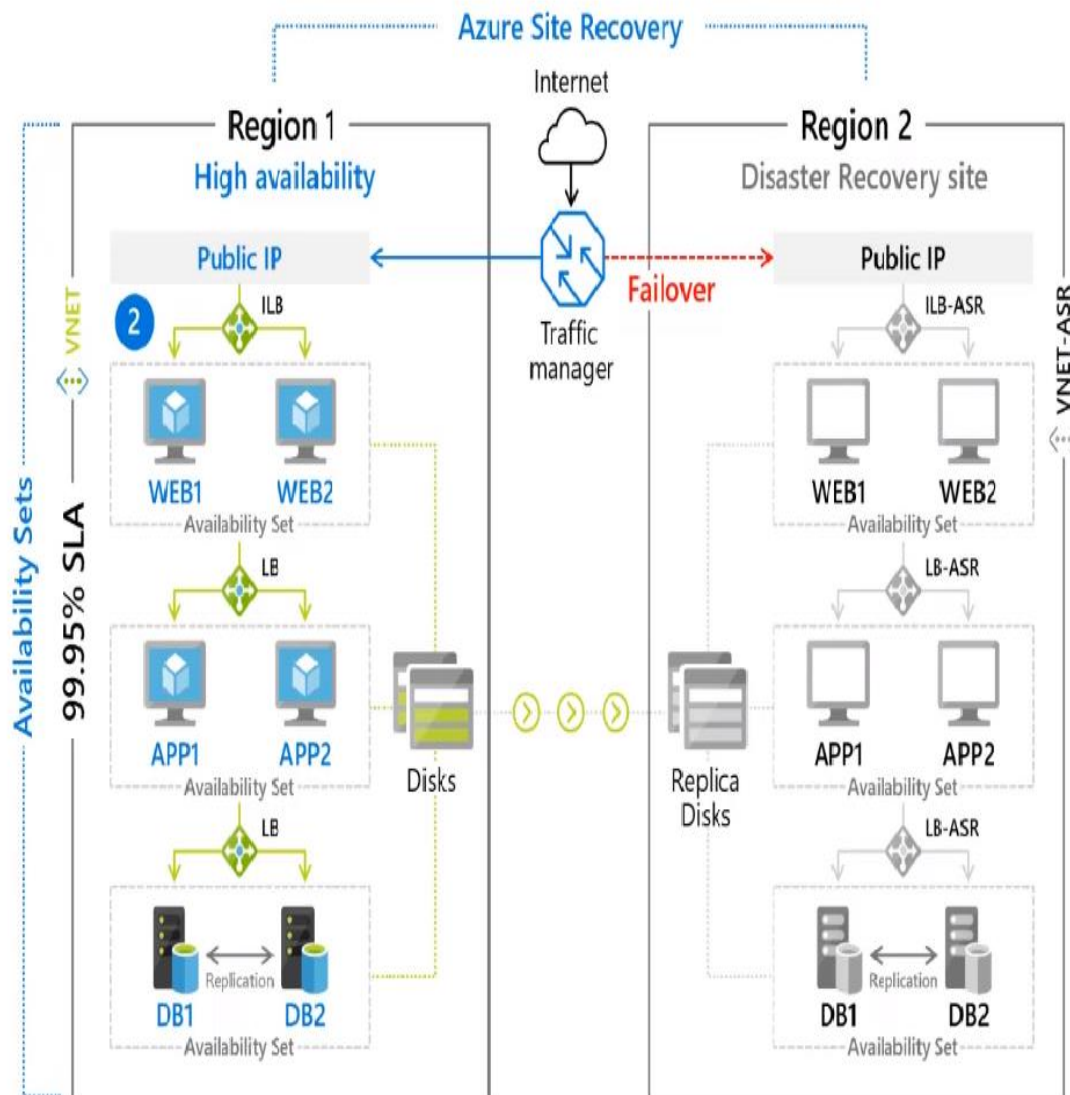


DISASTER SITE RECOVERY



We can replicate the virtual machines to another Azure region for business continuity and disaster recovery needs.

