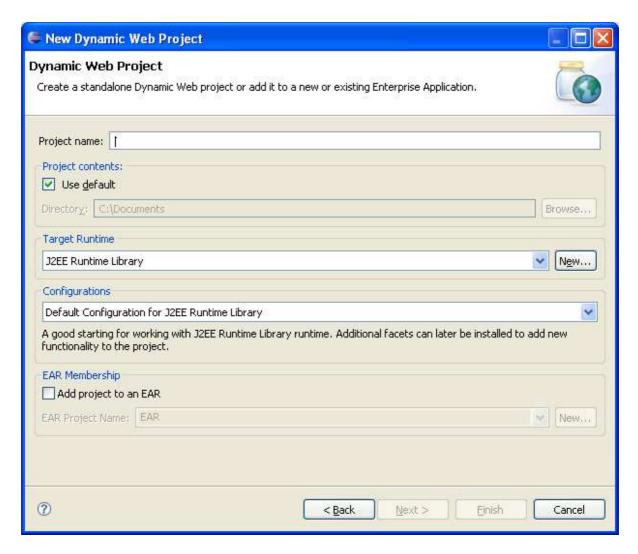# Creating an ApplinX Web Application

- Creating an ApplinX for JSP Web Application using the Software AG Designer (recommended)

- Creating an ApplinX for JSP Web Application using JDK and Tomcat (no IDE)

- Creating an ApplinX .NET Web Application using Visual Studio 2008

- Creating an ApplinX .NET Web Application using Visual Studio 2010

- Creating an ApplinX .NET Web Application using .NET (no IDE)

- Upgrading an ApplinX .NET Web Application from Visual Studio 2003 to 2005

- Upgrading an ApplinX .NET Web Application from Visual Studio 2003 to 2008

- Upgrading an ApplinX .NET Web Application to Visual Studio 2010

Creating an ApplinX for JSP Web Application using the Software AG Designer (recommended)

The following is based on the released Eclipse version. Additional information can be found on Eclipse website and WTP (web tool platform) site.

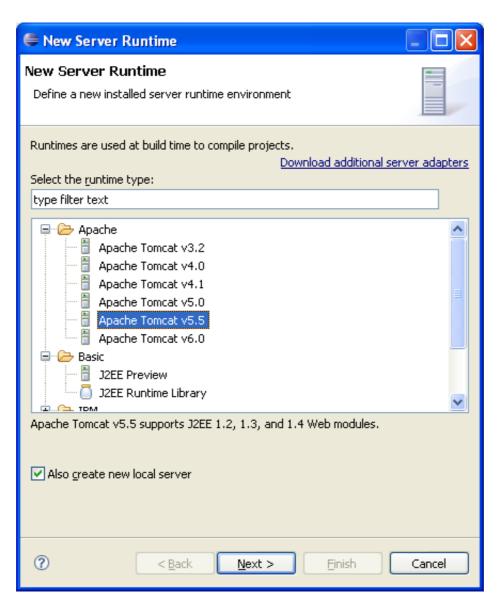> **To create a new Dynamic Web project**

1. In the Eclipse workspace, select **File > New > Project** to create a new project.

2. Select **Web > Dynamic Web Project**.

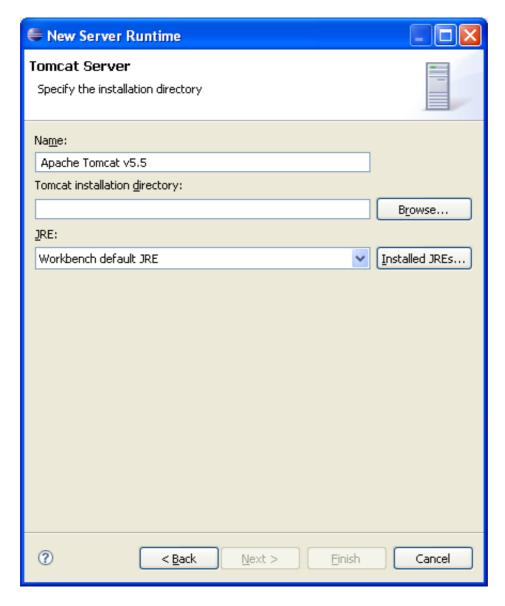3. Click **Next** to create a new web project. The **New Dynamic Web Project** dialog box is displayed.

