



# Azure Arc

Hybrid and Multi Cloud Management Solution



- A Hybrid Multi Cloud Management Framework for an  
Accelerated Cloud Transformation

Gold

# Microsoft Partner

Azure Expert MSP



- Advance Kubernetes Specialization
- Windows & SQL Migration to Azure
- Linux and Open Source Data Migration
- Application Modernization

## ABOUT TECH MAHINDRA'S AZURE ARC SOLUTION OFFERING

Rated as 'Leader' by leading analysts in the Cloud space, Tech Mahindra's Infrastructure & Cloud Services covers the entire Infrastructure stack and supports new age technologies that can help enterprises embrace a truly digital transformation. With our strong Alliance Ecosystem, we help deliver comprehensive solutions tailored to the unique business needs of our clients.

**Why Azure Arc?** It is complex to manage enterprise workloads that are spanned across multiple environments such as On Premises, Multiple Clouds and Edge locations. Azure Arc enables a single pane of glass view of heterogeneous environments and ability to govern and manage resources in a consistent way. Azure Arc Solution offers simplified management, faster app development and consistent Azure services for hybrid and multi cloud environments.

### Our portfolio of services includes

- Consulting / Strategy / Advisory
- Assessment, Design & Procure
- Deployment / Implementation & Configuration
- Hybrid & Multi Cloud Management
- Managed Services

**mPAC**™ Tech Mahindra's managed Platform for Adaptive Cloud (mPAC) delivers Hybrid Multi-Cloud Management Framework for Accelerated Cloud Transformation

### Value Proposition : Brainscale A Tech Mahindra Company is Launch Partner for Azure Arc



- Gold Datacenter
- Gold Cloud Platform
- Gold Cloud Productivity
- Gold Data Analytics
- Silver DevOps



Gold

### Microsoft Partner

Azure Expert MSP



Tech M is Strategic Partner with Microsoft with Dedicated Azure Practice

Tech Mahindra's Microsoft Specific Acquisition

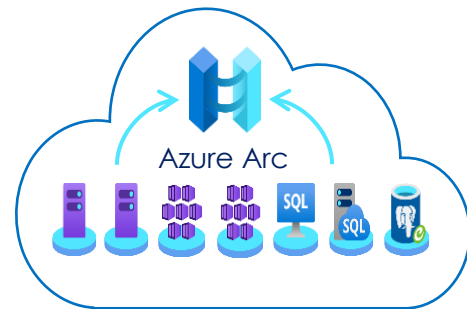
Tech M is an Azure Expert MSP & Networking MSP for Microsoft

#### Hybrid and Multi Cloud Management Challenges:

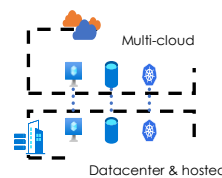
- Lack of Visibility for enterprise workloads spread across On Premises, Multiple Clouds and Edge Locations
- Each Cloud Environment has own set of Management Tools and Operations hence difficult to manage
- Challenge of inventory management and organize resources spanned across Multiple Environments
- Complexity to apply standard Security Policies across different environments
- Address regulatory requirements for Governance & compliance on distributed workloads
- Complexity of Application and Data Development on various Cloud Platforms

#### How Azure Arc addressing above challenges:

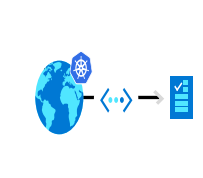
- **Unified View** : Single Pane of Glass to view various workloads together, such as Virtual Machines, Databases, Kubernetes clusters etc. spread across Hybrid and multiple cloud environments.
- **Simplified Management** : Leverage familiar Azure Management Tools, capabilities and extend Azure Services to various Cloud environments
- **Organized Resources** : Organize resources across distributed locations and ease of inventory management with searching & Indexing capabilities.
- **Standard Security** : Apply Standard security Policies for workloads spread across different environments.
- **Governance & Compliance** : Ensure consistent Governance and compliance to meet regulatory requirements
- **App and Data Modernization** – Accelerate App modernization by building cloud native apps on any environment using Kubernetes. Run Azure Data and Machine Learning Services on Kubernetes



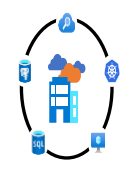
Manage & Operate infrastructure from the Azure control plane and run Azure services on your infrastructure



