

# Seamlessly Move Your VMware Workloads to Azure

**PRESIDIO<sup>®</sup>**



# Drive Costs Down While Moving Towards Digital Innovation with Presidio & the Azure VMware Solution (AVS)

The days of expensive hardware refresh cycles and datacenter lease agreements are over. Moving workloads to the cloud can save you money and enable you to modernize your data estate as well as your corresponding applications.

Unfortunately, the roadmap to get there can seem daunting.

Not anymore. With Presidio and the Azure VMware Solution, you can accelerate your cloud migration and digital innovation by seamlessly extending your VMware workloads and environment to the cloud.

Here is how.



# If you are like most IT and business leaders...

You already know that migrating workloads to the cloud can help lower costs and drive digital innovation.

You realize that many of the old, traditional approaches to IT are no longer viable. For example, you recognize the need to abandon data centers, given the cost of running them. You want to move from CAPEX to OPEX, paying only for what you need when you need it. You understand that moving more workloads from on-prem to the cloud enables your people to work on more high-value tasks.

You realize that you need to modernize data and applications. You know the power of hybrid solutions—not everything should run on-premises; some things are better on a cloud-based VMware solution.

On the other hand...

You are also fully aware that cloud migrations can be costly, complex, and difficult, depending on how you go about them.

That is why it often takes major problems or events to convince organizations to exit data centers. These problems could include:

1. You will soon have to pay high monthly costs due to lease expiration, and the pressure is on to find a better solution quickly.
2. You face an upcoming hardware refresh cycle and want to avoid a large capital expenditure.
3. You are dealing with expensive extended support costs due to aging operating systems or SQL data you must maintain.

Presidio and Microsoft offer an effective solution for these problems.



# What is the Azure VMware Solution (AVS)?

Presidio and Microsoft can help you seamlessly migrate and extend VMware workloads to the cloud, using AVS.

AVS is a hybrid cloud solution that takes the core components of the VMware environment— VMware vCenter Server, VMware vSAN, VMware vSphere, and VMware NSX-T—and hosts them on Microsoft's Azure infrastructure. This allows you to gain all the benefits of VMware's software without having to manage the hardware.

AVS can be used as a private cloud or integrated with Azure's public cloud, meeting your specific needs. Its consistent operating framework is cost-effective, secure, scalable, and reliable.

With AVS, you can seamlessly migrate your VMware workloads to the cloud. That means you can leverage all your existing VMware investment and knowledge while gaining the scale and speed of Azure's infrastructure.

Once your workloads are in AVS, you can optimize them for cloud operation by leveraging Azure's content delivery services including:

- Internal and External Load Balancing:
- Azure Application Gateway
- Azure Web Application Firewall
- Azure Front Door
- Azure Monitor
- Azure Sentinel

This will then leave you in the best position to modernize your workloads without the pressure of hardware and license management. Modernization can be done by leveraging services like:

- Azure App Services
- Azure Functions
- Azure Kubernetes Service
- Azure SQL
- Azure AI