4. Enter a name for the project.

5. In the **Target Runtime** field, select the Tomcat installation: click **New...** and select the server to be used: Either **J2EE Preview** (recommended) or **Tomcat v5.5**.

   Important:
   The Restart function in the J2EE Preview server does not work properly. Instead of using the Restart function, stop and the start the server. In addition, editing files only works after stopping and starting the server.
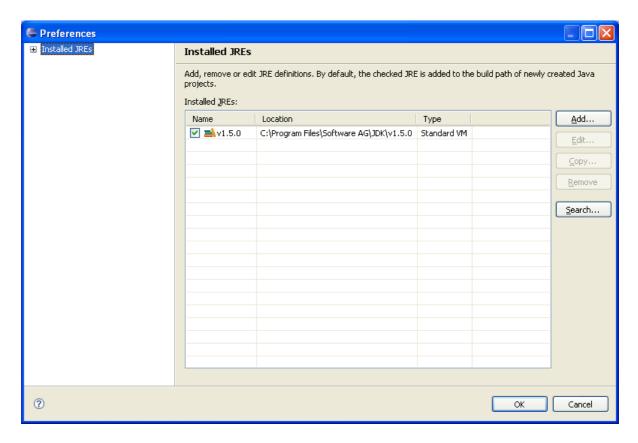
6. Click **Next**.

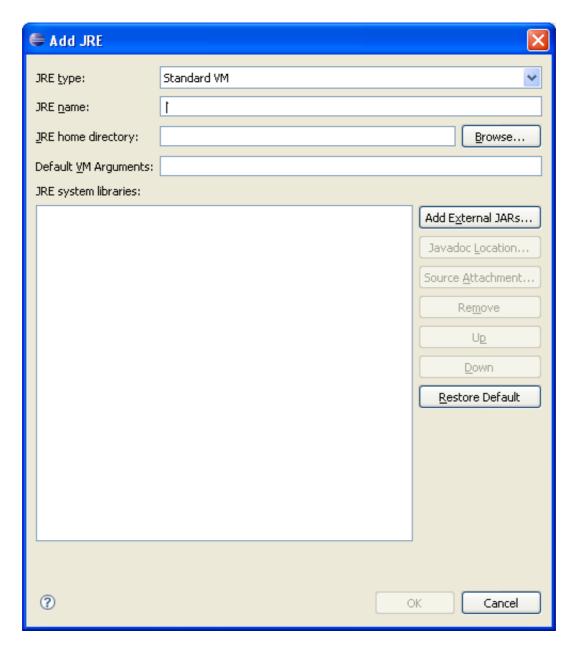7. Browse and select the Tomcat installation.

   Note:
   Currently the ApplinX internal Tomcat cannot be used to create a web application and when
   selecting to use Tomcat, you are required to install an additional Tomcat 5.5 version.

