



Microsoft

CSU Migration Factory

Azure VMWare Solution (AVS)

October 22nd, 2024

CSU Migration Factory AVS Pillar Lead



Agenda

CSU Migration Factory Overview

Azure VMWare Solution Overview

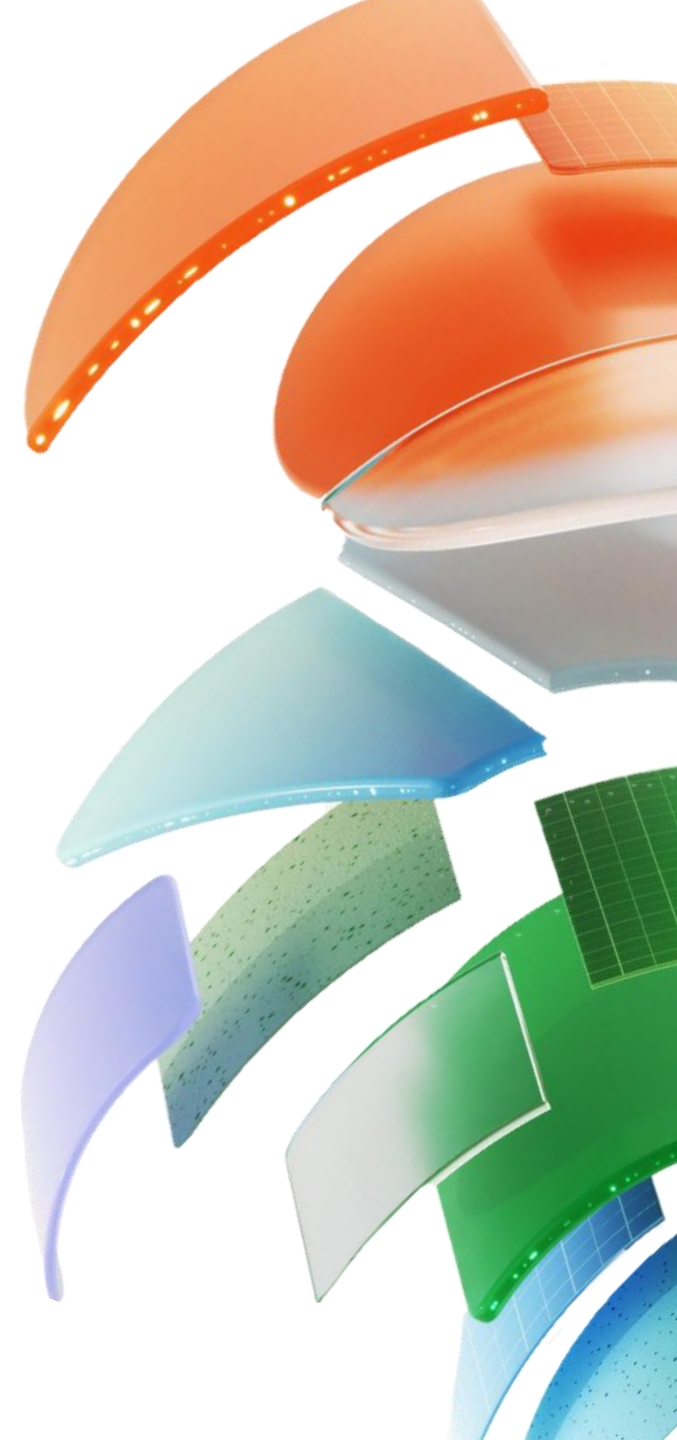
Success Story

FY 24 AVS Learnings

Nomination & Getting Help

Resources and Next Steps

Q&A



CSU Migration Factory | Azure Migrate and Modernize

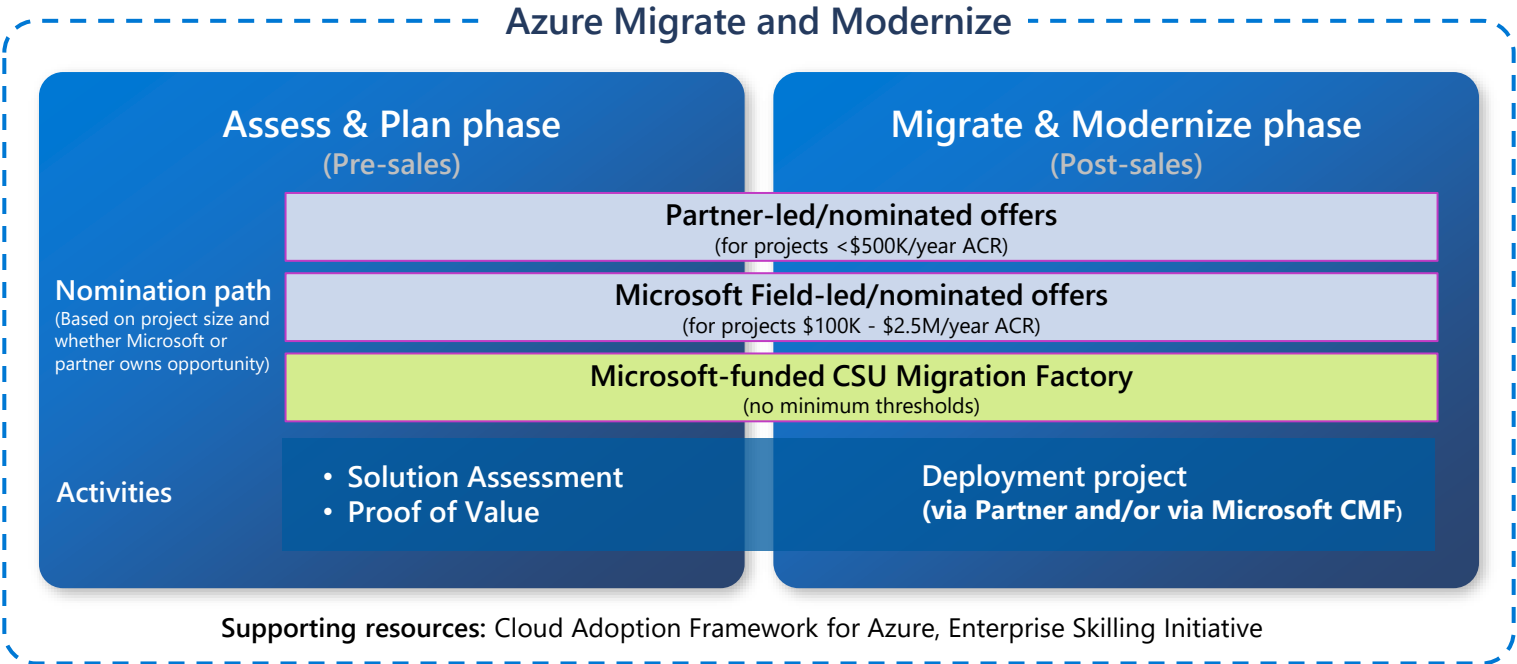
Jumpstart your customer's Azure journey through Microsoft funded delivery at no cost with CSU Migration Factory

CSU Migration Factory is part of Azure Migrate and Modernize



Start at any stage, based on customer's readiness | Nominate at [AMM Offers](#) and accelerate with quick wins

- Start customer conversations
- Customer engagement
Achieve more with Azure pitch
- Proactive proposal
- RFP assistance
Proposal Center of Excellence
- Azure Discovery Workshop