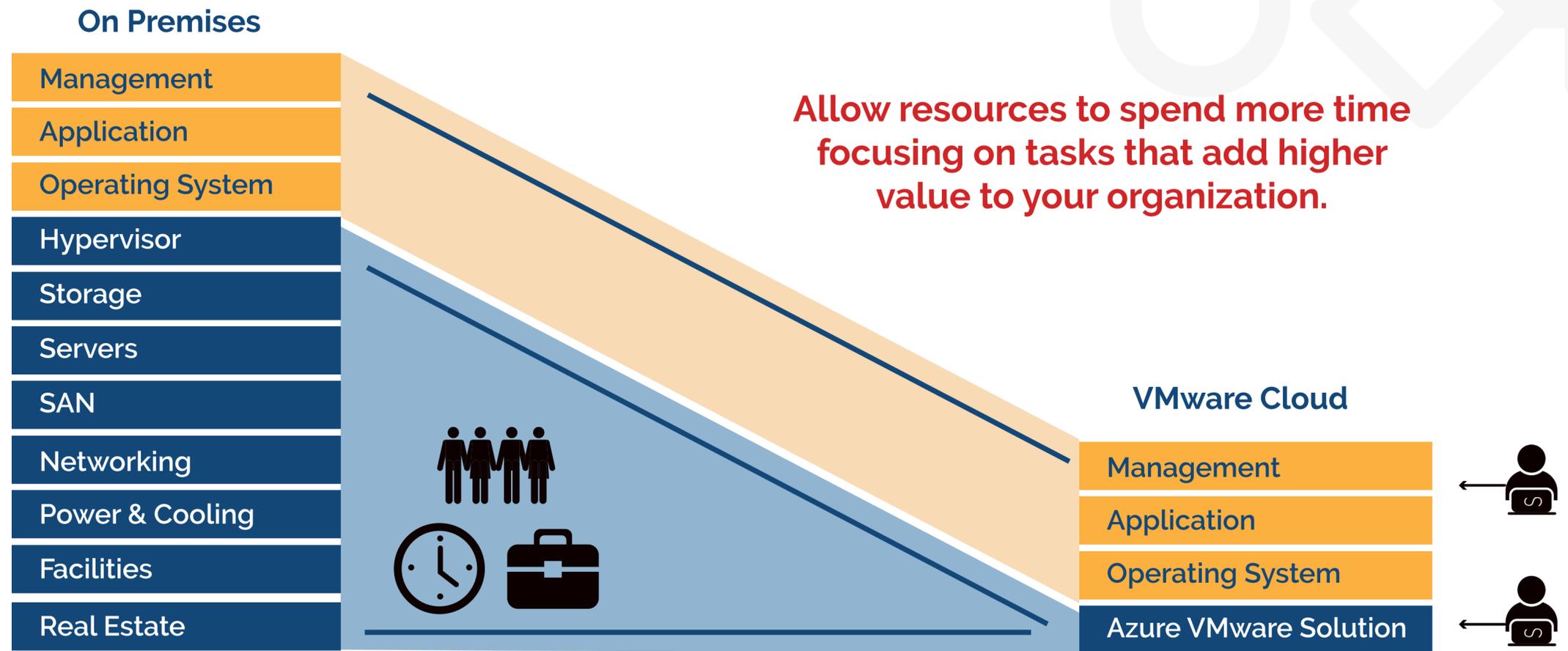
# AVS is an “easy button” to the cloud and modernization.

AVS provides unprecedented, seamless, and easy speed-to-migration, which is the first step to modernization.

It just takes planning and good partners.

Presidio and Microsoft provide careful analyses and total cost of ownership assessments to help you fully understand the costs and value of moving to the Azure cloud. We then provide you with a roadmap and detailed list of steps to achieve the path.

With unparalleled expertise, Presidio helps you optimize value every step of the way through your migration to the cloud and beyond, as you modernize your data and applications and move to a cloud native environment.



# Key Use Cases—From Migration to Application Modernization

Organizations can benefit from AVS in many ways. Use cases include:

## 1. Application Modernization

AVS is a great first step to start application modernization projects because your apps and data are close to Azure Services. This is especially useful for hybrid applications and standardizing on Kubernetes. If you have an initiative to move to serverless or containers, AVS places Azure Kubernetes Services (AKS) close to, and integrated with, your workloads. This creates a much easier transition.

## 2. Cloud Migration

AVS is perfect if you need to right-size, consolidate or retire your data centers. The infrastructure is ready and waiting. You can avoid expensive hardware refreshes, or delayed timelines and shipping of hardware impacting Infrastructure refreshes. Plus, you can take advantage of hybrid software benefits and extended support.

## 3. Data Center Exit or Extension

Another key use case involves footprint expansion and on-demand capacity. For example, a financial enterprise client had Dev, QA, and Production all in the same data center, creating latency or bottlenecks. Moving workloads to another data center would have been extremely costly. Instead, moving Dev and QA—great workloads for Azure—to AVS not only eliminated latency and bottlenecks, but also enabled them to deploy software at greater speeds.

