



# Deployments

## Virtual Desktop Service

NetApp

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# Deployments

## Provisioning Collections

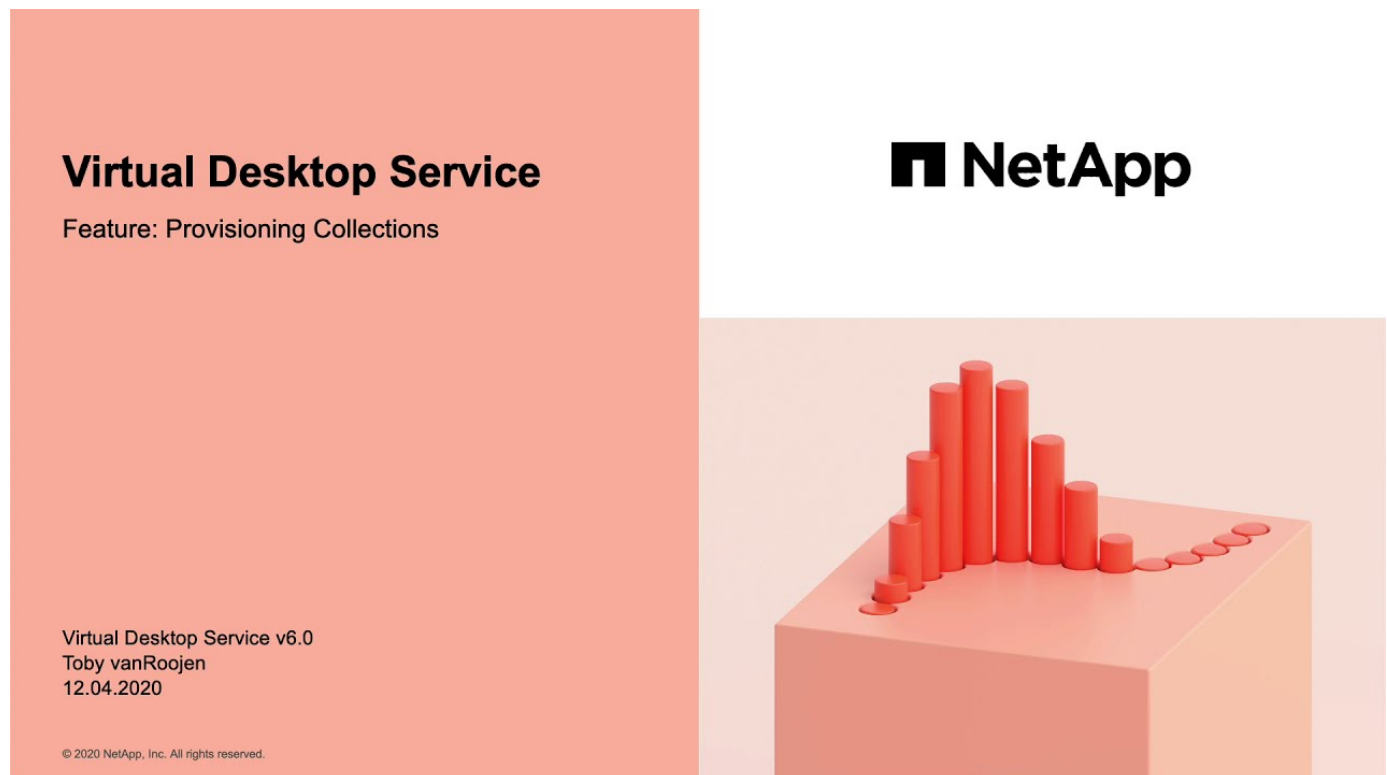
### Overview

Provisioning Collections is a function of VDS related to the creation and management of VM images.

*At a high level, the Provisioning Collection workflow is as follows:*

1. A temporary VM (e.g. "CWT1") is built based on an existing image (either a stock image or a previously saved Provisioning Collection).
2. The VDS Administrator customizes the temporary VM to match their requirements using [Scripted Events](#), [Connect to Server](#) and/or 3rd party management tools.
3. Once customized, the VDS Admin click **Validate** and triggers a validation process that automates finalizing the image, running SysPrep, deleting the temporary VM and making the image available for deployment throughout VDS.

