SuperMap iObjects .NET Getting Started

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Sample Data and Sample Code Description

- Sample Data: SuperMap iObjects .NET 9D Installation Directory\SampleData\World\World.smwu

- Sample Code: Refer to the Getting Started section of the Help document

Main Contents

- Create a new project
- Load workspace and the map control
- Open WorldMap in World.smwu
- Basic operations of map window

Create a New Project

- Step1: Start Visual Studio and create a new project (File >> New >> Project)
- Step2: Find the sample data in the installation directory
  - World.smwu/udb/udd
- Step3: Load Workspace and MapControl controls to the form

Create a New Project
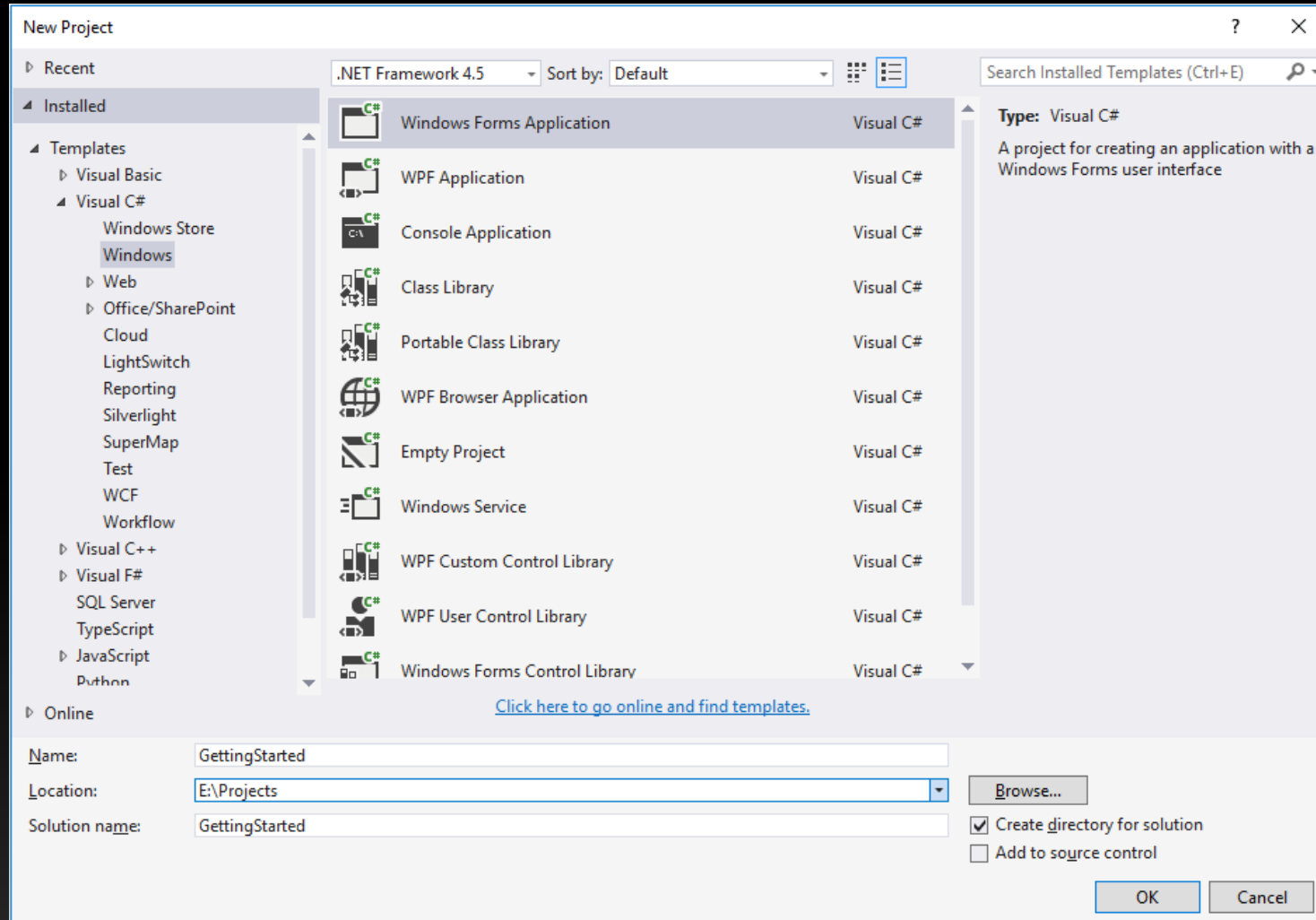
Load Controls

- Step1: Find the SuperMap tab in the ToolBox
  - Manually add controls to the ToolBox
  - Automatically register controls to the ToolBox
- Step2: Add Workspace and MapControl components to the form
- Step3: Simply design the interface of the form

