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Snapshot manager automation via azure automation account using powershell tutorial and requirements.

About The runbook:

This runbook takes incremental snapshot of a specified VM disk's every one hour. The retention of the snapshots is 24 hours. Also the runbook sends notification through email whether the snapshot was successful or not and if the deletion of the old snapshots was successful or not.

Requirements:

1. Have an Azure account with a valid subscription.
2. Create an automation account in the resource group where the VM is allocated .
3. Download the following modules to your automation account (automation account → shared resources → modules → add a module): Az.accounts, Az.Compute, AzureAD, AzureRM.Compute, AzureRM.profile, AzureRM.Resources, AzureVmSnapshots.
4. Two runbooks: "snapshot manager.ps" - the main runbook and "certificate_generated.ps" - a runbook for generating a self signed certificate.

Tutorial:

1. In your Automation account, open an runbook and name it "snapshot manager". Then just copy the runbook's code in there.
2. For the runbook to recognize which disk belongs to which VM you will need to add a tag to the VM's disks which you want to snapshot (home → <resource group name> → <VM name> → <OS/data disk name> → tags). Then add a tag named "vm" with the value "<VM name>".
3. Connect to azure cli and run this command: `az ad sp create-for-rbac --name snap1 --role "Owner" --scopes /subscriptions/<subscription id>/resourceGroups/<resource group name>`. **save the output to a notepad file.**
4. The runbook runs through an identity called an App. Create an app (Home → App registrations) and call it as you want (with default settings). You will get generated IDs: **application ID** and **tenant ID**. Save them in a notepad file for later.
5. Now we will need to create a schedule to run the runbook every hour. Create a new schedule (automation account → shared resources → schedules). Name it "snapshot_schedule" and set it to recurring for every hour.
6. Now we will need to connect the schedule to the runbook (automation account → runbooks → "snapshot manager" → resources → schedules).
7. Edit the runbook (automation account → runbooks → "snapshot manager" → edit). Notice that at line 2 and 3 you have consistence parameters: resource group name (\$RG_NAME) and the VM name (\$VM_NAME). Change them to fit your azure environment.

8. Create SendGrid account, register an email to send mail. Create an API to connect and send emails from SendGrid. Save the API key to use for the runbook.
9. Add to the runbook all the relevant parameters.
10. Make sure you publish the runbook (automation account → runbooks → “snapshot manager” → edit → publish) so you can run it as an automation.

