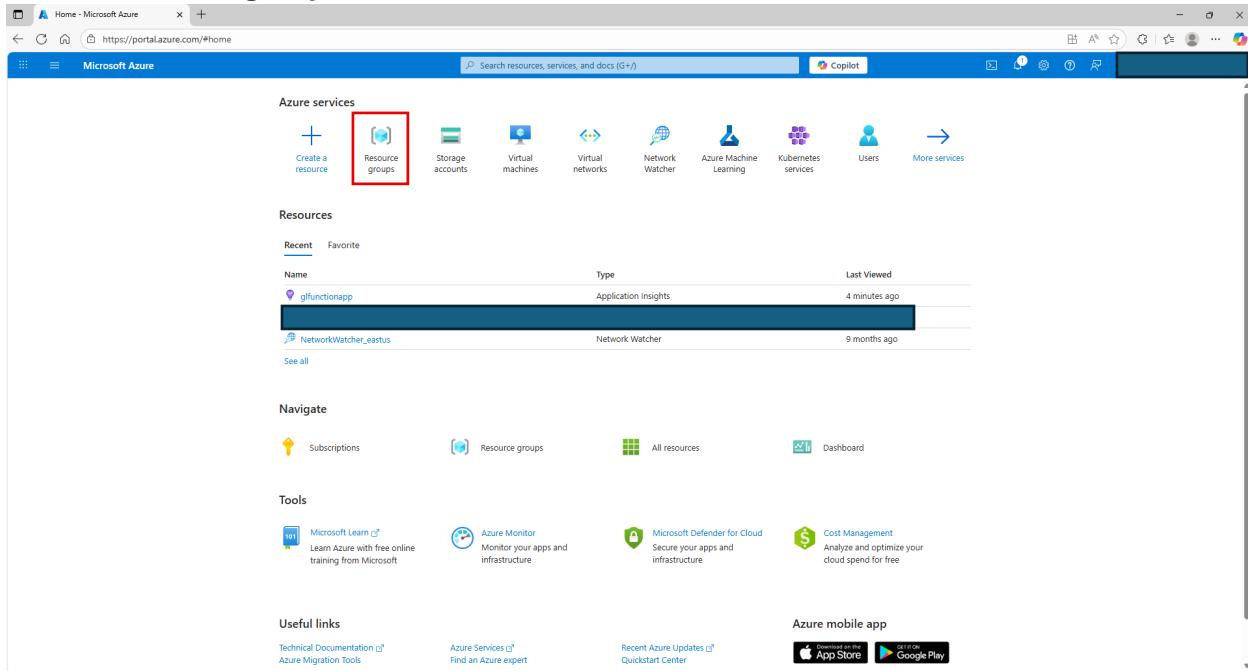
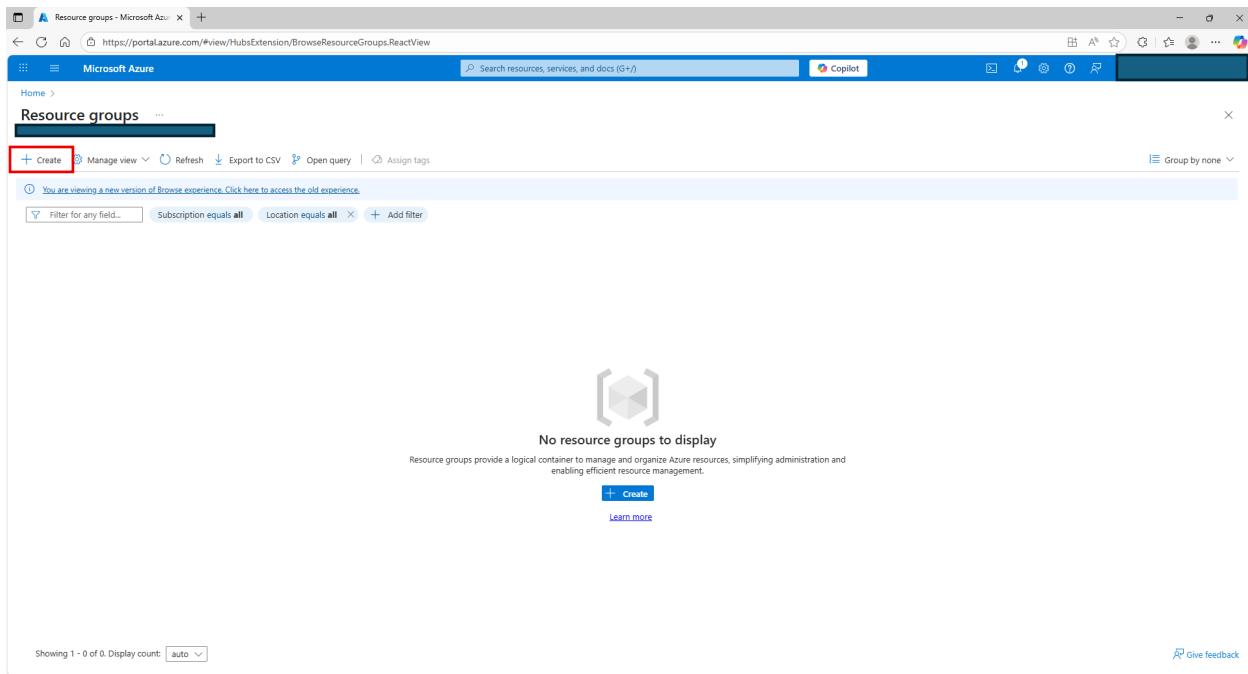


Log into your Azure portal Select Resource groups



The screenshot shows the Microsoft Azure Home page. At the top, there's a navigation bar with icons for Home, Search, Copilot, and other account settings. Below the bar, the 'Azure services' section features a 'Create a resource' button and a 'Resource groups' button, which is highlighted with a red box. Other service icons include Storage accounts, Virtual machines, Virtual networks, Network Watcher, Azure Machine Learning, Kubernetes services, Users, and More services. The 'Resources' section shows a table of recent resources: 'gfunctionapp' (Application Insights, last viewed 4 minutes ago) and 'NetworkWatcher_eastus' (Network Watcher, last viewed 9 months ago). Below this is a 'See all' link. The 'Navigate' section includes links for Subscriptions, Resource groups (highlighted with a red box), All resources, and Dashboard. The 'Tools' section lists Microsoft Learn, Azure Monitor, Microsoft Defender for Cloud, and Cost Management. The 'Useful links' section includes Technical Documentation, Azure Services, Recent Azure Updates, and Azure mobile app download links for App Store and Google Play. At the bottom, there's a note about viewing a new version of the Browse experience.

Select + Create



The screenshot shows the Microsoft Azure Resource groups page. The URL is https://portal.azure.com/#view/HubsExtension/BrowseResourceGroups.ReactView. The page title is 'Resource groups ...'. At the top, there are buttons for '+ Create', 'Manage view', 'Refresh', 'Export to CSV', 'Open query', and 'Assign tags'. A message says 'You are viewing a new version of Browse experience. Click here to access the old experience.' Below this is a search bar and filter options ('Filter for any field...', 'Subscription equals all', 'Location equals all'). The main content area displays a large gray cube icon and the text 'No resource groups to display'. It explains that resource groups simplify administration and enable efficient resource management. There are 'Create' and 'Learn more' buttons. At the bottom, it shows 'Showing 1 - 0 of 0. Display count: auto' and a 'Give feedback' link.

Resource group name: **smbRGjlp**

Select **Review + Create**

Subscription * [Redacted]
Resource group name * **smbRGjlp**
Region * (US) East US

Basics Tags Review + create

Resource group - A container that holds related resources for an Azure solution. The resource group can include all the resources for the solution, or only those resources that you want to manage as a group. You decide how you want to allocate resources to resource groups based on what makes the most sense for your organization. [Learn more](#)