We will create a Virtual Machine now using Azure powershell using below script.

```
New-AzVM -ResourceGroupName rg1 -Name vm -Location EastUS  
-VirtualNetworkName vnet -SubnetName default  
-SecurityGroupName security_grp -PublicIpAddressName pubIP -  
OpenPorts 80,443,3389
```

It'll ask Username and Password - Give username and password of your choice.

```
PS /home/phanikrishna> New-AzVM -ResourceGroupName rg1 -Name vm -Location EastUS -VirtualNetworkName vnet -SubnetName default -SecurityGroupName security_grp -PublicIpAddressName pubIP -OpenPorts 80,443,3389

cmdlet New-AzVM at command pipeline position 1
Supply values for the following parameters:
Credential
User: azuser-vm
Password for user azuser-vm: *****

ResourceGroupName      : rg1
Id                     : /subscriptions/fa791130-a07d-4c99-b765-1c53aa354e6e/resourceGroups/rg1/providers/Microsoft.Compute/virtualMachines/vm
VmId                   : 189cdd0a-fb90-4cd5-8c58-90f650b576ea
Name                   : vm
Type                   : Microsoft.Compute/virtualMachines
Location                : eastus
Tags                   : {}
HardwareProfile         : {VmSize}
NetworkProfile          : {NetworkInterfaces}
OSProfile               : {ComputerName, AdminUsername, WindowsConfiguration, Secrets, AllowExtensionOperations, RequireGuestProvisionSignal}
ProvisioningState       : Succeeded
StorageProfile          : {ImageReference, OsDisk, DataDisks}
FullyQualifiedDomainName : vm-e60854.EastUS.cloudapp.azure.com
```

Once VM is created it'll reflect in azure portal

Subscriptions: Free Trial

Filter by name... All resource groups All types All locations All tags No grouping

2 items

Name	Type	Status	Resource group	Location	Source	Maintenance status	Subscription
vm	Virtual machine	Running	rg1	East US	Marketplace	-	Free Trial
vm1	Virtual machine	Running	RG1	East US	Marketplace	-	Free Trial

Now go to -> Disaster Recovery in “vm” virtual machine

Home > Virtual machines > vm

Virtual machines

Default Directory

+ Add Reservations

Try the new virtual machine resource browser! This experience is faster and has improved sorting and filtering capabilities. Please note that the new experience will not show classic virtual machines and does not include support for some columns such as maintenance status.

Filter by name...

Name	Type
vm	Virtual machine
vm1	Virtual machine

vm | Disaster recovery

Virtual machine

Search (Ctrl+/)

Operations

- Bastion
- Auto-shutdown
- Backup
- Disaster recovery
- Guest + host updates
- Inventory
- Change tracking
- Configuration management (P...
- Policies
- Run command

Monitoring

- Insights
- Alerts
- Metrics
- Diagnostic settings

Basics Advanced settings Review + Start replication

Welcome to Azure Site Recovery

You can replicate your virtual machines to another Azure region for business continuity and disaster recovery needs. You can conduct periodic DR drills to ensure you meet the compliance needs. The VM will be replicated with the specified settings to the selected region so that you can recover your applications in the event of outages in source region. [Learn more about Azure Site Recovery.](#)

Disaster Recovery between Availability Zones? No

Target region * West US

Review + Start replication Previous Next: Advanced settings

Azure will recommend replication region as seen in above image (Target region : West US) -> Click on Next : Advanced Settings

vm | Disaster recovery
Virtual machine

Search (Ctrl+/)
LUCKS

Operations

- Bastion
- Auto-shutdown
- Backup
- Disaster recovery
- Guest + host updates
- Inventory
- Change tracking
- Configuration management (P...
- Policies
- Run command

Monitoring

- Insights
- Alerts
- Metrics
- Diagnostic settings

Basics Advanced settings Review + Start replication

Target settings

General settings	Source	Target	Info
Subscription	Free Trial	Free Trial	(i)
VM resource group	rg1	rg1-asr	(i)
Virtual network	vnet	(new) vnet-asr	(i)
Availability	Single instance	Single instance Availability set Availability zone Not Applicable	(i)
Proximity placeme...	Not Applicable	Select	(i)

Storage settings [+] Show details

An existing cache storage account will be used and 1 replica managed disk(s) will be created.

Replication settings [+] Show details

An existing recovery services vault and replication policy will be used.

Review + Start replication Previous Next : Review + Start replication

As we can see it'll replicate resource group, vnet etc with "-asr". After replication starts it'll take approx 30-60 mins hour to replicate and reflect in azure portal.

REST ALL LEAVE AS DEFAULTS AND CLICK REVIEW + Start replication.

After replication has been completed we can see it has created two resource groups "rg1-asr" & "site-recovery-vault-RG" with required resources.

Resource groups

Default Directory

+ Create Manage view Refresh Export to CSV Open query Assign tags Feedback

Filter for any field... Subscription == all Location == all Add filter

Showing 1 to 6 of 6 records.