## 4. Cloud Virtual Desktops

Using AVS for desktop gives you bursting capabilities and higher levels of security from moving the desktop closer to the apps.

## 5. Disaster Recovery

Whether your goal is to develop a new Disaster Recovery (DR) environment or to complement existing DR, AVS provides readily available failover capacity in case of a disaster, as well as backup and restore plans for workloads that have been migrated or failed over to AVS.

For Backup, Microsoft Azure Backup Server (MABS) is included as a free download with Azure Backup Services and is the current in-house product that Microsoft offers for backing up on-premises VMware workloads into Azure.

MABS combined with Azure Recovery Services Vault can provide you with a solution that is geo-redundant, longer-term, off-site storage for compliance purposes, and at the same time able to address short-term retention needs for restoring your data. It is a cost-effective, scalable solution for your backup needs, and that functionality has now been extended to AVS.

For Disaster Recovery, AVS allows you to leverage SRM with vSphere Replication to replicate and orchestrate application resiliency. Presidio can also help you work with other enterprise partners in the BC/DR space, including Veeam, Commvault, Rubrik, and Veritas, among others.

By offering you the broadest possible set of third-party Backup and DR solutions, Presidio helps you leverage the on-premises knowledge and investment you have by using AVS as a seamless extension of your on-premises VMware ecosystem.

# Case Studies

## Data Center Expansion

You can use AVS as an extension of your current VMware environment and data center on-site. Most organizations do not want new, bigger data centers; they want all their growth to be in the cloud.

An omnichannel commerce technology company needed to expand their on-prem VDI environment to handle daily fluctuating US and European workloads and seasonal demand spikes. AVS allowed them to grow and shrink their environment to realize cost savings without sacrificing capacity or performance.

## Data Center Consolidation & Migration

You can keep anything from your regional data centers that needs to stay on-premises in your data center and put everything else in Azure.

A large print media company that had grown rapidly through acquisition was supporting multiple data centers and segmented environments. With the help of Presidio and AVS, they were able to consolidate what they had, implement standards and improve efficiency, as well as building a better plan to accommodate future growth.

## Next Gen Applications

Once you move into AVS, re-factoring becomes much easier. Or, if you are modernizing apps and your data center needs a refresh, you can move your legacy apps into AVS and continue your refactoring without having to pay for the refresh. A digital brand ad platforms company with a mix of traditional VM and cloud

workloads needed to evacuate two data centers. As they were already doing work with native services, it made sense to bring the VM workloads closer. They were able to reduce latency, improve performance, increase ROI and speed up the data center evacuation.

## Business Continuity

You can use AVS for a DR test of an actual event, starting with only 3 hosts (the minimum) and expanding up to 16, to create a landing zone for recovered data. A medical technology provider needed to develop a strategy to protect and recover on-prem data in a VMware cloud environment that allowed for very short RTO's and RPO's while controlling costs and limiting infrastructure. AVS helped a city prepare for a potential outage at their data center in 7 days.

## Cost Avoidance

A major city transit system needed to remove numerous critical apps out of a data center in just a few weeks. Presidio helped the organization adopt AVS before their deadline with no downtime.

A community health organization was hit with a surprise migration under extreme time pressure, resulting from a data center lease renewal that they realized would result in having to pay exorbitant monthly costs. Presidio was able to help the organization accelerate their exit from the data center using AVS, while furthering their cloud migration efforts.

# Azure Pricing Benefits: Pricing 3 Ways

The AVS pricing structure offers some interesting, flexible benefits that help create a compelling economic value proposition for migrating your VMware workloads to the cloud.

AVS is a pay-as-you-go Azure subscription that includes both the Azure and VMware licenses you need.

