

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

Lenovo certified Azure Stack HCI solutions can be found at this link – [ThinkAgile MX](#).

Lenovo rack systems feature innovative hardware, software and services that solve customer challenges today and deliver an evolutionary fit-for-purpose, modular design approach to address tomorrow's challenges. These servers capitalize on best-in-class, industry-standard technologies coupled with differentiated Lenovo innovations to provide the greatest possible flexibility in x86 servers. Key advantages of deploying Lenovo rack servers include:

- Highly scalable, modular designs to grow with your business
- Industry-leading resilience to save hours of costly unscheduled downtime
- Expansive storage capacity and flexible storage configurations for optimized workloads

Fast flash technologies for lower latencies, quicker response times and smarter data management in real-time for cloud deployments, database, or virtualization workloads, trust Lenovo racks for world-class performance, power-efficient designs and extensive standard features at an affordable price.

The following Lenovo servers have been certified for Microsoft Azure Stack HCI and are equipped to support up to 2x 8-64-core processors, up to 3TB of memory and over 100TB of storage making them ideal candidates for Azure Stack HCI

Virtualized Desktop Infrastructure solutions:

- Lenovo ThinkAgile MX3520 Integrated systems and ThinkAgile MX validated nodes (based on ThinkSystem SR650)
- Lenovo ThinkSystem SR665 validated nodes



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- Lenovo ThinkSystem SR630 validated nodes

2. Plan Hardware Deployment

For planning hardware deployment, refer to the [Lenovo Certified Configurations for Microsoft Storage Spaces Direct document](#).

For Azure Stack HCI deployment planning on Lenovo ThinkAgile MX, refer to the [Microsoft Storage Spaces Direct Deployment Guide](#).

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.](#)

Enable


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 Lenovo ThinkAgile MX for Azure Stack HCI platform for running VDI end-user workloads, built to scale with your customer needs.