UPDATED SCRIPT WITH EMAIL

```
# consistence paramters
$RG_NAME = "rg1"
$VM_NAME = "test1"
$DEST_EMAIL = "almoggall1@gmail.com"
$FROM_EMAIL = "ofirgall1@outlook.com"
# scopes moudles of automation account
Enable-AzureRmAlias -Scope Process
# Forces the script to use proper TLS
[System.Net.ServicePointManager]::SecurityProtocol =
[System.Net.SecurityProtocolType]::Tls12

# Connect to azure with password: az ad sp create-for-rbac --name snap1
--role "Disk Snapshot Contributor" --scopes
/subscriptions/<subscription id>/resourceGroups/<resource group name>
$TENANT_ID = "d597d379-d9d9-4ebb-9052-f2d218fabbc1"
$PASSWORD = "GgP8Q~avP4ybYgcV-MhxW2HBSuLnexjo3vGkfa87"
$APP_ID = '1bd7809d-c862-4566-ba36-02cff3caaa92'

$passwd = ConvertTo-SecureString $PASSWORD -AsPlainText -Force
$pscredential = New-Object
System.Management.Automation.PSCredential($APP_ID, $passwd)
Connect-AzAccount -ServicePrincipal -Credential $pscredential -Tenant
$TENANT_ID

# get all disks.
$disk_list = Get-AzureRmResource -ResourceType
"Microsoft.Compute/disks"

# get the current time of the snapshot with '_' format
$snapshot_time = Get-Date -Format "_dd_MM_yyyy_HH_mm"

# Content of summary mail
$content = ""
```

```

# create incremental snapshots of VM_NAME disks.
foreach($disk in $disk_list){
    # $tags = $disk.Tags
    if($disk.Tags.Values -eq $VM_NAME){
        $snapshot_name = $disk.name + $snapshot_time
        try{
            $disk_snap = Get-AzDisk -DiskName $disk.name
            -ResourceGroupName $RG_NAME
            $snapshotConfig = New-AzSnapshotConfig -SourceUri
            $disk_snap.Id -Location $disk_snap.Location -CreateOption Copy
            -Incremental -Tag @{vm=$VM_NAME}
            New-AzSnapshot -ResourceGroupName $RG_NAME -SnapshotName
            $snapshot_name -Snapshot $snapshotConfig | Out-Null
            $s_snap = "SNAPSHOT TAKE OF $snapshot_name SUCCEEDED `n"
            $content += $s_snap
        }
        # if the snapshot take has failed
        catch{
            $err_msg = $($PSItem.Exception.Message.ToString())
            #Write-Output $err_msg
            $f_snap = "SNAPSHOT TAKE OF $snapshot_name FAILED: $err_msg
`n"
            $content += $f_snap
        }
    }
}

# Delete snapshots after 24 hours of VM_NAME disks
$snapshots = Get-AzSnapshot
foreach($snapshot in $snapshots){
    # for every snapshot of the vm
    if($snapshot.Tags.values -eq $VM_NAME){
        # if the snapshot exists more then 24 hours
        $snapshot_name = $snapshot.name
        if($snapshot.TimeCreated -lt
(Get-Date).AddDays(-1).ToUniversalTime()){
            try{
                Remove-AzSnapshot -ResourceGroupName $RG_NAME
                -SnapshotName $snapshot_name -ErrorAction Stop -Force;
                $s_snap = "SNAPSHOT DELETION OF $snapshot_name
SUCCEEDED `n"
                $content += $s_snap
            }
        }
    }
}

```

```

        # if deletion has failed
        catch{
            $err_msg = $($PSItem.Exception.Message.ToString())
            $f_snap = "SNAPSHOT DELETION OF $snapshot_name FAILED:"
$err_msg `n"
            $content += $f_snap
        }
    }
}

Write-Output $content
# The send grid key from the send grid account
$SENDGRID_API_KEY =
"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"
$headers = New-Object
"System.Collections.Generic.Dictionary[[String],[String]]"
$headers.Add("Authorization", "Bearer " + $SENDGRID_API_KEY)
$headers.Add("Content-Type", "application/json")

# subject of the mail
$subject = "Hourly snapshot of $snapshot_time"

$body = @{
personalizations = @(
    @(
        to = @(
            @(
                email = $DEST_EMAIL
            )
        )
    )
)
from = @(
    email = $FROM_EMAIL
)
subject = $subject
content = @(
    @(
        type = "text/plain"
        value = $content
    )
)

```

```
}
```

```
$bodyJson = $body | ConvertTo-Json -Depth 4
```

```
$response = Invoke-RestMethod -Uri
```

```
https://api.sendgrid.com/v3/mail/send -Method Post -Headers $headers
```

```
-Body $bodyJson
```

creating a new VM from disks snapshots

Create DISks from Snapshot for restore machine (OS+DATA disks)

Create OS disk from snapshot (same snapshots need to be used for all disks)- from same time for all (OS+2 data disks snapshots)

Microsoft Azure

Home > rg1 > test1_OsDisk_1_caea7af902c44737a5b993ecc9ed6f86_17_06_2022_13_00 >

Create a managed disk ...