Previous Next **Review + create**

Select **Create**

Automation Link

Basics

Subscription	[Redacted]
Resource group name	smbRGjlp
Region	East US

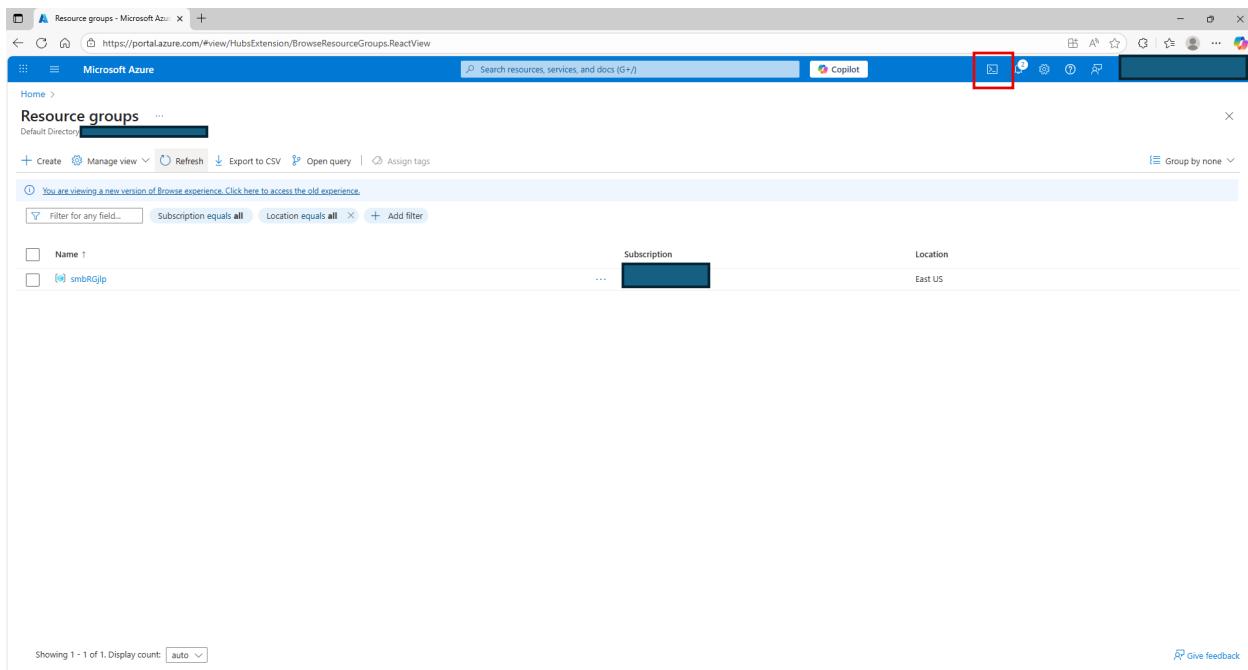
Tags

None

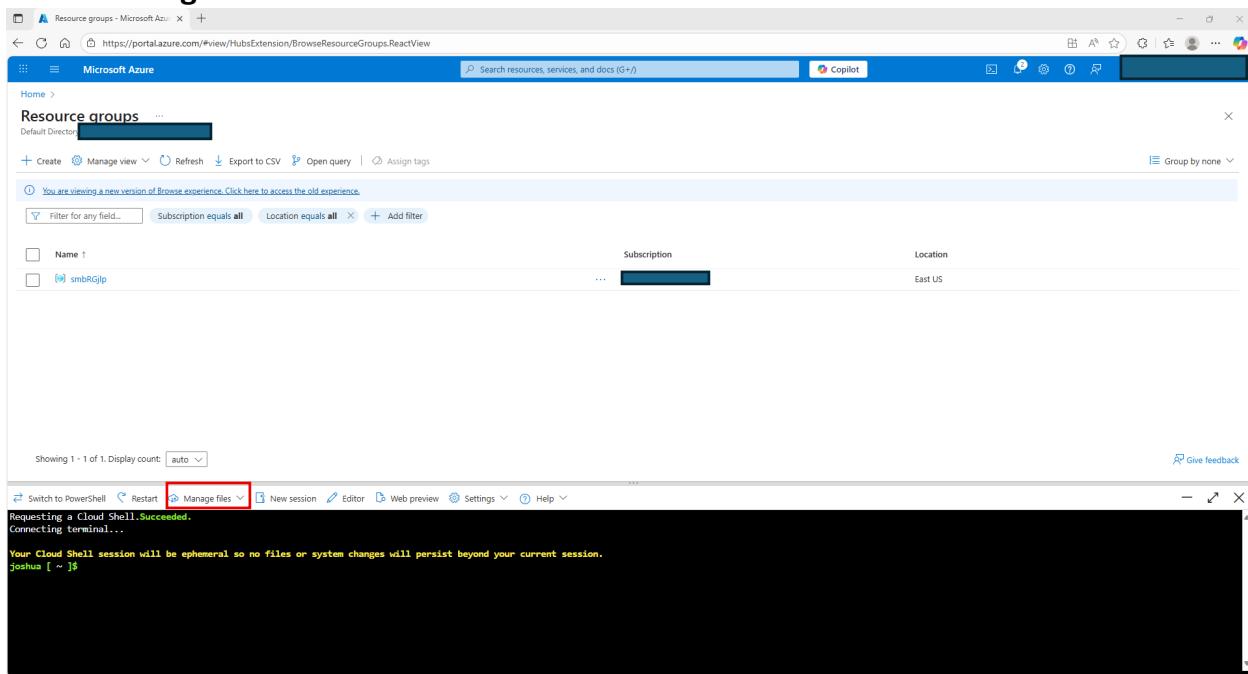
Basics Tags **Review + create**

Previous Next **Create**

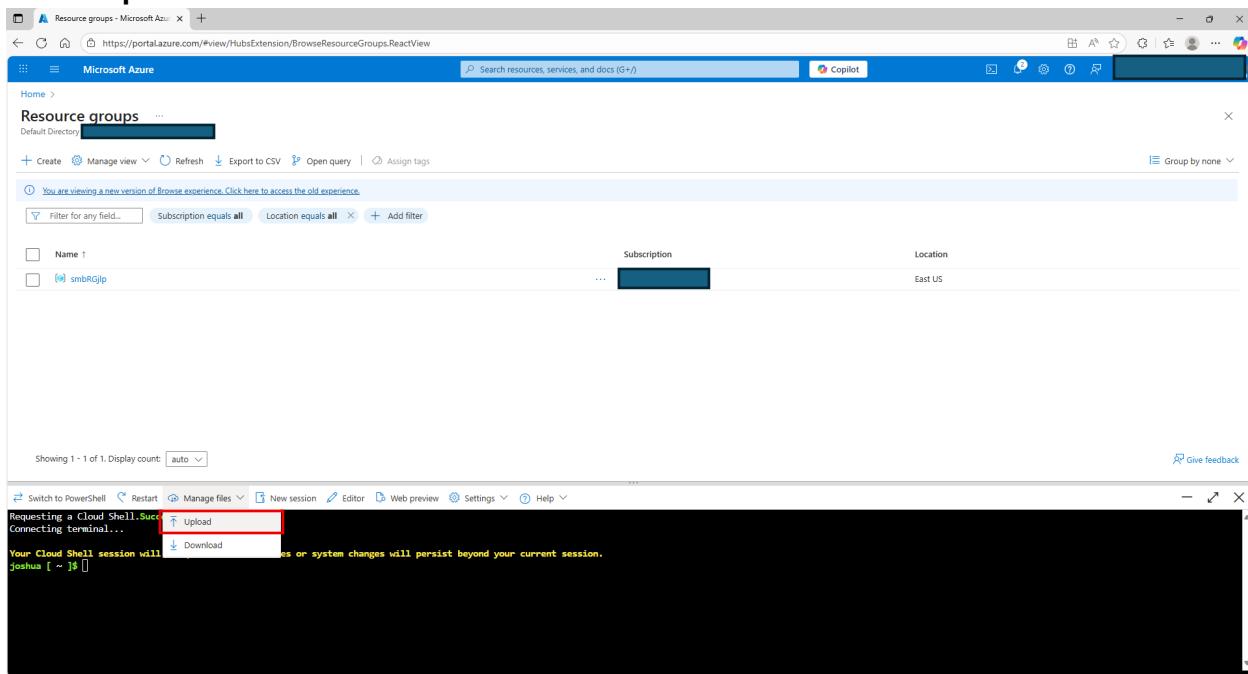
Select Cloud Shell icon



Select Manage files

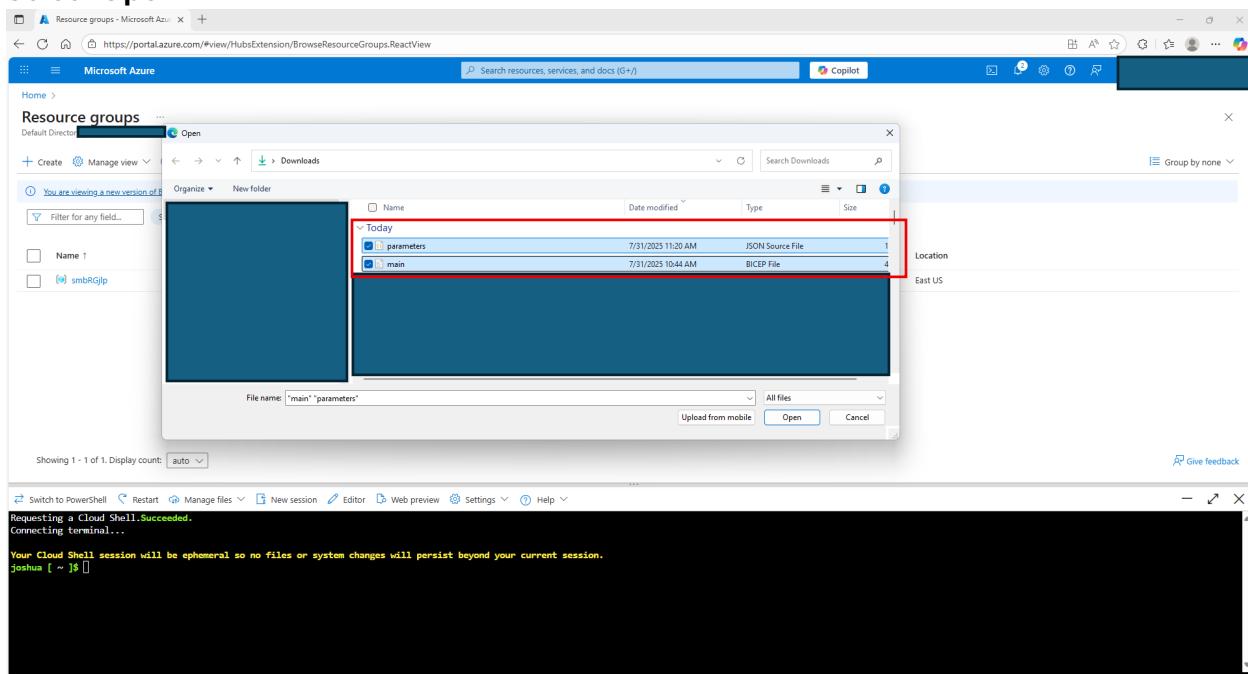


Select Upload



Upload **main.bicep** and **parameters.json** files

Select Open



Successfully uploaded 2 files

A screenshot of the Microsoft Azure portal showing the 'Resource groups' blade. At the top, a success message 'Successfully uploaded 2 files' is displayed in a toast notification. Below the message, there is a 'Show more' link. The main table lists one resource group named 'smbrGjlp'.

Name	Subscription	Location
smbrGjlp	...	East US

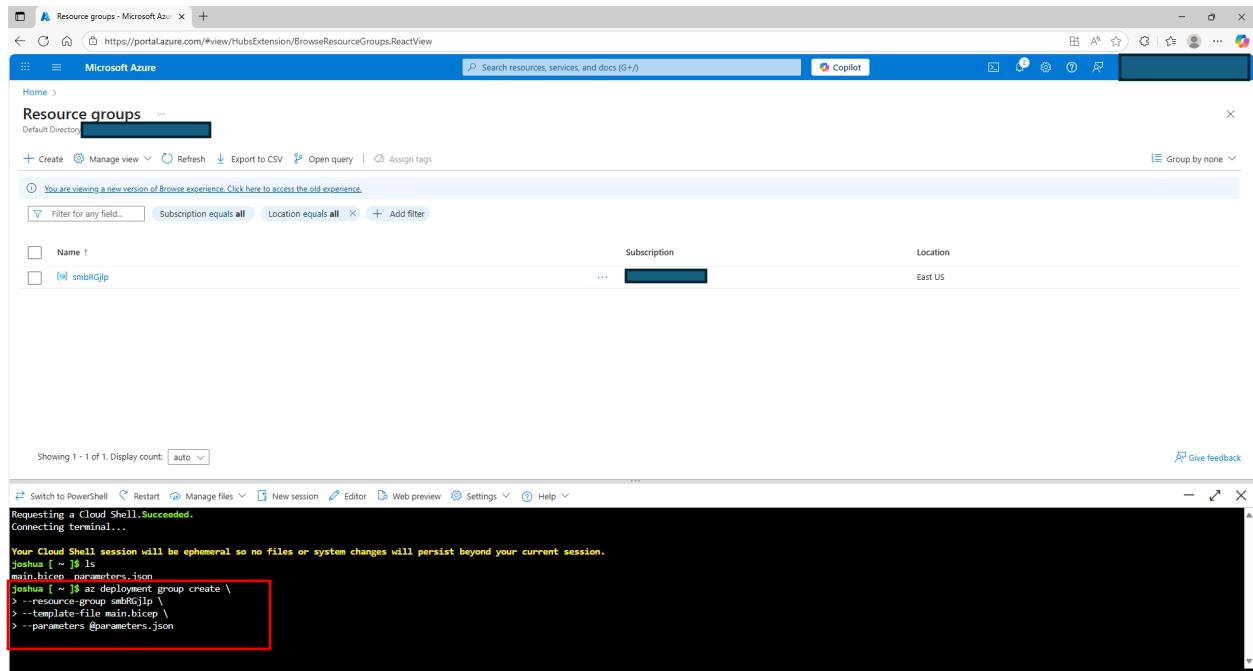
Enter ls to List the files that are uploaded

A screenshot of the Microsoft Azure portal showing the 'Resource groups' blade. Below the 'Successfully uploaded 2 files' message, the terminal window displays the output of the 'ls' command, which shows a single file named 'main.dicep'. A red box highlights this line of text.

```
Requesting a Cloud Shell...Succeeded.  
Connecting terminal...  
Your Cloud Shell session will be ephemeral so no files or system changes will persist beyond your current session.  
joshua [ ~ ]$ ls  
main.dicep parameters.json
```

Deploy the stack with commands:

```
az deployment group create \
--resource-group <your-resource-group> \
--template-file main.bicep \
--parameters @parameters.json
```



The screenshot shows the Microsoft Azure portal interface. At the top, there's a navigation bar with links for Home, Resource groups, and other services. Below the navigation bar, the main content area is titled "Resource groups". It displays a single resource group entry:

Name	Subscription	Location
smbRGjlp	[Subscription icon]	East US

At the bottom of the portal window, there's a Cloud Shell terminal window. The terminal output shows the command being run:

```
Requesting a Cloud Shell...Succeeded.
Connecting terminal...
Your Cloud Shell session will be ephemeral so no files or system changes will persist beyond your current session.
joshua [ ~ ]$ ls
main.bicep parameters.json
joshua [ ~ ]$ az deployment group create \
> --resource-group smbRGjlp \
> --template-file main.bicep \
> --parameters @parameters.json
```

Stack deployed successfully

- **Storage Account**
- **Virtual Machine**
- **Network Interface**
- **Public IP Address**
- **Network Security Group**
- **Disk**
- **Virtual Network**

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes 'smbRGjlp - Microsoft Azure' and 'Compute infrastructure - Microsoft'. The main content area is titled 'smbRGjlp' (Resource group). The 'Overview' tab is selected, displaying basic information: Subscription (moved), Subscription ID, Tags, Deployments (1 Succeeded), and Location (East US). Below this, the 'Resources' section lists seven resources, each with a checkbox, type, name, location, and three-dot ellipsis menu. A red box highlights this list. The resources are:

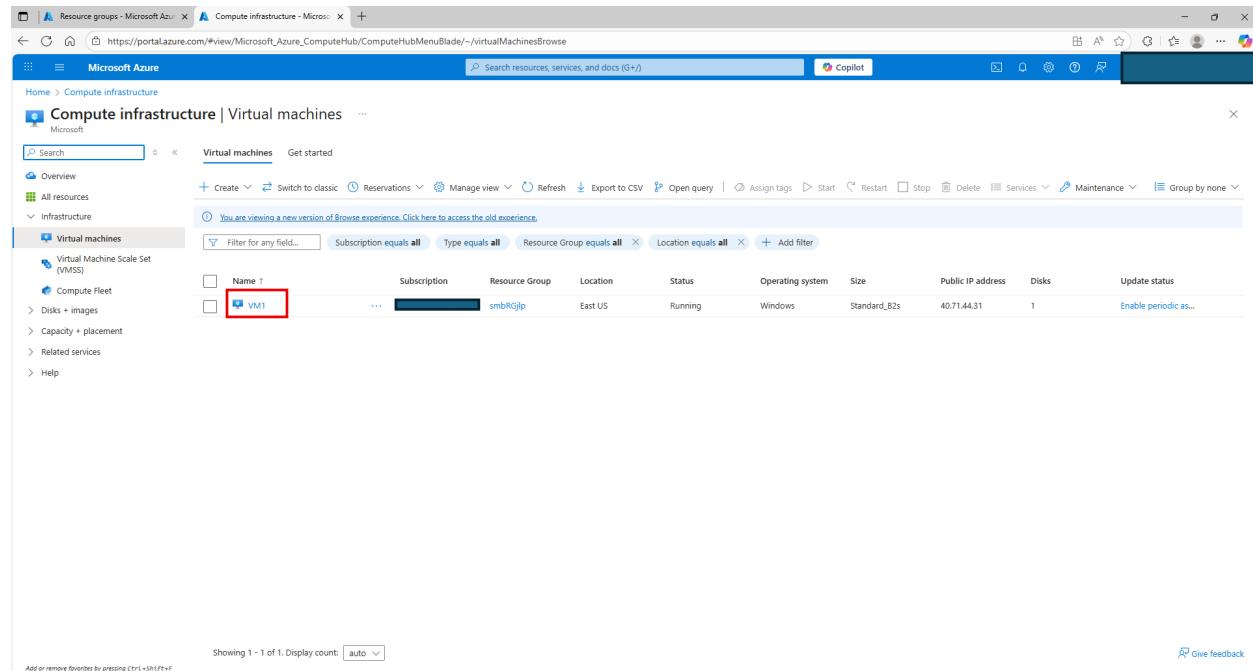
Name	Type	Location
smbstorageaccountbox	Storage account	East US
VM1	Virtual machine	East US
VM1-nic	Network interface	East US
VM1-pip	Public IP address	East US
VM1-nsg	Network security group	East US
VM1-osDisk	Disk	East US
VM1-vnet	Virtual network	East US

At the bottom of the page, there is a message: 'Showing 1 to 7 of 7 records. □ Show hidden types □ Add filter'. The bottom part of the screenshot shows a terminal window with the following JSON output:

```
},
  "resourceGroup": "smbRGjlp",
  "tags": null,
  "type": "Microsoft.Resources/deployments"
}
joshua [ ~ ]$
```

Navigate to your Virtual Machine

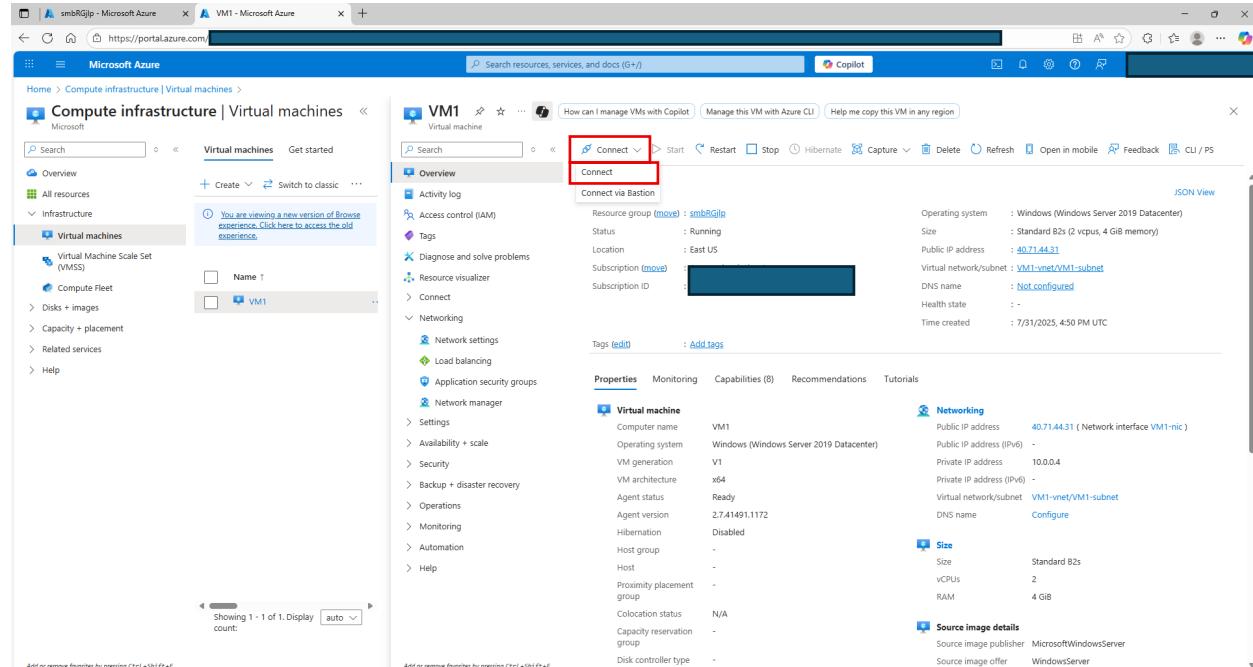
Select VM1



The screenshot shows the Microsoft Azure Compute infrastructure - Virtual machines page. A table lists one virtual machine, VM1. The row for VM1 is highlighted with a red box. The columns include Name, Subscription, Resource Group, Location, Status, Operating system, Size, Public IP address, Disks, and Update status. VM1 details: Name: VM1, Subscription: smbrGjlp, Resource Group: smbrGjlp, Location: East US, Status: Running, Operating system: Windows, Size: Standard_B2s, Public IP address: 40.71.44.31, Disks: 1, Update status: Enable periodic as... . The left sidebar shows navigation options like Overview, Infrastructure, and Virtual machines.

Select Connect

Select Connect



The screenshot shows the Microsoft Azure Compute infrastructure - Virtual machines page for VM1. The 'Connect' button in the top navigation bar is highlighted with a red box. The main pane displays VM1 details: Resource group: smbrGjlp, Status: Running, Location: East US, Subscription: smbrGjlp, Subscription ID: [REDACTED]. The right side shows properties for VM1, including Networking (Public IP address: 40.71.44.31), Size (Standard B2s), and Source image details (Source image publisher: MicrosoftWindowsServer, Source image offer: WindowsServer). The left sidebar shows navigation options like Overview, Infrastructure, and Virtual machines.

Select Check access to confirm inbound NSG rules

The screenshot shows the Microsoft Azure portal interface. On the left, the navigation pane is open with 'Compute infrastructure | Virtual machines' selected. In the center, the 'VM1 | Connect' page is displayed for a virtual machine named 'VM1'. The 'Connect' section is active, showing options like 'Bastion', 'Windows Admin Center', and 'Native RDP'. Under 'Native RDP', the 'Source machine' is listed as Windows, and the 'Destination VM' has a Public IP address of 40.71.44.31 and port 3389. The 'Connection prerequisites' section includes 'VM access' and 'Networking'. The 'VM access' section has a 'Check access' button highlighted with a red box. The 'Networking' section includes 'Network settings', 'Load balancing', 'Application security groups', and 'Network manager'. The 'Username' field is set to 'localadmin'. At the bottom right, there is a 'Download RDP file' button.

Port 3389 is accessible

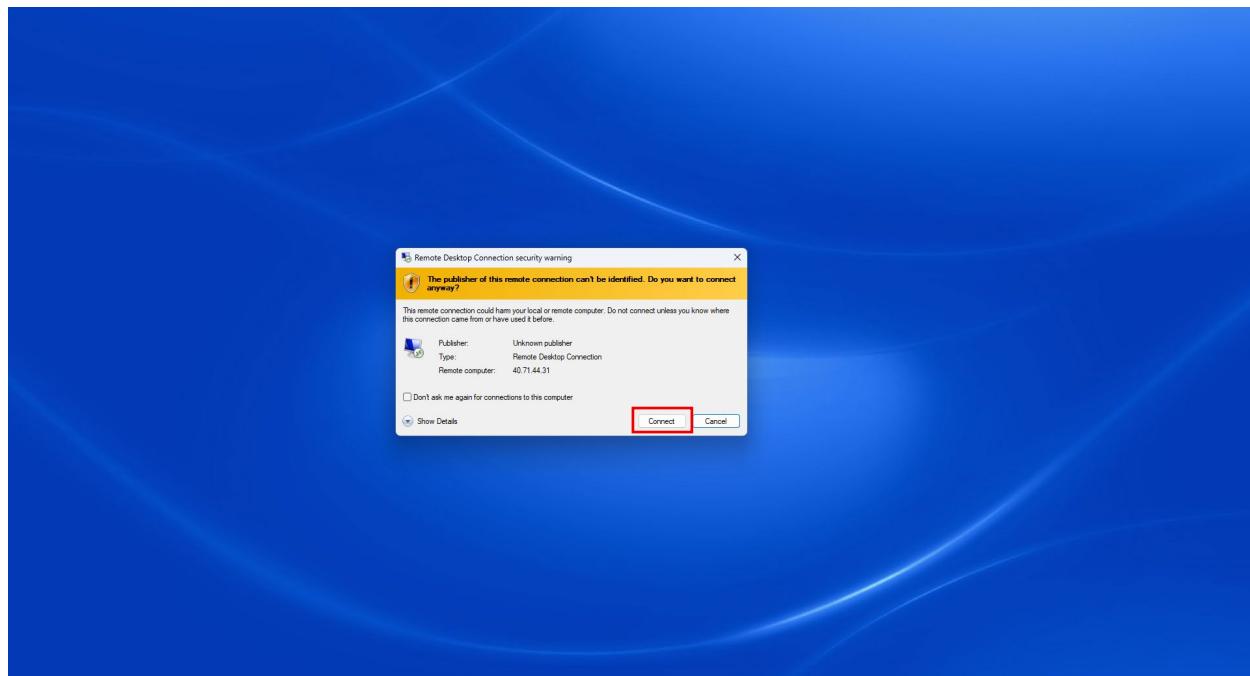
Select Download RDP file

This screenshot is from the same session as the previous one, but it shows the result of clicking the 'Check access' button. A green checkmark icon appears next to the message 'Port 3389 is accessible from source IP(s) [View applied NSG rules]'. The 'Download RDP file' button is also highlighted with a red box. The rest of the interface remains the same, showing the 'Native RDP' configuration and the 'Networking' section below it.

Select Open file

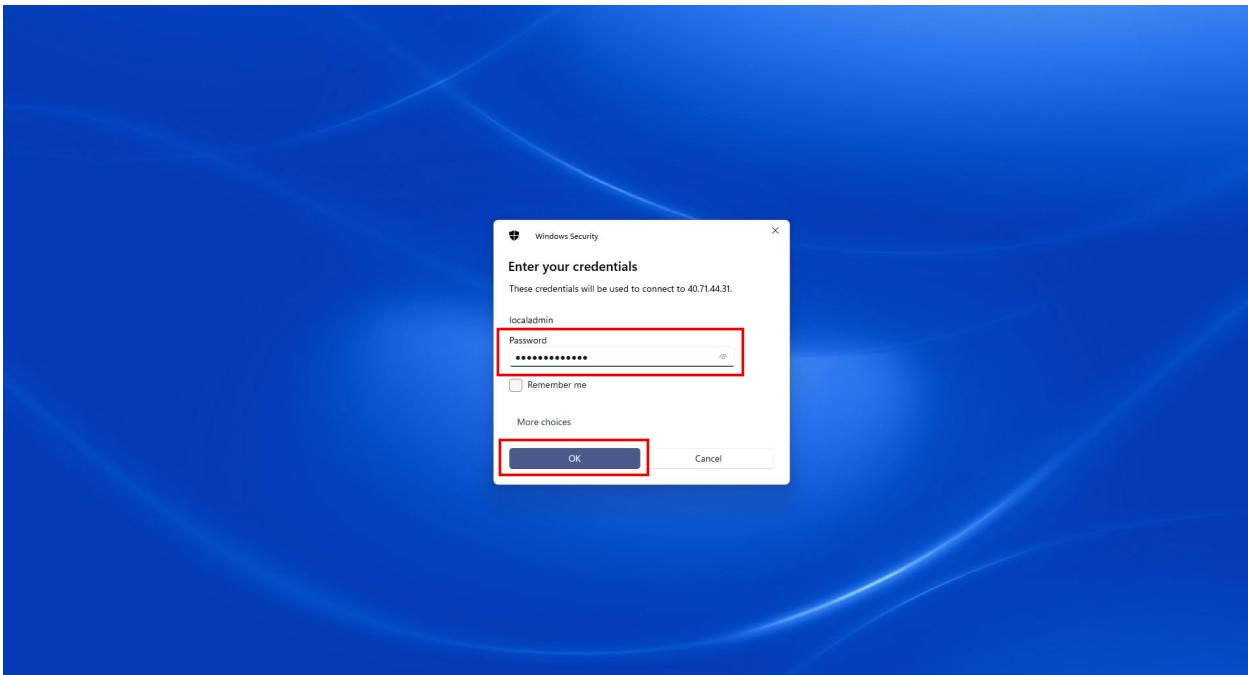
The screenshot shows the Microsoft Azure portal interface. On the left, the navigation menu is visible with 'Compute infrastructure' selected. In the center, the 'Virtual machines' section is shown, with 'VM1' selected. On the right, the 'VM1 | Connect' page is displayed. At the top right of this page, there is a card for 'VM1.rdp'. A red box highlights the 'Open file' link next to the file icon in the card's header.

