NOKIA Developer

Using Microsoft Advertising Control in Windows Phone apps

This article explains how to monetize Windows Phone application using Microsoft Advertising Ad control .

Introduction

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In mobile application development the term monetization is used to mean the ability to generate revenue thorough your mobile application. It can be from affiliate programs, e- commerce, premium content and advertising.

The market for Windows Phone applications is wide open for developers wanting to monetize their mobile applications. That means endless opportunities for any developer looking to monetize mobile applications. One way of monetization can be advertisement i.e. displaying ads in your apps. In this article we'll see how to achieve such kind of functionality using Microsoft Advertising Ad Rotator Control.
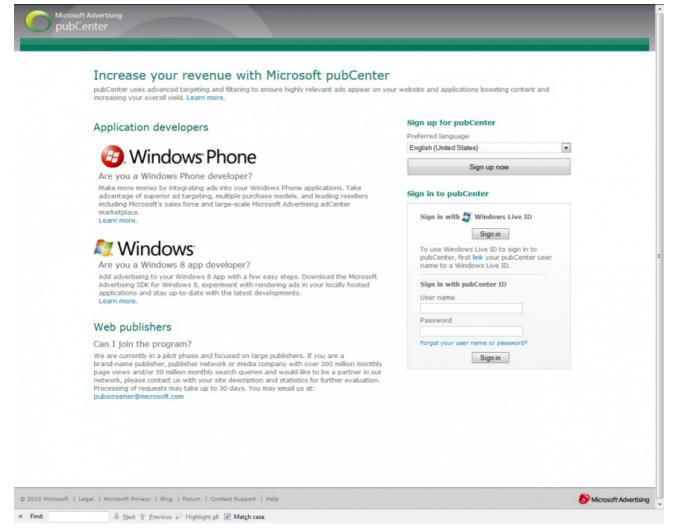
Implementation

Following are the basic steps to be implemented in a Windows Phone application.

Step-1: Download Microsoft Advertising SDK. (included in newer versions of the WP SDK)

Download Microsoft Advertising SDK for Windows Phone. After downloading the Microsoft Advertising SDK, install it on your development machine.

Step-2: Register mobile App at Microsoft pubCenter.

Register Your Mobile App: Sign up and register your Windows Phone apps using Microsoft pubCenter. Here you can use your live or pubCenter Id.

Register your first application and create an ad unit (optional).

3 Register your first application and create an ad unit (optional)

To enable ads, you must register an application and create an ad unit that you will use in your application code. You can skip this step now and register the application and create the ad unit later in pubCenter.

Application information ?

Application name:

TestApp

Device type:

Windows Phone 7

Ad unit information ?

Ad unit name:

WP Solution

Ad unit size:

480x80 XX-Large banner

480 x 80

Note: The ad unit size that you have selected is shown in a sample location of a device. You define the location of your ad unit in your application code.

Ad categories ?

Select up to three categories from the tier 1 and tier 2 categories. Click a tier 1 name to see the tier 2 categories within it. These categories set the general guidelines for what types of ads appear in your ad unit. Some ads might apply to more than one category or otherwise appear to be out of place.

Tier 1 categories	Tier 2 categories	Selected categories
☐ Religion & Spirituality (10)	☐ 3-D Graphics	☑ Arts & Entertainment
☐ Science (10)	☐ Animation	☑ Hobbies & Interests
☐ Shopping (3)	☐ Antivirus Software	☑ Technology & Computing
☐ Society (8)	☐ C/C++	
☐ Sports (44)	☐ Cameras & Camcorders	
☐ Style & Fashion (6)	☐ Cell Phones	
☑ Technology & Computing (37)	☐ Computer Certification	
☐ Travel (27)	☐ Computer Networking	
☐ Uncategorized (1)	☐ Computer Peripherals	

Excluded URLs ?

You can exclude ads that link to webpages on specific URLs. For example, you might want to exclude ads that lead to your competitors' sites. If you add a top-level domain all webpages under that domain will be excluded.

http://windows-mobile-dev.blogspot.com/

Examples:

www.contoso.com
http://www.contoso.com
http://www.contoso.com/area3
http://subdomain.contoso.com/Area12

250 excluded URLs maximum, one per line

http://pubcenter.microsoft.com/ContentManagement/...Country=United+States&pubCurrency=US+Dollar+(USD)#

Skip and enter pubCen

Enter required information to register your application.

Enter application name:

Device type:

Ad unit name:

Ad unit size:

Select Ad category:

Excluded url:

③ Your first application and ad unit

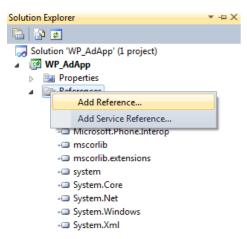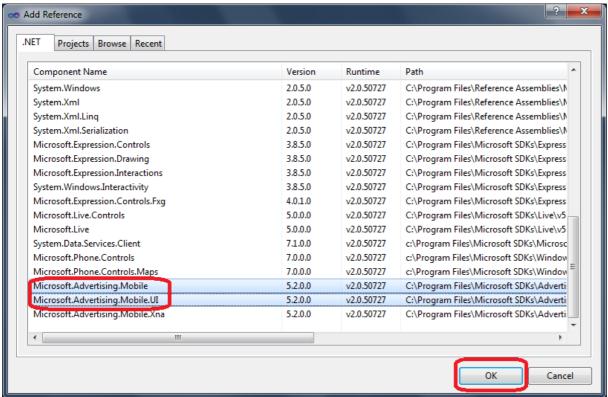|	
Application name:	TestApp
Device type:	Windows Phone 7
Ad unit name:	WP Solution
Ad unit size:	480x80 XX-Large banner
Excluded URLs:	1
Ad categories:	Arts & Entertainment - All
	Hobbies & Interests - All
	Technology & Computing - All
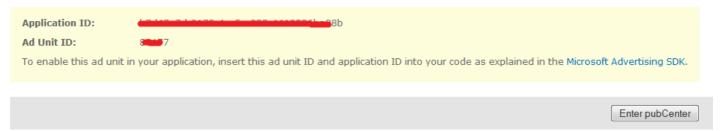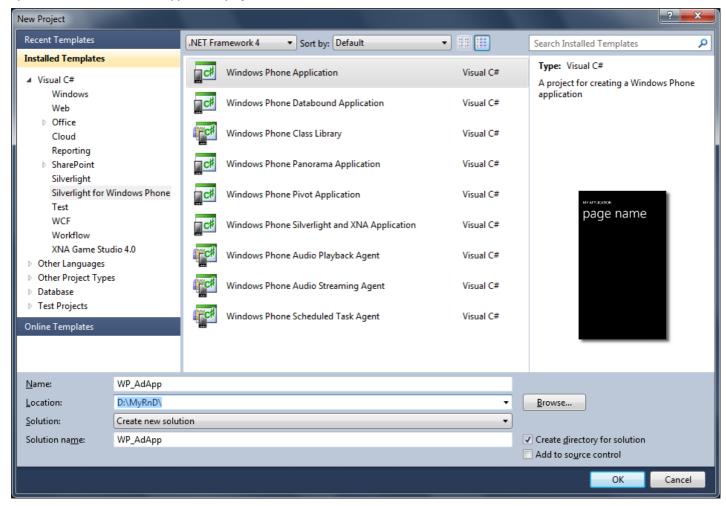
Application code information

Application ID:	~~~~~~~~~~~~~~~~~~~~~~~08b
Ad Unit ID:	8■■■7

To enable this ad unit in your application, insert this ad unit ID and application ID into your code as explained in the Microsoft Advertising SDK.

Enter pubCenter

Step-3: Creating the Windows Phone application

1) Create a Windows Phone Application project

2) Right click on project in solution explorer panel and click on Add Reference dialog box, click the Browse tab. Navigate to the location where you installed the Microsoft.Advertising.Mobile.UI.dll previously. Click the Microsoft.Advertising.Mobile.UI.dll to select it, and click OK.

3) Now configure Application Id and Ad Unit Id properties in the Ad Control. Here is two ways to add "Ad Control" in the application using XAML and C# code behind.

Using XAML Drag and drop the Ad Control to Windows Phone xaml page and configure Application Id and Ad Unit Id properties in xaml. See below code snippet:

```
<my:AdControl Foreground="Red" AdUnitId="AdUnitId" ApplicationId="AppId" Height="80"
HorizontalAlignment="Left" Margin="0,6,0,0" Name="adControl1" VerticalAlignment="Top"
Width="480" IsAutoRefreshEnabled="True" />
```
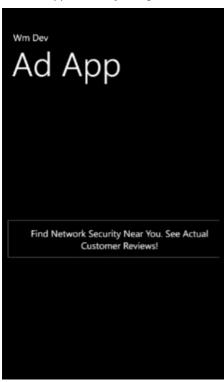
Using (C#) code behind Double click on the Windows Phone7 Page, it will automatically open the code behind of a page. And using the AdControl API which is a managed api. Include the Microsoft.Advertising.Mobile.UI namespace in the project. And create an instance of the AdControl Class and set the properties of the AdControl class instance or you can directly pass it to AdControl constructor. See below code snippet:

```csharp
private const string APPLICATION_ID = "";
        private const string AD_UNIT_ID = "";
        private AdControl adControl;

        // Constructor
        public MainPage()
        {
            InitializeComponent();
            this.Loaded += new RoutedEventHandler(MainPage_Loaded);
            this.Unloaded += new RoutedEventHandler(MainPage_Unloaded);
        }

        void MainPage_Loaded(object sender, RoutedEventArgs e)
        {
            if (!string.IsNullOrEmpty(APPLICATION_ID) &&
!string.IsNullOrEmpty(AD_UNIT_ID))
            {
                adControl = new AdControl(
                    APPLICATION_ID,
                    AD_UNIT_ID,
                    true);

                // Make the AdControl size large enough that it can contain the image
                adControl.Width = 480;
                adControl.Height = 80;
                adControl.Keywords = "Windows Phone 7, Hotels, Travels, Gold";
```

```
                ContentPanel.Children.Add(adControl);
            }
            else
            {
                MessageBox.Show("To show ads in this application, insert the application
 ID and an ad unit ID into your code as explained..");
            }
        }

        void MainPage_Unloaded(object sender, RoutedEventArgs e)
        {
            ContentPanel.Children.Remove(adControl);
        }
```

Run the application by using **F5** button, and you will see a sample of Monetization in a Windows Phone Application.

Note: The Microsoft Ad Control detects when it is being run inside the Emulator. It then won't display any Ads unless the official Test-Values are provided for the Application_Id and AdUnit_Id. Those are: ApplicationId: test_client and AdUnitId: Image480_80

Example source code

- Source code of an example app can be downloaded from here - File:WP AdApp.zip