Basics

Encryption

Networking

Advanced

Tags

Review + create

Select the disk type and size needed for your workload. Azure disks are designed for 99.999% availability. Azure managed disks encrypt your data at rest, by default, using Storage Service Encryption. [Learn more about disks.](#)

Project details

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

Subscription * ⓘ

Pay-As-You-Go

Resource group * ⓘ

rg1

[Create new](#)

Disk details

Disk name * ⓘ

test_Restore_OS_disk

Region ⓘ

(Europe) West Europe

Availability zone

None

Source type ⓘ

Snapshot

Source subscription ⓘ

Pay-As-You-Go

Source snapshot ⓘ

test1_OsDisk_1_caea7af902c44737a5b993ecc9ed6f86_17_06_2022_13_00

OS type ⓘ

☐ None (data disk)

☐ Linux

☒ Windows

Security type ⓘ

Standard

VM generation ⓘ

☐ Generation 1

☒ Generation 2

Size * ⓘ

128 GiB



Premium SSD LRS

[Change size](#)




Home > Microsoft.ManagedDisk-20220617164151 >

test_Restore_OS_disk ...



Disk

<< [+ Create VM](#) [+ Create snapshot](#)  Delete  Refresh

Overview

-  Activity log
-  Access control (IAM)
-  Tags

Settings

-  Configuration
-  Size + performance

Essentials

Resource group [\(move\)](#) : [rg1](#)

Disk state : Unattached

Location : West Europe

Subscription [\(move\)](#) : [Pay-As-You-Go](#)

Subscription ID : 0e27a18e-ee52-4451-b258-8973f9e06557

Time created : 6/17/2022, 4:44:44 PM

Now we create DATA disks from same time as OS disk snapshots



[portal.azure.com/#@ofirgal11hotmail.onmicrosoft.com/resource/subscriptions/0e27a18e-ee52-4451-b258-8973f9e06557/resourceGroups/rg](#)

Microsoft Azure




Home >

test1_datadisk_1_17_06_2022_13_00 ...






Snapshot

<< [+ Create disk](#) [+ Copy snapshot](#)  Delete  Refresh



Overview

-  Activity log
-  Access control (IAM)
-  Tags


Settings

-  Encryption
-  Networking
-  Snapshot export
-  Properties
-  Locks

Automation

-  Tasks (preview)
-  Export template

Support + troubleshooting

-  New Support Request

Essentials

Resource group [\(move\)](#) : [rg1](#)

Location [\(move\)](#) : West Europe

Subscription [\(move\)](#) : [Pay-As-You-Go](#)

Subscription ID : 0e27a18e-ee52-4451-b258-8973f9e06557

Snapshot state : Unattached

Tags [\(edit\)](#) : [vm : test1](#)

Get started

Properties



Snapshot

Name : test1_datadisk_1_17_06_2022_13_00

Snapshot type : Incremental

VM generation : Gen 1

Provisioning state : Succeeded



Encryption

Encryption type : Platform-managed key



Networking

Network access : AllowAll

Create a managed disk ...

Basics Encryption Networking Advanced Tags Review + create

Select the disk type and size needed for your workload. Azure disks are designed for 99.999% availability. Azure managed disks encrypt your data at rest, by default, using Storage Service Encryption. [Learn more about disks.](#)

Project details

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

Subscription * ⓘ

Pay-As-You-Go

Resource group * ⓘ

rg1

Create new

Disk details

Disk name * ⓘ

test_Restore_DATA_disk

Region ⓘ

(Europe) West Europe

Availability zone

None

Source type ⓘ

Snapshot

Source subscription ⓘ

Pay-As-You-Go

Source snapshot ⓘ

test1_datadisk_1_17_06_2022_13_00

OS type ⓘ

☒ None (data disk)

☐ Linux

☐ Windows

Security type ⓘ

Standard

Size * ⓘ

64 GiB

Premium SSD LRS

[Change size](#)

Create a managed disk ...

