

# 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

### Supermicro X12 Ultra 1U All-flash:








#### Supermicro SYS-120U-TNR- HCI – All Flash NVMe + SSD

##### Scale

2 to 16 nodes

##### Single Node Data

-  16 to 80 cores (intel 3<sup>rd</sup> Gen)
-  128GB to 4TB memory
-  3.75TB to 75TB raw storage
-  NVMe + SATA SAS
-  Up to 100GbE



# AZURE STACK HCI: VIRTUAL DESKTOP INFRASTRUCTURE

## X11 Ultra



**Supermicro SYS-2029U-TN24R4T- HCI**

**Scale**

2 to 4 nodes

**Single Node Data**

- 8 to 56 cores (intel)
- 128GB to 6TB memory
- 4TB to 367TB raw storage
- NVMe
- Up to 100GbE



**Supermicro SYS-6029U-E1CR4-HCI – ALL Flash**

**Scale**

2 to 16 nodes

**Single Node Data**

- 8 to 56 cores (intel)
- 128GB to 6TB memory
- 12TB to 96TB raw storage
- NVMe
- NVMe + SSD
- Up to 100GbE



**Supermicro SYS-6029U-E1CR4-HCI - Hybrid**

**Scale**

2 to 16 nodes

**Single Node Data**

- 8 to 56 cores (intel)
- 128GB to 6TB memory
- 12TB to 96TB raw storage
- NVMe
- NVMe + SSD + HDD
- Up to 100GbE



**Supermicro SYS-1029U-TN10RT-HCI**

**Scale**

2 to 16 nodes

**Single Node Data**

- 8 to 56 cores (intel )
- 128GB to 6TB memory
- 4TB to 153TB raw storage
- NVMe
- Up to 100GbE



**Supermicro SYS-1029U-TRT – HCI - Hybrid**

**Scale**

2 to 4 nodes

**Single Node Data**

- 8 to 56 cores (intel )
- 128GB to 6TB memory
- 4TB to 60.8TB raw storage
- NVMe
- NVMe + SSD + HDD
- Up to 40GbE



**Supermicro SYS-1029U-TRT – HCI – All Flash**

**Scale**

2 to 4 nodes

**Single Node Data**

- 8 to 56 cores (intel )
- 128GB to 6TB memory
- 4TB to 60.8TB raw storage
- NVMe
- NVMe + SSD
- Up to 40GbE

2. Plan Hardware Deployment

Please contact us for comprehensive deployment guidance.

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



# AZURE STACK HCI: VIRTUAL DESKTOP INFRASTRUCTURE



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 platform for running VDI end-user workloads, built to scale with your customer needs.

