

NaturalX Configuration Examples

This section gives you an example of how to configure DCOM for NaturalX on each available platform, providing examples for both client and server configuration.

This section covers the following topic:

- DCOM Configuration on Windows 2000/XP
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DCOM Configuration on Windows 2000/XP

This section describes how to configure NaturalX applications on Windows 2000/XP. All settings are applied with the tool DCOMCNFG. The dialog examples shown in the following sections appear as with DCOMCNFG under Windows 2000. (TSH: wäre das so korrekt?)

- Configuring NaturalX Servers
- Configuring NaturalX Clients

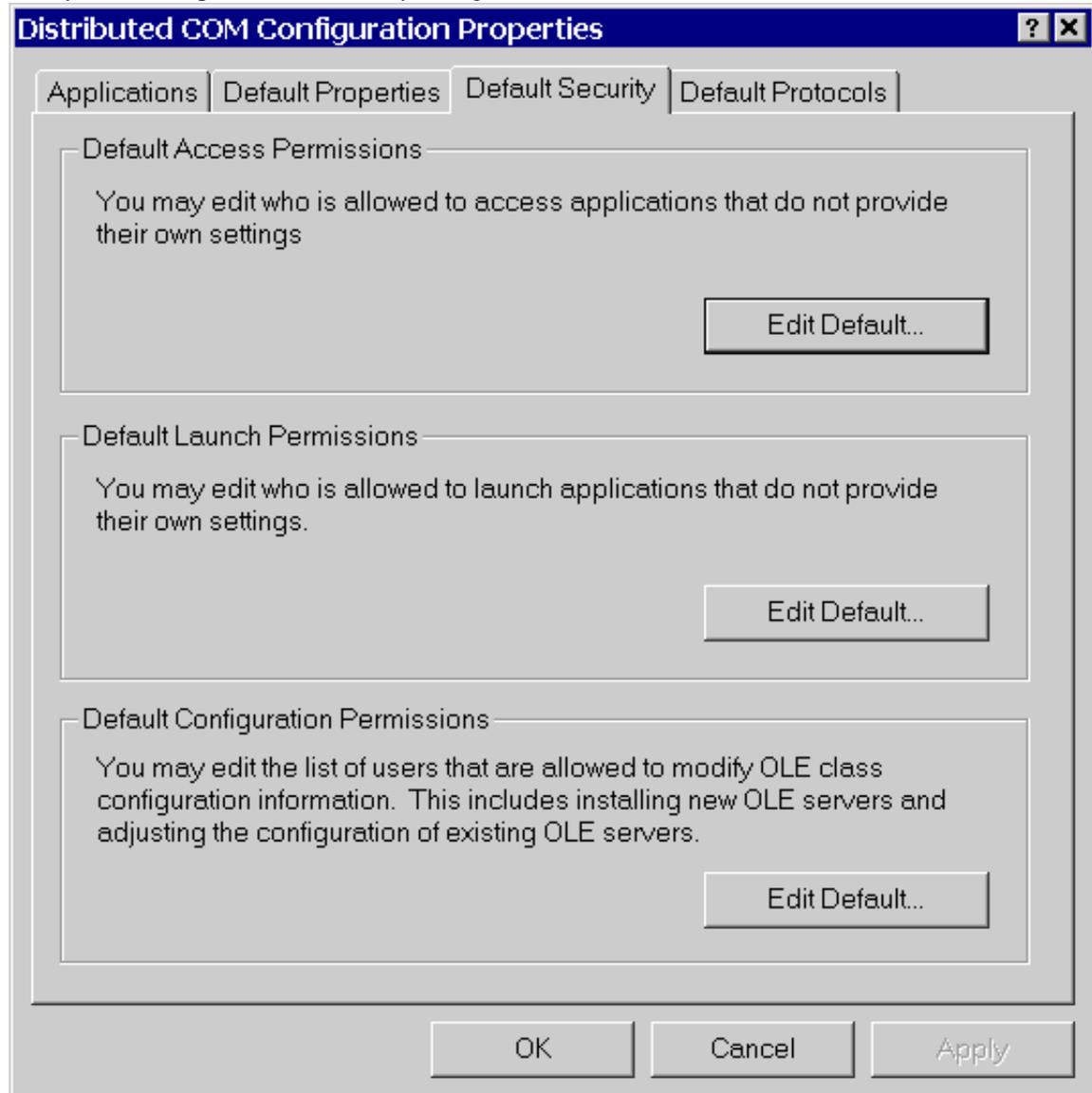
Configuring NaturalX Servers

1. Invoke the Distributed COM Configuration Properties dialog box.
2. In the "Default Properties" tab, activate the checkbox "Enable Distributed COM on this computer".
3. Set "Default Authentication Level" to "Default" and "Default Impersonation Level" to "Identify".