Gain central visibility, operations, and compliance

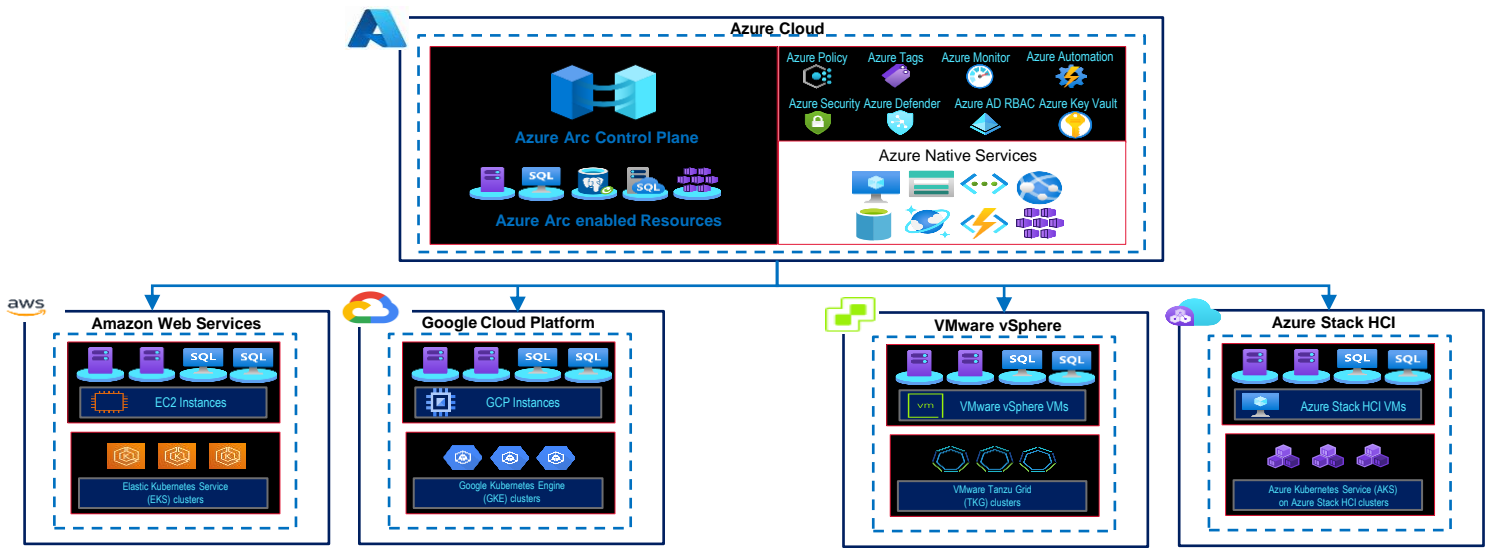


Build Cloud native apps anywhere, at scale

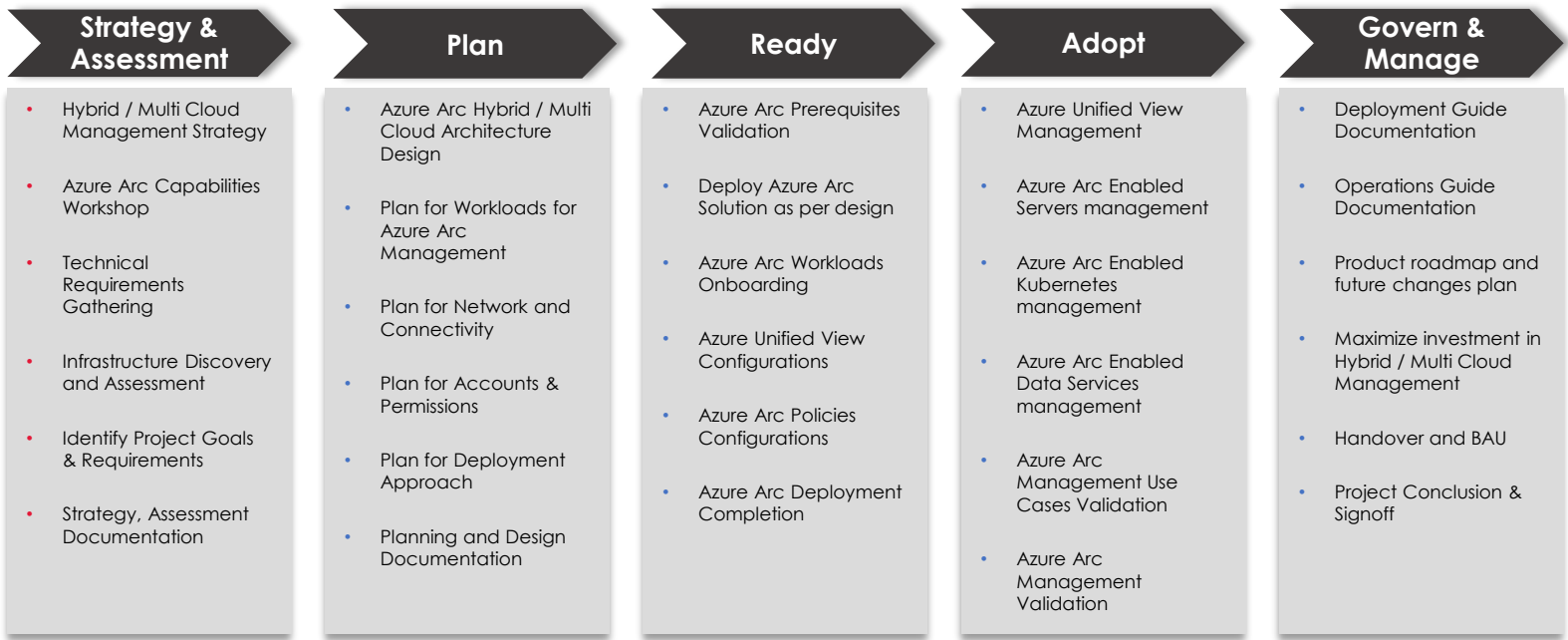


Run Azure services anywhere

# Azure Arc Reference Architecture



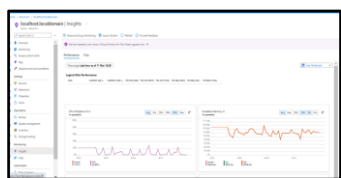
## Deployment Approach and Phases



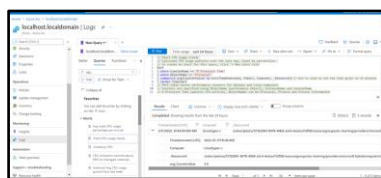
## Azure Arc Management

Tech Mahindra is Certified Microsoft Cloud Adoption Framework (CAF) ready Partner and Azure Arc Deployment approach is aligned with CAF

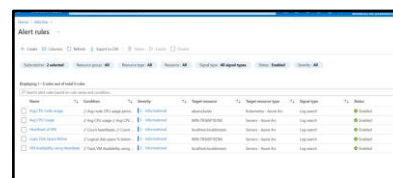
## Tools and Accelerators



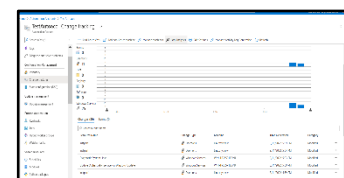
**Monitoring** - Monitor Azure Arc enabled connected machine guest operating system performance.



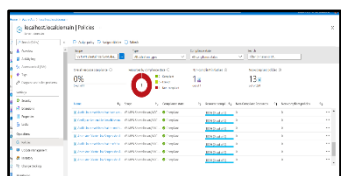
**Log Analytics** - Log Query on Collected log data, such as performance data and events stored in a Log Analytics workspace



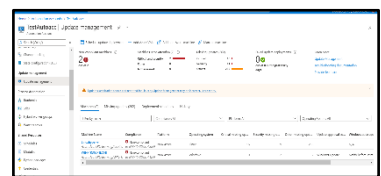
**Alert Management** - Alert based on certain criteria on Azure Arc enabled workloads



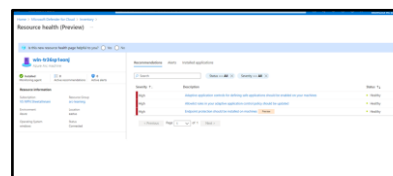
**Inventory** - Inventory and change tracking for Azure Arc enabled workloads



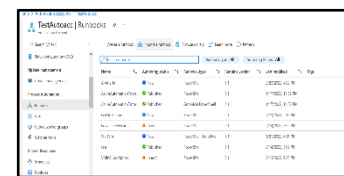
**Azure Policies** - Azure Policy built-in policy definitions for Azure Arc-enabled servers.



**Update Management** - Manage operating system updates for Windows and Linux servers



**Microsoft Defender for Cloud** - Protect non-Azure servers with Microsoft Defender for Endpoint



**Automation Runbook** - Automate management tasks using PowerShell and Python runbook

# MANAGED SERVICES

Tech Mahindra will follow ITIL best practices for providing Managed Support Services for Azure Arc Solution management. The support is split in to three categories Level 1, Level 2 and Level 3 based on nature of the support needed.