✓ Validation passed

Basics Encryption Networking Advanced Tags Review + create

Basics

Subscription	Pay-As-You-Go
Resource group	rg1
Region	West Europe
Disk name	test_Restore_DATA_disk
Availability zone	None
Source type	Snapshot
Source subscription	Pay-As-You-Go
Source snapshot	test1_datadisk_1_17_06_2022_13_00
OS type	None (data disk)
Security type	Standard

Size

Size	64 GiB
Performance tier	P6 - 240 IOPS, 50 MBps (default)
Storage type	Premium SSD LRS

Encryption

Encryption type	Platform-managed key
-----------------	----------------------

Advanced

Enable shared disk	No
Enable on-demand bursting	No

Networking

Network access	AllowAll
----------------	----------

Tags

(none)

Create another disk (DATA 2) from the same time as the 2 other disks as required

Create a new VM machine from the restored OS IMAGE (use the same machine type as the original machine)

The screenshot shows the Azure portal interface for a disk named 'test_Restore_OS_disk'. The 'Create VM' button is highlighted with a red circle. The page includes a search bar, a left-hand navigation menu, and a main content area with disk details and performance charts.

Navigation Menu:

- Overview
- Activity log
- Access control (IAM)
- Tags
- Settings
- Configuration
- Size + performance
- Encryption
- Networking
- Disk Export
- Properties
- Locks
- Monitoring
- Metrics
- Automation
- Tasks (preview)
- Export template
- Support + troubleshooting
- New Support Request

Disk Details:

- Resource group: rg1
- Disk state: Unattached
- Location: West Europe
- Subscription: Pay-As-You-Go
- Subscription ID: 0e27a18e-ee52-4451-b258-9973f9e06557
- Time created: 6/17/2022, 4:44:44 PM
- Tags: Click here to add tags

Disk Properties:

- Disk size: 128 GiB
- Disk sku: Premium SSD LRS
- Managed by: ---
- Operating system: Windows
- Max shares: 0
- Availability zone: None
- Performance tier: P10 - 500 IOPS, 100 MBps
- Security type: Standard

Performance Charts:

- Disk Bytes/sec (Throughput)
- Disk Operations/sec (IOPS)
- Disk QD (Queue Depth)

Use the same machine type /network/region /add public IP and RDP
Mark No infra redundancy required on the disk level

Create a virtual machine ...

[Basics](#) [Disks](#) [Networking](#) [Management](#) [Advanced](#) [Tags](#) [Review + create](#)

Create a virtual machine that runs Linux or Windows. Select an image from Azure marketplace or use your own customized image. Complete the Basics tab then Review + create to provision a virtual machine with default parameters or review each tab for full customization. [Learn more](#)

Project details

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

Subscription *

Resource group * [Create new](#)

Instance details

Virtual machine name *

Region

Availability options

Security type

Image * [See all images](#) | [Configure VM generation](#)

Azure Spot instance ☐

Size * [See all sizes](#)

Inbound port rules

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports * ☐ None ☒ Allow selected ports

Select inbound ports *

⚠ This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to

Inbound port rules

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports * ☐ None ☒ Allow selected ports

Select inbound ports *

⚠ This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.

Licensing

License type *

Save up to 49% with a license you already own using Azure Hybrid Benefit. [Learn more](#)

Would you like to use an existing ☒

Windows Server license? *

☒ I confirm I have an eligible Windows Server license with Software Assurance *
or Windows Server subscription to apply this Azure Hybrid Benefit.

[Review Azure hybrid benefit compliance](#)

[Review + create](#)

[< Previous](#)

[Next : Disks >](#)

Attach the 2 DATA disks to the new VM (Lun 0 -data disk1, lun 1- data disk 2)

Microsoft Azure

Search resource

Home > rg1 > test_Restore_OS_disk >

Create a virtual machine

Basics **Disks** Networking Management Advanced Tags Review + create

Azure VMs have one operating system disk and a temporary disk for short-term storage. You can attach additional data disks. The size of the VM determines the type of storage you can use and the number of data disks allowed. [Learn more](#)

Disk options

OS disk type

Delete with VM ☐

Encryption at host ☐

Encryption at host is not registered for the selected subscription. [Learn more about enabling this feature](#)

Encryption type

Enable Ultra Disk compatibility ☐
Ultra disk is supported in Availability Zone(s) 1,2,3 for the selected VM size Standard_D2s_v3.

