

# VMWARE CLOUD PROVIDER PROGRAM DATA PROTECTION FOR VCLLOUD DIRECTOR

## AT A GLANCE

Data Protection is a suite of products from Dell EMC now integrated into vCloud Director. Dell EMC Data Protection and Data Domain products work together to provide a seamless backup and restore service to tenants.

Dell EMC Data Protection provides deduplication with integrated backup and recovery software. Dell EMC Data Protection is optimized for virtual environments and its unique client-side global deduplication technology eliminates redundant backup data before it is sent over the network and stored. With Dell EMC Data Protection, every backup is a full backup and no data is ever backed up twice. Image recovery is a simple one-step process.

Dell EMC Data Protection is tightly integrated with Data Domain systems through DD Boost software. Both Dell EMC Data Protection and Data Domain are integrated and certified with VCE Vblock and VSPEX systems.

With Dell EMC Data Protection you have a fast, reliable data protection solution that scales to even the largest of enterprises.

### KEY BENEFITS

Tenants will have access (subject to a provider enabling it) to the data protection tab in vCloud Director from here they can work with backups and restores.

High levels of client-side deduplication mean service providers need less network bandwidth as the data sets will be smaller, up to 99% less bandwidth.

Less data to transmit means backups can occur faster, up to 50% faster, which leads to a higher customer satisfaction with the service.

Of course, less data to backup means less storage is required and Data Protection can account for up to a 30% saving in storage, lowering CapEx expenses for a backup service.

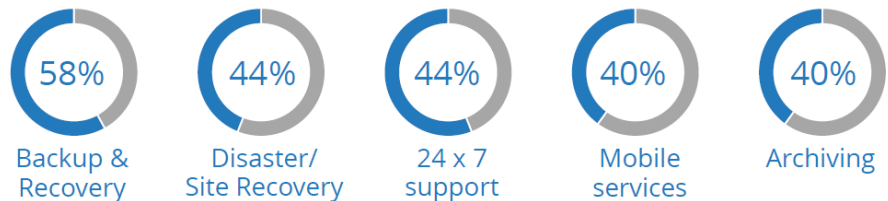
## The Backup as a Service Market

The market is accelerating as the proliferation of workloads in public clouds continues to thrive, backup and data protection is expected to grow in line with a CAGR of over 27% by 2022 and 24% in 2018 year-over-year growth rate est.<sup>1</sup>

The current market is fairly fragmented where a few players occupy the market share leaders according to Gartner this is shared amongst Veeam, Veritas, IBM and Commvault with Dell EMC a clear leader and measured as having the highest ability to execute.

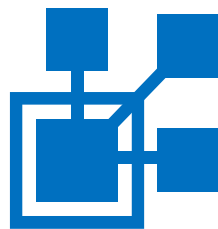
This leaves Cloud Service Providers a distinct opportunity to maximise the revenue from tenants as the demand grows for additional value-added backup services. Indeed, according to the Cloud Price Index Q2 2018 451 research, backup services are typically a separate service, not typically bundled, this allows providers to change on a per unit basis which increases revenue potential. 451 also establishes that Backup services have limited feature inclusion and are some of the cheapest price services, making this a simple upsell and providing an opportunity to differentiate.

## Top Managed Services



Source: IDC's Cloud and AI Adoption Survey, January 2018, N=400, Percent Sample

## How does Data Protection for vCloud Director help?



Cloud Service Providers using vCloud Director to provide compute resources to their customers (tenants) can provide network and security services with NSX native integration to vCloud Director. Data Protection is similar, in that customers can now access Data Protection services from within the vCloud Director user interface, exactly how they would access native compute, network and security services.

## FUNCTIONALITY

### DASHBOARDS

- The dashboard tab provides overview of tenant's total consumption and quota utilization by policy

### VAPP & VM

- vApp/VM tabs list vApps/VM by vDC, users can Backup vApp, Manage Policies and Restore
- Manage Policy action allows you to configure protection policies for the whole vApp, or subsets of VMs
- vApps can be protected by 1 or multiple policies. They can also be partially or completely unprotected

### POLICIES

- Policy tab lists policies available to this tenant VDC. Clicking on any policy brings up the policy details screen. This is read-only (for tenants) since policies are configured by the Cloud Admin.

