Solution Showcase

Customers Are Looking for Cloud-powered Data Protection, and Veeam Can Help You Deliver It

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Abstract: Organizations of all sizes are looking to add cloud-based services to their IT architectures, which often affects their data protection strategies. Each cloud service permutation (BaaS, STaaS/DP, DRaaS, IaaS, and SaaS) presents different data protection opportunities for service providers. Those providers should be aware that Veeam has innovated well beyond "just" VM backups. This vendor is delivering significant agility and availability to modern data centers, and its latest wave of innovation focuses on *harnessing the cloud* and *enabling service providers*.

Overview: Why Leveraging the Cloud for Data Protection Makes Sense

Data protection is a top-of-mind issue for practically every organization today. According to ESG research, *improving data backup and recovery* is a top-five priority among surveyed organizations overall, and a top-two priority for midsized organizations in particular.[1]

Those respondents also reported that cost containment is a major business driver affecting their IT strategy, and increasing cloud usage is the most frequently cited measure they're taking to reduce or otherwise contain IT expenditures. This increased use of the cloud is most often centered on data protection (see Figure 1).[2]

Figure 1. Top Five Cloud Infrastructure Use Cases

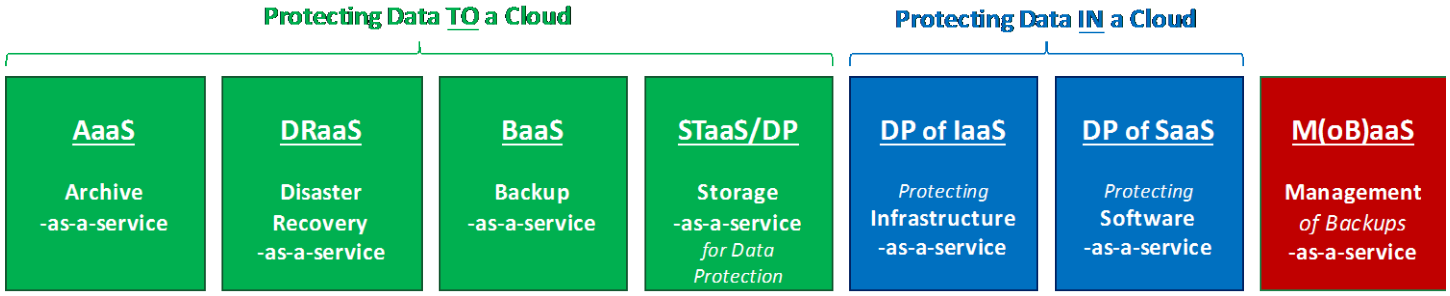
Source: Enterprise Strategy Group

[1] Source: ESG Research Report, *2016 IT Spending Intentions Survey*, February 2016.
[2] ibid.

The Cloud and Data Protection Intersect in Multiple Ways

There are many ways one might consume cloud-powered data protection, preservation, and availability services—such as the seven intersection points shown in Figure 2.

Figure 2. Seven Intersection Points Between Cloud and Data Protection



Source: Enterprise Strategy Group

For organizations looking to utilize cloud-based production services (IaaS and SaaS), it is important to recognize that data protection still applies:

- Protecting VMs hosted in infrastructure-as-a-service (IaaS) is ideally delivered by service providers as part of their hosting offering (either for an add-on fee or included within a white-glove or "premium" hosted service).
- Protecting data within software-as-a-service (SaaS) is still critically important, even though the SaaS platform may be natively resilient. For example, built-in data replication will replicate bad data or deletions just as efficiently as it replicates good data. As such, backups still matter!

Veeam enables IaaS and SaaS providers to offer data protection for hosted workloads using the company's purpose-built and proven technology for virtualized environments, which has evolved into a highly scalable, enterprise-class solution.

