



Rittal Therm Version 6.1

The screenshot shows a web browser window displaying the Rittal Therm 6.0 interface. The page has a blue background. In the top right corner, there is a "Change language" link with a small UK flag icon. On the left side, there is a small Rittal logo. The main content area features a 3D rendering of a white Rittal Therm 6.0 unit. To the right of the unit, the text reads: "The Rittal platform strategy" followed by "Climate control with a system." and a bulleted list of product types: "» Roof-mounted cooling units", "» Wall-mounted cooling units", "» Air/water heat exchangers & recooling systems", and "» Air/air heat exchangers". Below the unit rendering, the text "Rittal Therm 6.0" is displayed. In the bottom right corner of the main content area, there is a "Start program" button with a right-pointing arrow icon. At the bottom left of the main content area, there is a checkbox labeled "Do not show this screen again". The browser's taskbar at the bottom shows the "Lokales Intranet" icon.

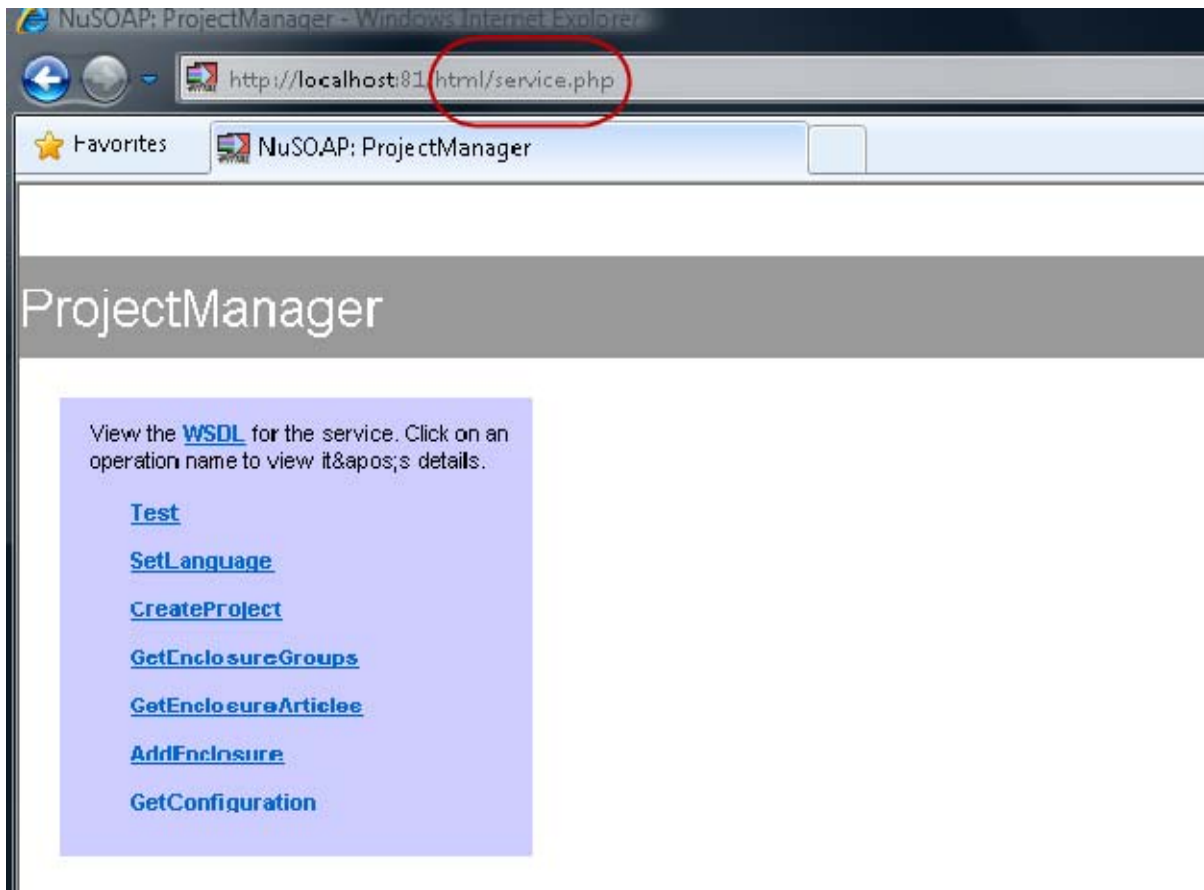
Web Services¹ – HOW TO

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1. How to begin

1. Run Therm (microweb.exe) and in the browser window replace “start.php” with “html/service.php”.



It is now possible to browse Therm web service methods that are available. Just click on the method link to see the description.