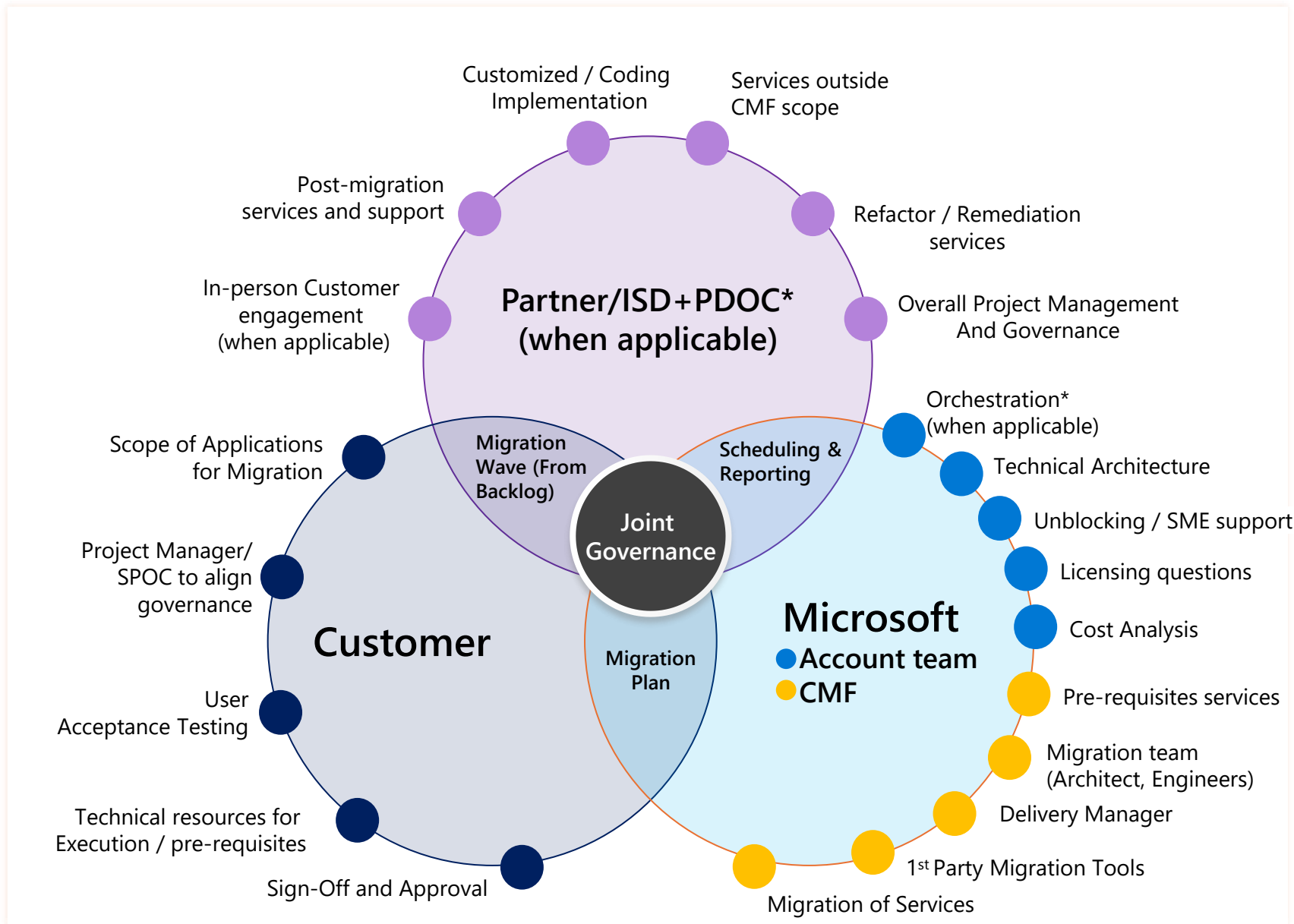


Azure Essentials (Preview offer)

Increase reliability,
performance and security
of existing Azure
workloads

Execution with Azure Specialized partners or Microsoft resources

CSU Migration Factory Model – Shared Responsibility



*** Partners/ISD+PDOC:** Partner/ISD+PDOC owns overall cloud journey engagement; Factory delivers migration scope under Partner/ISD+PDOC Project Manager.



CMF – Customer Eligibility and Pre-requisites

Jumpstart Azure journey for Microsoft Cloud Workloads through Microsoft delivery at no cost

Why Migrate? – Customer Sponsorship Secured

- Clarity on Why-to-Migrate, commitment to migrate now (scope for Phase 1 defined), Single point of contact or Project Manager assigned

What to Migrate? – Scope Confirmed

- Which servers to assess for migration – potential candidates: Out-of-support, dev-test, DR, apps prioritized to migrate now
- Destination Azure services approved for production deployment (PaaS or IaaS)









How to Migrate? – Execution Conditions

- No min or max thresholds, phased approach with iterative sprints
- Landing zone creation/verification, CI/CD pipeline validation; Azure Migrate Discovery, Database/VM/Apps assessments supported for given scope
- Hands-on-keyboard delivery available with Unified/CMF Program agreement; alternately, customer can execute with screen-sharing support
- Delivered by Local/Global Cloud Solution Architects and onshore-offshore vendor resources (covered under Microsoft agreements)

CMF | Workloads & Execution Focus

Jumpstart Azure journey for Microsoft Cloud Workloads through Microsoft delivery at no cost

■ Migrations
■ Jumpstart

WS & Linux Migration + AVS+ Windows Arc Enablement 	RDS to AVD Migration 	SQL Migration & SQL Arc enablement 	NoSQL & OSS Databases 	App Migration (PaaS) 	Security 	Analytics 	AI 