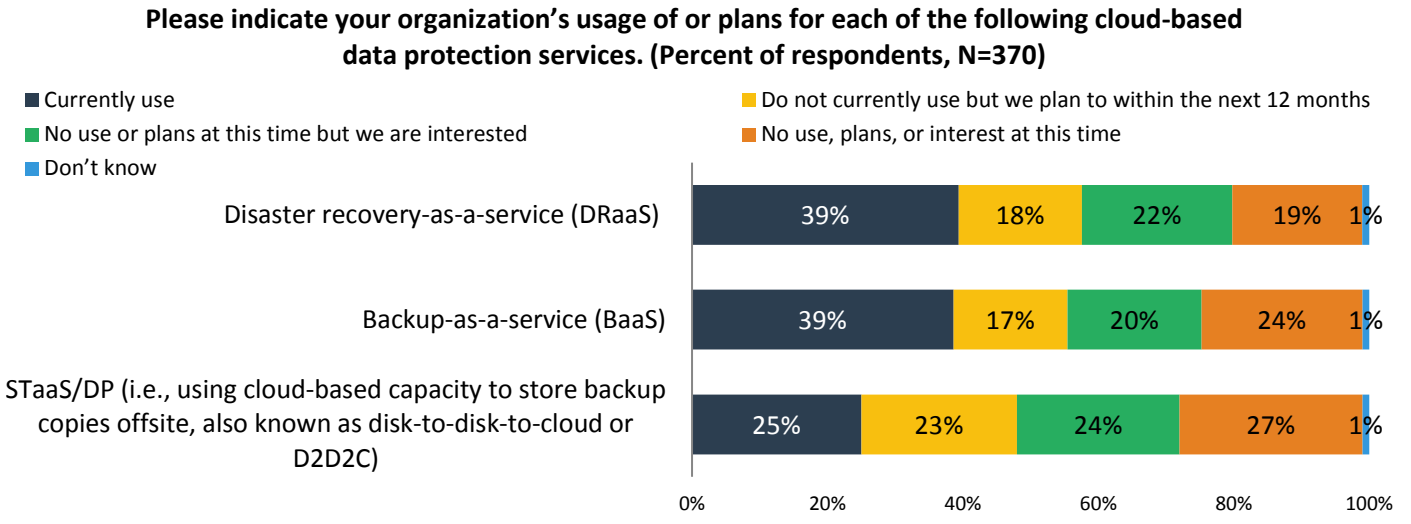
For organizations looking to leverage "the cloud" to help protect on-premises infrastructure, cloud services delivered by a provider with data protection expertise is often the best option. ESG defines data protection cloud services as follows:

- Disaster recovery-as-a-service (DRaaS) is a cloud-based service enabling servers and services to resume functionality within a hosted cloud service instead of within a self-managed data center.
- Backup-as-a-service (BaaS) is a third-party service that includes software to back up data to a cloud-based repository, typically paid for via a capacity-centric model. Along with software/service, it may include an on-premises caching appliance or another on-premises storage device for fast recovery. The primary design and intent of a BaaS solution is to offload data protection and ensure backups are available offsite.
- Storage-as-a-service used for data protection (STaaS/DP) is cloud-based storage leveraged as a secondary or tertiary repository supplementing a traditional on-premises data protection solution. Traditional backups occur onsite before the data is replicated to the cloud for longer-term retention and offsite protection. This approach is also called "disk-to-disk-to-cloud," or D2D2C.

Service providers ought to be excited to learn that a significant majority of organizations are, at the least, interested in taking advantage of cloud services as part of their broader data protection efforts (see Figure 3), with many of them already doing so to some degree.[3]

[3] Source: ESG Research Report, *Data Protection Cloud Strategies*, December 2016.

Figure 3. Current and Anticipated Use Trends for DRaaS, BaaS, and STaaS/DP



Source: Enterprise Strategy Group

As Figure 3 shows, a relatively balanced percentage of organizations (25-39%) use each cloud-powered protection strategy in their environments now to some degree. More notably, by adding current users, plus planned users, plus interested users, roughly three out of four organizations surveyed were at least warm to the idea of cloud-powered data protection. In other words, only 19% to 27% of respondents had no interest in cloud-based data protection.

