

## **Import - Export - Recovery**

### **PST Import**

- (1) [Required Permissions](#) (page2)
- (2) [Import-Job](#) (below)
- (3) [AZCopy](#)
- (4) [Mapping.CSV](#) (FILENAME.PST > NEWUSER)

### **Export**

- (5) [PST Export](#) (Exchange/eDiscovery)
- (6) [Content search](#)
- (7) [Backup+Upload OneDrive](#) - link existing to new account

### **E-Mail Recovery**

- (8) [Restore-Recoverableitems](#)

### **Mailbox Recovery**

- (9) [softdeleted mailboxes](#) / on-prem disconnected mailboxes

## (1) Required Permissions

- Powershell / Powershell (ISE)

```
[Net.ServicePointManager]::SecurityProtocol = [Net.SecurityProtocolType]::Tls12
Set-ExecutionPolicy RemoteSigned
Install-Module -Name ExchangeOnlineManagement -Scope currentuser # INSTALLATION
$ADMIN = "Global@Admin.com" # PLEASE CHANGE ADMIN
Connect-ExchangeOnline -UserPrincipalName $ADMIN -ShowProgress $true # CONNECT
New-ManagementRoleAssignment -Role "Mailbox Import Export" -User $ADMIN # REQUIRED
New-ManagementRoleAssignment -Role "Mailbox Search" -User $ADMIN
Add-RoleGroupMember "Organization Management" -Member $ADMIN
Add-RoleGroupMember "Discovery Management" -Member $ADMIN
Add-RoleGroupMember "Compliance Management" -Member $ADMIN

#if customization not enabled yet, run the below first (takes 1-2 minutes)
Enable-OrganizationCustomization -confirm:$false
```

- SCREENSHOT Powershell (ISE)

Windows PowerShell ISE

File Edit View Tools Debug Add-ons Help

mark below + Run Selection (F8)

```
1 [Net.ServicePointManager]::SecurityProtocol = [Net.SecurityProtocolType]::Tls12
2
3 Set-ExecutionPolicy RemoteSigned
4
5 Install-Module -Name ExchangeOnlineManagement -Scope currentuser # INSTALLATION
6
7 $ADMIN = 'Global@Admin.com' just modify Admin (nothing else)
8
9 Connect-ExchangeOnline -UserPrincipalName $ADMIN -ShowProgress $true # CONNECT
10
11 New-ManagementRoleAssignment -Role "Mailbox Import Export" -User $ADMIN # REQUIRED
12 New-ManagementRoleAssignment -Role Mailbox Search -User $ADMIN
13 Add-RoleGroupMember "Organization Management" -Member $ADMIN
14 Add-RoleGroupMember "Discovery Management" -Member $ADMIN
15 Add-RoleGroupMember "Compliance Management" -Member $ADMIN
```

Get-Recipient Get-EXORecipient  
Get-RecipientPermission Get-EXORecipientPermission

CONNECTED

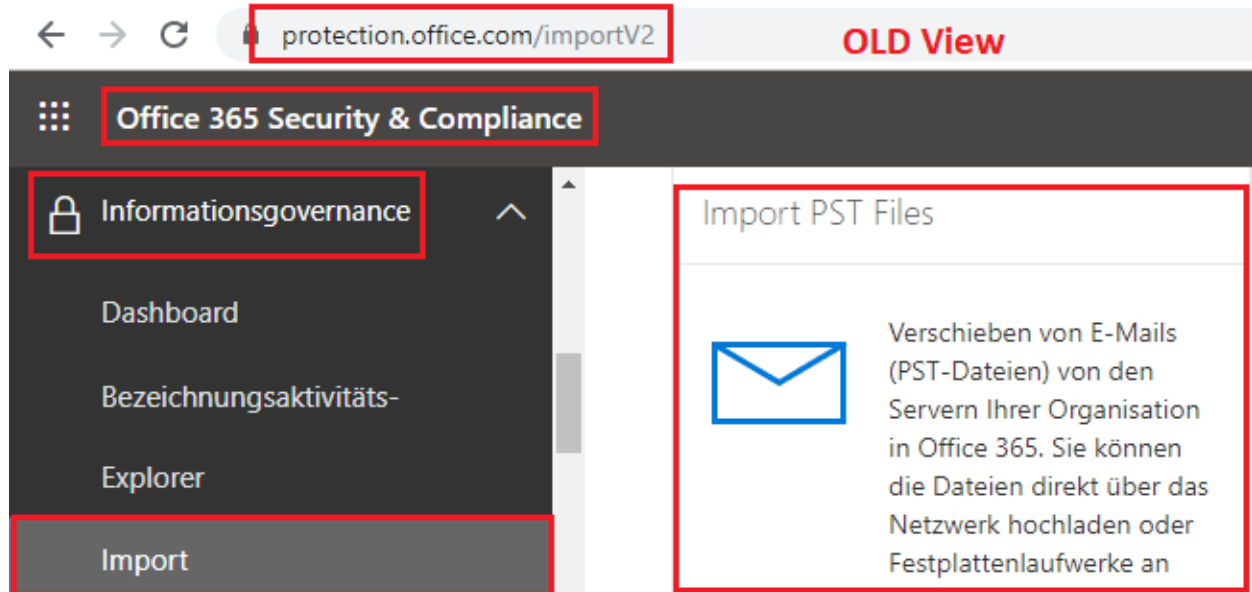
To get additional information, run: Get-Help Connect-ExchangeOnline  
Please send your feedback and suggestions to exocmdletpreview@service.microsoft.com