8. Select a JRE or click **Installed JREs...** to add a new JRE. The **Preferences** dialog box is displayed.

9. Define the Runtime Environment (JRE) for the server: JSP server requires a full JDK and not only the JRE bundle. If you need to add a new JRE, click the **Add...** button.
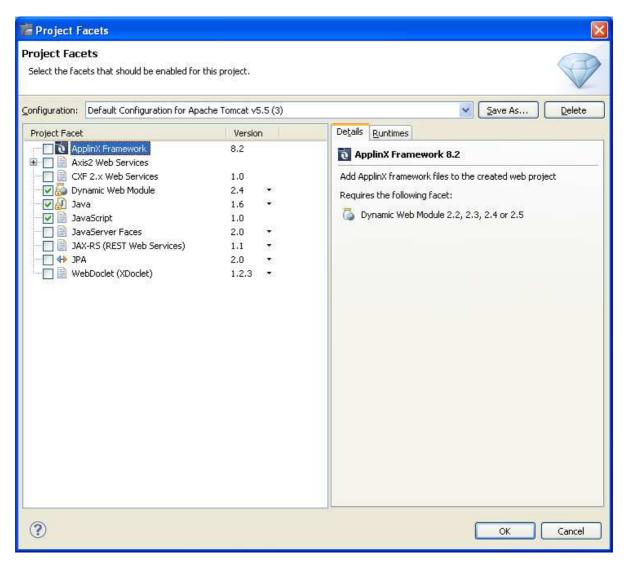
10. Assign a name to the new JRE.

11. Enter the JRE home directory (when necessary, click **Browse...** to locate the file).

12. Add VM arguments when required.

13. Click **OK** to return to the **New Server Runtime** dialog box. Select the newly created JRE. Click **OK**.

14. Click **Finish**. The **New Dynamic Web Project** dialog box is displayed.

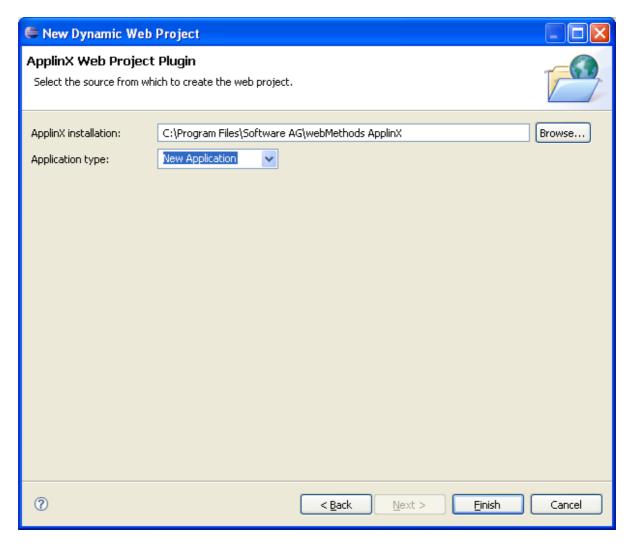   You have completed the configuration of the flexible project, the server (Tomcat) and the JDK.

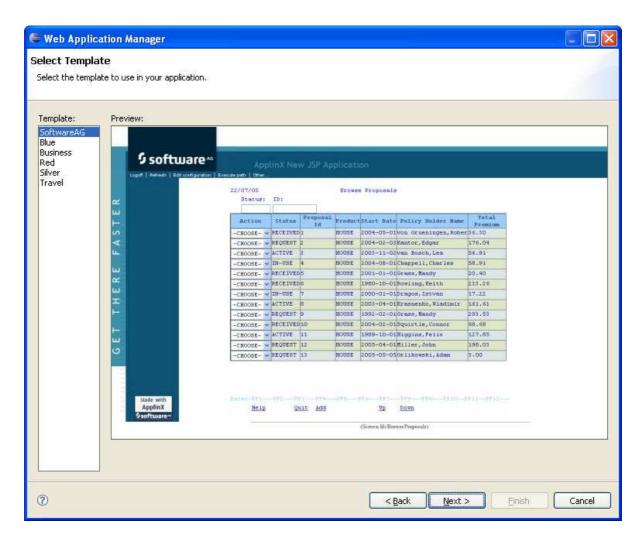15. Change the configuration to **Custom** and click **Modify**.

Select **ApplinX Framework**. Ensure that the **Dynamic Web Module** and **Java** check boxes are selected. Click **OK**.

16. Click **Next**.

17. Click **Next**.

18. Select ApplinX installation from which to create the web project and select the application type.

19. Click **Next**.

Select the template to use in your application.