Select Connect

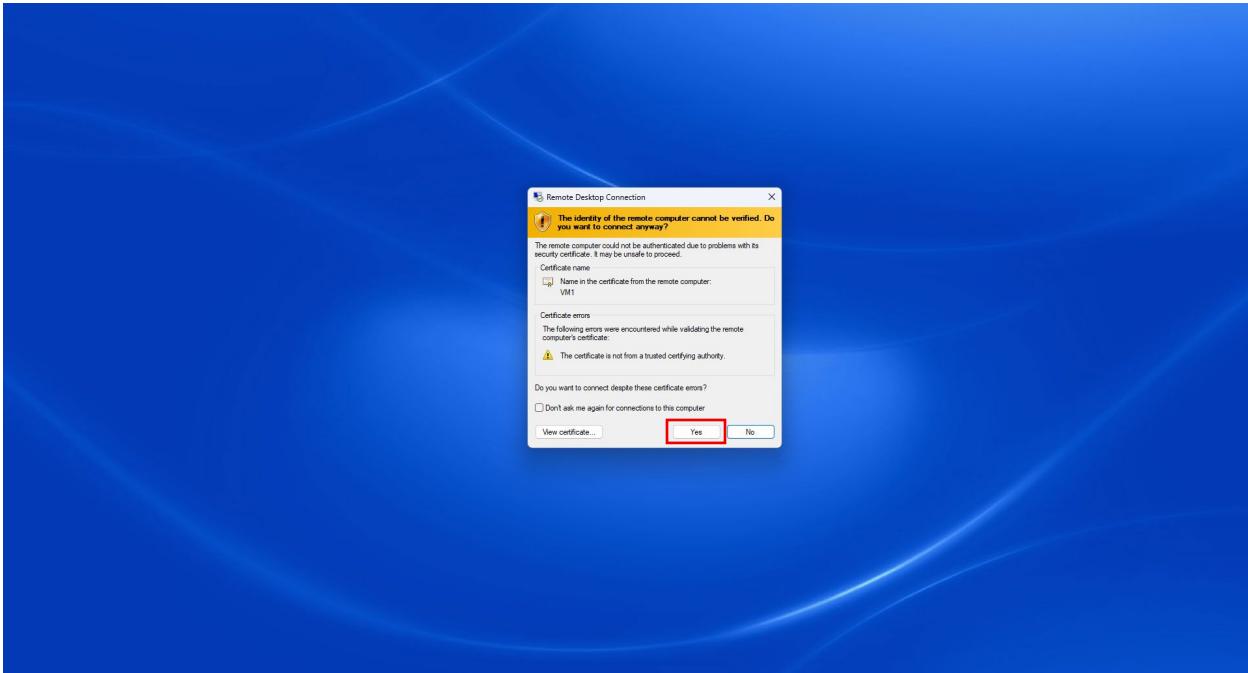


Enter **password** from **parameters.json** file

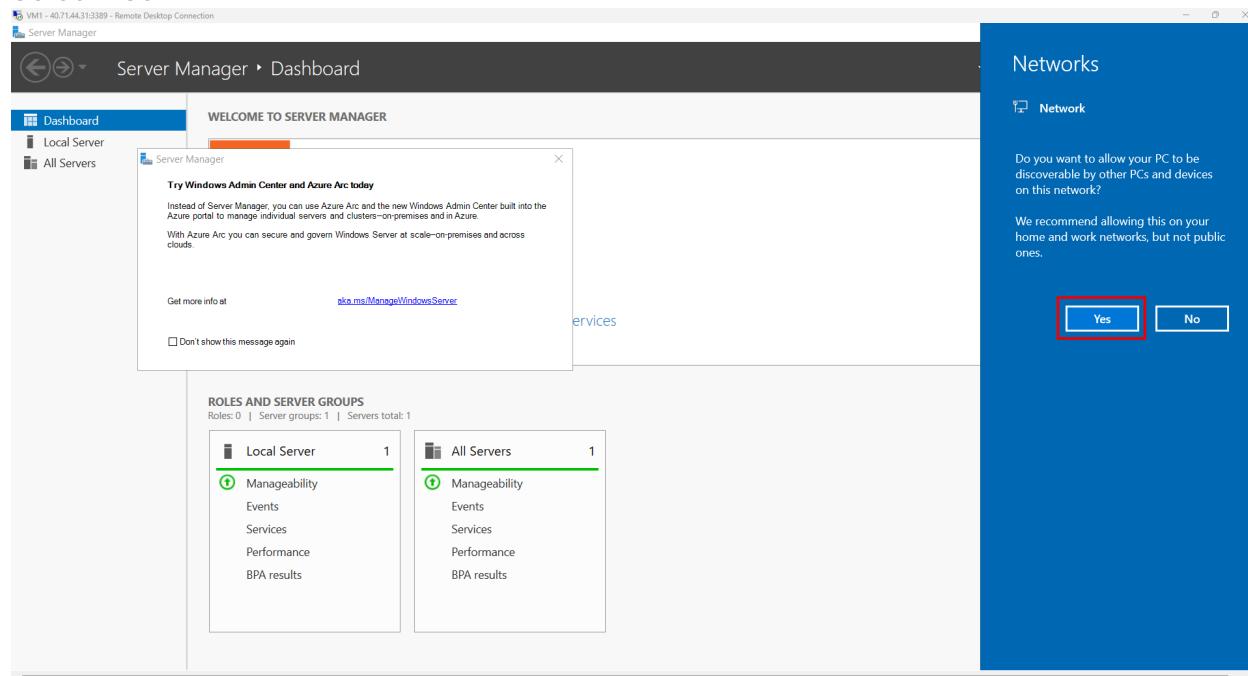
Select **OK**



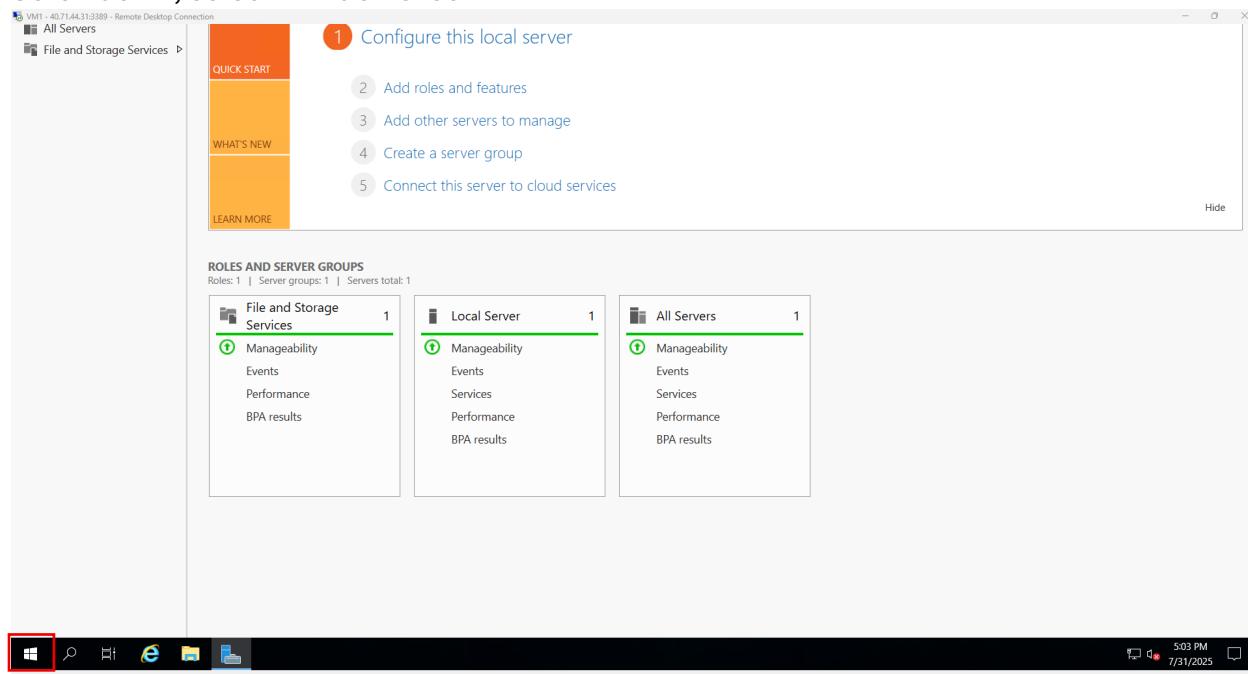
Select **Yes**



Select Yes

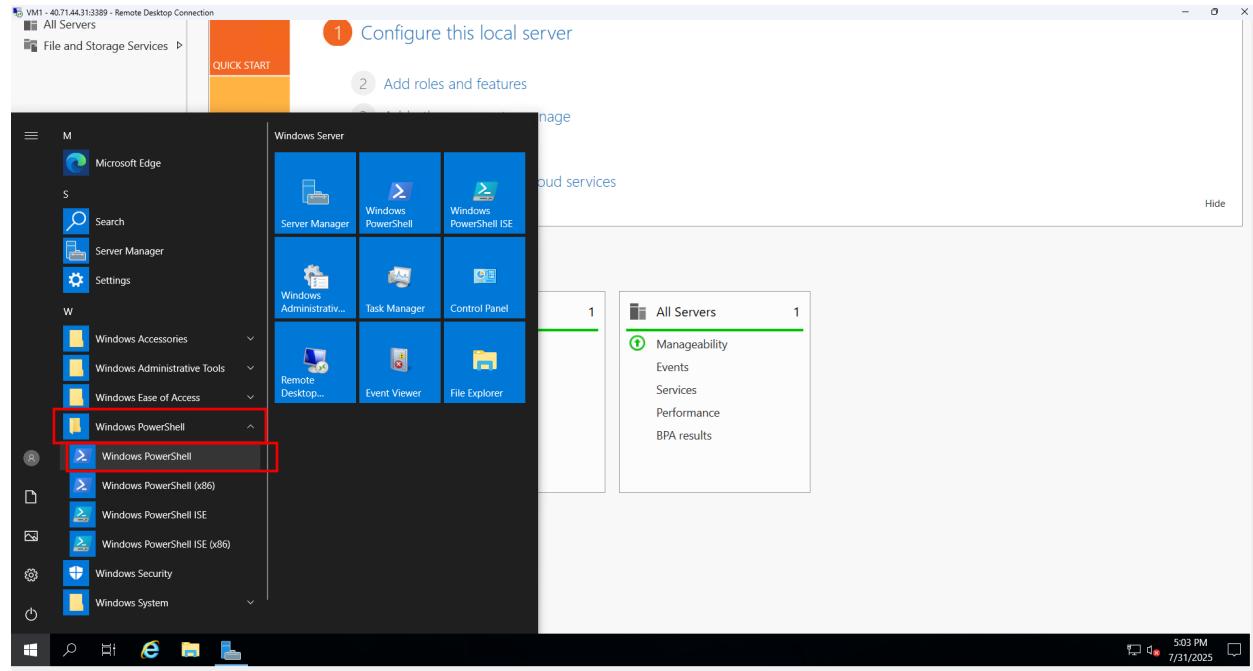


Scroll down, select Windows icon

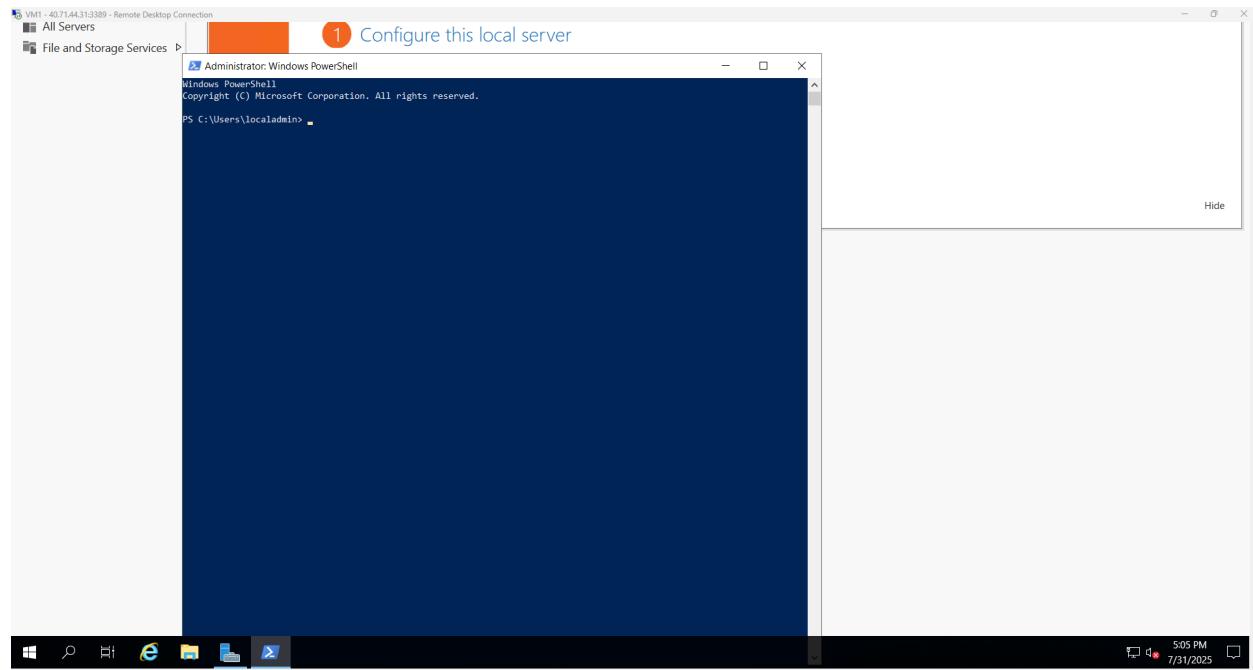


Select Windows PowerShell

Select Windows PowerShell



Administrator Windows PowerShell opens



Navigate to Storage account

Select Data storage

Select File shares

The screenshot shows the Microsoft Azure portal interface for managing a storage account named 'smbstorageaccountxxx'. The left sidebar navigation menu is visible, with 'File storage' highlighted by a red box. The main content area displays the storage account overview, including essential details like Resource group (smbStorage), Location (eastus), and Subscription ID. It also shows blob service and file service configurations. The 'File service' section is expanded, showing settings such as Large file share (Enabled), Identity-based access (Not configured), and Default share-level permissions (Disabled). A red box highlights the 'File shares' link in the sidebar.

Select qfileshare

The screenshot shows the Microsoft Azure portal interface for managing file shares within the 'smbstorageaccountxxx' storage account. The 'File shares' section is highlighted with a red box in the sidebar. The main content area lists existing file shares, with one named 'qfileshare' highlighted by a red box. The table provides details for each share, including Name, Modified date, Access tier, and Quota.

Name	Modified	Access tier	Quota
qfileshare	7/31/2023, 11:50:32 AM	Transaction optimized	100 GiB

Select Upload

The screenshot shows the Microsoft Azure portal interface. The URL in the address bar is <https://portal.azure.com/>. The page title is "qsfileshare - Microsoft Azure". The main content area displays the "Overview" tab for the "qsfileshare" SMB File share. Key details shown include:

- Storage account:** smbstorageaccount00x
- Resource group (move):** smb00jlp
- Location:** East US
- Subscription (move):** [Redacted]
- Subscription ID:** [Redacted]
- Share URL:** https://smbstorageaccount00x.file.core.windows.net/qsfileshare
- Redundancy:** Locally-redundant storage (LRS)
- Configuration modified:** 7/31/2025, 11:50:32 AM

The "Properties" tab is selected. Under "Size", it shows Maximum storage (GiB) as 102400, Used storage capacity (GiB) as 0, and Access tier as Transaction optimized. Under "Performance", IOPS is listed as Varies by region, and Throughput (MiB/sec) is also listed as Varies by region. Under "Backup", there are 0 snapshots, Last modified is not specified, and Backup is set to Not configured. Under "Feature status", Soft delete is set to 7 days and Large file shares is Enabled. Under "Identity-based access", Directory service is set to Not configured and Domain is listed as -. Under "SMB protocol settings", Security profile is set to Maximum compatibility, and SMB protocol versions, SMB channel encryption, Authentication mechanisms, and Kerberos ticket encryption are all listed as -. A red box highlights the "Upload" button at the top of the page.

Open Notepad

Save a blank qsTestFile.txt