Name	Role	RoleAssigneeName	RoleAs
Mailbox Import Export	Mailbox Import Export	Display Name	User
Mailbox Search	Mailbox Search	Display Name	User

## (2) Create Import-Job

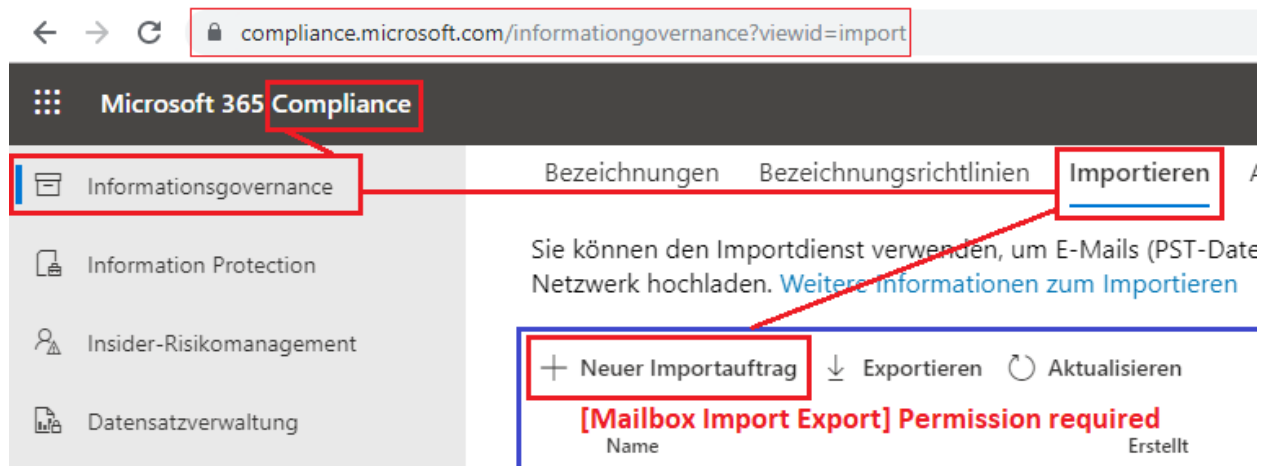
- OLD View ( Security and Compliance)

URL: <https://protection.office.com/import>



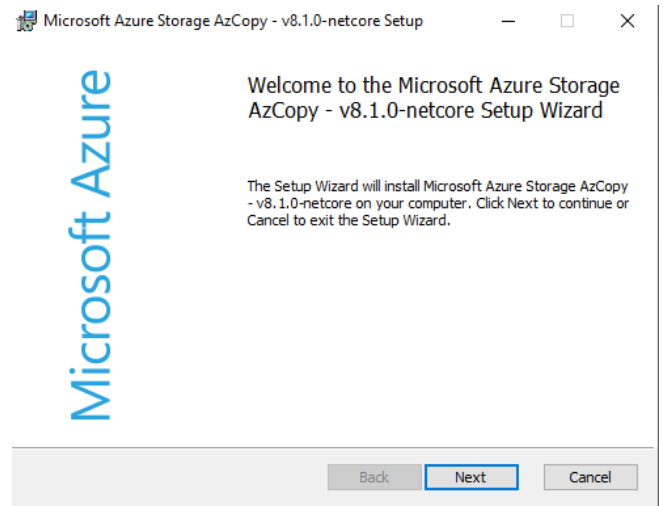
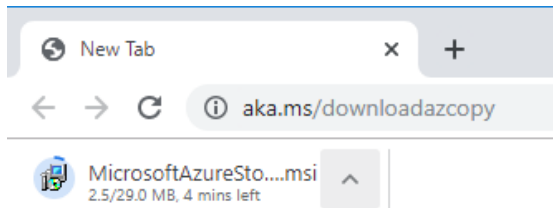
- New View (Compliance)