### WORKFLOWS

- vApp restore workflows include, restore to new, restore to original
- VM restore workflows include, restore to new, restore to original and File-level restore (note – file level restore is not done in this UI)

### SCALE

- 5000 VMs per Avamar Virtual Edition (AVE)\*
- 96TB per Data Domain Virtual Engine (DDVE)

(NB: Initial GA limited to 1000 VM per Avamar Virtual Edition (AVE))

### PERFORMANCE KPI

(The following are estimations observed from customers)

- ~92% job completion under 1 hr
- ~99% backup job success rates
- ~99% data reduction

### LOW TCO, HIGHER MARGIN

- Multiple AVE & DDVE per vCloud Director instance
- ~70:1\*\* de-dupe of data saves considerable cost

vCloud Director's innovation in version 9.1 called UI extensibility. This allows any 3<sup>rd</sup> party product or service to integrate to vCloud Director's HTML5 UI. The innovation has split the UI from the core product and made the UI self-consuming of the REST API, therefore upgrades to vCloud Director will not impact the UI and any extensions.

Data Protection is supplied by Dell EMC, who have integrated to the REST API (and extended it for their purposes) and have written a self-consuming extensibility interface, meaning that everything that a tenant can do in the vCloud Director UI is available via API, perhaps an opportunity for some service providers to integrate further.

## Why is this a differentiated solution?

Backups by themselves are a periodic data copy meant as a source of last resort for recovery of an environment. Typically held on different media, frequently in a different geography. Often replicated to a secondary site, just in case. vCloud Director is now integrated to Dell EMC Data Protection. Dell EMC Data Protection is an industry leading backup and deduplication product and integrated to Data Domain. Within the VCPP program, Cloud Service Providers can transact in Data Protection using points.

This means that customers now have access from within 1 console to both vCloud Direct services and Data Protection services, eliminating console hopping for tenants, and providing full self-service backup and restore within the same UI which no one else can claim today.

Existing Cloud Provider administrators will have controls that they can apply against the customer virtual data centers that limit and ensure adherence to the service parameter that the customer has purchased, allowing a provider to differentiate and 'tier' their offerings to help sales and meet differing customer needs.

## Tenant functionality

Tenants will have access (subject to a provider enabling it) to the data protection tab in vCloud Director from here they can work with backups and restores, including:

- Image-level backup to provide 'crash consistency' restores
- Restore to new (perhaps for test-dev, in-place restore)
- Restore networks (optional activation)
- vApp or individual VM level
- By policy or ad-hoc
- Policy assignment:
  - a. Default for vDC
  - b. Per-vApp / Per-VM
  - c. Self-service file-level restore

Download agents and docs for agent-based backups to provide 'application consistency' where specific application assets are needed for restore – i.e. transaction log files



- Multi-Tenant UI
- Integration of 3rd party services
- IaaS self-service
- Network & Security self-service
- Workflow extensibility
- Multi-site connectivity
- Resource pooling assets



- Enterprise deduplication backup & recovery software
- Offered with deduplication storage systems VCE Vblock and VSPEX

Only available to VMware Cloud Provider Program partners

#### LEARN MORE

FOR MORE INFORMATION OR TO PURCHASE VMWARE PRODUCTS

CALL 877-4-VMWARE (outside North America, +1-650-427-5000)

#### VISIT

<https://cloudsolutions.vmware.com/>, for more information on what services are available to VMware Cloud Provider Partners.

For more detailed product specifications and system requirements, refer to the product documentation

## Cloud Provider Admin functionality

The Cloud Provider Admin does not use vCloud Director interface, they use the Data Protection Extension interface instead, this runs on a separate appliance. They have lots of control over the tenant's VDC backup and restore capabilities, including:

- Policy template definition
- Configure backup schedule / frequency
- Configure backup retention periods
- vDC-level per-policy quotas on protected capacity
- vDC-level quota on ad-hoc backups with globally configurable retention period
- Configure number of VM backups
- Assign backup repository for VDC
- Backup replication configuration

## Dell EMC & VMware Better Together Results

### Enterprise benefits:

- Better customer experience via extended vCloud Director UI
- vCloud Director look and feel - same interface backup solution
- Self-service instant app. consistent full backups
- One-step image recovery VM's, vApps and/or files
- Backup policy controls for VDC and/or vApp / VM
- Simplicity workflow driven restore VMs and/or vApps

### Cloud Provider benefits:

- Multi-tenant Data Service Protection
- Multi-tiered services
- 55x Optimized deduplicated full backups
- 50% side faster backups from client-side deduplication
- Up to 99% reduction in backup network traffic
- vDC-level per-policy quotas for tenant's limits
- Federated & pooled appliance resources scale out
- vCloud Director plugin can scale out over multiple repositories (100's), so a provider can scale out dozens of Data Protection and Data Domain servers in a single vCloud Director deployment
- Simple and natural upsell for IaaS services
- Available to consume in points under the VMware Cloud Provider Program

<sup>1</sup>Footnote Technavio market research global backup as a service 2018-2022

VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 [www.vmware.com](http://www.vmware.com)

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