Use Tags with Azure resources

Use Case:

In this walkthrough task we will create Azure resources to allow us to create a lock against them, then you will add a Delete Lock to prevent deletion of a resource group. You will then verify that deletion of the resource group is indeed blocked, and also that any resources within the resource group are also blocked from being deleted by the parent Lock. You will then remove the lock and verify it has been removed by deleting the resource group.

Prerequisites:

You require need an Azure subscription to perform these steps. If you don't have one you can create one by following the steps outlined on the Create your Azure free account today webpage.

Steps:

Create Azure resources to allow us to apply Tags to them

1. Sign into the Azure Portal and click on the **Cloud Shell** icon in the top right hand corner.

2. The **Cloud Shell** is launched in the bottom of the browser window.

3. Create a resource group into which we will place our resources by running the following Azure CLI command. You can copy and paste the command from the below directly into the Cloud Shell console, then press **Enter** to run the command. This command will run fine in either **powershell** *or* **bash** console.

```cli
az group create `
--name tagrg `
--location westeurope
```

```
PS Azure:\> az group create --name tagrg --location westeurope
{
  "id": "/subscriptions/[redacted]/resourceGroups/tagrg",
  "location": "westeurope",
  "managedBy": null,
  "name": "tagrg",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null,
  "type": "Microsoft.Resources/resourceGroups"
}
```

2. Run the below Azure CLI command to create a virtual machine. Again, you can copy and paste the command from below directly into the Cloud Shell console and press **Enter** to run it.

```cli
az vm create `
--name vmtag1 `
--resource-group tagrg `
--image Win2019Datacenter `
--location westeurope `
--admin-username azureuser `
--admin-password Password0134!
```

```
PS Azure:\> az vm create --name vmtag1 --resource-group tagrg --image Win2019DataCenter --location westeurope --admin-username demouser --admin-password demo@
pass123
{
  "fqdns": "",
  "id": "/subscriptions/[redacted]/resourceGroups/tagrg/providers/Microsoft.Compute/virtualMachines/vmtag1",
  "location": "westeurope",
  "macAddress": "00-0D-3A-A8-24-B6",
  "powerState": "VM running",
  "privateIpAddress": "10.0.0.4",
  "publicIpAddress": "13.80.250.156",
  "resourceGroup": "tagrg",
  "zones": ""
}
```

Note: The command will take 2 to 3 minutes to complete. The command will create a virtual machine and various resources associated with it such as storage, networking and security resources. You can close the Azure Cloud Shell once it is complete.

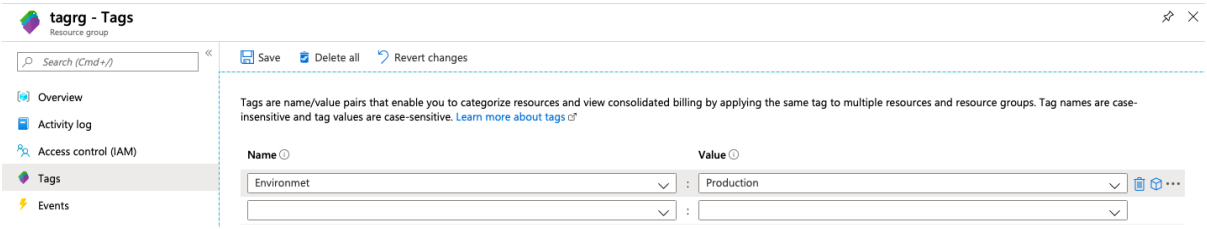
View the tags for a resource or a resource group

In the Azure Portal, open the resource group we just created i.e. **tagrg**, on the **Overview** pane alongside **Tags**, note there are no values listed and a message reads **Click here to add tags**. This indicates no tags have been applied to the resource group or resources.

