# Exercise 5.1: Deploy Function App and Cognitive Service using ARM Template

## Task 2: Deploy Cognitive Service using ARM

1. On the left side of the portal, click the **Create a resource** link.
2. At the top of the **New** blade, locate the **Search the Marketplace** field.
3. Enter the text **Template Deployment** into the search field and press **Enter**.
4. In the **Everything** search results blade, select the **Template deployment** result.
5. In the **Template deployment** blade, click the **Create** button.
6. In the **Custom deployment** blade, click the Build your own template in the editor link.
7. In the **Edit template** blade, locate the text editor and delete the existing template content.
8. Copy and paste the following ARM template into the template editor:{

{

"$schema":

"http://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json#",

"contentVersion": "1.0.0.0",

"variables": {

"serviceName": "[concat('cgnt', uniqueString(resourceGroup().id))]"

},

"resources": [

{

"apiVersion": "2017-04-18",

"type": "Microsoft.CognitiveServices/accounts",

"name": "[variables('serviceName')]",

"kind": "TextAnalytics",

"location": "[resourceGroup().location]",

"sku": {

"name": "S1"

},

"properties": {}

}

],

"outputs": {

"cognitiveEndpointUrl": {

"type": "string",

"value": "[reference(variables('serviceName')).endpoint]"

},

"cognitiveEndpointKey": {

"type": "string",

"value": "[listKeys(variables('serviceName'), '2017-04-18').key1]"

}

}

}

1. Click the **Save** button to persist the template.
2. Back in the **Custom deployment** blade, perform the following actions: a. Leave the

**Subscription** field set to its default value. a. In the **Resource group** section, select the **Create new** option. a. In the **Resource group** section, enter the value **MOD10COGS** into the empty field. a. In the **Location** field, select the **East US** location. a. In the **Terms and Conditions** section, select the I agree to the terms and conditions stated above checkbox. a. Click the **Purchase** button.

1. Wait for the deployment of the DSC configuration to complete before moving on with this lab.
2. On the left side of the portal, click the **Resource groups** link.
3. In the **Resource groups** blade, select the **MOD10COGS** resouce group. On the **Overview** tab, locate the **Deployments** header at the top of the blade and click the hyperlink immediately below the header that indicates the number of successful deployments.
4. In the **Deployments** blade, click the name of the most recent deployment.
5. In the **Microsoft.Template Deployment** blade, record the output values **CognitiveEndpointURL** and **CognitiveEndpointKey**. These values will be used later in the lab.

## Task 3: Deploy Function App and Code

1. At the top of the **New** blade, locate the **Search the Marketplace** field.
2. Enter the text **Function** into the search field and press **Enter**.
3. In the **Everything** search results blade, select the **Function App** result.
4. In the **Function App** blade, click the **Create** button.
5. In the next **Function App** blade, perform the following actions: a. In the **App name** field, enter a globally unique name. a. Leave the **Subscription** field set to its default value. a. In the **Resource group** section, select the **Use existing** option. a. In the **Resource group** section, locate the dropdown list and select the **MOD10COGS** option. a. In the **OS** section, select the **Windows** option. a. In the **Hosting Plan** list, select the **Consumption Plan** option. a. In the **Location** field, select the **East US** location. a. In the **Storage** section, select the **Create new** option. a. In the **Storage** section, enter a globally unique name. a. In the **Application Insights** section, select the **Off** option. a. Click the **Create** button.
6. Wait for the creation task to complete before moving on with this lab.
7. On the left side of the portal, click the **Resource groups** link.
8. In the **Resource groups** blade, locate and select the **MOD10COGS** Resource Group link.
9. In the **MOD10COGS** blade, select the **Function App** you most recently created.
10. In the **Function Apps** blade, click the **Platform features** tab at the top of the blade.
11. In the **Platform features** tab, click the **Application Settings** link in the **General Settings** section.
12. In the **Application settings** tab, scroll down and locate the **Application Settings** section. Click the **Add new setting** button. Perform the following actions: a. In the **Enter a name** field, enter the value **EndpointUrl**. a. In the **Enter a value** field, enter the value you previously recorded for the **CognitiveEndpointURL**.
13. Back in the **Application Settings** section, click the **Add new setting** button. Perform the following actions: a. In the **Enter a name** field, enter the value **EndpointKey**. a. In the **Enter a value** field, enter the value you previously recorded for the **CognitiveEndpointKey**.
14. Click the **Save** button at the top of the **Application settings** tab.
15. Back in the **Function Apps** blade, click the **Platform features** tab at the top of the blade.
16. In the **Platform features** tab, click the **Deployment options** link in the **Code Deployment** section.
17. In the **Deployments** blade that appears, click the **Setup** button at the top of the blade.
18. In the **Deployment option** blade that appears, click the **Choose Source** section.
19. In the **Choose source** blade that appears, click the **External Repository** link.
20. In the **Deployment option** blade that appears, perform the following actions: a. In the **Repository URL** field, enter the value

**https://github.com/azure-labs/cognitive-services-function**. a. In the **Branch** field, enter the value **master**. a. In the **Repository Type** section, select the **Git** option. a. Click the **OK** button.

1. Wait for the first deployment to complete. **Note**: You will know the first deployment has completed when you see a successful deployment operation listed on the **Deployments** tab. This tab updates automatically.

## Task 4: Test Function App

1. Back in the **Function Apps** blade, click the **Functions** link on the left side of the blade to expand the list of functions. **Note**: You may need to click the **Functions** link twice to refresh the list of functions.
2. Select the **DetermineLanguage** function from the list of functions.
3. In the **run.csx** pane that opens, click the **Test** link on the right side of the pane.
4. In the **Test** popup, perform the following actions: a. In the **Request body** field, enter the following value: {

"text": "I stuffed a shirt or two into my old carpet-bag, tucked it under my arm, and started for Cape Horn and the Pacific."

}

a. Click the **Run** button. a. Observe the output in the **Output** section. The output should correctly identify the language as **en (English)**.

**Review**: In this exercise, you create a Function App that is uses an Azure Cognitive Services account.