Developing and Deploying Intelligent Chat Bots

Microsoft

Registering and Publishing Bots Lab

Mithun Prasad, PhD

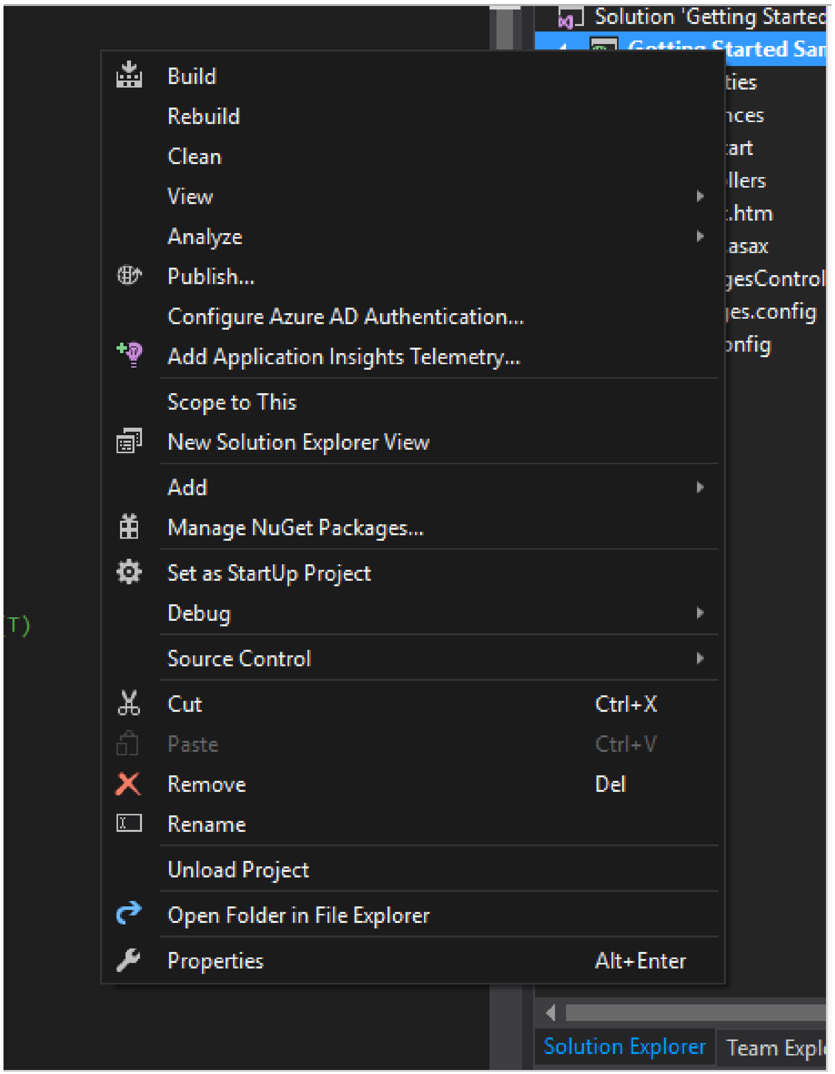
miprasad@Microsoft.com

1. Publishing your Bot Application to Microsoft Azure

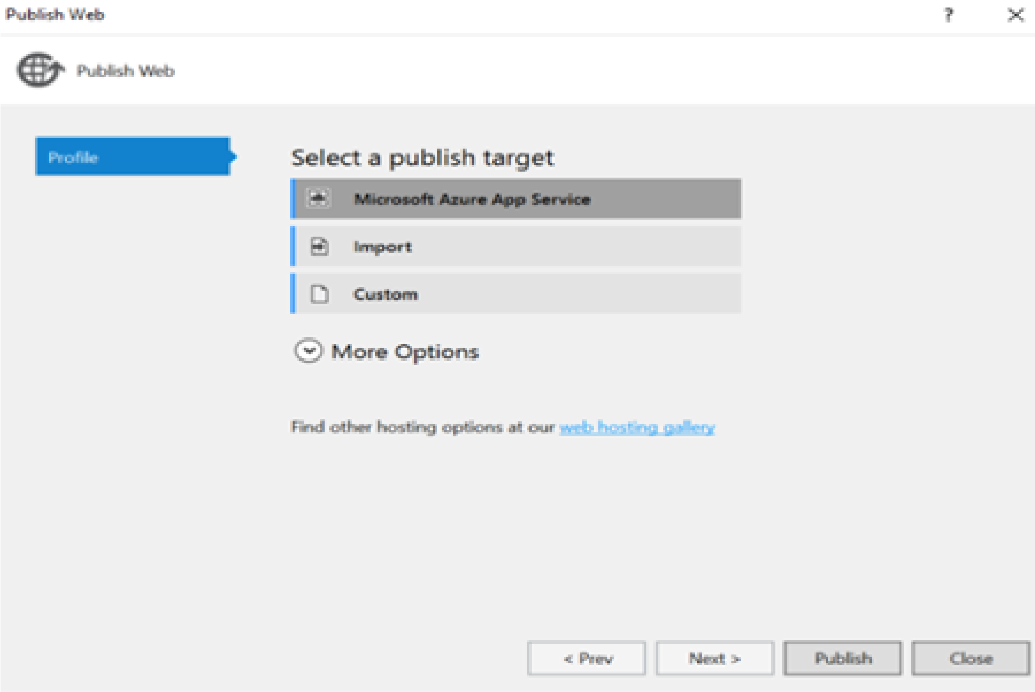
To publish your Bot Application you will need a Microsoft Azure subscription. You can get a free trial from here: azure.microsoft.com/en-us/

Right click on the project and choose "Publish", and then your appropriate Azure subscription information. By default, the bot should be published as an Microsoft Azure App Service. When publishing, keep track