This allows NaturalX servers to retrieve the client's user ID. Before executing a request, the server will then move the client's user ID into the Natural system variable *USER in order to let Natural Security checks run against this user ID.

Now you can set up the default security configuration.



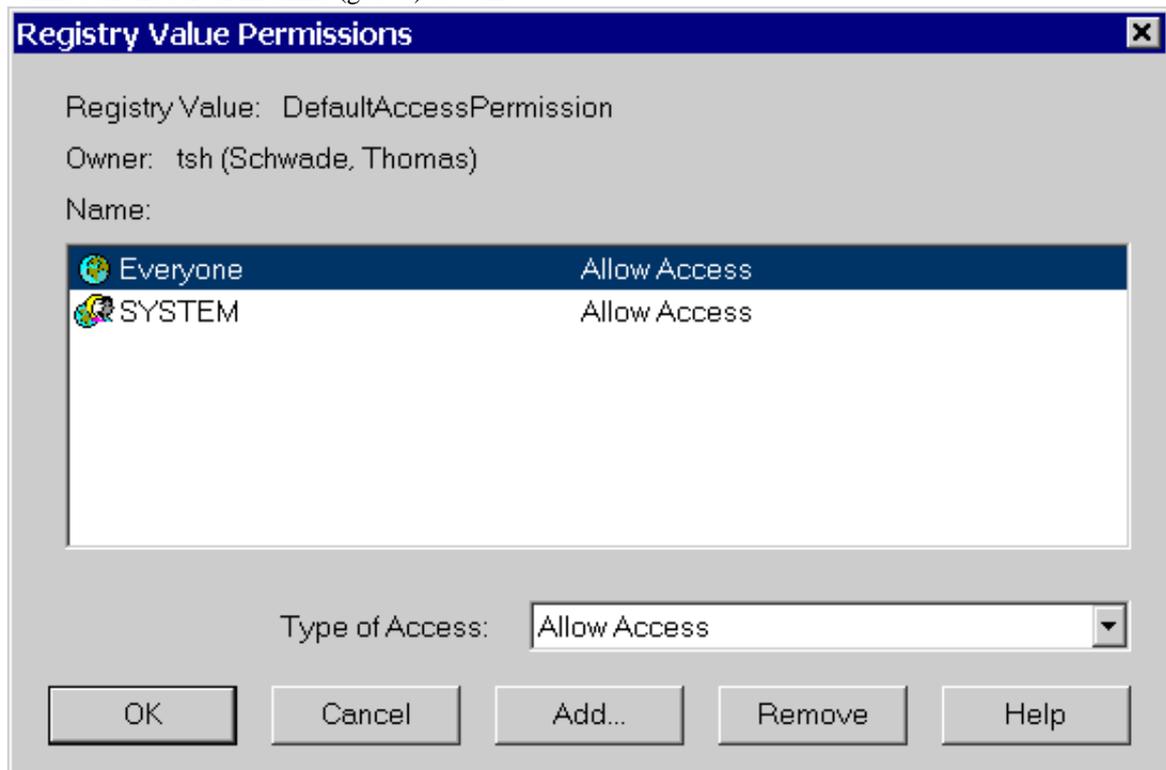
4. In the "Default Security" tab, choose Edit Default in the Default Access Permissions box. The Registry Value Permissions dialog box appears.

5. Use the Add function to define which users and groups can access NaturalX servers.

Note:

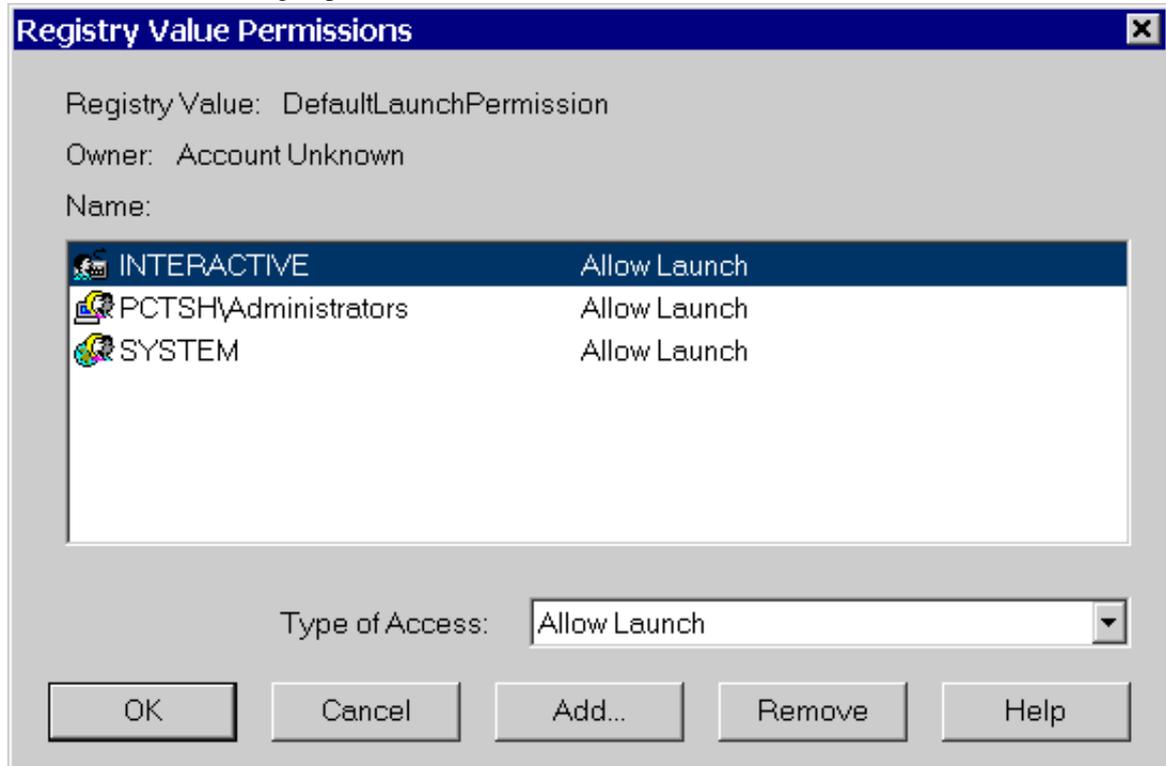
The registry value "DefaultAccessPermission" must contain at least the account SYSTEM.

In most cases you will define a group of all users to whom you want to grant access and enter this group here. In the example, the built-in group "Everyone" is entered. This grants access to every user that is defined on the server machine. If the built-in account "Guest" is enabled in the User Manager, this setting grants access to users not defined on the server machine (guests) as well.



6. Edit the default launch permissions.

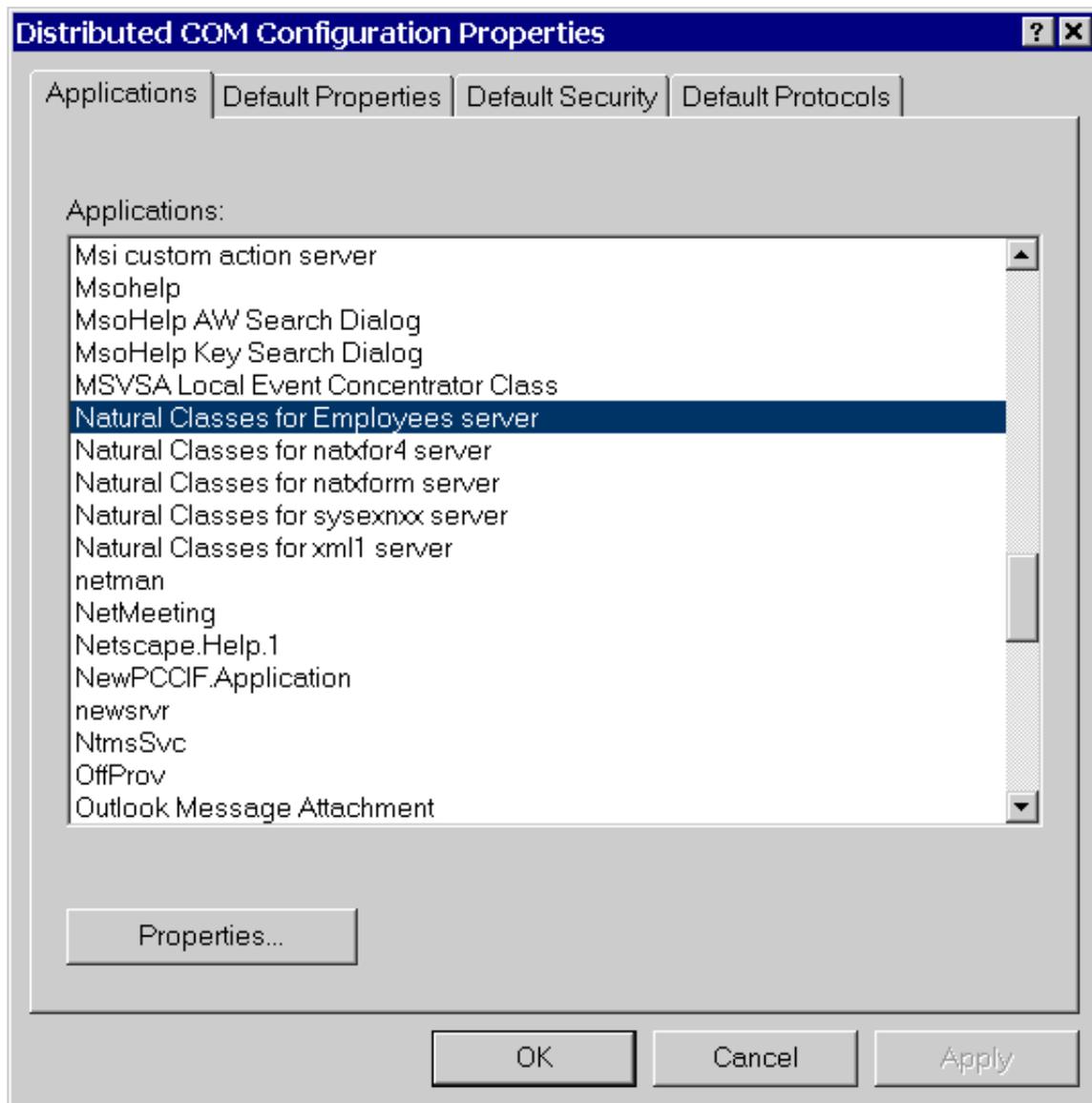
The registry value "DefaultLaunchPermission" must contain at least the accounts SYSTEM and INTERACTIVE and the group Administrators.



