

Ark Patel

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LAB 05

Islam Gomaa

SERVER 93073

172.16.93.73

2021/02/14

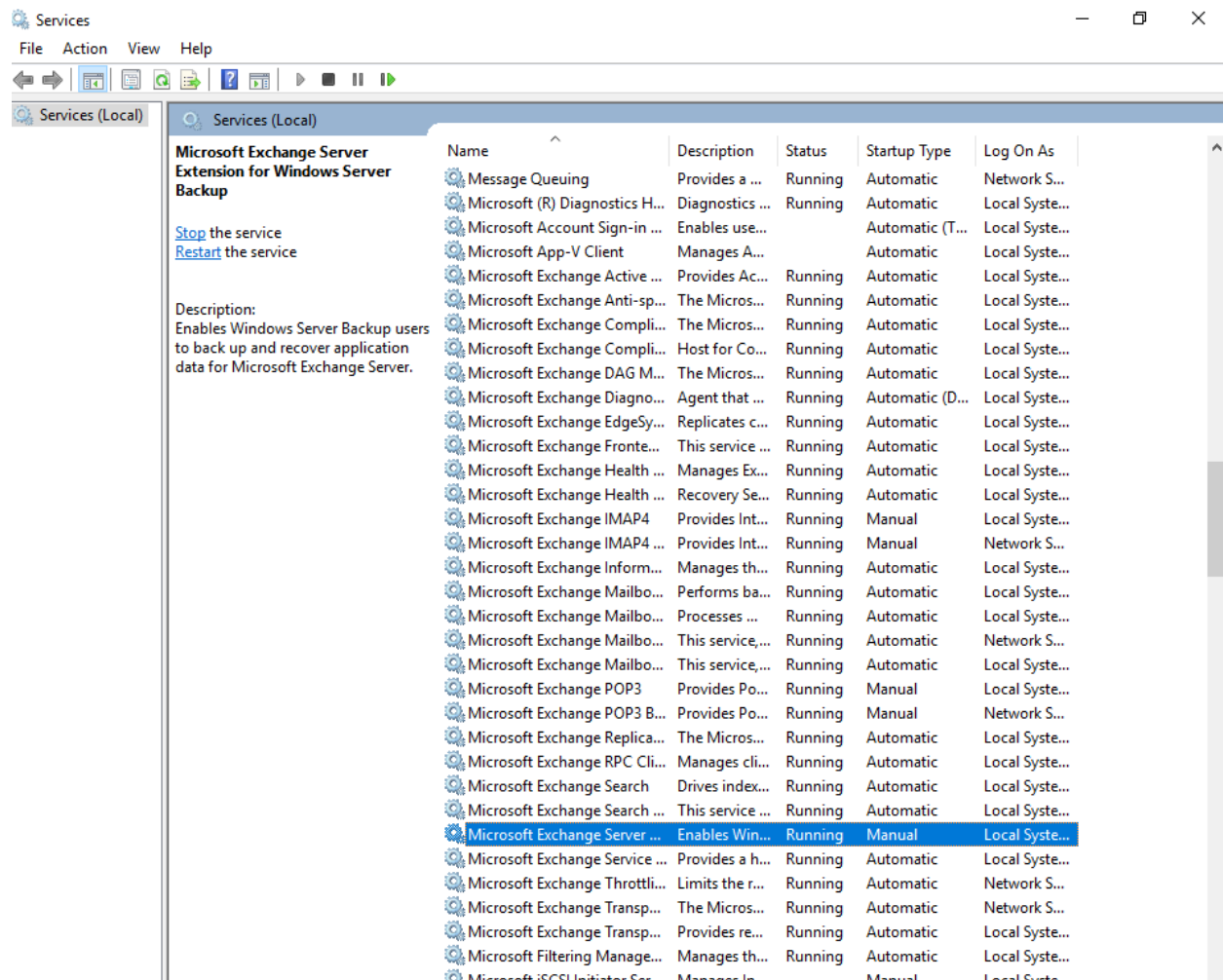
%1

```
C:\Users\Administrator>nslookup server93073.dm93073.cst8242.com
Server:  Server93073.dm93073.cst8242.com
Address:  172.16.93.73

DNS request timed out.
  timeout was 2 seconds.
DNS request timed out.
  timeout was 2 seconds.
DNS request timed out.
  timeout was 2 seconds.
DNS request timed out.
  timeout was 2 seconds.
*** Request to Server93073.dm93073.cst8242.com timed-out

C:\Users\Administrator>
```

%2



%3

Services

File Action View Help

Services (Local)

Microsoft Exchange Server Extension for Windows Server Backup

[Stop](#) the service  
[Restart](#) the service

Description:  
Enables Windows Server Backup users to back up and recover application data for Microsoft Exchange Server.