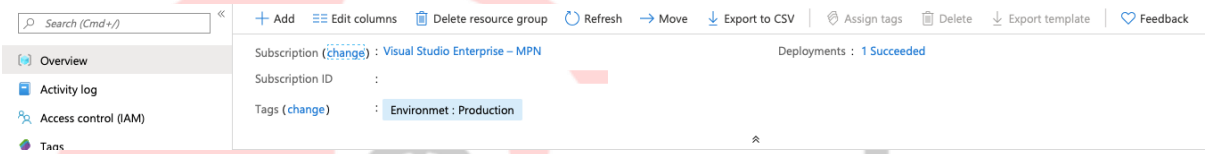
Add tags

1. Still in the Tagrg resource group click on the Click here to add tags link and in the subsequent Tags pane enter the values below, click Save and then Close.

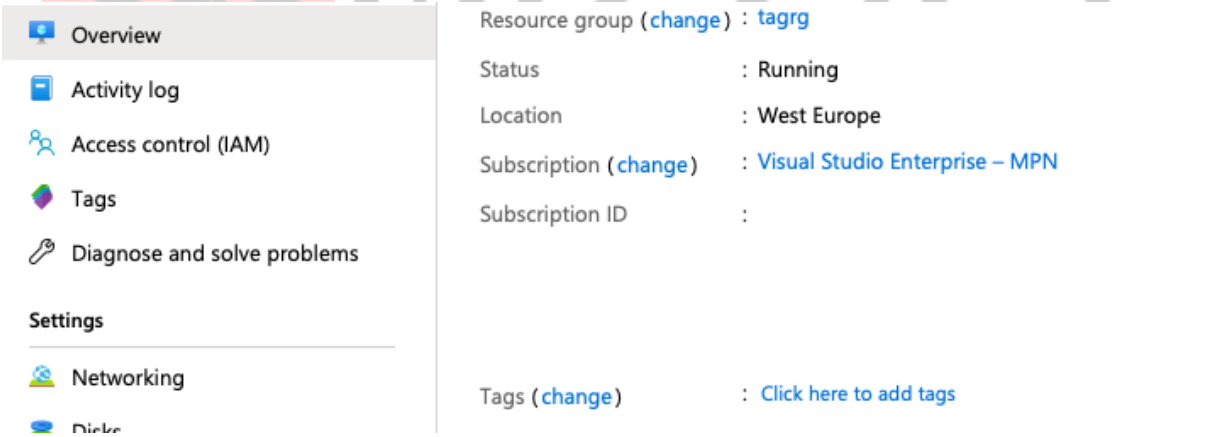
- **Name:** Environment
- **Value:** Production



2. In the Tagrg resource group Overview section, the Tags section now has the tag Name:Value pair of Environment: Production present.