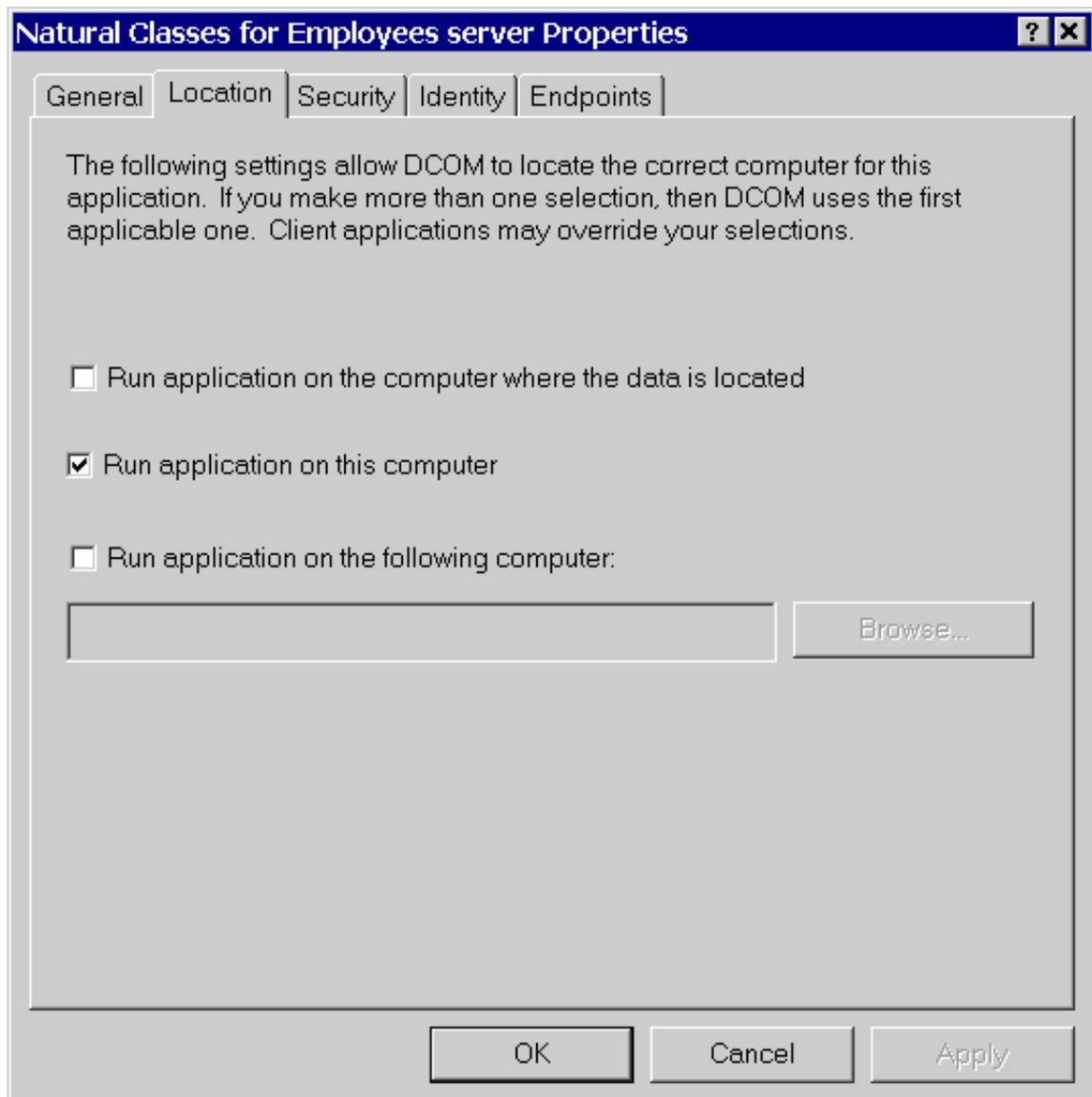
Now you can set up the configuration for a specific NaturalX server.

