MyShuttle Deployment Guide

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# Prerequisites

Before starting you should have:

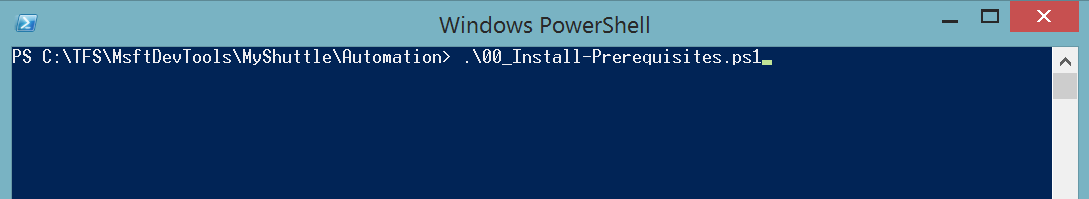
* Windows Azure Subscription.
  + [Get Microsoft Azure Trial](http://azure.microsoft.com/es-es/pricing/free-trial/)
* Visual Studio 2015.
  + [Get Visual Studio 2015 Preview](http://www.visualstudio.com/en-us/downloads/visual-studio-2015-downloads-vs.aspx)
* Bing Maps Key
  + [Getting a Bing Maps Key](http://msdn.microsoft.com/en-us/library/ff428642.aspx)
* Office 365 Account
  + [Get Office 365 Trial](https://products.office.com/en-us/try)
* Salesforce Account
  + [Get Safesfoce trial](https://www.salesforce.com/form/signup/freetrial-sales.jsp)

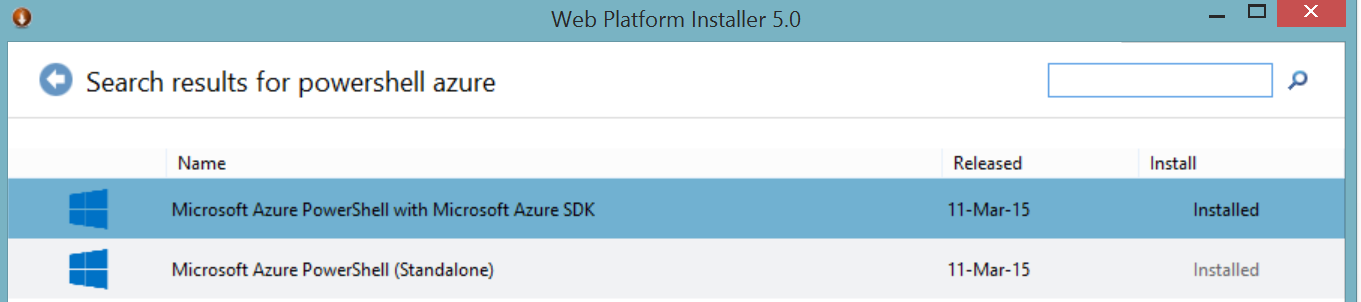
# Step 1. Install prerequisites

The installation also needs Windows Azure PowerShell and Microsoft Azure Cross Platform Command Line (azure-xplat-cli) but in this case you don't have to install this prerequisites by yourself, you can just run the script **01\_InstallPrerequisites.ps1** in a PowerShell console and the prerequisites will be installed automatically.

This script will install Windows Azure PowerShell and Microsoft Azure Cross Platform Command Line and all the dependencies using Chocolatey Package Manager.

* Open powershell cmd.
* Launch .\**01\_InstallPrerequisites.ps1**
* Check you have the latest Azure PowerShell version





# Step 2. Configure Azure credentials

1. Open the Azure PowerShell console.
2. Type the following command:  
     
   Add-AzureAccount
3. In the window, type the email address and password associated with your account.
4. Azure authenticates and saves the credential information, and then closes the window.
5. To download the publish settings for your account, use the following command:

azure account download

1. This will open your default browser and prompt you to sign in to the Azure Management Portal. After signing in, a .publishsettings file will be downloaded. Make note of where this file is saved.
2. Next, import the .publishsettings file by running the following command, replacing [path to .publishsettings file] with the path to your .publishsettings file:

azure account import [path to .publishsettings file]

After importing your publish settings, you should delete the .publishsettings file, as it is no longer required by the Command-Line Tools and presents a security risk as it can be used to gain access to your subscription.