20. Click **Finish**.

You have completed the creation of a standard WAR file (Java Web Archive).

21. Ensure that in the **Project** menu, **Build Automatically** is selected.

To run the project, right-click on the project's folder in the **Project Explorer** view and select **Run As > Run on Server...**.

The first time you run a project you are required to select a default server:

Select the server you configured.

Select the **Always use this server when running this project** check box. The next time you run the application, this dialog box will not be displayed. The server you selected will automatically be used.

Click **Finish** to continue. A browser window will be opened.

Note:
The browser type can be configured under **Windows > Preferences > General > Web Browser**. It is recommended to configure it to **Default system web browser**.

Using the Javadoc as a reference within the code

When using the Javadoc you will have:

- Online usage of the Eclipse Javadoc for ApplinX API.

- Suggested argument names for the ApplinX API, instead of arg0, arg1, etc.

≫ **To use Javadoc capabilities when developing your project**

1. Right-click on the project node and select **Build Path > Configure Build Path...**. The **Properties** dialog box is displayed.

2. In the **Libraries** tab, expand the **gxframework.jar** node, click on **Javadoc location** and then click on the **Edit...** button to determine the location of the Javadoc.

3. You can either enter the URL *http://localhost:2380/applinx-help* or browse and select the Javadoc location path **<Software AG installation> > ApplinX > Help > API**. Then click **OK**.

4. Click **OK** to close the **Properties** dialog box.

Creating an ApplinX for JSP Web Application using JDK and Tomcat (no IDE)
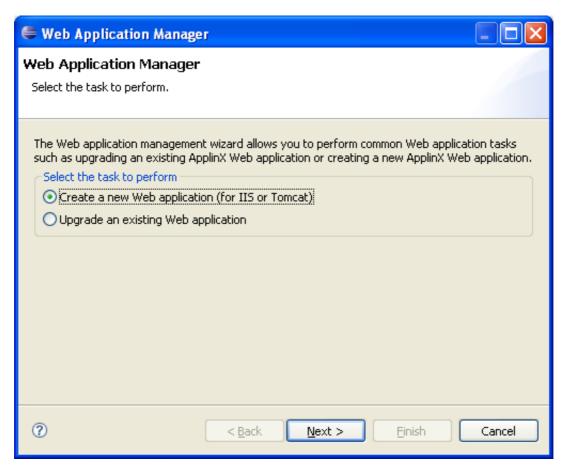
Note:
This is not available when working with a SOA license.
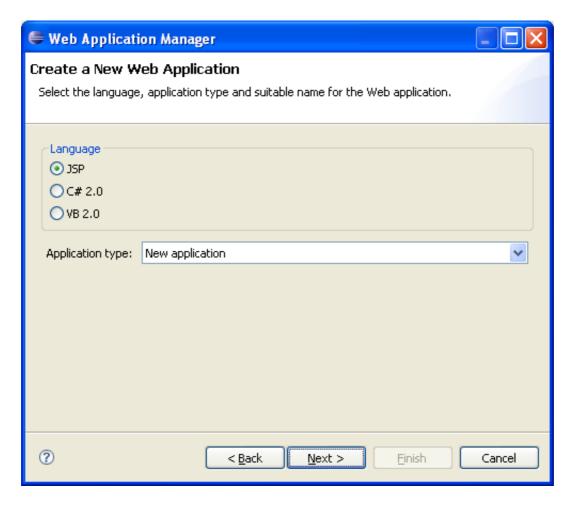
≫ **To create a new JSP application without any IDE and with JDK**

Refer to *ApplinX for JSP Web Application* in *Software Requirements*.