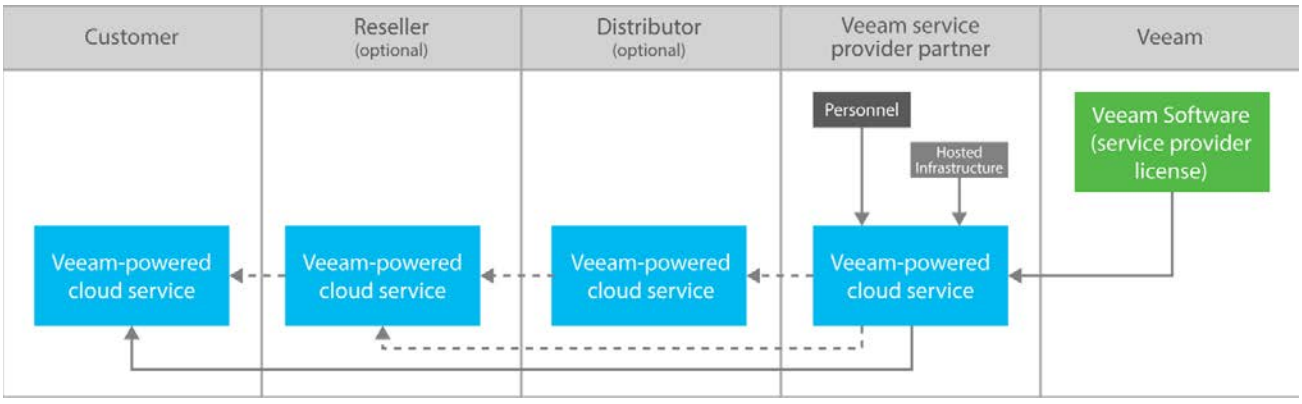
Infrastructure hosting providers, as well as cloud service providers, will find business opportunities by enabling cloud-based data protection via cloud-storage or turnkey backup services, as well as offering BC/DR capabilities that are highly sought out.

Between 72% and 79% of ESG survey respondents are either interested in or already using cloud-based data protection. This is a big opportunity for service providers willing to offer such services.

Why and How to Partner with Veeam for Cloud-powered Protection and Availability

One of the most visible innovators in modern data protection and availability is Veeam, which boasts more than 216,500 customers worldwide that are primarily running highly virtualized IT environments.[4] Veeam has evolved beyond "just" its VM protection and recovery solution with newer capabilities for workstation and physical backups, protection of cloud-based data (IaaS and SaaS), etc. With its *Cloud Connect* technology, Veeam has set its sights on enabling service providers to deliver a range of cloud-powered data protection solutions using Veeam's backup and replication software underpinnings in various ways (see Figure 4).

Figure 4. Consumption/Partnering Models for Veeam-powered Cloud Services



Source: Veeam

[4] Source: Veeam Q3 2016 results release, October 18, 2016.

Because of Veeam's software portfolio versatility, Veeam service provider partners can offer solutions for all three of the popular cloud-powered data protection models—STaaS/DP, BaaS, and DRaaS.