The screenshot shows the Microsoft Azure portal interface. The URL in the address bar is <https://portal.azure.com/>. The page title is "qsfileshare - Microsoft Azure". The main content area displays the "Overview" tab for the "qsfileshare" SMB File share. In the foreground, a local Windows file dialog is open, showing a "Save as" dialog box. The file name is "qsTestFile.txt" and the save type is "Text documents (*.txt)". The "Save" button is highlighted with a red box. The background shows the Azure portal with the "Upload files" button highlighted with a red box.

Drop into the qsfileshare

Select Upload

The screenshot shows the Microsoft Azure portal with the URL <https://portal.azure.com/> in the address bar. The page title is "Upload files - Microsoft Azure". On the left, there's a sidebar with "smbRGJip - Microsoft Azure" and "VM1 - Microsoft Azure" tabs. The main content area shows the "qsfileshare" file share under "File shares". A red box highlights the "Upload" button in the top navigation bar. To its right, a large red box highlights the "Upload files" section. This section contains a dashed box for dragging and dropping files, with the text "1 file(s) selected: qsTestFile.txt" and "Drag and drop files here or Browse for files". Below this is a checkbox for "Overwrite if files already exist" and a prominent blue "Upload" button.

Select Connect

The screenshot shows the Microsoft Azure portal with the URL <https://portal.azure.com/> in the address bar. The page title is "qsfileshare - Microsoft Azure". The left sidebar shows "smbRGJip - Microsoft Azure" and "VM1 - Microsoft Azure" tabs. The main content area shows the "qsfileshare" file share under "File shares". A red box highlights the "Connect" button in the top navigation bar. The rest of the interface is similar to the "Upload" screen, including the "Share URL" (https://smbstorageaccountbox.file.core.windows.net/qsfileshare), "Redundancy" (Locally-redundant storage (LRS)), and "Configuration modified" (7/31/2025, 11:50:32 AM). The "Feature status" section shows "Soft delete" (7 days), "Large file shares" (Enabled), and "Identity-based access" (Not configured). The "SMB protocol settings" section includes "Security profile" (Maximum compatibility), "SMB protocol versions" (-), "SMB channel encryption" (-), "Authentication mechanisms" (-), and "Kerberos ticket encryption" (-).

Select Show Script

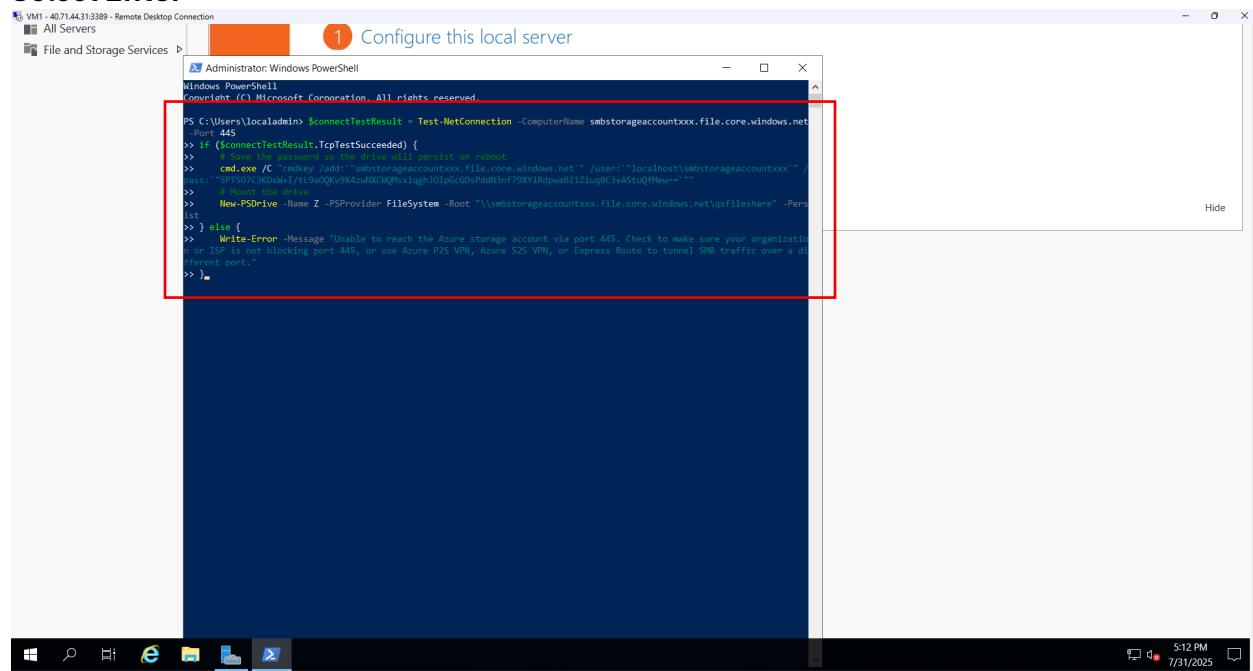
The screenshot shows the Microsoft Azure portal interface. In the center, there's a detailed view of an Azure file share named 'qfshare'. On the right side, under the 'Connect' heading, there's a section for Windows users. Within this section, a button labeled 'Show Script' is highlighted with a red box. Below the button, there's a script block containing PowerShell commands. At the bottom right of the script block, there's a small 'Copied' message with a clipboard icon.

Select Copy to clipboard

This screenshot is similar to the previous one but shows the 'Copy to clipboard' action instead. The 'Copy to clipboard' button is highlighted with a red box. The script block below it also contains the same PowerShell commands as the previous screenshot. The 'Copied' message with the clipboard icon is visible at the bottom right of the script block.

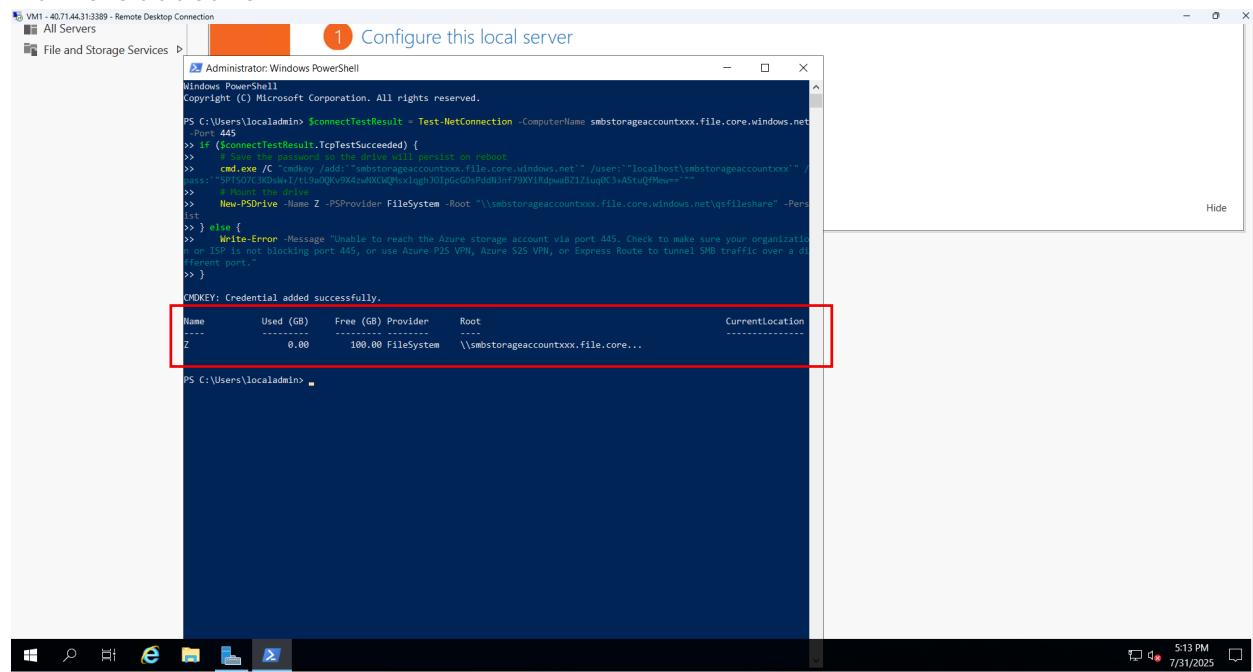
Paste (Ctrl+V) into Administrator: Windows PowerShell