2. The client application (service consumer) of the service can be an application in any language with SOAP web services support, e.g. .NET, Java or PHP.

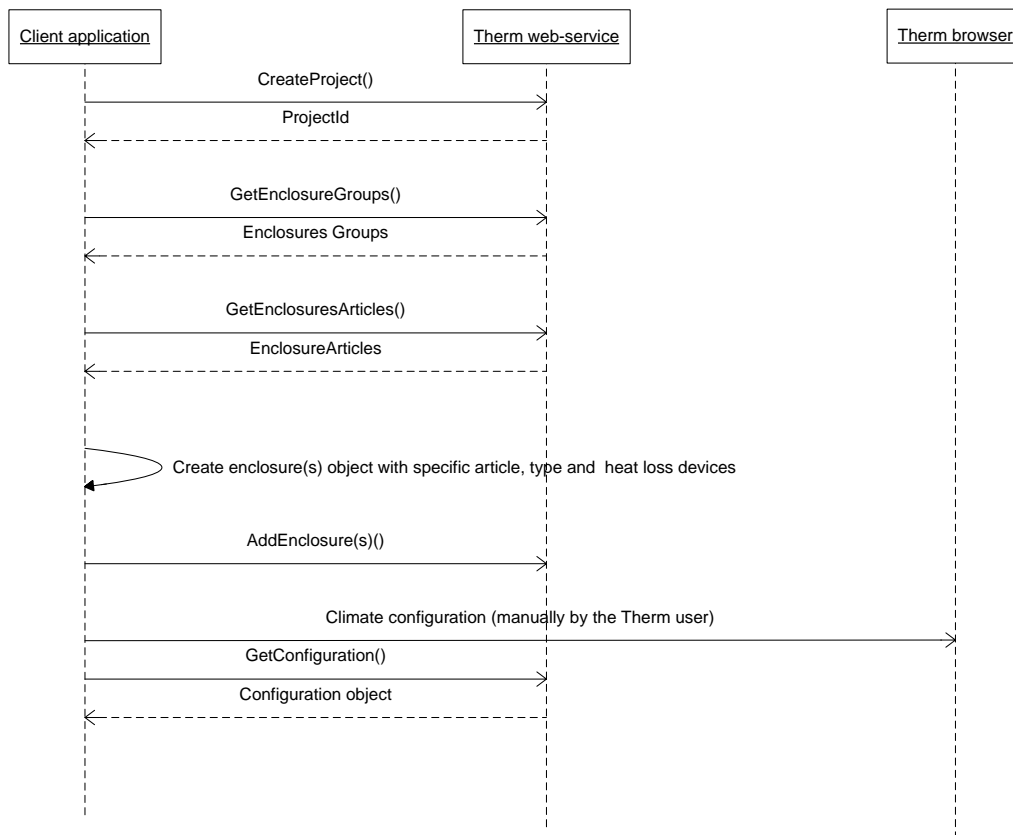
In Therm 6.1 web service it's possible to create a new project, get enclosure model numbers from Therm database and add new enclosure(s).

After climate control configuration, in browser windows the Therm 6.1 web service can get project configuration.



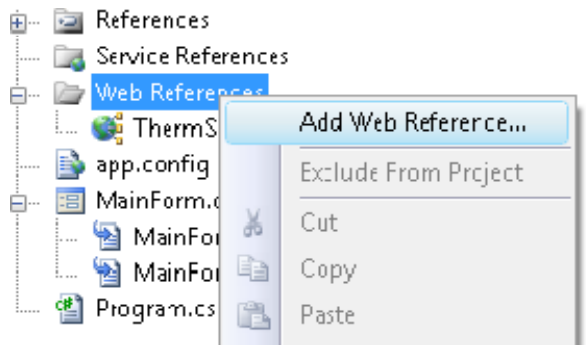
2. How to use the service – sequence diagram

The following diagram shows an example sequence. Of course, it is possible to create a lot of projects and add more enclosures to each project.



