
LAB 05 - CONFIGURING POP3, IMAP AND MAPI/HTTP SERVICES

EXERCISE 1 - CONFIGURING POP3 SERVICES

PART 1 - ENABLE AND CONFIGURE POP3 IN EXCHANGE ADMIN CENTER (EAC)

EXPLANATION:

In this part, you will enable and configure the POP3 protocol using the Exchange Admin Center (EAC). POP3 allows mail clients to download messages from Exchange for offline use. By default, the POP3 service is disabled and must be manually configured.

You will configure:

- Timeout duration for authenticated sessions
- Maximum concurrent connections allowed overall, per IP, and per user

STEPS:

1. Open a web browser on your Exchange server (e.g., Microsoft Edge or Google Chrome).
2. In the address bar, type the following URL and press Enter:
`https://ad07.domain07.com/ecp`
3. Sign in with an administrator account (e.g., Administrator@domain07.com).
4. In the left-hand navigation pane, click on "Servers", then click the "Servers" tab.
5. In the list of servers, double-click your Exchange server named "ad07".
6. In the server properties window, select "POP3" from the left-hand options.

The screenshot displays the Exchange Admin Center (EAC) interface. On the left, the navigation pane shows the 'servers' tab selected. The main content area shows the configuration for the 'AD07' server. The 'POP3' service is highlighted in the left-hand options. The configuration details for POP3 are shown on the right, including the 'Message MIME format' set to 'Best body format', 'Message sort order' set to 'Ascending', 'Logon method' set to 'Secure TLS connection', and a 'Banner string' that reads 'The Microsoft Exchange POP3 service is ready.' A 'More options...' link is visible at the bottom right.

7. In the POP3 settings page, configure the following:

- Authenticated session timeout: 10 minutes
- Maximum connections: 400
- Maximum connections per IP address: 200
- Maximum connections per user: 3

Time-out settings

Authenticated time-out (seconds):

600

Unauthenticated time-out (seconds):

60

Connection limits

Maximum connections:

400

Maximum connections from a single IP address:

200

Maximum connections from a single user:

3

Maximum command size (bytes):

512

8. Click the "Save" button at the bottom right corner to apply the changes.

PART 2 – CONFIGURE POP3 USING EXCHANGE MANAGEMENT SHELL (EMS)

EXPLANATION:

In this part, you will use PowerShell commands in the Exchange Management Shell to configure POP3.

This includes starting the POP3 and POP3 Backend services, setting them to start automatically, verifying POP3 settings, changing the authentication method, and enabling POP3 access for all mailboxes.

STEPS:

1. Launch the Exchange Management Shell (EMS) on your Exchange server (ad07).

2. Start the POP3 and POP3 Backend services:

```
Start-Service MSExchangePOP3
```

```
Start-Service MSExchangePOP3BE
```

```
[PS] C:\Users\Administrator>Start-Service MSExchangePop3
WARNING: Waiting for service 'Microsoft Exchange POP3 (MSExchangePop3)' to start...
WARNING: Waiting for service 'Microsoft Exchange POP3 (MSExchangePop3)' to start...
WARNING: Waiting for service 'Microsoft Exchange POP3 (MSExchangePop3)' to start...
WARNING: Waiting for service 'Microsoft Exchange POP3 (MSExchangePop3)' to start...
[PS] C:\Users\Administrator>Start-Service MSExchangePOP3BE
WARNING: Waiting for service 'Microsoft Exchange POP3 Backend (MSExchangePOP3BE)' to start...
WARNING: Waiting for service 'Microsoft Exchange POP3 Backend (MSExchangePOP3BE)' to start...
WARNING: Waiting for service 'Microsoft Exchange POP3 Backend (MSExchangePOP3BE)' to start...
```

These commands **start** the POP3 frontend (client-facing) and backend (mailbox-processing) services.

By default, they are not running after installation.

```
[PS] C:\Users\Administrator>Get-Service *Exchange* | Where-Object {$_.Name -like "*POP*"}

Status      Name                DisplayName
-----
Running     MSExchangePOP3      Microsoft Exchange POP3
Running     MSExchangePOP3BE    Microsoft Exchange POP3 Backend
```

3. Configure these services to **start** automatically on system boot:

```
Set-Service MSExchangePOP3 -StartupType Automatic
Set-Service MSExchangePOP3BE -StartupType Automatic
```

```
[PS] C:\Users\Administrator>Set-Service MSExchangePOP3 -StartupType Automatic
[PS] C:\Users\Administrator>Set-Service MSExchangePOP3BE -StartupType Automatic
```

Without this, the services would need to be started manually after every reboot.

4. Verify the current POP3 settings:

```
Get-PopSettings | Format-List
```

```
[PS] C:\Users\Administrator>Get-PopSettings | Format-List
Creating a new session for implicit remoting of "Get-PopSettings" command...

RunspaceId      : 5a366c53-39c7-43ce-bde4-f8708ff6b2d5
Name            : 1
ProtocolName    : POP3
MaxCommandSize  : 512
MessageRetrievalSortOrder : Ascending
UnencryptedOrTLSBindings : {[::]:110, 0.0.0.0:110}
SSLBindings     : {[::]:995, 0.0.0.0:995}
InternalConnectionSettings : {ad07.domain07.local:995:SSL, ad07.domain07.local:110:TLS}
ExternalConnectionSettings : {}
X509CertificateName : ad07
Banner          : The Microsoft Exchange POP3 service is ready.
LoginType       : SecureLogin
AuthenticatedConnectionTimeout : 00:10:00
PreAuthenticatedConnectionTimeout : 00:01:00
MaxConnections  : 400
MaxConnectionFromSingleIP : 200
MaxConnectionsPerUser : 3
MessageRetrievalMimeFormat : BestBodyFormat
ProxyTargetPort : 1995
CalendarItemRetrievalOption : iCalendar
OwaServerUrl    :
EnableExactRFC822Size : False
LiveIdBasicAuthReplacement : False
SuppressReadReceipt : False
ProtocolLogEnabled : False
EnforceCertificateErrors : False
LogFileLocation : C:\Program Files\Microsoft\Exchange Server\V15\Logging\Pop3
LogFileRollOverSettings : Hourly
LogPerFileSizeQuota : 0 B (0 bytes)
ExtendedProtectionPolicy : None
EnableGSSAPIAndNTLMAuth : True
Server          : AD07
AdminDisplayName :
ExchangeVersion : 0.10 (14.0.100.0)
DistinguishedName : CN=1,CN=POP3,CN=Protocols,CN=AD07,CN=Servers,CN=Exchange
Administrative Group (FYDIBOHF23SPDLT),CN=Administrative
Groups,CN=AD07-Exchange,CN=Microsoft
Exchange,CN=Services,CN=Configuration,DC=domain07,DC=local
Identity        : AD07\1
Guid            : 009c3349-3a78-4bd7-85ff-738657274279
ObjectCategory  : domain07.local/Configuration/Schema/ms-Exchange-Protocol-Cfg-POP-S
erver
```

This displays all POP3 server settings such as timeouts, connection limits, banner, and login type.

5. Set the login method to SecureLogin:

```
Set-PopSettings -LoginType SecureLogin
```

```
[PS] C:\Users\Administrator>Set-PopSettings -LoginType SecureLogin
WARNING: The command completed successfully but no settings of 'AD07\1' have been modified.
[PS] C:\Users\Administrator>
```

This changes the authentication method to a secure challenge-response model (NTLM), avoiding plain text credentials.

6. Enable POP3 access for all users:

```
Get-CASMailbox -ResultSize Unlimited | Set-CASMailbox -PopEnabled $true
```

```
[PS] C:\Users\Administrator>Get-CASMailbox -ResultSize Unlimited | Set-CASMailbox -PopEnabled $true
[PS] C:\Users\Administrator>
```

This enables POP3 protocol access for every user mailbox in the organization.

```
[PS] C:\Users\Administrator>Get-CASMailbox -Identity atohme | fl Name,PopEnabled

Name       : Antoine Tohme
PopEnabled : True
```

7. Restart both POP3 services to apply changes:

```
Restart-Service MExchangePOP3
Restart-Service MExchangePOP3BE
```

```
[PS] C:\Users\Administrator>Restart-Service MExchangePOP3
WARNING: Waiting for service 'Microsoft Exchange POP3 (MExchangePOP3)' to start...
WARNING: Waiting for service 'Microsoft Exchange POP3 (MExchangePOP3)' to start...
WARNING: Waiting for service 'Microsoft Exchange POP3 (MExchangePOP3)' to start...
WARNING: Waiting for service 'Microsoft Exchange POP3 (MExchangePOP3)' to start...
[PS] C:\Users\Administrator>Restart-Service MExchangePOP3BE
WARNING: Waiting for service 'Microsoft Exchange POP3 Backend (MExchangePOP3BE)' to start...
WARNING: Waiting for service 'Microsoft Exchange POP3 Backend (MExchangePOP3BE)' to start...
WARNING: Waiting for service 'Microsoft Exchange POP3 Backend (MExchangePOP3BE)' to start...
WARNING: Waiting for service 'Microsoft Exchange POP3 Backend (MExchangePOP3BE)' to start...
[PS] C:\Users\Administrator>
```

Restarting ensures all new settings take effect immediately.