of the URL you chose because we'll need it to update the Bot Framework registration endpoint.

In Visual Studio, right click on the project in Solution Explorer and select "Publish"



The Publish wizard will start. Select "Microsoft Azure App Service" as your project type.



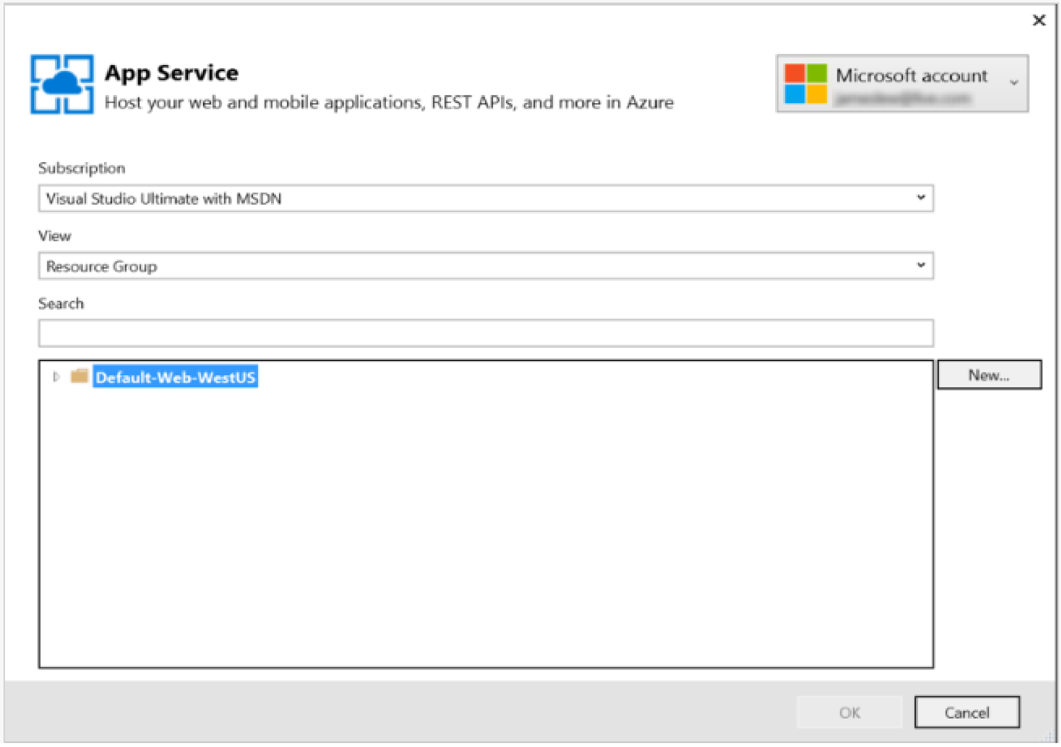
Select a publish target

- Microsoft Azure App Service
- Import
- Custom

More Options

Find other hosting options at our web hosting gallery

The next step in the Azure App Service publishing process is to create your App Service. Click on "New…" on the right side of the dialog to create the App Service.



