# Installation Guide

## Connecting an On-Premises Customer Portal to Microsoft Dynamics® CRM

Use this guide to learn how to install the Customer Portal solution for Microsoft Dynamics CRM on a Windows Server (IIS) computer that is connected to Microsoft Dynamics CRM (the CRM solution can be running Online or On-Premise).

***Important information:*** *Please review the steps in this installation guide before beginning your deployment process. This setup process is* ***technical*** *and assumes a level of proficiency with managing Microsoft Dynamics CRM customization imports, ASP.NET and Windows Server Internet Information Server (IIS). If you don’t have any experience with Visual Studio or setting up ASP.NET web sites, you will find the steps in this guide to be complex. You are urged to engage with an appropriately experienced technical resource to deploy your portal. However, once your portal is deployed, a business representative can configure the majority of the content and functionality.*

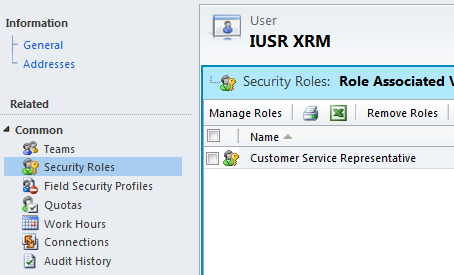
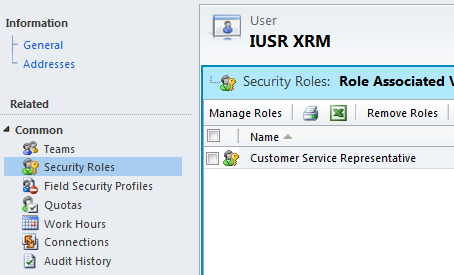
## Pre-Requisite Setup Steps

To complete the installation of the Customer Portal solution for Microsoft Dynamics CRM you will need the following technology pieces in place:

### Windows Live ID

* Windows Live ID (WLID) allows users to be authenticated to access your website without having to create your own security providers.
* You will need to register your application using a Windows Live ID. You can do this at <https://live.azure.com>. When registering your application, you need to provide your domain name, which must be the exact domain name “yoursite.yourdomain.com”. Do not enter just “yourdomain.com”.
* You also need to provide a URL that will direct Live ID requests back to your website when they have finished signing in. This will be to your Handler Service. By default, the URL you will want to enter is http://yoursite.yourdomain.com/liveid.axd.
* After you have registered your website, it will provide you with an application ID and a secret that you will use to plug in to your web.config file so that the site can be hooked up to Live ID. Make sure that you copy these two pieces of information for future use in the setup process.

### Microsoft Dynamics CRM

* **Microsoft Dynamics CRM Online:**
  + If you are signing up for Microsoft Dynamics CRM Online then you will need a Windows Live™ ID (hereafter referred to as WLID) for setup and billing purposes.
  + For more details on setting up your Microsoft Dynamics CRM Online accounts go to <http://crm.dynamics.com> where you can sign up for a free 30-day trial account.
  + If you need to set up a WLID, go to <https://login.live.com/>.
  + You will need a second WLID that will be used to call the required Microsoft Dynamics CRM web services from the portal. We recommend that you do **not** use the same WLID that is used for billing in Microsoft Dynamics CRM. This second WLID will also need a Device-ID and Device-Password for the authentication to Microsoft Dynamics CRM Online. Each connection to the Windows Live service requires a user-defined Device ID which can be any string from 12-22 characters. This device ID will be registered the first time an authentication is run but will be required for all subsequent authentications with that WLID. The Device-Password must also be 12-22 characters. Once you have decided on your Device ID and Password, make a note of them; you will need this ID and Password for every connection you make to Microsoft Dynamics CRM Online with this WLID.  
    **Note**: You won’t select the Device ID and Password when you set up the WLID account but you will need to specify the Device ID and Password in the connectionString in the web.config file of the portal. An example of this connectionString is shown in Step 6 of this guide.
  + Once you have set up this WLID, you will need to set up a Microsoft Dynamics CRM user account that uses this WLID. Ensure that this Microsoft Dynamics CRM user account is set up with a minimum set of permissions to allow access to only the required portal functionality It is recommended that you use the **System Administrator** pre-defined security role during the setup process, and then later restrict the user to only the privileges required by the nature of your portal’s functionality. The additional privileges required are the ability for that role to read and write any of the custom entities you deploy to your Microsoft Dynamics CRM system.
* **Microsoft Dynamics CRM On-Premise or Partner-Hosted:**
  + You will need to set up a Microsoft Dynamics CRM user account that will be used to call the required Microsoft Dynamics CRM web services from the portal. Ensure that this Microsoft Dynamics CRM user account is set up with a minimum set of permissions to allow access to only the required portal functionality. It is recommended that you use the **System Administrator** pre-defined security role during the setup process (**Settings 🡪 Administration 🡪 Security Roles**), and then later restrict the user to only the privileges required by the nature of your portal’s functionality. 