<ul style="list-style-type: none"> Rehost of Windows and Linux servers From On-prem, AWS, GCP, To: Azure VMs Azure VMware Solution: Factory to migrate servers, apps, and DBs into AVS Automated scripts for Azure Arc Enabled deployment (Current ESU Version) 	<ul style="list-style-type: none"> Modernize on-prem RDS to AVD Migrate on-prem Citrix to AVD 	<ul style="list-style-type: none"> Rehost/Refactor migration From SQL Server On-prem, AWS, GCP; To: Azure SQL MI, Azure SQL DB, SQL Server on Azure VMs Automated scripts for SQL Arc Enabled deployment 	<p>NoSQL:</p> <ul style="list-style-type: none"> On-prem Cassandra to Azure MI for Apache Cassandra On-prem MongoDB to Azure Cosmos DB for MongoDB (vCore) <p>OSS Databases:</p> <ul style="list-style-type: none"> MySQL/PostgreSQL to Azure DB for MySQL/PostgreSQL Single Server to FlexServer 	<ul style="list-style-type: none"> .NET, Java Apps On-Prem to PaaS Containerized workloads On-Prem to AKS/ACA Apps/Self Hosted K8's running on Azure VM's to PaaS WordPress migration to App Service Other Cloud providers to Azure: AWS EKS, ECS to AKS & ACA OpenShift to ARO migrations 	<ul style="list-style-type: none"> Defender for Cloud deployment – cloud security posture management Deployment of Cloud workload protection: Defender for Servers, Azure SQL, Storage; Configuration of monitoring components for automated data collection Splunk to Sentinel migration; Jumpstart new Sentinel deployments 	<ul style="list-style-type: none"> Lakehouse deployment (Data migration, Build MVP for initial use case) SQL Server Reporting Services to Power BI SSAS/Analysis Services to Power BI P SKU to F SKU migration Real-Time Analytics 	<ul style="list-style-type: none"> Deployment of AOAI use cases: Conversational AI/Search, Virtual Assistant, Doc Intelligence, Personalized content, LLMOps, Agentic Workflows, Image Analysis POC, Architecture Design, Landing Zone for AOAI, Prod deployment, Solution Optimization
Lift & Shift (rehost) of dependent applications to Azure VMs or App Service (no refactoring/code change)							