App Service

Host your web and mobile applications, REST APIs, and more in Azure

Microsoft account

[redacted]

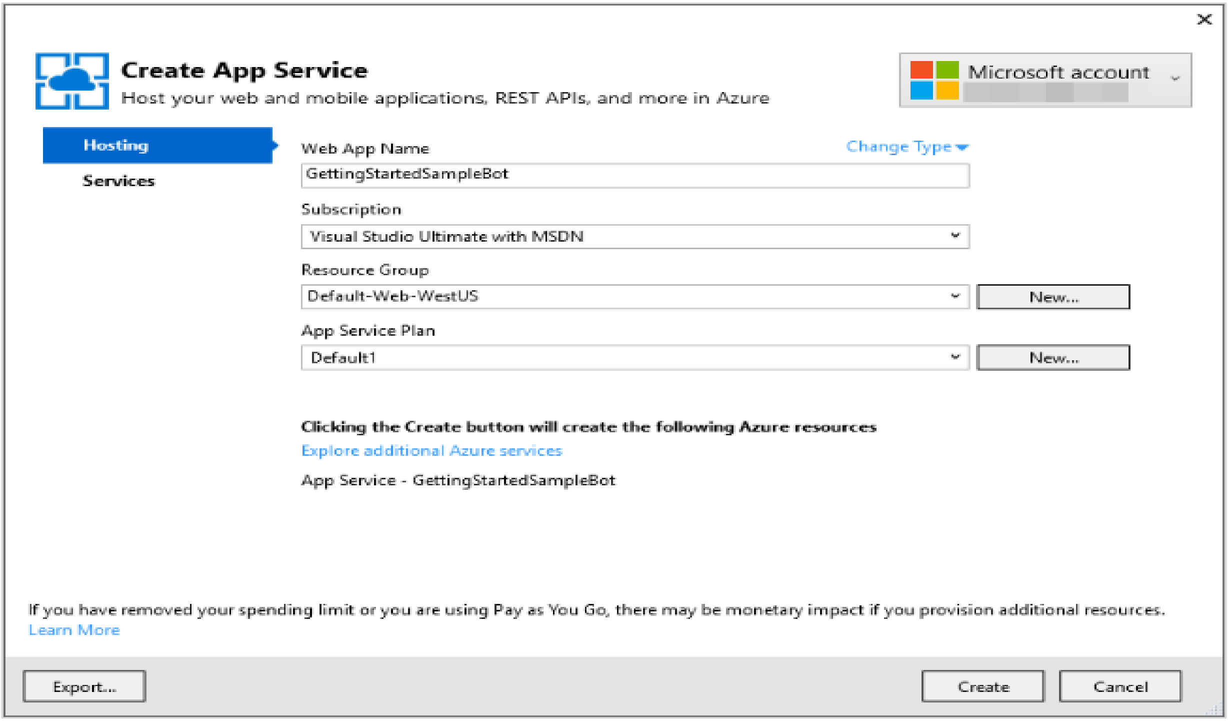
Subscription: Visual Studio Ultimate with MSDN

View: Resource Group

Search:

Default-Web-WestUS

The Create App Service dialog will be displayed, fill in the details as appropriate. Make sure to choose "Web App" from the Change Type drop down in the top right.



