# Exercise 1 From C++ to COM

This exercise creates a client/server application using the same principles as employed by the COM model. The server uses multiple inheritance to implement several interfaces and the client obtains interface pointers to the server. Note that the server is implemented in a DLL and the client is almost completely decoupled from the server.

#### Step 1 - Setting up the Projects

Open the workspace:

#### COM Programming\Exercises\From C++ to COM\From C++ to COM.dsw

Observe that there are two projects defined: Server and Client.

## Step 2 -Defining the Interfaces

Working in the *Server* project, open the file *Name.h*. This file defines all the interfaces for the *Server* and *Client* projects. Follow the instructions in the header file to define these interfaces.

## Step 3 - Completing the Server Application

Open the file *Name.cpp*. This file defines the method implementations for the *Server* project. Follow the instructions in the source file to define these methods. When you have implemented all the methods, build the DLL.

## Step 4 - Completing the Client Application

Working in the *Client* project, open the file *Main.cpp*. Follow the instructions in the file to complete the client test harness. Note that the client includes the file *Name.h* and this gives the client access to all the interface definitions. Build and test.