

1. Lab 03: Manage Azure resources by using Azure Resource Manager Templates

Task 1: Create an Azure Resource Manager template.

The screenshot shows the 'Create a managed disk' wizard in the Azure portal. The 'Review + create' tab is selected, showing a summary of the configuration. A green checkmark indicates that the validation has passed.

Validation passed

Basics

- Subscription: Azure for Students
- Resource group: (new) az104-rg3
- Region: East US
- Disk name: az104-disk1
- Availability zone: No infrastructure redundancy required
- Source type: (not visible)

The screenshot shows the 'az104-rg3' resource group in the Azure portal. The 'Resources' tab is selected, displaying a table of resources. The table has columns for Name, Type, and Location. One resource is listed: 'az104-disk1' of type 'Disk' located in 'East US'.

az104-rg3
Resource group

Essentials

Resources

Name	Type	Location
az104-disk1	Disk	East US

Task 2: Edit an Azure Resource Manager template and redeploy the template.

Custom deployment

Deploy from a custom template

New! Deployment Stacks let you manage the lifecycle of your deployments. Try it now →

Select a template **Basics** Review + create

Template

Customized template 1 resource

Edit template Edit parameters Visualize

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription Azure for Students

Resource group az104-rg3

Create new

Instance details

Region (US) East US

Disk_name az104-disk2

Home >

az104-rg3 Resource group

+ Create Manage view Delete resource group Refresh

Essentials JSON View

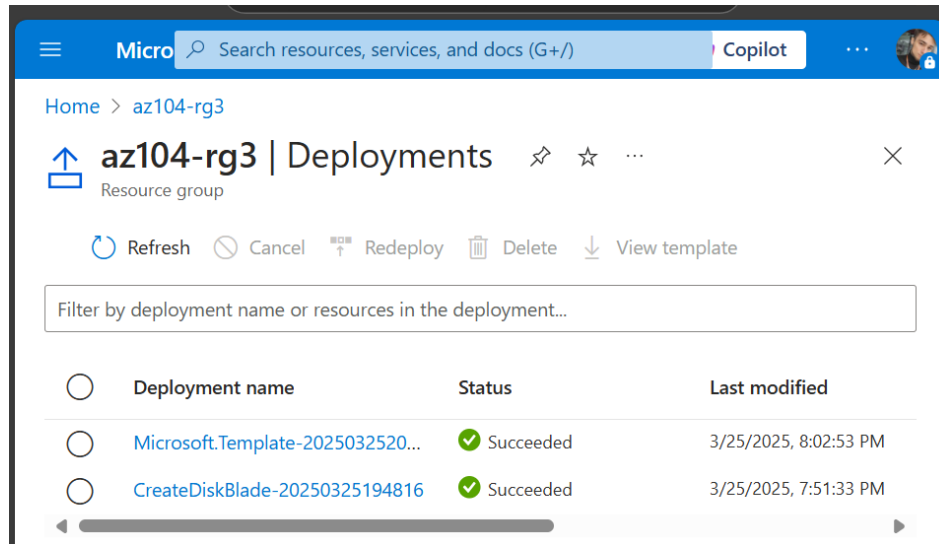
Resources Recommendations

Filter for any field... Type equals all Add filter More (1)

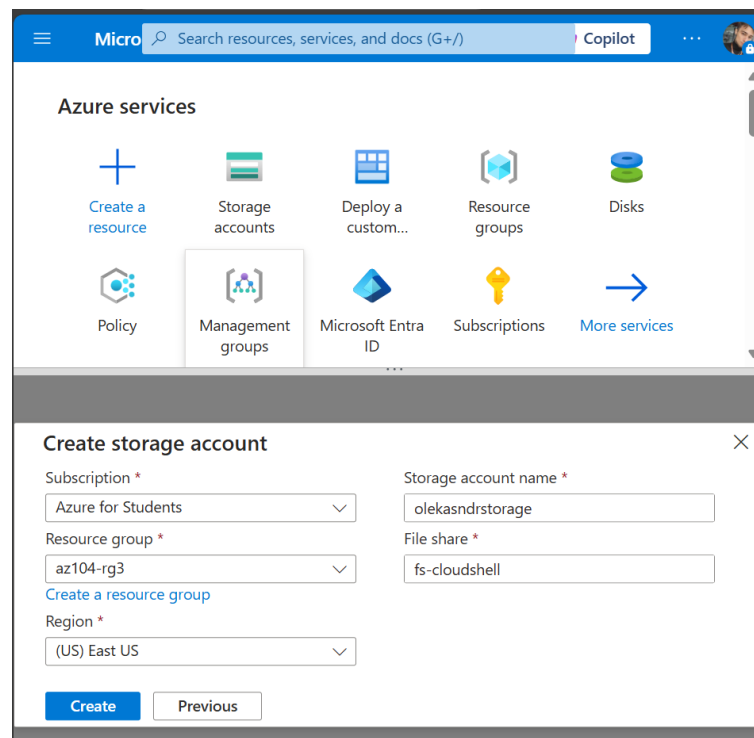
Showing 1 to 2 of 2 records. Show hidden types No grouping