Name	Description	Status	Startup Type	Log On As
Message Queuing	Provides a ...	Running	Automatic	Network S...
Microsoft (R) Diagnostics H...	Diagnostics ...	Running	Automatic	Local Syste...
Microsoft Account Sign-in ...	Enables use...		Automatic (T...	Local Syste...
Microsoft App-V Client	Manages A...		Automatic	Local Syste...
Microsoft Exchange Active ...	Provides Ac...	Running	Automatic	Local Syste...
Microsoft Exchange Anti-sp...	The Micros...	Running	Automatic	Local Syste...
Microsoft Exchange Compli...	The Micros...	Running	Automatic	Local Syste...
Microsoft Exchange Compli...	Host for Co...	Running	Automatic	Local Syste...
Microsoft Exchange DAG M...	The Micros...	Running	Automatic	Local Syste...
Microsoft Exchange Diagno...	Agent that ...	Running	Automatic	Local Syste...
Microsoft Exchange EdgeSy...	Replicates c...	Running	Automatic	Local Syste...
Microsoft Exchange Fronte...	This service ...	Running	Automatic	Local Syste...
Microsoft Exchange Health ...	Manages Ex...	Running	Automatic	Local Syste...
Microsoft Exchange Health ...	Recovery Se...	Running	Automatic	Local Syste...
Microsoft Exchange IMAP4	Provides Int...	Running	Automatic	Local Syste...
Microsoft Exchange IMAP4 ...	Provides Int...	Running	Automatic	Network S...
Microsoft Exchange Inform...	Manages th...	Running	Automatic	Local Syste...
Microsoft Exchange Mailbo...	Performs ba...	Running	Automatic	Local Syste...
Microsoft Exchange Mailbo...	Processes ...	Running	Automatic	Local Syste...
Microsoft Exchange Mailbo...	This service...	Running	Automatic	Network S...
Microsoft Exchange Mailbo...	This service...	Running	Automatic	Local Syste...
Microsoft Exchange POP3	Provides Po...	Running	Automatic	Local Syste...
Microsoft Exchange POP3 B...	Provides Po...	Running	Automatic	Network S...
Microsoft Exchange Replica...	The Micros...	Running	Automatic	Local Syste...
Microsoft Exchange RPC Cli...	Manages cli...	Running	Automatic	Local Syste...
Microsoft Exchange Search	Drives index...	Running	Automatic	Local Syste...
Microsoft Exchange Search ...	This service ...	Running	Automatic	Local Syste...
Microsoft Exchange Server ...	Enables Win...	Running	Automatic	Local Syste...
Microsoft Exchange Service ...	Provides a h...	Running	Automatic	Local Syste...
Microsoft Exchange Throttli...	Limits the r...	Running	Automatic	Network S...
Microsoft Exchange Transp...	The Micros...	Running	Automatic	Network S...
Microsoft Exchange Transp...	Provides re...	Running	Automatic	Local Syste...
Microsoft Filtering Manage...	Manages th...	Running	Automatic	Local Syste...

%4

```
[PS] C:\Windows\system32>Get-ExchangeServerAccessLicense | ft -AutoSize

ProductName      LicenseName      UnitLabel TabulationMethod
-----
Exchange Server 2016 Exchange Server 2016 Standard Edition Server Net
Exchange Server 2016 Exchange Server 2016 Enterprise Edition Server Net
Exchange Server 2016 Exchange Server 2016 Standard CAL CAL Net
Exchange Server 2016 Exchange Server 2016 Enterprise CAL CAL Net

[PS] C:\Windows\system32>Get-ExchangeServerAccessLicenseUser -LicenseName "Exchange Server 2016 Standard CAL"

LicenseName      Name
-----
Exchange Server 2016 Standard CAL Administrator@dm93073.cst8242.com
```

%5

```
[PS] C:\Windows\system32>New-RemoteDomain -Name xyz.com -DomainName xyz.com

Name                               DomainName                         AllowedOoFType
----                               -
xyz.com                           xyz.com                           External

[PS] C:\Windows\system32>Get-RemoteDomain

Name                               DomainName                         AllowedOoFType
----                               -
Default                           *                                 External
xyz.com                           xyz.com                           External
```

%6

accepted domains - Microsoft Ex x +

Not secure | mail.dm93073.cst8242.com/ecp/

Enterprise Office 365 Administrator ?

### Exchange admin center

- recipients
- permissions
- compliance management
- organization
- protection
- mail flow**
- mobile
- public folders
- connectors

rules delivery reports **accepted domains** email address policies receive connectors send connectors

+ ✎ 🗑 🔍 ↺

NAME	ACCEPTED DOMAIN	DOMAIN TY...	
dm93073.cst8242.c...	dm93073.cst8242.com	Authoritative	dm93073.cst8242.com

Fully qualified domain name:  
dm93073.cst8242.com

Domain type:  
Authoritative

%7

send connectors - Microsoft Exchange

Not secure | mail.dm93073.cst8242.com/ecp/

Enterprise Office 365 Administrator

## Exchange admin center

- recipients
- permissions
- compliance management
- organization
- protection
- mail flow**
- mobile
- public folders
- servers

rules delivery reports accepted domains email address policies receive connectors **send connectors**

+ ✎ 🗑️ ↺ ...

NAME	STATUS	
SMTP	Enabled	<div>SMTP</div> <div>Last modified: 2021-02-14 9:06:18 PM</div> <div>Connector status - Enabled</div> <div><a href="#">Disable</a></div> <div>Logging - Off</div> <div><a href="#">On</a></div> <div>Maximum send message size (MB): 35</div>

%8

Exchange Server - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/Servers/EditServer.aspx?pwmcid=1&ReturnObjectType=1&id=...

## SERVER93073

- general
- databases and database availability groups
- POP3**
- IMAP4
- unified messaging
- DNS lookups
- transport limits
- transport logs
- Outlook Anywhere

TLS or unencrypted connections:

+ ✎ -

LOCAL IP ADDRESSES	PORT
(All available IPv6)	110
(All available IPv4)	110

Secure Sockets Layer (SSL) connections:

+ ✎ -

LOCAL IP ADDRESSES	PORT
(All available IPv6)	995
(All available IPv4)	995

Save Cancel

%9

Exchange Receive Connector - Google Chrome  
⚠ Not secure | mail.dm93073.cst8242.com/ecp/ConnectorMgmt/EditReceiveConnector.aspx

## Default Frontend SERVER93073

general

security

▶ **scoping**

\*Remote network settings:

Receive mail from servers that have these remote IP addresses.

