Getting Started

Virtual Desktop Managed Service

NetApp
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Getting Started

Virtual Desktop Managed Service (VDMS) prerequisites

M365 Licensing

VDMS is built with Microsoft Windows Virtual Desktop (WVD) technology. WVD prerequisites require that the end users be assigned specific Microsoft 365 (M365) licensing. This licensing is not included in the VDMS subscription and NetApp does not sell or otherwise offer this license.

Responsibility for M365/WVD licensing compliance stays with the customer company, partner company and/or their M365 vendor.

There are a variety of M365 plans that support the WVD licensing for VDMS, details can be found here.

M365/Azure AD Tenant

The customer must have an existing Azure AD tenant. Microsoft 365 is based on the same Azure AD tenant structure, therefore meeting the M365 Licensing requirement (above) will also satisfy this requirement.

CSP Reseller Relationship

NetApp deploys VDMS into a dedicated Azure subscription using our CSP relationship with Microsoft. To deploy this subscription, NetApp needs to establish a reseller relationship with the customer's Azure AD tenant. A Global Admin for the customer's Azure AD tenant can accept this relationship here:

https://admin.microsoft.com/Adminportal/Home?invType=ResellerRelationship&partnerId=47c1f6d2-b112-48e0-915f-4304efffb3e8&msppId=0&DAP=true#/BillingAccounts/partner-invitation

Multi-partner functionality does not:

- Change any of the customer's existing subscriptions
- Transition the customer's existing subscriptions or account ownership
- Change the terms or customer's obligations for any of their existing subscriptions
- Change the partner of record for a subscription
- More details on this: https://docs.microsoft.com/en-us/partner-center/multipartner

Delegated Admin Rights

The invitation link (above) includes a request for delegated admin permissions. Acceptance will grant NetApp Global Admin and Helpdesk Admin roles in the customer's Azure AD tenant.

Virtual Network Scope

VDMS will be deployed on a virtual network in Azure. The /20 IP range used for this network can not overlap with other networks in their environment.

In any scenario that adds network connectivity between the VDMS virtual network and any other customer network(s), overlap with another network IP range will break VDMS. Therefore it is vital that a completely unused /20 range be dedicated to VDMS.

The /20 network scope needs to land within one of these IP ranges:

- 10.0.0.0 – 10.255.255.255
- 172.16.0.0 – 172.31.255.255
- 192.168.0.0 – 192.168.255.255

Deploy VDMS Worksheet

The customer/partner needs to complete the Deploy VDMS worksheet at:
https://www.deployvdms.com/

Existing AD Integration

Integrating VDMS with an existing Active Directory domain controller (AD DC) requires several additional prerequisites:

Local Domain Admin Credentials

A local domain admin account with domainjoin rights, on the existing domain is required to establish the integration.

Azure AD Connect

WVD requires that Azure AD be synced with the AD DC using AD Connect. If this is not already setup, this utility will need to be installed and configured on your AD DC.

/=== Network Contributor Role for vNet Peering
/=== Local Gateway Device Admin Rights to setup VPN
/=== DNS Zones (need more tech info)
/=== no multi-domain forrest, Users must be in the domain we are deploying to

Virtual Desktop Managed Service (VDMS) Service Summary

User Resource Allocation

This article seeks to accurately describe the technical details of the VDMS service. Service details are subject to change and this article does not represent an amendment or alteration to any existing agreements, contracts or other arrangements between NetApp and any customers or partners.

Shared Users (SKU: VDMS-SUBS-SHARED-USER)

Shared user sessions run on a Session Host Virtual Machine (SHVM) with up to 10 user sessions. The total number of shared SHVMs allocated will ensure at least one shared SHVM for every 10 shared users in the environment.

Resources allocated per shared user:

- 8/10ths of a vCPU core
- 6.4 GiB RAM

- 25 GiB Storage

Shared SHVM technical details:

- Typically from the Esv3, Eav4 and Easv4 families of Azure virtual machines.
- 128 GiB Standard SSD OS disk
- Windows 10 Enterprise for Virtual Desktop
- FSLogix attached containers user profile
- Attached storage for company share

VDI Users (SKU: VDMS-SUBS-VDI-USER)

A VDI user's session runs on a dedicated Session Host Virtual Machine (SHVM) that does not concurrently host any other user sessions. The total number of VDI SHVMs is equal to the total number of VDI users in the environment.

Resources allocated per VDI user:

- 2 vCPU cores
- 8 GiB RAM
- 25 GiB Storage

VDI SHVM technical details:

- Typically from the Dsv3, Dav4 and Dasv4 families of Azure virtual machines.
- 128 GiB Standard HDD OS disk
- Windows 10 Enterprise for Virtual Desktop
- FSLogix attached containers user profile
- Attached storage for company share

GPU Users (SKU: VDMS-SUBS-GPU-USER)

A GPU user's session runs on a dedicated Session Host Virtual Machine (SHVM) that does not concurrently host any other user sessions. The total number of GPU SHVMs is equal to the total number of GPU users in the environment.

Resources allocated per GPU user:

- 8 GiB GPU RAM
- 25 GiB Storage

GPU SHVM technical details:

- Typically from the NVv3 and NVv4 families of Azure virtual machines.
- 128 GiB Standard HDD OS disk
- Windows 10 Enterprise for Virtual Desktop
- FSLogix attached containers user profile
- Attached storage for company share

Other VDMS SKUs

Business Servers (SKU: VDMS-AZURE-BUSINESS-VM)

The business server can be added to an environment to support applications and services.

Each business server VM is allocated at least:

- 8 vCPU cores
- 64 GiB RAM
- 128 GiB Standard SSD OS disk
- Windows Server 2012R2/2016/2019
- Typically from the Esv3, Eav4 and Easv4 families of Azure virtual machines.

Additional Storage (SKU: VDMS-1TB-STORAGE-HPRSCLR)

The *Data Storage Layer* is the primary storage mechanism for the VDMS environment and runs on either Azure Files or Azure NetApp Files (ANF). The storage technology used is determined by the total VDMS users purchased. Additional capacity can be added in 1TiB increments.

User profiles, user data, company shares, application data and databases should all run from this storage service. It is best practice to avoid storing data on VM disks whenever possible.

Capacity is the sum of the per-user allocation (25 GiB/user) and additional TIBs storage purchased.

Table 1. Data Storage Layer Type & Tier

Metric	Azure Files GPv2	ANF Standard	ANF Premium
User Count	10-49	50-249	250+
Minimum size	250 GiB	4 TiB	4 TiB
IOPS	Up to 1,000	Up to 250/TiB	Up To 1,000/TiB
Throughput	Up to 60MiB/sec	Up to 16 MiB/sec/TiB	Up to 64 MiB/sec/TiB

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