

Study Guide

Exam MS-220: Troubleshooting Microsoft Exchange Online

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
How to earn the certification	Some certifications only require one exam, while others require more. On the details page, you'll find information about what skills are measured and links to registration. Each exam also has its own details page covering exam specifics.
Certification renewal	Once you earn your certification, don't let it expire. When you have an active certification that's expiring within six months, you should renew it—at no cost—by passing a renewal assessment on Microsoft Learn. Remember to renew your certification annually if you want to retain it.
Your Microsoft Learn profile	Connecting your certification profile to Learn brings all your learning activities together. You'll be able to schedule and renew exams, share and print certificates, badges and transcripts, and review your learning statistics inside your Learn profile.
Passing score	All technical exam scores are reported on a scale of 1 to 1,000. A passing score is 700 or greater. As this is a scaled score, it may not equal 70% of the points. A passing score is based on the knowledge and skills needed to demonstrate competence as well as the difficulty of the questions.
Exam sandbox	Are you new to Microsoft certification exams? You can explore the exam environment by visiting our exam sandbox. We created the sandbox as an opportunity for you to experience an exam before you take it. In the sandbox, you can interact with different question types, such as build list, case studies,

Useful links	Description
Request accommodations	and others that you might encounter in the user interface when you take an exam. Additionally, it includes the introductory screens, instructions, and help topics related to the different types of questions that your exam might include. It also includes the non-disclosure agreement that you must accept before you can launch the exam. We're committed to ensuring all learners are set up for success. If you use assistive devices, require extra time, or need modification to any part of the exam experience, you can request an accommodation.

Objective domain: skills the exam measures

The English language version of this exam was updated on October 19, 2022.

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

- Troubleshoot mail flow issues (20-25%)
- Troubleshoot compliance and retention issues (25–30%)
- Troubleshoot mail client issues (20–25%)
- Troubleshoot Exchange Online configuration issues (15–20%)
- Troubleshoot hybrid and migration issues (10–15%)

Functional groups

Troubleshoot mail flow issues (20–25%)

Troubleshoot Exchange Online mail flow issues

- Review and interpret message headers
- Review and interpret message trace results and policies associated with those results
- Determine whether a mail flow rule or conditional mail routing is affecting mail flow
- Identify rules that are evaluated and policies that are applied when sending or receiving email
- Troubleshoot issues where users cannot send or receive email and no NDR is generated or displayed
- Troubleshoot issues where email destined for one tenant is incorrectly routed to another tenant
- Troubleshoot delivery delays

Troubleshoot mail flow issues with external systems

- Read and analyze SMTP protocol logs for hybrid deployments and third-party systems
- Troubleshoot issues related to mail flow for hybrid deployments
- Troubleshoot DNS-related mail flow issues
- Troubleshoot SMTP relay issues
- Troubleshoot SMTP certificate issues

Troubleshoot other mail flow issues

- Identify types of NDRs and interpret NDR data
- Determine which active rules impact email attachments
- Determine which rules are triggered when an email arrives at a user's inbox
- Troubleshoot issues related to blocked attachment types
- Troubleshoot issues with corrupted inbox rules

Troubleshoot issues reported by Microsoft Defender for Office 365

- Determine why an email is marked as spam
- Determine why messages are being quarantined
- Determine whether the sender SPF, DMARC, and DKIM records are valid
- Troubleshoot anti-spam policies
- Troubleshoot messages that are categorized as false positive or false negative

Troubleshoot compliance and retention issues (25–30%)

Troubleshoot compliance issues

- Identify roles required to perform eDiscovery actions
- Describe Microsoft Purview compliance portal retention policies
- Troubleshoot eDiscovery issues

- Determine what types of holds are associated with an item
- Troubleshoot in-place and eDiscovery holds
- Search for and delete email messages in an organization
- Determine how to clear or purge recoverable item folders

Troubleshoot retention issues

- Describe retention tag types and actions
- Describe the process for calculating item retention age
- Troubleshoot issues creating and applying retention policies
- Review and interpret Messaging Records Management (MRM) mailbox diagnostics logs
- Interpret message properties used by message records management (MRM)