+ ✎ -

IP ADDRESSES
0.0.0.0-255.255.255.255

\*Network adapter bindings:

Specify the IP addresses and port of the network adapter to bind to the receive connector.

+ ✎ -

IP ADDRESSES	PORT
(All available IPv4)	25

%10

mailboxes - Microsoft Exchange x +

⏪ ⏩ ↺ ⚠ Not secure | mail.dm93073.cst8242.com/ecp/ ☆ 👤 ⋮

Enterprise Office 365 Administrator ?

### Exchange admin center

recipients permissions compliance management organization protection mail flow mobile public folders servers hybrid

mailboxes groups resources contacts shared migration

+ ✎ 🗑 🔍 ↺ ⋮

DISPLAY NAME	MAILBOX TYPE	EMAIL ADDRESS
Administrator	User	Administrator@dm93073.cst8242.com
pate0771	User	pate0771@dm93073.cst8242.com

**pate0771**

User mailbox  
pate0771@dm93073.cst8242.com

Title:

Office:

Work phone:

Phone and Voice Features

Mobile Devices

[Disable Exchange ActiveSync](#)

[Disable OWA for Devices](#)

[View details](#)

In-Place Archive

Archiving: Disabled

[Enable](#)

%11

Edit User Mailbox - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/UsersGroups/EditMailbox.aspx?pwmcid=4&ReturnObjectT...

pate0771

- general
- mailbox usage
- contact information
- organization
- email address
- mailbox features
- member of
- MailTip
- mailbox delegation

Select the mailbox settings, phone and voice features, and email connectivity options for this mailbox. [Learn more](#)

Sharing policy:  
Default Sharing Policy ▼

Role assignment policy:  
Default Role Assignment Policy ▼

Retention policy:  
[No Policy] ▼

Address book policy:  
[No Policy] ▼

Phone and Voice Features

- Mobile Devices
- [Disable Exchange ActiveSync](#)
- [Disable OWA for Devices](#)
- [View details](#)

Save Cancel

#12: To configure storage quotas for a user; you have to go properties, mailbox usage, then options and select “Customize the quota settings for this mailbox” from there you can restrict based on size.

%13

The screenshot shows the Exchange admin center (EAC) interface in a web browser. The address bar indicates the URL is `mail.dm93073.cst8242.com/ecp/`. The page title is "Exchange admin center". On the left, a navigation pane lists various management areas, with "mail flow" selected. The main content area is titled "receive connectors" and shows a list of connectors for the selected server, "Server93073.dm93073.cst8242.com".

NAME	STATUS	ROLE
Client Frontend SERVER93073	Enabled	FrontendTransport
Client Proxy SERVER93073	Enabled	HubTransport
Default Frontend SERVER93073	Enabled	FrontendTransport
Default SERVER93073	Enabled	HubTransport
Outbound Proxy Frontend ...	Enabled	FrontendTransport

On the right side of the connector list, details for the "Client Frontend SERVER93073" connector are displayed:

- Last modified: 2021-02-14 7:38:18 PM
- Version: Version 15.2 (Build 221.12)
- Connector status - Enabled
- [Disable](#)
- Logging - Off
- [On](#)
- Maximum receive message size (MB): 36

%14

The screenshot shows a Microsoft Outlook inbox. The left sidebar displays the folder hierarchy, including "Inbox", "Drafts", "Sent", "Trash", and "Local Folders". The main pane shows a list of email messages. The first message is from "Administrator" with the subject "Com check". Below it are three messages with the subject "Re: Com check 2", all from "Administrator".

Subject	Correspondents	Date
Com check	Administrator	4:52 p.m.
Re: Com check 2	Administrator	7:05 p.m.
com check 2	Administrator	7:08 p.m.
Re: com check 2	Administrator	7:08 p.m.

At the bottom of the message list, the "From" field is visible: "From Administrator <Administrator@dm93073.cst8242.com>".

#15: Rather than steering messages straightforwardly to the web you can course your mail through an application that outputs messages.



%16

```
[PS] C:\Windows\system32>Set-SendConnector -identity "SMTP" -Port:2525
[PS] C:\Windows\system32>Set-SendConnector -identity "SMTP" -Port:25
[PS] C:\Windows\system32>_
```

%17

Database - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/DBMgmt/NewDatabase.as...

### new database

\*Mailbox database

\*Server

Database file path:

Log folder path:

☒ Mount this database

This field displays the default path to the log folder. You can change the location by entering a new path.

%18

new user mailbox

NEW USER

First name:

Initials:

Last name:

\*Display name:

\*Name:

Organizational unit:

\*User logon name:  
 @

\*New password:

\*Confirm password:

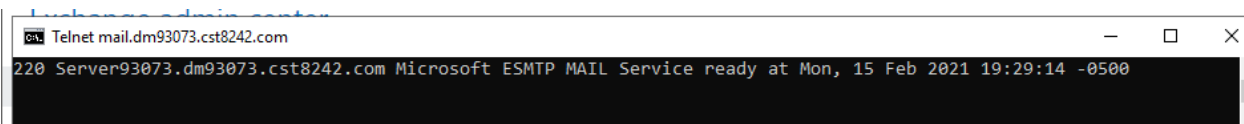
☐ Require password change on next logon

Mailbox database:

Archive  
Use the archive to store old email.  
☐ Create an on-premises archive mailbox for this user

Address book policy:

%19



#20: New-MailboxDatabase -Server Server93129 -Name "DB1" -EdbFilePath  
C:\DDrive\Databases\DBI\DBI.edb -LogFolderPath C:\EDrive\Logs\DBI

%21

Database - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/DBMgmt/NewDatabase.as...

new database

\*Mailbox database

DBI

\*Server

SERVER93073 X Browse...

