

0.3

MetaAccess

ASP.NET Example Application

OPSWAT.

Copyright

DISCLAIMER OF WARRANTY

OPSWAT Inc. makes no representation or warranties, either express or implied by or with respect to anything in this document, and shall not be liable for any implied warranties of merchantability or fitness for a particular purpose or for any indirect special or consequential damages.

COPYRIGHT NOTICE

OPSWAT, OESIS, MetaDefender, MetaAccess, AppRemover and the OPSWAT logo are trademarks and registered trademarks of OPSWAT, Inc. All other trademarks, trade names and images mentioned and/or used herein belong to their respective owners.

No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, photocopying, recording or otherwise, without prior written consent of OPSWAT Inc. No patent liability is assumed with respect to the use of the information contained herein. While every precaution has been taken in the preparation of this publication, OPSWAT Inc. assumes no responsibility for errors or omissions. This publication and features described herein are subject to change without notice.

Contents

1	Asp.net Example application	4
1.1	Requirements	4
1.2	Register your sample application	4
1.3	Build and deploy web application	6
1.4	Update your keys	7
1.5	Run application	7

1 ASP.NET EXAMPLE APPLICATION

1.1 Requirements

- Web server IIS with .NET framework 2.0 (on windows server)
- Visual Studio
- OPSWAT Account ([register here](#))
- Registered application on [MetaAccess APIs](#)
- Knowledge of [OAuth 2.0](#)

To register your application, visit [OPSWAT MetaAccess APIs](#), login and click on button: REGISTER NEW APP in left section of the page. Follow the process and in the end you will obtain pair of keys, which you will need later.

Register your application

1.2 Register your sample application

Before you will be able to run MetaAccess sample application you have to register new application on [OPSWAT MetaAccess APIs](#).

To register your application follow this process:

Go to [OPSWAT MetaAccess APIs](#)

Click on **Log in** button in top-right corner(you will be redirected to accounts.opswat.com)

Fill in your email and password and click on **Sign in** ->you will be redirected back to MetaAccess APIs

Click on button REGISTER NEW APPLICATION

Fill in form

Application name – name of your sample application. For example: *ASP Application 3*

Description – Description of your application. For example: *Simple testing application for MetaAccess APIs*

Website URL – Public website of your Application. For example: <http://www.yourhost.com>
(or http://localhost:61675/metaaccess_client/)

Callback URL – URL where should be user redirected from MetaAccess OAuth2.0 after successfully authenticating.

For example: <http://localhost:61675/gettoken.aspx>

Click on Save

You will see overview page of newly registered application with specific Client key and Client secret

Register new application

Description
Please enter information below to register a new application

Application Name

My Application 1

Description

My Application 1

Application icon (Allowed format: png, jpg - Max file size: 1MB)