Current localized coverage:

All Time Zones:	English
ASIA:	Chinese, Japanese
EMEA:	Germany, French
LATAM:	Spanish, Portuguese

Nomination Acceptance Criteria:

- Customer Sponsorship secured
- Scope is confirmed and aligned with CMF scope
- All customers, any size Migration (**no minimum** size)
- Execution Method (Hands-on-Keyboards or Screen-Share guidance)

Azure VMWare Solution (AVS)



CSU Migration Factory | AVS



In Scope*

Deployment & Migration Setup:

- Deploy Enterprise Scale Landing Zone + AVS Landing Zone Accelerator
- AVS and HCX setup with Win/Linux/SQL VM Migrations:
 - Deploy and configure Azure VMware Solution (AVS) nodes in Azure.
 - Deploy and configure HCX on AVS and on-premises.
 - Extend networks to retain IP addresses during migrations to AVS.

Supported Networking Scenario:

- AVS + Express route scenario

Supported Workloads:

- Lift and Shift of Customers Windows, Linux, and SQL As-Is VMs
- Applications installed as part of Existing image will be migrated as part of lift & Shift

Supported VMware versions outlined [here](#)

Supported Storage options:

- Azure NetApp Files
- Azure Storage (blob)



Out of Scope

Configuration changes to customer's existing Network, Azure AD, AD, Firewall & Security – [VBD Link](#)

Third-party tools integration into AVS

VMware Image Customization and SOE Application installations (In case of Marketplace image)

Application configuration, Certification of existing image and Packaging/testing

User/Application Performance Analysis.

File Share, Mapped drive or any User profile Data migration

Change request process, including internal communication, End user training, endpoint readiness - [Link](#)

Customer is responsible for testing of dependencies (e.g., applications, mapped databases) and source system changes.

Advisory & consulting services. Troubleshooting unrelated to migration please file a ticket via CSS channel

Any changes in the source (any time) & target environments (after handover)

Any Application/Services related configurations and testing (Pre and Post Migration)

Performing and configuring Backups, Monitoring & Alerts (Pre & Post Migration). DR set up

Stretch Cluster scenario for AVS

Any target environment setup & configuration

Any other migration path [ex: Zerto, Jetstream etc.] not listed in the Scope

Configuration of NSX-T DFW, NVA, LB, Firewall.

Configuration of Database Cluster

Customization of Azure Landing Zone

CSU Migration Factory | AVS Overview

A Microsoft CSU delivery model at no cost to provide AVS Rehosting Delivery to Customers

AVS Supported Scenarios

➤ **GA** VMware On Prem to Azure VMware Solution

➤ **Pilot** AWS VMware Cloud to Azure VMware Solution

➤ **GA** AWS VMware Cloud to Azure Cloud Native

➤ **Backlog** VMware On Prem/AWS VMware Cloud to Azure VMware Solution using integrated Elastic SAN

Customer Eligibility and Pre-Requisites

Customer Segments

- All customer segments
 - Strategics
 - Majors
 - SMC/B

Customer Readiness

- Alignment on why
- Commitment from customer
- Workload destination confirmation from customer

Scope

- Which servers to assess for rehost migration
- Destination Azure services approved for production deployment (PaaS or IaaS)

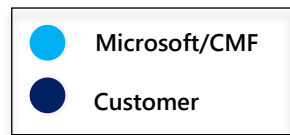
Execution Conditions

- Migration factory resources assigned
- No min or max thresholds, phased approach with iterative sprints
- Hands on/ screensharing delivery