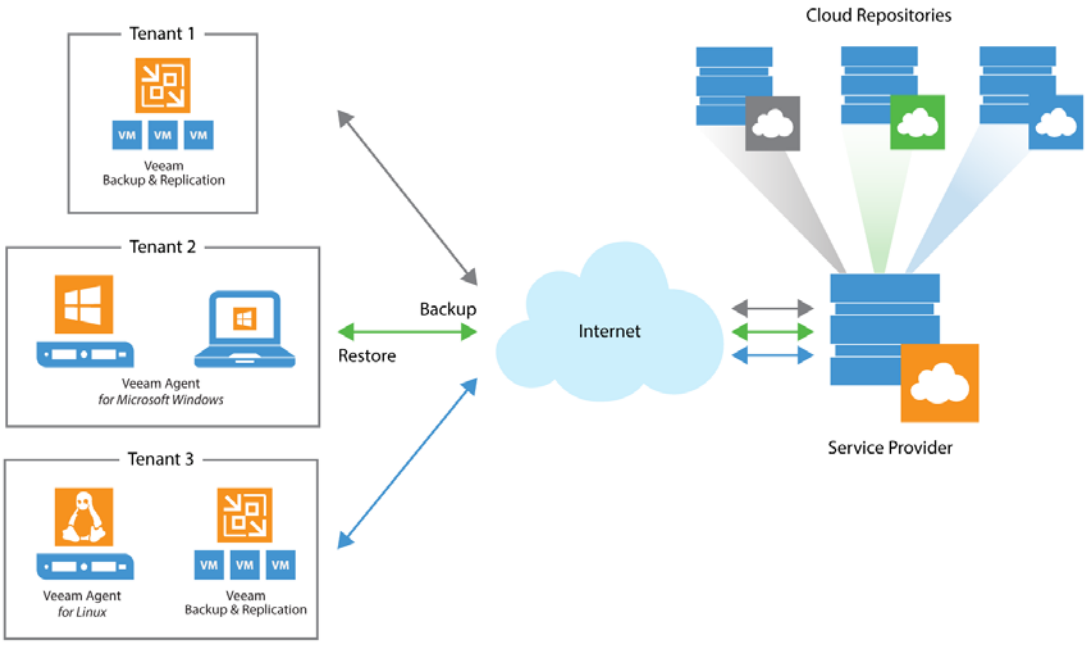
STaaS/DP: Utilizing Cloud Storage for On-premises Veeam Implementations

Arguably, the easiest way to "add cloud" to a data protection strategy is to incorporate cloud-based storage into an otherwise satisfactory onsite protection solution. In this manner, a company can leverage the reliable protection and rapid recovery of its traditional Veeam implementation *and* take advantage of the appealing economics and operational agility associated with cloud-powered protection.

When IT decision makers were asked by ESG why they chose cloud-based protection of any sort to supplement their onsite protection solution, 31% said it was because they had a high level of satisfaction with their existing protection solutions, while 32% stated they believed they were achieving a more economical outcome by simply adding cloud storage.[5]

Veeam enables service providers to offer cloud storage to on-premises Veeam implementations where the service provider simply becomes a secondary cloud repository for Veeam backups. It is a nearly transparent, easily manageable way for IT admins to leverage a service provider's storage tier within their Veeam environments (see Figure 5).

Figure 5. Cloud Storage for On-premises Veeam Implementations



Source: Veeam

Veeam's approach leverages both storage and compute in the cloud, which enables "forever incremental" backup and an associated reduction of data sent to the cloud. It also allows the creation of grandfather/father/son (GFS) retention points in the cloud, and—perhaps most importantly—the ability to browse and perform granular restores directly from cloud backups.

For organizations looking to embrace "the cloud" by extending their existing (or newly implemented) on-premises backup solution, adding cloud-based storage as an additional repository can be an easy and effective way to implement a hybrid approach to backup and recovery.

[5] Source: ESG Research Report, *Data Protection Cloud Strategies*, December 2016.