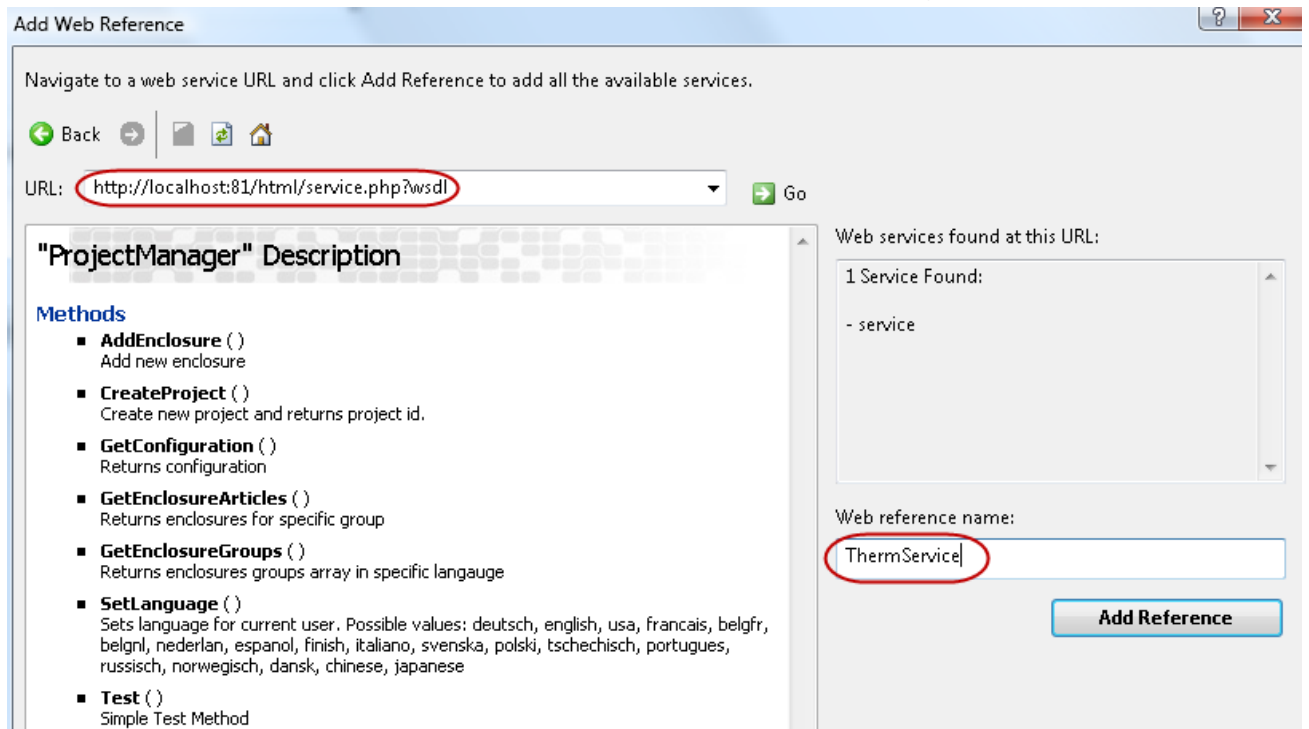
3. Example how to use Therm web service in Visual C# 2008.

1. Create new solution.
2. Add new web reference



3. Enter the actual Therm web service address with question mark and “wsdl” into the URL text box.

In the box “Web reference name” enter your service name, e.g. **ThermService**.





4. Next in the code add Therm service and create **ProjectManager** object.

```

using ThermServiceClient.ThermService;

namespace ThermServiceClient
{
    public partial class MainForm : Form
    {
        private int _projectId;
        private readonly ProjectManager _projectManager = new ProjectManager();
    }
}

```

5. For a test, call **Test()** method with your name as a parameter. The web service answer should be "Hello <your name>".

```

if (_projectManager.Test("john") != "Hello john")
    throw new WebException("Error accessing Therm web service!");