EXERCISE 2 – CONFIGURING IMAP4 SERVICES

PART 1 – ENABLE AND CONFIGURE IMAP4 IN EXCHANGE ADMIN CENTER (EAC)

EXPLANATION:

In this task, you will configure IMAP4 protocol support using the Exchange Admin Center (EAC).

IMAP4 keeps emails on the server and allows users to sync across multiple devices.

You will configure timeout settings and connection limits for security and performance control.

STEPS:

1. Open a web browser on your Exchange server (e.g., Microsoft Edge).
2. In the address bar, go to:
`https://ad07.domain07.com/ecp`
3. Sign in using your admin credentials (e.g., Administrator@domain07.com).
4. In the left-hand menu, click "Servers" > then click the "Servers" tab at the top.
5. Double-click your Exchange server (ad07) from the list.
6. In the left-hand panel, select **IMAP4**.

The screenshot displays the Exchange Admin Center (EAC) interface. On the left, a navigation pane lists various management areas, with 'servers' highlighted. The top navigation bar shows 'servers' as the active tab. The main content area is titled 'Exchange Server - [InPrivate] - Microsoft Edge' and shows the configuration for the 'AD07' server. The 'IMAP4' tab is selected in the left-hand panel. The configuration details include:

- Message MIME format: Best body format
- Logon method: Secure TLS connection
- Banner string: The Microsoft Exchange IMAP4 service is ready.

Below the configuration details, there is a section for 'Transport settings' which includes links for unified messaging, DNS lookups, transport limits, transport logs, and Outlook Anywhere.

7. Set the following values:
- Connection timeout: 15 minutes (enter 900 seconds)
 - Maximum connections: 600
 - Maximum connections per IP address: 300
 - Maximum connections per user: 4

Time-out settings

Authenticated time-out (seconds):

900

Unauthenticated time-out (seconds):

60

Connection limits

Maximum connections:

600

Maximum connections from a single IP address:

300

Maximum connections from a single user:

4

Maximum command size (bytes):

10240

8. Click ****Save**** to apply the changes.

PART 2 – CONFIGURE IMAP4 USING EXCHANGE MANAGEMENT SHELL (EMS)

EXPLANATION:

In this part, you will use PowerShell to configure the IMAP4 service. IMAP4 keeps email stored on the server and allows access from multiple devices. The goal is to start the required services, enable automatic startup, verify settings, enable IMAP4 access for all mailboxes, and restart the services to apply changes.

STEPS:

1. Open Exchange Management Shell (EMS) on your Exchange Server (ad07).
2. Start the IMAP4 and IMAP4 Backend services:
`Start-Service MSExchangeIMAP4`
`Start-Service MSExchangeIMAP4BE`

```
[PS] C:\Users\Administrator>Start-Service MSExchangeIMAP4
WARNING: Waiting for service 'Microsoft Exchange IMAP4 (MSExchangeIMAP4)' to start...
WARNING: Waiting for service 'Microsoft Exchange IMAP4 (MSExchangeIMAP4)' to start...
WARNING: Waiting for service 'Microsoft Exchange IMAP4 (MSExchangeIMAP4)' to start...
[PS] C:\Users\Administrator>Start-Service MSExchangeIMAP4BE
WARNING: Waiting for service 'Microsoft Exchange IMAP4 Backend (MSExchangeIMAP4BE)' to start...
WARNING: Waiting for service 'Microsoft Exchange IMAP4 Backend (MSExchangeIMAP4BE)' to start...
WARNING: Waiting for service 'Microsoft Exchange IMAP4 Backend (MSExchangeIMAP4BE)' to start...
[PS] C:\Users\Administrator>
```

These services handle IMAP client connections and communication with the mailbox databases.

```
[PS] C:\Users\Administrator>Get-Service *Exchange* | Where-Object {$_.Name -like "*IMAP*"}

Status      Name                DisplayName
-----
Running     MSExchangeImap4     Microsoft Exchange IMAP4
Running     MSExchangeIMAP4BE   Microsoft Exchange IMAP4 Backend
```

3. Set both services to start automatically after every reboot:

```
Set-Service MSExchangeIMAP4 -StartupType Automatic
Set-Service MSExchangeIMAP4BE -StartupType Automatic
```

```
[PS] C:\Users\Administrator>Set-Service MSExchangeIMAP4 -StartupType Automatic
[PS] C:\Users\Administrator>Set-Service MSExchangeIMAP4BE -StartupType Automatic
```

4. View the current IMAP4 server configuration:

```
Get-ImapSettings | Format-List
```

```
[PS] C:\Users\Administrator>Get-ImapSettings | Format-List

RunspaceId           : 5a366c53-39c7-43ce-bde4-f8708ff6b2d5
ProtocolName         : IMAP4
Name                 : 1
MaxCommandSize       : 10240
ShowHiddenFoldersEnabled : False
UnencryptedOrTLSBindings : {[::]:143, 0.0.0.0:143}
SSLBindings          : {[::]:993, 0.0.0.0:993}
InternalConnectionSettings : {ad07.domain07.local:993:SSL, ad07.domain07.local:143:TLS}
ExternalConnectionSettings : {}
X509CertificateName  : ad07
Banner               : The Microsoft Exchange IMAP4 service is ready.
LoginType            : SecureLogin
AuthenticatedConnectionTimeout : 00:15:00
PreAuthenticatedConnectionTimeout : 00:01:00
MaxConnections       : 600
MaxConnectionFromSingleIP : 300
MaxConnectionsPerUser : 4
MessageRetrievalMimeFormat : BestBodyFormat
ProxyTargetPort      : 1993
CalendarItemRetrievalOption : iCalendar
OwaServerUrl         :
EnableExactRFC822Size : False
LiveIdBasicAuthReplacement : False
SuppressReadReceipt  : False
ProtocolLogEnabled    : False
EnforceCertificateErrors : False
LogFileLocation      : C:\Program Files\Microsoft\Exchange Server\V15\Logging\Imap4
LogFileRolloverSettings : Hourly
LogPerFileSizeQuota   : 0 B (0 bytes)
ExtendedProtectionPolicy : None
EnableGSSAPIAndNTLMAuth : True
Server               : AD07
AdminDisplayName     :
ExchangeVersion      : 0.10 (14.0.100.0)
DistinguishedName    : CN=1,CN=IMAP4,CN=Protocols,CN=AD07,CN=Servers,CN=Exchange Administrative Group (FYDIBOHF23SPDLT),CN=Administrative Groups,CN=AD07-Exchange,CN=Microsoft Exchange,CN=Services,CN=Configuration,DC=domain07,DC=local
Identity             : AD07\1
Guid                 : af522dab-3d72-4edb-9e0f-c00d77320d07
ObjectCategory       : domain07.local/Configuration/Schema/ms-Exch-Protocol-Cfg-IMAP-Server
```

This confirms configuration values like login type, timeout, and connection settings.

5. Enable IMAP4 for all user mailboxes:

```
Get-CASMailbox -ResultSize Unlimited | Set-CASMailbox -ImapEnabled $true
```

```
[PS] C:\Users\Administrator>Get-CASMailbox -ResultSize Unlimited | Set-CASMailbox -ImapEnabled $true  
[PS] C:\Users\Administrator>
```

This allows every mailbox in the organization to connect using IMAP4.

```
[PS] C:\Users\Administrator>Get-CASMailbox -Identity atohme | fl Name,ImapEnabled  
  
Name : Antoine Tohme  
ImapEnabled : True
```

6. Restart both services to apply any changes:

```
Restart-Service MExchangeIMAP4
```

```
Restart-Service MExchangeIMAP4BE
```

```
[PS] C:\Users\Administrator>Restart-Service MExchangeIMAP4  
WARNING: Waiting for service 'Microsoft Exchange IMAP4 (MExchangeIMAP4)' to start...  
WARNING: Waiting for service 'Microsoft Exchange IMAP4 (MExchangeIMAP4)' to start...  
WARNING: Waiting for service 'Microsoft Exchange IMAP4 (MExchangeIMAP4)' to start...  
[PS] C:\Users\Administrator>Restart-Service MExchangeIMAP4BE  
WARNING: Waiting for service 'Microsoft Exchange IMAP4 Backend (MExchangeIMAP4BE)' to start...  
WARNING: Waiting for service 'Microsoft Exchange IMAP4 Backend (MExchangeIMAP4BE)' to start...  
WARNING: Waiting for service 'Microsoft Exchange IMAP4 Backend (MExchangeIMAP4BE)' to start...  
[PS] C:\Users\Administrator>
```

EXERCISE 3 - TESTING POP3 AND IMAP4 ON WINDOWS 11

OBJECTIVE:

Test Exchange client access by configuring and validating POP3 and IMAP4 connectivity

using Outlook Classic on a domain-joined Windows 11 client.