Database file path:

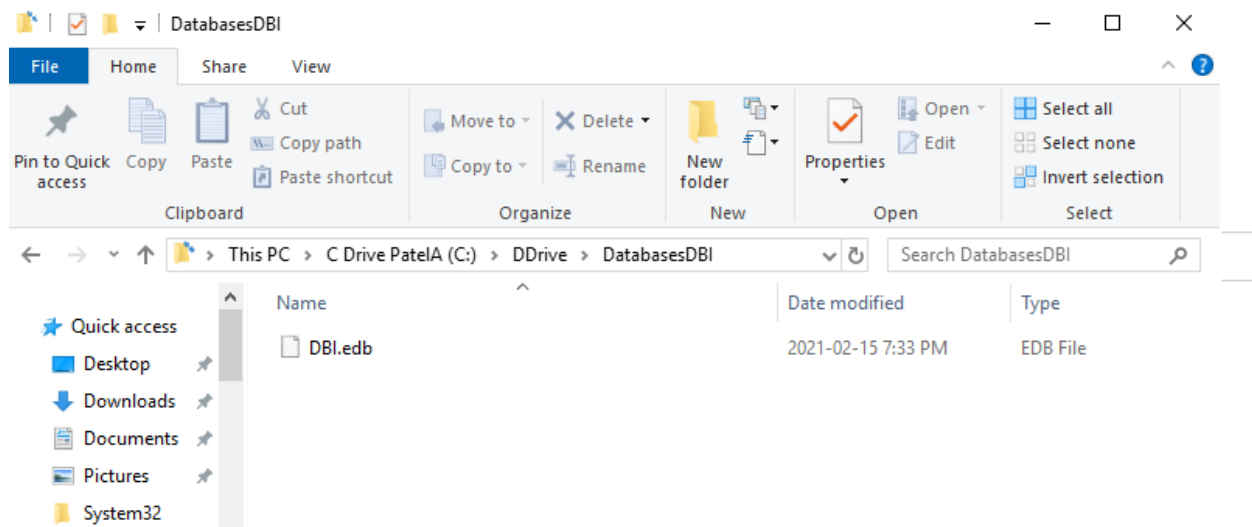
C:\DDrive\DatabasesDBI\DBI.edb

Log folder path:

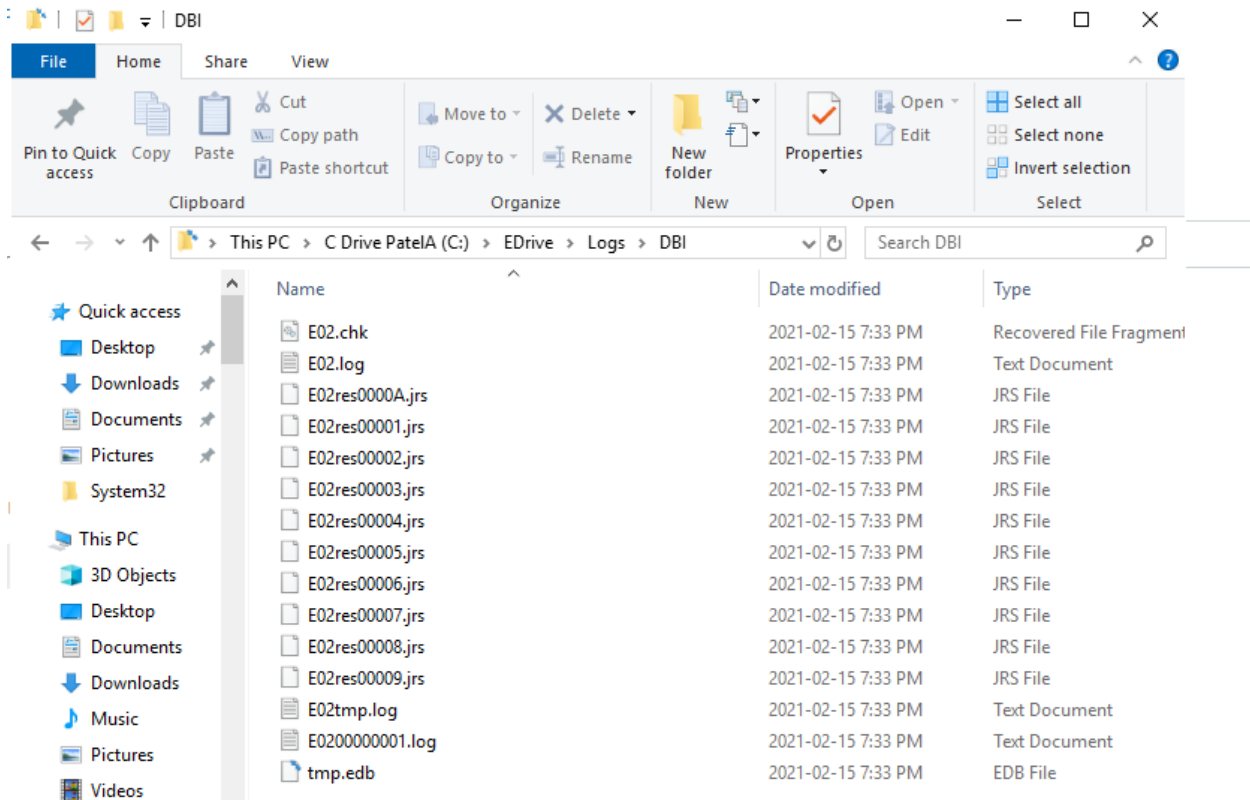
C:\EDrive\Logs\DBI

☒ Mount this database

%22



%23

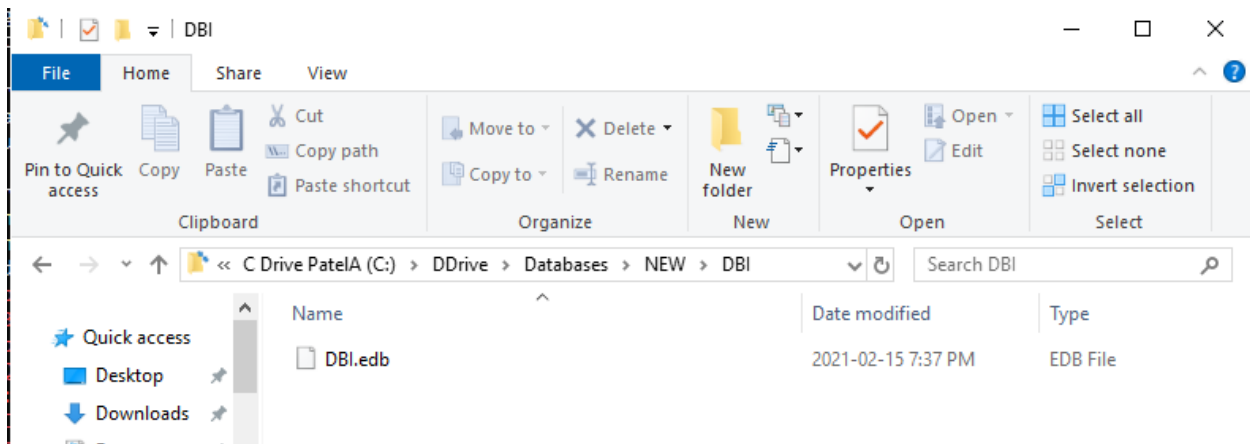


#24: Move-DatabasePath DBI -EdbFilePath

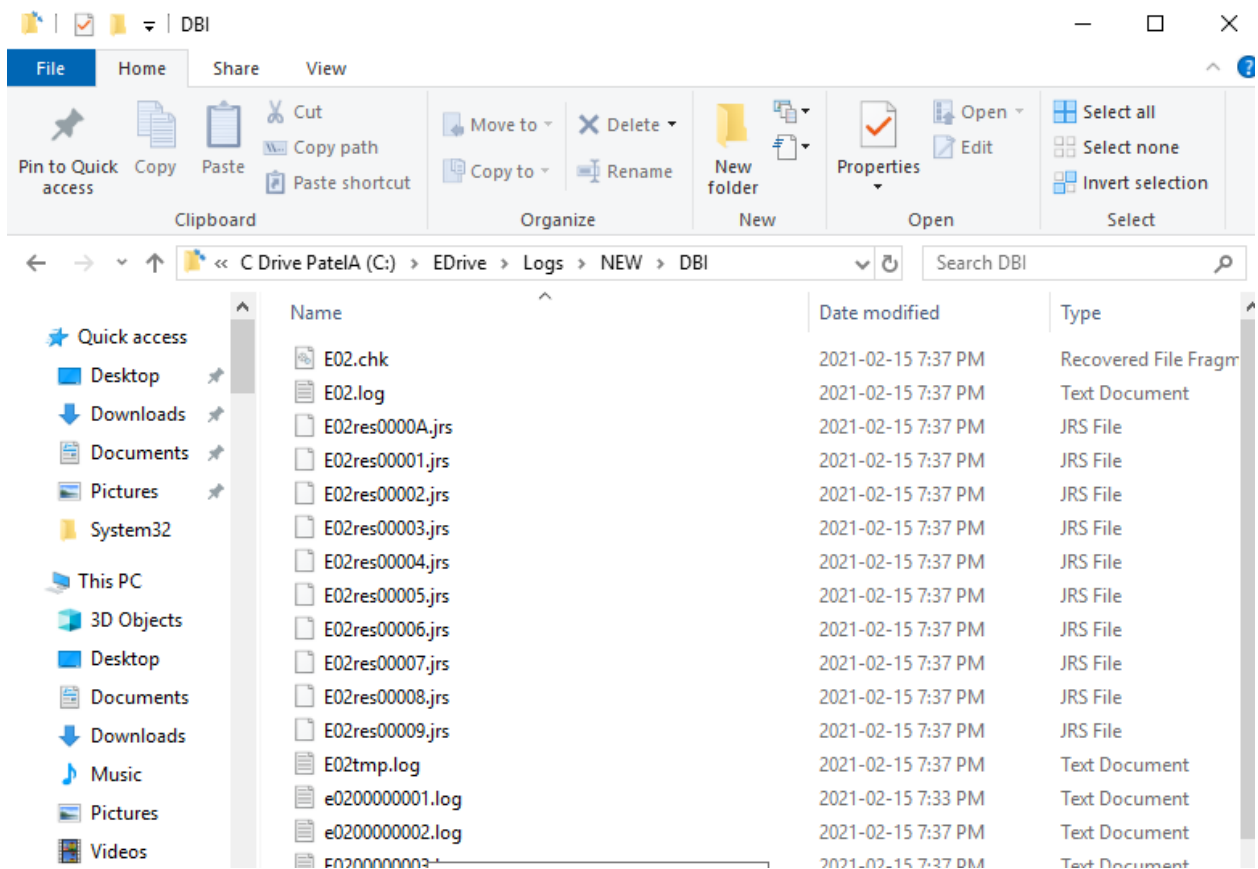
C:\DDrive\Databases\NEW\DBI\DBI.edb -LogFolderPath

C:\EDrive\Logs\NEW\DBI

%25



%26



#27: Indeed, yet it is unfilled.