Select Enter



```
PS C:\Users\localadmin> $connectTestResult = Test-NetConnection -ComputerName smbstorageaccountxxx.file.core.windows.net -Port 445
>>> if ($connectTestResult.TcpTestSucceeded) {
>>>     # Save the password so the drive will persist on reboot
>>>     cmd.exe /C "cmdkey /add:smbstorageaccountxxx.file.core.windows.net" /user:"localhost\smbstorageaccountxxx"
>>>     <snip>
>>>     # Mount the drive
>>>     New-PSDrive -Name Z -PSProvider FileSystem -Root "\\\smbstorageaccountxxx.file.core.windows.net\qfileshare" -Persist
>>> } else {
>>>     Write-Error -Message "Unable to reach the Azure storage account via port 445. Check to make sure your organization's ISP is not blocking port 445, or use Azure P2S VPN, Azure S2S VPN, or Express Route to tunnel SMB traffic over a different port."
>>> }
```

Z drive is added to VM1



```
PS C:\Users\localadmin> $connectTestResult = Test-NetConnection -ComputerName smbstorageaccountxxx.file.core.windows.net -Port 445
>>> if ($connectTestResult.TcpTestSucceeded) {
>>>     # Save the password so the drive will persist on reboot
>>>     cmd.exe /C "cmdkey /add:smbstorageaccountxxx.file.core.windows.net" /user:"localhost\smbstorageaccountxxx"
>>>     <snip>
>>>     # Mount the drive
>>>     New-PSDrive -Name Z -PSProvider FileSystem -Root "\\\smbstorageaccountxxx.file.core.windows.net\qfileshare" -Persist
>>> } else {
>>>     Write-Error -Message "Unable to reach the Azure storage account via port 445. Check to make sure your organization's ISP is not blocking port 445, or use Azure P2S VPN, Azure S2S VPN, or Express Route to tunnel SMB traffic over a different port."
>>> }

CMDKEY: Credential added successfully.

Name      Used (GB)  Free (GB) Provider   Root                               CurrentLocation
----      -----  -----  -----  \\\smbstorageaccountxxx.file.core...  

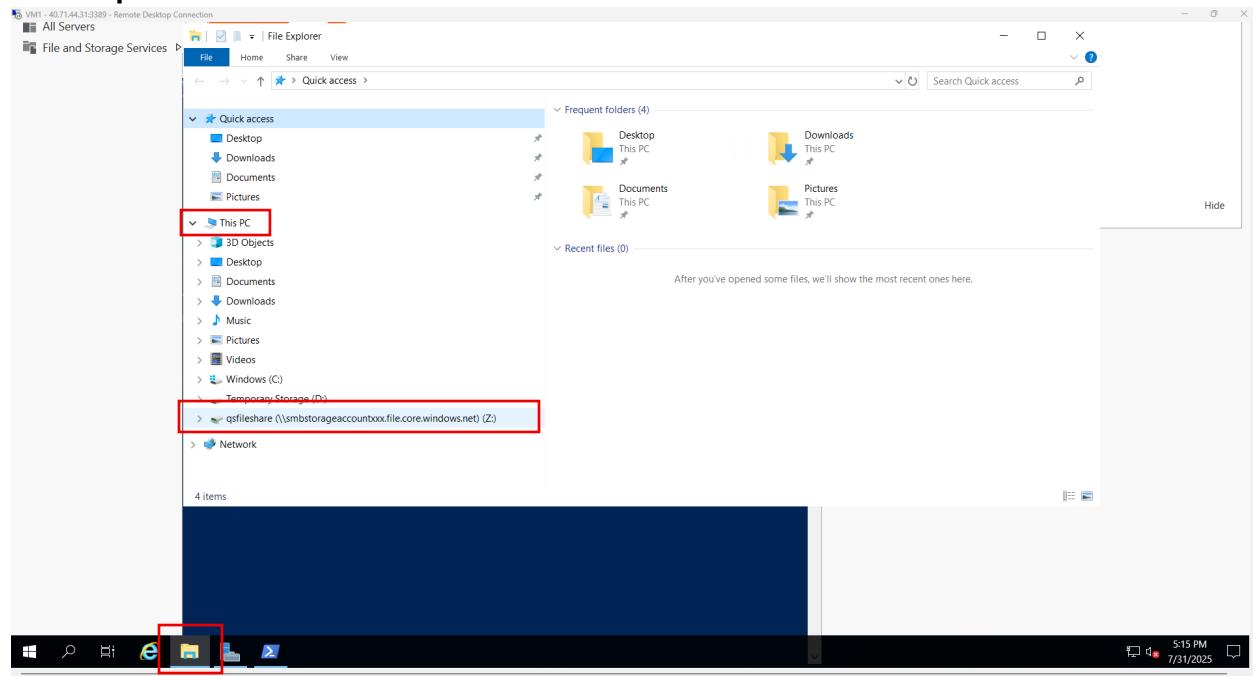

| Name | Used (GB) | Free (GB) | Provider   | Root                                 | CurrentLocation |
|------|-----------|-----------|------------|--------------------------------------|-----------------|
| Z    | 0.00      | 100.00    | FileSystem | \\\smbstorageaccountxxx.file.core... |                 |


PS C:\Users\localadmin>
```

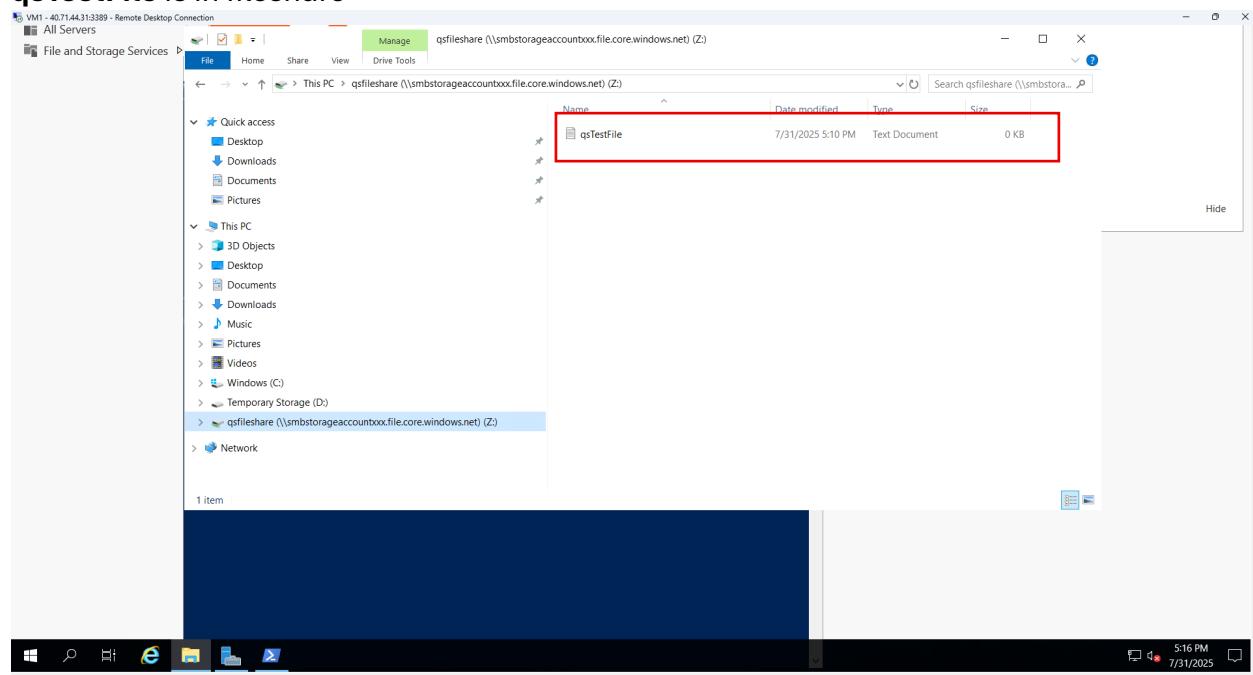
Select **File folder**

Select **dropdown to This PC**

Select **qsfileshare Z: drive**



qsTestFile is in fileshare



Navigate to qsfileshare in portal

Select **Operations**

Select **Snapshots**

Select **+ Add snapshot**

The screenshot shows the Microsoft Azure portal interface. The top navigation bar has tabs for 'smbRQip - Microsoft Azure', 'VM1 - Microsoft Azure', and 'qsfileshare - Microsoft Azure'. The main content area is titled 'qsfileshare | Snapshots' and shows a table with columns: Name, Date created, Initiator, and Comment. A single row is present: 'No file share snapshots found.' Below the table, there's a search bar, a refresh button, and a delete button. On the left, a sidebar menu is open under 'Operations', with 'Solutions' selected. The 'Add snapshot' button is highlighted with a red box.

Select **OK**

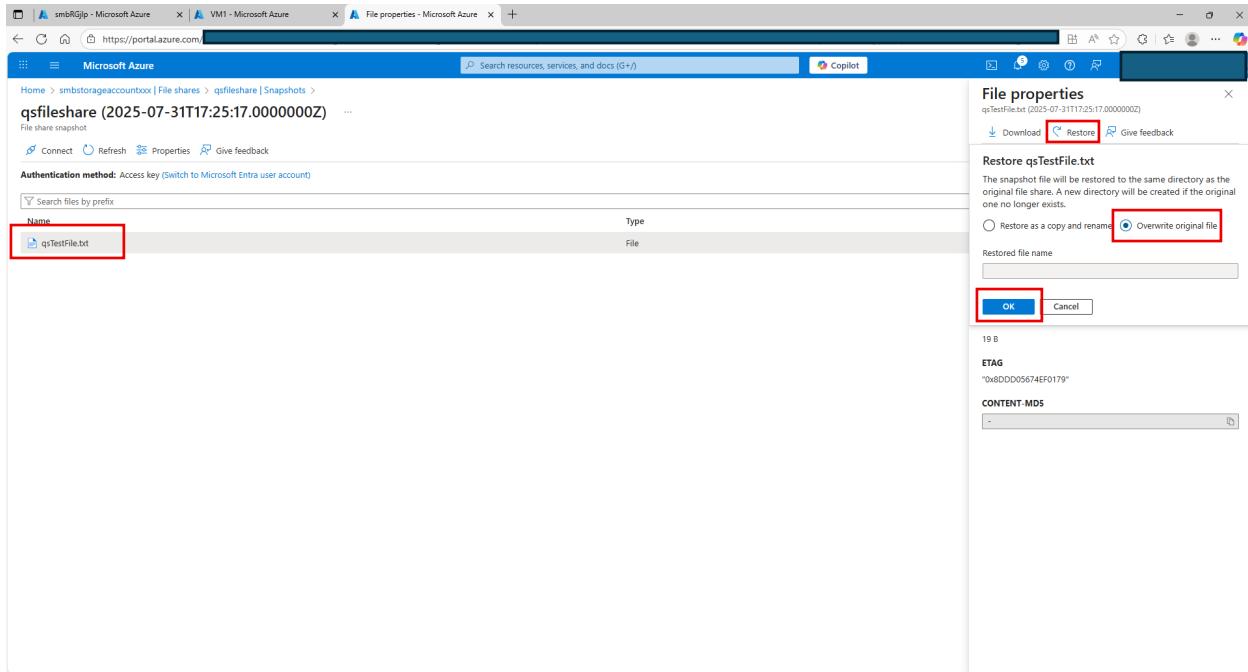
The screenshot shows the 'Add snapshot' dialog box from the previous step. It has a title 'Add snapshot' and a 'Comment' input field containing the text 'Optional'. At the bottom are two buttons: 'OK' and 'Cancel', with 'OK' highlighted with a red box.