EXPLANATION:

In this task, you will:

- Export and install the Exchange SSL certificate
- Disable the NAT adapter to force LAN-based access
- Configure Outlook Classic with POP3 and IMAP4 profiles
- Verify message transmission and folder synchronization

IMPORTANT - DISABLING THE NAT ADAPTER:

Ethernet1 (192.168.5.150) is your NAT adapter.

To ensure Outlook connects over LAN only (Ethernet0 - 192.168.7.1), disable NAT during testing.

To disable NAT via PowerShell:

```
Disable-NetAdapter -Name "Ethernet1" -Confirm:$false
```

```
PS C:\Users\Administrator> Disable-NetAdapter -Name "Ethernet1" -Confirm:$false
PS C:\Users\Administrator>
PS C:\Users\Administrator> Get-NetAdapter
```

Name	InterfaceDescription	ifIndex	Status	MacAddress
Ethernet0	Intel(R) 82574L Gigabit Network Co...#2	6	Up	00-0C-29-95-6A-C9
Ethernet1	Intel(R) 82574L Gigabit Network Conn...	4	Disabled	00-0C-29-95-6A-D3

To re-enable NAT after testing:

```
Enable-NetAdapter -Name "Ethernet1" -Confirm:$false
```

This ensures Outlook and SMTP/POP3/IMAP4 connections use the lab environment.

Lab 05A - Certificate Trust and Secure OWA Access

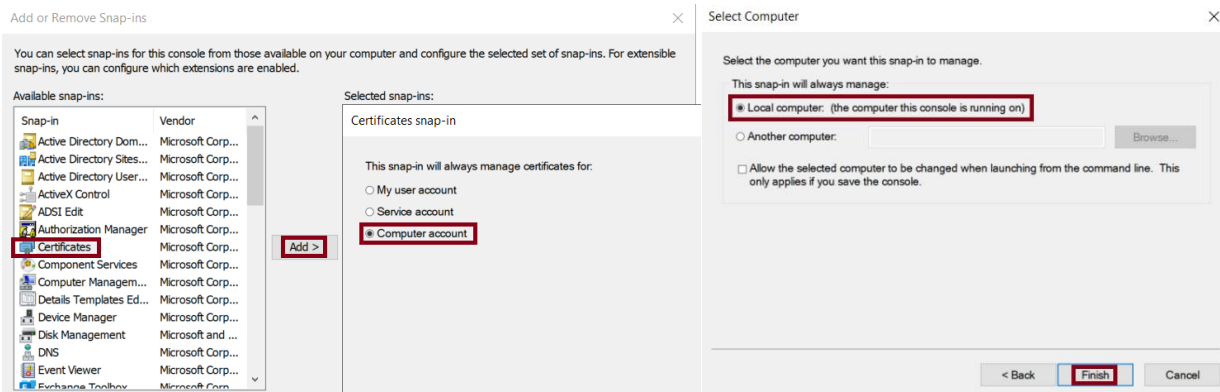
STEPS:

1. On the Exchange Server (ad07):

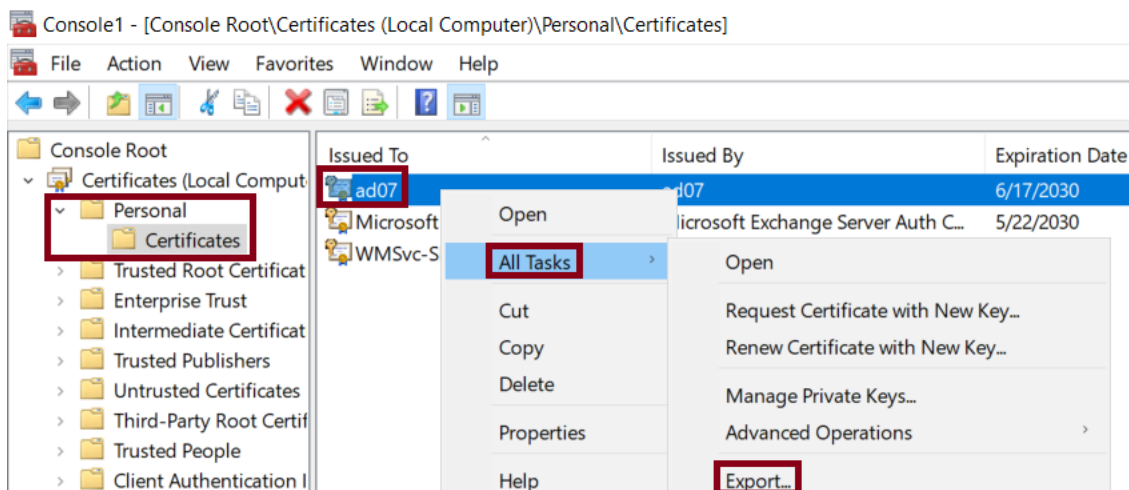
- Disable the NAT adapter as shown above.

2. Open MMC and export the Exchange SSL certificate:

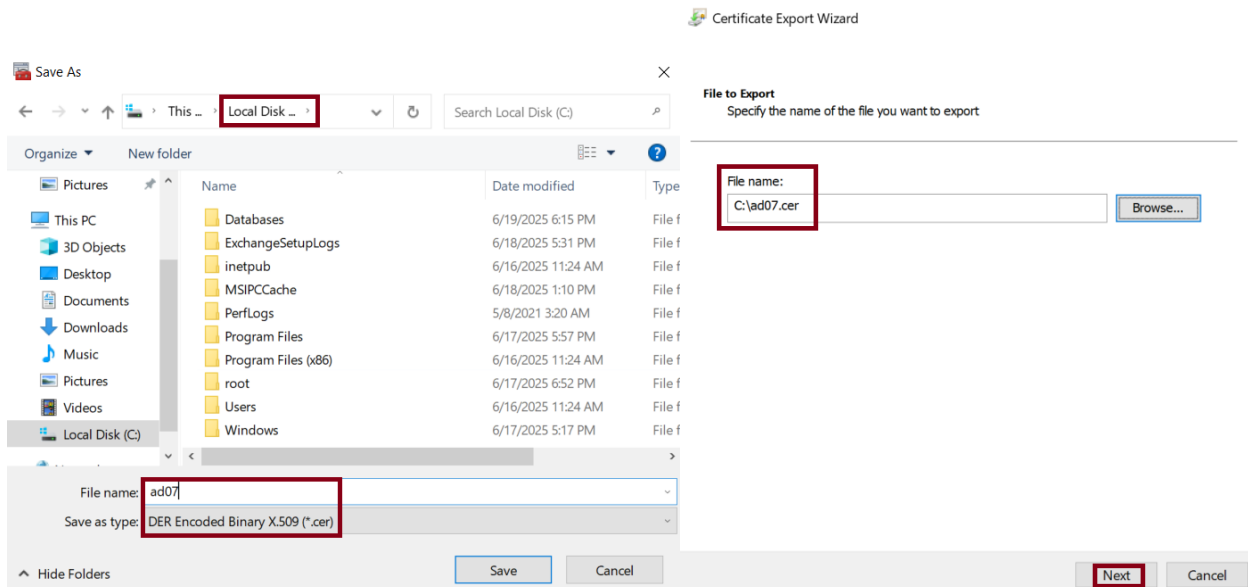
- Start > Run > mmc
- File > Add/Remove Snap-in > Certificates > Computer Account > Local Computer



- Navigate to Personal > Certificates
- Right-click the certificate issued to ad07.domain07.com
- Select All Tasks > Export