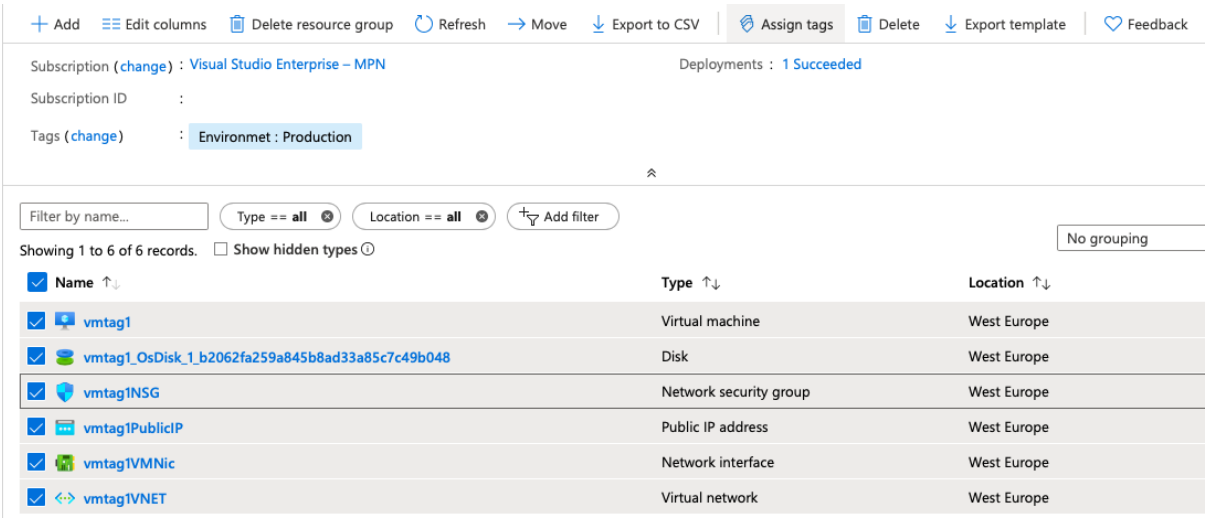


3. Open up the virtual machine resource and in the **Overview** pane note that the tags assigned to the resource group are **not** present in the resource beneath it.



Bulk assign tags to resources

1. Return to the resource group **tagrg** check the checkboxes beside all resources listed under the resource group by clicking on the **NAME** checkbox then click the **Assign Tags** button.