### Video Demo - Managing VM images for VDI Session Hosts



### Provisioning Collection Types

There are two distinct types of collection with specific use cases, **Shared** and **VDI**.

## Shared

The **Shared** type is a collection of VM images(s) designed to deploy an entire environment with multiple, distinct VM images and VM roles.

## VDI

The **VDI** type is a single VM image designed to be used and reused to deploy multiple identical VMs, typically as for hosting user sessions.

## Creating a new Provisioning Collection

Provisioning Collections are found in the VDS interface within each deployment, under the **Provisioning Collections** sub-tab.



*To create a new collection*

1. Click the + **Add Collection** button.
2. Complete the following fields:
  - a. **Name**
  - b. **Description**(Optional)
  - c. **Type** - Shared or VDI
  - d. **Operating System**
  - e. **Share Drive** - If this VM will be used to host users profiles or company share data, pick the drive letter on which it will be hosted. If not, leave as "C"
  - f. **Minimum Cache** - If you want VDS to create VMs to hold for instant deployment, specify the minimum number of cached VMs that should be maintained. If deploying new VMs can wait for as long as it takes the hypervisor to build a VM, this can be set to "0" to save costs.
  - g. **Add Servers**
    - i. **Role** (If "Shared" type is selected)
      - A. **TS** - This VM will act only as a session host
      - B. **Data** - This VM will not host any user sessions
      - C. **TSData** - This VM will be both the session host and the storage host (Maximum: one TSData per workspace)
    - ii. **VM Template** - Select from the available list, both stock hypervisor images and previously saved Provisioning Collections are available to select.
      - A. NOTE: By using an existing Provisioning Collection you can update and re-deploy

existing images as part of a planned image upgrade process.

- iii. **Storage Type** - Select the speed of the OS disk considering cost and performance
- iv. **Data Drive** - Optionally enable a 2nd disk attached to this image, typically for the data storage layer referenced above in 2.e.
  - A. **Data Drive Type** - Select the speed of the 2nd (data) disk considering cost and performance
  - B. **Data Drive Size (GB)** - Define the size of the 2nd (data) disk considering capacity, cost and performance
- h. **Add Applications** - Select any application from the Application Library that will be (1) installed on this image and (2) managed by VDS application entitlement. (This is only applicable to RDS deployments. It should remain empty for WVD workspaces)

### Customizing the Temporary VM

VDS includes functionality that will allow remove VM access from within the VDS web interface. By default a local Windows admin account is created with a rotating password and passed through to the VM allowing the VDS admin local admin access without needing to know local admin credentials.



The Connect to Server function has an alternative setting where the VDS admin will be prompted for credentials with each connection. This setting can be enabled/disabled by editing the VDS admin account from within the "Admin" section of VDS. the functionality is called *Tech Account* and checking the box will require credential to be entered when using Connect to Server, unchecking this box will enable the automatic injection of local Windows admin credentials at each connection.

The VDS Admin simply needs to connect to the temporary VM using Connect to Server or another process and make the changes required to meet their requirements.

### Validating the Collection

Once customization is complete, the VDS Admin can close the image and SysPrep it by clicking **Validate** from the Actions icon.

## Using the Collection

After validation has completed, the Status of the Provisioning Collection will change to **Available**. From within the Provisioning Collection the VDS Admin can identify the **VM Template** name which is used to identify this provisioning collection throughout VDS.

## New Server

From the Workspace > Servers page, a new server can be created and the dialog box will prompt for the VM Template. The template name from above will be found on this list:



VDS provides for an easy way to update session hosts in an RDS environment by using Provisioning Collections and the **Add Server** functionality. This process can be done without impacting end users and repeated over and over with subsequent image updates, building on previous image iterations. For a detailed workflow on this process, see the [RDS Session Host Update Process](#) section below.