Select **qsTestFile.txt**

Select **Restore**

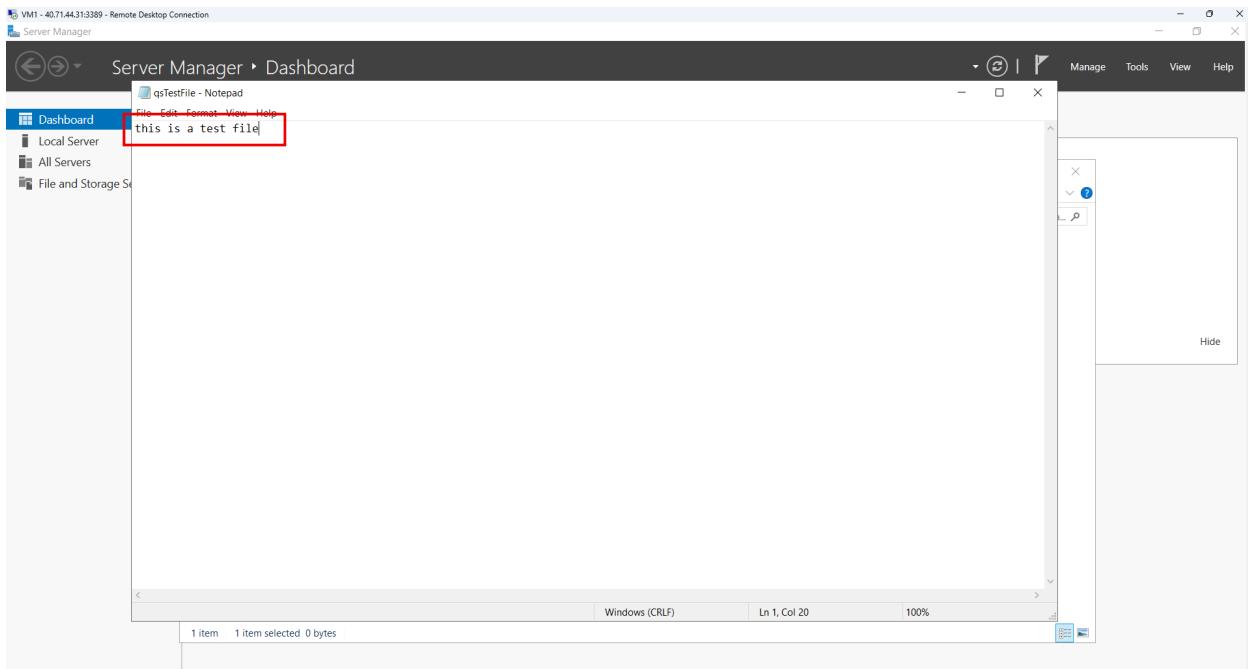
Select **Overwrite original file**

Select **OK**

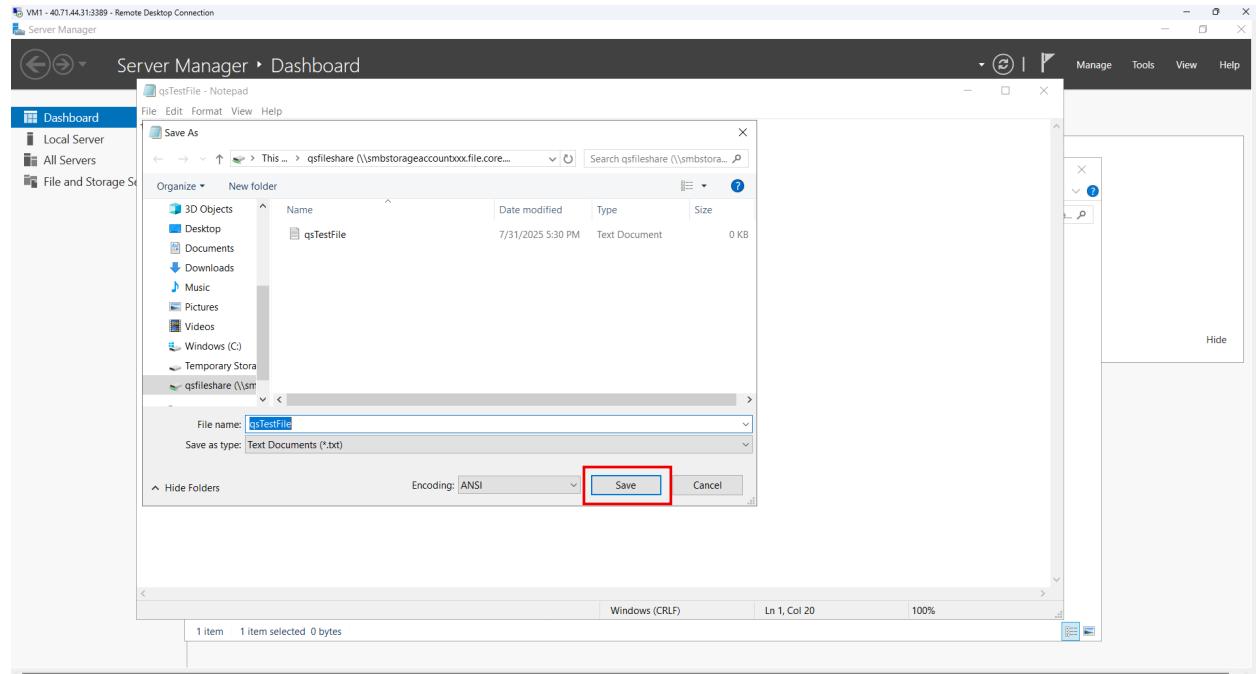


Open the **qsTestFile** in your VM1

Enter **this is a test file**



Select File
Select Save As
Select Save



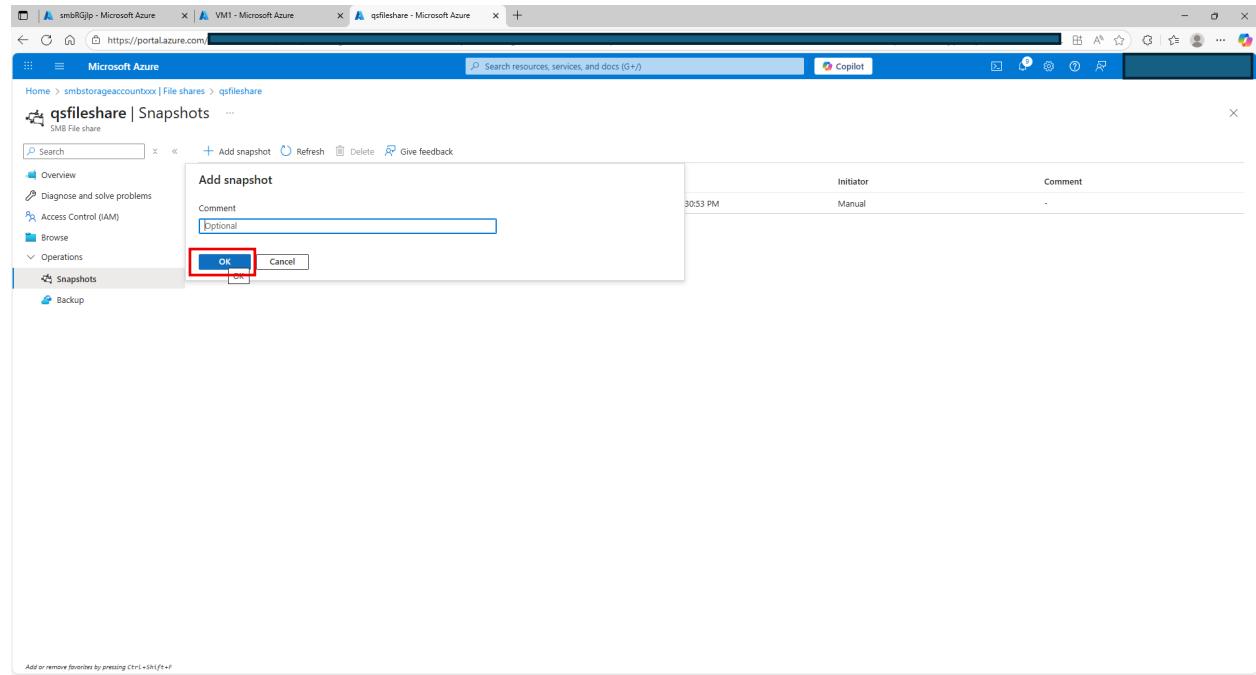
Select + Add snapshot

The screenshot shows the 'SMB File share' snapshots page in the Microsoft Azure portal. The interface includes:

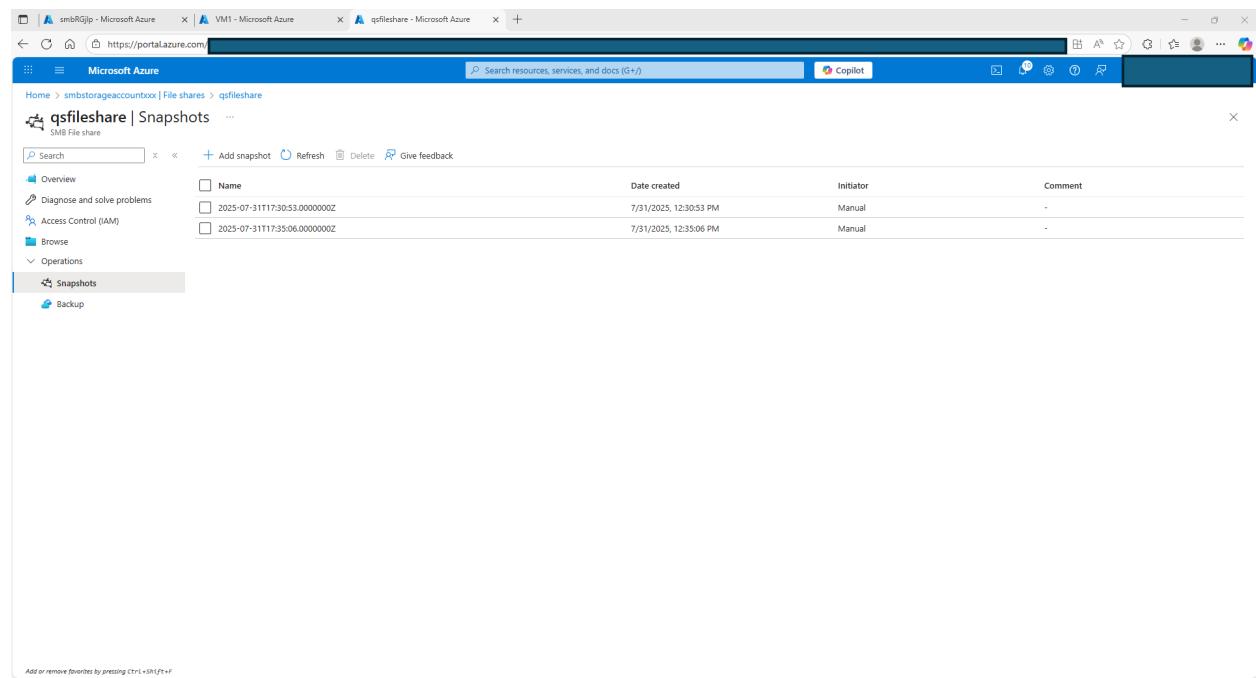
- A left sidebar with 'Overview', 'Diagnose and solve problems', 'Access Control (IAM)', 'Browse', 'Operations', 'Solutions' (selected), and 'Backup'.
- A top navigation bar with tabs for 'smbr01 - Microsoft Azure', 'VM1 - Microsoft Azure', and 'qsfileshare - Microsoft Azure'.
- A search bar at the top right.
- A main table listing snapshots:

Name	Date created	Initiator	Comment
2025-07-31T17:30:53.000000Z	7/31/2025, 12:30:53 PM	Manual	-