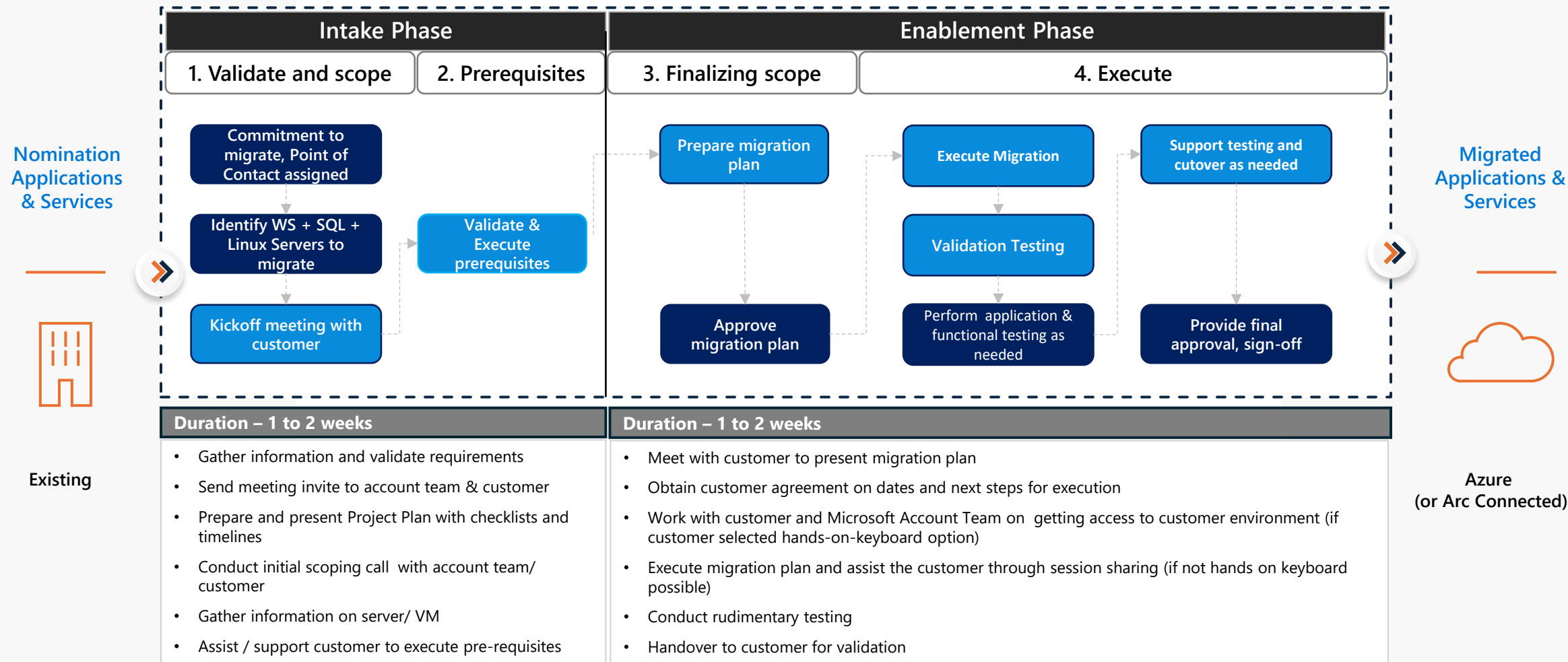
[Learn more about CSU Migration Factory](#)

CMF | Detailed execution flow

Jumpstart Azure journey for Microsoft Cloud Workloads through Microsoft delivery at no cost



CSU Migration Factory



CMF | How does the Intake process look like

1

CSU Migration Factory

Join the new **CSU Migration Factory Delivery Offering** and get hands on keyboard production migration support with rapid, predictable implementation designed for Rehost migration of Apps, Infra, and Data workloads delivered by Microsoft Customer Success resources at Zero Cost.

Visit our sharepoint site: <https://aka.ms/CSUMigrationFactory>

Delivery offering SLAs:

This delivery offering would like to adhere to the following SLAs

- 1) 2 business days for meeting between CSU Program team & Account team (from the date of nomination)
- 2) 5 business days for meeting between CSU Program team & Account team and Customer (from the date of nomination)
- 3) 20 business days to complete pre-migration assistance, if required (assessments, landing zone development, DB/server/Apps mapping document etc) (from the date of nomination)
- 4) 25 business days for migration execution (for up to 200 instances, anything more that will take additional 5 business days) (from the date of nomination)

Privacy: Response collected will be processed in accordance with Microsoft's privacy policy <https://privacy.microsoft.com/privacystatement>.

Hi, George. When you submit this form, the owner will see your name and email address.

* Required

Nomination Questionnaire

1. Account Name *

Enter your answer

2

Committed Milestone - Please provide an Active **Committed** milestone tied to this opportunity, with and estimated end date in the current quarter or Q+1.

Execution Start Date - Can the customer start execution with CMF through regular cadence in the following 2 weeks? If not, when?

