# Mogreet SDK Tutorials in C# .Net

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#### **Abstract**

This document provides several tutorials explaining how to install, use and modify the SKD.

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#### 1. Introduction

The Mercury Software Development Kit (SDK) provides the functions to implement the Mogreet API Mogreet Messaging System (MoMS).

This documentation will help you to understand the SDK (developed in .Net) via tutorials and schemas explaining the global operation of the application and how to install and use it in your computer.

# 2. Prerequisites

Before trying to test the SDK, you have to install Visual Studio on your pc (if it is not already installed).

You can download the trial version here, which is free: http://www.microsoft.com/visualstudio/en-us/try

We can now launch the application.

#### 3. Tutorials

## 3.1. How to start the application?

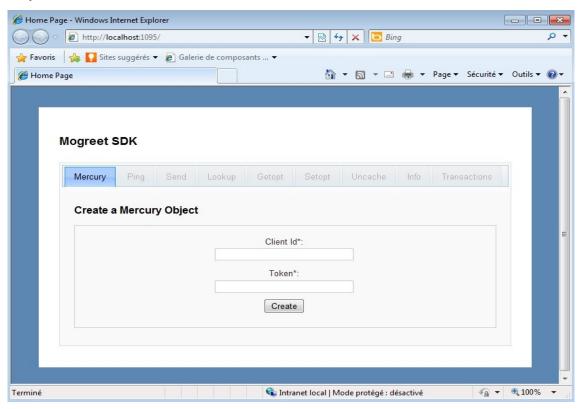
After launching Visual Studio, click on **File Open Project**, find the folder SDKApplication and double click on SDKApplication.sln.

Now click on **Debug Execute without debugging**. It will open Internet Explorer automatically and launch the application.

You have now launched the application, you can use it directly, or follow the next tutorial to know how it works.

### 3.2. Create a Mercury Object and Ping

After launching the application you will have to enter a Client Id and a Token in order to create a Mercury object. You cannot access to the other tabs before creating it This object will allow you to execute any request to the Moms API. You will keep the same Client id and the Token during the application, but if you want to change them, you can, at any moment, go back to the Mercury Tab and create another Mercury Object.



Now your Mercury is created, check if you entered the right Client id and the Token by doing a Ping request.



Succes! Your ping worked, and the message sent back is pong. Every time a request works, the code is 1.

If the Ping request doesn't work, an error page will appear with this message "Mogreet: 403 Forbidden". It means that the Client id or the Token entered aren't good. Go to the previous page and create another mercury object.

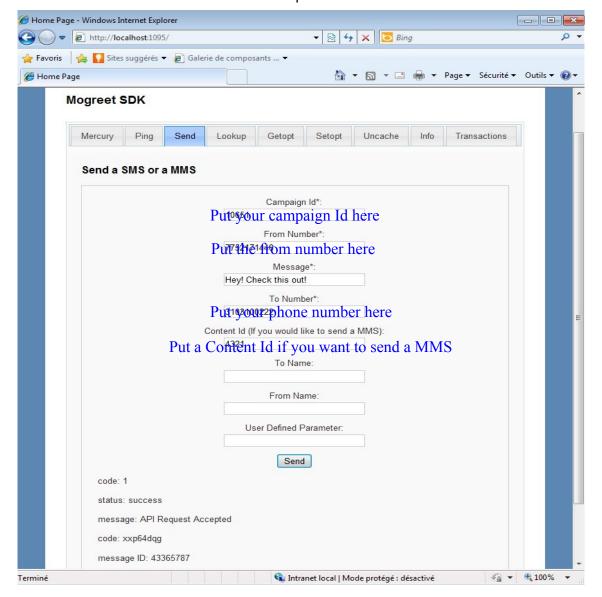
Let's try another request now! Except for the Ping, any request need at least one other information that the Client id and the token.

#### 3.3. Do a Send request

Precedent tutorials must be followed before doing this one.

You have now created a Mercury object and check its parameters by doing a Ping request. Let's now send a message via MoMS API.

