

# 10 - Create a VM with PowerShell (10 min)

In this walk-through, we will configure the Cloud Shell, use Azure PowerShell module to create a resource group and virtual machine, and review Azure Advisor recommendations.

## Task 1: Configure the Cloud Shell

In this task, we will configure Cloud Shell.

1. Sign in to the [Azure portal](#).\*\* You can find your login credentials within the resources tab (directly next to this Instructions tab!) \*\*
2. From the Azure portal, open the **Azure Cloud Shell** by clicking on the icon in the top right of the Azure Portal.



3. When prompted to select either **Bash** or **PowerShell**, select **PowerShell**.
4. On the **You have no storage mounted** screen select **Show advanced settings** then fill in the information below

Settings	Values
Resource Group	<b>Create new resource group</b>
Storage account (Create a new account a use a globally unique name (ex: cloudshellstoragemystorage))	<b>cloudshellxxxxxxx</b>
File share (create new)	<b>shellstorage</b>

5. Select **Create Storage**

## Task 2: Create a resource group and virtual machine


In this task, we will use PowerShell to create a resource group and a virtual machine.

1. Ensure **PowerShell** is selected in the upper-left drop-down menu of the Cloud Shell pane.
2. Verify your new resource group by running the following command in the Powershell window. Press **Enter** to run the command.

Code  Copy

```
Get-AzResourceGroup | Format-Table
```

3. Create a virtual machine by pasting the following command into the terminal window.

Code  Copy

```
New-AzVm `
  -ResourceGroupName "myRGPS" `
  -Name "myVMPS" `
  -Location "East US" `
  -VirtualNetworkName "myVnetPS" `
  -SubnetName "mySubnetPS" `
  -SecurityGroupName "myNSGPS" `
  -PublicIpAddressName "myPublicIpPS"
```

- When prompted provide the username (**azureuser**) and the password (**Pa\$\$w0rd1234**) that will be configured as the local Administrator account on that virtual machines.azureadmin
- Once VM is created, close the PowerShell session Cloud Shell pane.
- In the Azure portal, search for **Virtual machines** and verify the **myVMPS** is running. This may take a few minutes.

**Virtual machines**  
Microsoft

[+ Add](#)
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[Start](#)
[Restart](#)
[Stop](#)
[Delete](#)

<input type="checkbox"/>	Name ↑↓	Type ↑↓	Private IP address	Resource group ↑↓	Location ↑↓	Status
<input type="checkbox"/>	myVMPS	Virtual machine	192.1 [REDACTED]	myRGPS	East US	Running

- Access the new virtual machine and review the Overview and Networking settings to verify your information was correctly deployed.

## Task 3: Execute commands in the Cloud Shell

In this task, we will practice executing PowerShell commands from the Cloud Shell.

- From the Azure portal, open the **Azure Cloud Shell** by clicking on the icon in the top right of the Azure Portal.
- Ensure **PowerShell** is selected in the upper-left drop-down menu of the Cloud Shell pane.
- Retrieve information about your virtual machine including name, resource group, location, and status. Notice the PowerState is **running**.

Code	Copy
Get-AzVM -name myVMPS -status   Format-Table -autosize	

- Stop the virtual machine using the following command.

Code	Copy
Stop-AzVM -ResourceGroupName myRGPS -Name myVMPS	

- When prompted confirm (Yes) to the action. Wait for **Succeeded** status.
- Verify your virtual machine state. The PowerState should now be **deallocated**. You can also verify the virtual machine status in the portal. Close Cloudshell.

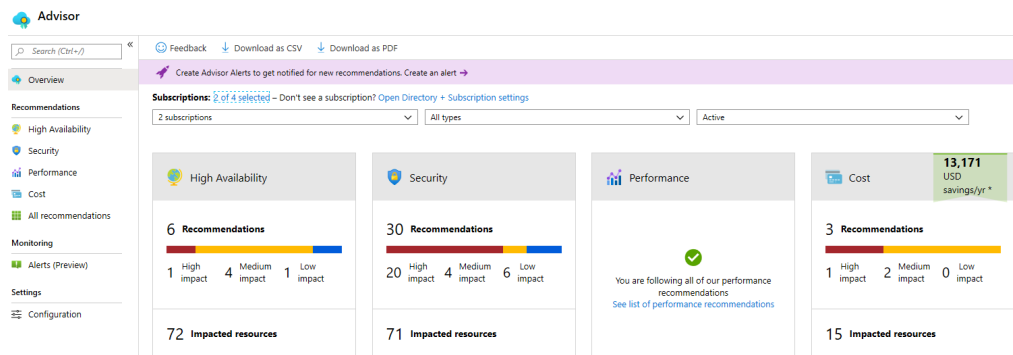
Code	Copy
Get-AzVM -name myVMPS -status   Format-Table -autosize	

## Task 4: Review Azure Advisor Recommendations

**Note:** This same task is in the Create a VM with Azure CLI lab.

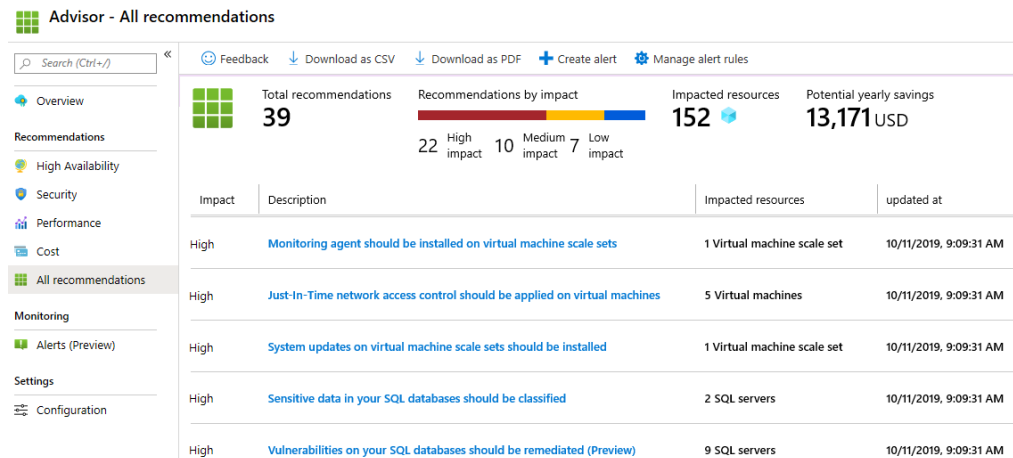
In this task, we will review Azure Advisor recommendations for our virtual machine.

- From the **All services** blade, search for and select **Advisor**.
- On the **Advisor** blade, select **Overview**. Notice recommendations are grouped by Reliability, Security, Performance, and Cost.



3. Select **All recommendations** and take time to view each recommendation and suggested actions.

**Note:** Depending on your resources, your recommendations will be different.



4. Notice that you can download the recommendations as a CSV or PDF file.

5. Notice that you can create alerts.

6. If you have time, continue to experiment with Azure PowerShell.

Congratulations! You have configured Cloud Shell, created a virtual machine using PowerShell, practiced with PowerShell commands, and viewed Advisor recommendations.

**Note:** To avoid additional costs, you can optionally remove this resource group. Search for resource groups, click your resource group, and then click **Delete resource group**. Verify the name of the resource group and then click **Delete**. Monitor the **Notifications** to see how the delete is proceeding.