

[VMware vSphere 5.1 Feature Spotlight: vSphere Data Protection](#)

☒ VMware has added some really great features with their vSphere Data Protection product that ships with the vSphere 5.1 environment. By leveraging the vSphere API - Data Protection (VADP) it allows for reduced load on the vSphere hosts which is great news for resource utilization.

So What does vSphere Data Protection Do?

The new vSphere Data Protection 5.1 does some exciting things. This is a newly developed product which came from a partnership with EMC (VMware's parent company) by adding the EMC Avamar software enhancements into the vSphere Data Protection suite allowing backup and de-duplication of up to 2TB of VM data for up to 100 VM guests into a VMware Storage Appliance specifically designed for the Data Protection Suite.

By using the Avamar technology, vSphere Data Protection can make use of the variable length de-duplication and Changed Block Tracking that will help to reach potential of 99% de-duplication and allow for single step restores.



No...Avamar, not Avatar.

Just how Free is Free?

What is great about this feature is that it is free to all vSphere licenses which are Essentials Plus or higher. The question only comes with scalability caveats. If you choose to grow outside of the 2TB storage or the 100 VM limit, you are most likely going to have to go to a third party product to backup in your current method or using a similar style, but with a different product in front of it.

Why 100 VMs and 2TB?

Great question. The folks at VMware have built the vSphere Data Protection to be used in a small to medium business environment to allow you to protect your VMs to a virtual SAN appliance. For this reason they have engineered it to work within reasonable limits of the vSphere and vCenter product. If you need additional capabilities like writing to tape or off-disk archival storage of some kind, or to maintain larger environments, you are probably in need of a more "enterprise" backup and restore solution.

While there is a cap on each VDP appliance, you can have up to 10 instances per vCenter installation in your datacenter. This allows you to grow to protect more machines. The limitation for total storage is a per-VDP appliance limit. What that means is that you cannot migrate backup images from one VDP appliance to another, nor can you share the VDP destinations to create a larger repository.

How can I best make use of vSphere Data Protection

✖ As I've written about with my article on [Belt and Suspenders](#), you may want to add the vSphere Data Protection into your suite of protection tools and potentially take some of the weight off of your current backup and restore products. If you have a group of VM guests that see limited change, or potentially your test and development boxes, they may be perfectly suited to be backed up using the vSphere Data Protection and then your traditional Tier 1 and Tier 2 servers will have more of your backup window available to them.

Backup and server protection is always a hot topic. This tool may not replace your current backup technology, but it may augment your current environment and free up resources. By creating a new method to achieve data protection without more licenses, you may add some cost savings to the ongoing management of your datacenter. Now that is what I like to hear.

The product comes as a pre-configured Linux based vSphere appliance so deployment is simple and the simple web based management tool gives you everything you need in the browser to backup, restore and configure the overall protection and retention for the appliance.



What do I need to deploy VDP?

The VDP appliance requires that you are using vCenter 5.1 which can be either the Windows based installation, or the Linux based vCenter Server Virtual Appliance (VCVA). The VDP product will be released with the general availability release of vSphere 5.1 on September 11th, 2012.

For more information, take a look at the vSphere Data Protection feature

PDF: <http://www.vmware.com/files/pdf/techpaper/Introduction-to-Data-Protection.pdf>