URL: <https://compliance.microsoft.com/informationgovernance?viewid=import>



### (3) Download + Install AZCopy 8.1

<https://aka.ms/downloadazcopy/>



- Open CMD
- Change Directory

CD "C:\Program Files (x86)\Microsoft SDKs\Azure\AzCopy\"

- Edit below in NotePad - insert the **SAS-URL** copied in Step [\(2\) Create Import-Job](#)
- Modify **PST-Folder** - put only the PST-Files inside
- Run below from Notepad

.\AzCopy.exe /Source:"**C:\PSTFOLDER**" /Dest:"**SAS-URL**" /V:"C:\AzCopy1.log" /Y

- Upload with ca. **700 kb/s Speed**
- Able to **automatically resume** (for example if internet connection is reset)

[When Upload is finished, continue below]

#### (4) Create Mapping.CSV (FILENAME.PST > NEWUSER)\*

##### Reference:

<https://docs.microsoft.com/en-gb/office365/securitycompliance/use-network-upload-to-import-pst-files>

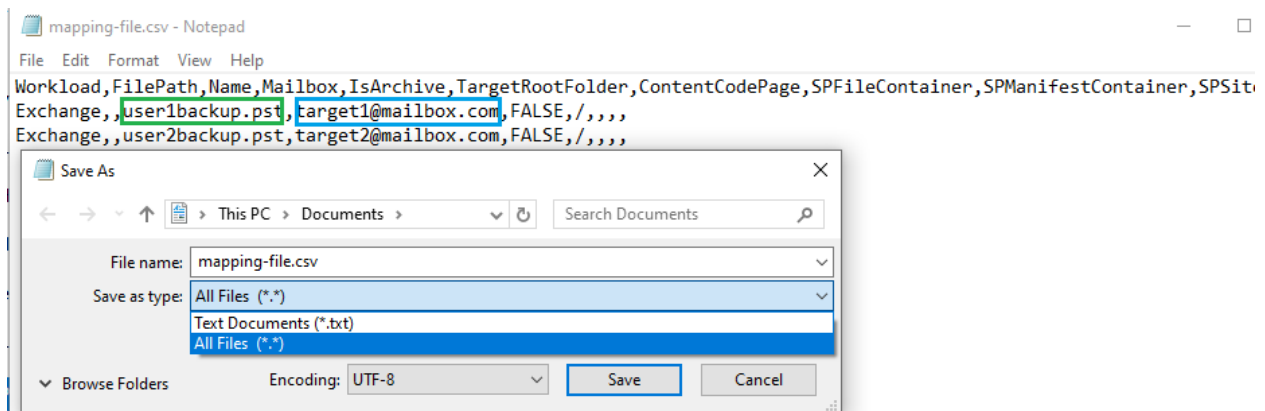
- **Copy Below to NotePad**

Workload,FilePath,Name,Mailbox,IsArchive,TargetRootFolder,ContentCodePage,SPFileContainer,SPManifestContainer,SPSiteUrl

Exchange,,user1backup.pst,target1@mailbox.com,FALSE,/,,,,

Exchange,,user2backup.pst,target2@mailbox.com,FALSE,/,,,,

- **save as All Files (\*.\*) → .CSV**



- **Excel View for Comparison**

Workload	FilePath	Name	Mailbox	IsArchive	TargetRootFolder	ContentCodePage	SPFileContainer
Exchange		user1backup.pst	target1@mailbox.com	FALSE	/		
Exchange		user2backup.pst	target2@mailbox.com	FALSE	/		

