## VERITAS



# Cross Cloud Provider Restore (AWS to Azure / Azure to AWS) Technical Brief

Veritas NetBackup

This paper is designed to highlight the capability to restore a virtual machine in Azure to AWS and vice versa in Veritas NetBackup.

For more information on Veritas products and solutions, visit <u>www.veritas.com</u>

September 2024

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## **Revision History**

Version	Date	Changes	Author
1.00	07/15/2024	Initial Version	Neil Glick

#### Introduction

#### **Executive Summary**

At Veritas, we know that your enterprise cloud environments are heterogenous and need the ability to backup and restore your enterprise cloud virtual machines easily from AWS to Azure and vice versa. Veritas NetBackup continues to un-complicate the cloud by now offering cross cloud provider restore capabilities.

#### **Target Audience**

This document is for customers who use Veritas NetBackup as their enterprise backup and recovery solution in the cloud or are interested in its value and operation.

#### **Use Case**

Cases arrive when it is necessary to restore a cloud virtual machine from one provider to another. NetBackup now makes that capability quick, simple and easy to configure.

#### Requirements

Veritas NetBackup Snapshot Manager with connection credentials for your AWS and Azure environments.

Note: A backup from snapshot copy must be present to restore the virtual machine to an alternate cloud

provider. Cloud Snapshots can continue to be used for restores at the same cloud provider.

#### How to Use - Azure to AWS

 After a backup has been completed of a cloud virtual machine, navigate to Workloads > Cloud and find the virtual machine you wish to restore to an alternate cloud service provider (CSP). Click on the virtual machine to proceed.

3	<b>Veritas</b> NetBackup <sup>™</sup>								
«		Cloud							
<b>¥</b> 4 30 F	Dashboard Activity monitor Recovery Protection ^	Virtual machines A	oplications	PaaS	Volumes	Intelligent groups	Providers	Snapshot Managers	
	Protection plans Policies	All Virtual machine	Region		Provider 🕹	Protected by	Applicat	ion	Last successful backup
ļ	Vorkloads ^ Apache Cassandra Cloud	win-2022-azure	eastus2		Microsoft Azure	Not protected	Not con	nected	Jul 10, 2024 4:56 AM

2. Find the backup you wish to restore and click on Restore Virtual Machine.

-win-2022-a	azure							🖙 Connect 💽 Mana	age credentials	]   ×
Intelligent grou none	ups	Last backu Today at 4:		ID		Provider ID azure-vm-	Last discovered July 10th 2024, 4:28:25 a	Application am Not connected	,	more ∛
Pro	rotection		Recovery p	oints	Volumes		Restore activity	Permissions		
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								V	ф ш	=
Date	Time	Application co	Includes di	Scan status	Copies					
July 10, 2024	4:56:58 AM	~	All	Not scanned	1 сору					:
Image location		Resource group	C	efault	Туре					
dp-01 🚯			,	/	Backup				③ Reco	over
1 record								Re	estore virtual mach	<u>hine</u>
								Creates a new	virtual machine after rest	toration

- 3. On the Restore Virtual Machine page, select the AWS equivalents for Azure.
  - a. Target CSP
  - b. Configuration Name
  - c. Region to restore to
  - d. Your AWS Account Number
  - e. The name the VM will have in AWS.
  - f. The instance machine type
  - g. The AMI ID.

Note: The two attached Azure volumes at the bottom of the screen image will be restored into two volume on AWS.

-win-2022-azure Restore	virtual machine	July 10, 2024 4:56 AM	
1 Recovery target			2 Recovery options
▲ One or more images for this red Select recovery target	covery point are not sca	nned for malware.	
Provider *  Follow steps from NetBackup doc provider restore.  aws The providers do not appear in the list if they are not Configuration * aws  Region * us-east-2		whine preparation for cross	
Account * Display name * •win-2022-azure-restored		•	
Instance type * (13.xlarge For example: 13.large, c5ad.xlarge, c6gd.8xlarge AMI ID * ami-		ð 	
Volumes			
Volume	Size	Encryption key	
-win-2022-azure_OsDisk	127 GB	Platform managed key	
win-2022-azure_DataDis	4 GB	Platform managed key	J
2 records			

- 4. On the next screen continue to select the AWS equivalents of the Azure VM.
  - a. AWS Zone
  - b. Network configuration
  - c. Network security group
  - d. Advanced options

-win-2022-azure Restore virtual machine July 10, 2024 4:56 AM	
Recovery target	2 Recovery options
One or more images for this recovery point are not scanned for malware.	
Region	
us-east-2	
Zone *	•
us-east-2b	
Network configuration *	
EC2 Subnet us-east-2	۹
Network security group *	م
Advanced	
Power on after recovery	
Remove tag associations	

5. After the restore, log into AWS and the virtual machine will be available for use.

aws Services	<b>Q</b> Sear	h [Alt+S]		
🔯 RDS 🙋 EC2				
EC2 Dashboard	×	Instances (1/1) Info		C Connect Instance state V Actions V Launch instances V
EC2 Global View		Q Find Instance by attribute or tag (case-sensitive)	All states 🔻	
Events		rohan X Clear filters		< 1 > @
<ul> <li>Instances</li> </ul>		Vame 🖉	v Instance ID	Instance state 🔻 Instance type 🔻 Status check Alarm status Availability Zone 🔻 Public IP
Instances		-win-2022-azure-restored		⊘ Running Q Q t3.xlarge
Instance Types				