### Web Server

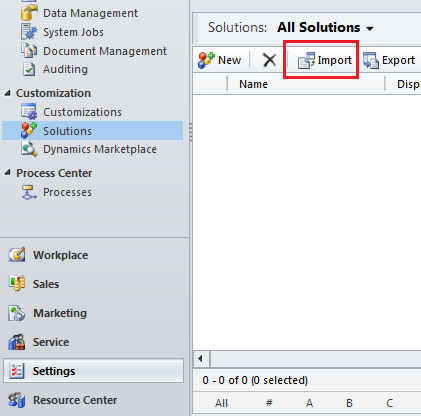
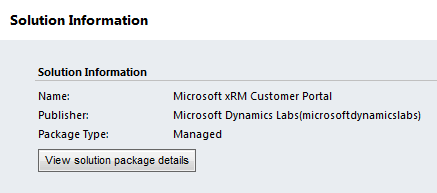
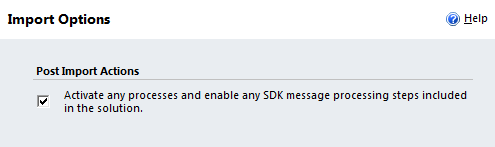
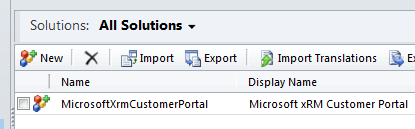
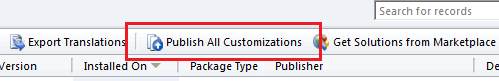
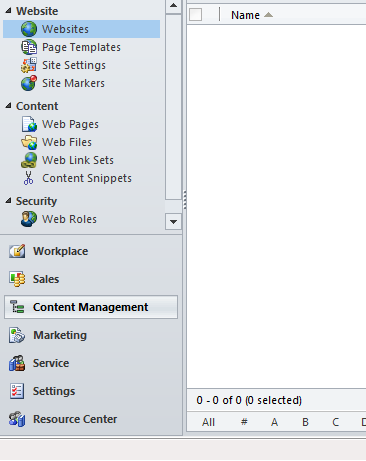
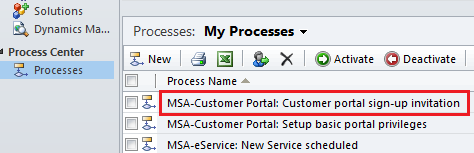
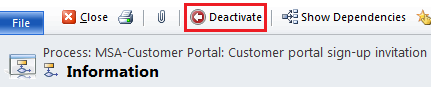
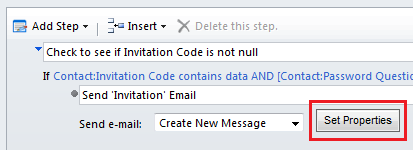
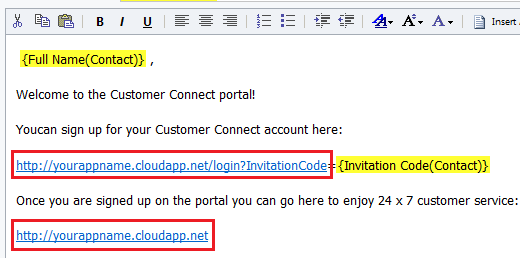
* Windows Server 2003 or Windows Server 2008 with Internet Information Services (IIS) version 6 and version 7.
* As Customer Portal uses ASP.NET Routing IIS 7.0 with Integrated pipeline mode is recommended. For details on using Customer Portal with other configurations, see the following web article:
  + <http://www.asp.net/mvc/tutorials/using-asp-net-mvc-with-different-versions-of-iis-cs>
* For more details on setting up IIS on your server, see the following web articles:
  + <http://support.microsoft.com/kb/323972>
  + <http://learn.iis.net/>