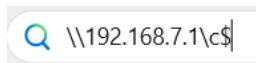


- Select: "No, do not export the private key"
- Format: DER encoded binary X.509 (.CER)
- Save the file and transfer to Windows 11
- File name: ad07.cer
- Save the file to C:\ and transfer it to the Windows 11 VM using \\ad07.domain07.com\c\$

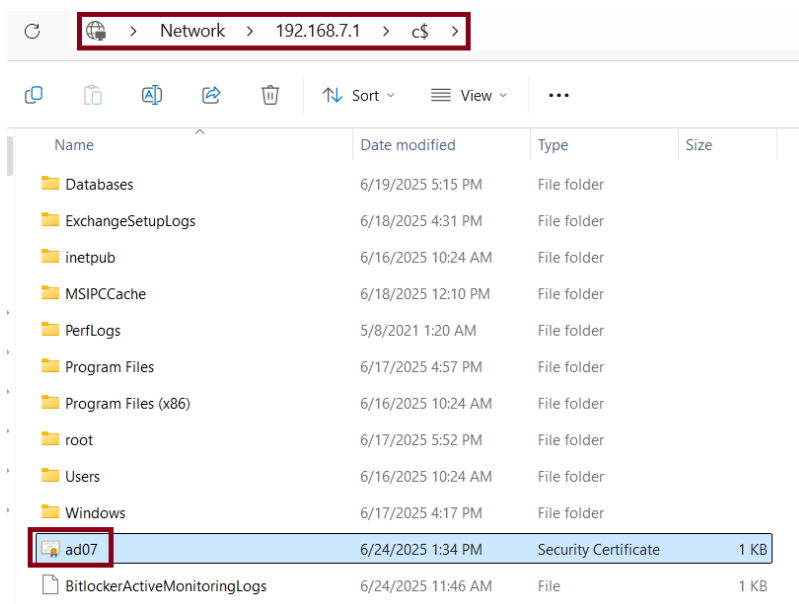


3. Transfer the certificate to Windows 11:

- Log **in** to the Windows 11 VM as: Administrator@domain07.local
- On the desktop, open File Explorer
- **In** the address bar, **type**:
\\192.168.7.1\c\$

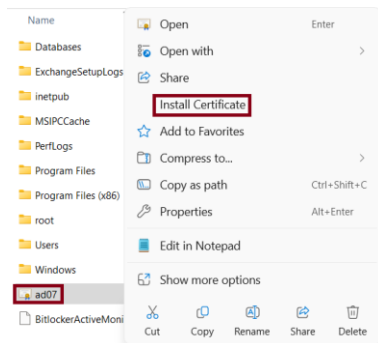


- Press Enter and wait **for** the server's C:\ drive to open
- When prompted, enter domain credentials (e.g., Administrator@domain07.local)
- Locate the certificate file (ad07.cer) on the Exchange server
- **Copy** it to the Windows 11 Desktop **for** easy access **in** the next step



4. On the Windows 11 VM:

- Right-click the ad07.cer file and select "Install Certificate"



- Select "Local Machine" when prompted



Welcome to the Certificate Import Wizard

This wizard helps you copy certificates, certificate trust lists, and certificate revocation lists from your disk to a certificate store.

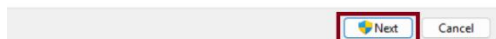
A certificate, which is issued by a certification authority, is a confirmation of your identity and contains information used to protect data or to establish secure network connections. A certificate store is the system area where certificates are kept.

Store Location

☐ Current User

☒ Local Machine

To continue, click Next.



- When the Certificate Store screen appears, choose: "Place all certificates in the following store"
- Browse to and select: **Trusted Root Certification Authorities**
- Complete the wizard and confirm successful import

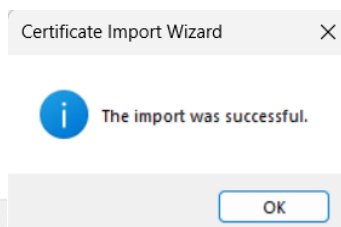
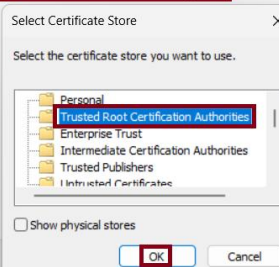


Certificate Store

Certificate stores are system areas where certificates are kept.

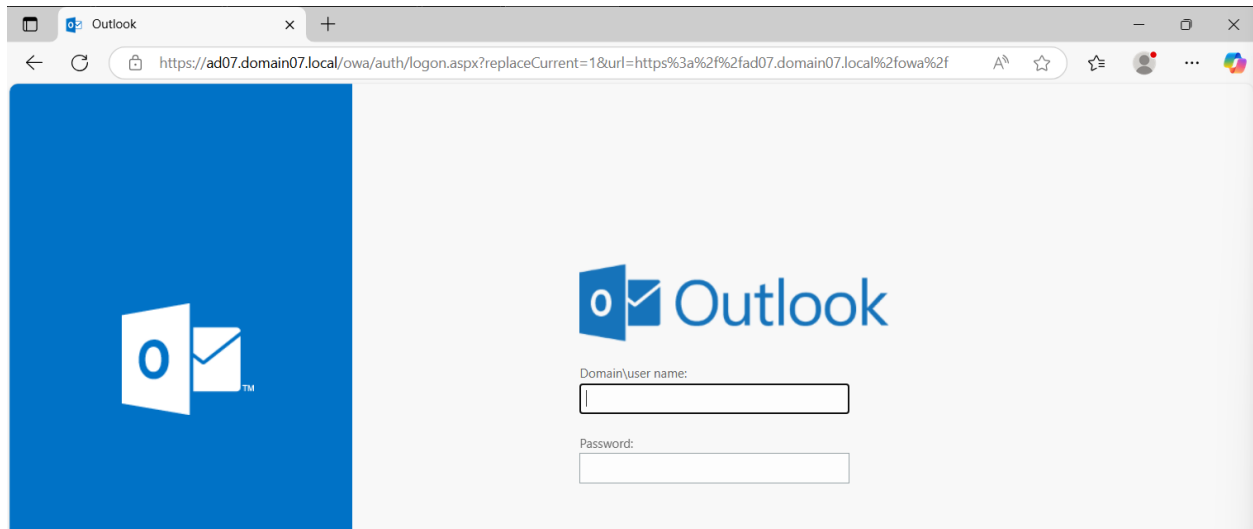
Windows can automatically select a certificate store, or you can specify a location for the certificate.

- ☐ Automatically select the certificate store based on the type of certificate
- ☒ Place all certificates in the following store



5. Confirm certificate trust:

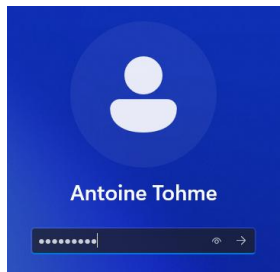
- Open Microsoft Edge or Google Chrome
- Navigate to: `https://ad07.domain07.local`
- The page **should** load successfully without any certificate warnings



Lab 05B - Configure Outlook Classic - POP3 and IMAP4

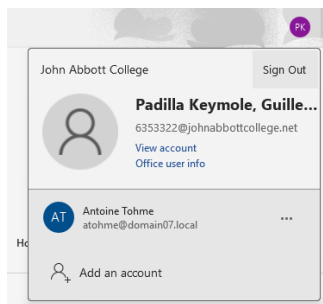
6. Log out of the Administrator session and log in as a test user:

- **For** example: `atohme@domain07.local` (created **in** Lab 3)

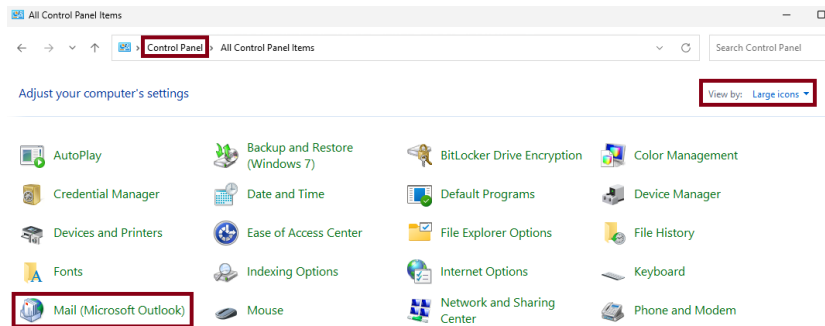


7. Configure a POP3 profile in Outlook Classic:

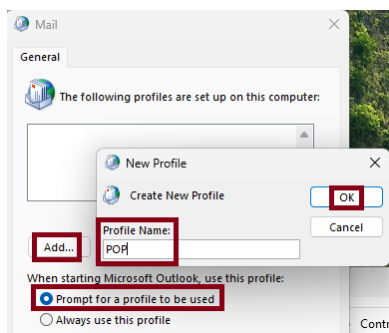
- Open Microsoft Word and sign **in using** your John Abbott account to activate Office



