

# Managed Azure Hybrid Cloud

Deliver a true hybrid experience with the combined power of Azure, Azure Stack HCI and Azure Arc

The majority of company computing environments are hybrid, spanning multiple cloud providers, on-premise infrastructure and edge devices. This diversity has evolved through a combination of application modernisation projects, latency or performance sensitive workloads, compliance, business continuity or just driving cost efficiencies.

This increased diversity creates a challenge to maintain skills across different platforms and technologies, have central tools in order to support compliance, operations and deployments, and that comes without considering the major inconsistencies that exist between platforms.

Node4's Managed Azure Hybrid Cloud is a market first offering, providing organisations with a best practice Azure deployment extended to a Node4 managed Azure Stack region, running high performance nodes. The majority of transformation projects take a number of years and this solution is the perfect modernisation platform to provide rapid transformation of services under a single management plane, requiring a single skill set.

This hybrid approach provides instant adoption of Azure whilst retaining a platform providing dedicated and cost-effective performance compute for legacy workloads. This approach not only provides a perfect target environment during a transformation project, but will provide increased business continuity, commercial flexibility and a single platform to give every project the best agility and the complete range of Azure technologies in the future.

## Key Benefits

✓	Create your own Azure region, with access from the Azure Management Portal
✓	Deploy consistent Azure tooling across the estate
✓	Monitor security and governance from Azure across the hybrid estate
✓	Run performance sensitive database workloads on high performance hardware
✓	Gain operator diversity for business continuity and protect your public cloud workloads
✓	Streamline internal skills by focusing on a single technology platform (Azure)
✓	Run Azure PaaS services in the data centre
✓	Get free extended support for EoL Windows & SQL Server software
✓	Includes an ExpressRoute connection and full network integration
✓	Managed 24x7 by an experienced Azure Expert MSP partner
✓	Optimise Azure costs by utilising the HCI Cluster compute and storage

For more information on Node4's Managed Azure Hybrid Cloud or other products and services we offer please call our Sales Team today on 0345 123 2222 or email us at [info@node4.co.uk](mailto:info@node4.co.uk)

## Key components:

**Data Centre & Network:** Premium, purpose-built Azure Stack data centre housing, with network security and hybrid connectivity to both customer networks, ExpressRoute and a range of 3rd party networks inc. HSCN, AWS and Google.

**Azure Stack HCI Cluster:** A Microsoft accredited, and vendor validated (n+1) Azure Stack HCI configuration using the latest Intel technologies and all flash storage. The choice of general purpose or performance blades which can scale from 3 – 16 nodes, in single or dual data centre deployments. Each customer has an Azure Stack cluster that links directly with their Azure tenant.

**Hot-node Scalability:** Node4 will hold in-data centre spare “hot” nodes ready to be added to customer clusters to support scaling requirements or to support node failures. There are typically long lead times for HCI hardware, so this provides a huge benefit for using a service provider managed service.

**Azure Arc:** Azure Arc brings the ability to run a range of PaaS services on the HCI environment including AKS, Azure SQL, App Service and functions. It also provides the ability to launch VMs from Azure into HCI and a range of security, governance and performance tooling.

**Azure Landing Zone:** Node4 will deploy and manage an Azure hybrid landing zone. This will provide a hub infrastructure, identity management controls and best practice deployments of governance guardrails with real time security compliance dashboards including both the Azure Stack and Azure environments.

**Managed Services:** Customers can choose from 3 tiers of Azure SysOps Management. Level 1 provides support for the Azure Stack environment and Azure at a platform level; Level 2 extends to support VM workloads and Level 3 provides advanced governance, monitoring and solution level support including the PaaS services.

## Tech specs

Resources (per node)	Node Type*	
	General Purpose	Performance
CPU Type	Intel Xeon Silver 4134	Intel Xeon Gold 6342
Cores	32 cores (64 threads)	48 cores (96 threads)
CPU Speed	2.4Ghz (3.4 Ghz Turbo)	2.8 GHz (3.5 Ghz turbo)
RAM	384 GB	512 GB (upgradeable to 1.5 TB)
Cache Storage	None	NVMe (2x 1.6 TB)
Cache Performance (IOPS)	n/a	Read 400,000 / Write 118,000
Primary Storage Tier	SSD (5x 3.84 TB)	SSD (4x 7.68TB)
Storage Performance (IOPS)	Read 97,000 / Write 32,000	Read 230,000 / Write 90,000
Extendable storage	N	Y
Number of storage replicas	3	3
Maximum Nodes per cluster	16	16
Networking	100 GbE	100 GbE
Stretch Cluster Option	On request	On request
Software Stack	Azure Stack HCI & Arc	Azure Stack HCI & Arc

\*Custom node types are available on request