New WVD Host Pool

From the Workspace > WVD > Host Pools page, new WVD Host Pool can be created by clicking + **Add Host Pool** and the dialog box will prompt for the VM Template. The template name from above will be found on this list:

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TV Toby

Home > Workspaces > Azure WVD > WVD > Host Pools > Add Host Pool

Add Host Pool

Basic Info

Name

Required

Friendly Name

Name...

Friendly Name...

Site

Required

Workspace

Required

Select a site...

Select a site first

Host Pool Type

Required

Custom Profile Path

Select a host pool type...

Custom Profile Path...

☐ Validation Environment

Included Session Hosts

OS Disk Type

☐ Ephemeral

☒ Persistent

VM Template

Required

Machine Size Type

Required

Windows10

Windows10EVD3497ver1

Windows10EVDwi3500ver1

Select machine size type...

Number of Instances

1

Cancel

Save

New WVD Session Host(s)

From the Workspace > WVD > Host Pool > Session Hosts page, new WVD session host(s) can be created by clicking + **Add Session Host** and the dialog box will prompt for the VM Template. The template name from above will be found on this list:

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TV Toby

Home > Workspaces > Azure WVD > WVD > Host Pools > Shared WVD Pool > Session Hosts

Shared WVD Pool

Host Pool

Overview

Session Hosts

App Groups

Active Users

Filter By

Refresh

Add Session Host

Add Session Host

OS Disk Type

☐ Ephemeral

☒ Persistent

VM Template

Required

Machine Size Type

Required

Windows10

Windows10EVD3497ver1

Windows10EVDwi3500ver1

Standard\_E2as\_v4

Number of Instances

1

Cancel

Save

525WTS12.VDSazu  
redemo.omicroso  
it.com

0

Online

Available



VDS provides for an easy way to update session hosts in a WVD Host Pool by using Provisioning Collections and the **Add Session Host** functionality. This process can be done without impacting end users and repeated over and over with subsequent image updates, building on previous image iterations. For a detailed workflow on this process, see the [WVD Session Host Update Process](#) section below.

## New Workspace

From the Workspaces page, a new workspace can be created by clicking + **New Workspace** and the dialog box will prompt for the Provisioning Collection. The Shared Provisioning Collection name will be found on this list.

VDS Documentation  
Virtual Desktop  
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Home > Workspaces > Add Workspace

### Add Workspace

Configure Users Applications Review

Is this a new client?  
☒ Yes ☐ No

Company Name Required Login Identifier Required  
Omega Fuel omegafuel

Notification Email Required Phone Number Required  
notify@omegafuel.abc 5555555555

Country Required  
United States

Address 1 Required Address 2  
555 Main St Address 2...

City Required State Required Zip Code Required  
Olympia Washington 98501

Website Internal Customer Number  
Website... Customer number...

#### Provisioning Info

Deployment Required Operating System Required  
VDSGCPDemo (kok) Windows Server 2019

Provisioning Collection Required  
Default PC  
**Default PC**

#### Application Settings

☐ Enable Remote App  
☐ Enable App Locker  
☐ Enable Application Usage Tracking

#### Device Settings

☐ Disable Printing Access  
☐ Enable User Profile Disk  
☒ Enable User Workspace Data Storage  
☐ Permit Access to Task Manager

#### Security Settings

☐ Require Complex User Password  
☐ File Auditing Enabled  
☐ Migration Mode Enabled  
☐ Enable MFA for All Users

