

# ONLINE LAB: Create and Deploy an ARM Template

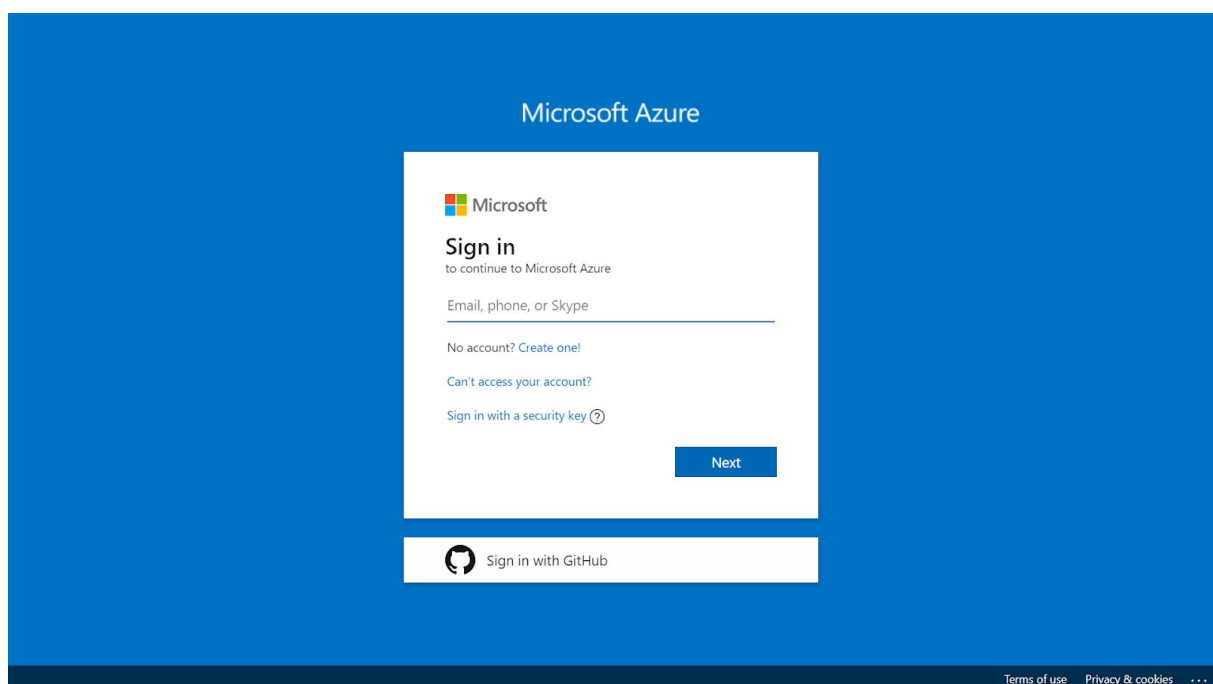
## Your Challenge

- You are to go through the steps to create a VM, but not create it
- Download the ARM template at the end of the process (and cancel the creation)
- Upload the ARM template to Azure
- Deploy the ARM template
- Clean up all of your resources created after you're done

## Solution

### Step 1 Sign Into Azure

Sign into Azure at <https://portal.azure.com/>



## Step 2 Create Resource Group

The screenshot shows the 'Create a resource group' page in the Microsoft Azure portal. The breadcrumb navigation is 'Dashboard > New > Resource group > Create a resource group'. The page has tabs for 'Basics', 'Tags', and 'Review + create'. A description of a resource group is provided. Under 'Project details', the 'Subscription' is 'Pay-As-You-Go (Azure Courses)' and the 'Resource group' is 'armtemplate' with a green checkmark. Under 'Resource details', the 'Region' is '(US) Central US'. At the bottom, there are buttons for 'Review + create', '< Previous', and 'Next: Tags >'.