Go to the Send tab. Then enter the parameters needed:

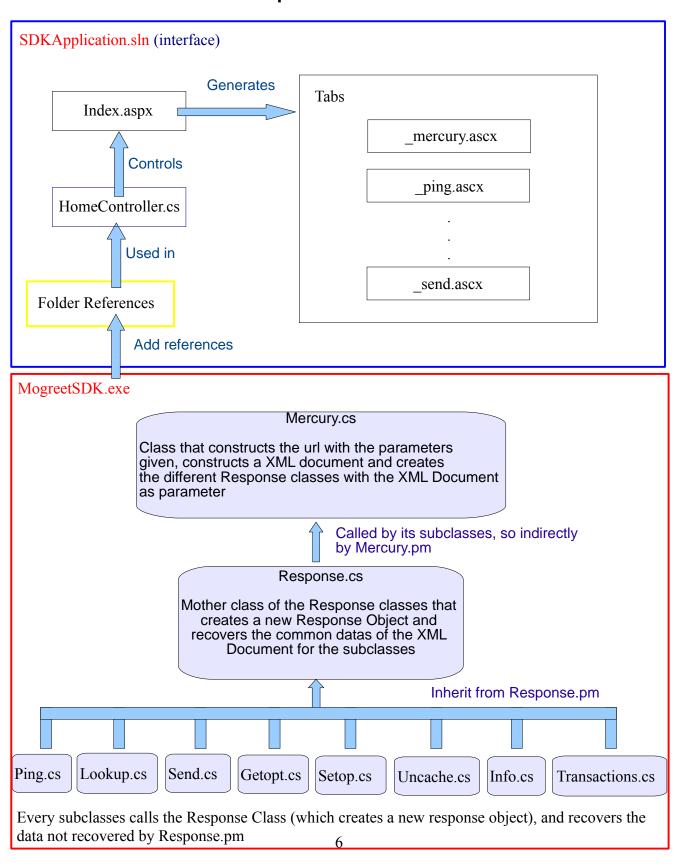


Success! The message has been sent! It is followed by a link to a video (because I entered a Content ID).

You know now everything about how to use the application, let's see how it works, and how you can modify it!

### 4. Mogreet SDK architecture

# 4.1. Global operation



### 4.2. MogreetSDK.exe

MogreetSDK.exe is the executable of Mogreet SDK in C#. It contains all the classes needed to do requests to MoMs API.

If you want to modify a class, open MogreetSDK.sIn in Virtual Studio.

Don't forget after your modifications to generate the executable of the application. You can do that by clicking on **Generate Generate MogreetSDK**.

Then, import it in SDKApplication.sIn to use your new classes or methods, by clicking on **References Add references** and find it in your folders.

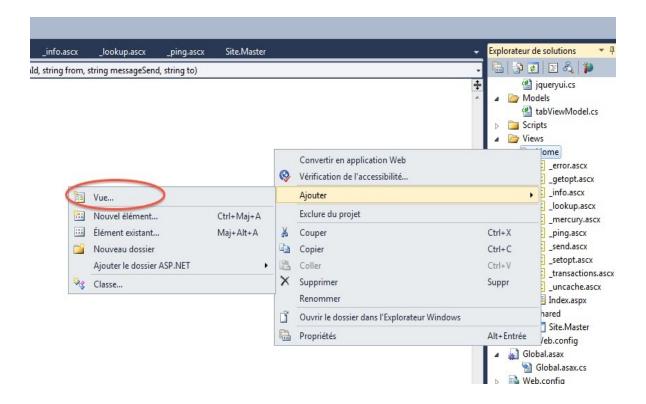
If you just need to access an attribute of a class, methods are available. Refer to the documentation to know the name of the methods.

### 4.3. SDKApplication.sln

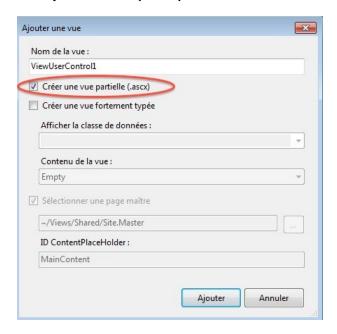
SDKApplication.sln is the graphical interface, in ASP.Net, of Mogreet Sdk in C#. We will see how it works, how you can create a tab, add a field to a tab, recover data entered in a tab, use it for your mercury object...