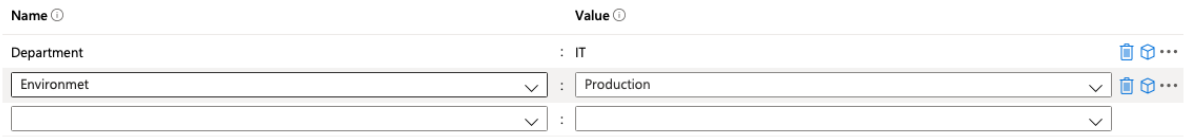


2. In the **Tags** pane enter the values below, click **Save** and then **Close**

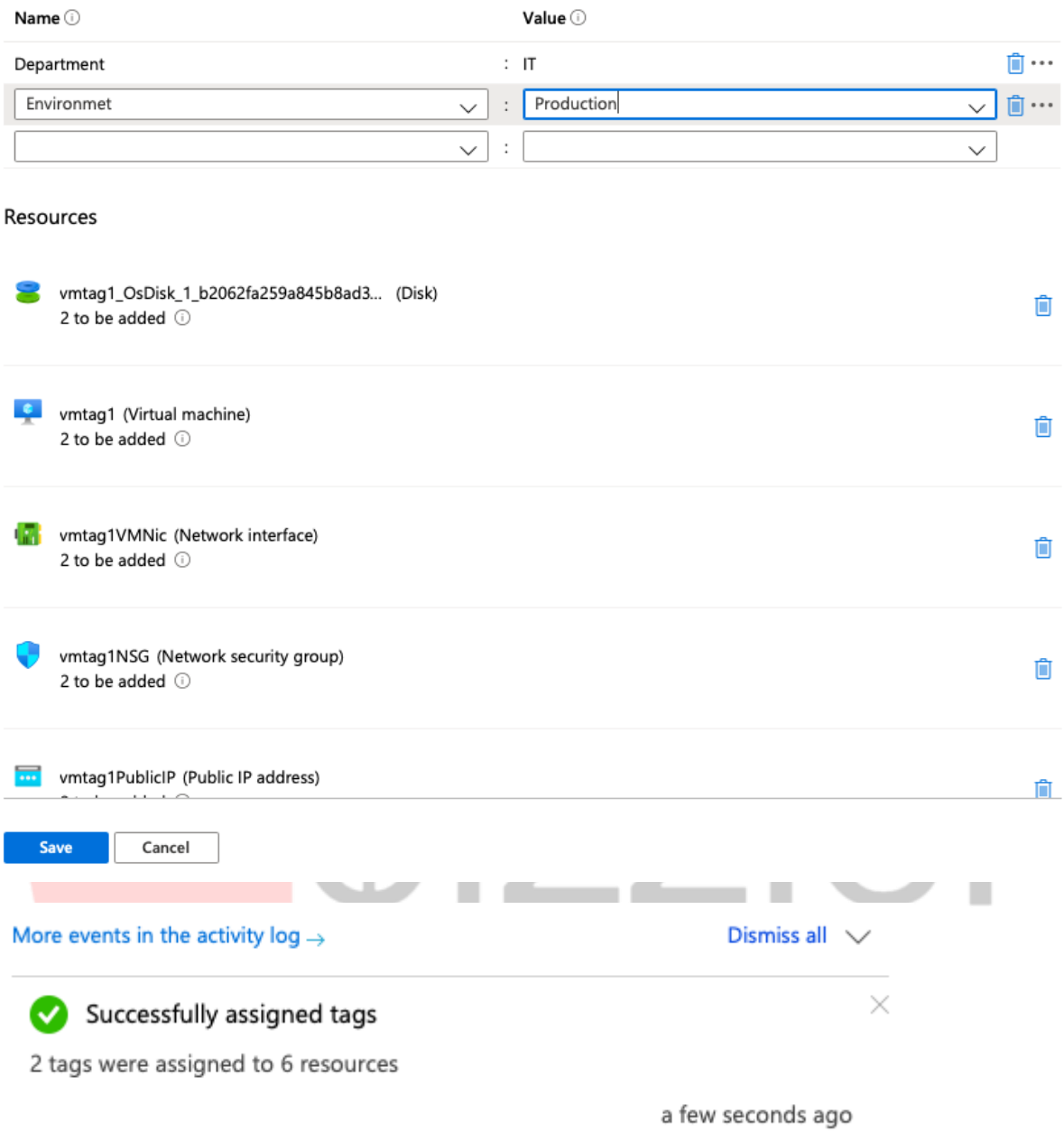
- **Name**: Department
- **Value**: IT

and

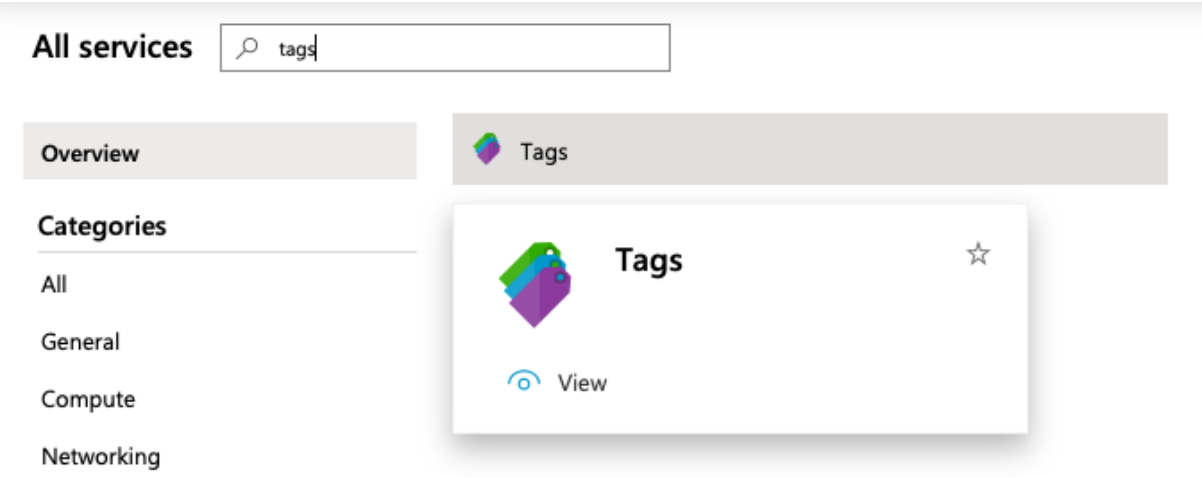
- **Name**: Environment
- **Value**: Production



3. Open up the virtual machine resource and note the presence of the two tags **Department:IT** and **Environment:Production**



