```
############################################################
Lab 04 – Managing Exchange Database
Machine: ad07.domain07.local
############################################################


############################################################
Exercise 1 – Managing an Exchange 2019 Database using EAC
Machine: ad07.domain07.local
############################################################


Objective:
Manage the Exchange 2019 database using the Exchange Admin Center (EAC),
including:
- Viewing status and backup information
- Modifying maintenance and storage settings
- Changing client settings
- Mounting and dismounting the database


############################################################
Part 1 – Database Overview and Status
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Step 1 – Open EAC and go to Servers > Databases
I logged into the EAC by opening a browser and navigating to:
https://ad07.domain07.local/ecp/

Then I selected "Servers" from the left menu and clicked on the "Databases"
tab.
```
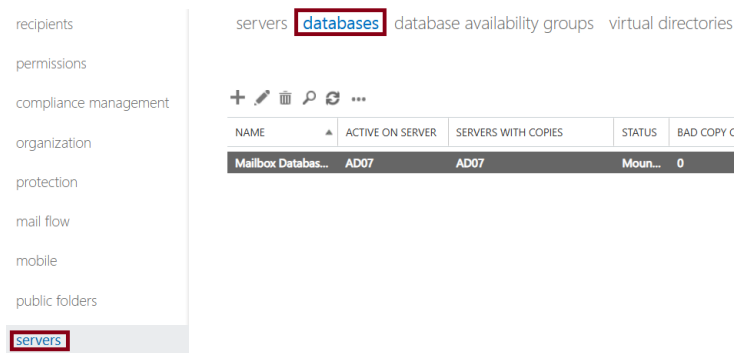


```
Step 2 – Select the database and review its properties
I clicked on the existing database listed (e.g., `Mailbox Database
1447570408\AD07`) to view its settings.
```

Mailbox Database 1447570408

general
maintenance
limits
client settings

Database path:

C:\Program Files\Microsoft\Exchange Server\V15\Mailbox\M

Last full backup:

Last incremental backup:

Status:

Mounted

Mounted on server:

ad07.domain07.local

Master:

AD07

Master type:

Server

Modified:

6/17/2025 9:00 PM

Servers hosting a copy of this database:

AD07

Answers:
- Status of the database: Mounted
- Server name hosting the database: `ad07`
- Database path: `C:\Program Files\Microsoft\Exchange Server\V15\Mailbox\Mailbox Database 1635488946`
- Last full backup: Not available (None)
- Last incremental backup: Not available (None)

Step 3 – Try deleting the database from EAC
I attempted to delete the selected database.

error

This mailbox database contains one or more mailboxes, mailbox plans, archive mailboxes, public folder mailboxes or arbitration mailboxes, Audit mailboxes. To get a list of all mailboxes in this database, run the command Get-Mailbox -Database <Database ID>. To get a list of all mailbox plans in this database, run the command Get-MailboxPlan. To get a list of archive mailboxes in this database, run the command Get-Mailbox -Database <Database ID> -Archive. To get a list of all public folder mailboxes in this database, run the command Get-Mailbox -Database <Database ID> -PublicFolder. To get a list of all arbitration mailboxes in this database, run the command Get-Mailbox -Database <Database ID> -Arbitration. To get a list of all Audit mailboxes in this database, run the command Get-Mailbox -Database <Database ID> -AuditLog. To disable a non-arbitration mailbox so that you can delete the mailbox database, run the command Disable-Mailbox <Mailbox ID>. To disable an archive mailbox so you can delete the mailbox database, run the command Disable-Mailbox <Mailbox ID> -Archive. To disable a public folder mailbox so that you can delete the mailbox database, run the command Disable-Mailbox <Mailbox ID> -PublicFolder. To disable a Audit mailbox so that you can delete the mailbox database, run the command Get-Mailbox -AuditLog | Disable-Mailbox.