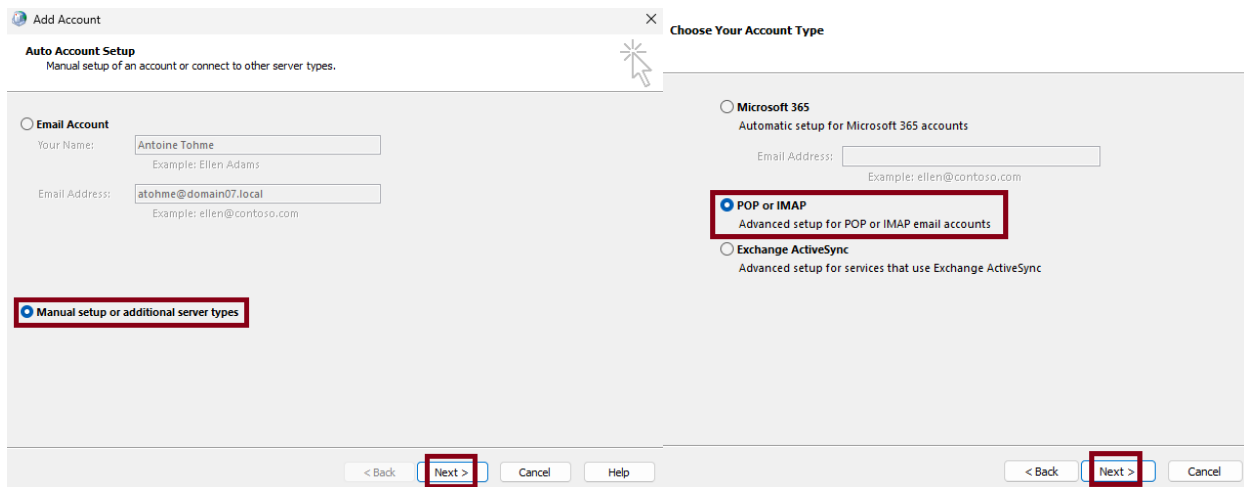
- Close Word
- Go to Control Panel > Mail (View by: Large icons)



- Click "Prompt for a profile to be used" > Add > Name: POP3



- Select: "Manual setup or additional server types"



- Enter the following account settings:
- | | |
|----------------------|-------------------------|
| Account Type | : POP3 |
| Your Name | : Antoine Tohme |
| Email Address | : atohme@domain07.local |
| Incoming mail server | : ad07.domain07.local |
| Outgoing mail server | : ad07.domain07.local |
| Username | : atohme@domain07.local |
| Password | : [Users Password] |
| Remember Password | : Checked |

Add Account

POP and IMAP Account Settings
Enter the mail server settings for your account.

User Information
Your Name: Antoine Tohme
Email Address: atohme@domain07.local

Server Information
Account Type: POP3
Incoming mail server: ad07.domain07.local
Outgoing mail server (SMTP): ad07.domain07.local

Logon Information
User Name: atohme@domain07.local
Password: *****
☒ Remember password
☐ Require logon using Secure Password Authentication (SPA)

Test Account Settings
We recommend that you test your account to ensure that the entries are correct.
Test Account Settings ...
☒ Automatically test account settings when Next is clicked

Deliver new messages to:
☒ New Outlook Data File
☐ Existing Outlook Data File
Browse

More Settings ...

< Back Next > Cancel Help

- Click "More Settings"
- Outgoing Server tab:
Enable "My outgoing server (SMTP) requires authentication"

Internet Email Settings

General **Outgoing Server** Advanced

☒ My outgoing server (SMTP) requires authentication
☒ Use same settings as my incoming mail server
☐ Log on using
 User Name:
 Password:
☒ Remember password
☐ Require Secure Password Authentication (SPA)
☐ Log on to incoming mail server before sending mail

- Advanced tab:
 - Incoming server: 995 with SSL
 - Outgoing server: 587 with STARTTLS

Internet Email Settings

General Outgoing Server **Advanced**

Server Port Numbers
 Incoming server (POP3): 995 Use Defaults
☒ This server requires an encrypted connection (SSL/TLS)
 Outgoing server (SMTP): 587
 Use the following type of encrypted connection: STARTTLS

Test Account Settings
 Congratulations! All tests completed successfully. Click Close to continue.
 Stop
 Close

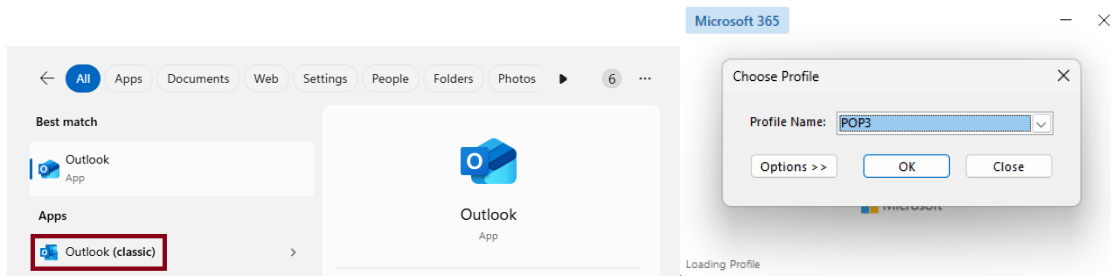
Tasks	Status
✓ Log onto incoming mail server (POP3)	Completed
✓ Send test email message	Completed

OK Cancel

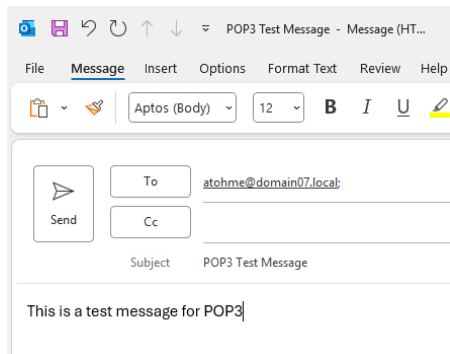
- Click OK > Next > Finish

8. Test POP3:

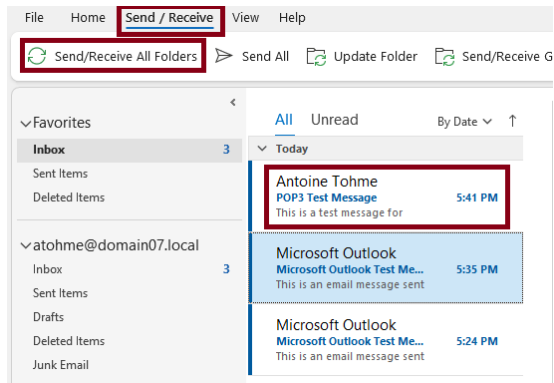
- Open Outlook and select the POP3 profile



- Send an email to yourself

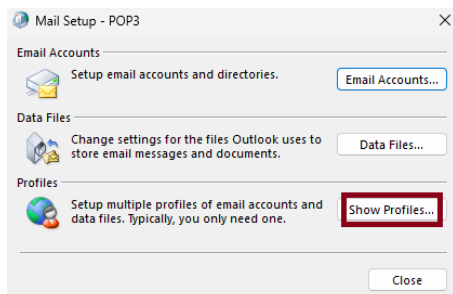


- Click "Send/Receive All Folders" to download the message from the server

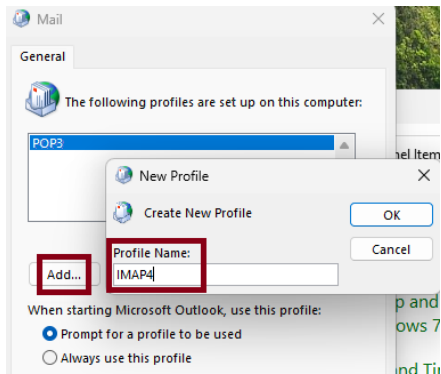


9. Configure an IMAP4 profile:

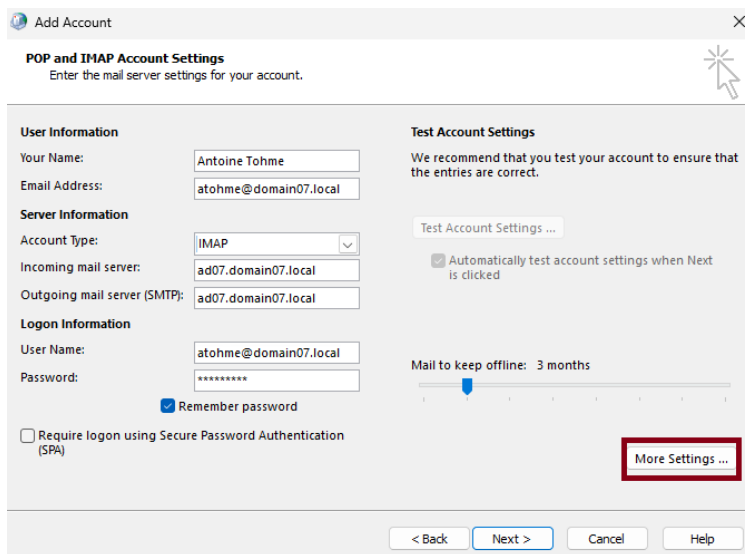
- Close Outlook
- Go back to Control Panel > Mail > Show Profiles > Add