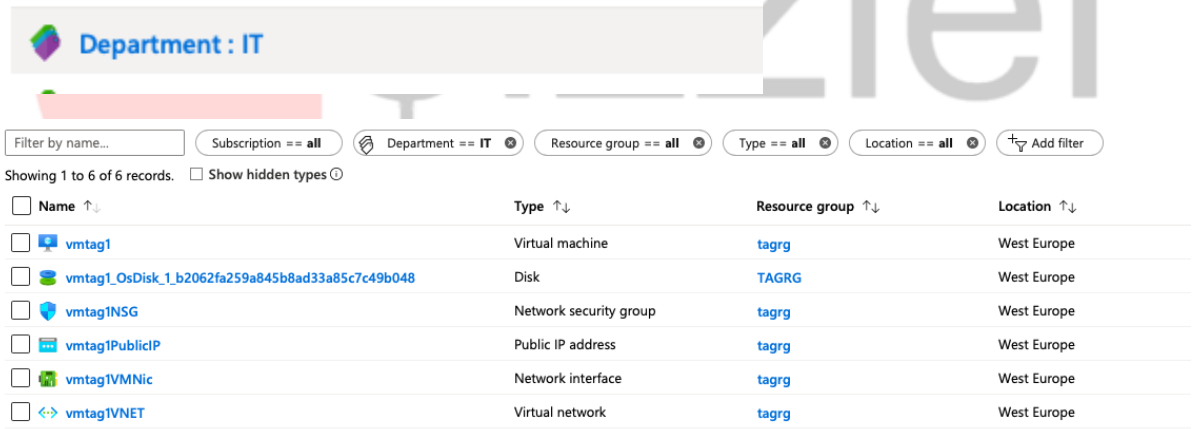
4. In the virtual machine **Overview** pane note that the values for **Tags** has returned of the link stating **Click here to add tags**., indicating there are no tags now present.



5. In the **Tags** pane a number of tags are listed. To view all resources with a specific tag, click the **Name:Value** pair that you want to view resources for i.e. click **Department:IT**

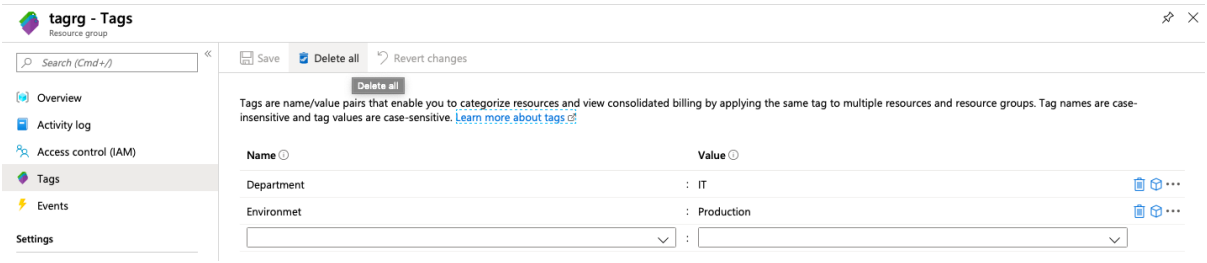
After clicking on the Name Value pair **Department:IT**, in the resultant **Department:IT** pane, all resources with this **Name:Value** pair are listed

Note: For quick access, you could pin the **Tags** service view to the dashboard.



Delete tags

In the resource group you created earlier i.e. **tagrg**, open the virtual machine and click on the **Tags** section. In the resultant **Tags** pane we have an option to **Delete All** tags, or click the **dustbin icon** beside individual **Name:Value** pairs, to delete individual tags. Click **Delete All** then **click Save** and **Close.**


tagrg - Tags
Resource group
Search (Cmd+/)
Overview
Activity log
Access control (IAM)
Tags
Events
Settings
Save
Delete all
Revert changes
Delete all
Tags are name/value pairs that enable you to categorize resources and view consolidated billing by applying the same tag to multiple resources and resource groups. Tag names are case-insensitive and tag values are case-sensitive. Learn more about tags
Name
Value
Department : IT
Environmet : Production