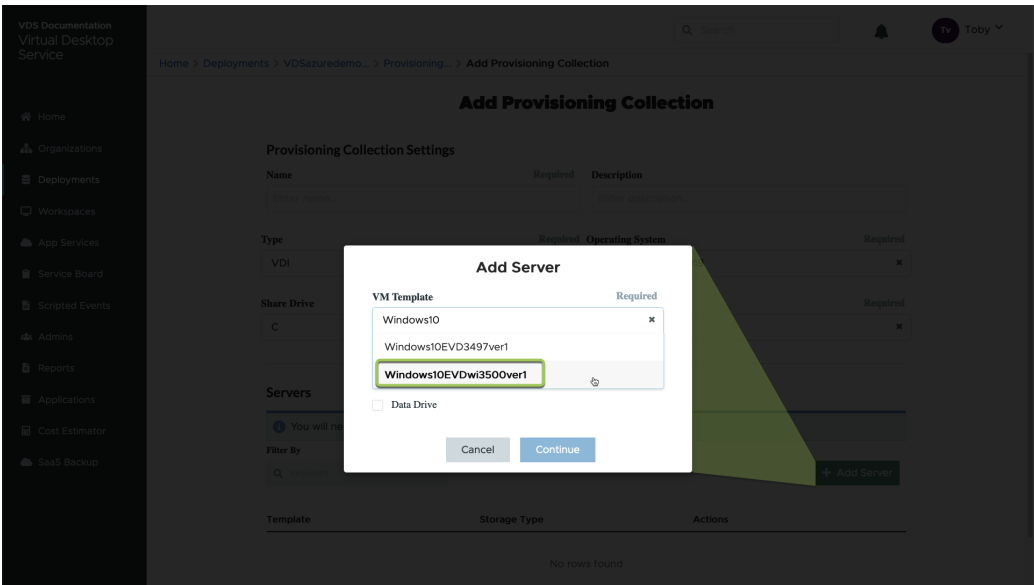
Cancel Next

## New Provisioning Collection

From the Deployment > Provisioning Collection page, a new Provisioning Collection can be created by clicking + **Add Collection**. When adding servers to this collection the dialog box will prompt for the



VM Template. The template name from above will be found on this list:



## Addendum 1 - RDS Session Hosts

### RDS Session Host Update Process

VDS provides for an easy way to update session hosts in a RDS environment by using Provisioning Collections and the **Add Server** functionality. This process can be done without impacting end users and repeated over and over with subsequent image updates, building on previous image iterations.

*The RDS Session Host update process is as follows:*

1. Build a new VDI Provisioning Collection, customize and validate the collection per the instructions above.
  - a. Generally this Provisioning Collection will be built on the previous VM Template, emulating an "Open, Save As" process.
2. Once the Provisioning Collection has validated, navigate to the *Workspace > Servers* page, click + **Add Server**