# Step 3. Configure your environment

1. Unzip the downloaded file to a folder on your PC (i.e. c:\MyShuttleDeploy)
2. Edit the parameters.xml file and set the values of each parameter.

<?xml version="1.0" encoding="utf-8"?>

<env>

<azuresubscription name="Windows Azure MSDN" />

<storageaccount name="myshuttledemostorage" />

<resourcegrouplocation name="West US" />

<websiteaspnet name="MyShuttleASPNET" />

<websitemobileservice name="MyShuttleMobileService" />

<websitewebjob name="MyShuttleWebJob" />

<sqlserver name="myshuttlesqlserver" login="myshuttleadmin" password="myshuttle1234!" />

<sharepoint name="MyShuttleSharepointName" username="MyShuttleSharepointUsername" password="MyShuttleSharepointPassword" />

<salesforce consumerkey="SalesforceConsumerKey" username="SalesforceUsername" password="SalesforcePassword" consumersecret="SalesforceConsumerSecret" accountid="SalesforceAccountId" />

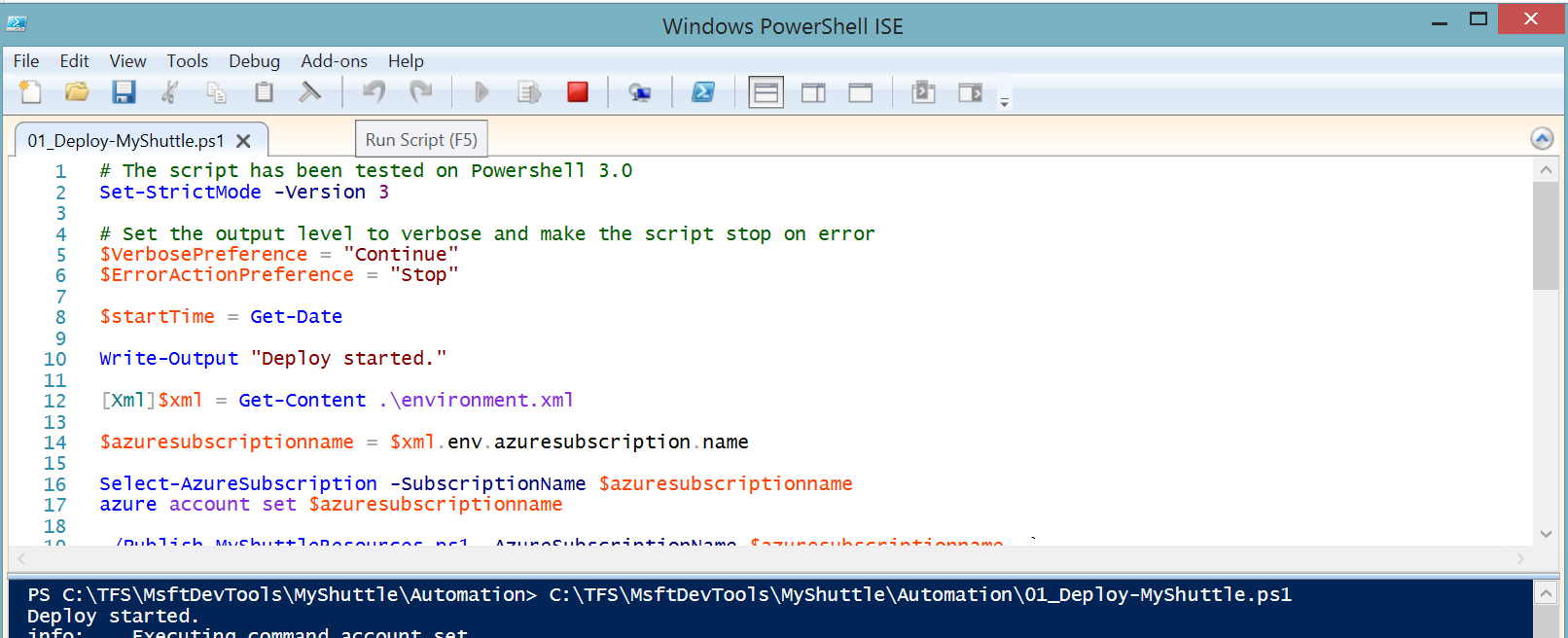
</env>

**Storage account** names must be between 3 and 24 characters in length and use numbers and lower-case letters only.

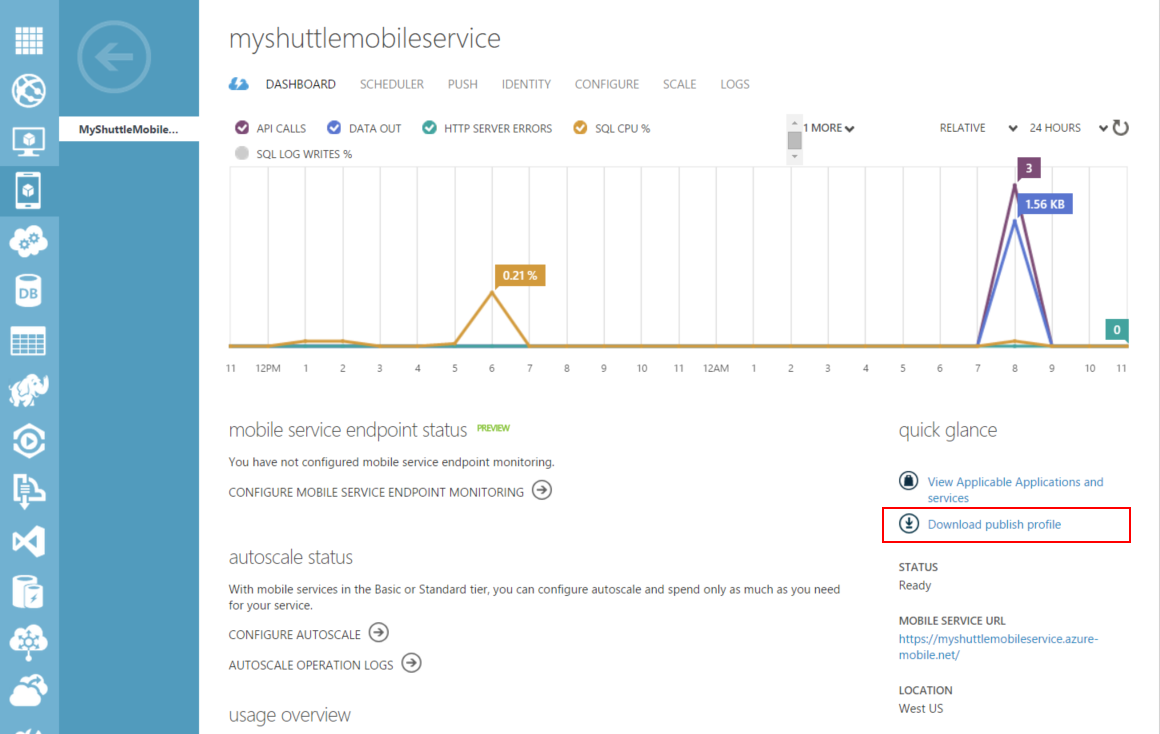
**SQL Server name** can only be made up of lowercase letters 'a'-'z', the numbers 0-9 and the hyphen. The hyphen may not lead or trail in the name.