Load Controls

- Add controls to ToolBox
  - While installing the product, the system will register components to the development environment. You can directly find the components when you open the ToolBox
  - Manually add components to the ToolBox
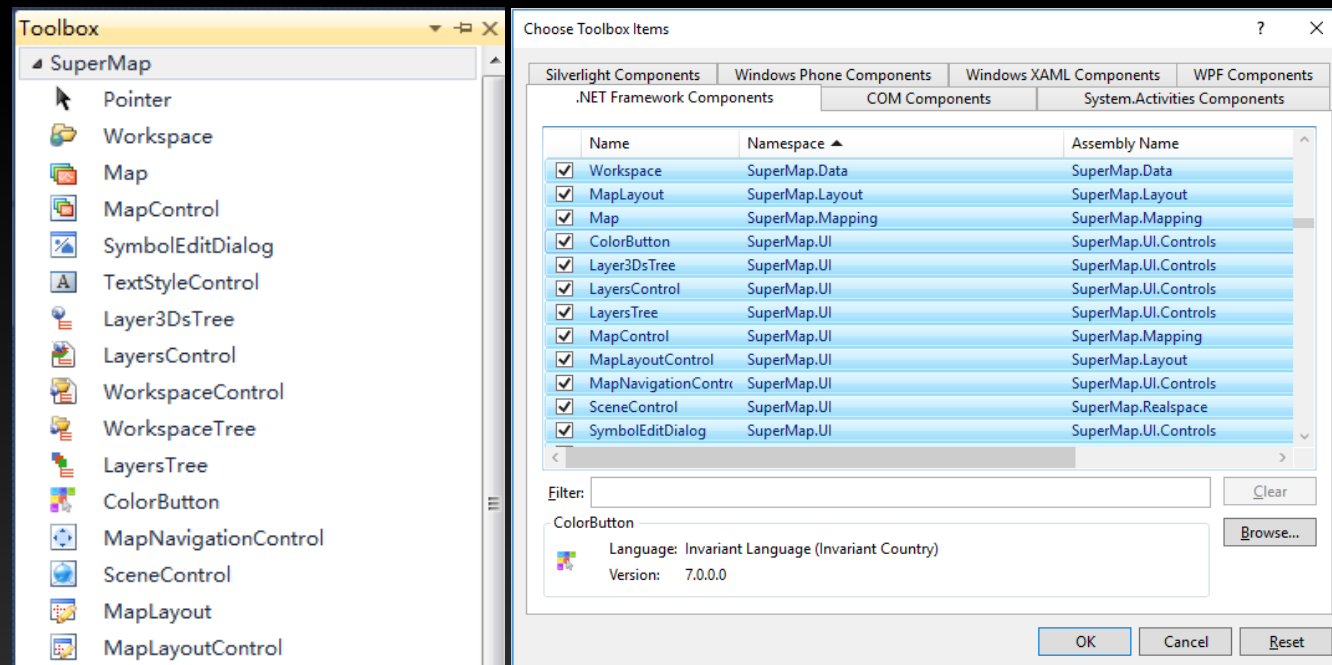
Load Controls
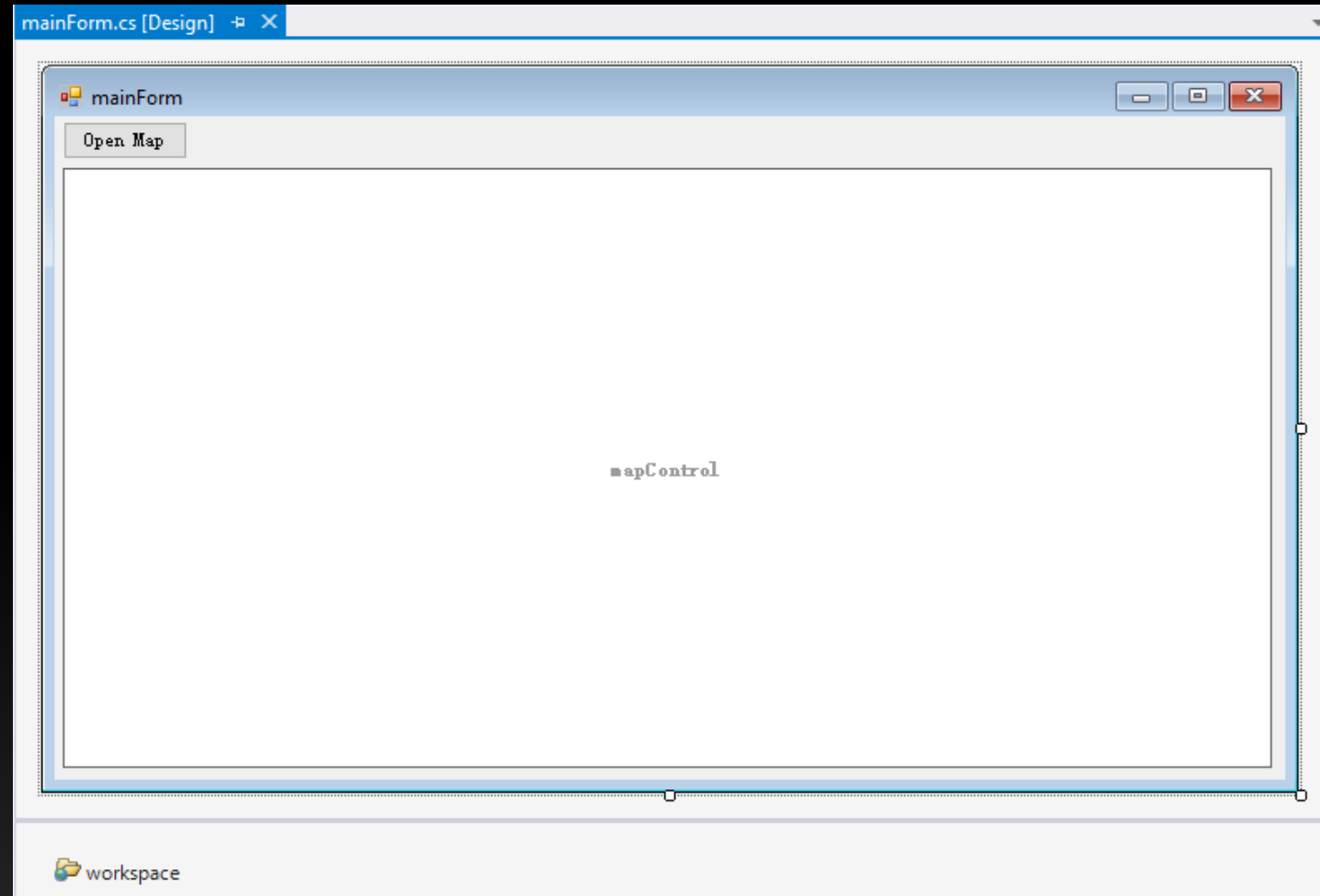
Open the Frist Map in World.smw