7. In the "Applications" tab, locate your NaturalX server in the Applications list box (in the example "Natural classes for Employees server").

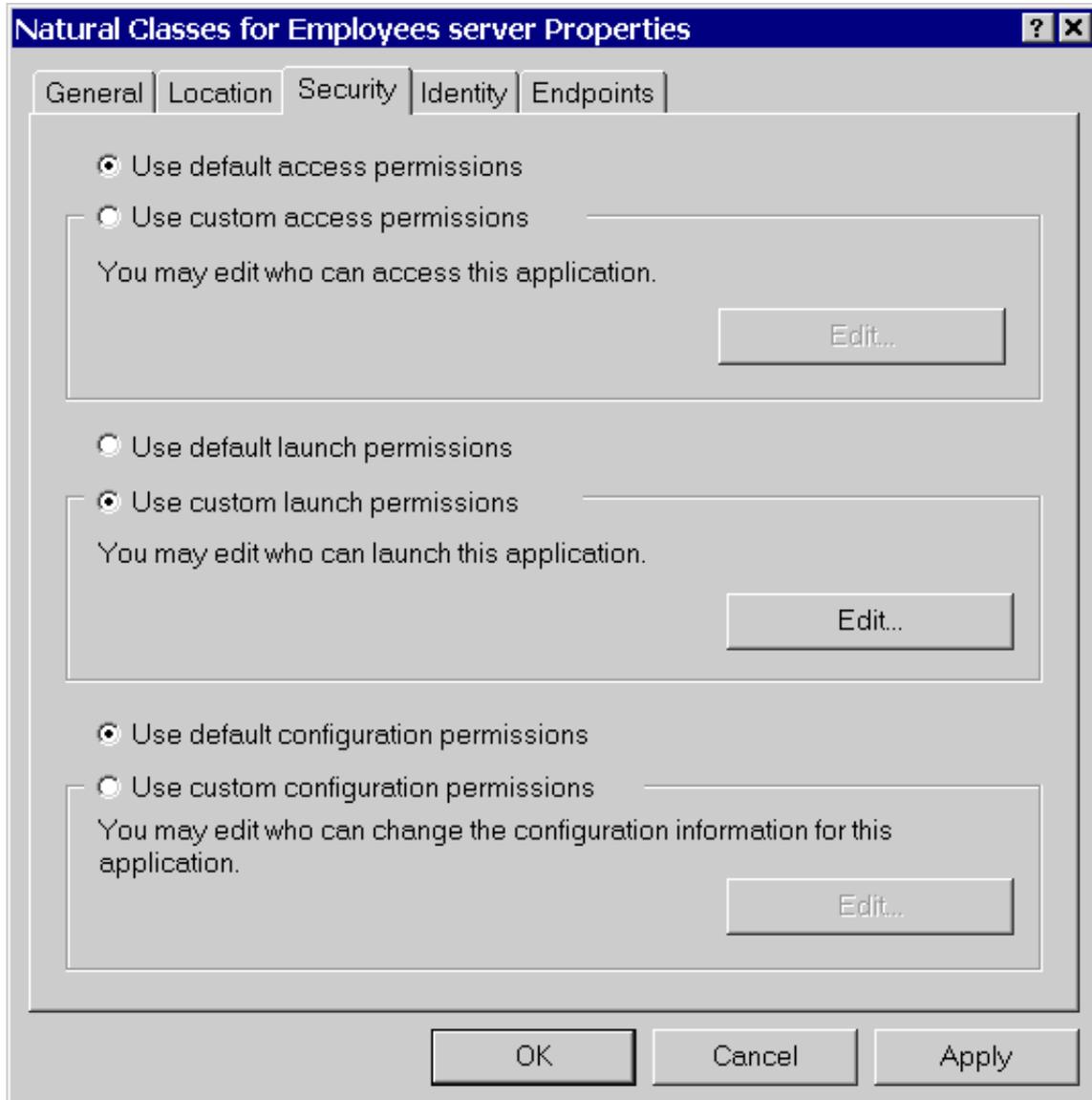
8. Select your server and choose "Properties".