Choose File 9a62d722ec9503cb5a84.jpg

Website URL

https://gears.opswat.com/o/app/register

Callback URL

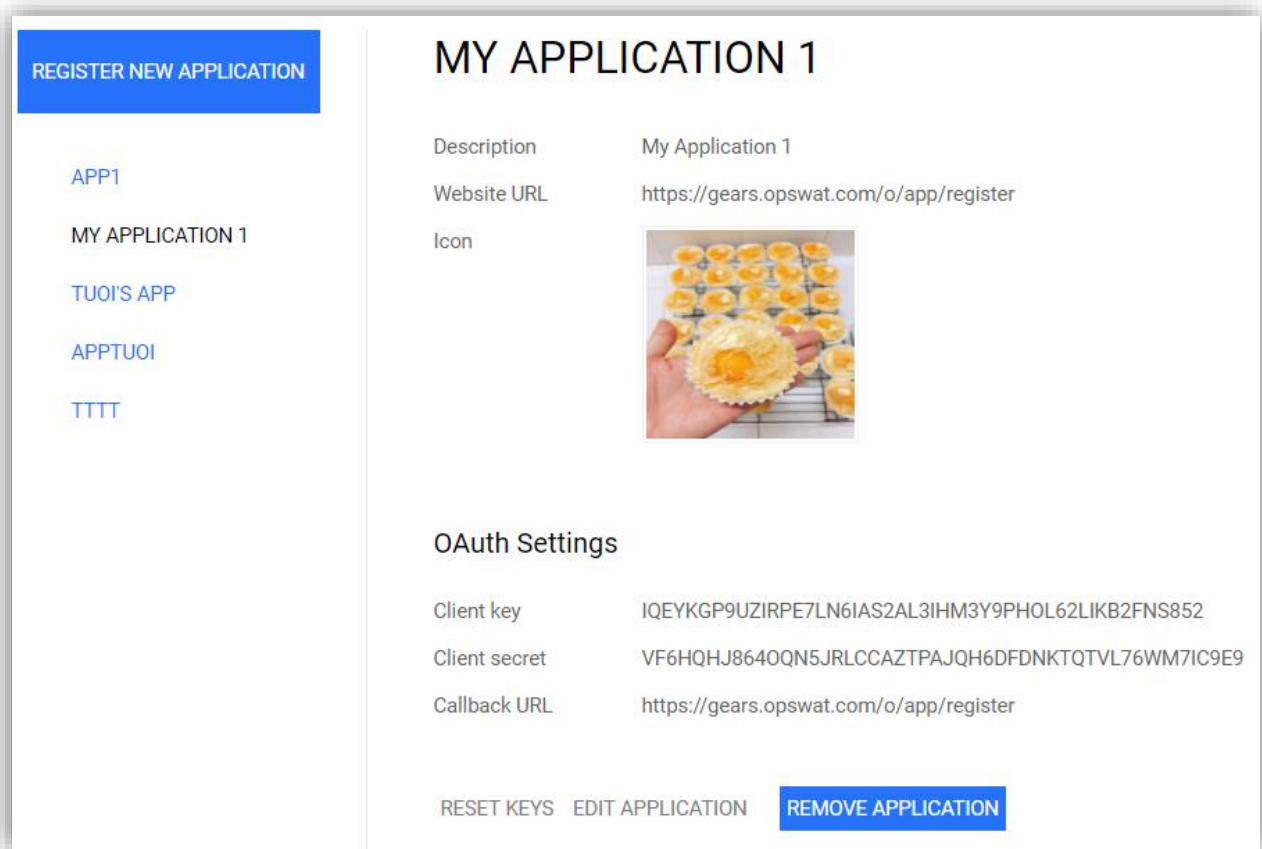
https://gears.opswat.com/o/app/register

SAVE

Example of registration form

Note: The most important part of this registration form is **Callback URL**. On this URL is user redirected together with secret code in URL parameter, which is generated by OAuth2.0. In this sample application, this process is implemented by [gettoken.aspx.cs](#) (This is behind code file of gettoken.aspx).

In this example we run our server on localhost and URL callback is <http://localhost:61675/gettoken.aspx>



Example of application overview

1.3 Build and deploy web application

You will need Visual Studio 2010 to open and build MetaAccess Sample project

- Open file "aspnet_client.sln"
- In the Visual studio menu, select *Build -> Publish aspnet_client*, this will open publish web dialog.
- On the publish web dialog:

- In the publish section, select **File System** for **Publish method**
 - Here select *target location*, which is a folder you want to save your built source (All files and folders in this directory will be uploaded to web server).
- Click on **Publish**

1.4 Update your keys

Before you upload published source code to server, you need to insert your Client Key and Secret Key generated by MetaAccess APIs for your application into file **Web.config**. Visit detail page of your application on MetaAccess APIs and copy and paste both Client and Secret to Web.config

```

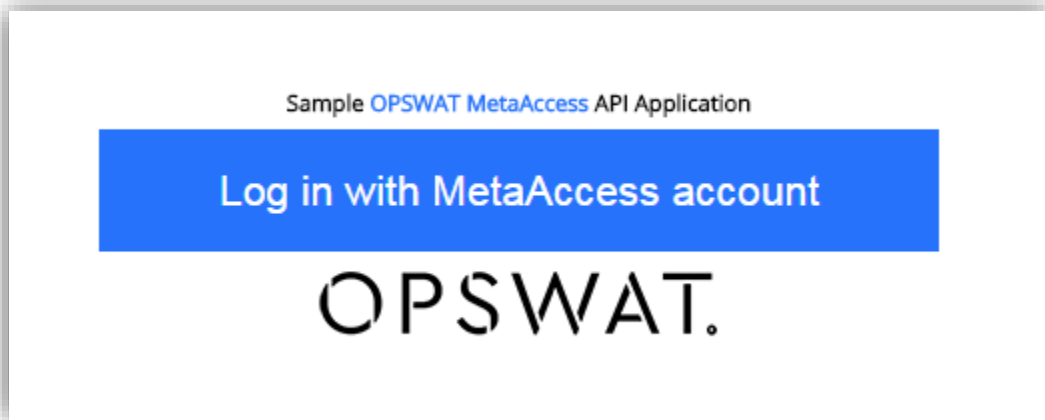
1 <?xml version="1.0"?>
2 <configuration>
3   <appSettings>
4     <add key="CLIENT_ID" value="79EX[REDACTED]5ZTKD2ZKVSHTQD5HZ72ELZ"/>
5     <add key="CLIENT_SECRET" value="GE5[REDACTED]1H0U4AZ4NN6EYRJ4QVFZPP"/>
6     <add key="CALLBACK_URL" value="/gettoken.aspx"/>
7
8     <add key="AUTHORIZE_URI" value="https://gears.opswat.com/o/oauth/authorize"/>
9     <add key="ACCESS_TOKEN_URI" value="https://gears.opswat.com/o/oauth/token"/>
10    <add key="API_ACCOUNT" value="https://gears.opswat.com/o/api/v2/account"/>
11    <add key="API_ACCOUNT_CONFIG" value="https://gears.opswat.com/o/api/v2/account/policy"/>
12    <add key="API_DEVICES" value="https://gears.opswat.com/o/api/v2/devices?limit=10&grou">
13    <add key="API_DEVICES_DETAIL" value="https://gears.opswat.com/o/api/v2/devices/">
14    <add key="API_LOGS" value="https://gears.opswat.com/o/api/v2/logs"/>
15
16    <add key="REDIRECT_AFTER_LOGIN" value="/account.aspx"/>
17    <add key="AUTHORIZATION_CODE" value="code"/>
18    <add key="ACCESS_TOKEN" value="access_token"/>
19    <add key="REFRESH_TOKEN" value="refresh_token"/>
20  </appSettings>
  
