Kyndryl AVS Discovery & Assessment Framework

Why move on-premises VMware workloads to Azure VMware Solutions (AVS)?

Lift and shift any application to consistent infrastructure with Azure VMware Solution

Scale as needed and make the most of your existing skills and technologies

Run Microsoft workloads in the optimal hybrid cloud and reduce costs

Refactor & modernize monolithic legacy and existing apps.

Develop new apps with a seamless connection to Azure services and cutting-edge Kubernetes

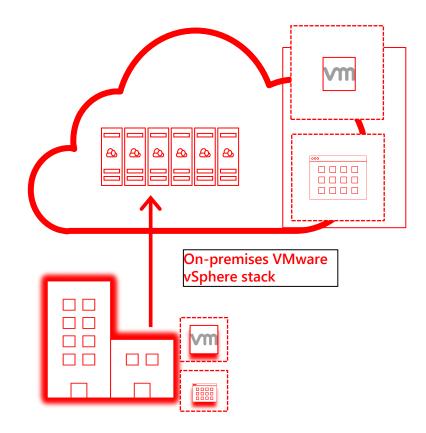
Increase efficiency with single Dashboard for centralized experience and management.

Why AVS?

Azure VM ware Solutions allow for minimal disruption, ensures technology updates without major investments

What is Azure VMWare Solutions

- A comprehensive VMware environment on Azure infrastructure.
- Run VMware workloads natively as an Azure service.
- Manage and secure applications across VMware environments and Microsoft Azure.



Kyndryl helps clients design, deploy and migrate on prem VMware workloads to AVS, and manage them on an ongoing basis with minimal disruption to application availability and businesses

What are some of the challenges to getting started?

Kyndryl helps clients design, deploy and migrate on prem **VIVI**ware workloads to AVS, and manage them on an ongoing basis with minimal disruption to the business

Challenge

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Migrating our on-prem
VWware workloads is a
priority but I don't know where
to start

Business application optimization and rationalization is a priority but what if it impacts business operations?

Software compatibility issues are causing continuous scale, capacity & licensing challenges

Solution

Discovery and assessment of your on prem workloads and identification of the priority use cases for AVS for those workloads

Solution

Fastest path to the cloud with vMotion to the Cloud using HCX for zero downtime migrations

Solution

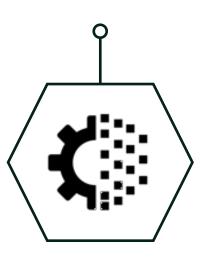
Hybrid cloud and hybrid use of license

How Kyndryl can help you get started

Kyndryl provides end to end services to help you migrate-on premises VMware workloads to Azure VMware Solution

Discover and Assess

Discover, Assess the on prem workloads and identify the use cases for AVS for those workloads



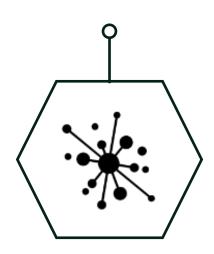


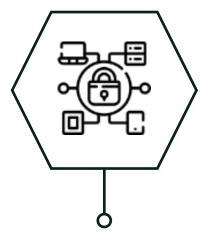
Design and Implementation

Design and build the AVS environment based on the identified use cases

Migrate and Deploy

Provision and Migrate workloads from on-premise to AVS leveraging azure native migration tools





Manage and Govern

Monitor, operate and govern the AVS environment and the workloads running on them through a combination of VMware and Azure native tools

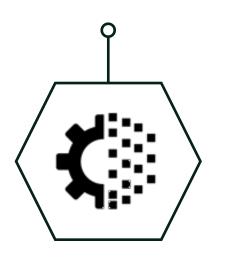


How Kyndryl can help you get started

The first step is to discover what you have and assess which workloads are best suited for migration

Discover and Assess

Discover, Assess the on prem workloads and identify the use cases for AVS for those workloads



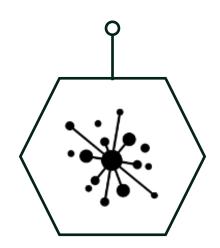
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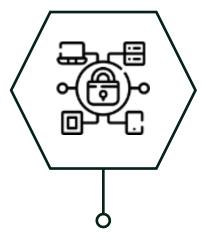
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Design and Implementation

Design and build the AVS environment based on the identified use cases





Manage and Govern

Monitor, operate and govern the AVS environment and the workloads running on them through a combination of VMWare and Azure native tools



Discovery & Assessment Overview

Gather Perform a TCO **Review findings** Plan together and co-creation of information study Discovery & Assessment next steps approach about infrastructure, to compare current with future (1 workshop) (1 workshop) applications, and databases state costs (1 to 3 weeks) (1 week) 3 to 6 week timeframe

If customer desires a deeper dive on a specific application, that may be a part of an additional assessment.

