

# Using WebGrid.NET Enterprise 6.0 as WebPart in Microsoft Office SharePoint Server 2007

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This white paper describes the techniques and walkthroughs to integrate Intersoft's WebGrid.NET Enterprise 6.0 with Microsoft Office SharePoint Server 2007..

## Prerequisites

The following is the list of prerequisites of the required software and development environments before you can follow the walkthroughs described in this white paper.

- Windows 2003 Server with IIS installed.
- Microsoft Office SharePoint Server 2007.
- SharePoint template for Visual Studio 2005.
- Intersoft WebUI Studio.NET 2007 R2.

If you don't currently have SharePoint Server 2007 installed and wish to experiment with Intersoft WebUI Studio.NET 2007 R2, please download SharePoint Server 2007 Virtual PC Image from Microsoft Website at <http://www.microsoft.com/downloads/details.aspx?FamilyID=67f93dcb-ada8-4db5-a47b-df17e14b2c74&DisplayLang=en>.

Next, download the SharePoint template from the following link:  
<http://www.intersoftpt.com/tdn/downloads/VSeWSS.zip>

You can download the trial version of Intersoft WebUI Studio.NET 2007 R2 from Intersoft Website at <http://www.intersoftpt.com/WebUIStudio/Try>.

## Download Samples

You can download the SharePoint WebPart sample including WebGrid.NET Enterprise 6.0 from the following link:

<http://www.intersoftpt.com/tdn/downloads/SharePointSample.zip>

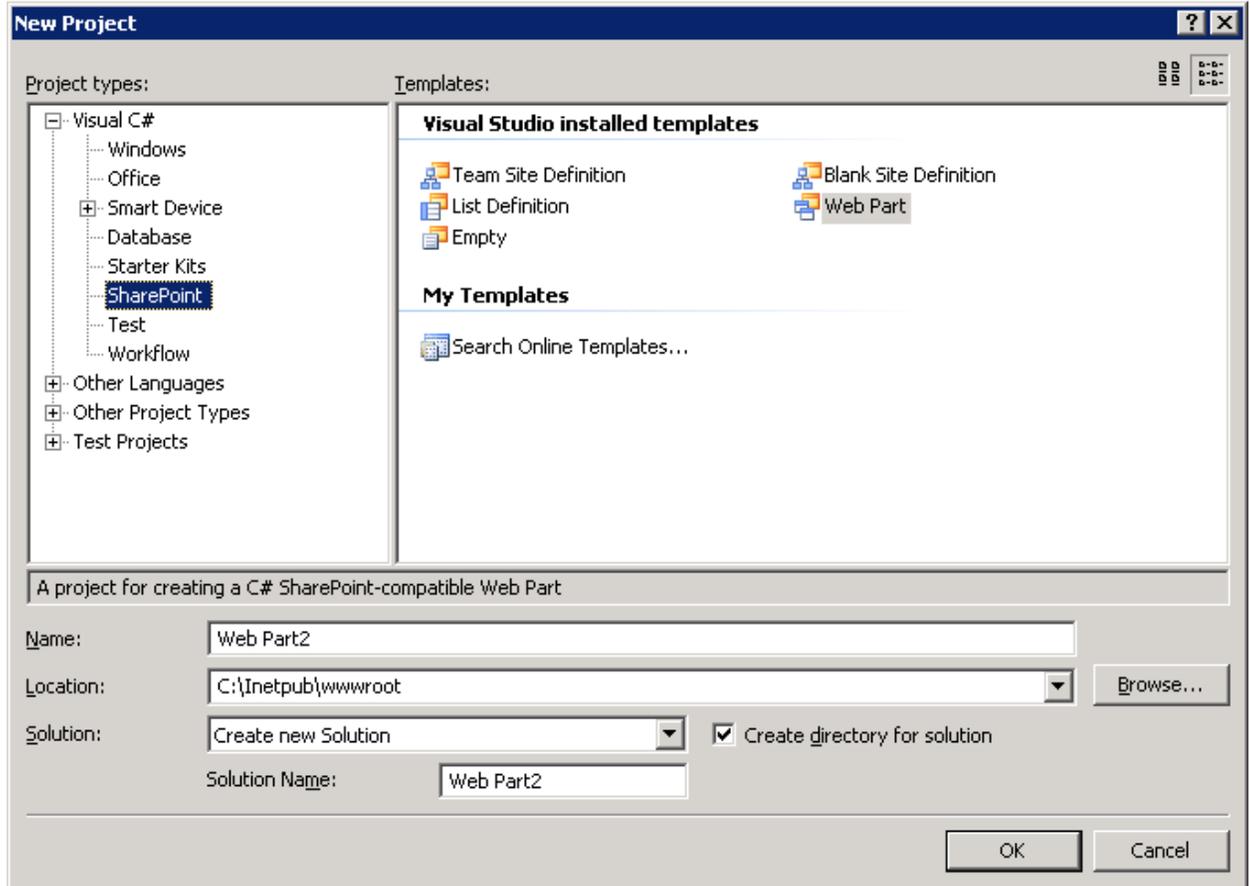
## Creating SharePoint WebPart using Visual Studio 2005