#### 4.3.1. Create a tab

First of all, you have to know that a tab is represented by a partial control view. That is what you will create first: Click on the folder **Home Add Vue** 



And then click on Create partial view (.ascx) and enter the name of the new view.



Let's see of what \_setopt.ascx is composed to know what you should put in your view:

```
Control Language="C#" Inherits="System.Web.Mvc.ViewUserControl<SDKApplication.Models.tabViewModel>" %>
2
3
    <h3>Do a Getopt request</h3>
Title of the page
4
                                                                        Inherits of the same model as the
5
    <% using (Html.BeginForm("Index","Home"))%>
                                                                        other views, don't forget to put it!
6
     <% { %>
                                        Will use the Index function
7
           <fieldset>
                                        in HomeController
                                                                        Label of the TextBox: Number*
8
               <center>
                  <label for="numberGetopt">Number*:</label>
                                                                        Id of the TextBox: numberGetopt
9
10
                  <%= Html.TextBox("numberGetopt") %>
                                                                        (will be used in Index function of
                  <%= Html.ValidationMessage("numberGetopt", "*") %>
11
                                                                        HomeController)
               12
13
               >
                                                                         The Number is a required
                  <label for="campaignIdGetopt">Campaign ID:</label>
14
                                                                         data which will be checked in
15
                  <%= Html.TextBox("campaignIdGetopt") %>
               16
                                                                         Validate getopt function of
                                                             Submit
17
                                                                         HomeController
                  <input type="submit" value="Getopt" /><=</pre>
18
19
               </center>
20
                <%= ViewData["codeGetopt"] %> 
                                                            ■ Display data from HomeController
21
                <%= ViewData["statusGetopt"] %> 
                <%= ViewData["messageGetopt"] %> 
22
                                                              Thanks to the id
               <% if(ViewData["campaignsGetopt"] != null) %>
23
                  <% foreach (var item in (List<string>)ViewData["campaignsGetopt"]){ %>
24
25
26
                      <%= item %>
                                                   As we don't know how much campaigns there is
27
                  before the request, this will display all the
28
               <% } %>
                                                   campaigns
               29
           </fieldset>
30
    K= Html.Hidden("getoptID", Model.ID)
Gives to the controller the Id of the tab: getoptID
31
32
33
      <% } %>
```

So I will recommend you to copy and paste this code, and to add or delete what you don't need, I put what you should change in Italic.

We are now going to see what you have to change in the **HomeController**. In the Index function, add "string tabID" as parameter, and replace tabID by the ID of your new view (in the previous case getoptID).

Then add the Ids of the TextBox as parameters of the function. In our example "string numberGetopt, string campaignIdGetopt".

Then add a new part of Index function code that will treat the data in the new view. Let's take the part of the function which concerns Getopt Tab as an example:

```
//we are in getopt tab Replace getoptID by your view ID
if (getoptID != null)
                                 Getopt is the 5<sup>th</sup> tab (but we begin to count at 0 so it has the
{
    selectTab = 4;
                                 number 4), put the place of your new tab here
    if (!Validate_getopt(numberGetopt))
                                                Check if the required parameter is not
                                                   null by calling Validate getopt function
       ViewData["tabID"] = selectTab;
       return View(tabView);
    //Creates Dictionary (request parameter)
    Dictionary<String, String> parameters = new Dictionary<String, String>();
    parameters.Add("number", numberGetopt);
    if (campaignIdGetopt != null)
        parameters.Add("campaign id", campaignIdGetopt);
    //Getopt request
                                                              Display the elements in the view
    Getopt getopt = myM.getopt(parameters);
                                                              page where we put ViewData["id"]
    //Prints elements
    ViewData["codeGetopt"] = "code: " + getopt.getResponseCode();
    ViewData["statusGetopt"] = "status: " + getopt.getResponseStatus();
    ViewData["messageGetopt"] = "message: " + getopt.getResponseMessage();
    List<int> list = getopt.getCampaignIdList();
    List<string> campaigns = new List<string>();
    for (int i = 0; i < list.Count; i++)
        campaigns.Add("campaign id:" + list[i] + " status code: " +
        getopt.getCampaignStatusCode(list[i]) + " -> " + getopt.getCampaignStatus(list[i]));
    ViewData["campaignsGetopt"] = campaigns;
    ViewData["tabID"] = selectTab;
                                         Returns tab with data displayed
    return View(tabView);
}
   Don't forget to add ValidateNameOfView at the end of the HomeController class:
         private bool Validate_getopt(string numberGetopt)
             if (String.IsNullOrEmpty(numberGetopt))
                 ModelState.AddModelError("numberGetopt", "You must specify a number.");
             return ModelState.IsValid;
         }
```

