



# **IBM ILOG Gantt for .NET V4.0**

## **Building Applications**

**June 2009**

© **Copyright International Business Machines Corporation 1987, 2009.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.



## ***Contents***

<b>Preface</b>	<b>Building Applications with IBM ILOG Gantt for .NET</b> .....	<b>3</b>
<b>Creating Windows Forms Applications</b> .....		<b>5</b>
<b>Creating ASP.NET Web Applications</b> .....		<b>7</b>
<b>Embedding Windows Forms Controls into Internet Explorer</b> .....		<b>9</b>
<b>Index</b> .....		<b>1</b>



# ***Building Applications with IBM ILOG Gantt for .NET***

This section contains instructive overviews and detailed step-by-step procedures for creating applications.

## **In This Section**

### *Creating Windows Forms Applications*

Provides information about how to develop enterprise-class Windows® applications with IBM ILOG Gantt for .NET.

### *Creating ASP.NET Web Applications*

Describes how to develop enterprise-class Web applications with IBM ILOG Gantt for .NET.

### *Embedding Windows Forms Controls into Internet Explorer*

Explains how to embed a Windows® Forms Gantt Application into Internet Explorer.

## **Related Sections**

### *Getting Started*

Provides a hands-on introduction and overview to the IBM ILOG Gantt for .NET.



# *Creating Windows Forms Applications*

This section provides you with conceptual information about how IBM ILOG Gantt for .NET can be used in a Rich Client Windows® Forms application.

---

## **Prerequisites**

You must be familiar with **Windows® Forms**. Be sure to read “Creating Windows® Forms Applications” in the .NET Framework documentation before going on.

---

## **Visual Studio**

To create a Windows® Forms application, select the **File->New->Project** menu item of Visual Studio and select the **Windows® Application** item in the **Visual C# or Visual Basic** projects collection. The wizard will create a new project and open an empty Form.

Locate the toolbox tab named **IBM ILOG Gantt for .NET** in the **Visual Studio** toolbox. This tab contains all the controls of IBM ILOG Gantt for .NET that can be used in a **Windows® Forms** application. Simply drag and drop components from the tab into the form, initialize their properties and connect them together using the properties window.

### Tutorials

This documentation includes several tutorials to help you create **Windows® Forms** applications with IBM ILOG Gantt for .NET. Each tutorial provides a step-by-step description of how to create simple Windows® applications.

The following Windows® Forms tutorials are available:

*Creating a Windows Forms Gantt Application*

Walks you through the process of creating a simple Gantt application using Windows® Forms.

*Synchronizing a Schedule Chart with a Load Chart (Windows Forms Tutorial)*

Walks you through the process of synchronizing a Schedule chart with a Load chart.

*Creating a Custom Gantt Representation (Windows Forms Tutorial)*

Walks you through the process of creating a custom Gantt chart representation made of an activity table and two scroll activity sheets.



# *Creating ASP.NET Web Applications*

This section provides you with conceptual information about how IBM ILOG Gantt for .NET can be used in **ASP.NET** Web applications.

---

## **Prerequisites**

You must be familiar with **ASP.NET**. Be sure to read *Creating ASP.NET Web Applications* in the .NET Framework documentation before going on.

---

## **Visual Studio**

To create an **ASP.NET** Web application, select the **File->New->Project** menu item of Visual Studio and select the **ASP.NET Web Application** item in the **Visual C#** or **Visual Basic** projects collection. The wizard will create the IIS virtual directory, as well as a set of files to start with an empty application.

Locate the toolbox tab named **IBM ILOG Gantt for .NET Web** in the Visual Studio toolbox. This tab contains all the controls of IBM ILOG Gantt for .NET that can be used in an **ASP.NET** page. As you would have done with a **Windows® Forms** application, simply drag and drop components from the tab into the web form, initialize their properties and connect them together using the properties window.

### **Data Binding**

Data binding is used by the .NET Framework to connect components together. As for every **ASP.NET** application, if your application uses data binding, that is, if you've connected components together, you will need to add a call to **Control.DataBind** during the page load phase. If you don't call this method, your components will not be connected together at runtime.

