



Rittal Therm Version 6.1



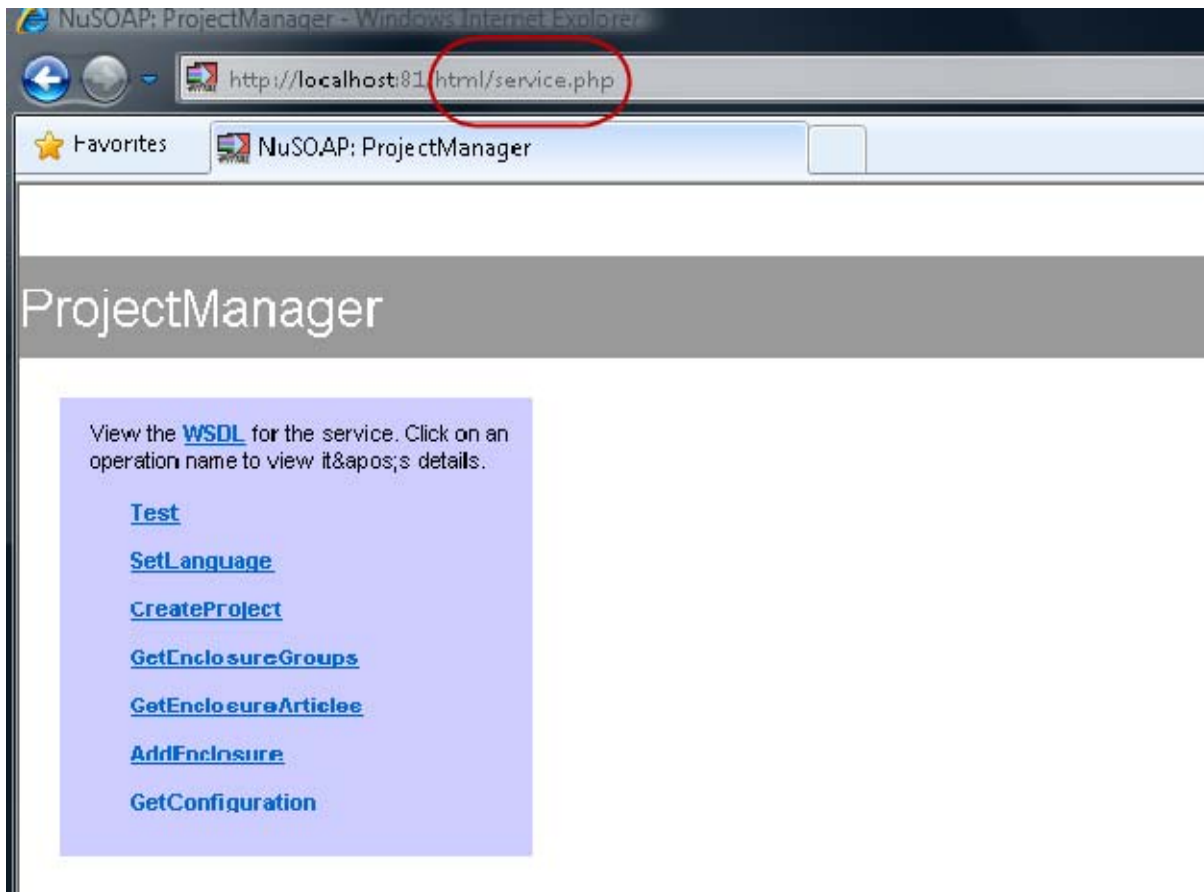
Web Services¹ – HOW TO

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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”.



Now it is possible to browse available Therm web-service methods. Just click on the method link to see the description.