And finally, in the **Index** page, you will have to add a link to the new view, let's see how to do that with our example:

```
9 🖹
        <script type="text/javascript">
10
           $(document).ready(function () {
11
               $("#tabs").tabs();
12
               if(<%=ViewData["init"]%> != 1){
13
                  $("#tabs").tabs("option", "disabled", [1,2,3,4,5,6,7,8]);
                                                                           Ids of tabs disabled before the creation of
14
               if(<%=ViewData["init"]%> == 1){
15
                                                                           a Mercury object.
16
                  $("#tabs").tabs("option", "disabled", []);
                                                                           If you add a 10th tab, add "9" here.
17
               };
18
               $("#tabs").tabs("select", <%=ViewData["tabID"]%>);
                                                                           Enable the tabs
19
           });
20
        </script>
                                                                           Create tabs
21
22
    </asp:Content>
23
24
25 = <asp:Content ID="indexContent" ContentPlaceHolderID="MainContent" runat="server">
26
         <h2>Mogreet SDK</h2>
27
        <div id="tabs">
28 F
29 ⊟
           <l
               <a href="#mercury">Mercury</a>
30
31
               <a href="#ping">Ping</a>
               <a href="#send">Send</a>
32
33
               <a href="#lookup">Lookup</a>
                                                                Add a new tab to Index page
34
               <a href="#getopt">Getopt</a>
               <a href="#setopt">Setopt</a>
35
               <a href="#uncache">Uncache</a>
36
37
               <a href="#info">Info</a>
38
               <a href="#transactions">Transactions</a>
           39
40
           <div id="mercury">
41
               Ktml.RenderPartial(" mercury", new SDKApplication.Models.tabViewModel { ParentModel = Model, ID = "mercury" }); %>
42
           </div>
43 F
           <div id="ping">
44
               Ktml.RenderPartial("_ping", new SDKApplication.Models.tabViewModel { ParentModel = Model, ID = "ping" });  %>
45
            </div>
46
           <div id="send">
               Ktml.RenderPartial("_send", new SDKApplication.Models.tabViewModel { ParentModel = Model, ID = "send" }); %>
47
48
           </div>
49
           <div id="lookup">
               Ktml.RenderPartial("_lookup", new SDKApplication.Models.tabViewModel { ParentModel = Model, ID = "lookup" });  %>
50
51
           </div>
52 🖹
           <div id="getopt">
53
               Ktml.RenderPartial("_getopt", new SDKApplication.Models.tabViewModel { ParentModel = Model, ID = "getopt" });  %>
54
           </div>
55
            <div id="setont">
                                                  You will have to add a new div with, as Id, the same you
                                                  put to add a new tab but without "#".
                                                  Then, instead of "getopt", add the name of your new
```

view, and instead of ID="getopt", add ID="Id of the div"

#### 4.3.3. Delete a tab

By following the previous tutorial, you know how the application works, how you can add a tab, and finally how to delete it! Because you just have to delete what you just added in the previous part of this document:

- the partial view
   what you added in Index.aspx
   what you added in HomeController (in the Index function and the ValidateNameOfView corresponding).