---

### **Tutorials**

This documentation includes a tutorial to help you creating **ASP.NET Web** applications with IBM ILOG Gantt for .NET. This tutorial provides a step-by-step description of how to create simple Web applications.

The following Web Forms tutorial is available:

*Creating a Web Forms Gantt Application*

Walks you through the process of creating a simple Gantt application using Web Forms.

# *Embedding Windows Forms Controls into Internet Explorer*

IBM ILOG Gantt for .NET provides controls for building traditional Windows® application using .NET Windows® Forms or Web applications through ASP.NET. Another way to create a Gantt application is to host a Windows® Forms control inside Internet Explorer. By hosting .NET Windows® Forms controls in Internet Explorer, developers can create Web application with rich client side interactions.

---

## **Creating a User Control**

In order to create such an application developer must create a **User Control** inside an assembly. To create a Windows® control library, select the **File->New->Project** menu item of Visual Studio and select the **Windows® Control Library** item in the **Visual C#** or **Visual Basic** projects collection. The wizard will create a default user control. In this user control you can create your Gantt application using IBM ILOG Gantt for .NET Windows® Forms control as well as all the Windows® forms controls needed.

---

## **Creating the HTML Page**

Once the user control is created, you need to create the HTML page that will host the control. If the HTML page is named `index.htm`, the HTML page looks like the following:

```
<html>
<head><LINK REL="licenses" HREF="index.htm.licenses"/></head>
```

## Embedding Windows Forms Controls into Internet Explorer

```
<body>
<p>Gantt Control in IE<br> <br></body>
<object id="gantttControl"
classid="GanttUserControl.dll#GanttUserControl.GanttControl"
height="500" width="500" VIEWASTEXT>
</object>
<br><br>
</html>
```

In the classid attribute of the object tag, we specify the path to the control library assembly and the fully qualified name of the control. This fully qualified name of the control includes the namespace as well as the name of the control class. As you can see from the above code, the assembly and the fully qualified name of the control are separated by # sign. The combination of these two parameters serves as the unique identifier to identify the control. It is also possible to write client side script against the control since it is identified by the unique id named gantttControl.

The tag:

```
<LINK REL="licenses" HREF="index.htm.licenses"/>
```

is used to indicate where the license information will be found. In this type of deployment the license information is not included in the dll but will be downloaded from the web site. Internet Explorer defines this special **LINK** tag for this purpose. To create the `index.htm.licenses` file, you need to use the .NET license compiler (`lc.exe`). Create a `.licx` file that contains the licensed controls you are using, for example if you are using a **GanttChart** control in your application, create a `licenses.licx` file that contains:

```
ILOG.Views.Gantt.Windows.Forms.GanttChart, ILOG.Views.Gantt
```

then create the `index.htm.licenses` file by compiling the `.licx` file:

```
lc /target:index.htm /complist:licenses.licx /i:ILOG.Views.Gantt.dll
```

---

### Creating a Virtual Directory

In order to run the application, we must create a virtual directory in **IIS** and add both the control dll (`GanttUserControl.dll`), the HTML page and the `.licenses` file in the virtual directory as well as IBM ILOG Gantt for .NET dlls.

While configuring the virtual directory, it is important to set the execution permissions on the virtual directory to **Scripts**. The control will not be properly activated if the execution permissions are set to **Scripts & Executables**. You can verify this by opening up the Properties window for your virtual directory.

---

### Configuration of Code Access Permissions

In order to allow the control to run you need to alter the security policy. You can place your site in the trusted sited of Internet Explorer by choosing **Tools->Options->Security->Trusted Sites** from Internet Explorer. You can also give the necessary permissions to your

application using the **.NET Framework Configuration** tool available through the **Control Panel/Administrative Tools** menu in your **Start menu**.

The installer of IBM ILOG Gantt for .NET has added a new code group in your .NET framework configuration that gives the **FullTrust** permissions to the IBM ILOG Gantt for .NET dll on your machine.



***Index***

