

Exercise 3

Phase 2. Prototype with remote access (eLibrary_v3)

Make a copy of the entire folder eLibrary_v2 and rename it as eLibrary_v3. Open the new project folder.

3.1. On the server side: Creating a project eLibraryHost of Windows Service type.

Step 1

- Create a new project **eLibraryHost** - *Windows->Windows Service* in the folder **eLibrary_v3**
- Save the project **eLibraryHost** (with a new solution with the same name) in the folder **eLibrary_v3**
- Add the project **eLibraryServer** into the new solution
Use **file>Add>Existing project ..**

Step 2

Open the **Service1.cs** file.

- Edit the functions **OnStart()** and **OnStop()** in order to write to a text file **eLibraryHostLog.txt** in C: directory:

```
protected override void OnStart(string[] args)
{
    System.IO.File.AppendAllText("C:\\eLibraryHostLog.txt", "eLibraryHost STARTED at " + DateTime.Now.ToString() + Environment.NewLine);
    doRemotingConfiguration();
}

protected override void OnStop()
{
    System.IO.File.AppendAllText("C:\\eLibraryHostLog.txt", " STOPPED at " + DateTime.Now.ToString() + Environment.NewLine);
}
```

Step 3

Create an item Installer in the project, which serves to establish the parameters for the connection with **Services Control Manager (SCM)**.

- Open the file **Service1.cs** in *[design]* view. With right mouse click choose the context menu and option **Add Installer**.

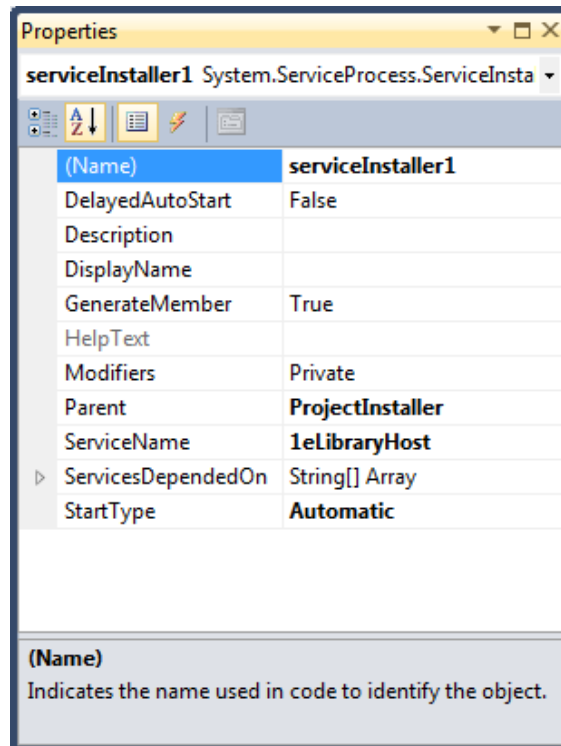
As a result a **ProjectInstaller.cs** file is created.

If you open the file *ProjectInstaller.cs* in *[design]* view , there are two objects in it.

- **serviceInstaller1**
- **serviceProcessInstaller1**
- Configuring the **ServiceInstaller1** object.

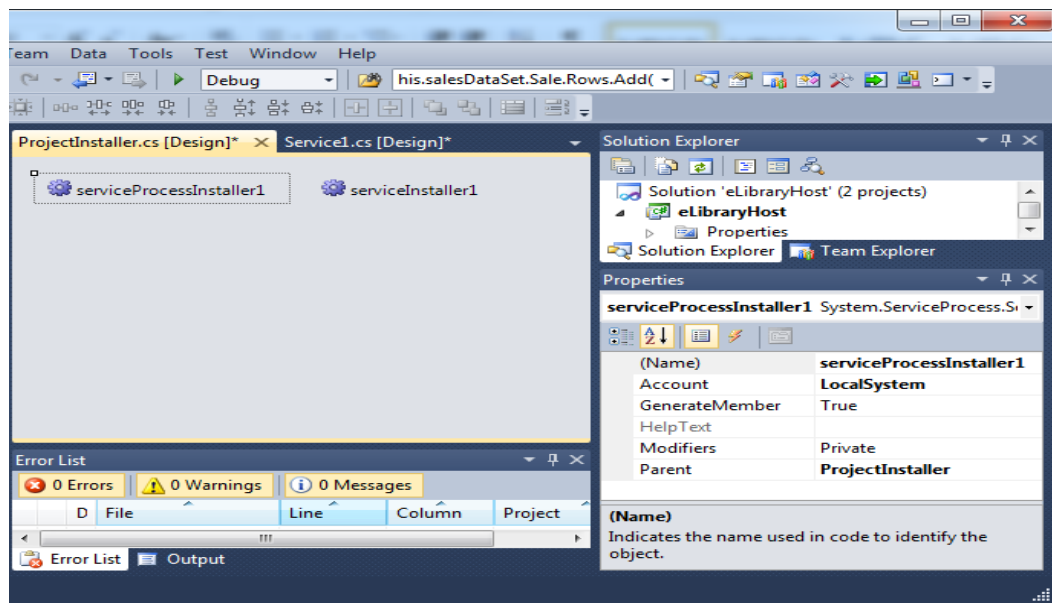
Choose the *ServiceInstaller1* control and set the following properties:

- *ServiceName* = "**1eLibraryHost**"
- *StartType* = "**Automatic**"



- Configuring the **serviceProcessInstaller1** object.

Choose the *serviceProcessInstaller1* properties. Set the following properties: **Account** to **LocalSystem**.



Build the project to check for errors (no action will be produced, except checking for mistakes).

Step 4

Installing the created service:

Installing a service using the VS2010 Command Prompt:

- Open the console Start>All Programs> Microsoft Visual Studio 2010> Visual Studio Tools> Visual Studio Command Prompt (2010) with right mouse click > Run as administrator
- Set the current directory with the command **cd..** (the current directory have to be **bin / Debug** directory of your project **eLibraryHost**):
... \eLibrary_v3\eLibraryHost\bin\Debug
- Install the service with command:
... \eLibrary_v3\eLibraryHost\bin\Debug> **installutil eLibraryHost.exe**
(uninstalling command - **installutil /u eLibraryHost.exe**)

.NET Console (Not DOS console!)

```
C:> cd c:\..\ eLibrary_v3\eLibraryHost\bin\Debug
```

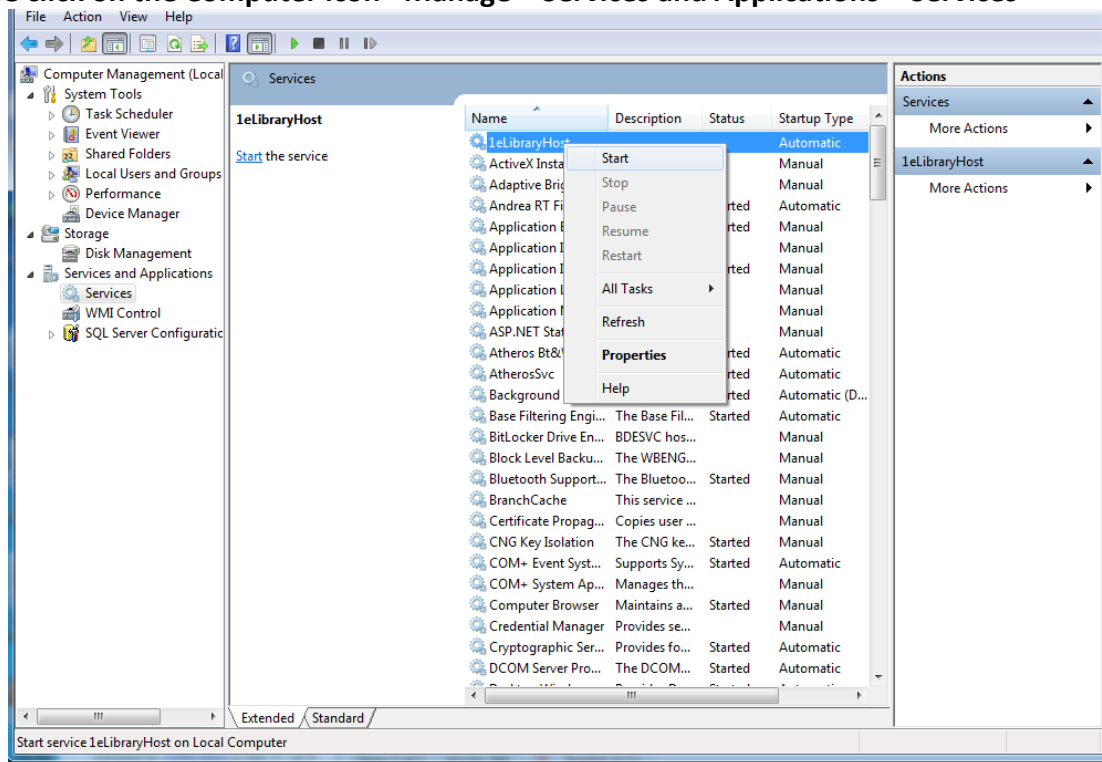
```
C:\..\ eLibrary_v3\eLibraryHost\bin\Debug >installutil eLibraryHost.exe
```