Create App Service

Host your web and mobile applications, REST APIs, and more in Azure

Web App Name: GettingStartedSampleBot

Subscription: Visual Studio Ultimate with MSDN

Resource Group: Default-Web-WestUS

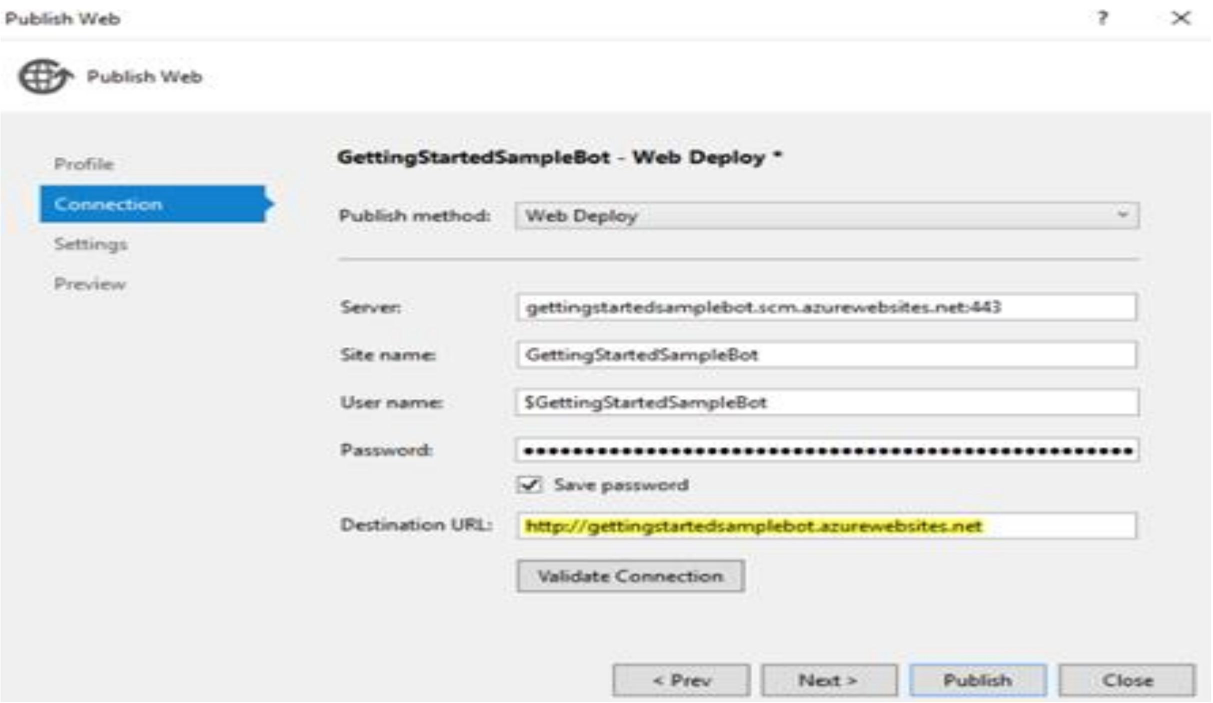
App Service Plan: Default1

Clicking the Create button will create the following Azure resources

Explore additional Azure services

App Service - GettingStartedSampleBot

If you have removed your spending limit or you are using Pay as You Go, there may be monetary impact if you provision additional resources. Learn More