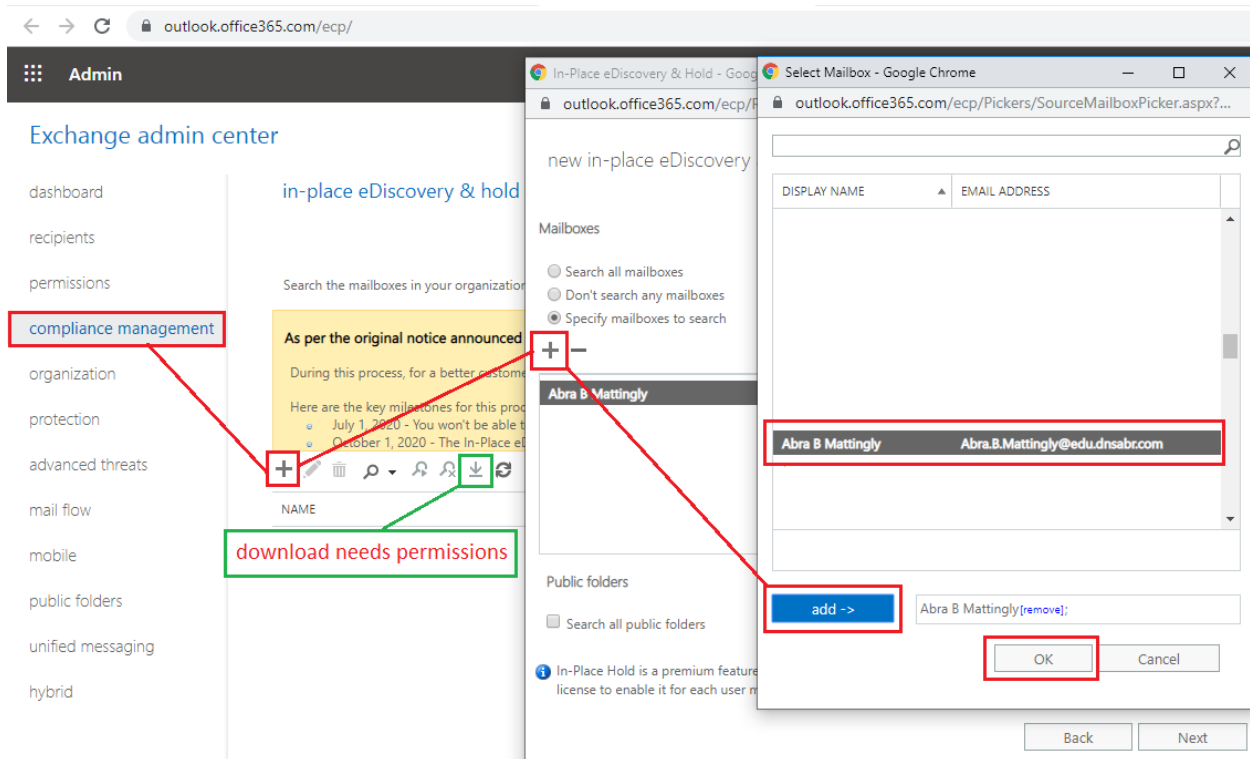
- **Excel-CSV**

The image shows an Excel window titled 'mapping-file.csv - Excel'. The worksheet contains the following data:

	A	B	C	D	E	F	G	H	I	J
1	Workload	FilePath	Name	Mailbox	IsArchive	TargetRootFolder	ContentCodePage	SPFileContainer	SPManifestContainer	SPSiteUrl
2	Exchange		user1backup.pst	target1@mailbox.com	FALSE	/				
3	Exchange		user2backup.pst	target2@mailbox.com	FALSE	/				

## (5) PST Export (Exchange/eDiscovery)

Exchange Admincenter > Compliance Management > [+] > [+] > one user > [ADD] > [OK] > Run



- **Download only in Internet Explorer (Arrow-Down)**
- **Alternative: Chrome + [Clickonce Chrome] Plugin**

## (6) Content Search (also for Data-Recovery + Sharepoint + other Data)

- **Assign Permissions**

<https://docs.microsoft.com/en-us/microsoft-365/compliance/assign-ediscovery-permissions>

<https://protection.office.com/permissions> → "eDiscovery Manager"

- **Alternative: Assign Permissions in Powershell**

```
[Net.ServicePointManager]::SecurityProtocol = [Net.SecurityProtocolType]::Tls12
```

```
Install-Module MSOnline ; Connect-MsolService
```

```
Add-MsolRoleMember -RoleName "eDiscovery Manager" -RoleMemberEmailAddress "admin@domain.com"
```

- **Start a New Search**

<https://protection.office.com/contentsearchbeta>

<https://docs.microsoft.com/en-gb/microsoft-365/compliance/content-search>

Office 365 Security & Compliance

Searches Exports

1 + New search + Guided search

Search query

For tips on how to use keywords and conditions to search for content, [click here](#).