Assessment scope

Rapid discovery and migration assessment leveraging Azure native tools to help client determine the value of moving to Microsoft Azure Cloud from the current environment.

Timeline

The timeline for discovery and assessment is **3 to 6 weeks** depending on size and complexity to begin after Phase 1 outcomes are complete.

Overall Deliverables:

- Mapping and collection of applications, data, and servers (High Level Affinity Mapping for in-scope servers only)
- TCO Analysis to run workload on Azure
- Recommendations including migration to Azure next steps and MVPs



Phase 1 | Plan, Discovery And Assessment Approach

Plan, Discovery And Assessment Approach

Collect Infrastructure, Application And Databases Asset Information

Perform TCO Study (Cost Comparison with Target)

Review Findings and Next Steps

Activities

- 1. Workshop to share discovery & assessment approach
 - a. Identify stakeholders
 - Gather inventory and/or networks to scan for assessment
 - c. Validate environment and tools required for discovery
- 2. Identify migration triggers (i.e., Datacenter contracts, Business continuity, Cash flow, Cybersecurity threats, rapid scaling of web apps & infrastructure, Budget & resource constraints
- 3. Establish architecture and tool deployment

Outcomes:

- Agreement on how to conduct the assessment
- ✓ Understanding of migration & modernization triggers and goals
- ✓ High-level scope and inventory of applications, infrastructure, and databases or networks (for servers that are in scope for this assessment) and determine if additional scanning tools are required
- ✓ Identify process and permits required to deploy assessment tooling if needed



Phase 2 | Collect Infrastructure, Application And Databases Asset Information

Plan, Discovery And Assessment Approach Collect Infrastructure, Application And Databases Asset Information

Perform TCO Study (Cost Comparison with Target)

Review Findings and Next Steps

Activities

- Ensure Process and permissions are in place for the assessment of the inscope servers
- Gather inventory of in-scope items (infrastructure, applications, & databases)
- Perform discovery with current environment tools/sources, Azure, or ISV tools
- Supplement automated data with application workshops and questioners

MVP 1 tools

- Azure Migrate: Discovery & assessment
- Azure App and Data modernization Readiness Tool (Optional)
- Azure Questionnaire

Other tools (Not for this MVP)

Flexera Cloudscape, CloudGenera, Device42, TransitionManager, SAP Discovery tools , Intel tools, etc.

Azure native and Agent-less tools should be leveraged first as they require minimal impact on the client environment. Should more complex data or scans be required then additional time will be needed to deploy additional discovery tooling.

Outcomes:

- List of the in-scope servers, applications, and databases along with configuration data
- Completed questionnaire with information to support TCO study (Application compute, storage and network component, API's and interfaces, owners and support teams for each application. If any migration/modernization/upgrade path has been considered or established for them)



Phase 3 | Perform TCO Study (Cost Comparison with Target)

Plan, Discovery And Assessment Approach Collect Infrastructure, Application And Databases Asset Information

Perform TCO Study (Cost Comparison with Target)

Review Findings and Next Steps

Activities

- Identify current infrastructure and operations costs (electricity, labor costs mostly)
- 2. Scenario TCO and peak business periods (right sizing)
- 3. Conduct a sample TCO for a single application: would need to have the application components identified (compute, storage, networking, users, authentication, backup, DR). This would be if the single application lives solely with the in-scope servers.
- 4. Identify Azure services which be appropriate for the client (this can be a scenario, right sizing to more native PaaS or SaaS Azure Services)

MVP 1 tools

- Azure Total cost of ownership (TCO) calculator
- Azure Pricing calculator

Outcomes

- Completed infrastructure TCO Analysis of cost of existing on-premises vs. Cost to run assessed workloads on Azure
- Data summary report to support an application rationalization study

Optional: Sample TCO deep dive for single application (within the in-scope servers)



Phase 4 | Review Findings and Next Steps

Plan, Discovery And Assessment Approach Collect Infrastructure, Application And Databases Asset Information