Name	Subscription	Location
AzureBackupRG_eastus_1	Free Trial	East US
cloud-shell-storage-centralindia	Free Trial	Central India
NetworkWatcherRG	Free Trial	East US
rg1	Free Trial	East US
rg1-asr	Free Trial	West US
site-recovery-vault-RG	Free Trial	West US

Home > Resource groups > Resource groups

Default Directory

+ Create Manage view ...

Filter for any field...

Name

- AzureBackupRG_eastus_1
- cloud-shell-storage-centralindia
- NetworkWatcherRG
- rg1
- rg1-asr
- site-recovery-vault-RG

rg1-asr

Resource group

Search (Ctrl+/)

Overview

- Activity log
- Access control (IAM)
- Tags
- Events
- Settings
- Deployments
- Security
- Properties
- Locks

Essentials

Subscription (change)
Free Trial

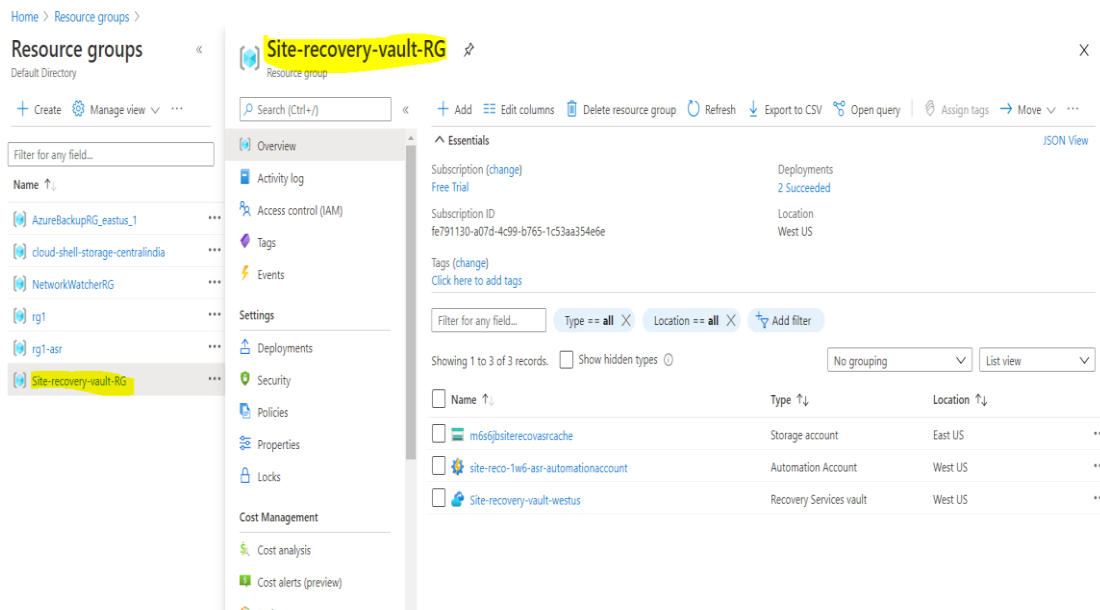
Subscription ID
fe791130-a07d-4c99-b765-1c53aa354e6e

Tags (change)
Click here to add tags

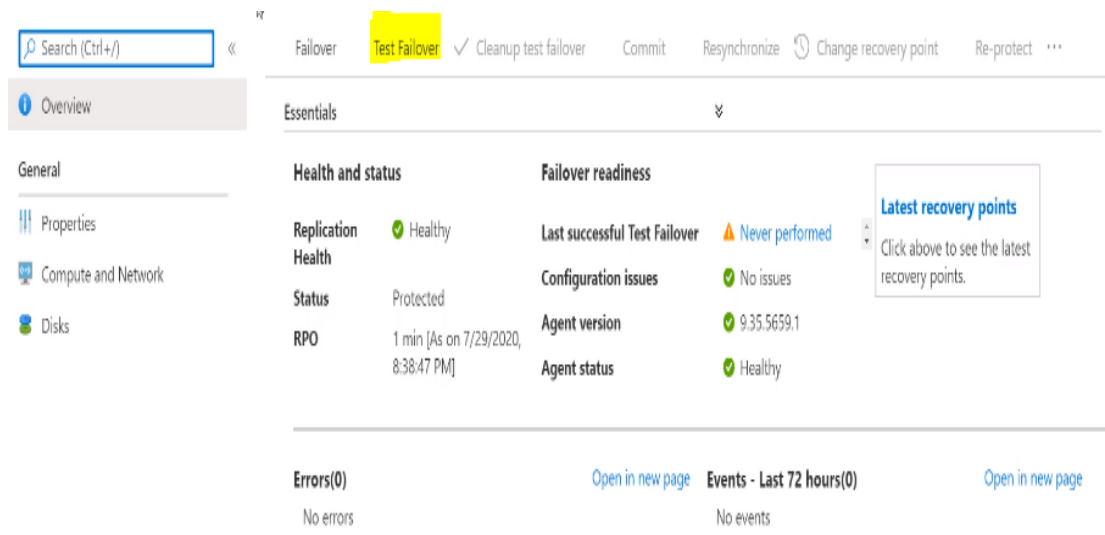
Filter for any field... Type == all Location == all Add filter