Step 5

Starting the installed service. Starting **Services Control Manager (SCM)**

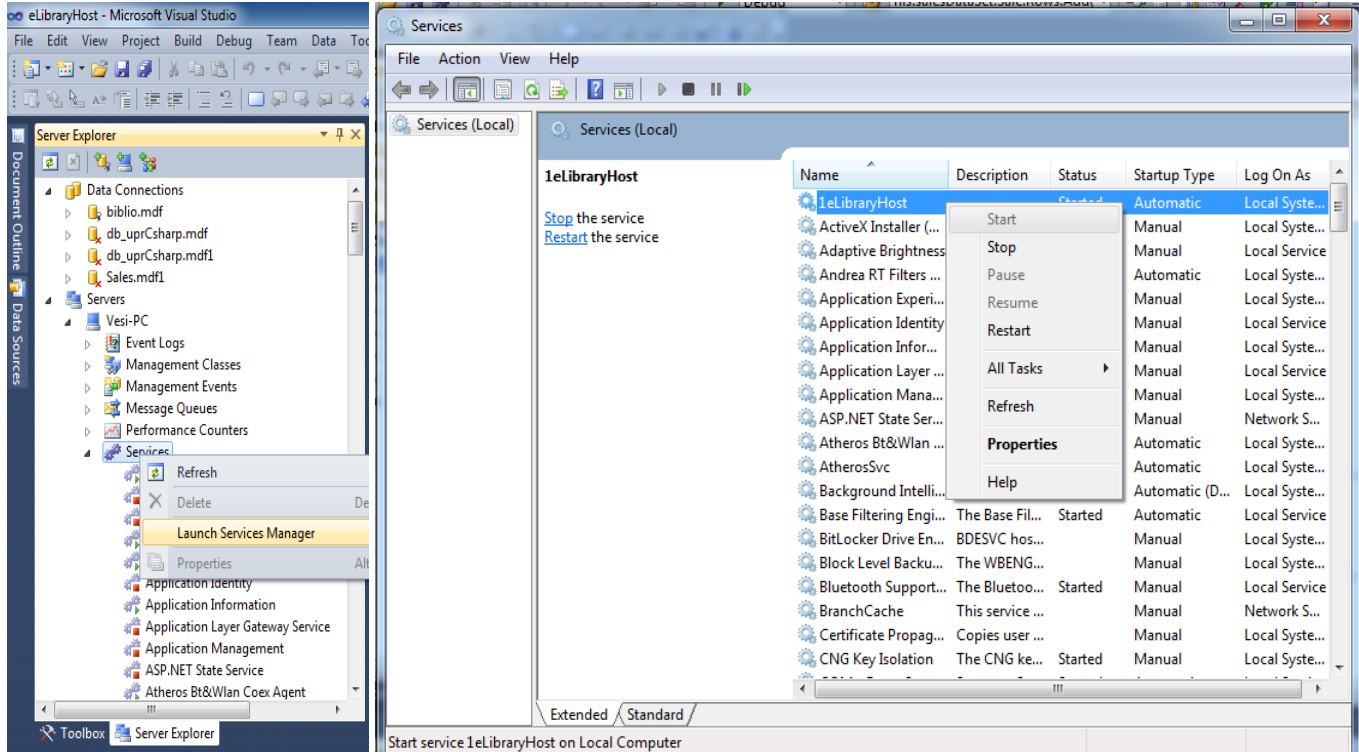
I variant

Right mouse click on the Computer icon> Manage > Services and Applications > Services



II variant

Right mouse click on the Services in Visual Studio/Server Explorer > Launch Services Manager



Add to the current project both eLibraryClient and eLibraryServer projects.