In the following walkthroughs, you will be guided to configure the newly created site in order to use WebGrid.NET Enterprise in the Website. There are several important steps that need to be done to enable Intersoft WebGrid control:

### Using Sample Code

1. Open Visual Studio 2005 and create a new project.

2. Choose **SharePoint >> WebPart** as the template and named the project as **WG6SPS**.



*WebPart Template for new project.*

3. Now, you need to add some assembly references needed in the project. Right click on **References** in **Solution Explorer** and choose **Add Reference**.
4. Browse and add **ISNet.WebUI.WebGrid.dll** from **[Installation Folder]\WebGrid.NET 6.0\Bin**. *[Installation Folder]* is using *C:\Program Files\Intersoft Solutions* by default.
5. Also, browse and add **ISNet.dll** and **ISNet.WebUI.dll** from **[Installation Folder]\WebUI.NET Framework 3.0\Bin**.
6. Add some namespaces into the project, such as:  
*using ISNet.WebUI.WebGrid;*  
*using System.Data.OleDb;*  
*using System.Data;*  
*using System.Web.UI.WebControls;*
7. Next, you need to create data connection using **OleDbConnection**.
8. Now, you need to use **CreateChildControls()** event in order to create WebGrid control including its Script, SharedScript and server side events.

```
protected override void CreateChildControls()  
{  
    base.CreateChildControls();  
}
```

```

        if (_grid == null)
        {
            _grid = new WebGrid("WebGrid1");
            _grid.Width = new Unit("800px");
            _grid.Height = new Unit("600px");
            _grid.SharedScriptDirectory = "/CommonLibrary/Shared/";
            _grid.ScriptDirectory = "/CommonLibrary/WebGrid/V6_0_7200/";
            _grid.UseDefaultStyle = true;
            _grid.EnableWebResources = ISNet.WebUI.WebResourceType.Never;
            _grid.InitializeDataSource += new
DataSourceEventHandler(_grid_InitializeDataSource);
            _grid.PrepareDataBinding += new
DataSourceEventHandler(_grid_PrepareDataBinding);
            _grid.InitializeLayout += new
LayoutEventHandler(_grid_InitializeLayout);
            this.Controls.Add(_grid);
        }
    }
}

```

9. Use **InitializeLayout** event to set the behavior and styles of WebGrid.

```

void _grid_InitializeLayout(object sender, LayoutEventArgs e)
{
    e.Layout.AllowSelectColumns = SelectColumns.Yes;
    e.Layout.AllowSorting = Sorting.Yes;
    e.Layout.AllowColumnFreezing = ColumnFreezing.Yes;
    e.Layout.AllowGrouping = Grouping.Yes;
    e.Layout.AllowFilter = Filter.Yes;
    e.Layout.AllowExport = Export.Yes;
    e.Layout.AllowColumnMove = ColumnMove.Yes;
    e.Layout.GroupByBoxVisible = true;
    e.Layout.FreezePaneSettings.ActiveFrozenColumns = 2;
    e.Layout.FreezePaneSettings.AbsoluteScrolling = true;
}

