Modernising .NET Apps using Azure

Before the hands-on lab setup guide

February 2020

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Requirements

- Microsoft Azure subscription must be pay-as-you-go or MSDN.
  - Trial subscriptions will *not* work.
- **IMPORTANT**: To complete this lab, you must have sufficient rights within your Azure AD tenant to:
  - Create an Azure Active Directory application and service principal
  - Assign roles on your subscription
  - Register resource providers

Before the hands-on lab

Duration: 45 minutes

In this exercise, you set up an environment for use in the rest of the hands-on lab. You should follow all steps provided *before* attending the Hands-on lab.

> **IMPORTANT**: Many Azure resources require globally unique names. Throughout these steps the word "SUFFIX" appears as part of resource names. You should replace this with your Microsoft alias, initials, or another value to ensure resources are uniquely named.

Task 1: Provision a resource group

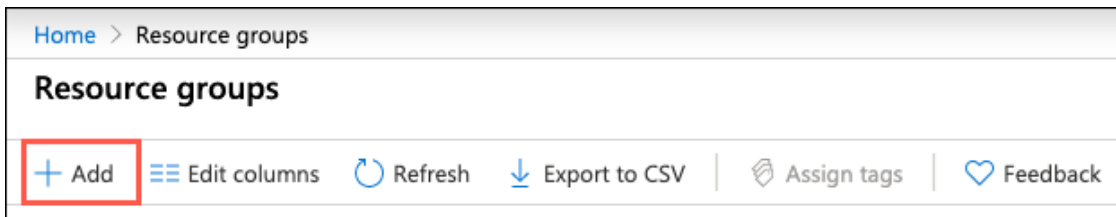In this task, you create an Azure resource group to serve as a container for the resources used throughout this lab.

1. In the Azure portal, select **Resource groups** from the Azure services list.
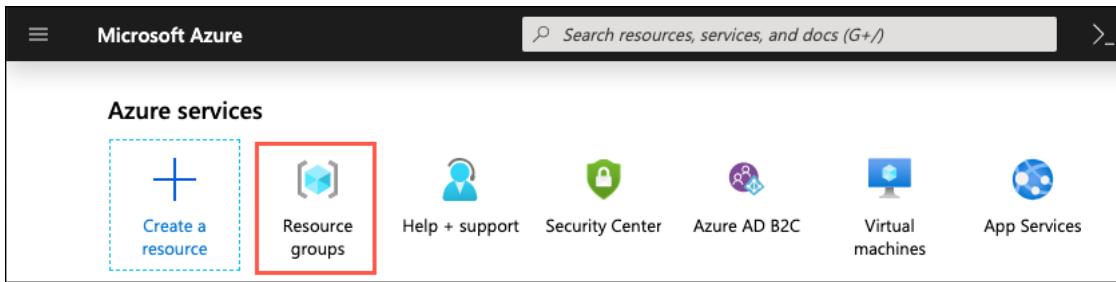
Resource groups is highlighted in the Azure services list.

2. On the Resource groups blade, select **+Add**.

+Add is highlighted in the toolbar on Resource groups blade.

3. On the Create a resource group **Basics** tab, enter the following:

   – **Subscription**: Select the subscription you are using for this hands-on lab.
   – **Resource group**: Enter **hands-on-lab-SUFFIX** as the name of the new resource group.
   – **Region**: Select the region you are using for this hands-on lab.

The values specified above are entered into the Create a resource group Basics tab.

4. Select **Review + Create**.

5. On the **Review + create** tab, ensure the Validation passed message is displayed and then select **Create**.

Task 2: Register required resource providers

In this task, you register the Microsoft.DataMigration and Microsoft.Search resource providers within your Azure subscription. These resource providers allow Azure Cognitive Search and the Azure Database Migration Service to be provisioned within your subscription.

1. In the Azure portal, select **Subscriptions** from the Azure services list.

Subscriptions is highlighted in the Azure services list.

2. Select the subscription you are using for this hands-on lab from the list, select **Resource providers**, enter "migration" into the filter box, select **Microsoft.DataMigration** and then select **Register**.
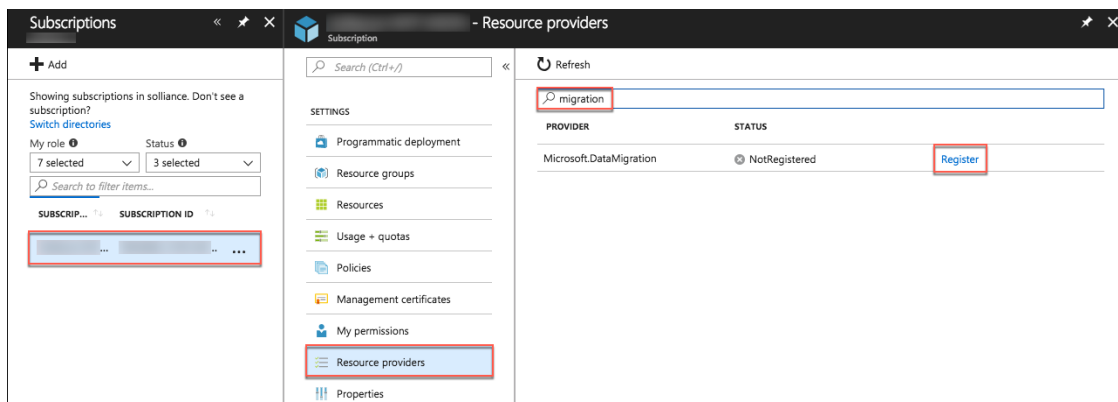

The Subscription blade is displayed, with Resource providers selected and highlighted under Settings. On the Resource providers blade, migration is entered into the filter box, and Register is highlighted next to Microsoft.DataMigration.