9. In the "Location tab", activate the checkbox "Run application on this computer".



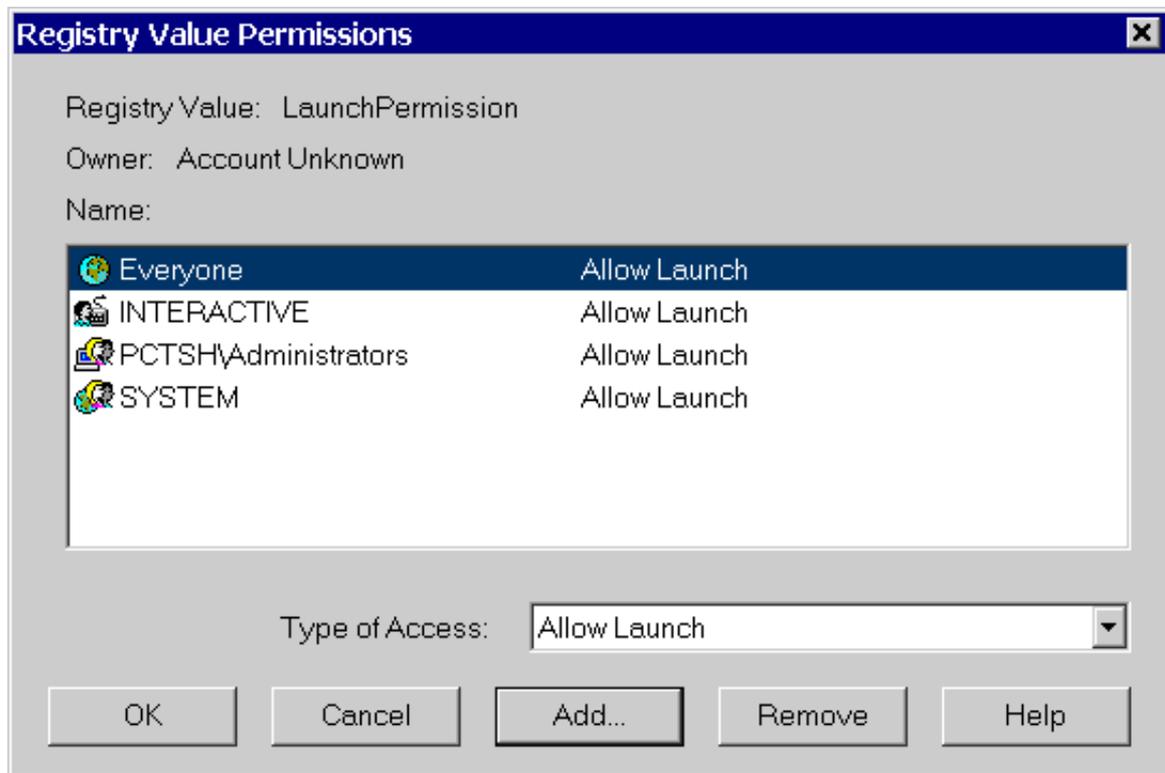
10. In the "Security" tab, make sure that the access permissions are set to "Use default access permissions".
11. Activate the "Use custom launch permissions" check box and choose "Edit" to modify the application-specific launch permissions.



The registry value "LaunchPermission" will contain at least the accounts SYSTEM and INTERACTIVE and the group Administrators.

12. Add the users and groups to be allowed to launch your NaturalX server.

In most cases, you will define a group of all users to whom you want to grant launch and enter this group here. In the example, the built-in group "Everyone" is entered. This grants launch to every user that is defined on the server machine. If the built-in account "Guest" is enabled in the User Manager, this setting grants launch to users not defined on the server machine (guests) as well.



13. In the "Identity" tab, define the account under which the NaturalX server will be launched.
- If you select "The launching user", a server process will be launched for each client. The server process will be launched under the account of the client user.
 - If you select "The interactive user", only one server process will be launched for all clients.

Note:

This is true only for classes that have been registered in Natural as "ExternalMultiple". If a class is registered as "ExternalSingle", a server process is created for each object of this class that is created.

The server process will be launched under the account of the user that is interactively logged in on the server machine. If no user is currently logged in on the server machine, this setting behaves like "The launching user".

- If you select "This user" and select a specific user account, only one server process will be launched for all clients.