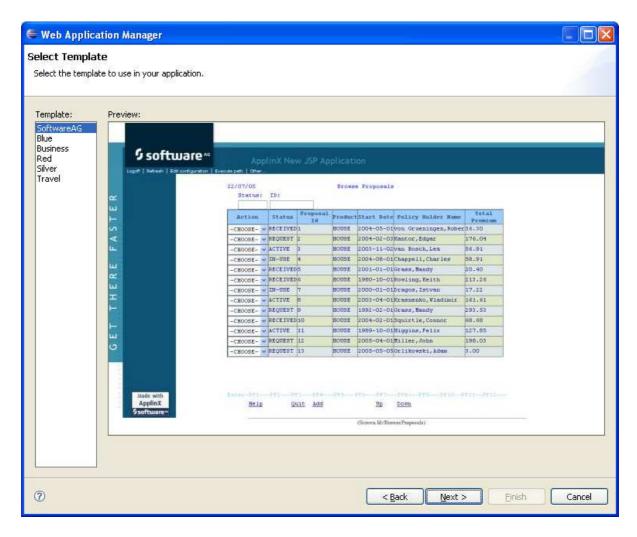1. During the installation process, choose the option **ApplinX Framework for JSP**.

2. In the ApplinX Explorer, right-click on the relevant application and select **Web Application Manager...**. The **Web Application Manager** wizard is displayed.

3. Ensure that **Create a new Web application (for IIS or Tomcat)** is selected. Click **Next**. The **Create a New Web Application** screen is displayed.

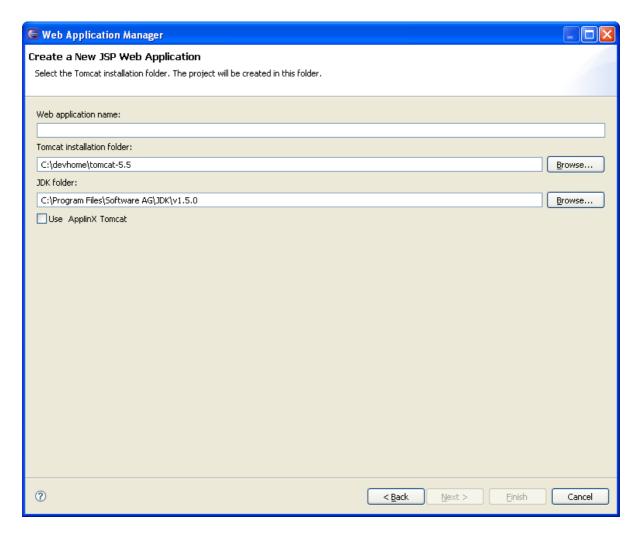4. Ensure that **JSP** is selected. Select the application type: **New application** to create a basic ApplinX web application with a web look and feel or **Emulation template** to create an ApplinX web application with a host look and feel.

5. Click **Next**. The **Select Template** screen is displayed.

Select a template from the list on the left.

6. Click **Next**. The **Create a New JSP Web Application** screen is displayed.

Enter a name for the web application. By default this is the name of the ApplinX application that you selected. Browse and select the folder where Tomcat is installed. Select the location of the JDK installation.

When you wish to use the ApplinX internal Tomcat, select the corresponding check box.

7. Click **Next**. The **Wizard Summary** screen is displayed.

8. Select whether to launch the browser when the process is completed.

9. Select whether to restart Tomcat. This is only relevant when Tomcat is activated from a batch file. The Framework Manager does not support restarting Tomcat when Tomcat runs as a Windows Service (in this case, you need to manually restart Tomcat).

10. Click **Finish**. A message will be displayed indicating whether the process succeeded or failed.

Note:
Any change in the Java file requires recompilation of your new application. Changes in JSP files do not require recompilation. Furthermore, Tomcat requires reloading:
http://localhost:8080/manager/reload?path=/<YOUR_APP_NAME>.

Creating an ApplinX .NET Web Application using Visual Studio 2008

> **To create a new ApplinX web application using Visual Studio 2008**

1. Install J# 2.0 redistributable package Second edition.

2. Install Microsoft Visual Studio 2008 on your computer (install Visual Studio before installing ApplinX so that when installing ApplinX, the ApplinX web application templates will be added to the available Visual Studio New Web Sites).

