

# 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. Hardware and OS configuration for VDI

				
Type	Hybrid:SSD/HDD		All-Flash:All-SSD	All-Flash:NVMe
Server	2288H V6			
Scalability	2-16 nodes			
CPU	Intel 3rd Gen Xeon® Scalable Processor			
Memory	128GB~4TB			
Network	Up to 25Gbps			
RDMA	yes			
HBA	Avago 3416IT(XR760IT-M)		Avago 3408IT (XP150IT-M)	-
Drives	Cache	2-6x 3.5" SSD SAS/SATA(480GB or higher)	-	-
	Capacity	4-10x 3.5" HDD SAS/SATA(1200GB or higher)	4-24x 2.5" SSD SAS/SATA (960GB or higher)	4-24x 2.5" NVMe (1600GB or higher)
OS	Azure Stack HCI ,Version 21H2			

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## 2. Plan Hardware Deployment

- For planning hardware deployment, refer to [FusionServer Rack Server Deployment Guide 02](#).


**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

Enable consistent control and compliance of this VM with Update Management.  
This service is included with Azure virtual machines. You only pay for logs stored in Log Analytics. [Learn more](#).


**Settings**

Location   
East US

Log analytics workspace   
Create default workspace...

Automation account   
Create default account...



- 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:

<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.