

TM1956 VirtualMachines-029 Check for Desired VM SKU Size(s)

Risk Level: High

Rule ID: VirtualMachines-029

Determine if the virtual machine (VM) instances provisioned within your Azure cloud account have the desired SKU size(s) established by your organization based on the workload deployed.

Setting limits for the SKU size(s) of the virtual machine instances provisioned in your Microsoft Azure account can help you to manage better your cloud compute power, address internal compliance requirements and prevent unexpected charges on your Azure monthly bill.

Audit

To determine if all your Azure VM instances have the desired SKU size(s), perform the following actions:

Using Azure CLI

01 Check rule settings and identify the SKU size configured for VM instances.

02 Run **account list** command (Windows/macOS/Linux) using custom query filters to list the IDs of the subscriptions available in your Azure account:

```
az account list
  --query '[*].id'
```

03 The command output should return the requested subscription identifiers (IDs):

```
[
  "abcdabcd-1234-abcd-1234-abcdabcdabcd",
  "abcd1234-abcd-1234-abcd-abcd1234abcd",
]
```

04 Run **vm list** command (Windows/macOS/Linux) using custom query filters to list the name and the associated resource group of each virtual machine provisioned in the selected Azure subscription:

```
az vm list
  --subscription abcdabcd-1234-abcd-1234-abcdabcdabcd
  --output table
  --query '[*].{name:name, resourceGroup:resourceGroup}'
```

05 The command output should return the requested virtual machine (VM) identifiers:

Name	ResourceGroup
-----	-----
cc-project5-app-server	cloud-shell-storage-westeuropa
cc-project5-web-server	cloud-shell-storage-westeuropa

06 Run **vm show** command (Windows/macOS/Linux) using the name of the virtual machine that you want to examine and the associated resource group as identifier parameters, to describe the VM SKU size of the selected virtual machine instance:

```
az vm show
    --name cc-project5-app-server
    --resource-group cloud-shell-storage-westeuropa
    --query 'hardwareProfile.vmSize'
```

07 The command output should return the size of the specified VM instance:

```
"Standard_A8_v2"
```

Compare the VM SKU size returned by the **vm show** command output with the one(s) allowed by your organization, identified at step no. 1. If the verified SKU size is not listed in the conformity rule configuration settings, the selected Azure virtual machine instance is not using the desired SKU size.

08 Repeat step no. 6 and 7 for each Azure virtual machine deployed to the selected subscription.

09 Repeat steps no. 4 – 8 for each subscription created in your Microsoft Azure cloud account.

Using Azure Portal

01 Access Check for Desired VM SKU Size conformity rule settings and identify the SKU size configured for VM instances.

02 Sign in to Azure Management Portal.

03 Navigate to **Virtual machines** blade at

[https://portal.azure.com/#blade/HubsExtension/BrowseResourceBlade/resourceType/](https://portal.azure.com/#blade/HubsExtension/BrowseResourceBlade/resourceType/Microsoft.Compute%2FVirtualMachines)

[Microsoft.Compute%2FVirtualMachines](#) to view the list with all the virtual machine (VM) instances available in your Azure cloud account.

04 Choose the Azure subscription that you want to access from the subscription filter box to list only the VM instances available in the selected subscription.

05 Choose the virtual machine instance that you want to examine.

06 In the navigation panel, select **Overview**, and check the SKU size of the instance, listed as value for the **Size** configuration attribute. If the VM SKU size is different than the one(s) allowed by your organization and identified at step no. 1, the selected Azure virtual machine instance was not launched using the desired SKU size.

07 Repeat step no. 5 and 6 for each Azure virtual machine available in the selected subscription.

08 Repeat steps no. 4 – 7 for each subscription created in your Microsoft Azure cloud account.

Azure Official Documentation

- [Sizes for virtual machines in Azure](#)
- [Resize virtual machines](#)
- [Azure Policy built-in definitions for Azure virtual machine scale sets](#)

Azure Command Line Interface (CLI) Documentation

- [az account](#)
- [az vm](#)
- [az vm show](#)
- [az vm resize](#)
- [az policy assignment](#)