## 1. Reserved Instances

Along with pay-as-you-go, AVS enables you to achieve greater savings by forecasting and reserving future usage needs or reserved instances. AVS has available 1-year or 3-year Reserved Instance discounts for AVS which provide 30%-50% savings on the cost of dedicated nodes.

## 2. Azure Hybrid Benefit (AHB)

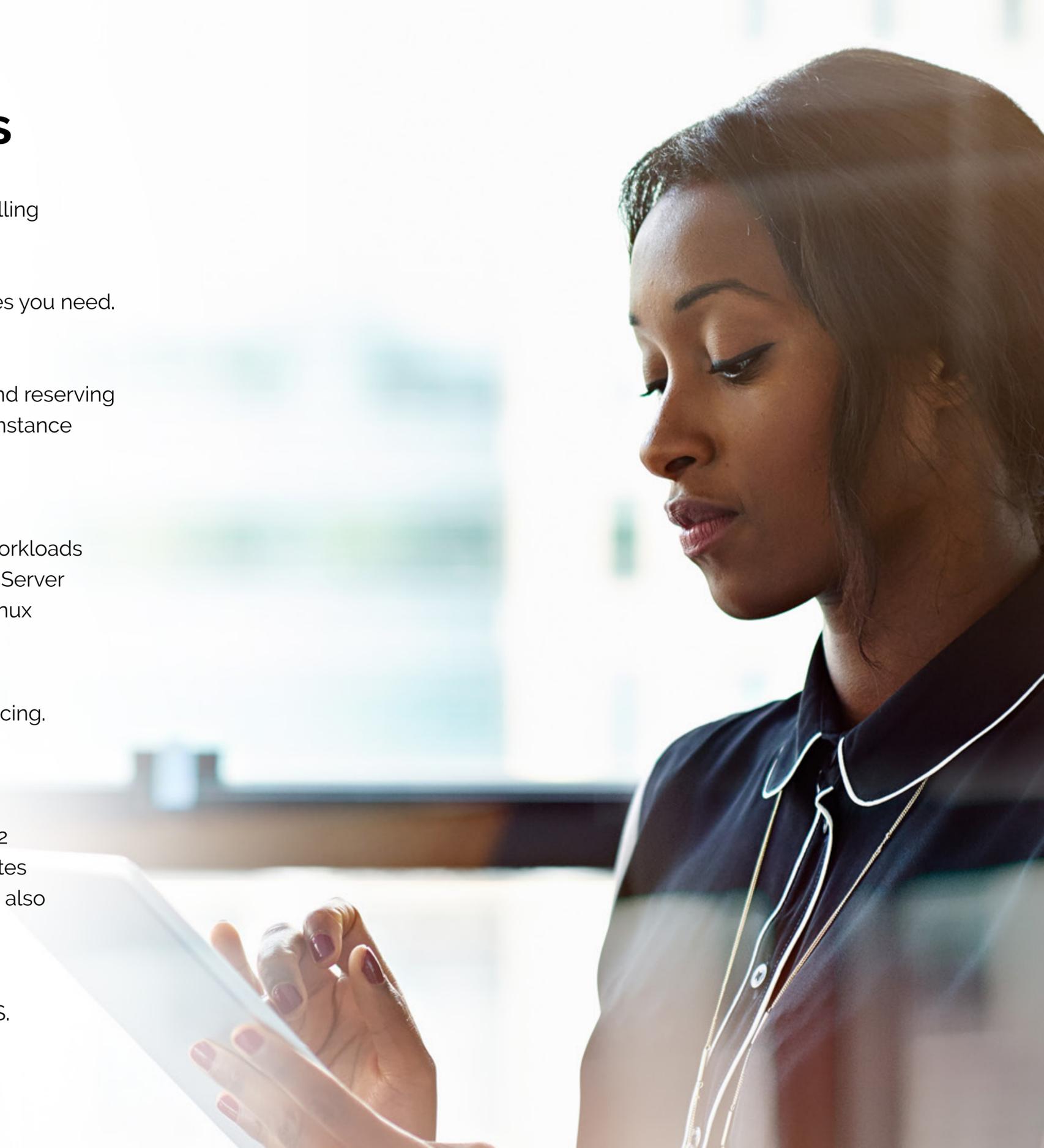
AHB is a licensing benefit that helps you significantly reduce the costs of running your workloads in the cloud by letting you use your on-premises Software Assurance-enabled Windows Server and SQL Server licenses on Azure. This benefit now also applies to Red Hat and SUSE Linux subscriptions.