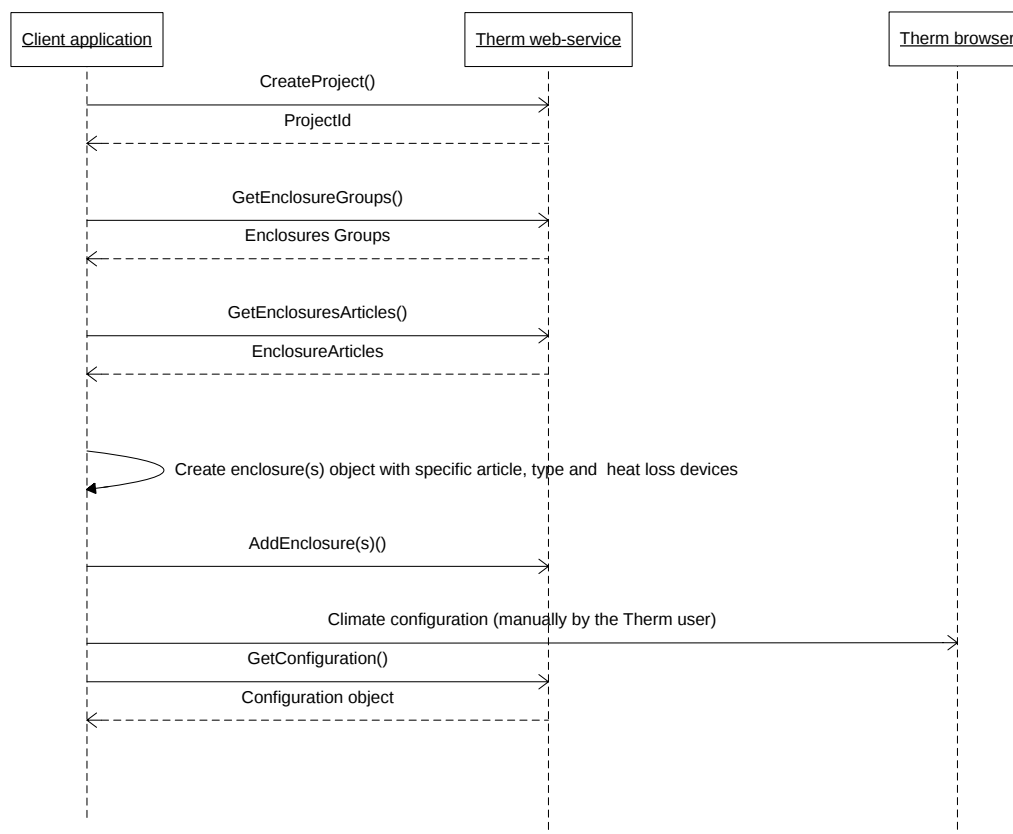
2. The client application (service consumer) of the service can be an application in any language with SOAP web services support. E.g. .NET, Java or PHP.

In Therm 6.1 web-service it's possible to create new project get enclosures articles from Therm database, add new enclosure(s) and after climate control configuration in browser windows get project configuration.



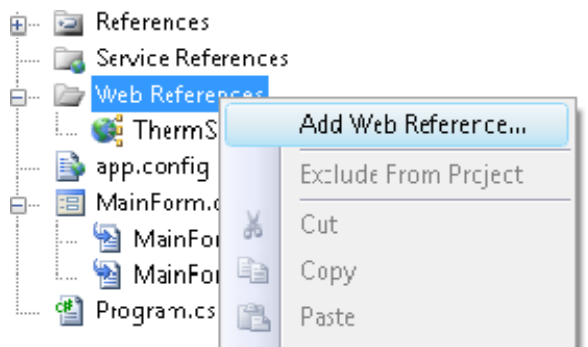
2. How to use the service – sequence diagram.