**Add Server**

Server Role

Required

VM Template

TS

×

Windows10EVDwi3500ver1

×

Machine Size Type

Required

Storage Type

Required

Standard\_E8as\_v4

×

StandardSSD\_LRS

×

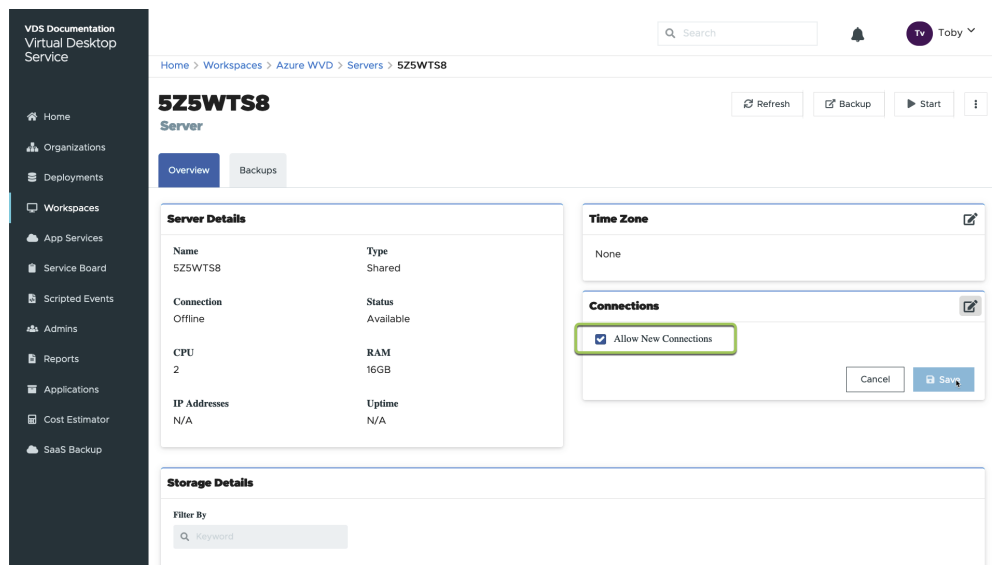
☐ Data Drive

Cancel

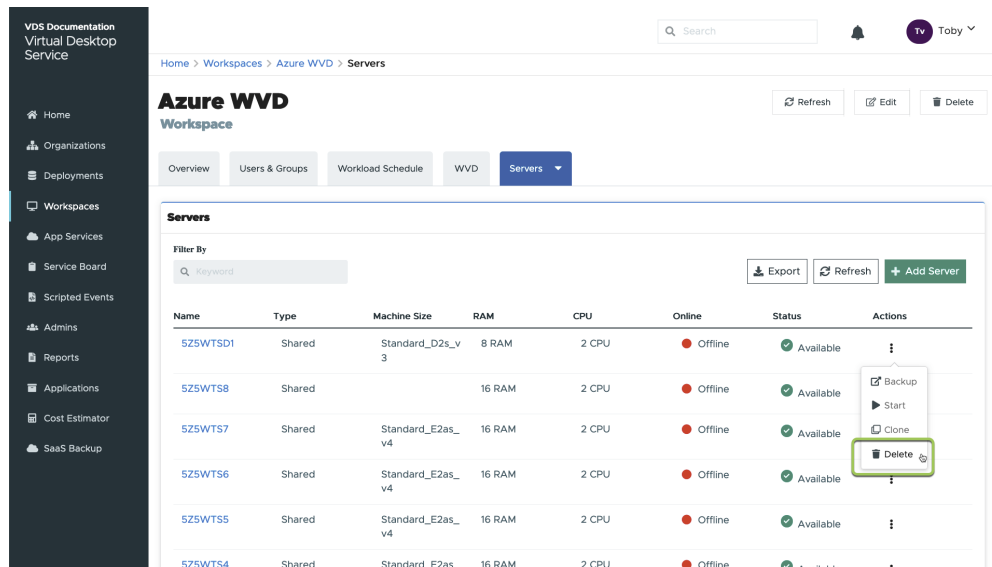
Add Server

3. Select **TS** as the **Server Role**

4. Select the latest **VM Template**. Make the appropriate **Machine Size** and **Storage Type** selections based on your requirements. Leave **Data Drive** unchecked.
5. Repeat this for the total number of Session Hosts required for the environment.
6. Click **Add Server**, the session hosts will build based on the selected VM Template and starting coming online in as soon as 10-15 minutes (depending on the hypervisor).
  - a. Note that the Session Hosts currently in the environment will ultimately be decommissioned after these new host come online. Plan to build enough new hosts to be sufficient to support the entire workload in this environment.
7. For each session host, the **Allow New Sessions** toggle can be used to manage which hosts can receive new user sessions. This setting is accessed by editing the settings of each individual session host server. Once sufficient new hosts have been built and functionality has been confirmed, this setting can be managed on both the new and old hosts to route all new sessions to the new hosts. The old hosts, with **Allow New Sessions** set to **disabled**, can continue to run and host existing user sessions.



8. As users log off of the old host(s), and with no new user sessions joining the old host(s), the old host(s) where **Sessions = 0** can be deleted by clicking the **Actions** icon and selecting **delete**.



## Addendum 2 - WVD Session Hosts

### WVD Session Host Update Process

VDS provides for an easy way to update session hosts in a WVD Host Pool by using Provisioning Collections and the **Add Session Host** functionality. This process can be done without impacting end users and repeated over and over with subsequent image updates, building on previous image iterations.