3. Open Visual Studio 2008.

4. In the **File** menu, select **New** and then **Web Site...** to create a new web site. The **New Web Site** dialog box is displayed.

5. Select the relevant ApplinX web application type (Visual C# or Visual Basic).

6. Determine whether you would like to upgrade to .NET framework 3.5 or continue working with .NET framework 2.0 (both options are acceptable).

7. Define that *index.aspx* will be the start page (right-click on *index.aspx* and select **Set as Start Page**).

8. Run the web site.

9. In the Framework Configuration Editor, define the connection parameters as follows:

   1. Click on the **Framework Configuration** link. The Configuration Editor will be displayed.

   2. In the **Session** node, enter the application name. By default, the application name is "InstantDemo". In the **Session** node, it is possible to edit and configure additional connection and project properties.

   3. Click **Save** to save your changes.

   4. Click **Close** to return to the web application.

Creating an ApplinX .NET Web Application using Visual Studio 2010

> **To create a new ApplinX web application using Visual Studio 2010**

1. Install J# 2.0 redistributable package.

2. Install .NET Framework 3.5 SP1.

3. Install Microsoft Visual Studio 2010 on your computer (install Visual Studio before installing ApplinX so that when installing ApplinX, the ApplinX web application templates will be added to the available Visual Studio New Web Sites).
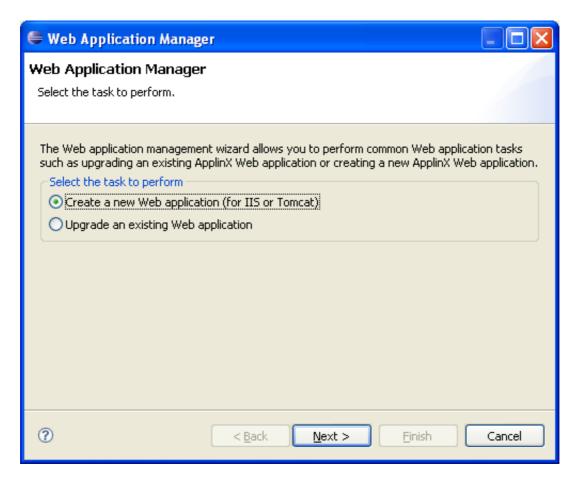
4. Open Visual Studio 2010.

5. In the **File** menu, select **New** and then **Web Site...** to create a new web site. The **New Web Site** dialog box is displayed.

6. Select to work either with .NET Framework 2.0 or 4.0.

7. Select the relevant ApplinX web application type (Visual C# or Visual Basic).

8. Define that *index.aspx* will be the start page (right-click on *index.aspx* and select **Set as Start Page**).

9. Run the web site

10. In the Framework Configuration Editor, define the connection parameters as follows:

    1. Click on the **Framework Configuration** link. The Configuration Editor will be displayed.

    2. In the **Session** node, enter the application name. By default, the application name is "InstantDemo". In the **Session** node, it is possible to edit and configure additional connection and project properties.

    3. Click **Save** to save your changes.

    4. Click **Close** to return to the web application.

Creating an ApplinX .NET Web Application using .NET (no IDE)

Note:
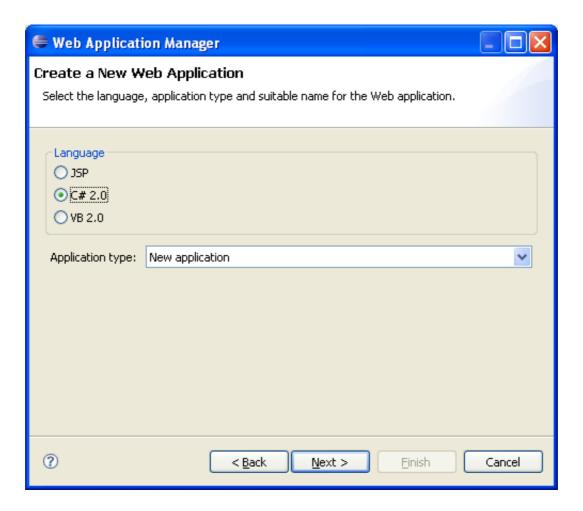This is not available when working with a SOA license.