3. It can take a couple of minutes for the registration to complete. Make sure you see a status of **Registered** before moving on. You may need to select **Refresh** to see the updated status.

| Microsoft.DataMigration | ✔ Registered |
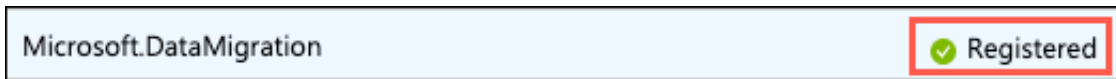
Registered is highlighted next to the Microsoft.DataMigration resource provider.

4. Next, enter "search" into the filter box to locate the Microsoft.Search resource provider. If the status is not **Registered**, select **Register**, and wait for the resource status to be registered.
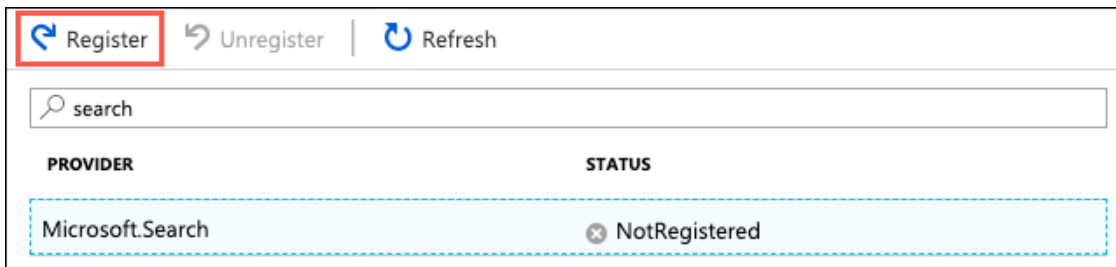
The Register button is highlighted, search is entered into the filter box, and the Microsoft.Search resource provider is selected.

Note: You may need to select Refresh to see the updated status.

Task 3: Run ARM template to provision lab resources

In this task, you run an Azure Resource Manager (ARM) template to deploy and configure the resources used throughout this hands-on lab. The resources created by the ARM template include:

- Azure Blob Storage account
- A lab virtual machine (VM) with Visual Studio 2019 Community edition and SQL Server Management Studio (SSMS) installed.
- A SQL Server 2008 R2 VM with the Microsoft Data Migration Assistant (DMA) installed and a copy of the ContosoInsurance database installed.
- Azure SQL Database
- Azure Database Migration Service (DMS)
- Azure App Service Plan
- App Service (Web App)
- App Service (API App)
- Function App
- API Management
- Key Vault
- Azure Cognitive Search
- Azure Cognitive Services account
- Virtual Network

Note: You can review the steps to manually provision the lab resources in the Manual resource setup guide.

1. To run the ARM template deployment, select the **Deploy to Azure** button below, which opens a custom deployment screen in the Azure portal.

2. On the custom deployment screen in the Azure portal, enter the following:

    - **Subscription**: Select the subscription you are using for this hands-on lab.
    - **Resource group**: Select the hands-on-lab-SUFFIX resource group from the dropdown list.
    - **Location**: Select the location you used for the hands-on-lab-SUFFIX resource group.
    - **SQL Server Name**: Accept the default value, **contosoinsurance**.

    Note: The actual name must be globally unique, so a unique string is generated from your Resource Group Id and appended to the name during provisioning.

    - **Admin Username**: Accept the default value, **demouser**.
    - **Admin Password**: Accept the default value, **Password.1!!**.
    - **API Management Email**: Enter an email to use for admin notifications from API Management.
    - Check the box to agree to the Azure Marketplace terms and conditions.

The Custom deployment blade displays, and the information above is entered on the Custom deployment blade.

3. Select **Purchase** to start provisioning the lab resources.

   Note: The deployment of the custom ARM template takes about 30 minutes to complete. If you receive any errors, you can manually provision the missing resources following the steps within the Manual resource setup guide. If the error indicates an issue with quotas in the region you selected for the resource group, you can delete the resource group, create a new resource group in a different region, and re-run the

ARM template, or you can request a quota increase and then manually provision the missing resources.

4. You can monitor the progress of the deployment by navigating to the hands-on-lab-SUFFIX resource group in the Azure portal and then selecting **Deployments** from the left-hand menu. The deployment should be named **Microsoft.Template**. Select the deployment item to view the progress of each individual component in the template.

The Deployments menu item is selected in the left-hand menu of the hands-on-lab-SUFFIX resource group and the Microsoft.Template deployment is highlighted.

You should follow all steps provided *before* attending the Hands-on lab.