List view

Name	Type	Location
az104-disk1	Disk	East US
az104-disk2	Disk	East US



Task 3: Configure the Cloud Shell and deploy a template with Azure PowerShell.



```
Microsoft Azure Search resources, services, and docs (G+/) Copilot Oleksandr.Kozak.IT.2022... НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ ...

PowerShell FILES 1 2 3 4 5 6 7 8 9 10 11
template.json
"$schema": "https://schema.management.azure.com/schemas/2019-04-01/deploymentTemplate.js",
"contentVersion": "1.0.0.0",
"parameters": {
  "disks_az104_disk1_name": {
    "defaultValue": "az104-disk3",
    "type": "String"
  }
},
"variables": {},
"resources": [

VERBOSE: Building your Azure drive ...
PS /home/azureuser> New-AzResourceGroupDeployment -ResourceGroupName az104-rg3 -TemplateFile template.json -TemplateParameterFile parameters.js
on

DeploymentName      : template
ResourceGroupName  : az104-rg3
ProvisioningState   : Succeeded
Timestamp          : 3/25/2025 6:21:55 PM
Mode               : Incremental
TemplateLink       :
Parameters         :
                    Name      Value      Type
                    =====
                    disks_az104_disk1_name String
                    "az104-disk3"

Outputs            :
DeploymentDebugLogLevel :
```

```
04-disk3
Name      : az104-disk3
Type      : Microsoft.Compute/disks
Location  : eastus
ExtendedLocation :
Tags      : {}
NetworkAccessPolicy : AllowAll
DiskAccessId :
Tier      :
BurstingEnabled :
PurchasePlan :
SupportsHibernation :
SecurityProfile :
PublicNetworkAccess : Enabled
SupportedCapabilities :
DataAccessAuthMode : None
CompletionPercent :
OptimizedForFrequentAttach :
```