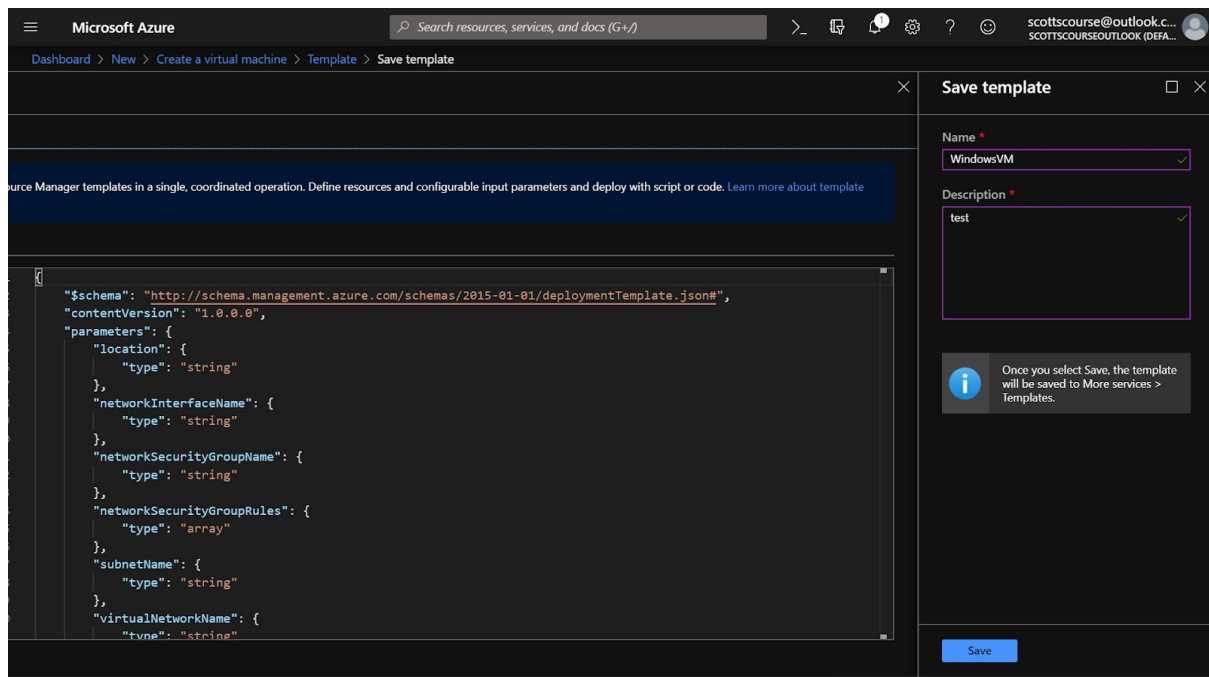
1. Create a new resource group named **armtemplate**.

## Step 3 Create a VM

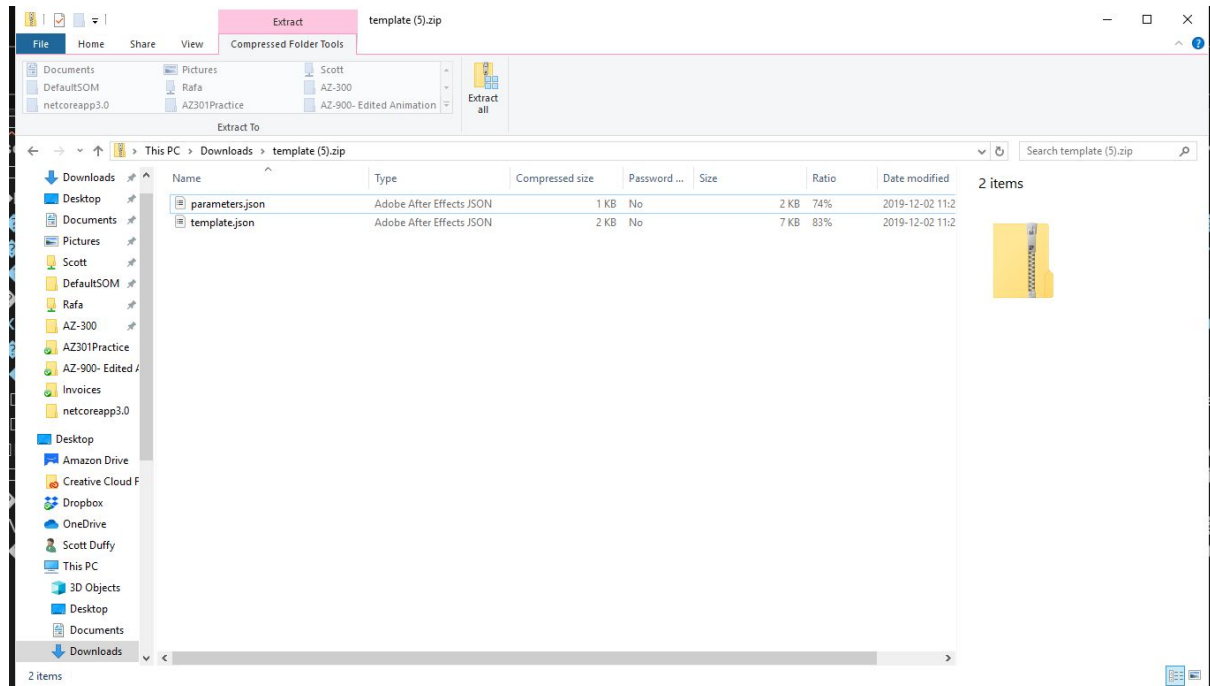
The screenshot shows the 'Create a virtual machine' page in the Microsoft Azure portal. The breadcrumb navigation is 'Dashboard > New > Create a virtual machine'. A green banner at the top indicates 'Validation passed'. The page has tabs for 'Basics', 'Disks', 'Networking', 'Management', 'Advanced', 'Tags', and 'Review + create'. Under 'PRODUCT DETAILS', the VM is 'Standard DS1 v2' by Microsoft, with a price of '0.1613 CAD/hr'. A 'TERMS' section contains legal text. A 'Basics' section at the bottom shows the 'Subscription' as 'Pay-As-You-Go (Azure Courses)', 'Resource group' as 'armtemplate', 'Virtual machine name' as 'armtest', and 'Region' as '(US) East US'. At the bottom, there are buttons for 'Create', '< Previous', 'Next >', and 'Download a template for automation'.