- Step4: Add the button controlButton1, set the Name property to btnOpenMap, and set the Text property to "Open Map"

- Step5: Enter the code page and add SuperMap references

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Windows.Forms;
//Add the following code
using SuperMap.Data;
using SuperMap.Mapping;
using SuperMap.UI;
```

Open the Frist Map in World.smwd.smw

- Step6: Add the mainForm_Load event, and add code for the mainForm_Load event
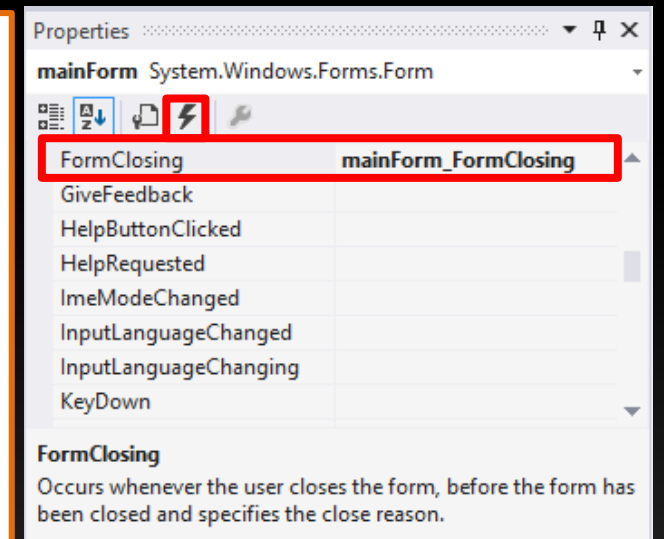
```
private void mainForm_Load(object sender, EventArgs e)
{
        //Associate the map and the workspace
        mapControl.Map.Workspace = workspace;
}
```
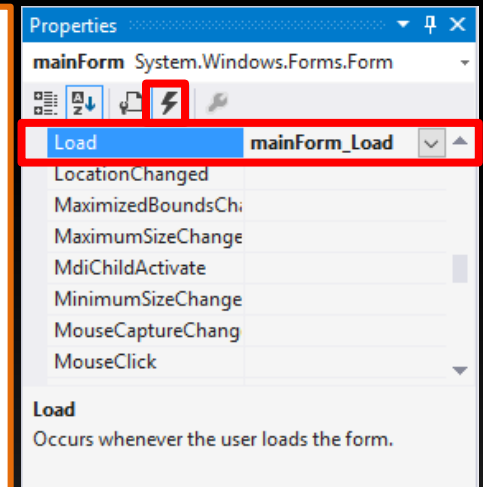
Open the Frist Map in World.smw

- Step7: Add the mainForm_FormClosing event (refer to the open method of the mainForm_Load event), and add code for the mainForm_FormClosing event

```
private void mainForm_FormClosing(object sender,
FormClosingEventArgs e)
{

    //Add the following code to disconnect the controls
    mapControl.Dispose();
    workspace.Dispose();
}
```

Open the Frist Map in World.smw

- Step8: Add code for the click event of the "Open Map" button