Start Date of Migration:

Planned End Date?

Does Customer have VMWare Support?

AVS Region

of Avs Nodes and Type (AVS Node is Physical Server (ESXi host) not VM)

AVS Availability

Network Connectivity

Available N/w Bandwidth

Support Mode

On-prem Vsphere Version

Onprem Vcenter version

On prem ESXi Version

On prem VM Hardware Version

Vmware Switch Configuration - VDS or VSS?

HCX Availability

HCX Migration Methods

Network Extension

Mandatory

Mandatory

Mandatory

Mandatory

Mandatory

Mandatory

Mandatory

Mandatory

Mandatory

Mandatory

Mandatory

Mandatory

Optional

Mandatory

Mandatory

Mandatory

Mandatory

[Yes/No]	
	Azure region , Central india, East US , West Europe (there could be Regions which may not supported)
# of Avs Nodes and type AV36/36P/64	
New deploy/Already Inplace	
ER/VPN	Please ensure that the Customer is aware that network troubleshooting would be out of scope for the Factory given that it is via VPN, but we can still assist with executing the migration of servers into AVS.We'll need to set clear expectations that CMF cannot help with network troubleshooting".
1G/10G	
Remote/Shoulder/HOK/	They give access of their environment and Tech will do it remotely, Shoulder - Screenshare
	Supportability Min: 7, Max: 8.0 U3 Note: vSphere version 6.5 and 6.7 have limited support from Broadcom till Nov 24. CMF can help to migrate till that time. In case of issues, Customer will have to work with Broadcom to resolve the issue.
	It is good to know info
	Supportability Min: 7, Max: 8.0 U2c
	Supportability Min: 9, Max: 19
	Do not support VSS, Will do the migration , before Migration they Customer has to change the VSS to VDS
New deploy/Already Inplace	Vmware tool
Vmotion/Cold/HCX-RAV /Bulk	
Yes/No	

CMF Partner Nomination Form can be found [here](#)

CSU Migration Factory | AVS Migration CMF Pathways

Customers can enter CMF pathway at **uncommit/commit stage**, but **execution will kickoff only after commitment**

Scenario: Migration Checklist (*CMF CoE Intake team will go through this checklist in Prepare Phase and route to the right team as needed*)

- ☐ Network Connectivity is **Express Route using GR**
- ☐ Is customer **committed**?



Pre-nomination: Customer Buy In

**Customer is committed
to migrating to AVS**

- Compelling drivers to migrate have been established
- Scope of migration is defined
- Sponsorship has been gained
- AVS SKU, Capacity, & Region are identified

Led by STU/ Partner



Prepare Phase: CMF Executing Pre-Requisites

**Customer does not need a POC. The nomination
has been approved by CMF**

- AVS Architecture Design or Review (*For unified support customers, this can be delivered by CSA/ or Partner*)
- Deploy or Validate Enterprise grade Landing Zone only via portal (cannot do terraform /bicep)
- AzMigrate AVS Assessment with dependency analysis
- Deploy or Validate AVS Landing Zone
- Install HCX appliance

**Led by CSU Migration Factory or
Partner**



CMF Migration Planning & Execution

**Handson/ Over the Shoulder migration is
completed and ready to be validated by the
customer**

- Create & Approve Migration Plan – recommended SKUs, migration paths, project plan
- Execute the migration sprints per the Plan
- Conduct functional testing and prep for cutover (75 server/week)
- Execute cutover and sign-off on migration completion
- Plan and prep for next phase of migration (repeat steps above)