%28

```
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 Server93057.dm93057.cst8242.com.
VERBOSE: Connected to Server93057.dm93057.cst8242.com.
[PS] C:\Windows\system32>New-Mailbox -Name "Deb Burns" -UserPrincipalName BurnsD@dm93057.cst8242.com -Password (ConvertTo-SecureString -string "P@ssw0rd" -AsPlainText -Force) -FirstName Deb -LastName Burns -OrganizationalUnit ExchangeUsers

Name                Alias                ServerName            ProhibitSendQuota
----                -
Deb Burns            BurnsD               server93057           Unlimited

[PS] C:\Windows\system32>
```

%29

```
[PS] C:\Windows\system32>New-Mailbox -Name "Judy Burns" -UserPrincipalName BurnsJ@dm93073.cst8242.com -Password (ConvertTo-SecureString -string "P@ssw0rd" -AsPlainText -Force) -Firstname Judy -LastName Burns -OrganizationalUnit ExchUsers -Database DBI
```

Name	Alias	ServerName	ProhibitSendQuota
Judy Burns	BurnsJ	server93073	Unlimited

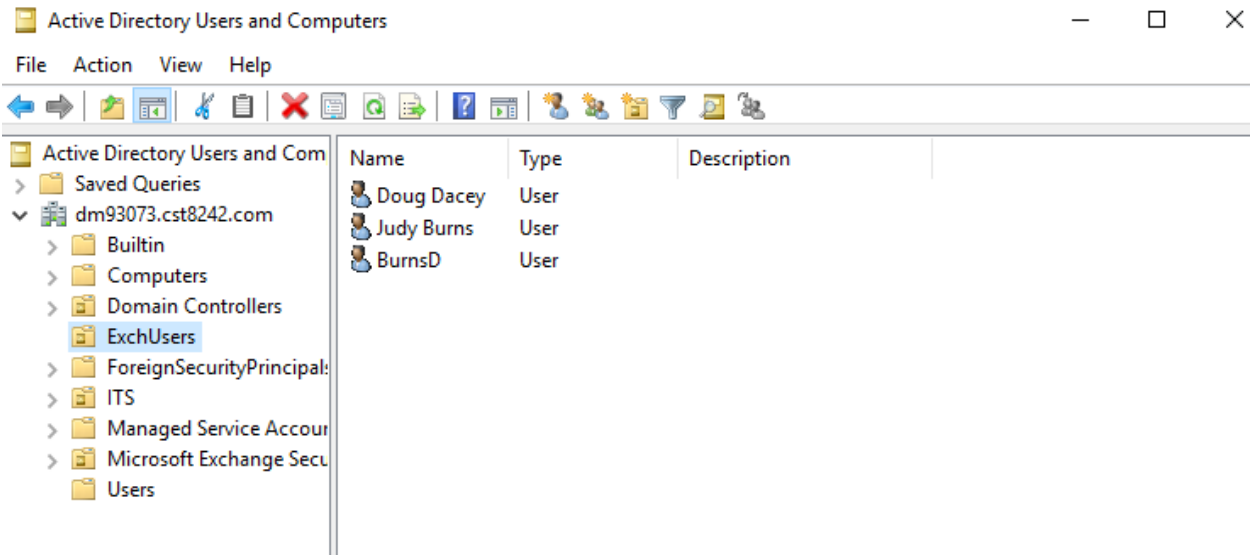
```
[PS] C:\Windows\system32>
```

%30

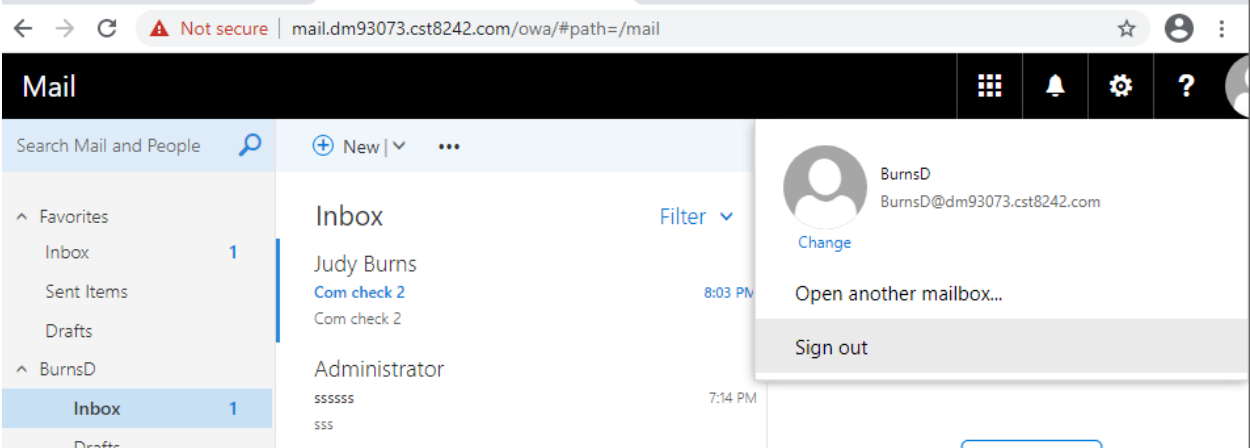
```
[PS] C:\Windows\system32>New-MoveRequest -Identity "BurnsD@dm93073.cst8242.com" -TargetDatabase "DBI"
```