```
private void btnOpenMap_Click(object sender, EventArgs e)
{
 //---------------Add the following code to open the map---------------//
            //Construct the WorkspaceConnectionInfo object
            WorkspaceConnectionInfo workspaceConnectionInfo = new WorkspaceConnectionInfo();
            //Set properties for Workspace
            workspaceConnectionInfo.Server = @ "D: \Program Files\SuperMap\iObjects .NET 9D
\SampleData\World\World. smwu";
            workspaceConnectionInfo.Type = WorkspaceType.SMWU;
            //Open the workspace
            workspace.Open(workspaceConnectionInfo);
            //Open the map
            mapControl.Map.Open( "WorldMap");
            //Map display control
            mapControl.Map.ViewEntire();
}
```

Result
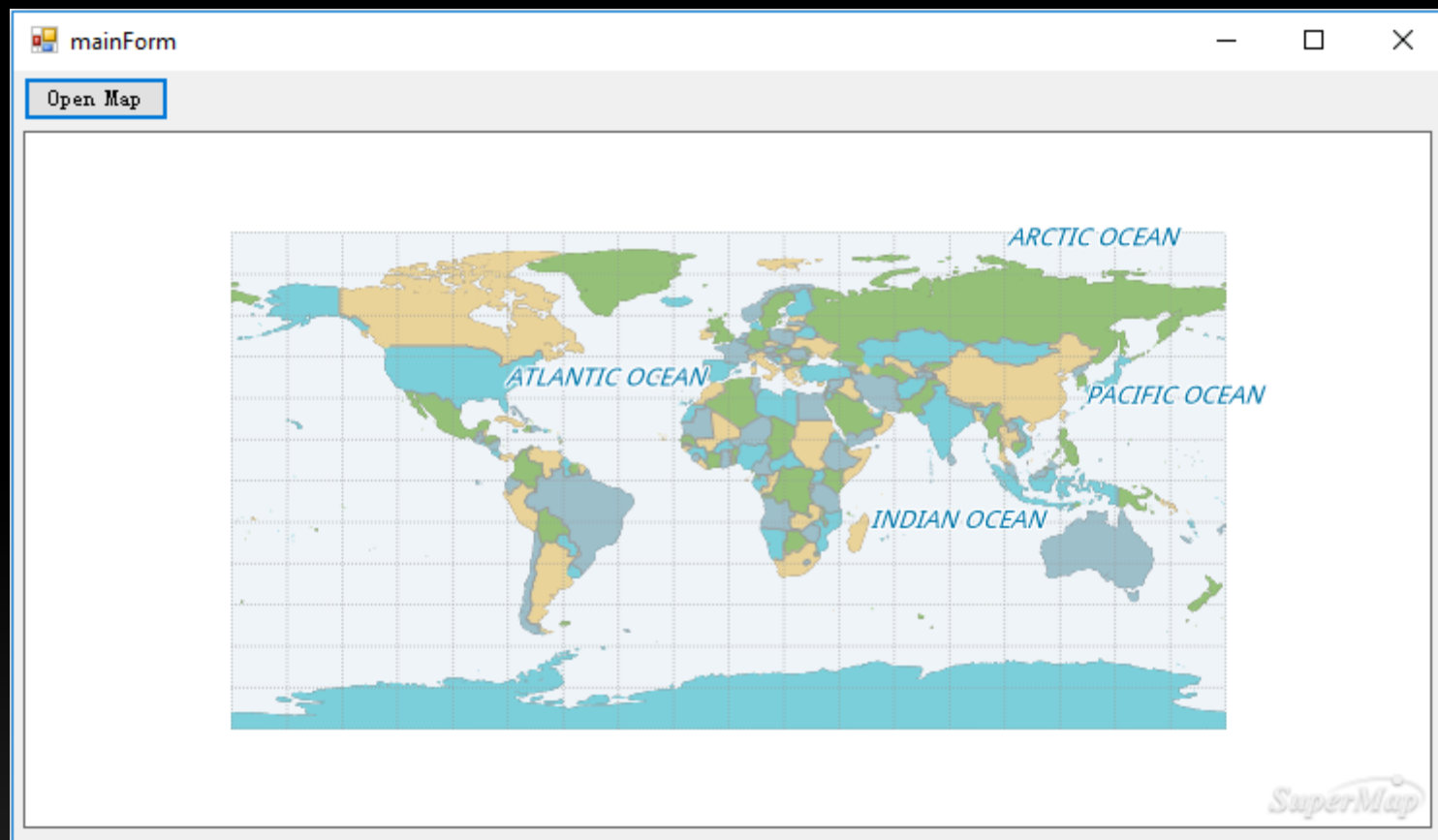
Basic Operations of Map Window

- Step9: Add 5 button controls, and set the Name properties of the controls to btnZoomIn, btnZoomOut, btnZoomFree, btnPan, btnViewEntire; Correspondingly set the Text properties of the controls to "Zoom In", "Zoom Out", "Zoom Free", "Pan", "Full Extent".

Basic Operations of Map Window

- Step10: Add the following code for the double click event for the buttons.

```
private void btnZoomIn_Click(object sender, EventArgs e)
{
    //-------Add the following code to zoom in the map------//
    mapControl.Action = SuperMap.UI.Action.ZoomIn;
}
private void btnZoomOut_Click(object sender, EventArgs e)
{
    //-------Add the following code to zoom out the map------//
    mapControl.Action = SuperMap.UI.Action.ZoomOut;
}
```

Basic Operations of Map Window

- Step10: Add the following code for the double click event for the buttons.

