*Florida International University*

*School of Computing and Information Sciences*

CIS 4911 Senior Capstone Project

Test Case Management and Automation

**INSTALLATION GUIDE**

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# **Introduction**

Welcome to the installation guide. This guide will help you install or update as well as setup a development environment for extending the system.

## **Prerequisites**

There are a number of tools and software required to run this project. Below is a comprehensive list of these items. This list is common to both

1. ***Windows 7 - Windows 8.1 or Windows Server 2012***  
   Both development and deployment must be done on Windows machines.
2. ***.NET 4.5***  
   .NET 4.5 is a free download from Microsoft
3. ***ASP.NET MVC 4***  
   ASP.NET can be downloaded in Visual Studio from the NuGet package manager or from Microsoft’s website.

## **Development environment tools**

1. ***Visual Studio 2013 Ultimate***  
   Visual Studio 2013 Ultimate is required for its modelling and test support. It is available free to FIU CIS majors via DreamSpark
2. ***MS SQL Management Studio 2012***  
   The Studio is required to manage the TestFlow database
3. ***Batarang*** (not required but suggested for debugging Angular JS)  
   While not required it can be a very helpful Chrome plugin for troubleshooting issues with AngularJS.

## **Deployment environment applications**

1. ***IIS 7 or greater***  
   This is the web server in Windows
2. ***Web Deploy 3.5***  
   Makes the deployment process much more simple
3. ***MS SQL Server 2012***This is a free download for CIS majors from Dream Spark

## **Setting Up the development environment**

1. ***Install Visual Studio***  
   Just like installing any other program on Windows, it should also install .NET 4.5 if you do not already have it installed.
2. ***Install MS SQL Management Studio 2012***  
   Use the MS SQL Server Express, a free download from Microsoft, to install the Management Studio. Optionally, you may also install the server to make development tweaks to the DB more accessible.
3. ***Install ASP.NET MVC***  
   You may use NuGet or download the executable directly from Microsoft
4. ***Configure Solution for your environment***  
   Open the solution by double clicking the Backend.sln file in the code folder. Next open the App.Config file and change the connection string entry “instance=INSTANCENAME;” to whatever you MSSQL instance name is, also update the credentials beside the instance.  
     
   Next open Web.Config and do the same with both connection strings as you did in the above step.
5. ***Start the application***  
   At this point you should see the web app open in a browser.
6. ***Deploy the Application***  
   Right click on the TestFlow application and click Publish, follow the steps and it will generate a zip file which you will upload to your server.

## **Publishing to a deployment system**

1. ***Install IIS7 or greater***  
   Go to Control Panel -> Programs -> Turn on or off Windows features  
   Once there select the IIS checkboxes.  
   Restart
2. ***Install MS SQL Server 2012***  
   This is a free download from DreamSpark for FIU CIS majors. Download the installer and run through the options.  
   Create a new “testflow” database from SQL Management Studio on your new database server instance.  
   Restore the .bak file from the code directory in GitHub by right click on the new “testflow” databse and clicking Tasks -> Restore -> Database  
   At the database dialog add the .bak file as your restore device and ensure “over write” and “disconnect users” are selected in “options”. Press Restore.  
   Create a new user from the security folder under logins. Make sure this is a SQL user and not a Windows uers, remember the credentials you assign this user.  
   Go to this user’s server mapping and make sure they have read/write access to the testflow database.
3. ***Install Web Deploy 3.5***  
   A free download from Microsoft, run through the install and restart.
4. ***Deploy the application***  
   Open IIS Manager from Control Panel -> Administrative Tools -> IIS and right click on the “default web site”. Click the Deploy option and “Important Application”. Find the zip file in the exec directory of GitHub and load it. On the configuration dialog update the connection strings to your server’s instance of MSSQL and the credentials you assigned earlier. Remove TestFlow from Application name, press next until the application is deployed. You should now go to your external IP from a browser and see the website running.