#### How to Use – AWS to Azure

1. After a backup has been completed of a cloud virtual machine, navigate to Workloads > Cloud and find the virtual machine you wish to restore to an alternate cloud service provider (CSP). Click on the virtual machine to proceed.

oud								
Virtual machines	Applications	PaaS	Volumes	Intelligent groups	Providers	Snapshot Managers		
Search							(Åa) Q	G
All	<b>+</b>	D						
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		us-east-2	Amazo	n Web Services	Not protected	Not connected	Jul 10, 2024 2:15 PM	

2. Find the backup you wish to restore and click on Restore Virtual Machine.

								🗢 Connect 💽 Manage cr	
Intelligent grou none	ıps	Last back Today at 2		ID		Provider ID	Last discovered July 10th 2024, 2:13:25 pm	Application Not connected	more
Pro	otection		Recovery	points	Volumes		Restore activity	Permissions	
Search(Enter a	a file or folder nar	ne to search.)						۹ 🛈 ې	m ∘ t≣ ∘
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mage location		Default		Туре					
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	.us-east-2.co			Backup					③ Recover
2 records								Restore	virtual machine
July 9, 2024	10:09:00 PM		All	Not scanned	1 сору			Creates a new virtual n	nachine after reatoratio
July 9, 2024	12:55:11 PM		All	Not scanned	1 copy				1

- 3. On the Restore Virtual Machine page, select the Azure equivalents for AWS.
  - a. Target CSP
  - b. Configuration Name
  - c. Region to restore to
  - d. Your Azure subscription
  - e. Resource group in Azure to restore to
  - f. The name the VM will have in Azure.
  - g. The instance machine type

Note: The two attached AWS volumes at the bottom of the screen image will be restored into two volume on Azure.

Restore virtua	I machine Ju	ly 10, 2024 2:15 PM		
1 Recovery target				2 Recovery options
One or more images for this Select recovery target	recovery point are	not scanned for malware.		
Provider *  Follow steps from NetBackup of provider restore.  azure  The providers do not appear in the list if they are		tual machine preparation for cross	s •	
Configuration *			•	
Region * eastus2			•	
Subscription *			•	
Resource group *			٩	
Display name *	Ţ			
Size * Standard_B1Is For example: Standard_B1Is			Ð	
Volumes				
Volume	Size	Resource group	p	Туре
	10 GB			
	1 GB			
2 records				

- 4. On the next screen continue to select the Azure equivalents of the AWS VM.
  - a. Azure Zone
  - b. Network configuration
  - c. Security group
  - d. Advanced options

Restore virtual machine July 10, 2024 2:15 PM	
Recovery target	2 Recovery options
One or more images for this recovery point are not scanned for malware.	
Region eastus2	
Zone * Zone 2	
Network configuration *	
Security group *	
Advanced <ul> <li>Power on after recovery</li> <li>Remove tag associations</li> </ul>	

5. After the restore, log into Azure and the virtual machine will be available for use.

Microsoft Azure			𝒫 Search resources, services, ar	nd docs (G+/)	
Home > > · RESTO	DRE-TWO ☆☆				
	🔊 Connect 🗸 ▷ St	art 🖓 Restart 🔲 Stop 🕓 Hiber	nate 🕅 Capture 📋 Delete 🖒	Refresh 🔋 Open in mobile 🔗 Feedback 扂	CLI / PS
Overview		E-TWO virtual machine agent status is not n	eady. Troubleshoot the issue $\rightarrow$		
Activity log					
Access control (IAM)	∧ Essentials				
🗳 Tags	Resource group (mov	:) :		Operating sys	tem : Linux
🔀 Diagnose and solve problems	Status	: Running		Size	: Standard B1ls (1 vcpu, 0.5 GiB memory
✓ Favorites	Location	: East US 2 (Zone 2)		Public IP addr	ess : _
serial console	Subscription (move)			Virtual networ	k/subnet :
> Connect	Subscription ID	1		DNS name	Ea.
	Availability zone	: 2		Health state	1.*
> Networking				Time created	: 10/07/2024, 09:26 UTC

### Conclusion

Veritas again makes it easier than ever to backup and recover almost any storage or application.

#### **About Veritas**

Veritas Technologies is a leader in multi-cloud data management. Over 80,000 customers—including 95 percent of the Fortune 100—rely on Veritas to help ensure the protection, recoverability, and compliance of their data. Veritas has a reputation for reliability at scale, which delivers the resilience its customers need against the disruptions threatened by cyberattacks, like ransomware. No other vendor is able to match the ability of Veritas to execute, with support for 800+ data sources, 100+ operating systems, 1,400+ storage targets, and 60+ clouds through a single, unified approach. Powered by Cloud Scale Technology, Veritas is delivering today on its strategy for Autonomous Data Management that reduces operational overhead while delivering greater value. Learn more at <u>veritas.com</u>. Follow us on Twitter at @veritastechllc.

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