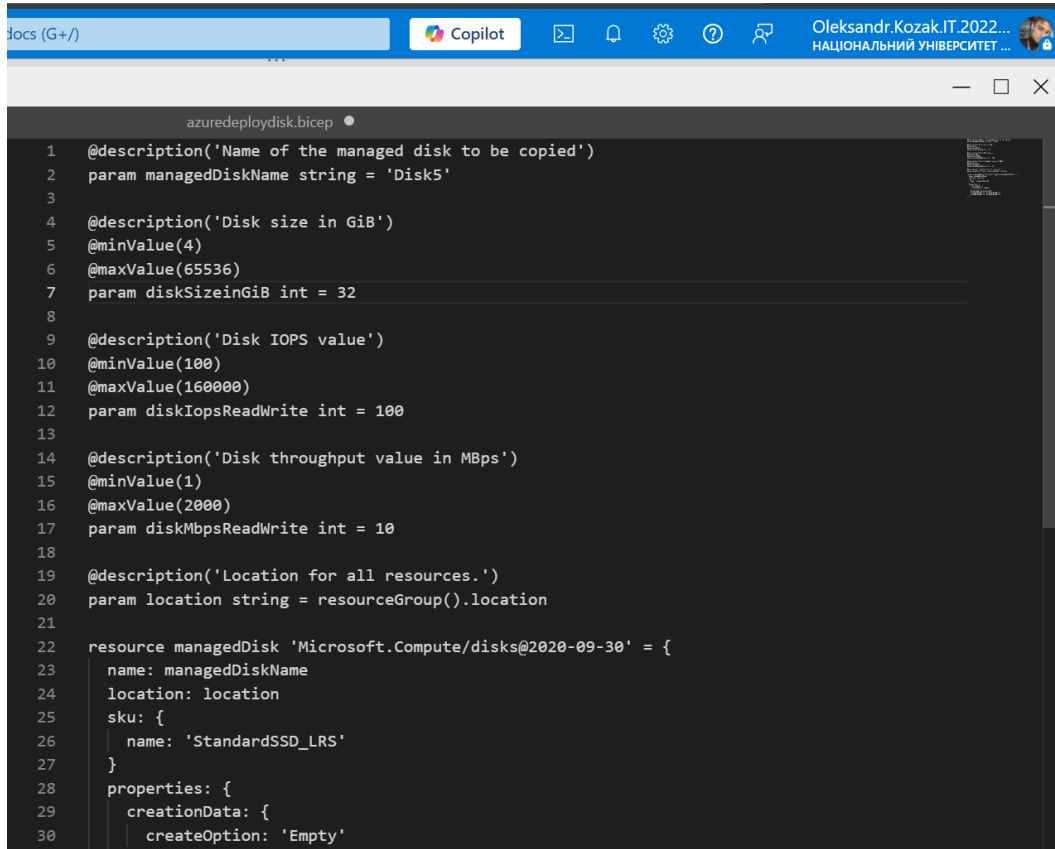
Task 4: Deploy a template with the CLI.

```

azureuser [ ~ ]$ az disk list --output table
Name                ResourceGroup    Location    Zones    Sku                SizeGb    ProvisioningState
-----
az104-disk1         AZ104-RG3        eastus      Standard_LRS  32              Succeeded
az104-disk2         AZ104-RG3        eastus      Standard_LRS  32              Succeeded
az104-disk3         AZ104-RG3        eastus      Standard_LRS  32              Succeeded
az104-disk4         AZ104-RG3        eastus      Standard_LRS  32              Succeeded
azureuser [ ~ ]$

```

Task 5: Deploy a resource by using Azure Bicep.



```

1  @description('Name of the managed disk to be copied')
2  param managedDiskName string = 'Disk5'
3
4  @description('Disk size in GiB')
5  @minValue(4)
6  @maxValue(65536)
7  param diskSizeinGiB int = 32
8
9  @description('Disk IOPS value')
10 @minValue(100)
11 @maxValue(160000)
12 param diskIopsReadWrite int = 100
13
14 @description('Disk throughput value in MBps')
15 @minValue(1)
16 @maxValue(2000)
17 param diskMbpsReadWrite int = 10
18
19 @description('Location for all resources.')
20 param location string = resourceGroup().location
21
22 resource managedDisk 'Microsoft.Compute/disks@2020-09-30' = {
23   name: managedDiskName
24   location: location
25   sku: {
26     name: 'StandardSSD_LRS'
27   }
28   properties: {
29     creationData: {
30       createOption: 'Empty'

```

```

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Name                ResourceGroup    Location    Zones    Sku                SizeGb    ProvisioningState
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az104-disk2         AZ104-RG3        eastus      Standard_LRS  32              Succeeded
az104-disk3         AZ104-RG3        eastus      Standard_LRS  32              Succeeded
az104-disk4         AZ104-RG3        eastus      Standard_LRS  32              Succeeded
Disk5               AZ104-RG3        eastus      StandardSSD_LRS  32              Succeeded
azureuser [ ~ ]$





```

Micro


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Copilot



Home >


 **az104-rg3**   


Resource group




 Create

 Manage view 

 Delete resource group

 Refresh




Essentials


JSON View


Resources


Recommendations


Filter for any field...


Type equals **all** 















 Add filter

 More (1)

Showing 1 to 6 of 6 records. ☐ Show hidden types 

No grouping 

List view 

<input type="checkbox"/>	Name 	Type 	Location 	
<input type="checkbox"/>	 az104-disk1	Disk	East US	
<input type="checkbox"/>	 az104-disk2	Disk	East US	
<input type="checkbox"/>	 az104-disk3	Disk	East US	
<input type="checkbox"/>	 az104-disk4	Disk	East US	
<input type="checkbox"/>	 Disk5	Disk	East US	
<input type="checkbox"/>	 olekasndrstorage	Storage account	East US	