1. Navigate to the **armtemplate** resource group
2. Add a resource to it

3. Create a **Windows Server 2016 Datacenter VM**, with the name **armtest**
4. Create it in the **East US 2** region
5. Accept **the defaults** to all steps until the final screen
6. On the Review + Create screen, click **Download a template for automation**
7. Navigate to the **Parameters** tab, and click **Download**. This will download a file named **template.zip** to your local machine.
8. Click Add to Library and give the template a name like **"WindowsVM"** and the description **test**.
9. Click **Save** to save the template to the template library.
10. Click the X at the top right to cancel the template editing.
11. Click the X at the top right to cancel the VM creation.

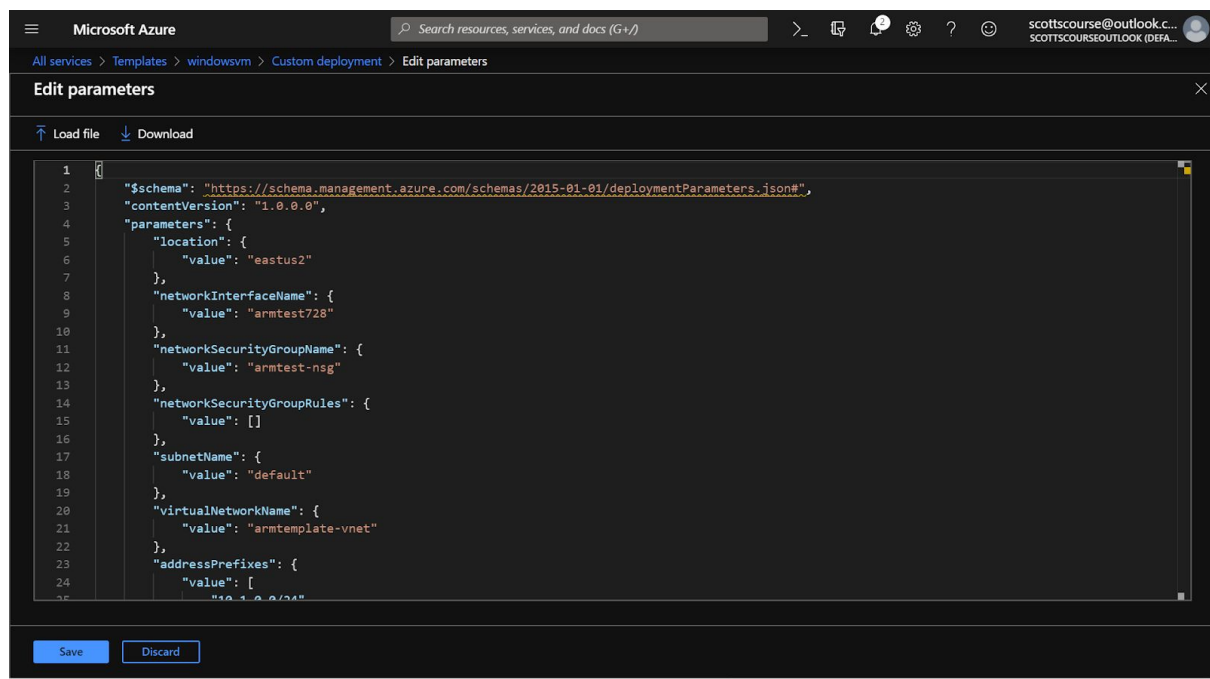


## Step 3b Extract the Parameters.json



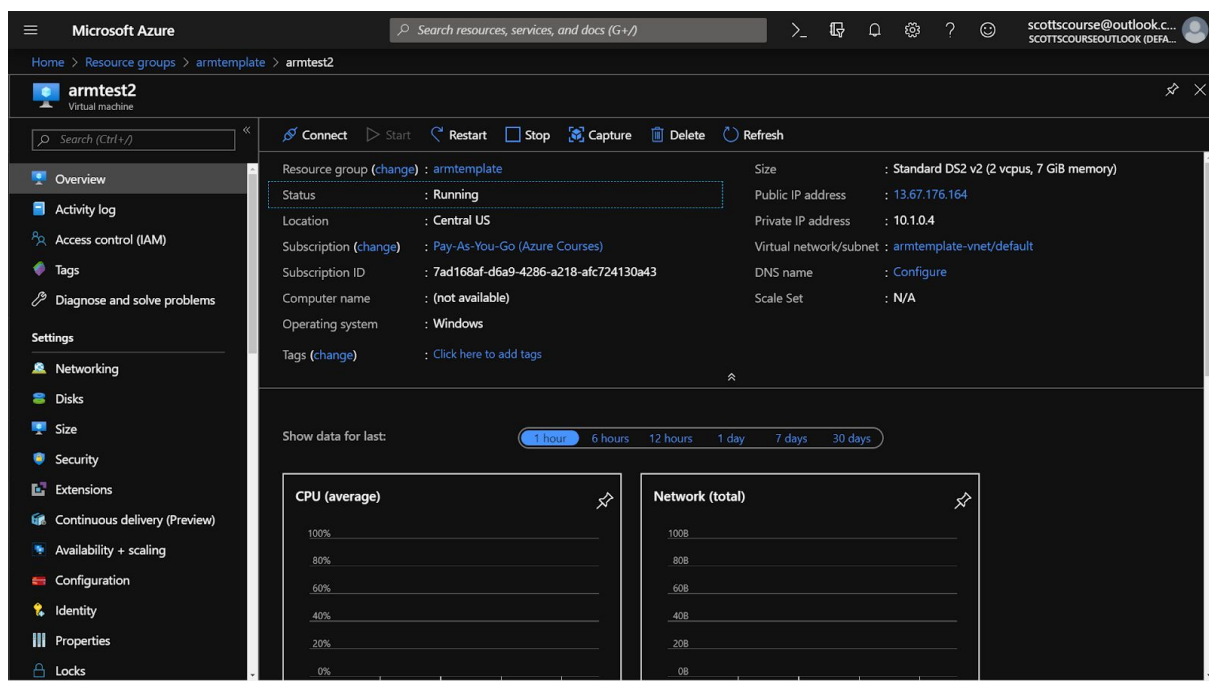
1. From the template.zip file on your local machine (or whatever name it was given), extract the parameters.json from that compressed folder

## Step 4 Edit the Parameters



1. From the home page, navigate to **All Services**
2. Search for “**Templates**”
3. Choose the **windowsvm** template from the list
4. Click **Deploy**.
5. Click **Edit parameters**.
6. Click **Load file**.
7. Choose the **parameters.json** file extracted from the downloaded template.
8. From the parameters file, edit the following values:
  - a. Change the **virtualMachineName** parameter to “armtest2”.
  - b. Change the **virtualMachineSize** parameter to “Standard\_DS2\_v2”
  - c. Change the **location** to centralus
  - d. Click Save
9. Choose the **armtemplate** resource group.
10. Enter the **Admin Password**
11. **Agree** to the terms and conditions
12. Click **Purchase**.
13. Wait for the deployment to complete.

## Step 5 Verify the VM is Running



1. Find the VM **armtest2** in the **armtemplate** resource group
2. Go in and verify the **status** is **running**

## Step 6 Clean up

1. In the navigation list, click **Resource groups**.
2. Click **armtemplate** to open the resource group.
3. Click **Delete resource group** to delete the resource group.
4. On the **Are you sure you want to delete** blade, type the resource group name:  
**armtemplate**.
5. Click **Delete** to delete the resource group.