

## STO3194BU - Protecting Virtual Machines in VMware Cloud on AWS

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Brian does the intro

\*VMware on AWS Backup Overview

VMware Cloud on AWS

- VMware is enabling the VADP backup partner ecosystem on VMC
- Access to native AWS storage for backup target
- Leverages high performance network between Virtual Private Clouds [vmware-cloud-on-aws.png]

<https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/cloud/VMW-T-O-Cloud-on-AWS-USLET-101-MED-RES.pdf>

Backup Partner Strategy

VMware Certified – VMware provides highest level of product endorsement

- Product certification with VMware Compatibility Guide Listing
- Predictable Life Cycle Management
- VMware maintains continuous testing of VAPD APIs on VMC releases

Customer Deployed – Same solution components for both on-premises and VMC deployments

- Operational Consistency
- Choice of backup methods – image-level, in-guest
- Choice of backup targets – S3, EBS, EFS

Partner Supported – Partner provides primary support

- Same support model as on-premises

VMware Cloud on AWS ISV Partners (Initial Availability)

VADP / ENI / Storage Targets

VADP

- New VDDK supports both on-premises and VMC
- VMware backup partners are updating existing products to use new VDDK to enable backup of VMC based VMs

Elastic Network Interface (ENI)

- Provide access to high speed, low latency network between VMC and AWS Virtual Private Clouds
- No ingress or egress charges within the same availability zone

Backup Storage Targets

- EC2 based backup appliance – EBS and S3 storage
- Direct to S3

Example Backup Topology

- Some partners will support in-guest and image level backups direct to S3
- Deduplicates, compresses and encrypts on EC2 backup appliance
- Store or cache backups on EBS
- Some partners will support vaulting older backups to S3

## Summary

- VADP based backup products for VMC are available now
- Elastic Network Interface connection to native AWS services is available now
- Dell EMC Data Protection Suite is the first VADP data protection product available on VMC
- Additional VADP backup solutions will be available in the coming months

\*Dell EMC Data Protection for VMware Cloud on AWS - Anita

Data Protection Continuum - Where you need it, how you want it

## In-cloud Protection

### Dell EMC Data Protection - Launch Partner

Data Protection Suite protects VMs and enterprise workloads whether on-premises or in VMware Cloud

- Same data protection policies
- Leveraging best-in-class Data Domain Virtual Edition
- AWS S3 integration for cost efficient data protection

### Dell EMC Data Domain and DP Suite

#### Data Protection Suite

- Protects across the continuum – replication, snapshot, backup and archive
- Covers all consumption models
- Broadest application and platform support
- Tightest integration with Data Domain

#### Data Domain Virtual Edition

- Deduplication ratios up to 55x
- Supports on-premises and cloud
- Data encryption at rest
- Data Invulnerability Architecture – best-in-class reliability
- Includes DD Boost, DD Replicator

### Dell EMC Solution Highlights

#### Unified

- Single solution for enterprise applications and virtual machines
- Works across on-premises and cloud deployments

#### Efficient

- Direct application backup to S3
- Minimal compute costs in cloud
- Storage-efficient: deduplication up to 55x to DD/VE

#### Scalable

- Highly scalable solution using lightweight stateless proxies
- Virtual synthetic full backups – lightning fast daily backups, faster restores
- Uses CBT for faster VM-image backup and restore

### Solution Detail

Backup of VMs and applications in VMC to a DD/VE or AWS S3

Solution Supports

- VM image backup and restore
- In-guest backup and restore of applications using agents for consistency
- Application direct to S3

#### ESG InstaGraphic

- ESG Lab has confirmed that the efficiency of the Dell EMC architecture can be used to reduce monthly in-cloud data protection costs by 50% or more
- ESG Research has confirmed that public cloud adoption is on the rise. More than 75% of IT organisations report they are using the public cloud and 41% are using it for production applications
- There is a common misconception that an application, server, or data moved to the cloud is automatically backed up the same way it was on-premises
- Architecture matters when choosing a public cloud data protection solution

Source – ESG White Paper – Cost-efficient Data Protection for Your Cloud – to be published.

#### Manage Backups Using a Familiar Interface

Consistent user experience in cloud and on-premises

- Manage backups using familiar data protection UI
- Extend data protection policies to cloud
- Detailed reporting and monitoring

#### Software Defined Data Protection Policies

Dynamic Policies – Keeping up with VM data growth and smart policies

Supported Attributes

- DS Clusters
- Data Center
- Tags
- VMname
- Data Store
- VMfolder
- VM resource group
- vApp

#### \*Technology Preview

The Vision we are building towards

(screenshot demos)

#### Further Reading

Chad's post on the solution -

[http://virtualgeek.typepad.com/virtual\\_geek/2017/08/vmworld-2017-re-inventing-data-protection-for-vmware.html](http://virtualgeek.typepad.com/virtual_geek/2017/08/vmworld-2017-re-inventing-data-protection-for-vmware.html)

#### Press Release

<https://www.emc.com/about/news/press/2017/20170828-04.htm>

#### Blog

<https://blog.dell EMC.com/en-us/dell-emc-delivers-superior-vmware-data-protection-designed-for-the-modern-software-defined-data-center/>