> **To create a new ASP.NET application without Visual Studio .NET with .NET SDK**

1. During ApplinX installation, select the ApplinX ASP.NET Web Framework C#/VB .NET option.

2. In the ApplinX Explorer, right-click on the relevant application and select **Web Application Manager...**. The **Web Application Manager** wizard is displayed.

3. Ensure that **Create a new Web application (for IIS or Tomcat)** is selected. Click **Next**. The **Create a New Web Application** screen is displayed.
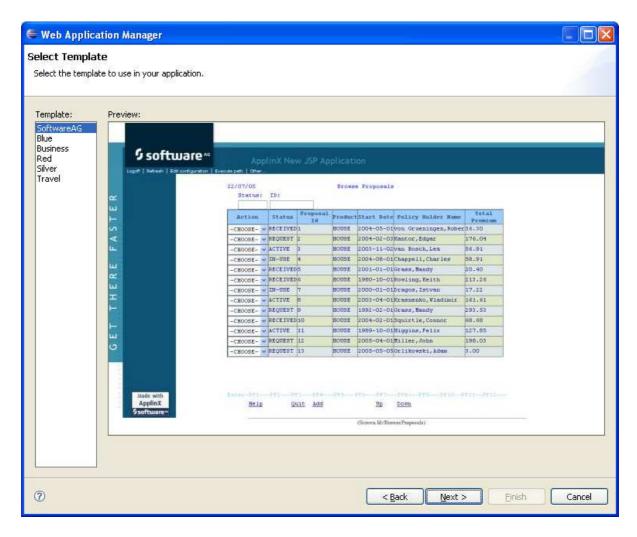
4. Ensure that **C# 2.0** or **VB 2.0** is selected. Select the application type: **New application** to create a basic ApplinX web application with a web look and feel or **Emulation template** to create an ApplinX web application with a host look and feel.
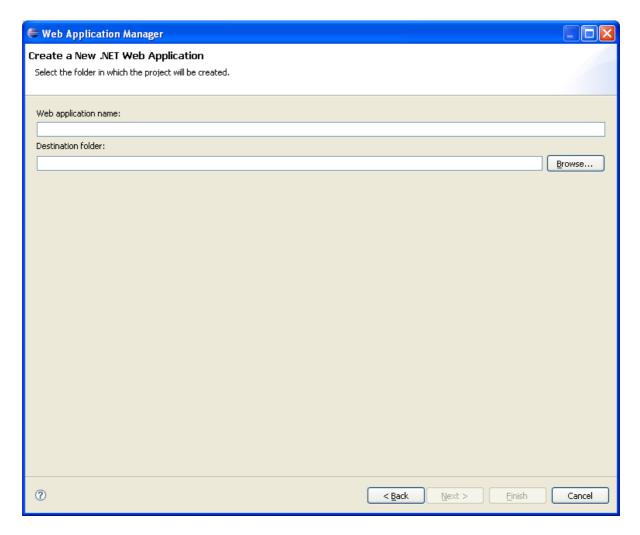
   Note:
   If you wish to create a new web application based on .NET 4.0, you need to use Visual Studio 2010 (refer to *Creating an ApplinX .NET Web Application using Visual Studio 2010*).

5. Click **Next**. The **Select Template** screen is displayed.

Select a template from the list on the left. Click **Next**.

6. The **Create a New .NET Web Application** screen is displayed.

7. Enter a name for the web application. By default, this is the name of the ApplinX application that you selected. Browse and select the destination folder.