# Step 4. Create Azure resources for Apps demos

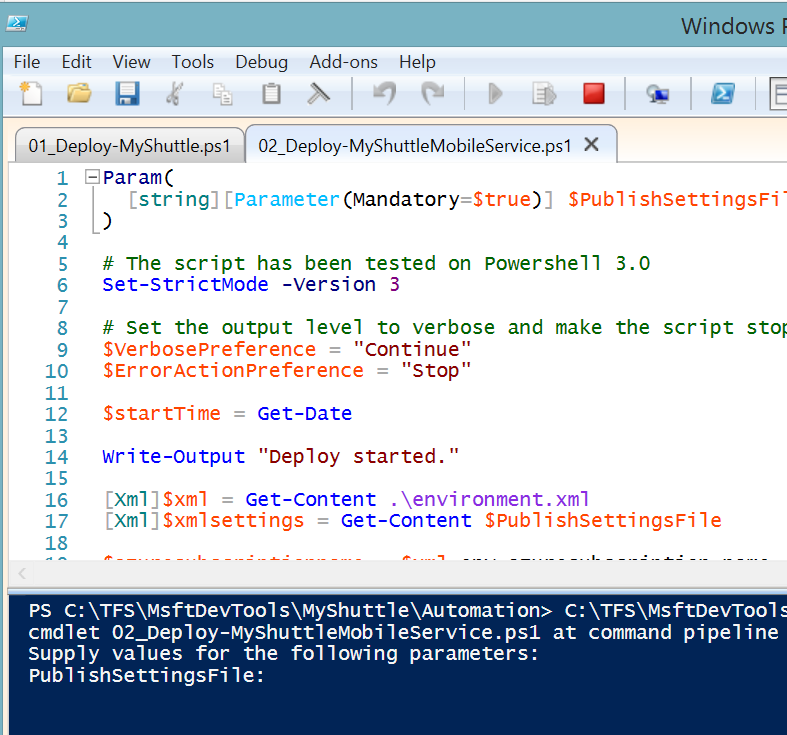
1. Open the file **01\_Deploy-MyShuttle.ps1** with Windows PowerShell ISE.
2. Run the script.



1. Login to the [Azure Management Portal](https://manage.windowsazure.com/), and click on Mobile Services and select the service that has been defined in parameters file (websitemobileservice).
2. Go to Dashboard and click on Download publish profile.



1. Open the file **02\_Deploy-MyShuttleMobileService.ps1** with Windows PowerShell ISE
2. Run the script and set the name of the publish profile as parameter value.



This script will create the following resources in your Azure subscription:

* SQL Server
  + YOUR\_SERVER.database.windows.net
  + USER
  + PASSWORD
* Website with ASP.NET application
  + <http://YOUR_SITE.azurewebsites.net/>web
  + AppSettings
    - Key => MyShuttleContext:ConnectionStringKey
    - Value =>
  + data source=**YOUR\_SERVER**.database.windows.net;initial catalog=MyShuttle;persist security info=True;user id=**USER**@**YOUR\_SERVER**;password=**PASSWORD**;MultipleActiveResultSets=True
* Azure Storage Account named **YOUR\_STORAGE**
* Public container named **myshuttleinvoice** with a PDF file (invoiceform.pdf)
* Website with WebJob
* Url: http://**YOUR\_SITE\_API**.azurewebsites.net/
* AppSettings:
  + Key => pdf::invoiceform
  + Value =><http://YOUR_STORAGE.blob.core.windows.net/myshuttleinvoice/invoiceform.pdf>
* Connection Strings:
  + Keys: AzureWebJobsDashboard & AzureWebJobsStorage.
  + Value: DefaultEndpointsProtocol=https;AccountName=**YOUR\_STORAGE**;AccountKey=ACCOUNT\_KEY
* Mobile service with the SQL Server.
* <http://YOUR_SITE.azure-mobile.net/>
* AppSettings
  + Key: MS\_TableConnectionString
  + Data Source= **YOUR\_SERVER**.database.windows.net;Initial Catalog=MyShuttle;User ID= **USER**@**YOUR\_SERVER**;Password= **PASSWORD**;Asynchronous Processing=True;TrustServerCertificate=False;
  + Key: AzureWebJobsStorage.
  + Value: DefaultEndpointsProtocol=https;AccountName=YOUR\_STORAGE;AccountKey=ACCOUNT\_KEY

# Step 5. Create Azure resources for IoT and Big Data demos

1. Open 03\_Deploy-MyShuttle-IoT with Windows Powershell ISE.
2. Run the script.

PD: Creating Service Bus resource the script could error an error messaging related to “EventHubExists” method. Close Windows Powershell ISE, open the script and run again it.