Showing 1 to 2 of 2 records. Show hidden types (i)

Name	Type	Location
rg1-vnet-asr	Virtual network	West US
vm1_disk1_17b6ed19e1c146e18fedefb2d2ec1982-ASRReplica	Disk	West US



Now we can test the disaster recovery using **Test Failover**.



Click on Test Failover ->

From : East US

To : West US

Azure virtual network : rg1-vnet-asr

REST ALL LEAVE AS DEFAULTS AND CLICK OK.

Test failover

vm1

Failover direction

From ⓘ

East US

To ⓘ

West US

Recovery Point

Choose a recovery point ⓘ

Latest processed (low RTO) (1 out of 1 disks) (2/5/2021, 7:11:58 PM)

Azure virtual network * ⓘ

rg1-vnet-asr

i It is recommended that for a test failover you use a network different from production network (as specified under Compute and Network settings of the virtual machine). [Learn more.](#)

OK

After Test Failover has been initiated we can see a new Virtual Machine is replicated in West US region.

<input type="checkbox"/>	vm	Virtual machine	Running	rg1	East US	Marketplace	-	Free Trial	...
<input type="checkbox"/>	vm1	Virtual machine	Running	RG1	East US	Marketplace	-	Free Trial	...
<input type="checkbox"/>	vm1-test	Virtual machine	Running	RG1-ASR	West US	Disk	-	Free Trial	...

Home > Virtual machines >

vm1-test

Search (Ctrl+F)

Connect Start Restart Stop Capture Delete Refresh Open in mobile

Essentials

Resource group (change): RG1-ASR

Status: Running

Location: West US

Subscription (change): Free Trial

Subscription ID: fe791130-a07d-4c99-b765-1c53aa354e6e

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

Operating system: Windows

Size: Standard B1s (1 vcpu, 1 GiB memory)

Public IP address: -

Private IP address: 10.0.0.4

Virtual network/subnet: rg1-vnet-asr/default

DNS name: -

Properties Monitoring Capabilities (7) Recommendations Tutorials

Virtual machine

Computer name: -

Operating system: Windows

Publisher: -

Offer: -

Plan: -

VM generation: V1

Agent status: Not Ready

Agent version: Unknown

Host group: None

Networking

Public IP address: -

Public IP address (IPv6): -

Private IP address: 10.0.0.4

Private IP address (IPv6): -

Virtual network/subnet: rg1-vnet-asr/default

DNS name: -

Size

Size: Standard B1s

Now we can cleanup the resources created by Test Failover.

Goto -> Disaster Recovery in "vm" Virtual Machine -> Click on Cleanup test failover -> Give the comments -> Click OK.

Failover

Test Failover

Cleanup test failover

Commit

Resynchronize

Change recovery point

Re-protect

Disable Replication

Error Details

Refresh

Essentials

JSON View

Health and status

Replication Health

Status

RPO

Healthy

Cleanup test failover pending

55 secs [As on 2/5/2021, 7:22:59 PM]

Failover readiness

Last successful Test Failover

Configuration issues

Agent version

Agent status

-

No issues

9.40.5850.1

Healthy

Latest recovery points

Click above to see the latest recovery points.

Errors(0)

No errors

Open in new page

Events - Last 72 hours(0)

No events

Open in new page

[Home](#) > [Virtual machines](#) > [vm1](#) > [vm1](#) >

Test failover cleanup

vm1

Notes

Works Great!

✓ Testing is complete. Delete test failover virtual machine(s).

OK

Failover

Test Failover

Cleanup test failover

Commit

Resynchronize

Change recovery point

Re-protect

Disable Replication

Error Details

Refresh

Essentials

JSON View

Health and status

Replication Health

Status

RPO

Healthy

Protected

3 mins [As on 2/5/2021, 7:25:13 PM]

Failover readiness

Last successful Test Failover

Configuration issues

Agent version

Agent status

2/5/2021, 7:18:59 PM

No issues

9.40.5850.1

Healthy

Latest recovery points

Click above to see the latest recovery points.

Errors(0)

No errors

Open in new page

Events - Last 72 hours(0)

No events

Open in new page