*The WVD Session Host update process is as follows:*

1. Build a new VDI Provisioning Collection, customize and validate the collection per the instructions above.
  - a. Generally this Provisioning Collection will be built on the previous VM Template, emulating an "Open, Save As" process.
2. Once the Provisioning Collection has validated, navigate to the *Workspace > WVD > Host Pools* page and click the name of the Host Pool
3. From within the *Host Pool > Session Hosts* page, click + **Add Session Host**

### Add Session Host

**OS Disk Type**

☐ Ephemeral ☒ Persistent

**VM Template** Required

Windows10EVDwi3500ver1 ✕

**Machine Size Type** Required

Standard\_E8as\_v4 ✕

**Machine Storage Type** Required

StandardSSD\_LRS ✕

**Number of Instances**

12

4. Select the latest **VM Template**. Make the appropriate **Machine Size** and **Storage Type** selections based on your requirements.
5. Enter the **Number of Instances** equal to the total number of required Session Hosts. Typically this will be the same number as are currently in the Host Pool but it can be any number.
  - a. Note that the Session Hosts currently in the Host pool will ultimately be decommissioned after these new host come online. Plan for the **Number of Instances** entered to be sufficient to support the entire workload in this Host Pool.
6. Click **Save**, the session hosts will build based on the selected VM Template and starting coming online in as soon as 10-15 minutes (depending on the hypervisor).
7. For each session host, the **Allow New Sessions** toggle can be used to manage which hosts can receive new user sessions. Once sufficient new hosts have been built and functionality has been confirmed, this setting can be managed on both the new and old hosts to route all new sessions to the new hosts. The old hosts, with **Allow New Sessions** set to **disabled**, can continue to run and host existing user sessions.

The screenshot shows the Azure WVD console interface. The left sidebar contains navigation links for Home, Organizations, Deployments, Workspaces, App Services, Service Board, Scripted Events, Admins, Reports, Applications, Cost Estimator, and SaaS Backup. The main content area displays the 'Shared WVD Pool' with tabs for Overview, Session Hosts, App Groups, and Active Users. The 'Session Hosts' tab is active, showing a table of session hosts. The table has columns for Name, Allow New Session, Sessions, Online, Managed, Entity Status, and Actions. There are four hosts listed, all with 'Allow New Session' set to 'Yes' and 'Entity Status' as 'Available'. A context menu is open for the first host, showing options like 'Backup', 'Clone', 'Connect', 'Delete', 'Disallow New Session', and 'Stop'.

Name	Allow New Session	Sessions	Online	Managed	Entity Status	Actions
5Z5WTS1.VDSazuredemo.onmicrosoft.com	Yes	0	Online	Yes	Available	Backup, Clone, Connect, Delete, Disallow New Session, Stop
5Z5WTS10.VDSazuredemo.onmicrosoft.com	Yes	0	Online	Yes	Available	
5Z5WTS11.VDSazuredemo.onmicrosoft.com	Yes	0	Online	Yes	Available	
5Z5WTS12.VDSazuredemo.onmicrosoft.com	Yes	0	Online	Yes	Available	

8. As users log off of the old host(s), and with no new user sessions joining the old host(s), the old

host(s) where **Sessions = 0** can be deleted by clicking the **Actions** icon and selecting **delete**.

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Home > Workspaces > Azure WVD > WVD > Host Pools > Shared WVD Pool > Session Hosts

Shared WVD Pool

Host Pool

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Delete

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Active Users

Session Hosts

Filter By

Q keyword

Bulk Actions

Refresh

Add Session Host

	Name	Allow New Session	Sessions	Online	Managed	Entity Status	Actions
<input type="checkbox"/>	SZ5WTS1.VDSazuredemo.onmicrosoft.com	✗	0	Online	✓	Available	<div><div>Allow New Session</div><div>Backup</div><div>Clone</div><div>Connect</div><div>Delete</div><div>Stop</div></div>
<input type="checkbox"/>	SZ5WTS10.VDSazuredemo.onmicrosoft.com	✓	0	Online	✓	Available	
<input type="checkbox"/>	SZ5WTS11.VDSazuredemo.onmicrosoft.com	✓	0	Online	✓	Available	
<input type="checkbox"/>	SZ5WTS12.VDSazuredemo.onmicrosoft.com	✓	0	Online	✓	Available	

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