

Study guide for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub

Purpose of this document

This study guide should help you understand what to expect on the exam and includes a summary of the topics the exam might cover and links to additional resources. The information and materials in this document should help you focus your studies as you prepare for the exam.

Useful links	Description
Review the skills measured as of October 28, 2022	This list represents the skills measured AFTER the date provided. Study this list if you plan to take the exam AFTER that date.
Review the skills measured prior to October 28, 2022	Study this list of skills if you take your exam PRIOR to the date provided.
Change log	You can go directly to the change log if you want to see the changes that will be made on the date provided.
How to earn the certification	Some certifications only require passing one exam, while others require passing multiple exams.
Certification renewal	Microsoft associate, expert, and specialty certifications expire annually. You can renew by passing a free online assessment on Microsoft Learn.
Your Microsoft Learn profile	Connecting your certification profile to Learn allows you to schedule and renew exams and share and print certificates.
Passing score	A score of 700 or greater is required to pass.
Exam sandbox	You can explore the exam environment by visiting our exam sandbox.

Useful links	Description
Request accommodations	If you use assistive devices, require extra time, or need modification to any part of the exam experience, you can request an accommodation.
Take a practice test	Are you ready to take the exam or do you need to study a bit more?

Updates to the exam

Our exams are updated periodically to reflect skills that are required to perform a role. We have included two versions of the Skills Measured objectives depending on when you are taking the exam.

We always update the English language version of the exam first. Some exams are localized into other languages, and those are updated approximately eight weeks after the English version is updated. Other available languages are listed in the **Schedule Exam** section of the **Exam Details** webpage. If the exam isn't available in your preferred language, you can request an additional 30 minutes to complete the exam.

Note

The bullets that follow each of the skills measured are intended to illustrate how we are assessing that skill. Related topics may be covered in the exam.

Note

Most questions cover features that are general availability (GA). The exam may contain questions on Preview features if those features are commonly used.

Skills measured as of October 28, 2022

Audience Profile

Candidates for this exam have subject matter expertise in providing infrastructure as a service (IaaS) and platform as a service (PaaS) offering to end users or customers from within their own datacenter using Azure Stack Hub.

Their responsibilities are to plan, deploy, update, and maintain the Azure Stack Hub infrastructure. They also configure resources, manage infrastructure capacity, and optimize the services that run in Azure Stack Hub.

Professionals in this role work with teams that support datacenter infrastructure, teams that manage identity, and teams that consume Azure Stack Hub resources, including developers, DevOps engineers, and virtual infrastructure administrators.

Candidates for this exam have significant experience managing and operating Azure Stack Hub environments and are proficient at managing Azure Stack Hub by using PowerShell. They should have a

strong understanding of Azure, in addition to knowledge of virtualization, networking, and identity management.

- Plan and deploy Azure Stack Hub (30–35%)
- Provide services (20–25%)
- Manage infrastructure (40–45%)

Plan and deploy Azure Stack Hub (30–35%)

Plan an Azure Stack Hub deployment

- Recommend a deployment model for a specific scenario
- Recommend a name resolution strategy
- Define fully qualified domain name (FQDN) and region name
- Recommend a public and internal IP strategy
- Define static routes or Border Gateway Protocol (BGP) configuration
- Recommend a datacenter firewall integration strategy
- Choose between Microsoft Azure Active Directory (Azure AD), part of Microsoft Entra and Active Directory Federation Services (AD FS)
- Validate identity provider and network by using the Azure Stack Hub Readiness Checker tool
- Select a billing model

Plan and implement infrastructure certificates for Azure Stack Hub

- Choose between an Enterprise certificate authority (CA) and a public certificate
- Prepare certificates for Azure Stack Hub
- Import certificates
- Export PFX files
- Prepare folder structure
- Validate certificates by using the Azure Stack Hub Readiness Checker tool
- Rotate secrets for certificates

Manage Azure Stack Hub registration and billing

- Recommend a registration model
- Register in a connected environment
- Register in a disconnected environment
- Validate Azure Stack Hub registration
- Refresh Azure Stack Hub registration
- Set up usage data reporting
- View and retrieve usage data by using the usage API
- Manage usage and billing in multitenant and cloud solution provider (CSP) scenarios

Set up management environment

- Obtain and connect to Azure Resource Manager endpoints

- Download and deploy Operator Access Workstation
- Install PowerShell modules for Azure Stack Hub
- Enable Azure CLI for Azure Stack Hub users
- Download and deploy Azure Stack PowerShell tools
- Add relevant environment based on a scenario
- Enable the Emergency VM Access Service (EVA)

Provide services (20–25%)

Manage Azure Stack Hub Marketplace

- Populate Azure Stack Hub Marketplace from a connected environment
- Populate Azure Stack Hub Marketplace in a disconnected environment
- Create a custom Azure Stack Hub Marketplace item
- Manage the lifecycle for Azure Stack Hub Marketplace items
- Create an ARM template