```

10. To bind the **Products** table with WebGrid using **OleDbDataAdapter**, you need to use **InitializeDataSource** event.

```

void _grid_InitializeDataSource(object sender, DataSourceEventArgs e)
{
    OleDbDataAdapter da = new OleDbDataAdapter("Select * from Products",
con);
    DataTable dt = new DataTable("Products");
    da.Fill(dt);

    e.DataSource = dt;
}

```

11. To retrieve the grid's data structure, you need to use **PrepareDataBinding** event. This event is used to get the data structure to be displayed in the grid.

```

void _grid_PrepareDataBinding(object sender, DataSourceEventArgs e)
{
    if (!Page.IsPostBack)
        _grid.RetrieveStructure();
}

```

```
}
```

12. **OnPreRender** event is used to register WebGrid's script and share point handler before rendering the control.

```
protected override void OnPreRender(EventArgs e)
{
    base.OnPreRender(e);
    _grid.RegisterScript();
    _grid.RegisterSharePointHandler();
}
```

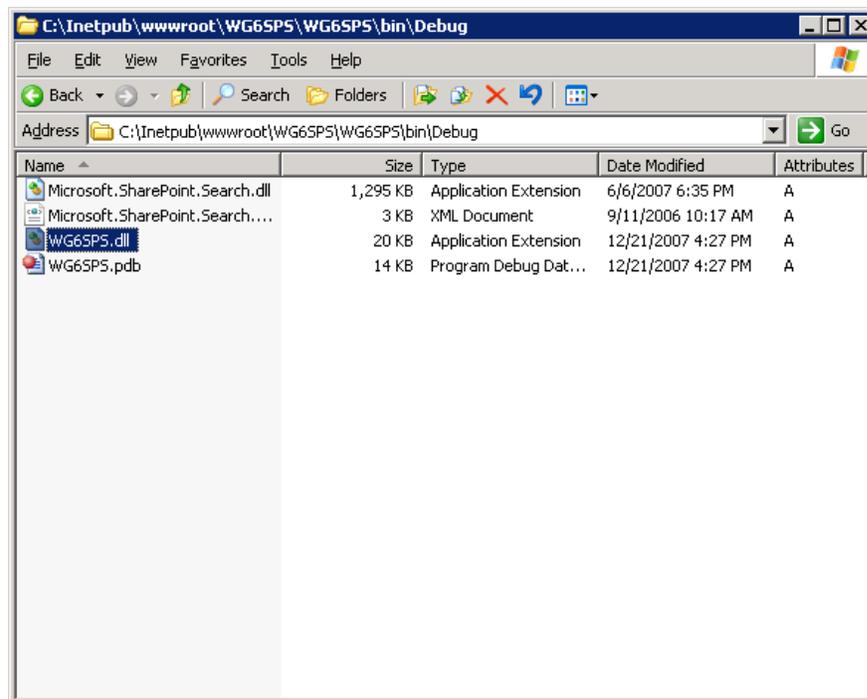
13. Finally, we use **Render** event to render the WebGrid into WebPart.

```
protected override void Render(HtmlTextWriter writer)
{
    _grid.RenderControl(writer);
}
```