```

6. Set current Therm language, if necessary.

```
_projectManager.SetLanguage("english");
```

7. Use methods: GetEnclosureGroups() and GetEnclosureArticles to get enclosure model numbers.
8. Create new **Enclosure** object, set enclosure model number and group (previously selected from the list), set position, add devices and finally add enclosure to the project.

```

Enclosure enclosure = new Enclosure();
enclosure.ArtNr = "8004500";
enclosure.Group = "TS";

List<Device> devices = new List<Device>();

devices.Add(new Device { Name = "Example device1", HeatLoss = 100, Factor = 100, Quantity = 1 });
devices.Add(new Device { Name = "Example device2", HeatLoss = 75, Factor = 75, Quantity = 2 });
devices.Add(new Device { Name = "Example device3", HeatLoss = 350, Factor = 100, Quantity = 1 });

enclosure.Devices = devices.ToArray();

_projectManager.AddEnclosure(_projectId, enclosure);

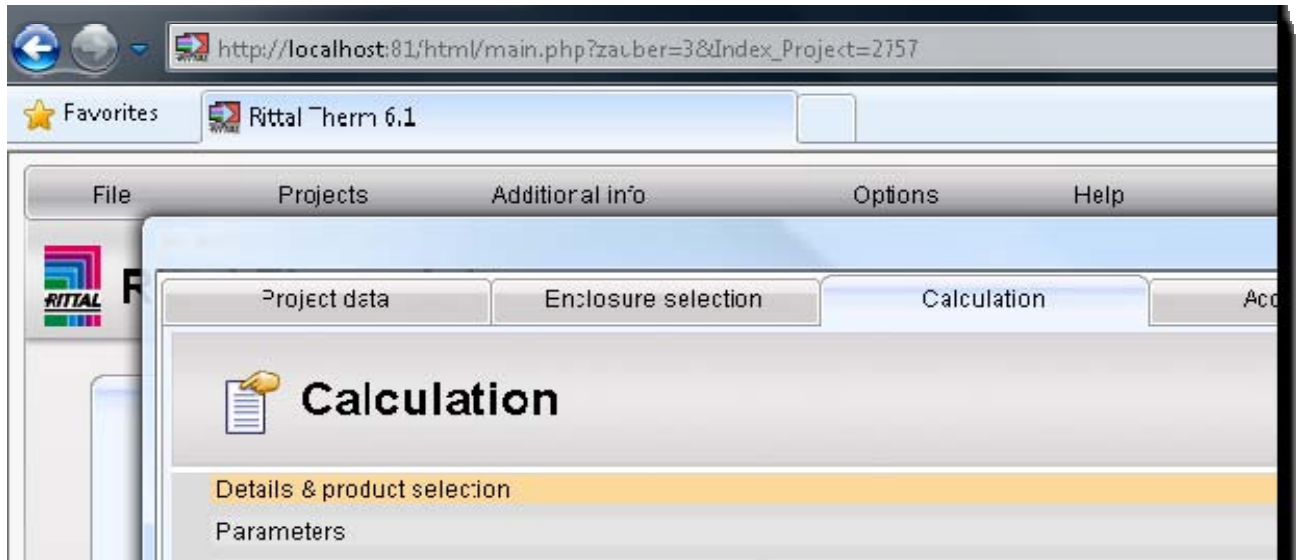
```

9. Now it is possible to configure climate control units. Call Therm in the browser window with the following address:

<Therm server> /html/main.php?zauber=3&Index_Projekt=<current project Id>



Replace <Therm server> with the current server address and <current project Id> with your project Id.



10. After the configuration is finished, call `GetConfiguration()` to get the configuration object with all configuration data.

```
Configuration configuration = _projectManager.GetConfiguration(_projectId);
```

configuration	{ThermServiceClient.ThermService.Configuration}
Enclosures	{ThermServiceClient.ThermService.Enclosure[1]}
[0]	{ThermServiceClient.ThermService.Enclosure}
AirAirExchanger	{ThermServiceClient.ThermService.ClimateControlMountedUnit}
airAirExchangerField	{ThermServiceClient.ThermService.ClimateControlMountedUnit}
AirWaterExchanger	{ThermServiceClient.ThermService.ClimateControlMountedUnit}
airWaterExchangerField	{ThermServiceClient.ThermService.ClimateControlMountedUnit}
ArtNr	"TS 8004500"
artNrField	"TS 8004500"
ClimateControlDoors	null
climateControlDoorsField	null
CoolingUnit	{ThermServiceClient.ThermService.ClimateControlMountedUnit}
RoofMountedUnit	null
roofMountedUnitField	null
WallMountedUnit	{ThermServiceClient.ThermService.ClimateControlUnit}
ArtNr	"SK3361540"
artNrField	"SK3361540"
Attributes	{ThermServiceClient.ThermService.KeyValueElement[0]}
attributesField	{ThermServiceClient.ThermService.KeyValueElement[0]}