OK

Result:
- Not able to delete it.
Reason: The database could not be removed because it still contains mailboxes or system mailboxes (e.g., Arbitration mailboxes).

```
############################################################
Part 2 - Maintenance Settings
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Step 4 - Configure maintenance and logging settings
I opened the properties of the same database and went to the **Maintenance**
section.

Changes made:
- Set the custom maintenance schedule:
    - Days: Saturday and Sunday
    - Time: 12:00 AM to 2:00 AM
```



```
- Enabled "This database can be overwritten by a restore"
- Enabled background database maintenance
- Enabled circular logging
- Checked "Don't mount this database at startup"
```



```
Then clicked **Save**.
```

```
############################################################
Part 3 — Storage Limits
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Step 5 — Set database limits
In the **Limits** section of the database properties, I made the following
updates:

Mailbox Database 1447570408

general
maintenance
▸ limits
client settings

*Issue a warning at (GB):
`1.5`

*Prohibit send at (GB):
`2.2`

*Prohibit send and receive at (GB):
`2.5`

*Keep deleted items for (days):
`10`

*Keep deleted mailboxes for (days):
`20`

☑ Don't permanently delete items until the database
is backed up

- Issue warning at **(**GB**):** `1.5`
- Prohibit send at **(**GB**):** `2.2`
- Prohibit send and receive at **(**GB**):** `2.5`
- Keep deleted items **for (**days**):** `10`
- Keep deleted mailboxes **for (**days**):** `20`
- Enabled "Don't permanently delete items until the database is backed up"

Clicked **Save** to apply the changes.

```
############################################################
Part 4 — Client Settings
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Step 6 — Change OAB (Offline Address Book)
Switched to the **Client Settings** tab **in** the database properties.

I changed the assigned Offline Address Book to a different option.

Select Offline Address Book - [InPrivate] - Microsoft...   —   □   ✕

🔒 https://ad07.domain07.local/ecp/Pickers/OfflineAddres...   Aᴺ

NAME ▲

Default Offline Address Book

Answer:
- Available OAB options included: `Default Offline Address Book **(**Ex2013**)**` and
any custom OABs created manually.

Clicked **Save**.

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Part 5 – Mounting and Dismounting
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Step 7 – Dismount the database
Back on the Databases list page, I selected the database and clicked the **…
(More options)** button **in** the toolbar.
Then I clicked **Dismount** to take the database offline.

Step 8 – Refresh the database status
I clicked **Refresh** **in** the EAC to confirm that the database status changed
to `Dismounted`.

Step 9 – Mount the database again
I selected the database and clicked **… (More options) > Mount**.

Confirmed that the status is back to `Mounted`

Finally, I closed the EAC console.

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#########################################################
Exercise 2 – Managing an Exchange 2019 Database using EMS
Machine: ad07.domain07.local
#########################################################
```

Objective:
Perform mailbox database administration tasks **using** Exchange Management Shell
(EMS**).**

```
        Welcome to the Exchange Management Shell!

Full list of cmdlets: Get-Command
Only Exchange cmdlets: Get-ExCommand
Cmdlets that match a specific string: Help *<string>*
Get general help: Help
Get help for a cmdlet: Help <cmdlet name> or <cmdlet name> -?
Exchange team blog: Get-ExBlog
Show full output for a command: <command> | Format-List

Show quick reference guide: QuickRef
VERBOSE: Connecting to ad07.domain07.local.
VERBOSE: Connected to ad07.domain07.local.
[PS] C:\Users\Administrator>
```

```
#########################################################
Part 1 – Database Information and Status
#########################################################
```

Step 1 – Display all mailbox databases on server ad07
Get-MailboxDatabase **-**Server ad07

```
[PS] C:\Users\Administrator>Get-MailboxDatabase -Server ad07

Name                          Server    Recovery    ReplicationType
----                          ------    --------    ---------------
Mailbox Database 1447570408   AD07      False       None
```

Step 2 – Display all properties of the main mailbox database
Get-MailboxDatabase **-**Identity "Mailbox Database 1447570408" **|** Format-List

```
[PS] C:\Users\Administrator>Get-MailboxDatabase -Identity "Mailbox Database 1447570408" | Format-Li
st