```
private void btnZoomFree_Click(object sender, EventArgs e)
{
    //--------Add the following code to freely zoom the map---//
    mapControl.Action = SuperMap.UI.Action.ZoomFree;
}
private void btnPan_Click(object sender, EventArgs e)
{
    //--------Add the following code to pan the map---//
    mapControl.Action = SuperMap.UI.Action.Pan;
}
private void btnFullExtent_Click(object sender, EventArgs e)
{
    //--Add the following code to display the full extent of the map---//
    mapControl.Map.ViewEntire();
}
```

Result
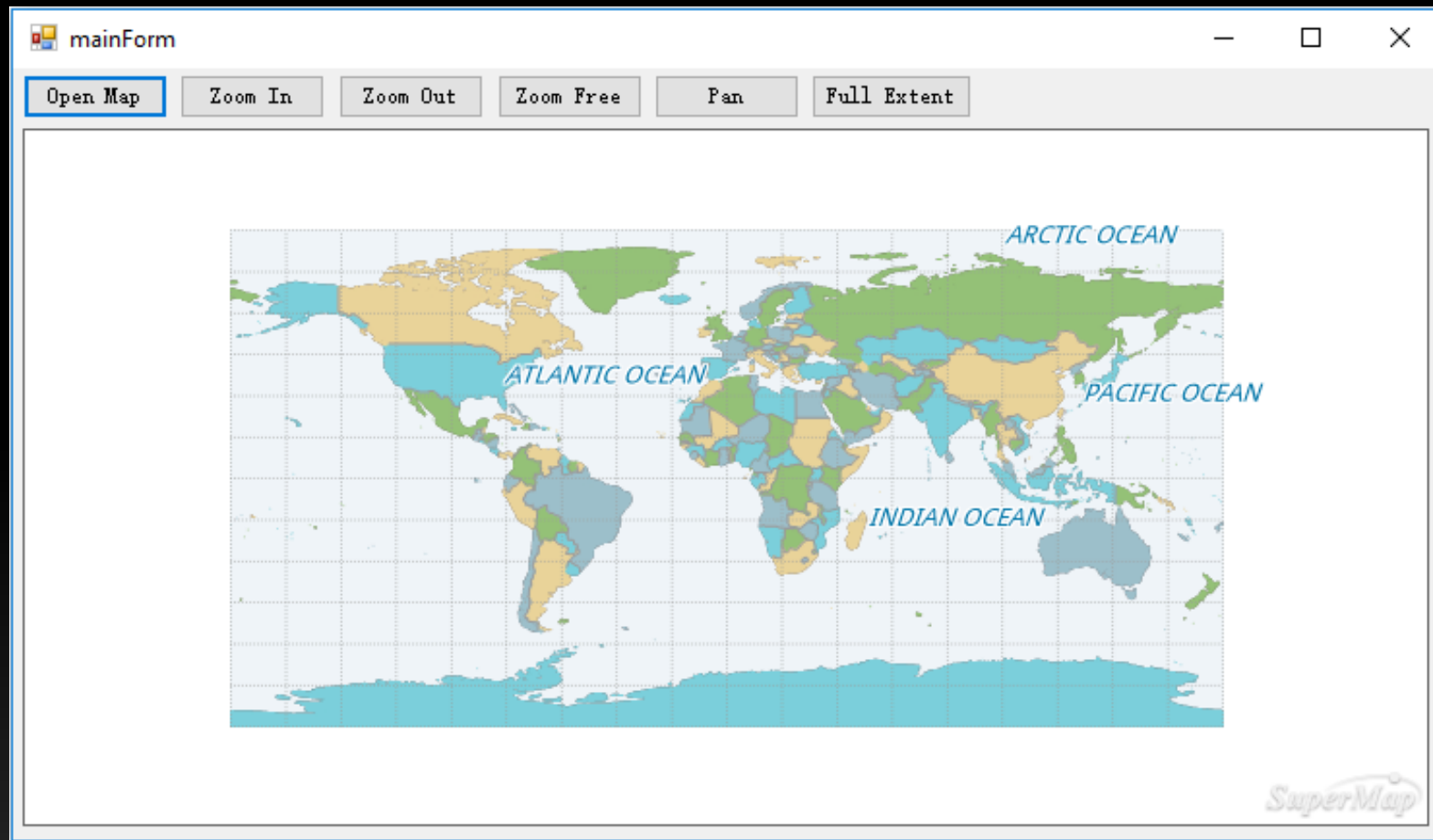
Summary

- Associate controls

mapControl.Map.Workspace = workspace;

- Disconnect controls

mapControl.Dispose();
workspace.Dispose();

- Open the workspace

workspace.Open();

- Display the map

mapControl.Map.Open();

- Basic map operations

mapControl.Action