DisplayName	StatusDetail	TotalMailboxSize	TotalArchiveSize	PercentComplete
BurnsD	WaitingForJobPickup	493.7 KB (505,500 bytes)		0

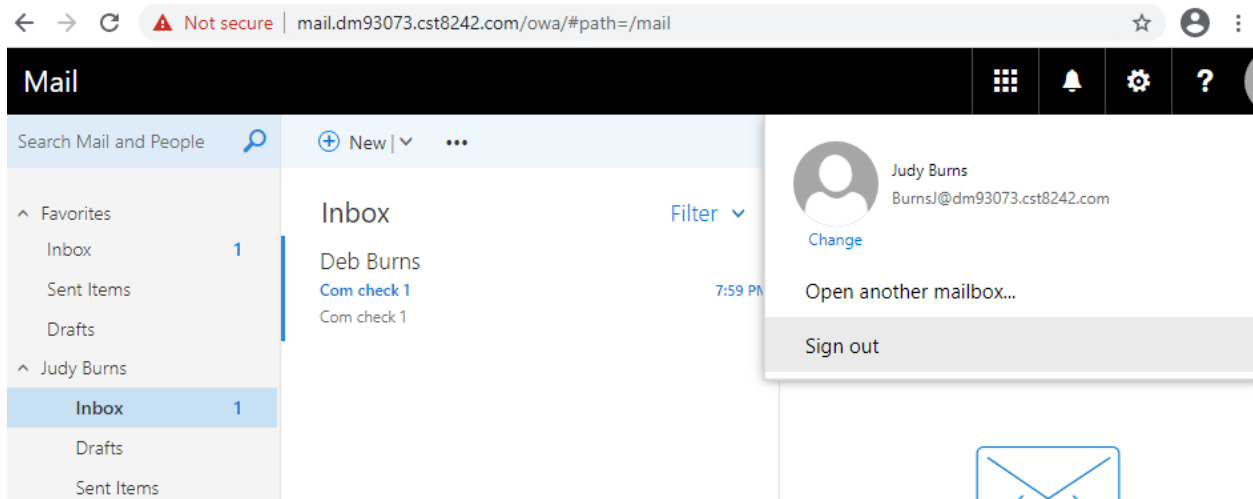
%31



%32



%33



%34

```
[PS] C:\Windows\system32>Get-MailboxStatistics -server Server93073 | where { $_.DisplayName -eq 'judy burns' } | select DisplayName,MailboxGuid,Database,DisconnectDate

DisplayName MailboxGuid Database DisconnectDate
-----
Judy Burns 396994c2-5d29-4cdb-8225-10e98ac5be2d DBI

[PS] C:\Windows\system32>Update-StoreMailboxState -Database DBI -Identity 396994c2-5d29-4cdb-8225-10e98ac5be2d
[PS] C:\Windows\system32>
```

%35

```
[PS] C:\Windows\system32>
[PS] C:\Windows\system32>New-MailboxDatabase -Server Server93073 -Name "DB 02" -EdbFilePath 'C:\DDrive\Databases\DB 02\DB 02.edb' -LogFolderPath 'C:\EDrive\Logs\DB 02'

Name Server Recovery ReplicationType
----
DB 02 SERVER93073 False None
WARNING: Please restart the Microsoft Exchange Information Store service on server SERVER93073 after adding new mailbox databases.
```

%36

```
[PS] C:\Windows\system32>New-Mailbox -Name "Steve Jones" -UserPrincipalName jones@dm93073.cst8242.com -Password (ConvertTo-SecureString -String "P@ssw0rd" -AsPlainText -Force) -FirstName Steve -LastName Jones

Name Alias ServerName ProhibitSendQuota
----
Steve Jones jones server93073 Unlimited
```

%37

```
[PS] C:\Windows\system32>New-MoveRequest -Identity 'jones@dm93073.cst8242.com' -TargetDatabase 'DB 02'

DisplayName StatusDetail TotalMailboxSize TotalArchiveSize PercentComplete
-----
Steve Jones WaitingForJobPickup 53.3 KB (54,581 bytes) 0
```

%38

Database - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/DBMgmt/NewDatabase.as...

new database

\*Mailbox database

Staff

\*Server

SERVER93073

Browse...

Database file path:

C:\DDrive\databases\Staff\Staff.edb

Log folder path:

C:\EDrive\logs\Staff

☒ Mount this database

This field displays the default path to the log folder. You can change the location by entering a new path.

%39

new user mailbox

☒ New user

First name:

Richard

Initials:

Last name:

Hagemeyer

\*Display name:

Richard Hagemeyer

\*Name:

Richard Hagemeyer

Organizational unit:

Browse...

\*User login name:

RichardH

@

dm93073.cst8242.com

\*New password:

\*\*\*\*\*

\*Confirm password:

\*\*\*\*\*

☐ Require password change on next login

Mailbox database:

Staff

Browse...

Archive

Use the archive to store old email.

☒ Create an on-premises archive mailbox for this user

DBI

Browse...

Address book policy:



%40

[illegible]

%41

Mailbox database - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/DBMgmt/EditDatabase.aspx?pwmcid=5&ReturnObjectType=1&...