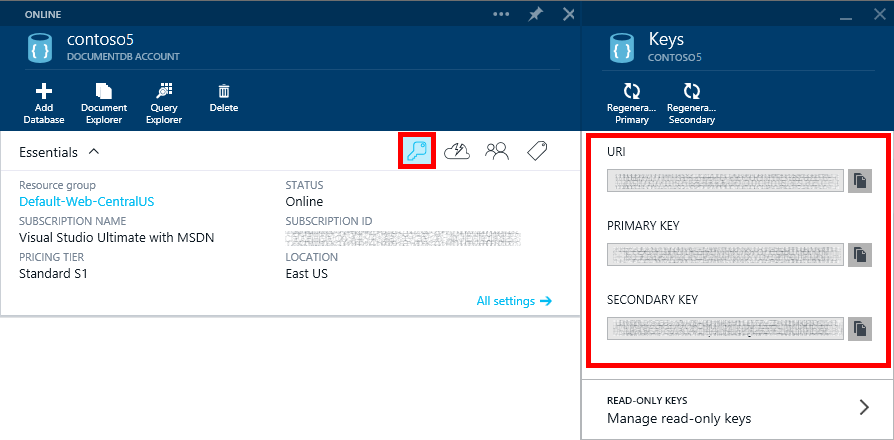
The ASP.NET portal Web App is created As Free. The websockets connection are limited to 5 so it could be a better option to change it to Shared.

* Free: (5) concurrent connections per website instance
* Shared: (35) concurrent connections per website instance
* Basic: (350) concurrent connections per website instance
* Standard: no limit

This script will create the following resources in your Azure subscription:

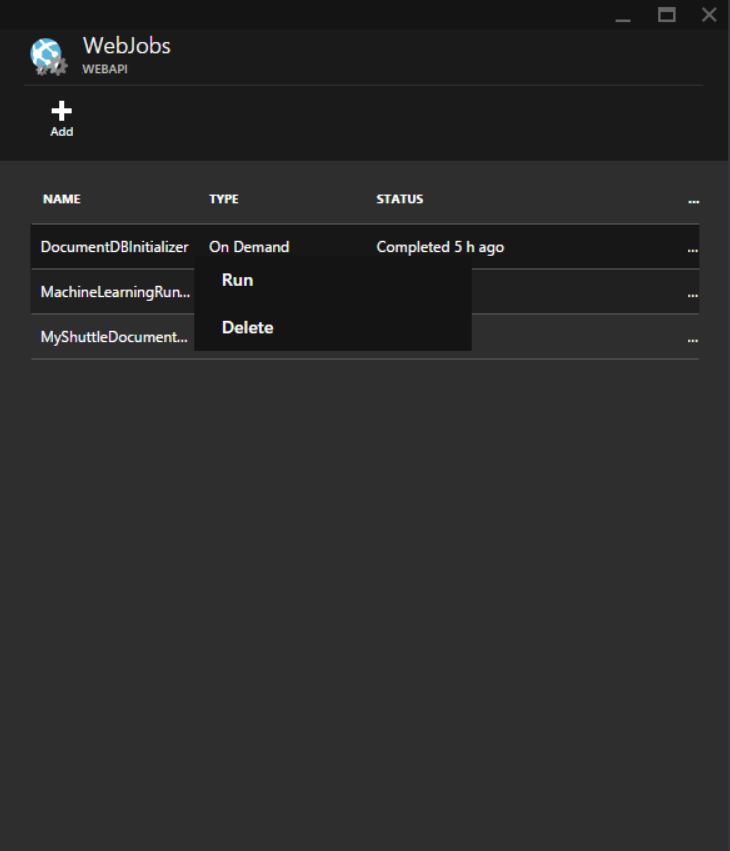
* Event Hub
  + Namespace
  + EventHub
* Stream Analytics
  + MyShuttle-Accelerometer
  + MyShuttle-Compass
  + MyShuttle-OBD
  + MyShuttle-OBD-SecurityBelt
  + MyShuttle-Rfid
* HDInsight
  + Cluster
* DataFactory
  + AccelerometerAggregatePipeline
  + AccelerometerAggregatePipeline\_output
* DocumentDB
  + <https://DOCUMENTDBNAME.documents.azure.com>
  + Database MyShuttle2
  + Collections: TrackedRides, VehiclesSummary, DrivingStyles
* WebAPI & WebJobs
  + <http://WEBSITEWEBAPINAME.azurewebsites.net/>web
    - "DocumentDb:EndpointUrl" => "https://DocumentDBNAME.documents.azure.com:443/";
    - "DocumentDb:AccessKey" = “[KEY”]
    - "DocumentDb:DatabaseId" = DOCUMENTDBNAME
    - "Settings:DeleteDocuments" => "true"
    - "HDinsight:EndpointUrl" = "https:// HDINSIGHTCLUSTERNAME.azurehdinsight.net";
    - "HDinsight:Login" = HDINSIGHTCLUSTERUSER
    - "HDinsight:Password" = HDINSIGHTCLUSTERPASSWORD