### Other Requirements

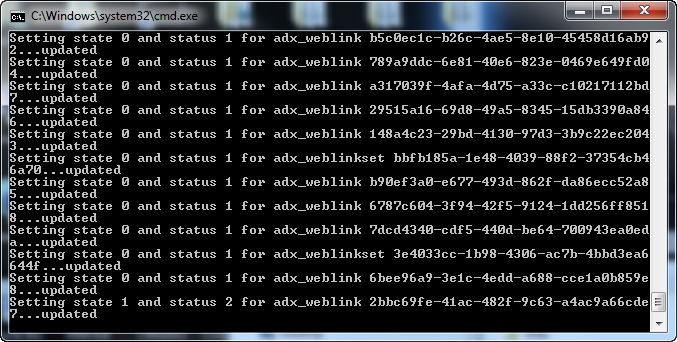
* To deploy your portal to Windows Azure, you will require a computer with an internet connection and the following software installed:
  + Microsoft Visual Studio® 2010. This is required on any computer that will be used to edit the settings and tailor your portal site(s).
  + Microsoft Dynamics CRM SDK which can be downloaded from [here](http://www.microsoft.com/downloads/en/details.aspx?FamilyID=420f0f05-c226-4194-b7e1-f23ceaa83b69).

**Additional note: *If you have already deployed the Partner Portal solution for Microsoft Dynamics CRM then you can skip steps 1 and 2 below.***

## Deployment Steps

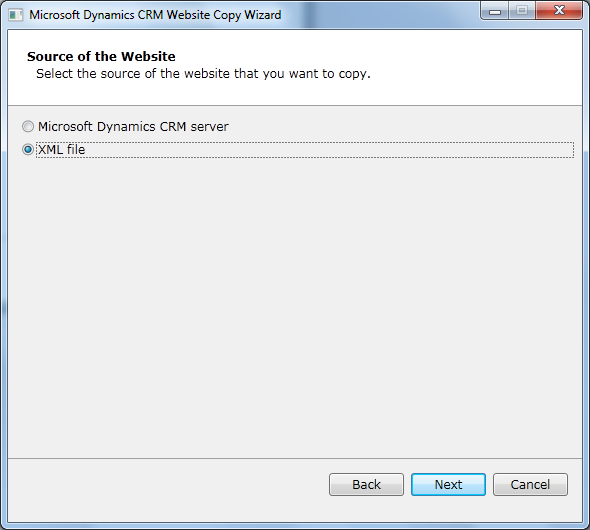
1. Import the customizations file provided:
   1. Ensure pop-up blocker does not cause errors to occur during the import process. In Internet Explorer either turn off Pop-up Blocker (go to **Tools 🡪 Pop-up Blocker 🡪 Turn Off Pop-up Blocker**) or add your CRM site to allowed sites (go to **Tools 🡪 Pop-up Blocker 🡪 Pop-up Blocker Settings**).
   2. Go into **Settings** 🡪 **Solutions** 🡪 **Import: **
   3. Select the solution package (MicrosoftXrmCustomerPortal.zip located in the root directory of your Customer Portal for Microsoft Dynamics CRM setup package) and review package details:
   4. Select the check box to enable post import actions:
   5. Wait for the import process to complete. A new entry for the imported solution is displayed in the Solutions list:
   6. While still under **Settings** 🡪 **Solutions**, click **Publish All Customizations:**
   7. Once the import process is completed, refresh your browser. The navigation pane of Microsoft Dynamics CRM includes the following:  
      