RunspaceId                                             : ffbd8852-489f-40a7-a7fc-d4028bff1e99
JournalRecipient                                       :
MailboxRetention                                       : 20.00:00:00
OfflineAddressBook                                     : \Default Offline Address Book
OriginalDatabase                                       :
PublicFolderDatabase                                   :
ProhibitSendReceiveQuota                               : 2.5 GB (2,684,354,560 bytes)
ProhibitSendQuota                                      : 2.2 GB (2,362,232,832 bytes)
RecoverableItemsQuota                                  : 30 GB (32,212,254,720 bytes)
RecoverableItemsWarningQuota                           : 20 GB (21,474,836,480 bytes)
CalendarLoggingQuota                                   : 6 GB (6,442,450,944 bytes)
IndexEnabled                                           : True
IsExcludedFromProvisioning                             : False
IsExcludedFromProvisioningReason                       :
IsExcludedFromProvisioningBy                           :
IsExcludedFromProvisioningBySchemaVersionMonitoring    : False
IsExcludedFromInitialProvisioning                      : False
IsSuspendedFromProvisioning                            : False
IsExcludedFromProvisioningBySpaceMonitoring            : False
IsExcludedFromProvisioningForDraining                  : False
IsExcludedFromProvisioningByOperator                   : False
IsExcludedFromProvisioningDueToLogicalCorruption       : False
MailboxLoadBalanceMaximumEdbFileSize                   :
MailboxLoadBalanceRelativeLoadCapacity                 :
MailboxLoadBalanceOverloadedThreshold                  :
MailboxLoadBalanceUnderloadedThreshold                 :
MailboxLoadBalanceEnabled                              :
DumpsterStatistics                                     :
DumpsterServersNotAvailable                            :
ReplicationType                                        : None
AdminDisplayVersion                                    : Version 15.2 (Build 1748.10)
AdministrativeGroup                                    : Exchange Administrative Group
                                                         (FYDIBOHF23SPDLT)
AllowFileRestore                                       : False
BackgroundDatabaseMaintenance                          : True
```

Step 3 – Display only the name and GUID of this database
Get-MailboxDatabase -Identity "Mailbox Database 1447570408" | Format-List
Name,Guid

```
[PS] C:\Users\Administrator>Get-MailboxDatabase -Identity "Mailbox Database 1447570408" | Format-Li
st Name,Guid


Name : Mailbox Database 1447570408
Guid : ea8c784f-c108-4403-8a3f-20bd4d2a95c2
```

```
####################################################
Part 2 – Creating and Managing Databases
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Step 4 – Create a new mailbox database named DB02 on ad07
New-MailboxDatabase -Name "DB02" -Server ad07

```
[PS] C:\Users\Administrator>New-MailboxDatabase -Name "DB02" -Server ad07

Name                           Server          Recovery        ReplicationType
----                           ------          --------        ---------------
DB02                           AD07            False           None
WARNING: Please restart the Microsoft Exchange Information Store service on server AD07 after
adding new mailbox databases.
```

Step 5 – Restart the Exchange Information Store service
Restart-Service MSExchangeIS

```
[PS] C:\Users\Administrator>Restart-Service MSExchangeIS
WARNING: Waiting for service 'Microsoft Exchange Information Store (MSExchangeIS)' to start...
[PS] C:\Users\Administrator>
```

Step 6 – Verify if databases are mounted
Get-MailboxDatabase -Status | Select Name,Mounted

```
[PS] C:\Users\Administrator>Get-MailboxDatabase -Status | Select Name,Mounted

Name                           Mounted
----                           -------
Mailbox Database 1447570408    False
DB02                           False
```

```
####################################################
Part 3 – Mounting and Dismounting
####################################################
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Step 7 – Mount DB02
Mount-Database -Identity "DB02"

```
[PS] C:\Users\Administrator>Mount-Database -Identity "DB02"
[PS] C:\Users\Administrator>
```

Step 8 – Verify mount status
Get-MailboxDatabase -Status | Where-Object {$_.Name -eq "DB02"} | Select
Name,Mounted

```
[PS] C:\Users\Administrator>Get-MailboxDatabase -Status | Where-Object {$_.Name -eq "DB02"} | Selec
t Name,Mounted

Name Mounted
---- -------
DB02    True
```

Step 9 – Dismount DB02
Dismount-Database -Identity "DB02"

```
[PS] C:\Users\Administrator>Dismount-Database -Identity "DB02"

Confirm
Are you sure you want to perform this action?
Dismounting database "DB02". This may result in reduced availability for mailboxes in the
database.
[Y] Yes  [A] Yes to All  [N] No  [L] No to All  [?] Help (default is "Y"): A
[PS] C:\Users\Administrator>_
```

Step 10 – Verify dismount status
Get-MailboxDatabase -Status | Where-Object {$_.Name -eq "DB02"} | Select
Name,Mounted

```
[PS] C:\Users\Administrator>Get-MailboxDatabase -Status | Where-Object {$_.Name -eq "DB02"} | Selec
t Name,Mounted