Led by CSU Migration Factory



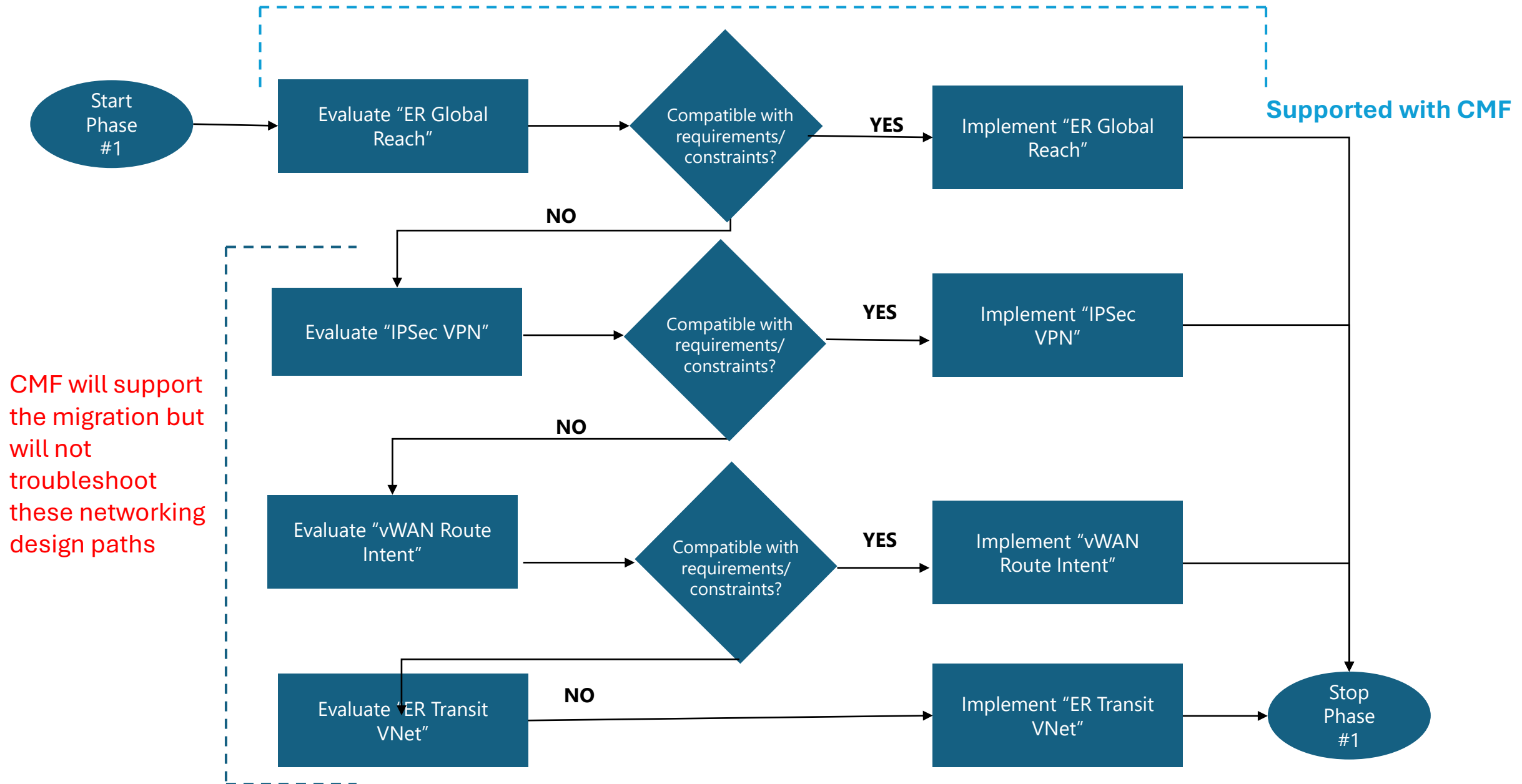
Post Migration Validation

**Customer has tested and
signed off the migration
and is ready to deploy to
prod with support from
CSA/Partner**

- Customer tests and validates the migration delivery.
- Customer signs off the engagement.

Led by Customer/Partner

Architecture Guidance



CMF | AVS – RACI Matrix

Function / Activity RACI (VMC to AVS) (& DR)	CSU Migration Factory	Customer & Partner Team	Customer Dependency	Outcome
Pre-nomination steps				
Establish compelling drivers for Migration – Why to Migrate. BDM engagement, Licensing evaluation	I	R		
Identify scope of migration with Requirements – What to Migrate, Policies/Standards	I	R		
Secure customer commitment to Migrate – Sponsor aligned; Customer PM assigned, AVS Capacity Availability	I	R		
Pre-requisites execution				
AVS Proof of Concept / Establish connectivity to Azure (not mandatory-customer not committed/pre-sales activity, connectivity covered through enterprise landing)	CI	AR	Networking, Security, Access	Proof of concept delivered by GBB/ CSA
AVS Architecture Design or Review	CI	AR	Strategy for Networking, Security, Access, Backup , Monitoring, Storage	End to end architecture with dependencies addressed delivered by GBB/CSA
Deploy or Validate Enterprise grade Landing Zone only via portal (cannot do terraform /bicep) VBD dispatch by corp CSA	AR	AR	Strategy & Access for Networking, Security, Access, Backup , Monitoring, Storage	Azure subscription set up delivered by CMF
Execute AzMigrate Assessment/Dependency Analysis for AVS (if customer is not committed, please work with Solution Assessment team via OneAsk)	AR	AR	Networking, Security, Access	Clear view of all servers running, and dependency of servers across apps
Deploy or Validate AVS Landing Zone	AR	AR	Networking, Security, Access, Backup , Monitoring, Storage, Region, DR	Region and node strategy delivered by CMF
Install HCX appliance,	AR	AR	Access on prem, Network connectivity to Azure, Understanding of internal environment, Customer Readiness	Discovery, assessment, and migration plan delivered by CMF
Create or validate apps testing model – pre and post migration comparison	C	AR	Customer owns this step	Delivery testing/ UAT by customer/partner
Migration planning and execution				
Create & Approve Migration Plan – recommended SKUs, migration paths, project	AR	R	Outcome from the assessment and understanding of server grouping from customer	Dependency analysis to understand grouping of servers
Execute the migration sprints per the Plan	AR	I	Dependency on understanding segregation of security and infra servers from customer. Downtime strategy from customer	Wave grouping and migration method
Conduct functional testing and prep for cutover	AR	I	Dependency on how many servers we are migrating/ day:With HCX 15 servers/ day. Also, depends on bandwidth and data seize.	Completion of switch over and delivery to UAT
Conduct apps testing per requirements	C	AR		Customer UAT Testing/ Roll back execution from CMF if there are issues
Execute cutover and sign-off on migration completion	AR	AR		Customer Sign Off
Plan and prep for next phase of migration (repeat steps above)	AR	AR		CMF planning kicks off for next wave