```

To obtain your Client key and Client secret, go to: **MetaAccess APIs -> Applications** and click on application name in left menu

1.5 Run application

Finally, upload all published source code to your web server, open browser and point to login page, for example <http://yourdomain.com/login.aspx>. You should see login page as below:

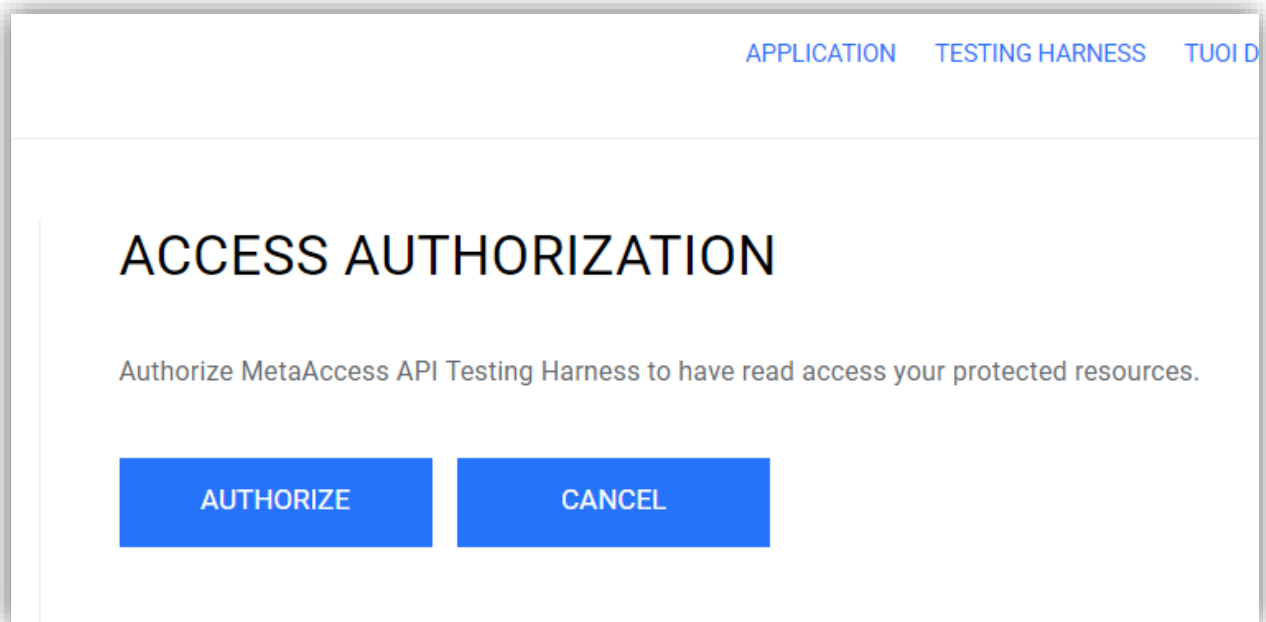
#54.213.40.38 gears.opswat.com#54.213.40.38 gears.opswat.com



After clicking on **Log in with MetaAccess Account** button, you will be redirected to gears.opswat.com landing page and follow this process:

Continue by clicking on **Log in** button in top section and you will be again redirected to accounts.opswat.com.

Insert your log in credentials and click Sign in -> you will be redirected on Confirmation page. Here you will be asked to accept access of your java Sample Application to your protected resources. As show on following screenshot.



Here click on **AUTHORIZE** – because you want your Sample application grant access to your resources (otherwise, you won't be able to load data in your application) and click **Submit**.

If you successfully finished whole process, you will see your MetaAccess account information in yours locally running sample application.

Account Information	
EMAIL	phuong.cao@opswat.com
NAME	Phuong Cao
ALLOWED DEVICES	25
USED DEVICES	0
ACCOUNT CREATED	2017-06-12T06:50:03Z
LAST LOGIN	2018-04-17T02:52:58Z

```
{ "devices_uncompliant"=>0, "devices_critical"=>0, "devices_issues"=>0, "devices_unknown"=>0, "name"=>"Phuong Cao", "email"=>"phuong.cao@opswat.com", "devices_allowed"=>25, "devices_used"=>0, "date_created"=>"2017-06-12T06:50:03Z", "last_login"=>"2018-04-17T02:52:58Z" }
```

UI of MetaAccess Sample ASP.Net Application