Name Mounted
---- -------
DB02   False
```

###
Part 4 – File Path Management
###

Step 11 – Create folder for DB02 database
New-Item -Path "C:\Databases\DB02" -ItemType Directory

```
[PS] C:\Users\Administrator>New-Item -Path "C:\Databases\DB02" -ItemType Directory


    Directory: C:\Databases


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
d-----         6/19/2025   6:15 PM                DB02
```

Step 12 – Move the database file and rename it to db002.edb
Move-DatabasePath -Identity "DB02" -EdbFilePath "C:\Databases\DB02\db002.edb"
-LogFolderPath "C:\Databases\DB02"

```
[PS] C:\Users\Administrator>Move-DatabasePath -Identity "DB02" -EdbFilePath "C:\Databases\DB02\db00
2.edb" -LogFolderPath "C:\Databases\DB02"

Confirm
Are you sure you want to perform this action?
Moving database path "DB02".
[Y] Yes  [A] Yes to All  [N] No  [L] No to All  [?] Help (default is "Y"): A
[PS] C:\Users\Administrator>_
```

Step 13 – Transaction logs are moved with the above command as specified

```
[PS] C:\Users\Administrator>Move-DatabasePath -Identity "DB02" -EdbFilePath "C:\Databases\DB02\db00
2.edb" -LogFolderPath "C:\Databases\DB02"

Confirm
Are you sure you want to perform this action?
Moving database path "DB02".
[Y] Yes  [A] Yes to All  [N] No  [L] No to All  [?] Help (default is "Y"): A
[PS] C:\Users\Administrator>_
```

Step 14 - Confirm updated file paths
Get-MailboxDatabase -Identity "DB02" | Format-List
Name,EdbFilePath,LogFolderPath

```
[PS] C:\Users\Administrator>Get-MailboxDatabase -Identity "DB02" | Format-List Name,EdbFilePath,Log
FolderPath


Name          : DB02
EdbFilePath   : C:\Databases\DB02\db002.edb
LogFolderPath : C:\Databases\DB02
```

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Part 5 - Quota Configuration
```
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Step 15 - Mount DB02 again
Mount-Database -Identity "DB02"

```
[PS] C:\Users\Administrator>Mount-Database -Identity "DB02"
[PS] C:\Users\Administrator>_
```

Step 16 - Set warning quota to 800 MB
Set-MailboxDatabase -Identity "DB02" -IssueWarningQuota 800MB

```
[PS] C:\Users\Administrator>Set-MailboxDatabase -Identity "DB02" -IssueWarningQuota 800MB
[PS] C:\Users\Administrator>_
```

Step 17 - Set prohibit send quota to 2 GB
Set-MailboxDatabase -Identity "DB02" -ProhibitSendQuota 2GB

```
[PS] C:\Users\Administrator>Set-MailboxDatabase -Identity "DB02" -ProhibitSendQuota 2GB
[PS] C:\Users\Administrator>
```

Step 18 - Remove prohibit send/receive quota
Set-MailboxDatabase -Identity "DB02" -ProhibitSendReceiveQuota unlimited

```
[PS] C:\Users\Administrator>Set-MailboxDatabase -Identity "DB02" -ProhibitSendReceiveQuota unlimite
d
[PS] C:\Users\Administrator>
```

Step 19 - Verify new quota settings
Get-MailboxDatabase -Identity "DB02" | Format-List
Name,IssueWarningQuota,ProhibitSendQuota,ProhibitSendReceiveQuota

```
[PS] C:\Users\Administrator>Get-MailboxDatabase -Identity "DB02" | Format-List Name,IssueWarningQuo
ta,ProhibitSendQuota,ProhibitSendReceiveQuota


Name                     : DB02
IssueWarningQuota        : 800 MB (838,860,800 bytes)
ProhibitSendQuota        : 2 GB (2,147,483,648 bytes)
ProhibitSendReceiveQuota : Unlimited
```

Step 20 - Delete the database DB02
Remove-MailboxDatabase -Identity "DB02"

```
[PS] C:\Users\Administrator>Remove-MailboxDatabase -Identity "DB02"

Confirm
Are you sure you want to perform this action?
Removing mailbox database "DB02".
[Y] Yes  [A] Yes to All  [N] No  [L] No to All  [?] Help (default is "Y"): A
WARNING: The specified database has been removed. You must remove the database file located in
C:\Databases\DB02\db002.edb from your computer manually if it exists. Specified database: DB02
[PS] C:\Users\Administrator>
```