2. Update the portal sign-up invitation e-mail message:
   1. In Microsoft Dynamics CRM go into **Settings** 🡪 **Processes**.
   2. Edit the process named **MSA-Customer Portal: Customer portal sign-up invitation:**
      1. If the process is already activated, click the **Deactivate** button:
      2. Edit the portal invitation e-mail message that is sent to customers by clicking the **Set Properties** button:
      3. You will need to edit the URL for your web portal – this is used to validate an invited web portal customer based on a secret question and answer that is stored in CRM: Leave the login?InvitationCode={Invitation Code(Contact)} text as is.
      4. Save and close the email properties and activate the process.
   3. Repeat the previous steps to customize the e-mail messages for the processes named **MSA-eService: New Service scheduled**, **MSA-Event Management Attendee Post-Event Process**, and **MSA-Event Management: Send Acknowledgement Email**.
3. The final step in the preparations is to upload the initial website content into Microsoft Dynamics CRM using the websitecopy utility. The Microsoft Dynamics CRM [SDK](http://www.microsoft.com/downloads/en/details.aspx?FamilyID=420f0f05-c226-4194-b7e1-f23ceaa83b69) has full details about this utility. You need to run this utility to upload the content in customerportal.xml into CRM. The utility can be run from the command line, will launch a wizard GUI when launched without parameters. It is recommended that you use the second WLID account created in a previous step of this guide and not the account that is used for billing in Microsoft Dynamics CRM or Windows Azure. The following example demonstrates how to upload to an online deployment:

> WebsiteCopy.exe /sourceFile:customerportal.xml /targetConnectionString:"Url=http://crm-server-name:port/crm-organization-name; Domain=user-domain; UserName=user-name; Password=user-password" /targetWebsiteName:"Customer Portal"

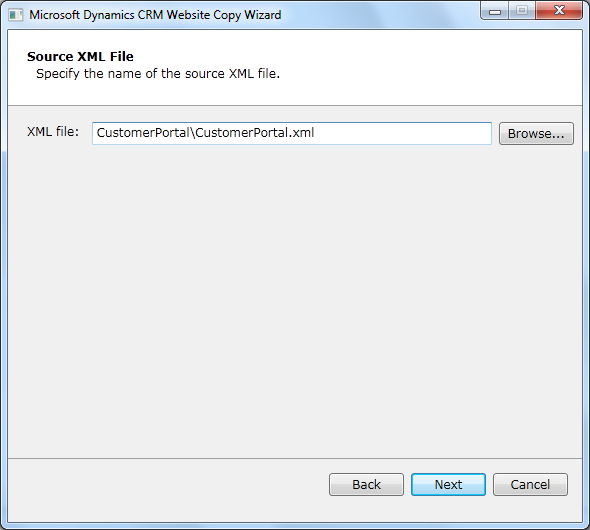


Alternatively, to use the GUI, launch WebsiteCopy.exe follow the wizard steps:

