
\$IO M2	String	String value
\$IO M3	String	String value
\$IO M4	String	String value
\$IO M5	String	String value
RTU4 FO_Alarm	String	String value
RTU4 IO_Alarm	String	String value
COOLING C_Usage	Real (4B)	Analog value
COOLING C1_Alarm	String	String value
COOLING C1_Min_Off	Real (4B)	Analog value
COOLING C1_Min_On	Real (4B)	Analog value
COOLING C1_Start_SP	Real (4B)	Analog value
COOLING C1_Start_Stop	Boolean	Binary value
COOLING C1_Status	Boolean	Binary value
COOLING C1_Stop_SP	Real (4B)	Analog value
COOLING C2_Alarm	String	String value
COOLING C2_Min_Off	Real (4B)	Analog value
COOLING C2_Min_On	Real (4B)	Analog value
COOLING C2_Start_SP	Real (4B)	Analog value
COOLING C2_Start_Stop	Boolean	Binary value
COOLING C2_Status	Boolean	Binary value
COOLING C2_Stop_SP	Real (4B)	Analog value
COOLING C3_Alarm	String	String value
COOLING C3_Min_Off	Real (4B)	Analog value
COOLING C3_Min_On	Real (4B)	Analog value
COOLING C3_Start_SP	Real (4B)	Analog value
COOLING C3_Start_Stop	Boolean	Binary value
COOLING C3_Status	Boolean	Binary value
COOLING C3_Stop_SP	Real (4B)	Analog value



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