Note:

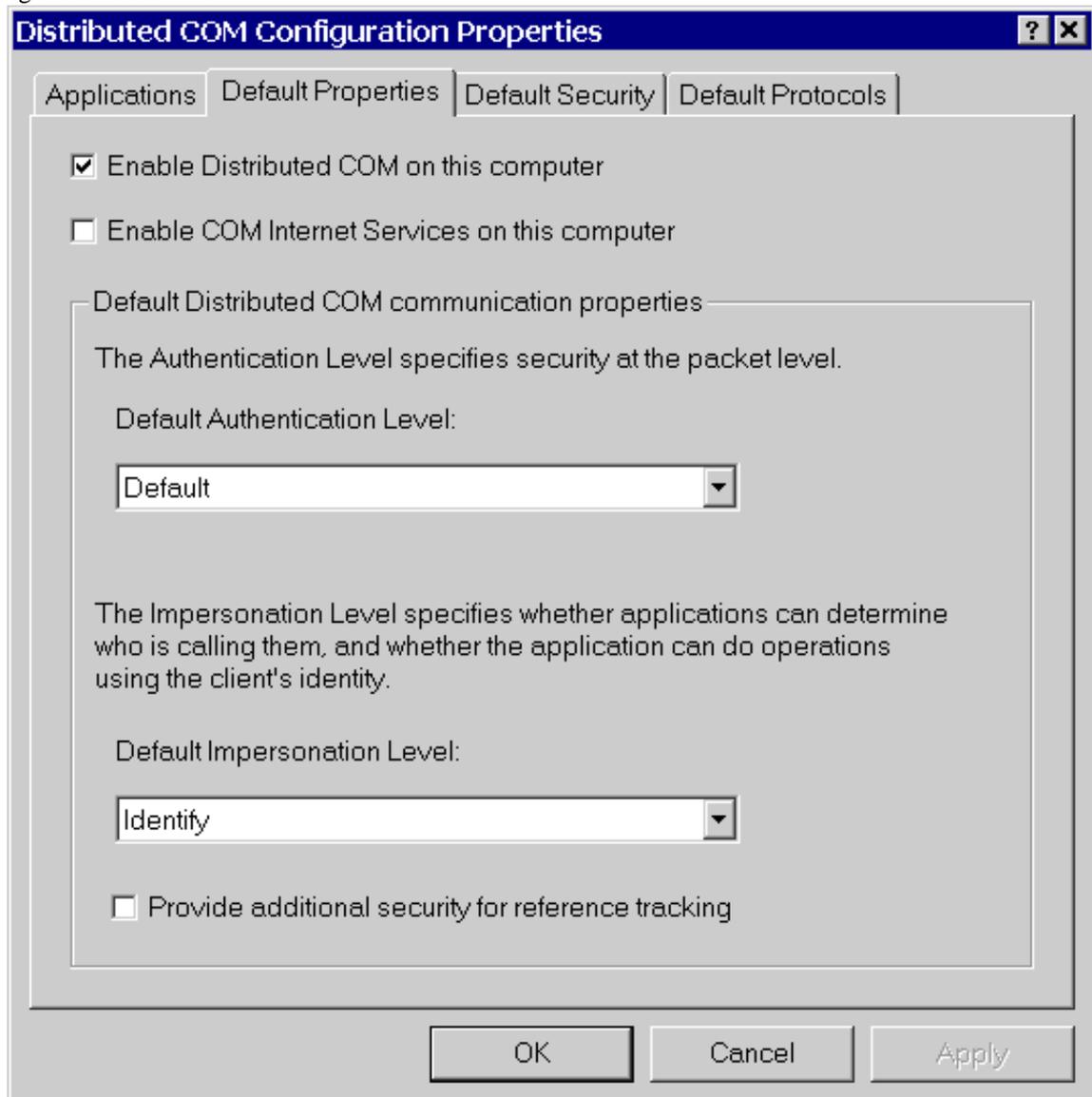
This is true only for classes that have been registered in Natural as "ExternalMultiple". If a class is registered as "ExternalSingle", a server process is created for each object of this class that is created.

The server process will be launched under the specified user account.

The screenshot shows a dialog box titled "Natural Classes for Employees server Properties" with a blue header bar containing a question mark and a close button. Below the header is a tabbed interface with five tabs: "General", "Location", "Security", "Identity" (which is selected), and "Endpoints". The main area of the dialog contains the question "Which user account do you want to use to run this application?". There are four radio button options: "The interactive user", "The launching user" (which is selected), "This user:", and "The System Account (services only)". Under the "This user:" option, there are three text input fields labeled "User:", "Password:", and "Confirm Password:". To the right of the "User:" field is a "Browse..." button. At the bottom of the dialog are three buttons: "OK", "Cancel", and "Apply".