Delivering BaaS with Veeam

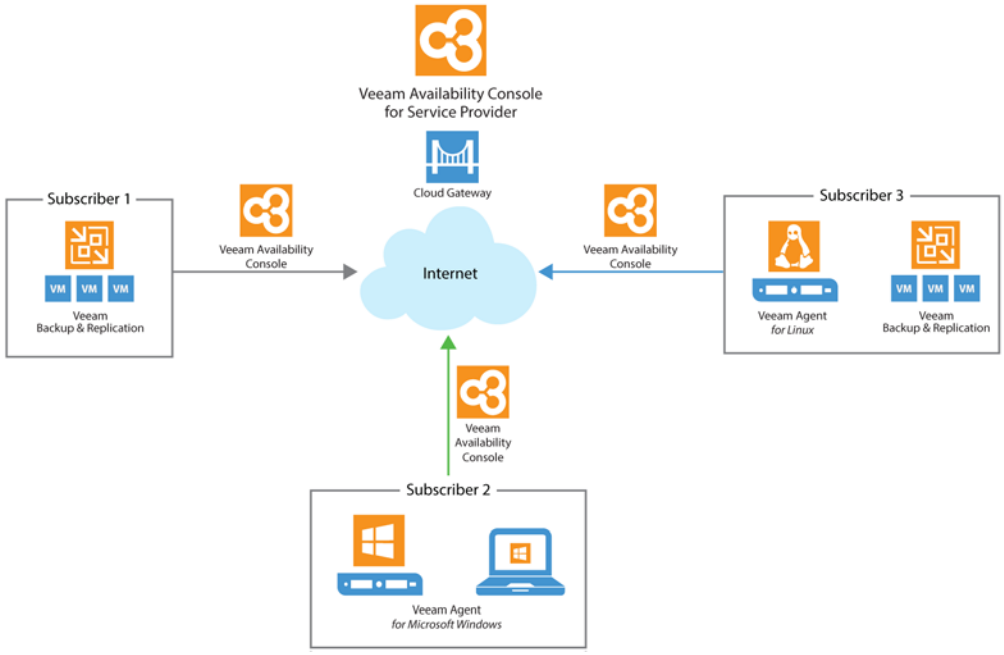
Many IT organizations, however, are dissatisfied with their current on-prem solution, usually due to unreliability and cost. When ESG asked potential cloud subscribers about leveraging BaaS versus simply adding cloud storage, their responses came down to:[6]

- **Economics—**A combined 67% of organizations currently using BaaS to some degree believed the BaaS approach would be more economical than adding cloud storage to their existing protection solution.
- **BaaS superiority—**A combined 30% of BaaS users considered their existing onsite solution unsatisfactory and in need of replacement. Simply adding cloud storage to that archaic solution wouldn't address their business needs.

Veeam enables service providers to deliver backup-as-a-service using the same Veeam backup and replication technology trusted by so many organizations today. Service providers can remotely deploy and manage the technology at multiple customer sites using Veeam Availability Console (see Figure 6) or their own remote monitoring and management platform (LabTech and Kaseya are supported out of the box). Particularly among highly virtualized organizations, confidence in Veeam combined with a reputable service provider's reliability and expertise creates quite a desirable model. Service providers looking to launch a strong BaaS offering should take note.

One in four organizations surveyed by ESG believe the ability to recover or failover within the cloud is a key characteristic of a good cloud-powered data protection solution.

Figure 6. Cloud-based Veeam to Remote Subscribers



Source: Veeam

Veeam technologies can be implemented by service providers to facilitate a turnkey backup-as-a-service offering, such that customers can gain the benefits of Veeam backup/recovery consumed through an OpEx model and paired with expertise to maximize outcomes and minimize demands on the customer's staff.

