**Exercise - Create infrastructure to manage**

Here, you create two Linux VMs that you'll later use to configure user accounts by using Ansible. Although you can use an infrastructure tool such as an Azure Resource Manager template, Terraform, or even Ansible to bring up your VMs, for learning purposes, here you use the Azure CLI.

**Important**

The **[Clean up Azure resources](https://docs.microsoft.com/en-us/learn/modules/configure-infrastructure-azure-pipelines/10-cleanup-resources" \t "az-portal)** page in this module contains important cleanup steps. These steps ensure that you're not charged for Azure resources you no longer need. Be sure to perform the cleanup steps even if you don't complete this module.

**Select an Azure region**

A *region* is one or more Azure datacenters within a specific geographic location. East US, West US, and North Europe are examples of regions. Every Azure resource, including an app service instance, is assigned a region.

To make the commands easier to run, start by selecting a default region. After you specify the default region, later commands use that region unless you specify a different region.

1. From Azure Cloud Shell, run the following az account list-locations command to list the regions that are available from your Azure subscription.

**Azure CLI**

az account list-locations \

--query "[].{Name: name, DisplayName: displayName}" \

--output table

1. From the **Name** column in the output, choose a region that's close to you, for example, **eastasia** or **westus2**.
2. Run az configure to set your default region. Replace **<REGION>** with the name of the region you chose for your database.

**Azure CLI**

az configure --defaults location=<REGION>

Here's an example that sets **northeurope** as the default region.

**Azure CLI**

az configure --defaults location=northeurope

**Create a resource group**

A *resource group* holds related Azure resources. Here, you create a resource group that holds your Linux VMs.

Run the following az group create command to create a resource group that's named **learn-ansible-rg**.

**Azure CLI**

az group create --name learn-ansible-rg

**Create the virtual machines**

Here you create two virtual machines, each running Ubuntu.

1. Run the following az vm create command to create a virtual machine that's named **vm1**:

**Azure CLI**

az vm create \

--resource-group learn-ansible-rg \

--name vm1 \

--admin-username azureuser \

--image UbuntuLTS \

--tags Ansible=mslearn \

--ssh-key-values ~/.ssh/ansible\_rsa.pub

This command specifies *azureuser* as the administrator user.

The --ssh-key-values argument specifies your SSH public key. The VM stores this file. Later, you use the private key to connect.

The --tags argument specifies a tag to apply to the VM. Think of a tag as metadata that helps you logically organize your resources. This syntax creates the tag as a key-value pair, where "Ansible" is the key and "mslearn" is its value. Ansible uses this tag to form groups within the inventory.

1. Run az vm create a second time to create a VM that's named **vm2**:

**Azure CLI**

az vm create \

--resource-group learn-ansible-rg \

--name vm2 \

--admin-username azureuser \

--image UbuntuLTS \

--tags Ansible=mslearn \

--ssh-key-values ~/.ssh/ansible\_rsa.pub

1. Run the following az vm list command to verify that your VMs were successfully created:

**Azure CLI**

az vm list \

--resource-group learn-ansible-rg \

--query [].{Name:name} \

--output table

You see this:

**Output**

Name

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vm1

vm2