You can save up to 40% to 55% off SQL costs in the cloud. When you combine Reserved Instances with Hybrid Benefit, you could save up to 80% compared to pay-as-you-go pricing.

## 3. Free Extended Security Updates

AVS also includes extended security benefits for existing Windows Server and SQL Server licenses being migrated to AVS. In fact, if you bring Windows Server 2008, 2012 R2 and SQL Server 2008 and 2012 R2 to Azure, you get 3 years free extended security updates at no charge, and you only must upgrade to the current version when you are ready. You also get 75% off the license cost to purchase standalone support.

Together, these programs represent an even more compelling proposition for moving to AVS.



# AVS Journey

The AVS Journey includes three phases:

1. AVS Migration TCO Assessment
2. AVS Workshop
3. Deployment & Migration

## Phase 1

### The AVS Express: Free AVS Migration TCO Assessment

Moving to the cloud can have an enormous impact on your organization in terms of cost and value. This becomes especially apparent when you consider the full costs you incur running your on-premises data centers. The perceived expense of a cloud solution does not seem as great when you compare them to all your actual current costs.

The first step in the AVS journey is a detailed, thorough assessment, led by Microsoft at zero cost to you, to determine the impact that AVS could have on your organization.

We help you evaluate the costs of running VMware natively on Azure with this detailed Azure consumption estimate with total cost of ownership (TCO) for running VMware on Azure (done by Microsoft). The analysis includes:

1. Azure cost consumption estimates to help you understand the economics of running VMware natively on Azure with AVS. Specifics include on-prem vs. AVS TCO 3-year costs for compute, storage, data center, networking, and IT labor, as well as a financial summary of AVS migration
2. A cloud-readiness report and migration options for moving the existing native VMware solution to the cloud
3. A sustainability review including potential gains on your carbon reduction goals while lowering operating costs, increasing efficiency and scaling as needed.





## Phase 2

### The AVS Workshop

The next step is participating in a workshop led by Presidio, at which we:

1. Review connectivity
2. Finalize design
3. Create design documents
4. Develop a migration plan

As this is not a one-size-fits-all journey, AVS is customized for your organization at this point.

[Learn more.](#)

[|or|](#)

[Sign up for a free AVS Migration TCO Assessment.](#)

## Phase 3

### Deployment & Migration

This phase is where the rubber hits the road. Led by Presidio, the work includes:

1. Creating Azure Landing Zone
2. Deploying and configuring AVS
3. Deploying and configuring HCX
4. Establishing connectivity and security
5. Migrating workloads

# 7 Tips to Ensuring AVS Migration Success

1. Build a strategy and roadmap, with stakeholder buy-in.
2. Develop strong executive sponsorship. Without it, you will fail.
3. Ensure that Networking, Security and Landing Zones are in place or planned for ahead of the migration. This is usually a showstopper until they are complete.
4. Security and compliance must come first.
5. Make sure you have a solid network to support the cloud, as well as bandwidth.
6. Good project management is a necessity.
7. Make sure you have a good partner.

Presidio is a complete solution provider offering strategy, design and implementation. While many systems integrators can boast about their competencies, few have the vast experience in both the datacenter and cloud and performing these migrations for critical applications for our clients. We've done hundreds of migrations, and that experience sets us apart from our competitors. In most instances, we can provide a successful project with minimal to no downtime depending on the applications.

Presidio is the leader in the Azure VMware Solution from both a VMware and Microsoft perspective. We are part of both VMware and Microsoft's partner advisory councils on this topic, so we are the experts who have seen and mitigated all the "gotchas" for AVS migration.