Publish Web

GettingStartedSampleBot - Web Deploy *

Publish method: Web Deploy

Server: gettingstartedsamplebot.scm.azurewebsites.net:443

Site name: GettingStartedSampleBot

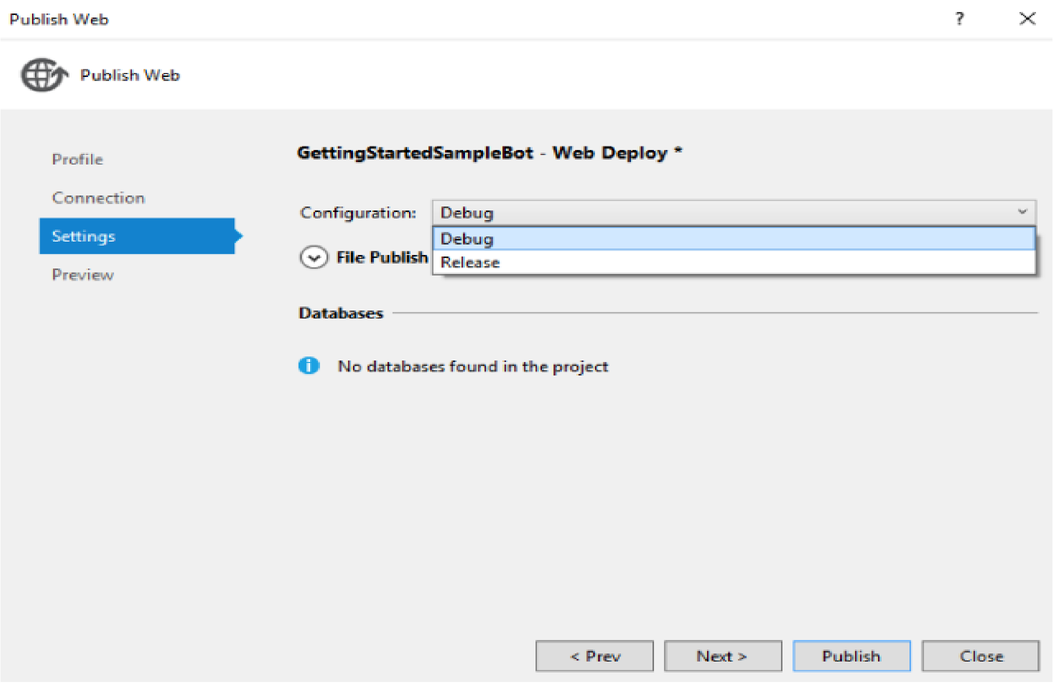
User name: $GettingStartedSampleBot

Password: ••

☑ Save password

Destination URL: http://gettingstartedsamplebot.azurewebsites.net

After returning to the Publish Web wizard, copy the destination URL to the clipboard. You will need it for the messaging endpoint during Bot registration (Section 2). Hit "Validate Connection" to ensure the configuration is good, and if all goes well, click "Next".



GettingStartedSampleBot - Web Deploy *

Configuration: Debug

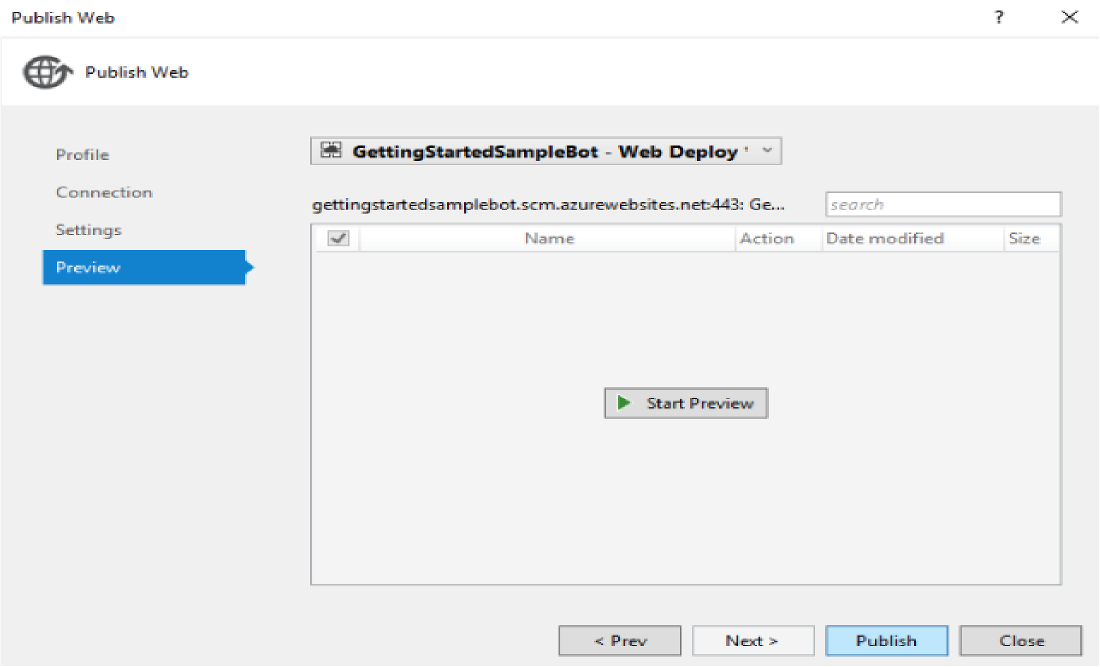
Debug
Release

File Publish

Databases

No databases found in the project

By default your Bot will be published in a Release configuration. If you want to debug your Bot, change Configuration to Debug. Regardless, from here you'll hit "Publish" and your Bot will be published to Azure.