Select OK



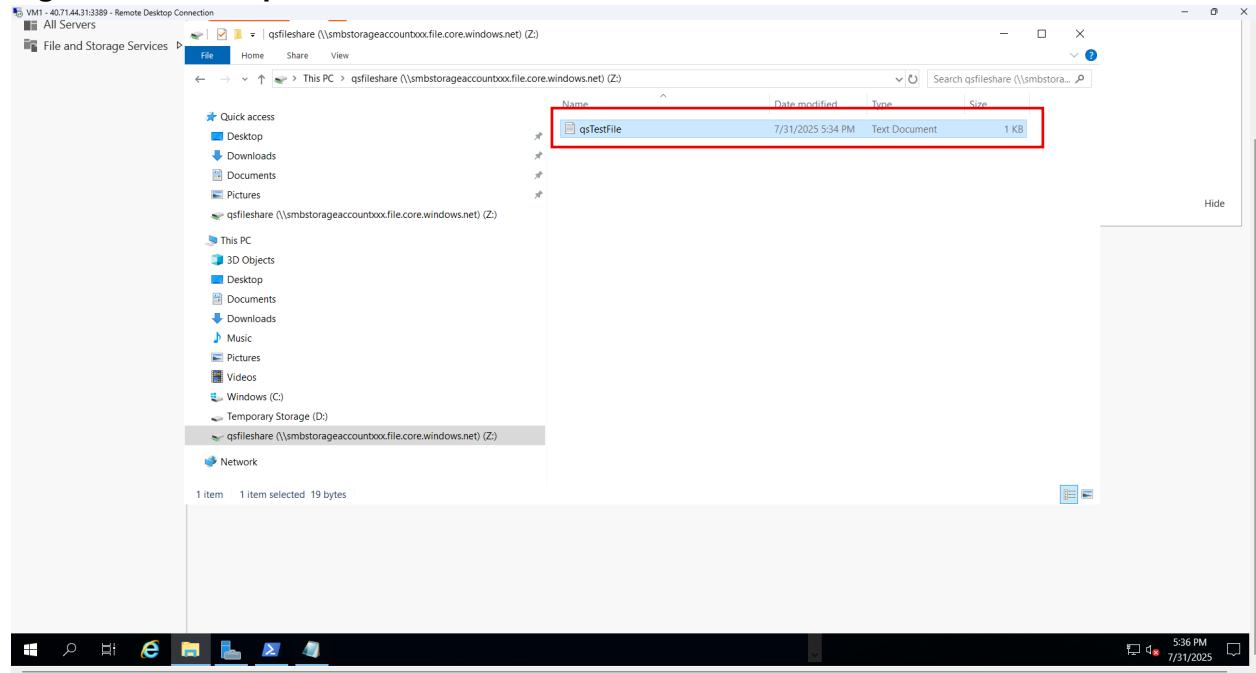
The screenshot shows the Azure portal interface for managing file shares. The current view is 'SMB File share' under 'File shares'. A modal dialog box titled 'Add snapshot' is open, prompting for a comment. The 'Comment' field contains the text 'Optional'. At the bottom of the dialog, there are two buttons: 'OK' (highlighted with a red box) and 'Cancel'.



The screenshot shows the 'SMB File share' page in the Azure portal. The 'Solutions' section is visible on the left. The main area displays the 'SMB File share' settings. Below this, the 'Solutions' section is shown again. The 'Solutions' section includes a 'File shares' tab, which is currently selected, and a 'File shares' table with two entries:

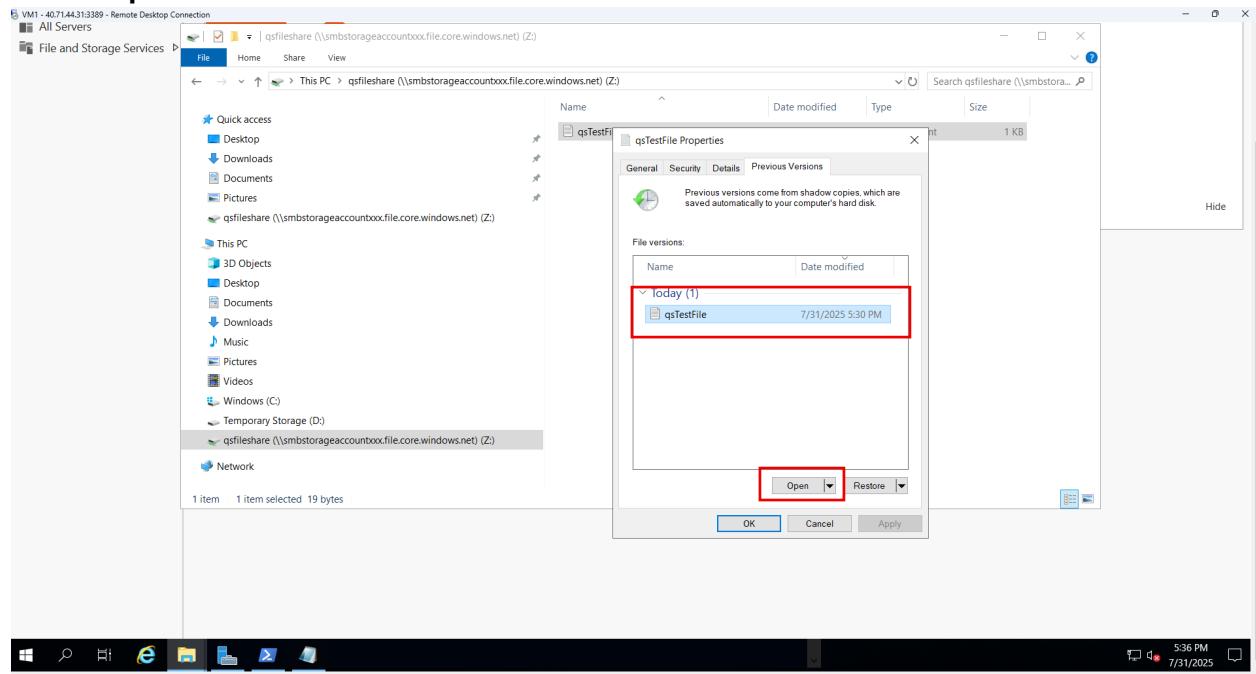
Name	Date created	Initiator	Comment
2025-07-31T173053.000000Z	7/31/2025, 12:30:53 PM	Manual	-
2025-07-31T173056.000000Z	7/31/2025, 12:35:06 PM	Manual	-

Right click on the qsTestFile

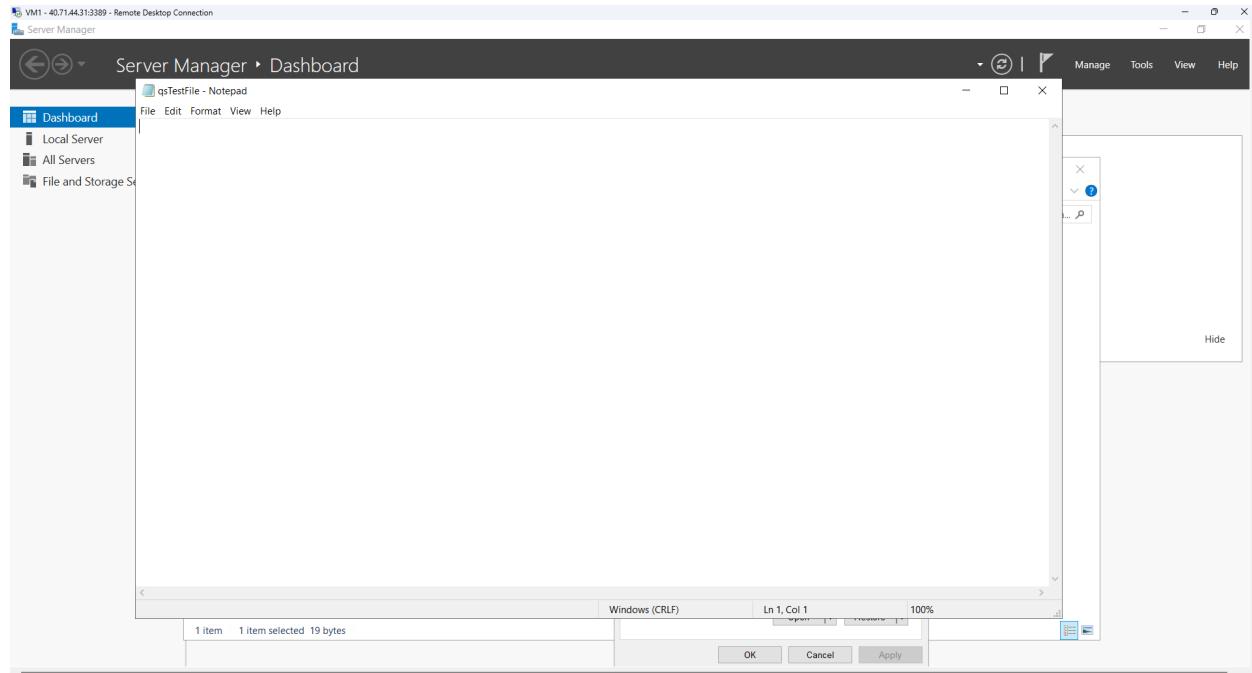


Select qsTestFile

Select Open



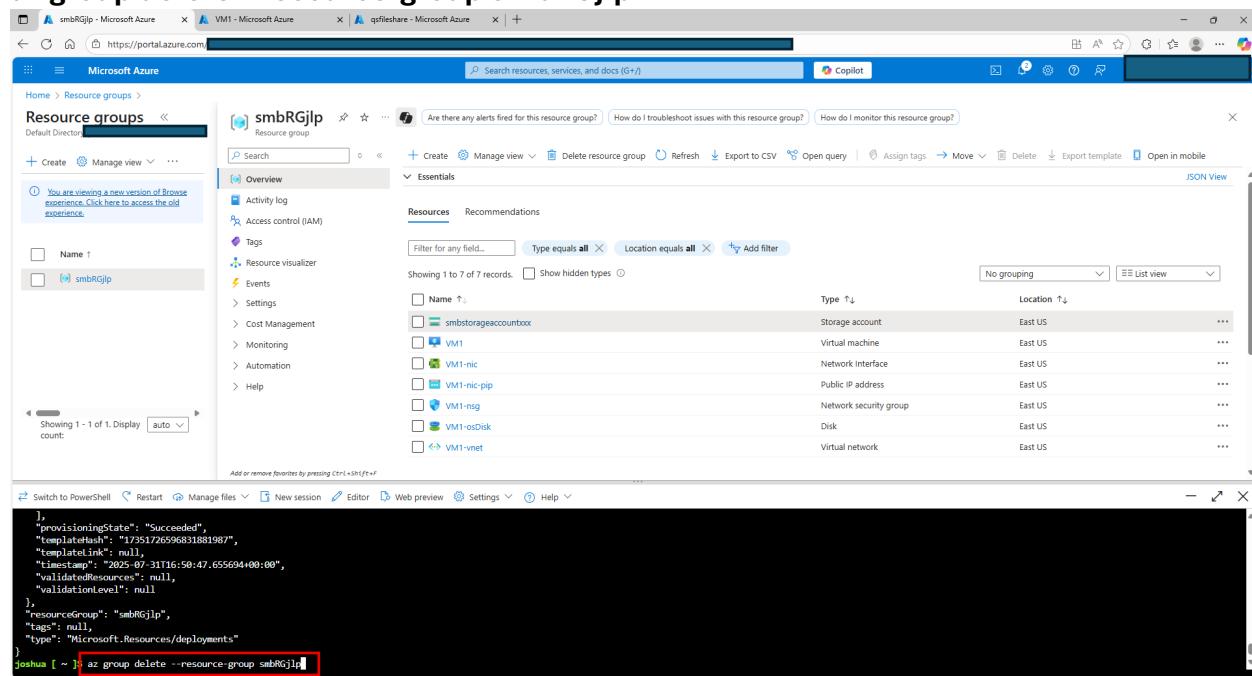
Previous version restored



Navigate to the Azure Portal to cleanup resources

In Cloud Shell enter:

```
az group delete --resource-group smbRGjlp
```



Enter Y for Yes

The screenshot shows the Microsoft Azure portal interface. In the top navigation bar, there are three tabs: 'smbRG@jp - Microsoft Azure', 'VM1 - Microsoft Azure', and 'qfilesshare - Microsoft Azure'. The main content area is titled 'Resource groups' and shows a single resource group named 'smbRGjlp'. The 'Overview' section lists several resources: 'smbstorageaccountxx' (Storage account, East US), 'VM1' (Virtual machine, East US), 'VM1-nic' (Network interface, East US), 'VM1-nic-pip' (Public IP address, East US), 'VM1-msg' (Network security group, East US), 'VM1-osDisk' (Disk, East US), and 'VM1-vnet' (Virtual network, East US). Below the table, a PowerShell terminal window is open, displaying the command 'az group delete --resource-group smbRGjlp'. A red box highlights the confirmation prompt 'Are you sure you want to perform this operation? (y/n)'. The user has typed 'Y'.

```
Switch to PowerShell ⌘ Restart ⌘ Manage files ⌘ New session ⌘ Editor ⌘ Web preview ⌘ Settings ⌘ Help ⌘
{
    "provisioningState": "Succeeded",
    "templateHash": "17351726596831881987",
    "templateLink": null,
    "timestamp": "2025-07-31T16:50:47.655694+00:00",
    "validatedResources": null,
    "validationLevel": null
},
"resourceGroup": "smbRGjlp",
"tags": null,
"type": "Microsoft.Resources/deployments"
}
joshua [ ~ ]$ az group delete --resource-group smbRGjlp
Are you sure you want to perform this operation? (y/n) Y
```