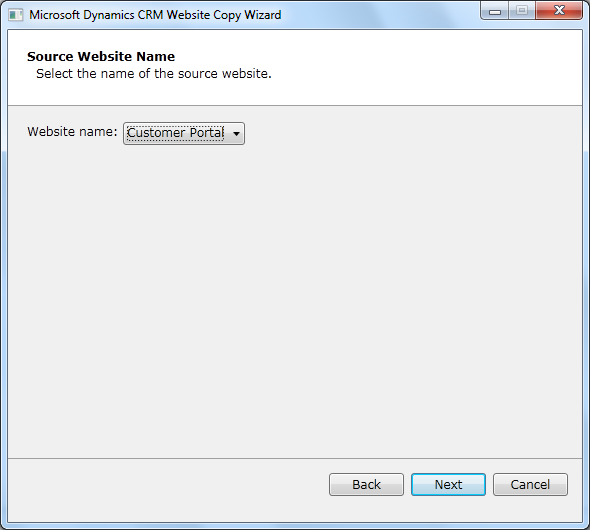
* 1. Select **XML file** as the source of the website data:



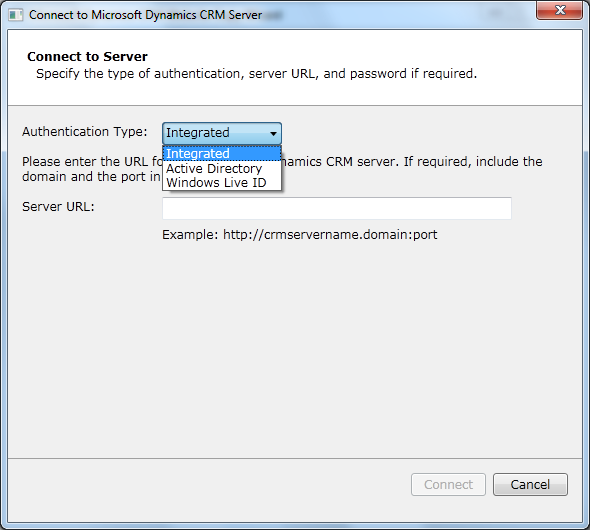
* 1. Select CustomerPortal.xml, included with the portal distribution:



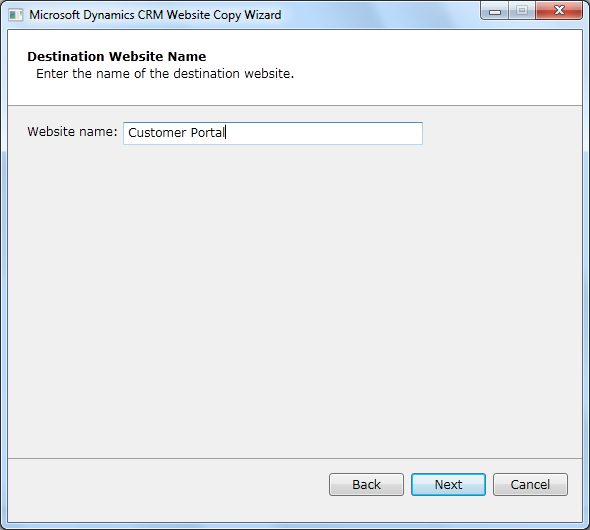
* 1. Select **Customer Portal** as the source website:

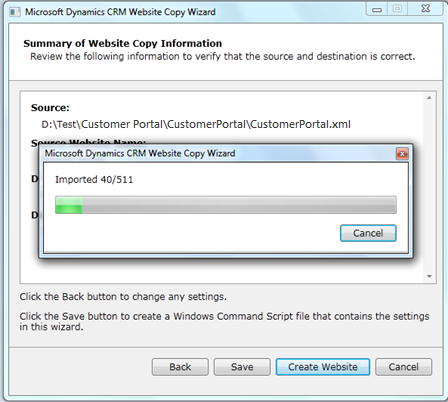
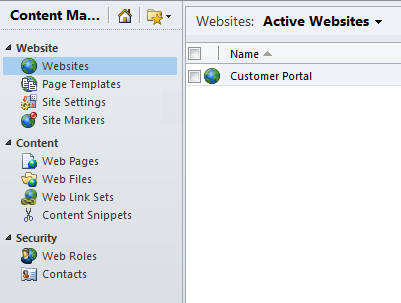


* 1. Select **Microsoft Dynamics CRM Server** as the destination, and enter your connection information:

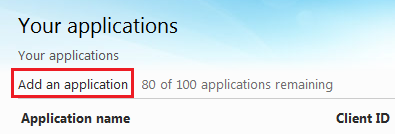


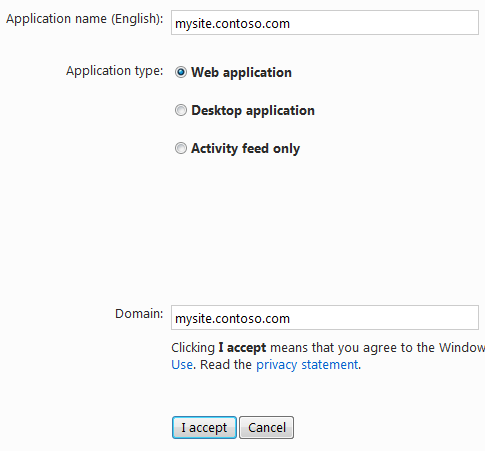
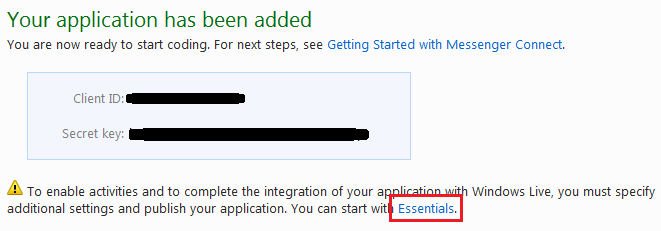
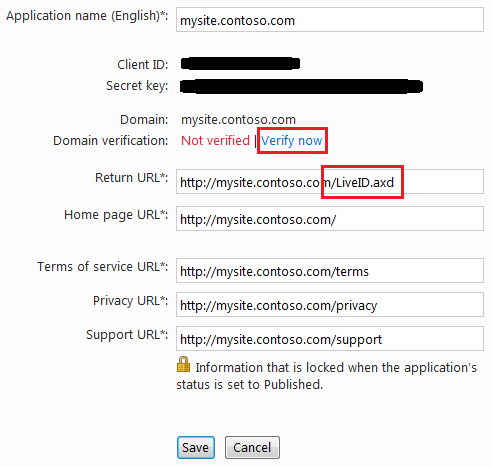
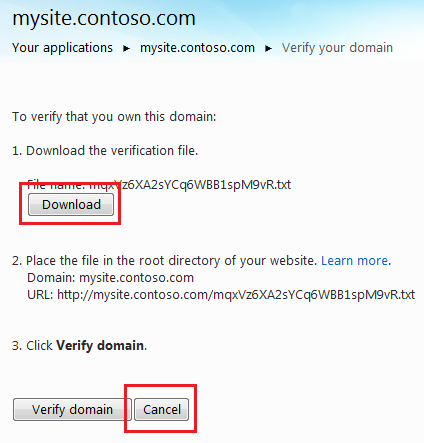
* 1. Select your destination organization, and then provide **Customer Portal** as the name for the new website:



* 1. Review the information you’ve supplied, and then click **Create Website**. When this process is complete, the initial sample data for your portal will have been copied to your CRM organization: 
  2. Upon success, the website ‘Customer Portal’ will be listed in CRM in **Content Management** 🡪 **Website** 🡪 **Websites** 🡪 **Active Websites**

1. Register your application using a Windows Live ID (any WLID account that you would like to use to manage your Windows Live applications can be used). Registering your application allows Windows Live to authenticate with your web portal application. Go to <https://live.azure.com>. Click the **Add an application** link:



* 1. Specify an application name, click **Web application** for the application type, and specify a domain (this domain needs to be Internet accessible so that Windows Live can verify the domain):
  2. Click the **I accept** button. This associates the WLID with a Windows Live application developer account.
  3. To complete the registration, click the **Essentials** link.
  4. Specify the URLs that are relevant to your website. Make sure that the Return URL specifies the path **/LiveID.axd**. Click the **Save** button. Click the **Verify now** button to open the verification page.
  5. Click the **Download** button and save the txt file to a local folder. This file will be added to the web application project in a later step.  
     