14. Build the project afterwards.

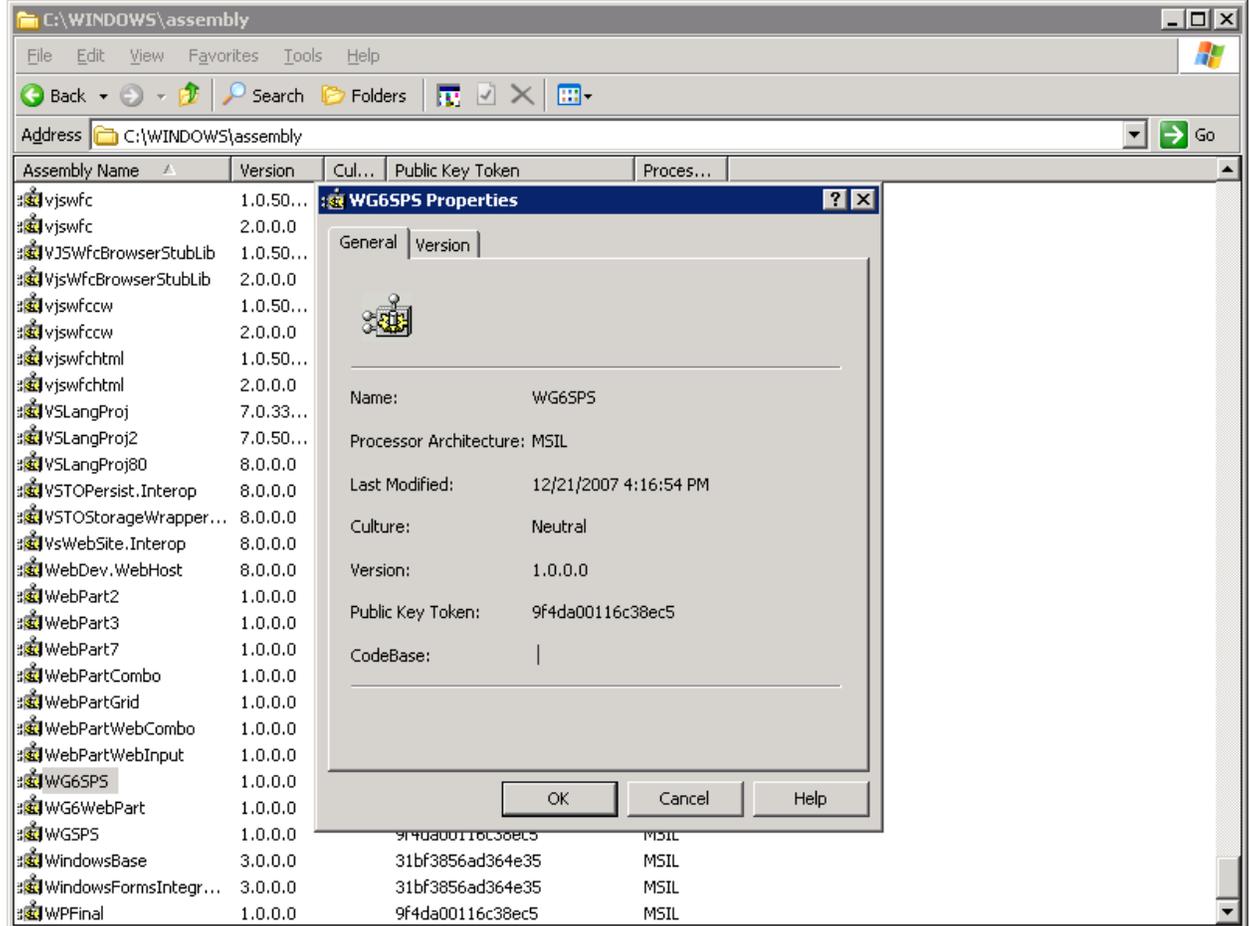
## Setting the GAC

1. Go to your **[Project path]\bin\Debug\** and locate your **[Project's name].dll**. For example: if you are rebuilding WG6SPS project, after rebuilding, you will see the WG6SPS.dll.



*The new dll for SharePoint's assembly.*

2. Drag the dll (WebGridSPSDemo.dll) to your GAC. Right click on the dll and choose **Properties**.  
Copy the **Public Key** token.