You need to set the valor of DbAuthorizationKey manually. This value is the PRIMARY KEY for your DocumentDB account, which can be obtained from the [Azure preview management portal](https://portal.azure.com/) blade for your DocumentDB account.



In order to initialize the DocumentDB database you need to run once the DocumentDBInitialize webjob.

1. In the Web App blade of the [Azure Portal](http://portal.azure.com/), click All settings > WebJobs to show the WebJobs blade.
2. To run the WebJob, right-click its name in the list and click Run.



# Configure Apps

## Demo Desktop App

* Solución: 01\_Demos\_NativeApps.sln
* Proyecto: MyShuttle.Client.Desktop
* App.config
  + URLPREFIXKEY => <http://YOUR_SITE.azurewebsites.net/>web

## Demo Native Apps

* Solución: 01\_Demos\_NativeApps.sln
* Windows Phone: MyShuttle.Client.UniversalApp.WindowsPhone
* Windows Store: MyShuttle.Client.UniversalApp.Windows
* Xamarin Android: MyShuttle.Client.Droid
* Xamarin iOS: MyShuttle.Client.iOS
* Configuración: (MyShuttle.Client.Core)
* Infrastructure>ApplicationSettingServiceSingleton.cs
  + DefaultUrlPrefixValue => <http://YOUR_SITE.azurewebsites.net/>web
  + DefaultBingMapsTokenValue => YOUR\_BING\_MAPS\_TOKEN\_VALUE

## Demo Connected Systems

* Solution: 05\_Demos\_Azure\_ConnServices.sln
* Open 01\_Demos\_NativeApps.sln to setup clients apps:
* Project - MyShuttle.Client.Core
  + Settings>CommonAppSettings.cs
    - \_MobileServiceUrl => http://YOUR\_SITE.azure-mobile.net/
    - \_MobileServiceKey => YOUR\_MOBILE\_SERVICE\_KEY
    - \_SignalRUrl => http://YOUR\_SITE.azurewebsites.net
  + Infrastructure>ApplicationSettingServiceSingleton.cs
    - DefaultUrlPrefixValue => <http://YOUR_SITE.azurewebsites.net/web>
    - DefaultBingMapsTokenValue => YOUR\_BING\_MAPS\_TOKEN\_VALUE

## Demo Cordova

* Solution: 03\_Demos\_Cordova.sln
* Set in app>modules>core>services>settingsService.ts
  + this.bingMapsKey = 'YOUR\_BING\_MAPS\_TOKEN\_KEY';
  + this.realTimeNotificationsServerUrl = 'http://YOUR\_SITE.azurewebsites.net/web';
  + this.mobileServiceKey = 'YOUR\_MOBILE\_SERVICE\_KEY';

this.storageService.getValue('serviceUrl', 'http://YOUR\_SITE.azure-mobile.net/');

## Demo IoT

* Solution MyShuttle\_IoT.sln
  + Device; MyShuttle.Device project
    - Configure ServiceBus connectionString
    - Add key="Microsoft.ServiceBus.ConnectionString" value="Endpoint=sb://xxxxx-ns.servicebus.windows.net/;SharedAccessKeyName=Send;SharedAccessKey=[key]" />
  + Windows Store; MyShuttle.Dashboard.Client>Constants.cs
    - Azure Api URI.

## Demo Dashboard

* Solution MyShuttle\_IoT.sln
  + MyShuttle.Dashboard.Client project
    - Open Constants.cs file and set the URL of the WebAPI service.

public static class Constants

{

public const string ServerAddress = "http://WEBAPI.azurewebsites.net";

}