Data disks

You can add and configure additional data disks for your virtual machine or attach existing disks. This VM also comes with a temporary disk.

LUN	Name	Size (GiB)	Disk type	Host caching	Delete with VM
0	test_Restore_DATA...	64	Premium SSD LRS	Read-only	<input type="checkbox"/>

[Create and attach a new disk](#) [Attach an existing disk](#)

Advanced

Use the same network subnet and assign RDP access

Create a virtual machine ...

Basics Disks Networking Management Advanced Tags Review + create

Define network connectivity for your virtual machine by configuring network interface card (NIC) settings. You can control ports, inbound and outbound connectivity with security group rules, or place behind an existing load balancing solution. [Learn more](#)

Network interface

When creating a virtual machine, a network interface will be created for you.

Virtual network *	<div>rg1-vnet</div> <div>Create new</div>
Subnet *	<div>default (10.0.0.0/24)</div> <div>Manage subnet configuration</div>
Public IP	<div>(new) restor1-ip</div> <div>Create new</div>
NIC network security group	<div><input type="radio"/> None</div> <div><input checked="" type="radio"/> Basic</div> <div><input type="radio"/> Advanced</div>
Public inbound ports *	<div><input type="radio"/> None</div> <div><input checked="" type="radio"/> Allow selected ports</div>
Select inbound ports *	<div>RDP (3389)</div>

⚠ This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.

Delete public IP and NIC when VM is deleted

Accelerated networking

The selected image does not support accelerated networking.

Load balancing

You can place this virtual machine in the backend pool of an existing Azure load balancing solution. [Learn more](#)

Place this virtual machine behind an existing load balancing solution?

[Home](#) > [rg1](#) > [test_Restore_OS_disk](#) >

Create a virtual machine ...

Basics Disks Networking **Management** Advanced Tags Review + create

Configure monitoring and management options for your VM.

Microsoft Defender for Cloud

Microsoft Defender for Cloud provides unified security management and advanced threat protection across hybrid cloud workloads. [Learn more](#)

✔ Your subscription is protected by Microsoft Defender for Cloud basic plan.

Monitoring

Boot diagnostics ⓘ ☒ Enable with managed storage account (recommended)
☐ Enable with custom storage account
☐ Disable

Enable OS guest diagnostics ⓘ ☐

Identity

System assigned managed identity ⓘ ☐

Azure AD

Login with Azure AD ⓘ ☐

⚠ This image does not support Login with Azure AD.

Auto-shutdown

Enable auto-shutdown ⓘ ☐

Guest OS updates

Enable hotpatch ⓘ ☐
ⓘ Hotpatching is available only with Windows Server 2022 Datacenter: Azure Edition Core.

Patch orchestration options ⓘ
ⓘ Some patch orchestration options are not available for this image. [Learn more](#)

[Home](#) > [rg1](#) > [test_Restore_OS_disk](#) >

Create a virtual machine ...

✓ Validation passed

[Basics](#) [Disks](#) [Networking](#) [Management](#) [Advanced](#) [Tags](#) [Review + create](#)

⚠ **You have set RDP port(s) open to the internet.** This is only recommended for testing. If you want to change this setting, go back to Basics tab.

test_Restore_OS_disk
Image

Standard D2s v3
2 vcpus, 8 GiB memory

Basics

Subscription	Pay-As-You-Go
Resource group	rg1
Virtual machine name	restor1
Region	West Europe
Availability options	No infrastructure redundancy required
Security type	Standard
Image	test_Restore_OS_disk - Gen2
Size	Standard D2s v3 (2 vcpus, 8 GiB memory)
Username	azureuser
Public inbound ports	RDP
Already have a Windows license?	Yes
License type	Windows Server
Azure Spot	Yes (Stop / Deallocate)
Azure Spot max price	-