Presidio is not just a migration partner; we believe that migration is just a step to modernization. Post migration, we will help you realize even more value with the cloud by optimizing your environments and begin down a path to modernizing apps and data and moving to a cloud native solution. This can include things like platform-as-a-service and software-as-a-service, serverless and containers to drive development and application costs down.



# MythBusters

**MYTH: Running VMware in Azure is too complicated.**

AVS is truly an “easy button,” making what used to be a 6-month project possible in a few weeks. It offers scalability you can’t conceive of with on-prem solutions.

**MYTH: Running VMware in Azure is too expensive to justify a migration.**

As soon as you compare the cost of AVS to all the real costs of your data centers, you will see the value of AVS. It can save you money.

**MYTH: I will have to double-pay for my VMware and Microsoft licenses.**

Nope! Both are included and portable—not to mention flexible.

**MYTH: I can’t afford the downtime.**

Hybrid Cloud Extension (HCX) is included. You may even experience zero downtime. The worst-case scenario is only a few minutes of downtime.

**MYTH: If I migrate workloads to the cloud, it is too hard to move them back.**

Anywhere you have HCX, you can move workloads over and back, or fail over and back, easily and as often as you want.

[Sign up for a free AVS Migration TCO Assessment](#)



# About the Authors

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Rob is a Senior Director of Microsoft Sales at Presidio. Rob brings over 20 years of experience in the Microsoft ecosystem and started his career moving customers to Microsoft 365. In his current role, he is a leader in helping to improve our customers' business processes through innovation and technology. Rob has a unique skill in bringing teams together to accomplish a common goal.

## [Mark Vaughan](#)

Mark is a Senior Director of VMware Cloud Practice here at Presidio. Mark has over 25 years of experience in information technology with large enterprise markets, as well as small to medium businesses and education. Mark's fundamental focus is on developing strategies that align business and IT with a common set of goals, where hybrid cloud technologies are leveraged for business gains.

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Joel is a Senior Solutions Architect Cloud Migration Practice at Presidio. Joel brings over 30 years of experience in the Microsoft ecosystem and started his career modernizing technology in the United States Army. Joel has done the same over the years with many companies, both large and medium size, as well as education. In his current role, Joel is helping businesses and organizations modernize their IT infrastructure by integrating cloud technologies.

## [Will Mason](#)

Having been in the information technology field for over twenty years, Will currently serves as a Senior Engineer in the VMware Cloud Practice at Presidio. His specialization in various areas of cloud technologies and commitment to enhancing the end-user experience, bring depth and perspective to the task of getting companies to the Azure cloud.

## [Guillermo Rodriguez](#)

Guillermo is a Principal Architect at Presidio with Team Lead experience with a demonstrated history of working in the information technology and services industry. Strong information technology professional skilled in Virtualization, Network Administration, Disaster Recovery, Cloud Computing, and Software as a Service (SaaS).

As a trusted advisor, we make sure tools and applications are fully leveraged and technologies are aligned with organizational needs. We keep up with best practices in security, reliability, and adoption to ensure our customers are benefiting from proven processes. Through technical workshops, training, and immersion experiences, we expose customers to new technologies and how these innovations might play out in their day-to-day work. Presidio solutions ensure seamless integration and interworking of Microsoft products to help businesses uncover untapped value.

## Presidio & Microsoft

As a Microsoft consulting partner within the Microsoft Partner Network (MPN), Presidio holds 13 Gold Competencies, Advanced Specializations, and is a Fast Track Ready partner. Presidio helps organizations of all sizes keep Microsoft solutions current while delivering business value at every stage of the technology life cycle. We have a proven history of digital transformation leveraging Microsoft Azure Cloud, SaaS, and premise technologies. Since we realize the significant impact of Microsoft solutions on business value, Presidio prioritizes comprehensive assessments before every implementation and ongoing education of decision-makers and end-users.

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