## ENGAGEMENT MODEL – RESOURCE AND DEVICE BASED



**Dedicated Model**  
Controlled /  
Customized



**Shared Model**  
Standardized /  
Optimized



**Hybrid Model**  
Best of Both Worlds

## INNOVATIVE SERVICE LEVELS WITH INDUSTRY LEADING SLA'S \*

Service Levels	Gold Service (Prod Env)			Silver Service (Prod + Non-Prod Env)			Bronze Service (Test /PoV Env)		
SLA	99.95%			99.7%			99.5%		
Severity#	Service Hours	Response Time	Resolution Time	Service Hours	Response Time	Resolution Time	Service Hours	Response Time	Resolution Time
Sev-1	24 * 7	1 Hrs	2 Hrs	24 * 7	2 Hrs	4 Hrs	08:00 * 18:00 M-F	2 Hrs	8 Hrs
Sev-2	24 * 7	2 Hrs	4 Hrs	24 * 7	3 Hrs	6 Hrs	08:00 * 18:00 M-F	4 Hrs	1 Biz days
Sev-3	08:00 * 18:00 M-F	4 Hrs	8 Hrs	08:00 * 18:00 M-F	6 Hrs	NBD	08:00 * 18:00 M-F	8 Hours	2 Biz days

## COMMON USE CASES

### Azure Arc Enabled Servers

Azure Services / Capabilities	Operations
Azure Policy	Assign Azure Policy guest configurations to audit settings inside the machine.
Azure Monitor	Monitor the connected machine guest operating system performance, and discover application components, their processes and dependencies with other resources using VM insights.
Microsoft Defender for Cloud	Protect non-Azure servers through Microsoft Defender for Cloud, to proactively monitor for potential security threats.
Microsoft Sentinel	Configure machines connected to Arc enabled servers with Microsoft Sentinel
Azure Automation	Automate frequent and time-consuming management tasks, configuration changes and manage operating system updates
Azure Automanage (preview)	Automate onboarding and configuration of a set of Azure services using Automanage
VM extensions	Post-deployment configuration and automation tasks for non-Azure Windows or Linux machine.

### Azure Arc Enabled Kubernetes

Azure Services / Capabilities	Operations
Connect Kubernetes cluster	Connect an existing Kubernetes cluster to Azure Arc.
Inventory & Tagging	Connect Kubernetes for inventory, grouping, and tagging.
Azure Policy for Kubernetes	Apply policy definitions using Azure Policy for Kubernetes.
Azure Monitor for containers	View and monitor clusters using Azure Monitor for containers.
Microsoft Defender for Kubernetes	Enforce threat protection using Microsoft Defender for Kubernetes.

### Azure Arc enabled Data Services

Azure Services / Capabilities	Operations
Data services	Install client tools for deploying and managing data services
SQL Managed Instance	Configure SQL managed instance, monitor, log analysis, billing information, reserve capacity, rotate certificates and delete instances
PostgreSQL Hyperscale (preview)	Configure, scale, monitor, log analysis, bill, secure, delete, manage PostgreSQL Hyperscale server group

Continuous innovation from Microsoft supports your development today, and your product visions for tomorrow. With 1,000+ new capabilities in the past year, you can build on the latest advancements in AI, blockchain, Kubernetes, containers, and databases to keep you ahead of the curve.

Our enterprise grade analytics solution outperforms the competition, costs less, and is fully compatible with your existing development, BI, and data-science tools.

### **Operate hybrid seamlessly**

On-premises, in the cloud, and at the edge—we'll meet you where you are. Integrate and manage your environments with tools and services designed for hybrid cloud.

Enhance security, simplify access, and set smart policies across your different environments with a single-identity platform trusted by 90% of enterprises globally.

### **Build on your terms**

You have choices. With a commitment to open source and support for all languages and frameworks, build and deploy how you want to. Take advantage of the full-featured, integrated development environments with built-in support Visual Studio and Visual Studio Code, the most popular IDEs trusted by 15M+ developers.

We embrace open source, drive innovation through collaboration, and contribute back to the community.

### **Trust your cloud**

Get security from the ground up, backed by a team of experts, and proactive compliance trusted by enterprises, governments, and startups.

With a \$1B+ investment in security R&D and 3,500 cybersecurity experts, security is foundational for Azure.

## **See what Customers are saying**

*"Prudential Thailand, has recently proven that by combining the power of their partnership with Tech Mahindra, the acceleration of their cloud capabilities and the strategic know-how and support of their Prudential regional counterparts, they have not only closed the gap created by InsureTech but very well on their way of becoming a disruptor themselves".*

“

**Jennifer Villalobos - Chief Digital and Technology Officer Prudential Life Assurance (Thailand)  
PCL**



Microsoft Azure is an ever-expanding set of cloud computing services to help your organization meet its business challenges. With Azure, your business or organization has the freedom to build, manage, and deploy applications on a massive, global network using your preferred tools and frameworks.

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