☐ Show the time in hours  
☒ Show the time in 15-minute intervals

Noon (PM)

	5	8	15	30	45	9	15	30	45	10	15	30	45	11	15	30	45	12	15	30	45	1	15	30	45
All																									
Sunday																									
Monday																									
Tuesday																									
Wednesday																									
Thursday																									
Friday																									
Saturday																									

Quota notification hours  
Non-quota notification hours

%42

Mailbox database - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/DBMgmt/EditDatabase.aspx?pwmcid=5&ReturnObjectType=1&...

Staff

general 10

maintenance \*Prohibit send at (GB): 12

limits \*Prohibit send and receive at (GB): 14

client settings \*Keep deleted items for (days): 14

\*Keep deleted mailboxes for (days): 60

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

Warning message interval:

	Midnight (AM)					Noon (PM)						
	12	2	4	6	8	10	12	2	4	6	8	10
Su												
Mo												
Tu												
We												
Th												

You can view the configured warning message interval. You can also configure a custom warning message interval.

%43

Edit User Mailbox - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/UsersGroups/EditMailbox.aspx?pwmcid=8&ReturnObjectT...

Richard Hagemeyer

general

mailbox usage Litigation hold: Disabled [Enable](#)

contact information

organization Archiving: Enabled  
Local archive created  
0 B used, 0% of 100 GB.  
[Disable](#) | [View details](#)

email address

mailbox features

member of

MailTip

mailbox delegation Mail Flow  
Delivery Options  
Delivery options control forwarding and recipient limits.  
[View details](#)

Message Size Restrictions

%44

Edit User Mailbox - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/UsersGroups/EditMailbox.aspx?pwmcid=8&ReturnObjectT...

### Richard Hagemeyer

- general
- mailbox usage
- ▶ **contact information**
- organization
- email address
- mailbox features
- member of
- MailTip
- mailbox delegation

Street:

0409816280771

City:

State/Province:

ZIP/Postal code:

%45

Edit User Mailbox - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/UsersGroups/EditMailbox.aspx?pwmcid=8&ReturnObjectT...

### Richard Hagemeyer

- general
- mailbox usage
- contact information
- organization
- email address
- ▶ **mailbox features**
- member of
- MailTip
- mailbox delegation

Phone and Voice Features

Mobile Devices

[Disable Exchange ActiveSync](#)

[Disable OWA for Devices](#)

[View details](#)

Email Connectivity

Outlook on the web: Enabled

[Disable](#) | [View details](#)

IMAP: Disabled

[Enable](#)

POP3: Disabled

[Enable](#)

MAPI: Enabled

[Disable](#)

%46

Edit User Mailbox - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/UsersGroups/EditMailbox.aspx?pwmcid=8&ReturnObjectT...

Richard Hagemeyer

general

61.85 KB used, 0% of 12 GB.

► mailbox usage

contact information

organization

email address

mailbox features

member of

MailTip

mailbox delegation

☒ Use the default quota settings from the mailbox database

☐ Customize the quota settings for this mailbox

\*Issue a warning at (GB):  
Select one ▼

\*Prohibit send at (GB):  
Select one ▼

\*Prohibit send and receive at (GB):  
Select one ▼

☐ Use the default retention settings from the mailbox database

☒ Customize the retention settings for this mailbox

\*Keep deleted items for (days):  
7

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

#47: “During retention hold, clients can log on to their mailbox and change or delete items. When you perform a mailbox search, deleted items that are past the deleted item retention period aren't returned in indexed results. Retention hold is designed for circumstances such as a user/client being on vacation or away temporarily.”

%48

Edit User Mailbox - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/UsersGroups/EditMailbox.aspx?pwmcid=8&ReturnObjectT...

Richard Hagemeyer

general

61.85 KB used, 0% of 12 GB.

► mailbox usage

contact information

organization

email address

mailbox features

member of

MailTip

mailbox delegation

☐ Use the default quota settings from the mailbox database

☒ Customize the quota settings for this mailbox

\*Issue a warning at (GB):

15

\*Prohibit send at (GB):

20

\*Prohibit send and receive at (GB):

25

☐ Use the default retention settings from the mailbox database

☒ Customize the retention settings for this mailbox

\*Keep deleted items for (days):

7

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

%49

Edit User Mailbox - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/UsersGroups/EditMailbox.aspx?pwmcid=8&ReturnObjectT...

message size restrictions

Set a maximum size for messages sent and received by this mailbox. [Learn more](#)

Sent messages

☒ Maximum message size (KB):

10000

Received messages

☒ Maximum message size (KB):

10000

%50

Edit User Mailbox - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/UsersGroups/EditMailbox.aspx?pwmcid=8&ReturnObjectT...

### delivery options

Forwarding Address  
Forward email to the following recipient. [Learn more](#)

☒ Enable forwarding  
Forward email to the following recipient:

pate0771 X Browse...

☒ Deliver message to both forwarding address and mailbox

Recipient limit  
☐ Maximum recipients:

%51

Edit User Mailbox - Google Chrome

Not secure | mail.dm93073.cst8242.com/ecp/UsersGroups/EditMailbox.aspx?pwmcid=8&ReturnObjectT...

### archive mailbox

Database:  
DB1

Name:  
In-Place Archive -Richard Hagemeyer

Archive usage:  
Archive usage displays the archive storage limit and current usage. [Learn more](#)

0 B used, 0% of 100 GB.

\*Archive quota (GB):  
100

\*Issue warning at (GB):  
90

Archiving is a premium feature that requires an Enterprise Client Access License (CAL). [Learn more](#)

This is the name of the folder in the user's mailbox that contains the archive.