



Getting Started with Microsoft Office 365 APIs

Office 365



Hands-on lab

In this lab, you will investigate the O365 APIs.

This document is provided for informational purposes only and Microsoft makes no warranties, either express or implied, in this document. Information in this document, including URL and other Internet Web site references, is subject to change without notice. The entire risk of the use or the results from the use of this document remains with the user. Unless otherwise noted, the companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted in examples herein are fictitious. No association with any real company, organization, product, domain name, e-mail address, logo, person, place, or event is intended or should be inferred. Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Microsoft Corporation.

Microsoft may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from Microsoft, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

Copyright 2014 © Microsoft Corporation. All rights reserved.

Microsoft, Internet Explorer, Microsoft Azure, Microsoft Office, Office 365, Visual Studio, and Windows are trademarks of the Microsoft group of companies.

All other trademarks are property of their respective owners.

Exercise 1: Obtain the Office 365 API Tools

You must have an Office 365 tenant to complete this lab. To sign up for an Office 365 developer subscription:

1. Navigate to [http://msdn.microsoft.com/en-us/library/office/fp179924\(v=office.15\).aspx](http://msdn.microsoft.com/en-us/library/office/fp179924(v=office.15).aspx).
2. Under the heading **Sign up for an Office 365 Developer Site** click **Try It Free**.

▲ Sign up for an Office 365 Developer Site

You may already have access to an Office 365 Developer Site. Here are three ways to get one:

- Are you an MSDN subscriber? Visual Studio Ultimate and Visual Studio Premium with MSDN
- Do you have a midsize business and enterprise (Plan E1 or E3) Office 365 subscription? You can get a [365 subscription](#).
- You can either start with a [free 30-day trial](#), or buy an [Office 365 developer subscription](#) (with a 30-day trial).

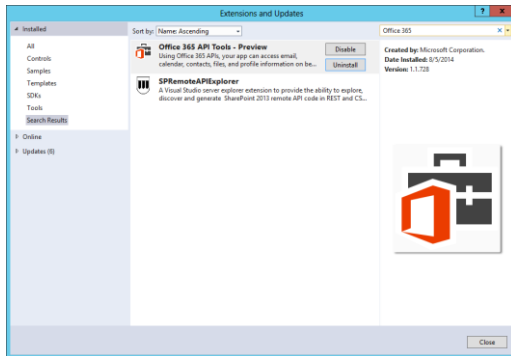


3. Fill out the form to obtain your trial Office 365 subscription.
4. When completed, you will have a developer site in the [subscription].sharepoint.com domain located at the root of your subscription (e.g. <https://mysubscription.sharepoint.com>)
5. You must have a Microsoft account to complete this lab. If you do not have one, navigate to <https://signup.live.com/signup.aspx?lic=1> and create one.

In this exercise you install the Office 365 API Tools in Visual Studio.

1. Start **Visual Studio 2013**.
2. Click **Tools/Extensions and Updates**.
 1. In the **Extensions and Updates** dialog, click **Online**.
 2. Click **Visual Studio Gallery**.
 3. Type **Office 365** in the search box.
 4. Click **Office 365 API Tools - Preview**.
 5. Click **Install**.

Getting Started with Microsoft Office 365 APIs



Exercise 2: Create an MVC Web Application

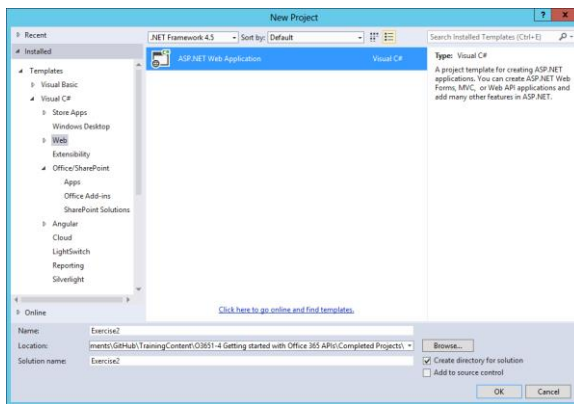
Before: Login into O365 (<https://<yoursubscription>.sharepoint.com>) and add somea test meeting in the calendar on a date of your choice. This exercise will show this meeting in an MVC Web Application.

Formatted: Font: Bold

Formatted: Font: Bold

In this exercise you will create a new MVC web application to utilize the O365 APIs.

1. In Visual Studio, click **File/New/Project**.
2. In the **New Project** dialog:
 1. Select **Templates/Visual C#/Web**.
 2. Select **ASP.NET Web Application**.



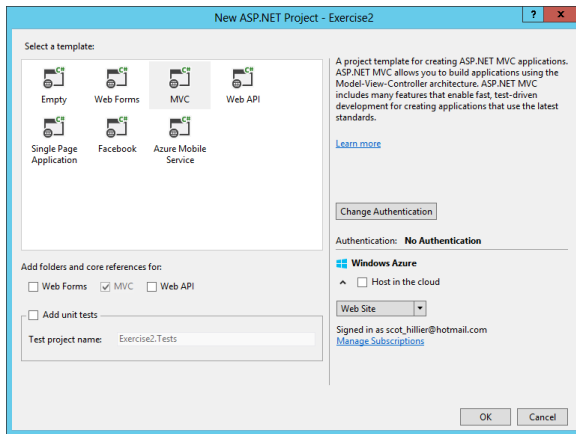
3. Click **OK**.
3. In the **New ASP.NET Project** dialog:
 1. Click **MVC**.
 2. Click **Change Authentication**.
 3. Select **No Authentication**.
 4. Click **OK**.

