

# Data Recovery *in Microsoft Azure*: 4 Reasons Veeam PN makes this easy!

## What is the problem with data recovery to the cloud?

Many IT organizations are considering public clouds such as Microsoft Azure for new services to reduce challenges with data centers on-premises. Yet, businesses of all sizes depend on IT — period! It seems every week, a new story populates news feeds across the globe about a critical IT outage costing an ill-prepared company hundreds of thousands, if not millions of dollars in downtime, lost data, and lost revenue. With a reliance on 24.7.365 connectivity and access to critical data to properly run a business, it's evident that reliable and affordable data recovery solutions have never been needed more than they are today.

The truth is, most businesses already invest significant amounts of money in data recovery solutions to prevent similar losses from happening. In fact, Backup as a Service (BaaS), Software as a Service (SaaS) and Disaster Recovery as a Service (DRaaS) markets are flourishing! And what is most interesting is observing the rapid evolution of the industry. For example, who would have thought today, that just a few years ago DRaaS was defined by someone arranging a truck to deliver physical servers to an office and spending a few days setting them up. Have the times changed, or what?

Organizations often struggle with how to pair these business challenges with the ever-expanding offering in the cloud, such as Microsoft Azure.

## Enter the age of cloud computing

What organizations want today is to use the cloud for these key IT processes. However, today it's much different. When a disaster strikes, all companies need reliable and effective on-demand recovery to minimize loss and quickly reestablish Availability — even within seconds, if possible. Fortunately, cloud solutions have revolutionized the way we manage disasters. With the vast adoption of private, public and hybrid-cloud services, there are many solutions available for an organization to not only protect the most critical business workloads, but also enable the cloud as a remote office so that organizations don't have to physically build and maintain a secondary site. The cloud makes it easy and flexible for administrators to deploy, manage and recover critical workloads when necessary, and do so efficiently.

Cloud adoption, distributed company structures and rapid globalization are the key points that need to be taken into consideration when deciding on DRaaS solutions in 2017. The most important is to keep services online 24x7x365. Or, in the case of data recovery, keep the organization together and provide employees and customers with a seamless and uninterrupted user experience. But maintaining all of this magic requires sophisticated networking requirements. Fortunately, software-defined networking (SDN) is quickly overtaking traditional networking, enabling organizations to keep up, but it's not necessarily always easy to use.

Take the case of traditional VPN, for example. This technology is great – it has proven itself to be a fundamental building block of the modern business. But, let's face it, don't we all wish VPN was a little less complex and more user friendly? What if remote workers didn't have to read so many user manuals and could just hit one button to connect to the corporate network? What if the workloads restored in any cloud that you regularly access could immediately start working in your network and automatically help you meet the tight SLAs that have been established by your organizations – providing you a break from annoying, occasional outages?

Most of you reading this would expect this type of solution to be available only to enterprises with large budgets and way too expensive for most businesses. The good news is, thanks to Veeam this is no longer the case. Welcome to Veeam® PN for Microsoft Azure.

## What is Veeam PN for Microsoft Azure?

Veeam has developed a special, small-but-mighty Microsoft Azure appliance that allows you to connect various physical networks and endpoints into one virtual, dedicated-private company network – bringing complete connectivity for your workloads, and becoming the “company savior” in the event of a disaster. This solution makes data recovery (and data recovery to Azure) easy, fast and more convenient than ever. Veeam PN allows an IT administrator to:

- Build a secure connection between remote company offices and sites
- Join on-premises networks and/or private-cloud networks in Microsoft Azure
- Allow remote users to securely connect to the company network

Veeam PN is a small Linux appliance that can be easily installed within a few minutes, directly from the Azure Marketplace. It features an intuitive web interface that simplifies management, configuration and monitoring. It also leverages OpenVPN and SSL technologies, allowing an administrator to implement Site-to-Site (S2S) and Point-to-Site (P2S) connectivity scenarios. What's even more amazing is that Veeam PN for Microsoft Azure is completely free of charge and doesn't require a license.

Veeam PN was specifically designed to work directly with and complement the functionality of Veeam Restore to Microsoft Azure, another Veeam product that was initially released as a free product and is now also included as part of Veeam Availability Suite. Veeam Restore to Microsoft Azure enables users to take on-premises workloads and move them to the Azure cloud.

Now, the two products work in unison to deliver **Recovery to Microsoft Azure** and dramatically minimize downtime during a disaster by simplifying and automating the setup of an on-demand recovery to Azure solution. This software combination makes the data recovery process easy to set up and perform, ensuring the Availability of critical workloads regardless of location – whether they are in the main office, remote office or in the Azure cloud.