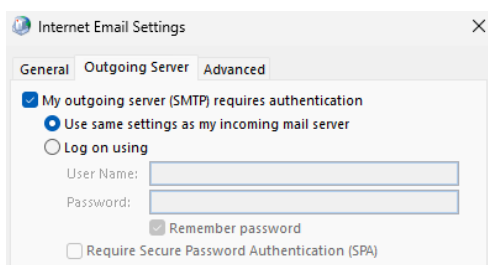
- Name the profile: IMAP4



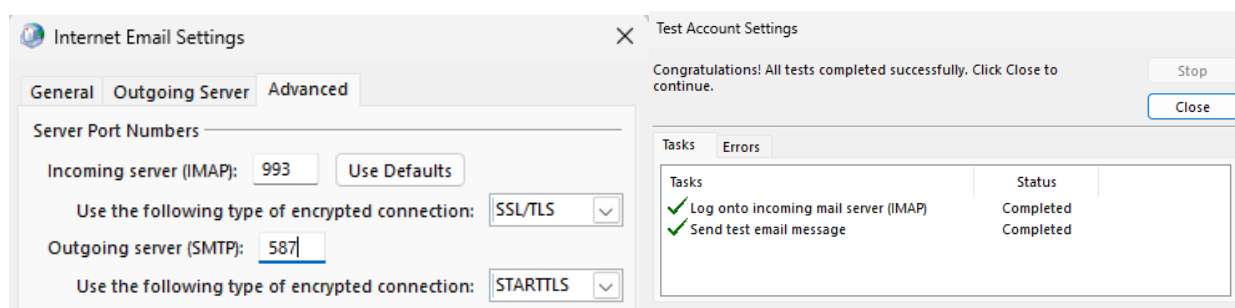
- Select: "Manual setup or additional server types" > POP or IMAP > Next
- Update the following fields:
 Account Type: IMAP
 Incoming mail server: ad07.domain07.local
 Outgoing mail server: ad07.domain07.local
 Username: atohme@domain07.local
 Password: *****
 Remember password: Checked



- Click More Settings > Outgoing Server tab:
 Enable "My outgoing server (SMTP) requires authentication"



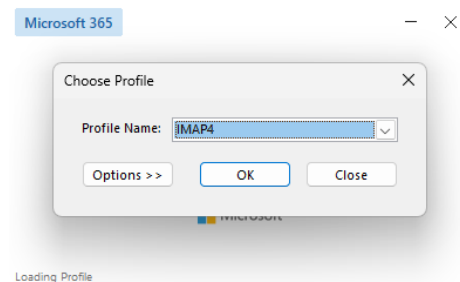
- Advanced tab settings:
Incoming server (IMAP): 993 with SSL
Outgoing server (SMTP): 587 with STARTTLS



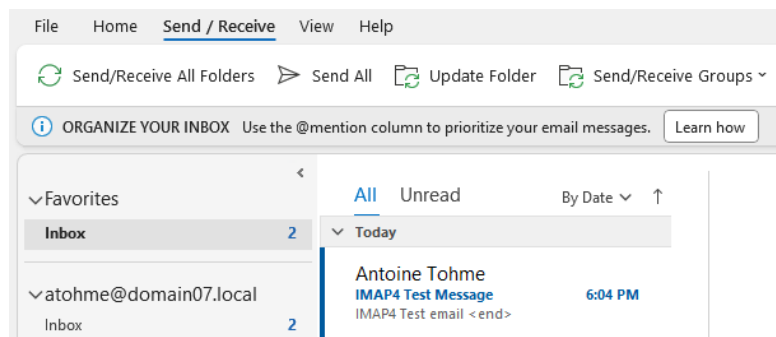
- Click OK > Next > Finish

10. Test IMAP4:

- Open Outlook and select the IMAP4 profile

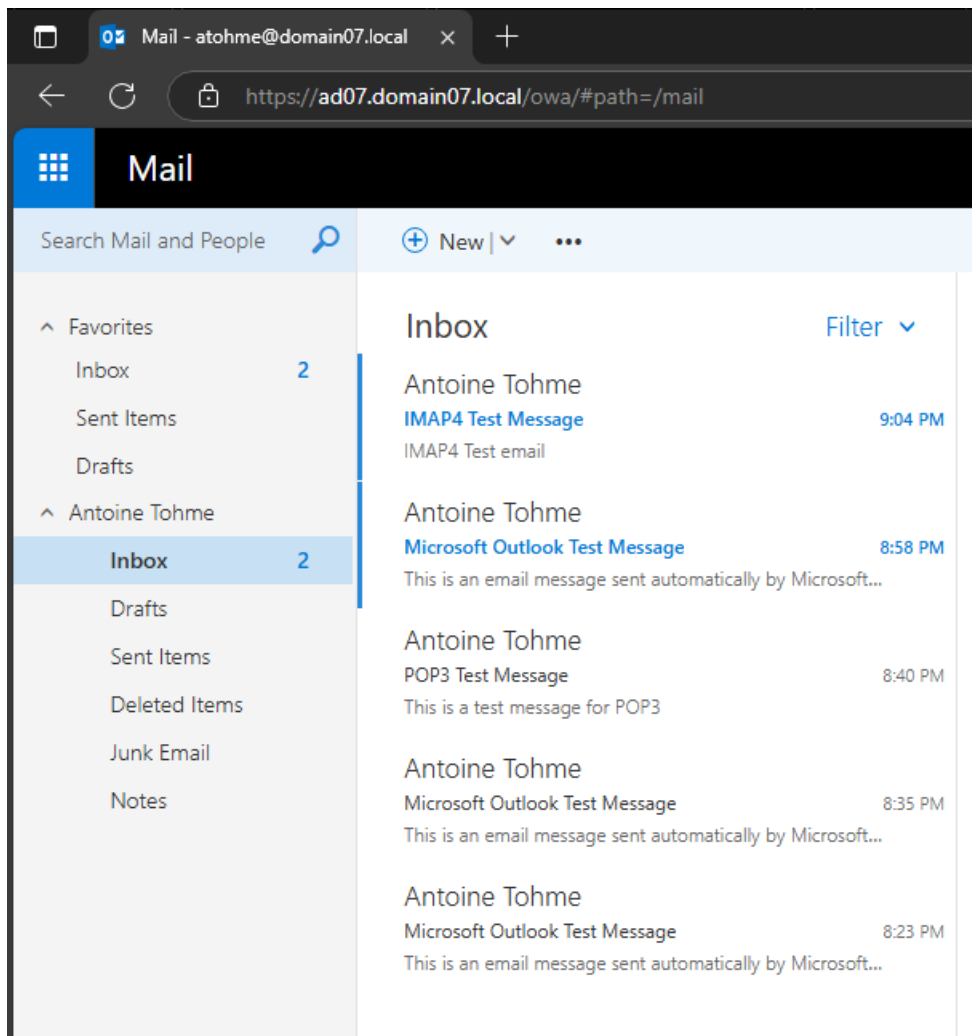


- Send a test email to yourself
- Click "Send/Receive All Folders"



Verification of IMAP Folder Synchronization using OWA

1. On the Windows 11 Client VM, open Microsoft Edge or Google Chrome.
2. In the address bar, type the following URL and press Enter:
`https://ad07.domain07.local/owa`
3. When prompted, log in using the test user credentials:
Username: `atohme@domain07.local`
Password: `<User_Password>`
4. Once logged in, check that:
 - The test email you sent to yourself via IMAP appears in the Inbox.
 - Any additional folders created in Outlook are visible here as well.