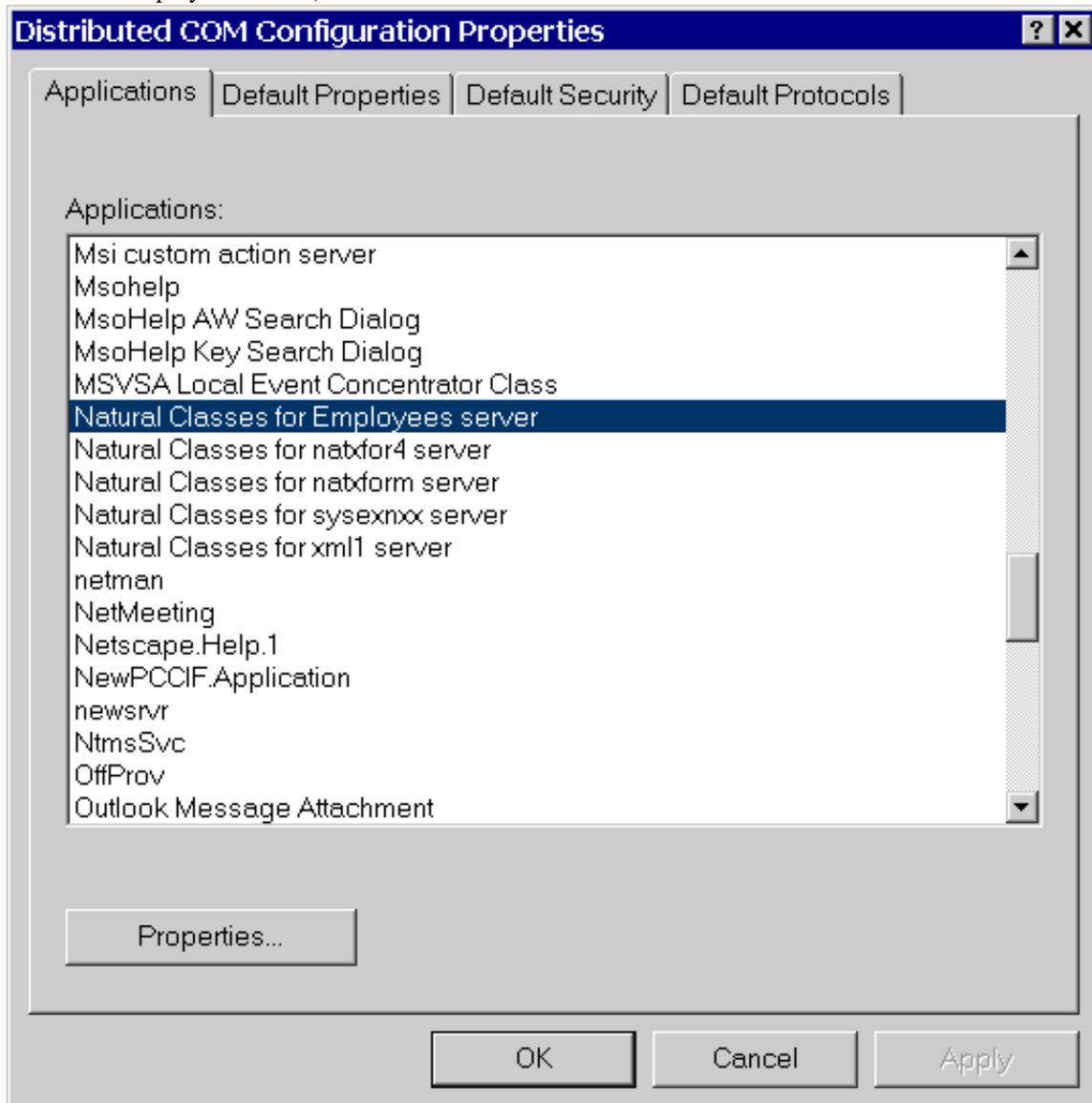
Configuring NaturalX Clients

1. Invoke the "Distributed COM Configuration Properties" dialog box.
2. In the "Default Properties" tab, activate the checkbox "Enable Distributed COM on this computer".
3. Set "Default Authentication Level" to "Default" and "Default Impersonation Level" to "Identify".
This allows NaturalX servers to retrieve the client's user ID. Before executing a request, the server will then move the client's user ID into the Natural system variable *USER in order to let Natural Security checks run against this user ID.



Now you can set up the configuration to access a specific NaturalX server.

4. In the "Applications" tab, locate your NaturalX server in the Applications list box (in the example "Natural classes for Employees server").



5. Select your server and choose "Properties".
6. In the "Location" tab, activate the checkbox "Run application on the following computer".

7. Enter the name of the remote machine on which the NaturalX server is installed.