*Display Public Key Token for SharePoint's assembly.*

## Mark WebGrid as Safe Control

1. Go to your [SPS 2007 Project path]\VirtualDirectories\80\ and open **web.config**.
2. Paste the following code under **<SafeControl>**:

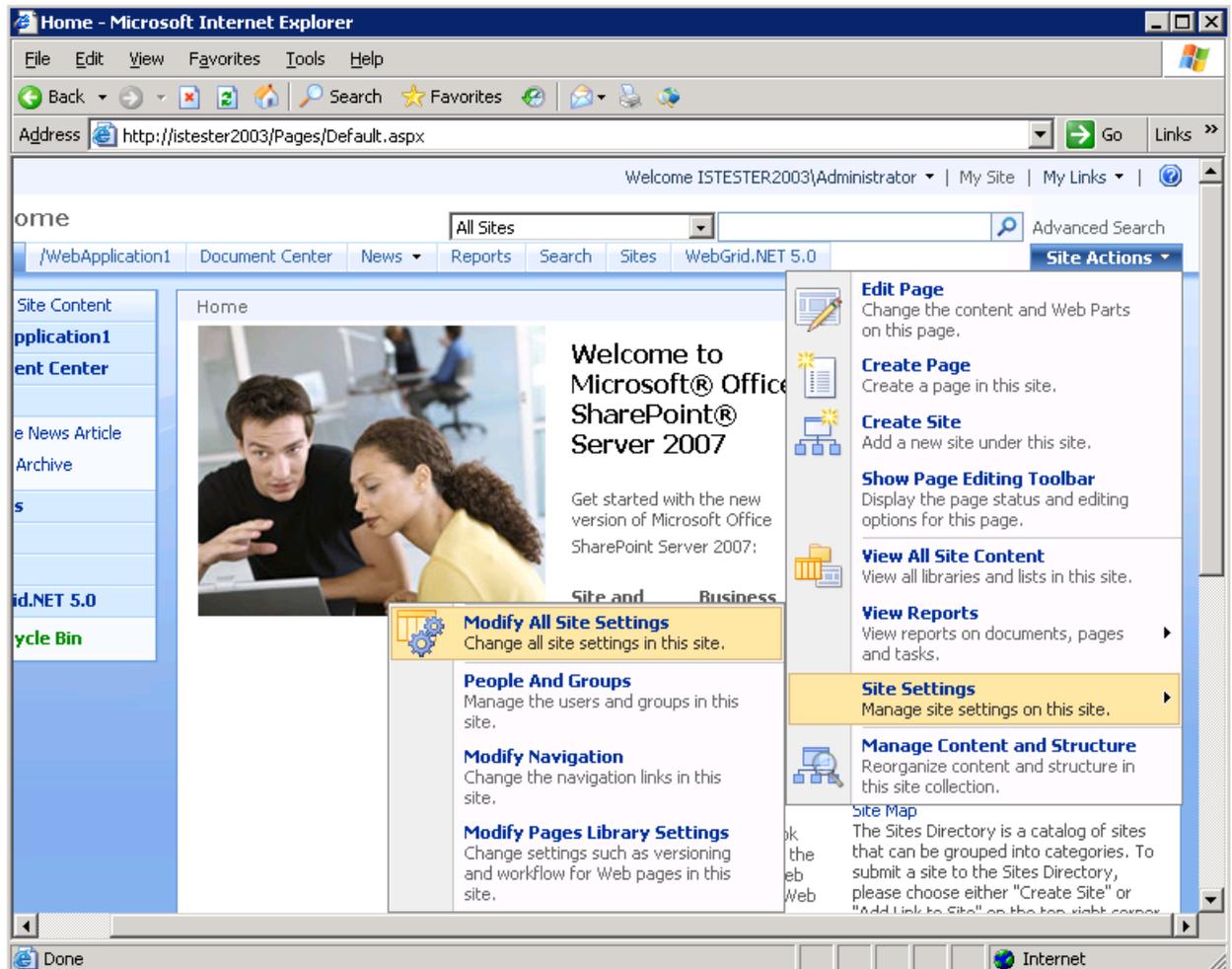
```
<SafeControl Assembly="[Project Name], Version=1.0.0.0, Culture=neutral, PublicKeyToken=[Your Public Key Token]" Namespace="[Project Name]" TypeName="*" Safe="True" />
```