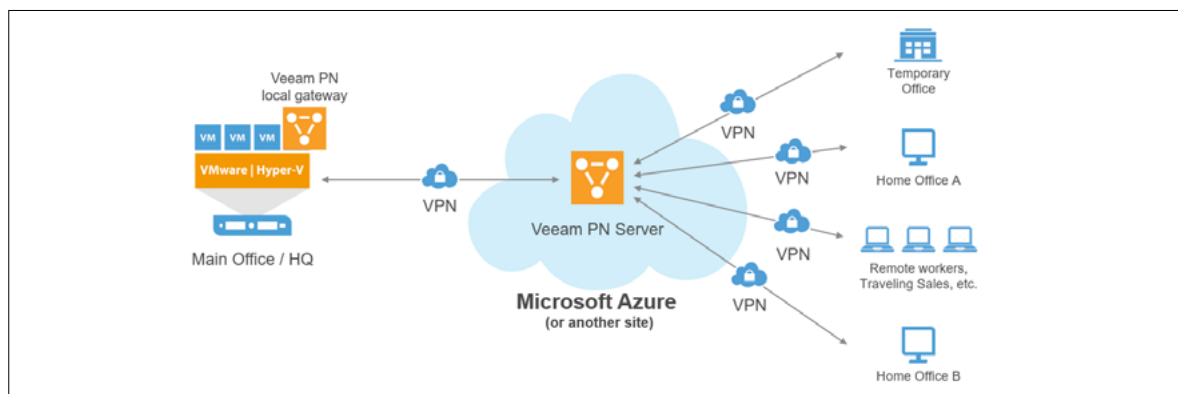


Figure 1. Veeam PN for Microsoft Azure

## Site-to-Site VPN with Veeam PN *for Microsoft Azure*

S2S connections allow a company to organize a VPN-secured communication channel over public networks between the main office, a remote or branch office and even the Microsoft Azure virtual infrastructure.

This organization goes through the central point of communication – the Veeam **network hub**, which is responsible for all background work, like traffic routing, encryption, user management, authentication, etc. This appliance should be accessible from all networks that a company may eventually need to communicate with and there are two options of network hub configurations including on-premises or in the Azure cloud. For an organization to add a new site network to an existing configuration, the administrator must deploy an additional component in the network called a **site gateway**, that completes the VPN tunnel between two involved sites. In this scenario, the network traffic between sites is managed by the network hub and site gateways, therefore, there is no need to install VPN clients on standalone endpoints that belong to any involved site.

## Point-to-Site VPN with Veeam PN *for Microsoft Azure*

This scenario is organized around the **network hub** as the main point of all endpoint communication. As with the previous scenario, the network hub could be installed in the Azure cloud or on-premises. All standalone clients that need to have access to the main site, should be configured with the OpenVPN client. This is a straight-forward process and doesn't require an endpoint to have a public IP address or DNS name.

## Four (of many) possible use cases

Below, we have provided a short list of use cases designed to illustrate the usefulness of Veeam PN *for Microsoft Azure*. This is by no means an inclusive list and there are many additional ways to apply this solution, however, the following cases provide excellent examples for every business to consider.

### Case 1

A small, family-owned restaurant has two IT servers. The server dedicated to SQL (and running the businesses' point-of-sale system) catastrophically fails and no one can restore it to working order. This poses a worst-case disaster scenario for the business, because ordering a replacement server and having it back online and operational will take days. The owner needs access to his point-of-sale (POS) system immediately or the downtime will result in lost sales, a reduction in employee productivity and potential financial ruin. In response, the IT manager, who has backed up the SQL VM, turns to Microsoft Azure and spins up the SQL VM in Azure as a temporary solution. By using Veeam PN *for Microsoft Azure*, he can push the data to his laptop to temporarily restore access to the POS system and return to business as usual. This temporarily helps bridge the gap between the server's failure and the time it takes to purchase and install a new server.

### Case 2

For some small businesses, losing one or two clusters could mean a complete data-loss disaster. If a small business experiences a failure of their single Microsoft Hyper-V server, but they have it properly backed up in their infrastructure, they could easily leverage Veeam PN *for Microsoft Azure* and utilize something as small as a laptop to keep the business operational until the replacement server is purchased, delivered and operational – which could be days. This solves a real-world disaster scenario for small-to-medium-sized businesses (SMBs) and can completely save the day.

## Case 3

Today, Veeam users can restore a VM in Azure utilizing Veeam *Restore to Microsoft Azure*. However, providing proper connectivity to the VM is problematic. For example, if users restore a web server, there is no problem accessing this in Azure. However, if they wish to restore and run anything else, there is no connectivity and it lacks proper security. Additionally, businesses lacking network-certified engineers also face the challenge of learning how to properly use the Azure VPN Gateway to help establish the cloud-to-data-center connection. Unfortunately, these Microsoft appliances require a steep learning curve and are difficult to use and don't always necessarily work. During a disaster, IT has a short time to read a detailed manual and learn how to use a cloud networking tool. Therefore, it is currently very difficult to make a data center that has been restored to the cloud useful and then connect users to it. Veeam *PN for Microsoft Azure* completely simplifies this process.

## Case 4

C-level executives deserve a lot of credit since they work hard day in and day out to push the business forward. But, it's no secret that they can sometimes be the most difficult employee for an IT staff to work with and manage. They require all company services to work for them 24x7x365, despite frequent and varying travel schedules. Administrators strive to ensure executives experience no problems connecting to headquarters regardless of their location and want that connection and local services to be available to them at all times. However, this is oftentimes a challenge because the CEO can be in Paris one day and in Sydney the next. Sending the CEO a preconfigured Open VPN file designed to launch at a moment's notice and provide connectivity is a significant improvement over asking the CEO to read a 10-page manual of complicated steps in order to properly and securely connect.

## Conclusion

IT challenges and possible disasters shouldn't scare anyone. What's truly "scary" is not having a data recovery plan. What is even more scary is NOT being able to leverage Microsoft Azure for this core IT function. Veeam *Recovery to Microsoft Azure* – including Veeam *PN for Microsoft Azure* and Veeam *Restore to Microsoft Azure*, help any sized business properly prepare for any sized disaster that may come your way and ensure the Availability and business continuity your business needs. But, don't take our word for it. Schedule some time to explore these products in your own environment. After all, you can get started for free!