8. Click **Next**. The **Wizard Summary** screen is displayed.

9. Select whether to launch the browser when the process is completed.

10. Click **Finish**. A message will be displayed indicating whether the process succeeded or failed.

   Note:
   When using the Application Manager on IIS 7.5 or 8.0, you need to convert your application from a virtual directory to a web application (in the IIS manager, right-click on your application and select **Convert to Application**).

Upgrading an ApplinX .NET Web Application from Visual Studio 2003 to 2005

≫ **To upgrade a project from Visual Studio 2003 to Visual Studio 2005**

1. In Visual Studio 2005, open the web application by clicking **File > Open > WebSite...** and selecting the web application.

2. The Visual Studio Conversion Wizard is displayed. Click **Next**.

3. Determine whether you would like to create a backup before converting.

4. Click **Finish.**

5. The conversion process is run. Once completed, errors are displayed in the conversion log. When necessary, make the required changes to correct these errors (error lines relating to the project file do not need to be dealt with, as from this point, you are working with a web site and not a web project). For example, an error "Unable to move file" should be corrected by manually moving the file.

6. Build the web site. If errors are displayed, check what these errors are and make the necessary changes.

7. Close the web site (**File > Close > Solution**).

8. In ApplinX Designer, upgrade your web application using the ApplinX Web Application Manager (refer to *Upgrading a .NET Web Application* in *Web Application Development*.

9. Reopen the web application in Visual Studio 2005 (**File > Open > WebSite...** and select the web application).

10. Build the web site. Correct errors.

11. Define that *index.aspx* will be the start page (right-click on *index.aspx* and select **Set as Start Page**).

12. You can run the web site to ensure that it performs as expected.

Upgrading an ApplinX .NET Web Application from Visual Studio 2003 to 2008

≫ **To upgrade a project from Visual Studio 2003 to Visual Studio 2008**

Ensure that you have J# 2.0 redistributable package installed.

1. In Visual Studio 2008, open the web application by clicking **File > Open > WebSite...** and selecting the web application.

2. The Visual Studio Conversion Wizard is displayed. Click **Next**.

3. Determine whether you would like to create a backup before converting. Click **Next**.

4. Determine whether you would like to work with .NET 2.0 or .NET 3.5.

5. Click **Finish**.

6. The conversion process is run. Once completed, errors are displayed in the conversion log. When necessary, make the required changes to correct these errors (error lines relating to the project file do not need to be dealt with, as from this point, you are working with a web site and not a web project). For example, an error "Unable to move file" should be corrected by manually moving the file.

7. Build the web site. If errors are displayed, check what these errors are and make the necessary changes.

8. Close the web site (**File > Close > Solution**).

9. In ApplinX Designer, upgrade your web application using the ApplinX Web Application Manager (refer to *Upgrading a .NET Web Application* in *Web Application Development*.

10. Reopen the web application in Visual Studio 2008 (**File > Open > WebSite...** and select the web application).

11. Build the web site. Correct errors.

12. Define that *index.aspx* will be the start page (right-click on *index.aspx* and select **Set as Start Page**).

13. You can run the web site to ensure that it performs as expected.

Upgrading an ApplinX .NET Web Application to Visual Studio 2010

≫ **To upgrade a project to Visual Studio 2010**

Ensure that you have J# 2.0 redistributable package Second edition installed.

1. When upgrading to Visual Studio 2010 from Visual Studio 2003, you need to first perform the upgrade task above: either *Upgrading an ApplinX Web Application from Visual Studio 2003 to 2005* or *Upgrading an ApplinX Web Application from Visual Studio 2003 to 2008*.

2. In Visual Studio 2010, open the web application by clicking **File > Open > WebSite...** and selecting the web application.

3. Determine whether you would like to work with .NET 2.0 or .NET 4.0.

4. In ApplinX Designer, upgrade your web application using the ApplinX Web Application Manager (refer to *Upgrading a .NET Web Application* in *Web Application Development*.

5. Define that *index.aspx* will be the start page (right-click on *index.aspx* and select **Set as Start Page**).

6. You can run the web site to ensure that it performs as expected.