For Example:

```
<SafeControl Assembly="ISNet.WebUI.WebGrid, Version=1.0.0.0, Culture=neutral, PublicKeyToken=3e60b85fb8502d5e" Namespace="ISNet.WebUI.WebGrid" TypeName="*" Safe="True" />
```

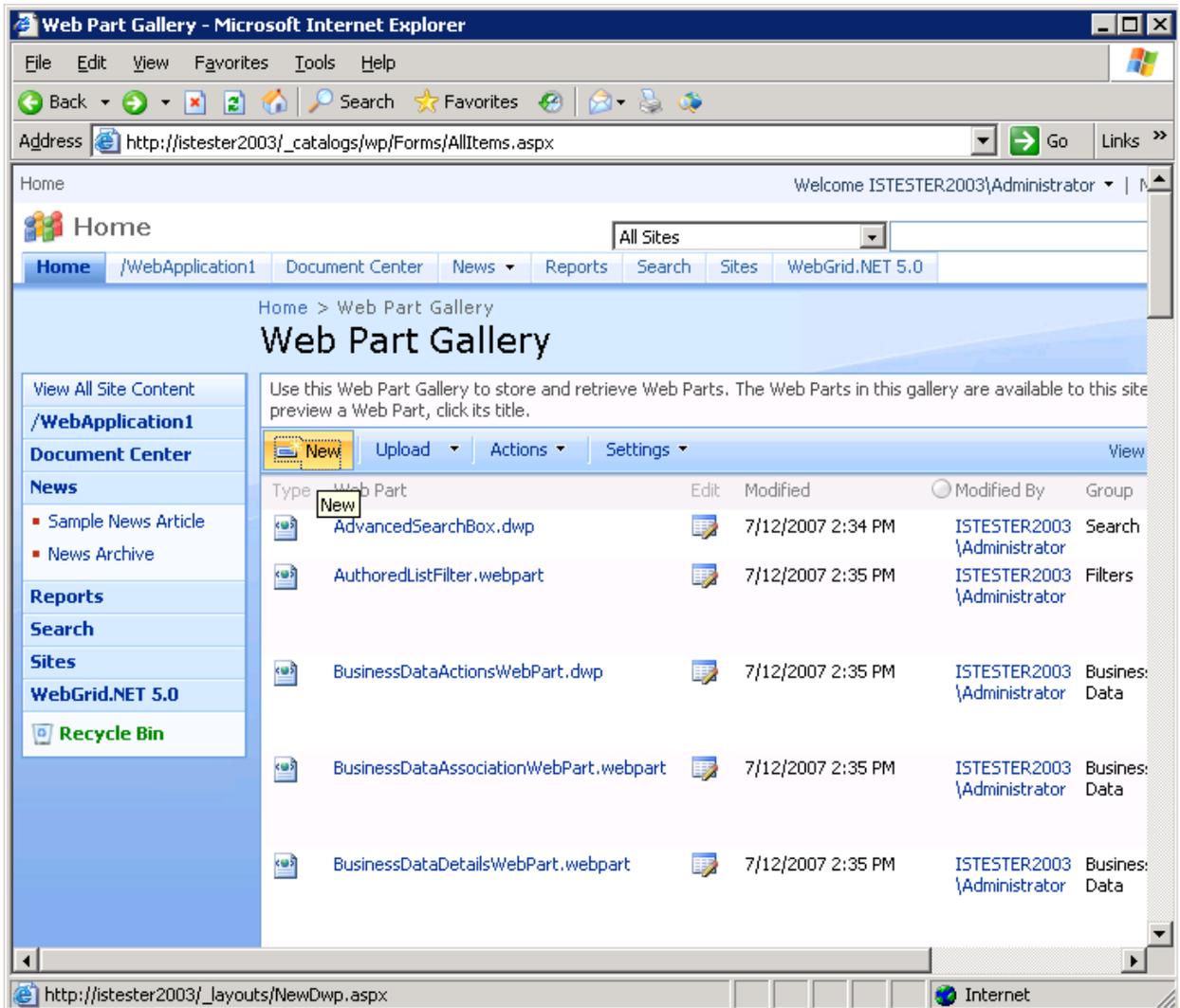
## Run WebGrid in Microsoft Office SharePoint Server 2007 as WebPart

1. Open a browser such as Internet Explorer. Go to <http://localhost/>. When the page is loaded, choose **Site Actions** >> **Site Settings** >> **Modify All Site Settings**.