This confirms that messages and folder structure are stored on the Exchange Server and not just locally on the client machine.

EXERCISE 4 – CONFIGURING AND TESTING MAPI OVER HTTP

OBJECTIVE:

Enable and verify MAPI/HTTP connectivity **for** Outlook clients

STEPS:

Step 1 – Check MAPI/HTTP Status at the Organization Level

This command verifies whether the MAPI/HTTP protocol is currently enabled at the Exchange organization level.

Get-OrganizationConfig | Format-List MapiHttpEnabled

```
[PS] C:\Users\Administrator>Get-OrganizationConfig | Format-List -Property MapiHttpEnabled  
  
MapiHttpEnabled : True
```

Step 2 – Configure the MAPI Virtual Directory with the External URL

This command sets the External URL used by Outlook clients to connect over MAPI/HTTP.

Set-MapiVirtualDirectory -Identity "mapi (Default Web Site)" -ExternalUrl https://ad07.domain07.com/mapi -IISAuthenticationMethods Negotiate

```
[PS] C:\Users\Administrator>Set-MapiVirtualDirectory -Identity "mapi (Default Web Site)" -ExternalUrl https://ad07.domain07.com/mapi -IISAuthenticationMethods Negotiate  
[PS] C:\Users\Administrator>
```

Step 3 – Verify MAPI Internal and External URLs

This command displays the current internal and external URLs **for** the MAPI virtual directory to confirm **configuration**.

Get-MapiVirtualDirectory -Identity "mapi (Default Web Site)" | Format-List Server, InternalUrl, ExternalUrl

```
[PS] C:\Users\Administrator>Get-MapiVirtualDirectory -Identity "mapi (Default Web Site)"  
  
Name                Server InternalUrl                ExternalUrl  
----                -  
mapi (Default Web Site) AD07    https://ad07.domain07.local/mapi https://ad07.domain07.com/mapi  
[PS] C:\Users\Administrator>Get-MapiVirtualDirectory -Identity "mapi (Default Web Site)" | Format-List  
Server, InternalUrl, ExternalUrl  
  
Server      : AD07  
InternalUrl : https://ad07.domain07.local/mapi  
ExternalUrl : https://ad07.domain07.com/mapi
```

Step 4 – Configure AutoDiscover Provider Settings

This command updates the Outlook AutoDiscover provider **configuration** to advertise the correct server URL.

Set-OutlookProvider exch -Server "ad07.domain07.com"

```
[PS] C:\Users\Administrator>Set-OutlookProvider exch -Server "ad07.domain07.com"
```

Step 5 - Enable MAPI/HTTP Protocol for All Mailboxes

This command enables MAPI/HTTP access for every mailbox in the organization.
Get-Mailbox | Set-CASMailbox -MapiHttpEnabled \$true

```
[PS] C:\Users\Administrator>Get-Mailbox | Set-CASMailbox -MapiHttpEnabled $true
[PS] C:\Users\Administrator>Get-CASMailbox | Select-Object Name, MapiHttpEnabled
```

Name	MapiHttpEnabled
Administrator	True
Antoine Tohme	True
DiscoverySearchMailbox {D919BA05-46A6-415f-80AD-7E09334BB852}	True
Elon Musk	True
Guillermo Padilla Keymole	True

Step 6 - Test the MAPI/HTTP Configuration

This command runs a built-in probe from the server to verify that MAPI/HTTP connectivity is functioning.

```
Test-OutlookConnectivity -RunFromServerId ad07 -ProbeIdentity OutlookMapiHttpSelfTestProbe
```

```
[PS] C:\Users\Administrator>Test-OutlookConnectivity -RunFromServerId ad07 -ProbeIdentity OutlookMapiHttpSelfTestProbe
```

MonitorIdentity	StartTime	EndTime	Result	Error
OutlookMapiHttp.Protocol\OutlookMapiH...	6/25/2025 1:...	6/25/2025 1:...	Succeeded	

Step 7 - Restart IIS to Apply Changes

Restart IIS-related services manually if needed

```
Restart-Service w3svc
Restart-Service WAS
```

Step 8 - Lab 05C Begins Here: Configure Outlook Classic - MAPI/HTTP

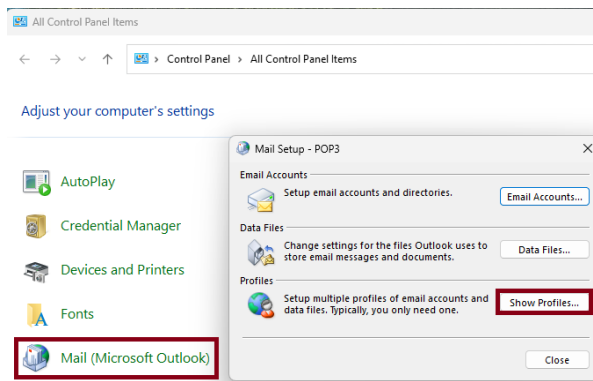
Continue with the Windows 11 client to configure and test MAPI/HTTP connectivity in Outlook Classic.

Explanation:

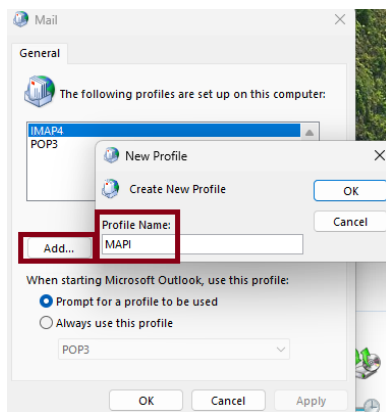
This lab validates MAPI over HTTP using Outlook Classic on a Windows 11 client. The test confirms that the Autodiscover service and Exchange MAPI virtual directory are functioning correctly. Instead of choosing "Manual Setup," we allow Outlook to automatically retrieve the settings via Auto Account Setup.

Execution:

1. On the Windows 11 client, open Control Panel.
2. Go to: Mail > Show Profiles > Add

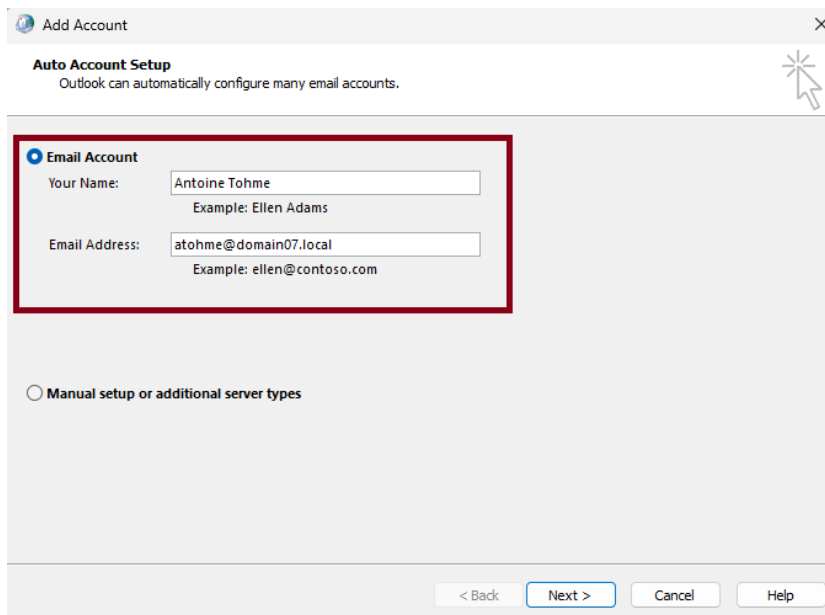


3. Enter the profile name: MAPI



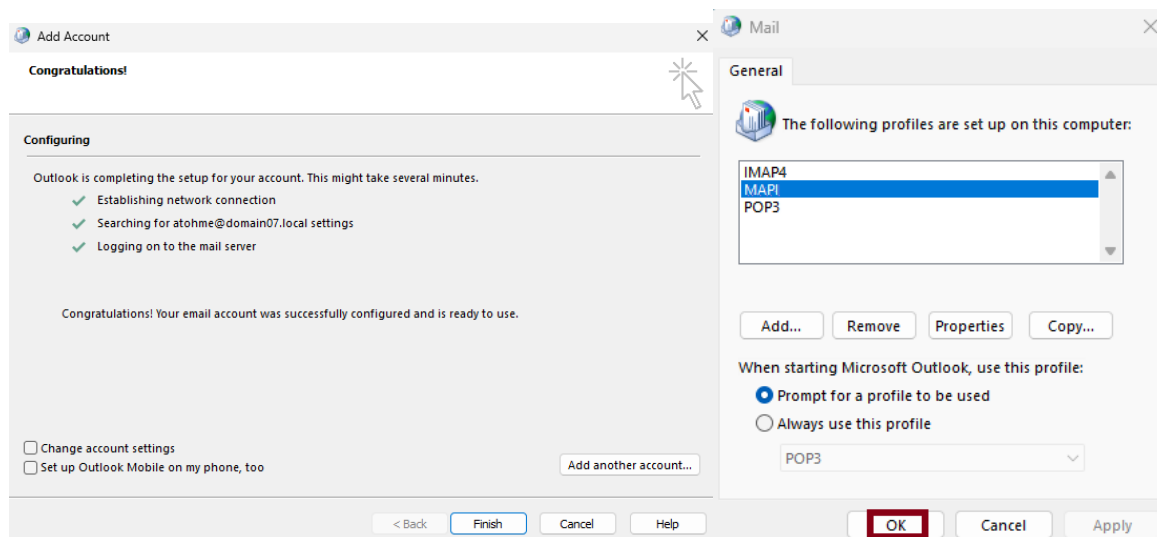
4. On the Auto Account Setup screen:

- Select: Email Account (default)
- Your Name: Antoine Tohme
- Email Address: atohme@domain07.local



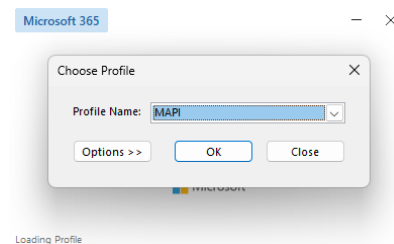
5. Click Next.

6. If prompted, enter the test user's password.
7. Wait for Outlook to complete the configuration using Autodiscover.
8. Once successful, click Finish.

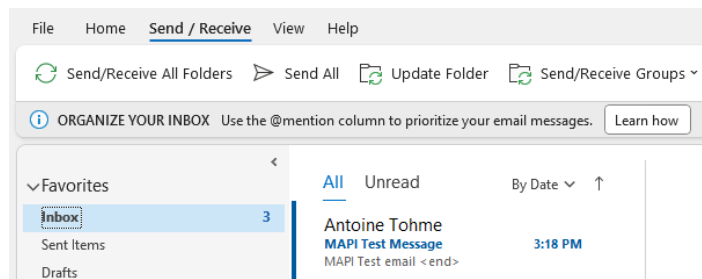


Step 9 – Launch Outlook and Confirm Profile

1. Open Outlook and choose the profile: MAPI



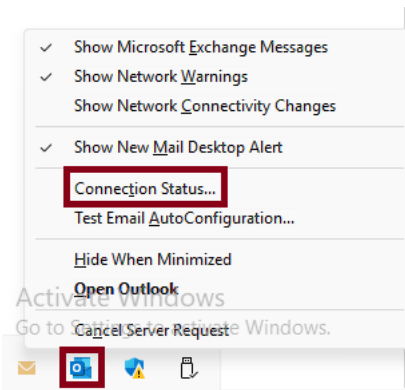
2. Allow Outlook to load the mailbox.
3. Send a test email to yourself (e.g., atohme@domain07.local).
4. Confirm that the message appears in both Inbox and Sent Items.
5. Click: Send/Receive All Folders to ensure synchronization with the Exchange server.



Step 10 - Confirm MAPI over HTTP is in use

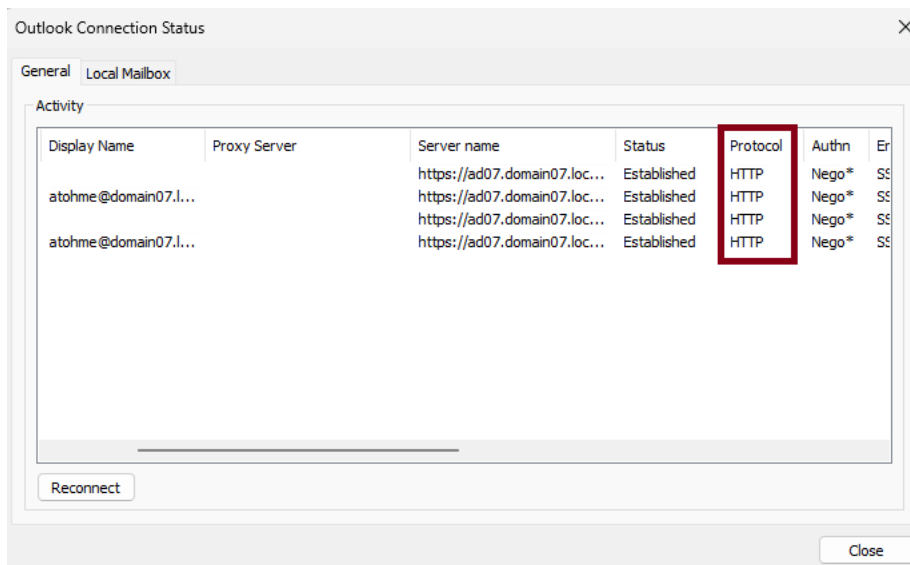
Hold down the Ctrl key and right-click the Outlook icon in the system tray near the clock

Click on Connection Status from the context menu



In the Outlook Connection Status window that appears, locate the Protocol column

Verify that the protocol used is HTTP



This confirms that Outlook is successfully connected to Exchange using the MAPI over HTTP protocol

Step 11 – Final Verification via OWA

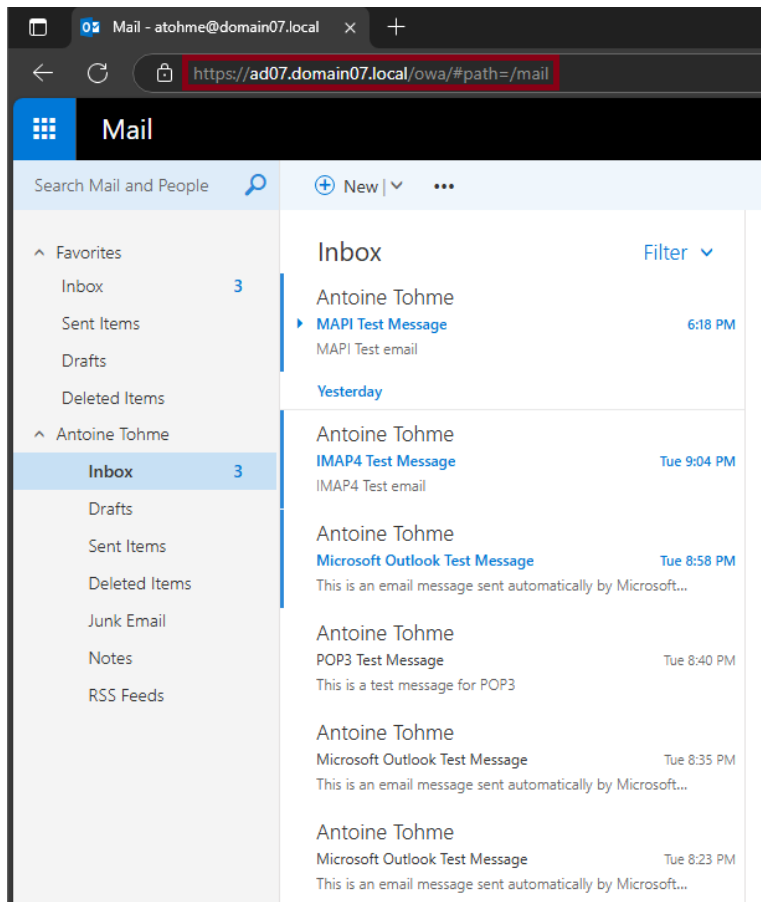
Explanation:

This step ensures that Outlook is fully synchronized with the Exchange Server **using** MAPI over HTTP.

By comparing the contents of Outlook Classic with the Outlook Web App (OWA), we confirm that server-based storage is functioning correctly.

Execution Steps:

1. Open Microsoft Edge or Google Chrome on the Windows 11 client VM.
2. In the address bar, enter:
`https://ad07.domain07.local/owa`
3. When prompted, log in using the test user credentials:
Username: domain07\atohme
Password: [Your Password]
4. After logging in, verify that:
 - The Inbox contains the test message you sent from Outlook Classic.
 - The Sent Items folder shows the message as sent.
 - Any other folders created in Outlook are also visible here.



This confirms that the MAPI/HTTP configuration is working properly and that mailbox data is stored and synchronized on the Exchange Server.