4.5. Uncheck **Host in the Cloud**

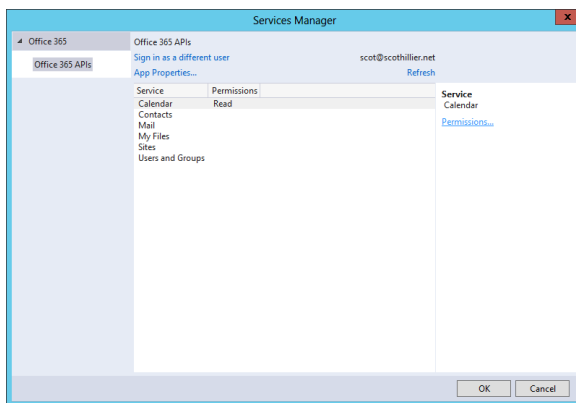
Formatted: Font: Bold

5.6. Click **OK**.

Getting Started with Microsoft Office 365 APIs



4. In the **Solution Explorer**, right click the project and select **Add/Connected Service**.
5. In the **Services Manager** dialog:
 1. Click **Register Your App**.
 2. When prompted sign in with your **Organizational Account**.
 3. Click **Calendar**.
 4. Click **Permissions**.
 5. Check **Read User's Calendar**.
 6. Click **Apply**.
 7. Click **OK**.



6. In the **Solution Explorer**, open the file **CalendarApiSample.cs**.

Getting Started with Microsoft Office 365 APIs

7. **Delete** the following lines of code. These values need to be stored in session state to prevent needless round trip for authentication.

```
↪ // Do not make static in Web apps; store it in session or in a cookie instead
↪ static string _lastLoggedInUser;
↪ static DiscoveryContext _discoveryContext;
```

8. **Replace** the code in the **EnsureClientCreated** method with the following code.

```
↪ DiscoveryContext _discoveryContext =
System.Web.HttpContext.Current.Session["DiscoveryContext"] as DiscoveryContext;
↪
↪ if (_discoveryContext == null)
↪ {
↪     _discoveryContext = await DiscoveryContext.CreateAsync();
↪     System.Web.HttpContext.Current.Session["DiscoveryContext"] =
_discoveryContext;
↪ }
↪
↪ var dcr = await
_discoveryContext.DiscoverResourceAsync(ServiceResourceId);
↪
↪ System.Web.HttpContext.Current.Session["LastLoggedInUser"] = dcr.UserId;
↪
↪ return new ExchangeClient(ServiceEndpointUri, async () =>
↪ {
↪     return (await
_discoveryContext.AuthenticationContext.AcquireTokenByRefreshTokenAsync(new
SessionCache().Read("RefreshToken"), new
Microsoft.IdentityModel.Clients.ActiveDirectory.ClientCredential(_discoveryContext.AppIdentit
y.ClientId, _discoveryContext.AppIdentity.ClientSecret), ServiceResourceId)).AccessToken;
↪ });
```

9. **Replace** the code in the **SignOut** method with the following code.

```
↪ DiscoveryContext _discoveryContext =
System.Web.HttpContext.Current.Session["DiscoveryContext"] as DiscoveryContext;
↪
↪ if (_discoveryContext == null)
↪ {
↪     _discoveryContext = new DiscoveryContext();
↪     System.Web.HttpContext.Current.Session["DiscoveryContext"] =
_discoveryContext;
```

Getting Started with Microsoft Office 365 APIs

```
↪    }
↪
↪    _discoveryContext.ClearCache();
↪
↪    return
↪    _discoveryContext.GetLogoutUri<SessionCache>(postLogoutRedirect);
↪
```

10. Open the **HomeController.cs** class.

11. Add the following code to the top of the file

```
↪ using System.Threading.Tasks;
↪ using Microsoft.Office365.Exchange;
↪ using Microsoft.Office365.OAuth;
↪ //Modify the Index method to appear as follows
↪ public async Task<ActionResult> Index()
↪ {
↪     try
↪     {
↪         IOrderedEnumerable<IEvent> events = await
↪         CalendarAPISample.GetCalendarEvents();
↪         ViewBag.Events = events;
↪     }
↪     catch (RedirectRequiredException x)
↪     {
↪         return Redirect(x.RedirectUri.ToString());
↪     }
↪     return View();
↪ }
```

Formatted: List 2

Formatted: k3, Font color: Gray-80%, English (United States)

12.13. Right click within the **Index** method and select **Go To View**.

13.14. Replace the contents of the view with the following code

```
↪ @{
↪     ViewBag.Title = "Home Page";
↪ }
↪
↪ <div>
↪ <table>
↪     <thead>
↪     <th>Subject</th>
↪     <th>Start</th>
↪     <th>End</th>
```


Getting Started with Microsoft Office 365 APIs

```
↪      @foreach (var Event in ViewBag.Events)
↪      {
↪          <tr>
↪              <td>
↪                  <div style="width:200px;">@Event.Subject</div>
↪              </td>
↪              <td>
↪                  <div style="width:200px;">@Event.Start</div>
↪              </td>
↪              <td>
↪                  <div style="width:200px;">@Event.End</div>
↪              </td>
↪          </tr>
↪      }
↪  </table>
↪  </ >/div>
```

[14.15.](#) Run the application by pushing **F5**.

[15.16.](#) Verify that events appear in the web application.

Congratulations! You have completed your first Office 365 API application.