

# **Microsoft Certified: Windows Virtual Desktop Specialty**

## **– Skills Measured**

NOTE: The bullets that appear below each of the skills measured are intended to illustrate how we are assessing that skill. This list is not definitive or exhaustive.

NOTE: Most questions cover features that are General Availability (GA). The exam may contain questions on Preview features if those features are commonly used.

### **Exam AZ-140: Configuring and Operating Windows Virtual Desktop on Microsoft Azure**

#### **Plan a Windows Virtual Desktop Architecture (10-15%)**

##### **Design the Windows Virtual Desktop architecture**

- assess existing physical and virtual desktop environments
- assess network capacity and speed requirements for Windows Virtual Desktop
- recommend an operating system for a Windows Virtual Desktop implementation
- plan and configure name resolution for Active Directory (AD) and Azure Active Directory Domain Services (Azure AD DS)
- plan a host pools architecture
- recommend resource groups, subscriptions, and management groups
- configure a location for the Windows Virtual Desktop metadata
- calculate and recommend a configuration for performance requirements
- calculate and recommend a configuration for Azure Virtual Machine capacity requirements

##### **Design for user identities and profiles**

- select an appropriate licensing model for Windows Virtual Desktop based on requirements
- recommend an appropriate storage solution (including Azure NetApp Files versus Azure Files)
- plan for Windows Virtual Desktop client deployment
- plan for user profiles
- recommend a solution for network connectivity
- plan for Azure AD Connect for user identities

## **Implement a Windows Virtual Desktop Infrastructure (25-30%)**

### **Implement and manage networking for Windows Virtual Desktop**

- implement Azure virtual network connectivity
- manage connectivity to the internet and on-premises networks
- implement and manage network security
- manage Windows Virtual Desktop session hosts by using Azure Bastion
- monitor and troubleshoot network connectivity

### **Implement and manage storage for Windows Virtual Desktop**

- configure storage for FSLogix components
- configure storage accounts
- configure disks
- create file shares

### **Create and configure host pools and session hosts**

- create a host pool by using the Azure portal
- automate creation of Windows Virtual Desktop host and host pools by using PowerShell, Command-Line Interface (CLI), and Azure Resource Manager templates
- create a host pool based on Windows client or Windows Server session hosts
- configure host pool settings
- manage licensing for session hosts that run Windows client or Windows Server
- assign users to host pools
- apply OS and application updates to a running Windows Virtual Desktop host
- apply security and compliance settings to session hosts

### **Create and manage session host images**

- create a gold image
- modify a session host image
- install language packs in Windows Virtual Desktop
- deploy a session host by using a custom image
- plan for image update and management
- create and use a Shared Image Gallery
- troubleshoot OS issues related to Windows Virtual Desktop

## **Manage Access and Security (10-15%)**

### **Manage access**

- plan and implement Azure roles and role-based access control (RBAC) for Windows Virtual Desktop
- manage local roles, groups and rights assignment on Windows Virtual Desktop session hosts
- configure user restrictions by using Azure AD group policies and AD policies

### **Manage security**

- plan and implement Conditional Access policies for connections to Windows Virtual Desktop
- plan and implement multifactor authentication in Windows Virtual Desktop
- manage security by using Azure Security Center
- configure Microsoft Defender Antivirus for session hosts

## **Manage User Environments and Apps (20-25%)**

### **Implement and manage FSLogix**

- plan for FSLogix
- install and configure FSLogix
- configure Profile Containers
- configure Cloud Cache
- migrate user profiles to FSLogix

### **Configure user experience settings**

- configure Universal Print
- configure user settings through group policies and Endpoint Manager policies
- configure persistent and non-persistent desktop environments
- configure Remote Desktop Protocol (RDP) properties on a host pool
- configure session timeout properties
- troubleshoot user profile issues
- troubleshoot Windows Virtual Desktop clients

### **Install and configure apps on a session host**

- configure dynamic application delivery by using MSIX App Attach
- implement application masking
- deploy an application as a RemoteApp
- implement and manage OneDrive for Business for a multi-session environment
- implement and manage Microsoft Teams AV Redirect
- implement and manage browsers and internet access for Windows Virtual Desktop sessions

- create and configure an application group
- troubleshoot application issues related to Windows Virtual Desktop

## **Monitor and Maintain a Windows Virtual Desktop Infrastructure (20-25%)**

### **Plan and implement business continuity and disaster recovery**

- plan and implement a disaster recovery plan for Windows Virtual Desktop
- design a backup strategy for Windows Virtual Desktop
- configure backup and restore for FSLogix user profiles, personal virtual desktop infrastructures (VDIs), and golden images

### **Automate Windows Virtual Desktop management tasks**

- configure automation for Windows Virtual Desktop
- automate management of host pools, session hosts, and user sessions by using PowerShell and Azure Command-Line Interface (CLI)
- implement autoscaling in host pools

### **Monitor and manage performance and health**

- monitor Windows Virtual Desktop by using Azure Monitor
- monitor Windows Virtual Desktop by using Azure Advisor
- customize Azure Monitor workbooks for Windows Virtual Desktop monitoring
- optimize session host capacity and performance
- manage active sessions and application groups
- monitor and optimize autoscaling results