Examples Summary

[Microsoft Patterns & Practices](http://msdn.microsoft.com/practices)

This document describes the examples that illustrate the scenarios described in the book*Developing Applications for the Cloud on Windows Azure (2.0)* (see <http://wag.codeplex.com/>). Each example is a Microsoft Visual Studio 2010 project that you can compile and run. For information about running each example, and the known issues and options available, see the [Release Notes](file:///C:\CloudGuidance\V2\Source\ReleaseNotes.htm).

**Before you start**

To check for and install the software prerequisites needed to use the examples, you must run the **CheckDependencies.cmd** batch file that is located in the root folder of the examples. For more details see the [Release Notes](file:///C:\CloudGuidance\V2\Source\ReleaseNotes.htm#dependencies).

**About The Examples**

The **SourceCode** folder of the examples contains the following folders and solutions:

**TailSpin**

This folder contains the complete Tailspin Surveys example application for the guide.

**TailSpinFunctionalTests**

This folder contains the tests that you can run to verify the test cases for the Tailspin Surveys example.

**Shared**

This folder contains the simulated issuers used by the Tailspin Surveys example for authentication.

**To Build and Test TailSpin Application in Emulator**

1. Download the Sample to C:\V2\ folder
2. Run C:\V2\CheckDependencies.cmd to install all necessary software.

*Known Issues: CheckDependencies.cmd does not yet work in Windows 8, Windows Server 2012, IIS 8 at this moment.*

1. Start VS as admin
2. In VS IDE, open C:\V2\SourceCode\Tailspin\Tailspin.sln
3. Rebuild Solution.
4. Press F5 to start application.

**To Deploy TailSpin application to Windows Azure Cloud**

**Create Windows Azure SQL Database adatum-survey**

1. Make sure that you **Build and Test TailSpin Application in Emulator** First.
2. You need to have a windows azure subscription to deploy the application to the cloud.
3. Start windows Azure management portal.
4. Select **New->DATA SERVICES->SQL DATABASE->CUSTOM CREATE** to create the database first. under Specify database settings page, give name as “adatum-survey” and set SERVER as “New SQL Database Server”, leave the rest as default. Once the db is created, make a note of the SERVER name.
5. Select the database server you just created, and click CONFIGURE to add firewall rules. Try not to use the range 0.0.0.0 to 255.255.255.255 if this is a production environment. Make sure you save the firewall settings.
6. Select the database in management portal and under **DASHBOARD->quick glance, click Show connection strings**. Copy the **ADO.NET Connection String** to notepad, and replace the “**your\_password\_here**” with your password for the database. You will need to use this connection string later.
7. Open the management page for the database you just created. And click the link under “MANAGE URL” to log in to the SQL DATABASE.
8. Make sure that the database [adatum-survey] is selected, and click **New Query**.
9. Open in notepad the file C:\V2\SourceCode\Setup\DependencyChecker\SqlScripts\create\_objects\_adatum-survey.sql and copy the content of the file to the **New Query** windows.
10. Click **Run**.

**Create Windows Azure Storage**

1. Start windows Azure management portal.
2. Select **New**->**DATA SERVICES**->**STORAGE**->**QUICK CREATE** to create the storage for the sample. Give the Unique URL name. Pick a REGION/AFINITY GROUP that is in the same REGIONS as your database. Make a note of the name. You will need it later.
3. After the storage account is created, make a note of the **PRIMARY ACCESS KEY**.

**Create Windows Azure Cloud Service**

1. Start windows Azure management portal.
2. Select **New**->**COMPUTER**->**CLOUD SERVICE**->**QUICK CREATE** to create the cloud service for the sample. Give the Unique URL name. Pick a REGION/AFINITY GROUP that is in the same REGIONS as your database. Make a note of the name. You will need it later.

**Upload service certificate to the Cloud Service**

1. Start windows Azure management portal.
2. Select the cloud service you just created.
3. Click **CERTIFICATES**
4. Click **UPLOAD A CERTIFICATE**.
5. Browser to C:\V2\SourceCode\Setup\DependencyChecker\certs and select the following 4 certificate one by one.

* Adatum.pfx password Passw0rd! (that is a zero in the password)
* Fabrikam.pfx password Passw0rd!
* Tailspin.pfx password Passw0rd!
* Localhost.pfx password xyz

**Update the source code with your connection string, and storage account.**

1. Open Tailspin.sln from C:\V2\SourceCode\Tailspin\Tailspin.sln
2. In the code, replace

value="UseDevelopmentStorage=true" />

with

value="DefaultEndpointsProtocol=https;AccountName=**YourStorageAccountName**;AccountKey=**YourPrimary access key**" />

**Note**: You will need to change the following files.

C:\V2\SourceCode\Tailspin\Tailspin.Cloud\ServiceConfiguration.cscfg

C:\V2\SourceCode\Tailspin\Tailspin.Web.Tests\App.config

C:\V2\SourceCode\Shared\Tailspin.SimulatedIssuer\Web.config

1. In the source code, replace

Data Source=.\SQLExpress;Initial Catalog=adatum-survey;Integrated Security=True

With your database connection string that you made a note of. That will be in the following format.

Server=tcp:**YourDatabaseServerName**.database.windows.net,1433;Database=adatum-survey;User ID=**YourUserId**@ **YourDatabaseServerName**;Password=**YourPassword**;Trusted\_Connection=False;Encrypt=True;Connection Timeout=30;

**Note**: You will need to change the following files.

C:\V2\SourceCode\Tailspin\Tailspin.Web.Survey.Shared\app.config

C:\V2\SourceCode\Tailspin\Tailspin.Web.Survey.Shared\Models\SurveySql.dbml

C:\V2\SourceCode\Tailspin\Tailspin.Web.Survey.Shared\Properties\Settings.settings

C:\V2\SourceCode\Tailspin\Tailspin.Web.Survey.Shared\Properties\Settings.settings

C:\V2\SourceCode\Tailspin\Tailspin.Web.Survey.Shared\Stores\TenantStore.cs

**To Build and Test TailSpin Application in Cloud**

1. Start VS as admin
2. In VS IDE, open C:\V2\SourceCode\Tailspin\Tailspin.sln
3. Rebuild Solution. At this time, the solution uses the Windows Azure SQL Database and Windows Azure Storage.
4. Right click Tailspin.Cloud and click Publish. You will need to select the Windows Azure Cloud Service you created in previous steps and the storage account.
5. Enable Remote Desktop options while publishing.

**Add 'Microsoft.ApplicationServer.Caching.AzureClientHelper.dll'****to Tailspin.Web.Survey.Public role**

Once the publish is succeeded,

1. In your local development box, copy the Microsoft.ApplicationServer.Caching.AzureClientHelper.dll from C:\V2\SourceCode\Tailspin\Tailspin.Web.Survey.Public\bin folder
2. Remote login to the **Tailspin.Web.Survey.Public** role instance using the credentials you provided while enabling Remote desktop during publish operation.
3. In the remote instance, browse to E:\sitesroot\0\bin and paste the dll that you copied in step 1.

**Running the tailspin application**

After copying the dll to E:\sitesroot\0\bin of remote instance of **Tailspin.Web.Survey.Public role,**

1. Browse to the cloud service url
   1. Be default it launches the public survey web site, for which the URL starts with http. In this site, you will be able to take any surveys of your interest. Initially you will not see any surveys listed. You need to login to the tenant website to create surveys.
   2. To login to the tenant web site, you need to change **http** to **https** of the defaultcloud service URL.