Troubleshoot Microsoft Purview Message Encryption and S/MIME issues

- Troubleshoot issues with messages that are not encrypted or decrypted as expected
- Troubleshoot issues where external users cannot decrypt messages but internal users can decrypt messages
- Troubleshoot issues reading, replying to, or forwarding protected messages from Microsoft 365 on mobile devices
- Troubleshoot mail flow rules
- Troubleshoot revocation issues for encrypted emails
- Troubleshoot S/MIME issues

Troubleshoot mailbox auditing issues

- Troubleshoot issues searching audit logs
- Troubleshoot user actions (for example, user reports an item is deleted but they say they did not delete)
- Troubleshoot bulk actions including email creation, moves, modifications, and deletion
- Track non-owner actions
- Troubleshoot audit log retention period issues
- Troubleshoot auditing not working

Troubleshoot journaling

- Troubleshoot duplicate journal entries
- Troubleshoot email not being journaled
- Troubleshoot journal OME decryption issues

Troubleshoot mail client issues (20–25%)

Troubleshoot connectivity and authentication issues

- Describe how to obtain Outlook client configuration information
- Troubleshoot Exchange authentication policies
- Troubleshoot client access rules

- Troubleshoot issues with modern authentication
- Troubleshoot Outlook on the web (OWA) sign in issues
- Troubleshoot Autodiscover issues
- Outlook client cannot connect to Exchange Online mailbox
- Troubleshoot Outlook continuously prompting for Exchange Online password

Troubleshoot calendaring issues

- Review and analyze mailbox and calendar diagnostic logs
- Troubleshoot broken manager/delegation issues
- Troubleshoot Resource Booking Assistant issues

Troubleshoot calendar sharing issues

- Troubleshoot permissions issues related to calendar sharing
- Troubleshoot issues publishing and accessing calendars shared with external users
- Determine why content for a published calendar is not up to date

Troubleshoot issues with mobile devices

- Identify mobile device access states and what the states indicate
- Review mobile devices statistics to confirm the reason for a block
- Review the Allow/Block/Quarantine (ABQ) list to identify blocked or quarantined devices
- Troubleshoot Exchange device access rules
- Review and interpret ActiveSync logs to troubleshoot Outlook Sync EAS connection issues
- Troubleshoot connectivity issues with native ActiveSync

Troubleshoot Exchange Online configuration issues (15–20%)

Troubleshoot provisioning issues

- Interpret and troubleshoot validation errors encountered during object provisioning
- Determine when to restore or recover an inactive mailbox
- Troubleshoot issues managing resource mailboxes
- Troubleshoot issues purging deleted users

Troubleshoot recipient issues

- Troubleshoot automatic email forwarding
- Troubleshoot matching issues with Azure AD, part of Microsoft Entra
- Troubleshoot distribution list membership issues (including dynamic distribution groups)
- Troubleshoot issues with archive mailboxes including auto-expanding archive mailboxes

Troubleshoot org-wide settings

- Troubleshoot domain setup and configuration issues
- Troubleshoot address book policies
- Troubleshoot address lists

- Troubleshoot allowed file types
- Troubleshoot mailbox plans
- Troubleshoot Client-Access Services (CAS) mailbox plans

Troubleshoot public folder issues

- Troubleshoot Exchange Online access to public folders
- Troubleshoot mail-enabled public folders
- Troubleshoot issues sending email to public folders
- Troubleshoot hybrid access to public folders
- Troubleshoot load-balancing issues for public folders

Troubleshoot hybrid and migration issues (10–15%)

Troubleshoot hybrid configuration issues

- Troubleshoot Hybrid Configuration Wizard issues
- Troubleshoot hybrid mail flow issues
- Troubleshoot free/busy issues for hybrid deployments
- Troubleshoot issues synchronizing remote recipient attributes with Exchange Online

Troubleshoot migration issues

- Troubleshoot endpoint creation issues
- Review migration users and move requests
- Troubleshoot slow migrations
- Troubleshoot Data Consistency Score (DCS) issues
- Troubleshoot failed migrations
- Troubleshoot public folder migration issues

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	Microsoft 365 documentation Microsoft Docs
Ask a question	Microsoft Q&A Microsoft Docs
Get community support	Microsoft 365 - Microsoft Tech Community
Follow Microsoft Learn	Microsoft Learn - Microsoft Tech Community
Find a video	Exam Readiness Zone Browse other Microsoft Learn shows