Disks

OS disk type	Premium SSD LRS
Use managed disks	Yes
Delete OS disk with VM	Disabled
Data disks	1
Delete data disk with VM	0 disks enabled
Ephemeral OS disk	No

[Connect and verify you can access your specific point in time snapshot data](#)

[Another option is restoring snapshots to the existing machine - this will reverse the machine data to the time of the snapshot - On production VM - last resort](#)

[We need to create the disks from Snapshots \(OS disk + DATA disk\)](#)
[OS disk creation from snapshot - same availability zone as VM](#)

Microsoft Azure

Home > Resource groups > rg1 > test1_OsDisk_1_cae7af902c44737a5b993ecc9ed6f86_17_06_2022_15_00 >

Create a managed disk ...

Basics

Encryption

Networking

Advanced

Tags

Review + create

Select the disk type and size needed for your workload. Azure disks are designed for 99.999% availability. Azure managed disks encrypt your data at rest, by default, using Storage Service Encryption. [Learn more about disks.](#)

Project details

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

Subscription * ⓘ

Pay-As-You-Go

Resource group * ⓘ

rg1

Create new

Disk details

Disk name * ⓘ

DB_OS_disk_Restore

Region ⓘ

(Europe) West Europe

Availability zone ⓘ

1

Source type ⓘ

Snapshot

Source subscription ⓘ

Pay-As-You-Go

Source snapshot ⓘ

test1_OsDisk_1_cae7af902c44737a5b993ecc9ed6f86_17_06_2022_15_00

OS type ⓘ

☐ None (data disk)

☐ Linux

☒ Windows

Security type ⓘ

Standard

VM generation ⓘ

☐ Generation 1

☒ Generation 2

Size * ⓘ

128 GiB

Premium SSD LRS

[Change size](#)

Restore disk from snapshot - data disk - (same snapshot time as OS disk)- SAME AZ

Create a managed disk - Microsoft x Document shared with you: 'Snap x Snapshot automation - Google x Inbox (22,865) - ofirgal11

portal.azure.com/#create/Microsoft.ManagedDisk

Microsoft Azure

Home > Resource groups > rg1 > test1_datadisk_1_17_06_2022_15_00 >

Create a managed disk

Basics Encryption Networking Advanced Tags Review + create

Select the disk type and size needed for your workload. Azure disks are designed for 99.999% availability. Azure managed disks encrypt your data at rest, by default, using Storage Service Encryption. [Learn more about disks.](#)

Project details

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

Subscription * ① Pay-As-You-Go

Resource group * ① rg1 [Create new](#)

Disk details

Disk name * ① DB_DATA_disk_Restore

Region ① (Europe) West Europe

Availability zone 1

Source type ① Snapshot

Source subscription ① Pay-As-You-Go

Source snapshot ① test1_datadisk_1_17_06_2022_15_00

OS type ① ☒ None (data disk) ☐ Linux ☐ Windows

Security type ① Standard

Size * ① **64 GiB**
Premium SSD LRS
[Change size](#)

STOP the production machine

Microsoft Azure

Search resources, services, and docs (G+)

Home > Resource groups > rg1 >

test1 Virtual machine

Search (Ctrl+/)

Connect Start Restart Stop Capture Delete Refresh Open in mobile CLI / PS Feedback

Overview

- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems

Settings

- Networking
- Connect
- Windows Admin Center (preview)
- Disks
- Size
- Microsoft Defender for Cloud
- Advisor recommendations
- Extensions + applications
- Continuous delivery
- Availability + scaling
- Configuration
- Identity
- Properties
- Locks

Operations

- Bastion
- Auto-shutdown
- Backup
- Disaster recovery

Essentials

Resource group (move) : [rg1](#)

Status : Stopped (deallocated)

Location : West Europe (Zone 1)

Subscription (move) : [Pay-As-You-Go](#)

Subscription ID : 0e27a18e-ee52-4451-b258-8973f9e06557

Availability zone : 1

Tags (edit) : [Click here to add tags](#)

