

Proxy Objects with the DCOM Wrapper

This chapter covers the following topics:

- Deploying Proxy Objects
 - Using Wrapper Objects with DCOM
 - Enabling Use of DCOM
 - Accessing and Registering the Wrapper Proxy
 - Specifying the Location of the DCOM Server Object
 - DCOMCNFG (DCOM Utility)
-

Deploying Proxy Objects

➤ **To use a Wrapper object on a machine other than the machine where you generated the object**

1. Make sure EntireX runtime is installed on the machine where you want to use the Wrapper object.
2. Copy the generated object and then register the Wrapper object as described in *Registering a Wrapper Object*.

Using Wrapper Objects with DCOM

You can use objects generated by the DCOM Wrapper with DCOM on Windows platforms. A wrapper object installed on one Windows machine that performs Remote Procedure Calls via EntireX Broker can be accessed from other Windows clients via DCOM.

Enabling Use of DCOM

Check the Generate DCOM proxy box in Advanced Options before generating the object.

The generated object (e.g. *Example.dll*) must be installed on the machine that will access the Broker (see Development of Wrapper Objects). This object is ready to use as a DCOM server. The security/identity settings for this object can be changed with the *DCOMCNFG.EXE* utility.

The proxy object (e.g. *pExample.dll*) must be registered on every DCOM client machine. The purpose of the proxy object is twofold:

- To register and unregister the Wrapper object on the client machines (registration on a DCOM client machine is different from registration on a DCOM server machine).
- To provide the type library for applications running on the client side.

Accessing and Registering the Wrapper Proxy

> To access the wrapper proxy

- Copy the generated proxy object to every client machine.

Or:

Put the generated proxy object on a fileserver.

> To register the wrapper proxy

- Run the program Regsvr32.exe with the name of the generated proxy object as parameter. *Regsvr32.exe* is part of Microsoft Visual C++. A copy can also be found in the Windows system directory.

Note:

Registration of the proxy object on the client machine does not require EntireX or any other Software AG middleware product.

Specifying the Location of the DCOM Server Object

After registering the proxy object on the DCOM client machine, specify the name of the machine where the DCOM server object is registered using the steps below:

1. With the *DCOMCNFG.EXE* utility, select the properties of the application (e.g. EOL.Example).
2. Select the Locations tab and enter the machine name under **Run application on the following computer**.

DCOMCNFG (DCOM Utility)

If access permission problems occur when running remote DCOM Wrapper objects from Windows, check the configuration using DCOMCNFG.

Server PC

- **Default Properties**

Please check that the following default properties settings exist for all objects:

- Enable DCOM on this Computer is set.
- Authentication Level is Connect and the Impersonation Level is Identify.
- Provide Additional Security is not set.

- **Default Security**

Default security settings should be applied globally for all objects or explicitly for the individual object. See Properties - Security. Please make sure that:

- Access Permissions contains the name Everyone or Administrators with AllowAccess.
- Launch Permissions contains the name Everyone or Administrators with AllowLaunch.
- Configuration Permissions use the default settings or your own modifications.
- **Properties**
Please make sure that:
 - General contains the Application name (for example EOL.EMPL). The application type is DLL surrogate.
 - If the Default Security settings for all objects are applied as described, use the default permissions:
 - Use default access permissions.
 - Use default launch permissions.
 - Use default configuration permissions.
 - If the default security settings and the settings for the individual object are different, use the following settings to access the DCOM Wrapper objects remotely:
 - Use custom access with Everyone or Administrators with AllowAccess.
 - Use custom launch with Everyone or Administrators with AllowLaunch.
 - Use custom configuration with default settings or your own modifications.
 - Identity is set to interactive user.

Client

- **Default Properties**
Please make sure that:
 - Enable DCOM on this Computer is set.
 - Authentication Level is Connect and the Impersonation Level is Identify.
 - Provide Additional Security is not set.
- **Default Security**
The default security settings for all objects must contain the following settings because restrictions for remote DCOM Wrapper objects are not possible:
 - Access Permissions must contain the name Everyone or Administrators with AllowAccess.
 - Launch Permissions must contain the name Everyone or Administrators with AllowLaunch.
 - Configuration Permissions with default settings or your own modifications.

- **Properties**

Please make sure that:

- General contains the Application name (for example EOL.EMPL).
- Application type is Remote Server.
- Remote Computer contains the host name of the server PC.

- **Location**

Please make sure that Run Application on the Following Computer is set. Enter < *pcname* > or < *IP-address* > here.