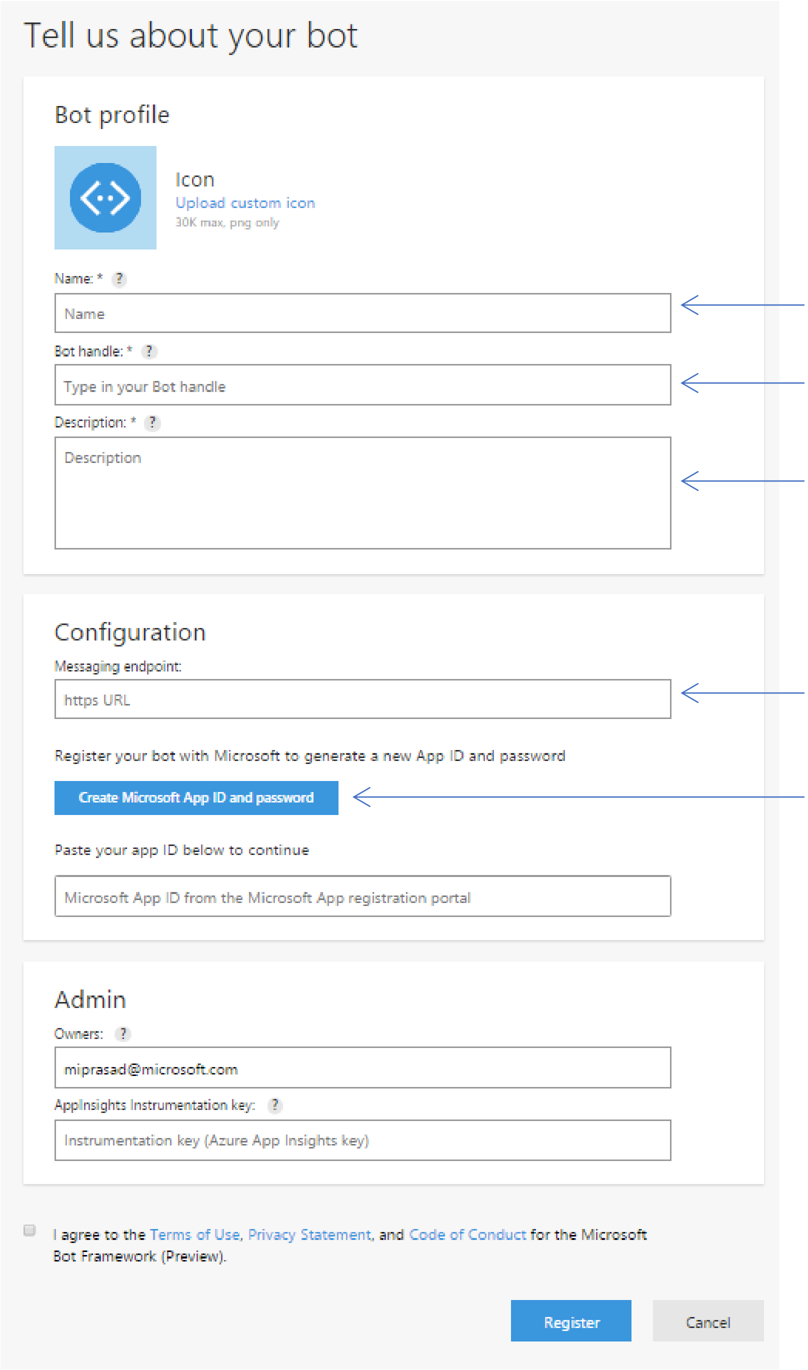
GettingStartedSampleBot - Web Deploy *

gettingstartedsamplebot.scm.azurewebsites.net:443: Ge...