Success Stories



CMF Scenario 2: DC Exit with OnPrem VMWare to AVS Migration using AV36P



Old Republic Insurance is a part of the Old Republic General Insurance Group, which is a subsidiary of the Old Republic International Corporation. The Old Republic International Corporation is a Fortune 500 company and one of the nation’s 50 largest shareholder-owned insurance organizations.



- **Migration Strategy:** Bulk Migration with Global Reach
- **Network Connectivity:** Azure Express Route



89 VMs & 5 Nodes



Joint orchestration with Partner-Insight



\$180k/ Year

Customer Goals and Challenges

- Customer Goals**
- Customer decided to move from VMWare on Prem to AVS even before the Broadcom acquisition and changes to achieve agility provided by the cloud.
 - They completed their DC exit to achieve agility provided by the cloud and only Mainframes exist in the DC today.
 - The customer has been on Azure with Unified Support for 4 years now.
- Technical Challenges**
- **Legacy Data and OS Compatibility:**
 - The customer had legacy operating systems (Windows 7, Windows 2000, and 2003) and there were concerns about their compatibility with AVS.
 - VMware had previously informed the customer that their on-premises setup would work fine on AVS, but the customer sought Microsoft's confirmation for migrating these older workloads.
 - **HCX Versions and Troubleshooting:**
 - There were discussions around HCX versions and troubleshooting related to the customer's on-premises setup, including server types, applications used, and express route bandwidth considerations.

CMF Customer Feedback



Speed of Delivery



Technical Guidance



Joint Collaboration

- Customer and account team appreciate the speed of delivery from CMF.
- The customer and partner appreciated the agile support from the CSU CoE Tech Lead to solve for legacy and OS compatibility issues and HCX setup issues related to version.
- Joint collaboration between 1P and Partner instilled confidence in customer
- GBB team helped with the architecture review and analysis of the customer's environment.
- Insight, the partner involved, was responsible for the architecture design, setup of AVS, and project management.
- CMF led the hands-on migration execution.

Who Nominated?

STU

Insight has been an incumbent partner but the customer was looking for support from Microsoft 1P to drive a seamless migration.

Contributing Team

- Account Team**
- CSAM: Par Kandathanda
 - STU: Steven Johnson
 - GBB: Justin Jakowski
- CSU Migration Factory Team**
- CSU CoE Tech Lead: Varsha Sujani
 - Migration Factory Team: Mahadevan Kasi (PM)

Customer Success Criteria



Speed



Quality

Customer Testimonial

FY24 AVS Learnings



FY 24 AVS Learnings



- **CMF is a zero cost delivery service to the customer. No Paperwork needed!** We leverage our scalable network of resources to ensure the migration goes as fast as possible providing PMs/Architects/Engineers for the respective workloads.
- **What makes a great CMF AVS opportunity? Account Team, CSU, and Partner are actively engaged** throughout the migration. We need to have Customer Leadership buy in. Customer/Partner Identity, Networking and AVS SMEs commitment to the migration. **Clear commitment on Timeframe, and resources.**
- **Common Delays & Reasons for Decline:**
 - Request quota and approval for required number of AVS nodes & SKU type
 - Networking
 - Ensuring /22 CIDR IP address space required to deploy
 - Network connectivity and routing paths
 - Necessary Firewall ports open
 - Scope
 - Clarity on migration path to AVS or Azure Native
 - Clarity on migration tool (HCX, Jetstream, Zerto, etc)
 - CMF application testing expectations
 - Timeline and commitment
 - Clarity on CMF + Partner scope
 - Customer renewed VMWare licenses due to tight timeline

Resources

Nomination Form: aka.ms/cmfp-partner

Partner related questions? MFpartnerdesk@microsoft.com



Q&A?

Questions? Feedback? Need Assistance?

Partner+Factory Questions

- CSU Migration Factory Partner Desk MFPartnerDesk@microsoft.com