  6. Click the **Cancel** button. Since the Azure website is not yet deployed, the txt file is not available for verification. This page will be revisited after the website is deployed.
  7. Complete the remaining forms including: Text & Logos and Localization. (Note: blank logo files, in the appropriate sizes, have been included in the portal distribution for your convenience. You can use these, or provide your own.)
  8. Note the **Client ID** and **Secret Key** values for subsequent configuration.

1. Copy all files and folders from the CustomerPortal folder of your Customer Portal for Microsoft Dynamics CRM setup package to the location on your web server for your portal.
   1. Add the txt file (downloaded from the <https://live.azure.com> site) to the root of the website. For example: http://mysite.contoso.com/mqxVz6XA2sYCq6WBB1spM9vR.txt
2. Open the Visual Studio solution (CustomerPortal.sln) found in the folder on your web server for your portal. Edit the web.config file (of the web application project) to set the connection string properties to connect to your CRM system:
   1. For Microsoft Dynamics CRM Online customers, the connection string will be structured as follows:

<connectionStrings>

<add name="Xrm" connectionString="Url=https://crmurl.crm.dynamics.com; UserName=wlid@hotmail.com; Password=wlidpassword; Device ID=your-device-id; Device Password=your-device-password"/>

<add name="Live" connectionString="Application Id=0000000000000000; Secret=aaaaaaa"/>

</connectionStrings>

1. For Microsoft Dynamics CRM On-Premises customers using Active Directory authentication, the connection string will be structured as follows:

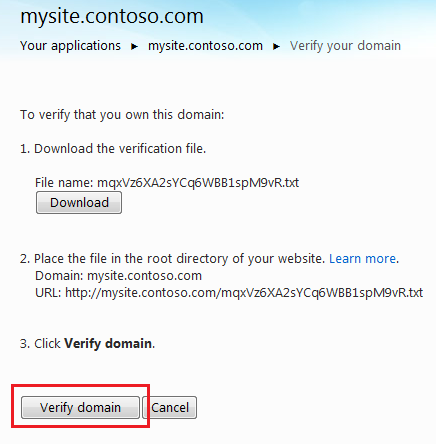
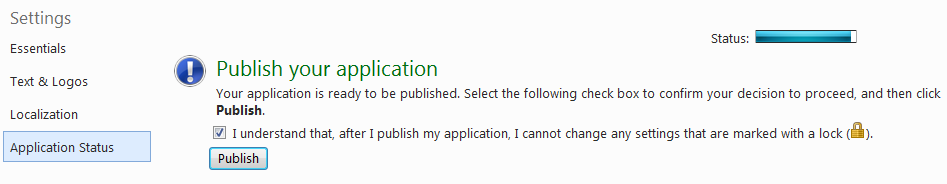
<connectionStrings>

<add name="Xrm" connectionString="Url=http://crm-server-name:port/crm-organization-name; Domain=user-domain; UserName=user-name;

Password=user-password"/>

<add name="Live" connectionString="Application Id=0000000000000000; Secret=aaaaaaa"/>

</connectionStrings>

1. You should debug your web project to ensure that the portal will open correctly and get the necessary content from your CRM system (**Right-click on project 🡪 Debug 🡪 Start New Instance**).
2. Build the entire solution.
3. Set up a website in IIS to point at these new web files.
4. In order for Windows Live ID authentication to work, Windows Live must verify the domain of the website. This is only possible if the website is deployed to the Internet and accessible by Windows Live.
5. Return to <https://live.azure.com>. Click the link to go to the application details and click the **Verify now** link. This time click the **Verify domain** button.  
   
6. With the domain verified, click on the **Application Status** tab.  
   Check the checkbox and click the **Publish** button.
7. You are now free to test and configure your new portal!