Properties Monitoring Capabilities (8) Recommendations Tutorials

Virtual machine

Computer name	test1
Health state	-
Operating system	Windows
Publisher	MicrosoftWindowsServer
Offer	WindowsServer
Plan	2016-datacenter-gensecond
VM generation	V2
Host group	None
Host	-
Proximity placement group	-
Colocation status	N/A
Capacity reservation group	-

Availability + scaling

Availability zone	1
Scale Set	-

Security type

Security type	-
---------------	---

Replace OS disk



Home > test1



test1 | Disks

Virtual machine

Search (Ctrl+J)



Save



Discard



Refresh



Additional settings



Feedback



Overview



Activity log



Access control (IAM)



Tags



Diagnose and solve problems

Settings



Networking



Connect



Windows Admin Center
(preview)



Disks



Size



Microsoft Defender for Cloud



Advisor recommendations



Extensions + applications



Continuous delivery



Availability + scaling



Configuration



Identity



Properties



Locks

Operations



Bastion

OS disk



Swap OS disk

Disk name

test1_OsDisk_1_caea7af902c44737a5b993ecc9ed6f86

Data disks



Filter by name

Showing 1 of 1 attached data disks



Create and attach a new disk



Attach existing disks

LUN ⓘ

Disk name

0

test1_datadisk_1

Home > test1 >

Swap OS Disk

Swap the OS disk for a backup disk or another disk for VM troubleshooting. [Learn more.](#)

Choose disk

DB_OS_disk_Restore



This VM will be stopped (deallocated) and the OS disk will be replaced. Any existing data on the OS disk will be lost.

Confirm you want to swap the OS disk for this VM by entering the name of the vm 'test1'

test1

remove data disks

Save Discard Refresh Additional settings Feedback Troubleshoot

OS disk

Swap OS disk

Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (MBps)	Encryption	Host caching
test1_OsDisk_1_caa7a902c44737a5b993acc0e0f86	Premium SSD LRS	127	500	100	SSE with PMK	Read/write

Data disks

Filter by name

Showing 1 of 1 attached data disks

Create and attach a new disk Attach existing disks

LUN	Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (MBps)	Encryption	Host caching
0	test1_dataDisk_1	Premium SSD LRS	64	240	50	SSE with PMK	Read-only

Attach the restore data disks (LUN0 and then data disk 2 LUN 1)

Save Discard Refresh Additional settings Feedback Troubleshoot

OS disk

Swap OS disk

Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (MBps)	Encryption	Host caching
test1_OsDisk_1_caa7a902c44737a5b993acc0e0f86	Premium SSD LRS	127	500	100	SSE with PMK	Read/write

Data disks

Filter by name

Showing 1 of 1 attached data disks

Create and attach a new disk Attach existing disks

LUN	Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (MBps)	Encryption	Host caching
0	DB_DATA_disk_Restore	Premium SSD LRS	64	240	50	SSE with PMK	Read-only

Save and start the VM

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test1
Virtual machine

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Connect Start Restart Stop Capture Delete Refresh Open in mobile CLI / PS Feedback

Overview

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Operations

Essentials

Resource group (move) : [rg1](#)

Status : Stopped (deallocated)

Location : West Europe (Zone 1)

Subscription (move) : [Pay-As-You-Go](#)

Subscription ID : 0e27a18e-ee52-4451-b258-8973f9e06557

Availability zone : 1

Tags (edit) : [Click here to add tags](#)

Properties Monitoring Capabilities (8) Recommendations Tutorials

Virtual machine

Computer name	test1
Health state	-
Operating system	Windows
Publisher	MicrosoftWindowsServer
Offer	WindowsServer
Plan	2016-datacenter-gensecond
VM generation	V2
Host group	None
Host	-
Proximity placement group	-
Colocation status	N/A
Capacity reservation group	-

Verify that you can access the VM with the snapshot disks (moving back in time to the snapshots on production VM is last resort)!!!