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



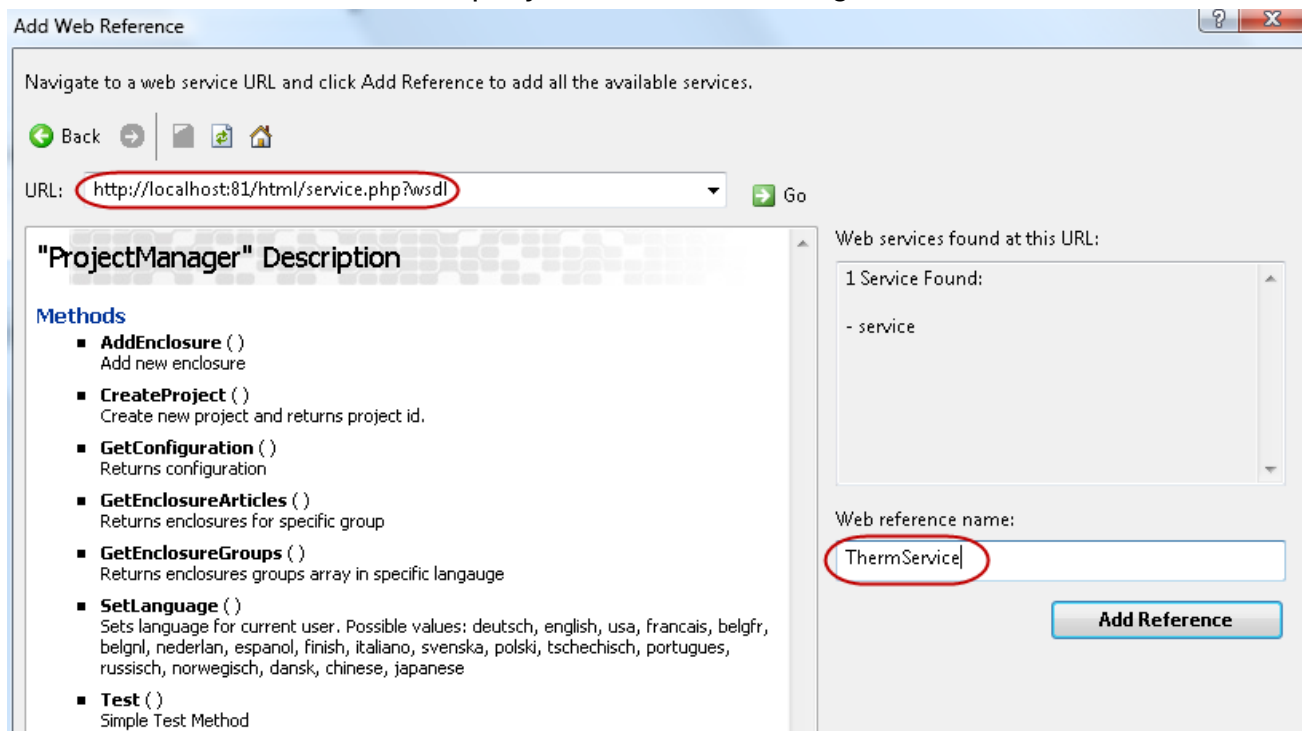
3. Example how to use Therm web-service in Visual C# 2008.

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



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

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



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

```

using ThermServiceClient.ThermService;

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

```

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5. For test try to 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 enclosures articles.

8. Create new **Enclosure** object, set enclosure article and group (previously selected from the articles 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 });

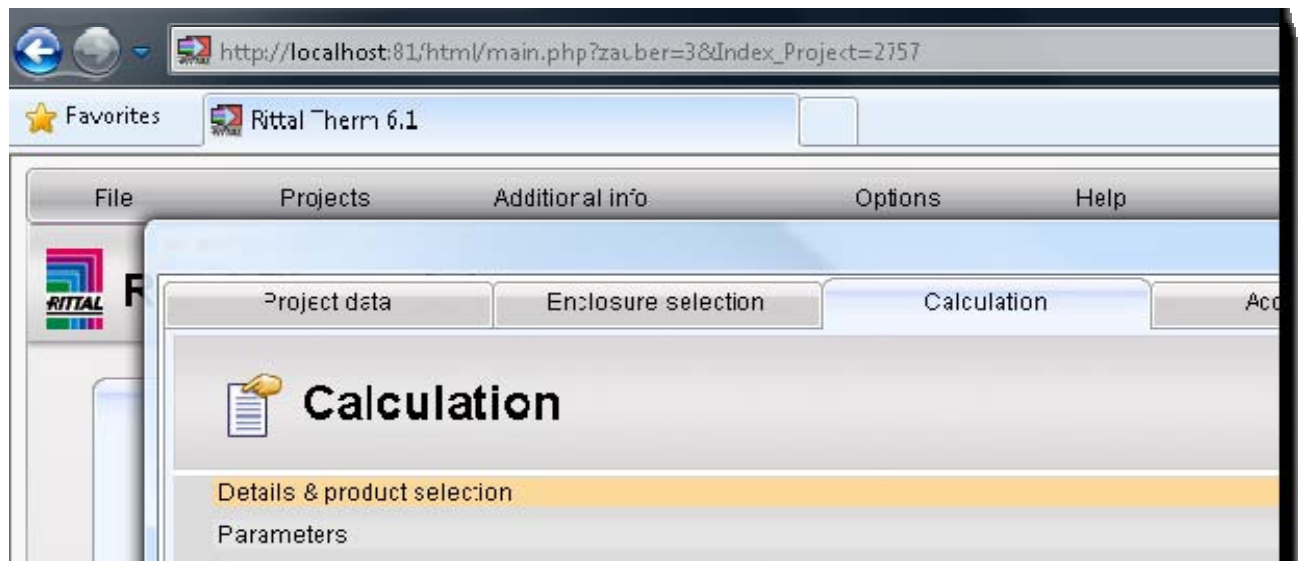
enclosure.Devices = devices.ToArray();

_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 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]}