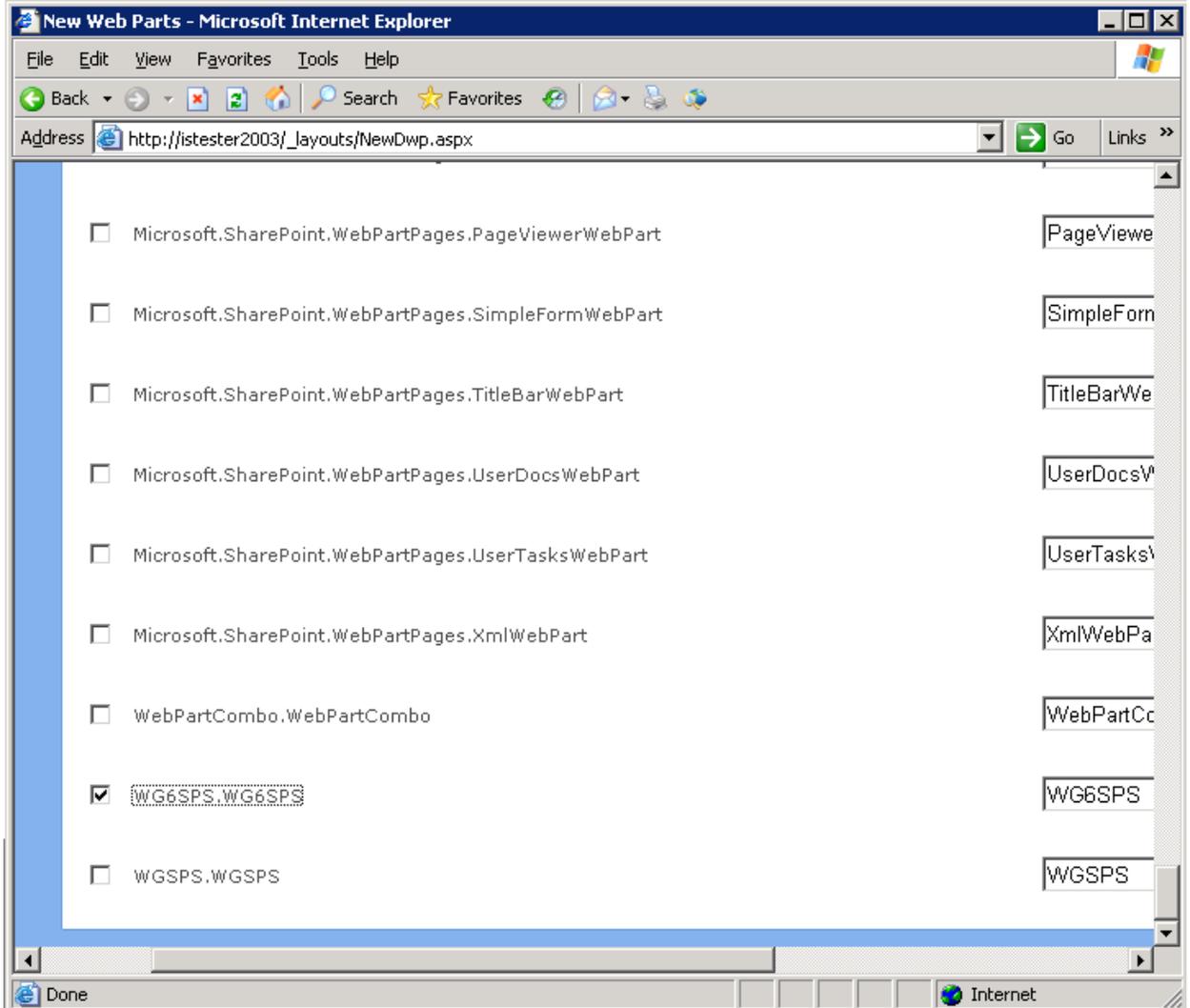


*SharePoint's site*

2. Choose **Web Parts** under the **Galleries** section.
3. Click **New** and tick the WebPart you want to load and click **Populate Gallery** afterwards.



