

# AZURE STACK HCI: VIRTUAL DESKTOP INFRASTRUCTURE

Leverage your Azure Stack HCI investment to deploy Virtual desktop infrastructure (VDI), deliver centralized, highly available, simplified, and secure management for your organization end-user computing. Enable scenarios like bring-your-own-device (BYOD), while providing customers consistent and reliable experience to business-critical applications without sacrificing security to your organization’s infrastructure.

Below, you will find a how-to guide for building and deploying your VDI environment on Azure Stack HCI.

## Overview of Virtual desktop infrastructure (VDI)

Virtual Desktop Infrastructure, or VDI, uses server hardware to run desktop operating systems and software programs on a virtual machine. For as long as operating system virtualization existed, VDI offered the flexibility of running traditional desktop workloads, on centralized servers. There is a wide range of advantages to leveraging VDI in a business setting, including keeping sensitive company applications and data in a secure datacenter, accommodating a bring-your-own-device policy without worrying about personal data getting mixed with corporate assets, reducing liability when corporate assets are lost - covering both data loss prevention, as well as exposure of sensitive data to potential corporate espionage and/or hackers. In addition, VDI has become the de-facto standard for supporting remote and branch workers, as well as providing contractor and partner access.

Azure Stack HCI offers the optimal platform for VDI. Leveraging a validated HCI solution, and Microsoft’s mature Remote Desktop Services, customers achieve a highly available, and highly scalable architecture.


In addition, Azure Stack HCI VDI solutions provide unique cloud-based capabilities for protecting VDI workloads and clients:

- Centrally manage updates using Azure Update Management
- Unified security management and advanced threat protection for VDI clients

## How to deploy VDI on Azure Stack HCI

### 1. Supported Configurations

Fujitsu recommends the 1U dual-socket PRIMERGY rack server system as the best fit for the virtual desktop infrastructure on Azure Stack HCI scenario. Please see below the configuration options that have been certified according to the Azure Stack HCI program.

	<b>NVMe</b>		
	<b>Server</b>	PRIMERGY RX2540 M6 (2.5’')	
	<b>Scalability</b>	1 to 16 nodes	
	<b>CPU</b>	2x Intel Xeon or better (16 cores)	
	<b>Memory</b>	64GB to 8TB	
	<b>Drives</b>	<b>Cache</b>	-
		<b>Capacity</b>	4-30 x 2.5” PCIe SSD (6.4TB per node or higher)
	<b>Network</b>	2x	
	<b>RDMA / TPM 2.0</b>	yes / yes	

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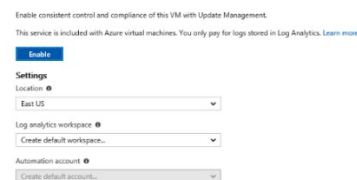
Type	Hybrid: SSD+HDD	All-Flash: All-SSD	All-Flash: NVMe+SSD
Server	PRIMERGY RX2540 M5(2.5" or 3.5" )	PRIMERGY RX2540 M5(2.5")	
Scalability	2 to 16 nodes		
CPU	2x Intel Xeon Silver 4208 or better (16-56 cores)		
Memory	64GB to 3TB		
Drives	Cache	2-12x 2.5" or 2-6x 3.5" SSD SAS/ SATA (800 GB per node or higher)	2-4x 2.5" NVMe (3.2 TB per node or higher)
	Capacity	4-22x 2.5" or 4-10x 3.5" HDD SAS/SATA (2.4 TB per node or higher)	4-24x 2.5" SSD SAS/SATA (1.92TB per node or higher)
Network	2x PLAN EP QL41xxx		2x PLAN EP MCX4-LX 25Gb 2p SFP28 LP
RDMA / TPM 2.0	yes / yes		
HBA	Fujitsu PSAS CP400i SAS		


Hybrid: SSD+HDD	
Server	PRIMERGY RX2530 M5 (2.5")
Scalability	2 to 16 nodes
CPU	2x Intel Xeon Silver 4208 or better (16-56 cores)
Memory	64GB to 3TB
Drives	Cache
	Capacity
Cache	2-5x 2.5" SSD SAS/SATA (800 GB per node or higher)
Capacity	4-8x 2.5" HDD SAS/SATA (2.4TB per node or higher)
Network	2x PLAN EP QL41xxx
RDMA / TPM 2.0	yes / yes
HBA	Fujitsu PSAS CP400i SAS

Step by Step guide to [deploy Azure Stack HCI](#). Also install [Windows Admin Center \(WAC\)](#) for managing Azure Stack HCI.

From Windows Admin Center (WAC), set up **Azure Update Management** can quickly assess the status of available updates, schedule installation of required updates, and review deployment results to verify updates that apply successfully.

### Update Management



- Additionally, you can set up additional  Azure hybrid services such as Backup, File Sync, Site Recovery, Point-to-Site VPN, Update Management, and Security Center in WAC.

### 3. Enable VDI support

Once your Azure Stack HCI deployment is complete and registered in Azure, follow the steps below to deploy Remote Desktop Services:

[www.fujitsu.com/global/pf4ashci](http://www.fujitsu.com/global/pf4ashci)

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<https://docs.microsoft.com/en-us/windows-server/remote/remote-desktop-services/rds-build-and-deploy>

- [Deploy the Remote Desktop Services infrastructure](#)
- [Create a session collection to hold the apps and resources you want to share](#)
- [License your RDS deployment](#)
- Have your users install a [Remote Desktop client](#) so they can access the apps and resources.
- Enable high availability by adding additional Connection Brokers and Session Hosts:
  - [Scale out an existing RDS collection with an RD Session Host farm](#)
  - [Add high availability to the RD Connection Broker infrastructure](#)
  - [Add high availability to the RD Web and RD Gateway web front](#)
  - [Deploy a two-node Storage Spaces Direct file system for UPD storage](#)

## Summary

With the completion of a VDI deployment using Azure Stack HCI, you now have a secure and resilient platform for running VDI end-user workloads, built to scale with your customer needs.

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