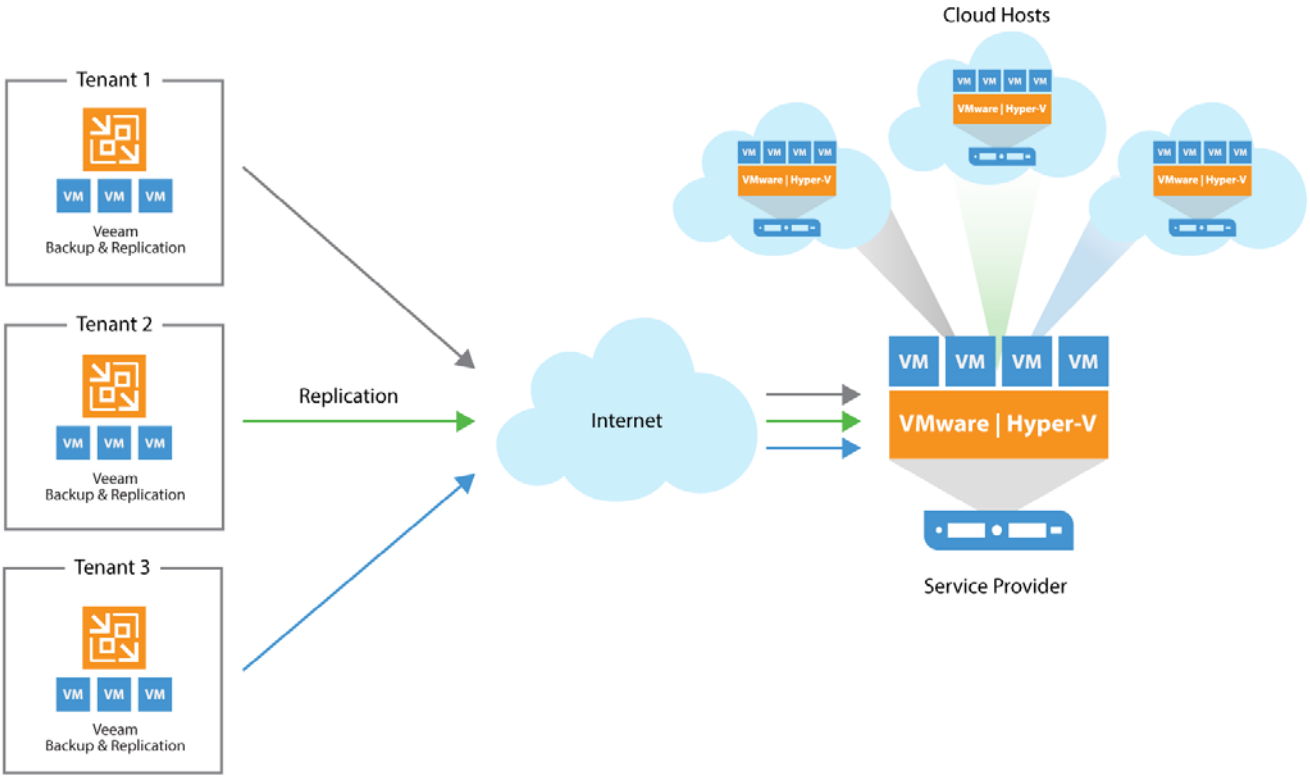
[6] ibid.

Delivering DRaaS with Veeam

For some organizations assessing cloud-powered data protection, simply being able to restore data back to their on-premises servers is not enough. They often ask, "*Why BaaS when we could DRaaS?*" Specifically, they are looking to recover servers within a cloud-powered alternative infrastructure. One in four organizations surveyed by ESG believe the ability to recover or failover within the cloud is a key characteristic of a good cloud-powered data protection solution.[7]

Service providers can leverage Veeam technology to provide not only offsite data survivability, but also the replication and failover capabilities necessary for disaster recovery. By utilizing VM replication (from production VMs or backups in the cloud), Veeam customers (or their service providers) can maintain standby VMs in the cloud. And with Veeam's "Failover Plans" and scripting support, service providers can combine their more reliable infrastructure with expertise and BC/DR planning, preparation, and testing processes to ensure their subscriber's business longevity (see Figure 7).

Figure 7. Cloud-based Disaster Recovery Architecture Using Veeam



Source: Veeam

As Figure 7 shows, the combination of Veeam's protection and recoverability enables a service provider to deliver true DRaaS to subscribers. By combining the VM-based replication and failover-plan mechanisms with a service provider's flexible infrastructure, BC/DR is finally attainable for small and midsized organizations, as well as a good option for enterprises looking to modernize edge/ROBO availability strategies.

[7] ibid.

The Bigger Truth

Today, every serious conversation about IT transformation likely includes "the cloud." And certainly, data protection appears to be a top-of-mind consideration for almost every organization right now. But even so, there are many different ways to use both to benefit not only a service-subscribing organization, but also the service provider.

What service providers should recognize—especially those providing hosting as well as managed services—is that, in much the same way that Veeam has innovated far beyond "just" VM backup to delivering agility and availability to modern data centers, this vendor's next wave of innovation focuses on *embracing the cloud* and *enabling service providers.*

It should be heartening for those service providers to learn that an IT innovator that played a big part in propelling the last IT transformation, i.e., virtualization, is today equally committed to driving business-level and engineering innovations that support the current IT transformational wave—cloud computing.