Offer the Azure App Service resource provider

- Plan the App Service resource provider deployment
- Deploy the App Service resource provider
- Update the App Service resource provider
- Scale roles based on capacity requirements
- Rotate App Service secrets and certificates
- Manage and monitor worker tiers
- Back up App Service resource provider, including SQL databases, file server share, and secrets

Offer the Azure Event Hubs resource provider

- Plan an Event Hubs resource provider deployment
- Deploy an Event Hubs resource provider
- Update an Event Hubs resource provider
- Rotate Event Hubs secrets and certificates

Offer services

- Create and manage quotas
- Create and manage plans
- Create and manage offers
- Create and manage user subscriptions
- Change user subscription owner

Manage infrastructure (40–45%)

Manage identity and access

- Assign users and groups in Azure Stack Hub

- Grant an app access to resources
- Define a custom role in Azure AD for delegating Azure Stack Hub management tasks to users
- Register a tenant directory with Azure Stack Hub
- Update a tenant directory
- Unregister a tenant directory

Monitor and maintain system health

- Monitor system health by using the administrator portal
- Monitor system health by using PowerShell
- Monitor system health by using the REST API
- Respond to and manage alerts
- Validate health and system status by using Test-AzureStack
- Monitor Azure Stack Hub infrastructure certificates
- Collect diagnostic logs on demand by using the administrator portal
- Collect diagnostic logs on demand by using the privileged endpoint
- Configure automatic diagnostic log collection
- Configure syslog forwarding for Azure Stack Hub infrastructure

Plan and configure business continuity and disaster recovery (BCDR)

- Retrieve BitLocker recovery keys
- Recommend a BCDR strategy
- Recommend a solution for tenant backups
- Choose a method for infrastructure backups
- Configure storage target for infrastructure backups
- Configure certificates for infrastructure backups
- Configure frequency and retention policy for infrastructure backups
- Test backup and restore of infrastructure by using Azure Stack Development Kit
- Enable backup by using PowerShell
- Validate success status of backup

Perform node and system-wide operations

- Add nodes
- Manage storage capacity by reclaiming space or rebalancing
- Add IP pools
- Stop and start Azure Stack Hub
- Perform node operations, including start, stop, resume, repair, drain, and shutdown
- Configure Time Server (NTP)
- Configure syslog server
- Configure DNS server
- Update Azure Stack Hub, including scheduling, deploying, monitoring, and troubleshooting

- Update Azure AD home directory

Configure and use privileged endpoints

- Connect to a privileged endpoint
- Configure the cloud admin user role
- Unlock a support session
- Close the session on the privileged endpoint

Study Resources

We recommend that you train and get hands-on experience before you take the exam. We offer self-study options and classroom training as well as links to documentation, community sites, and videos.

Study resources	Links to learning and documentation
Get trained	Choose from self-paced learning paths and modules or take an instructor-led course
Find documentation	Azure documentation Azure Stack Hub Documentation Azure Stack documentation Azure Stack Hub and operational excellence Azure hybrid and multicloud cloud documentation
Ask a question	Microsoft Q&A Microsoft Docs
Get community support	Azure Community Support
Follow Microsoft Learn	Microsoft Learn - Microsoft Tech Community
Find a video	Exam Readiness Zone Azure Fridays Browse other Microsoft Learn shows

Change log

Key to understanding the table: The topic groups (also known as functional groups) are in bold typeface followed by the objectives within each group. The table is a comparison between the two versions of the exam skills measured and the third column describes the extent of the changes.

Skill area prior to October 28, 2022	Skill area as of October 28, 2022	Change
Audience profile		No change
Plan and deploy Azure Stack Hub	Plan and deploy Azure Stack Hub	No change
Plan an Azure Stack Hub deployment	Plan an Azure Stack Hub deployment	Minor
Plan and implement infrastructure certificates for Azure Stack Hub	Plan and implement infrastructure certificates for Azure Stack Hub	No change
Manage Azure Stack Hub registration and billing	Manage Azure Stack Hub registration and billing	No change
Set up management environment	Set up management environment	No change
Provide services	Provide services	No change
Manage Azure Stack Hub Marketplace	Manage Azure Stack Hub Marketplace	No change
Offer the Azure App Service resource provider	Offer the Azure App Service resource provider	No change
Offer the Azure Event Hubs resource provider	Offer the Azure Event Hubs resource provider	No change
Offer services	Offer services	No change
Manage infrastructure	Manage infrastructure	No change
Manage identity and access	Manage identity and access	No change
Monitor and maintain system health	Monitor and maintain system health	No change
Plan and configure business continuity and disaster recovery (BCDR)	Plan and configure business continuity and disaster recovery (BCDR)	No change
Perform node and system-wide operations	Perform node and system-wide operations	No change
Configure and use privileged endpoints	Configure and use privileged endpoints	No change

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