Perform TCO Study (Cost Comparison with Target)

Review Findings and Next Steps

Activities

- Identify next steps to take in moving to Azure
- 2. TBD based summary data received from Phase 3

Outcomes

- ✓ For Non x86 workloads, they will not be in-scope (Additional Assessment could be separately scoped for migration to Intel on Azure)
- Identify possible MVPs to perform sample migration.
- ✓ Finalize Azure Migration Roadmap with Intel for in-scope servers

Possible next steps

- Technical Debt Analysis
- Application Rationalization
- Migration approach and plan
- Additional Application review assessment
- Additional ERP application review assessment



AVS Exclusive Benefits for Customers

- 4 years free security updates for Windows Server 2008 R2 / 2012 R2 | SQL Server 2008 R2 / 2012
- Bring windows server and SQL server onpremises licenses with software assurance to Azure
- License Cost Conservation of up to 90% The platform allows reuse of existing investments for on premise licenses via Azure Hybrid Benefit and Bring Your Own License (BYOL) for VMware licenses.
- The most compliant coverage for VMware in the Cloud including FedRAMP High, PCI DSS Level 1 and HIPPA BAA

- Cloud-Native Integration Allows broader access to Azure services and tools such as AKS, ACI, Terraform, Chef, Puppet, Etc. thereby leverage the latest cloud capabilities and services.
- Reserved Benefit AVS facilitates re-hosting of the onpremises environment through an AVS 3-year reserved instance, which offers an infrastructure cost benefit of up to 50%.
- Microsoft Support and Billing Benefit of integrated support from Microsoft & VMware. Unified dashboards for management and billing requirements.

Link - Azure VMware Solution | Microsoft Azure

Staffing Model

The discovery & assessment will be led by Kyndryl with support from Microsoft and Intel. The client will be part of the assessment squad and suggestions are below.

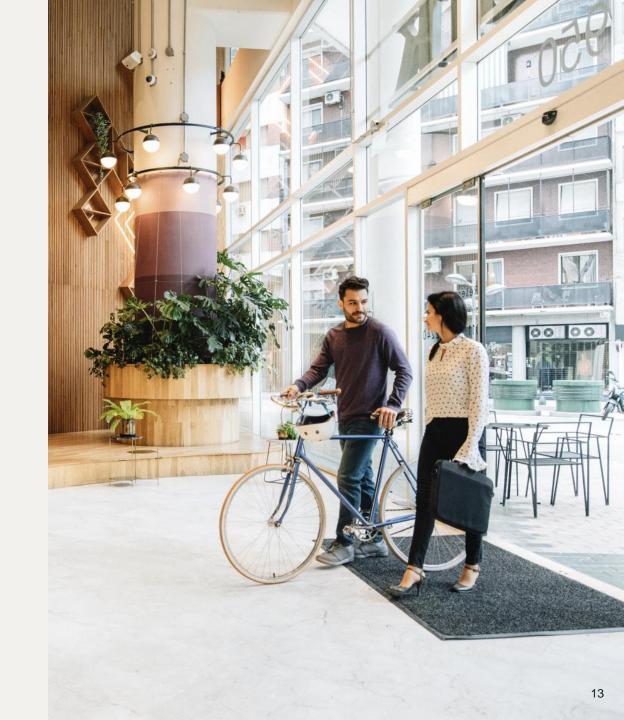
Kyndryl Discovery & Assessment squad (200 to 300 hours)

- Lead Architect (acts as assessment project leader and technical focal)
- 2. Associate Architect/Engineer (Infra/App)
- 3. Tool SMEs (as required)
- 4. Associate Partner/Consultant (client focal and relationship manager)

Microsoft & Intel Specialists (as needed)

Client staffing suggested

- 1. Executive stakeholder(s) sponsoring the assessment
- 2. Cloud or Infrastructure architect/manager (typically from operations)
- 3. Application focal and coordinator
- 4. Applications owners & SMEs (as needed)
- 5. Security focal to review and approve discovery tooling



Call to Action

Engage in 2-hour workshop and receive:

- Assessment benefits, scope and deliverables specific to your challenges
- High level overview on your business/technical priorities & use cases
- Potential MVP candidates for AVS
- Assessment timelines
- Qualification criteria for Microsoft Business Investment Funding
- Next Steps

Learn more: Azure Marketplace - Kyndryl Discovery and Assessment Offer for AVS

kyndryl

Thank you