*Choose New to create a new WebPart.*



*Select the related SharePoint's project.*

4. You are set now. Scroll to your WebPart and click on it. You will be able to view the WebPart you have created.

## Web Part Gallery: Web Part Preview

This is a preview of the Web Part. To use this Web Part, open a Web Part Page and then add this Web Part from the ToolPane.

### WG6SPS

#### WG6SPS

Drag a column header here to group by that column.

ProductID	ProductName	SupplierID	CategoryID	QuantityPerUnit	UnitPrice	UnitsInStock	UnitsOnOrder
1	Chai	1	1	10 boxes x 20 ...	18	39	0
2	Chang	1	1	24 - 12 oz bott...	19	17	40
3	Aniseed Syrup	1	2	12 - 550 ml bo...	10	13	70
4	Chef Anton's ...	2	2	48 - 6 oz jars	22	53	0
5	Chef Anton's ...	2	2	36 boxes	21.35	0	0
6	Grandma's Bo...	3	2	12 - 8 oz jars	25	120	0
7	Uncle Bob's Or...	3	7	12 - 1 lb pkgs.	30	15	0
8	Northwoods Cr...	3	2	12 - 12 oz jars	40	6	0
9	Mishi Kobe Niku	4	6	18 - 500 g pkgs.	97	29	0
10	Ikura	4	8	12 - 200 ml jars	31	31	0
11	Queso Cabrales	5	4	1 kg pkg.	21	22	30
12	Queso Manche...	5	4	10 - 500 g pkgs.	38	86	0
13	Konbu	6	8	2 kg box	6	24	0
14	Tofu	6	7	40 - 100 g pkgs.	23.25	35	0
15	Genen Shouyu	6	2	24 - 250 ml bo...	15.5	39	0
16	Pavlova	7	3	32 - 500 g boxes	17.45	29	0
17	Alice Mutton	7	6	20 - 1 kg tins	39	0	0
18	Carnarvon Tig...	7	8	16 kg pkg.	62.5	42	0
19	Teatime Choc...	8	3	10 boxes x 12 ...	9.2	25	0
20	Sir Rodney's M...	8	3	30 gift boxes	81	40	0
21	Sir Rodney's S...	8	3	24 pkgs. x 4 pi...	10	3	40
22	Gustaf's Knäck...	9	5	24 - 500 g pkgs.	21	104	0
23	Tunnbröd	9	5	12 - 250 g pkgs.	9	61	0
24	Guaraná Fantá...	10	1	12 - 355 ml cans	4.5	20	0

Ready. Loaded 77 of 77

The final result of WebGrid as WebPart.

## Conclusion

With the latest innovations in deep integration and interoperability among Microsoft development platforms, Intersoft WebGrid.NET Enterprise® 6.0 is the ultimate data display and management solution for professional developers targeting Microsoft Visual Studio® 2005 and Office SharePoint Server® 2007.

WebGrid.NET Enterprise® 6.0 includes over 750 features in total – from data display, editing, Grid-related features to advanced user runtime features such as Excel 2007® style column freezing. It has now support over 3500 unique scenarios to meet advanced business logic and enterprise-specific requirements.

To learn more about WebGrid.NET Enterprise, please visit <http://www.intersoftpt.com/WebGrid>. To download the evaluation version, please visit <http://www.intersoftpt.com/WebGrid/Try>. To download SharePoint WebPart, please visit <http://www.intersoftpt.com/tdn/downloads/SharePointSample.zip>.