You will see a number of messages displayed in the Visual Studio 2015 "Output" window. Once publishing is complete you will also see the web page for your Bot Application displayed in your browser.

2. Bot Registration

Sign in at https://dev.botframework.com/bots and click on the “Register a bot” tab. You will see the below page.



Tell us about your bot

Bot profile

Icon
Upload custom icon
30K max, png only

Name: * ?

Name

Bot handle: * ?

Type in your Bot handle

Description: * ?

Description

Configuration

Messaging endpoint:

https URL

Register your bot with Microsoft to generate a new App ID and password

Paste your app ID below to continue

Microsoft App ID from the Microsoft App registration portal

Admin

Owners: ?

miprasad@microsoft.com

AppInsights Instrumentation key: ?

Instrumentation key (Azure App Insights key)

□ I agree to the Terms of Use, Privacy Statement, and Code of Conduct for the Microsoft Bot Framework (Preview).

Unique Name Displayed in Bot Directory (35 character limit)

Used in the URL for your bot (alphanumeric and underscore only)

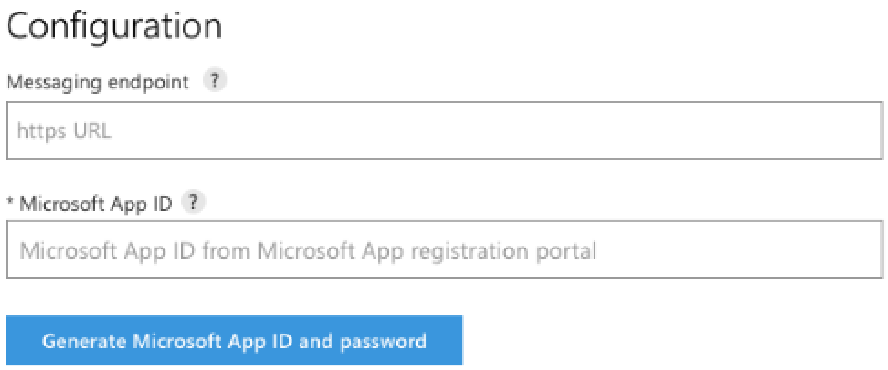
First 46 characters displayed on your bot card in Bot Directory

Add "/api/messages" to your URL from Azure Web App. Ensure https is used and not http

Refer to Section 3

3. Configuration

Once your registration is created, Microsoft Bot Framework will take you through generating your MicrosoftAppId and MicrosoftAppPassword. These are used to generate your MicrosoftAppPassword, be sure to record it somewhere as you won’t be able to see it again.


Configuration
Messaging endpoint ?
https URL
* Microsoft App ID ?
Microsoft App ID from Microsoft App registration portal
Generate Microsoft App ID and password

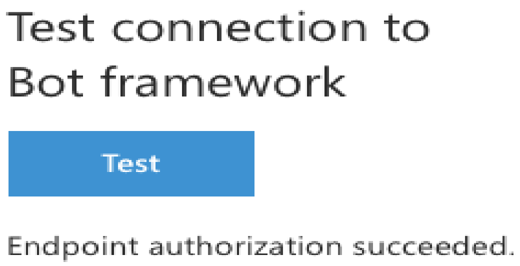
Change the following keys in the web.config file to match the ones generated when you saved your registration, and you’re ready to build.

```
<? xml version = "1.0" encoding = "utf-8" ?>
   < !--
    For more information on how to configure your ASP.NET application, please visit
    http://go.microsoft.com/fwlink/?LinkId=301879
   -->
< configuration >
< appSettings >
    < !--update these with your appid and one of your appsecret keys-->
    < add key = "MicrosoftAppId" value = "[GUID]" />
    < add key = "MicrosoftAppPassword" value = "[PASSWORD]" />
</ appSettings >
```

4. Testing the connection to your bot

In the developer dashboard of your Bot is a test chat window that you can use to interact with your Bot without further configuration, and verify that the Bot Framework can communicate with your Bot's web service.

Note that the first request after your Bot starts up can take 10 - 15 s as Azure starts up the web service for the first time. Subsequent requests will be quick. This simple viewer will let you see the JSON object returned by your Bot.


Test connection to Bot framework

Endpoint authorization succeeded.