Keywords

Enter keywords

Show keyword list

+ Add conditions

Locations: selected locations

All locations

Specific locations

Modify...

Status: query not run

Save & run

Modify locations

Location	Selected locations	Select all
Exchange email	1 user, group, or team	<input type="checkbox"/>
Office 365 group email	Choose users, groups, or teams	
Skype for Business		
Teams messages		
To-Do		
Sway		
Forms		

Save

- **Also Specify the User ("Search Locations")**

- **Start Search ( Save > Save & Run )**

- **Prepare the Export PST – One PST for each Mailbox**

- **when finished you can download the PST under Export (see permissions required)**

- **eDiscovery Export Tool *only* works in *IE* Explorer or *Chrome* + *Click-Once* Extension!**

→ protection.office.com/permissions → eDiscovery Manager / eDiscovery Administrator

Office 365 Security & Compliance protection.office.com/contentsearchbeta?ContentOnly=1

Searches **1** Exports

Notice something different? Our eDiscovery Manager

Refresh Search

**2** Search Title\_Results

Search Title\_Reportsonly

Content Search  
Export Results

Internet Explorer or  
Chrome + {clickonce Chrome Ext.}

2 item(s) loaded.

Restart export Download results Delete

(100%) Installing Microsoft Office 365 eDiscovery Export Tool

Started on: 2020-07-26

Size: 10,632 items

Export key:

The export key below is required to download the search results. Be sure to take precautions to protect this key because anyone can use it to download these results.

copy export key to eDiscovery Export Tool

**5** Copy to clipboard Change key

eDiscovery Export Tool

Export Name: admin search\_Export

Paste the export key that will be used to connect to the source:

**6** insert here

Select the location that will be used to store downloaded files:

CA\PST - Folder - Path\ Browse **4**

Advanced options

**7** Start Cancel

Exchange content format:

One PST file for each mailbox

## (7) Backup + Upload OneDrive (linking old Folder to new Account)

Get your Personal Onedrive Link

→ [Onedrive – view online]

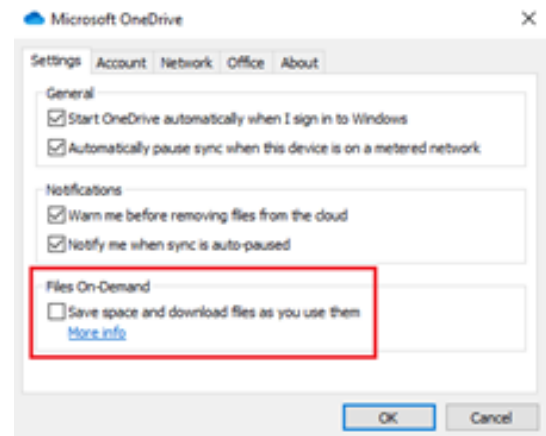
Alternative: Go to Onedrive / Settings

- unselect [ files on demand / save space]

- to download your complete Onedrive (compare size)

- link/sync NEW Onedrive account to that folder with all files

- can be used for Onedrive and for Sharepoint document lists





## (8) Restore-Recoverableitems ([Link](#))

- **Connect**

Set-ExecutionPolicy RemoteSigned

[Net.ServicePointManager]::SecurityProtocol = [Net.SecurityProtocolType]::Tls12

Install-Module -Name ExchangeOnlineManagement

**\$admin** = "[GLOBAL@ADMIN.com](#)" # *Global Admin please Modify*

Connect-ExchangeOnline -UserPrincipalName **\$admin** -ShowProgress \$true

New-ManagementRoleAssignment -Role "Mailbox Import Export" -User **\$ADMIN**

*#reconnect to have new permissions*

Get-PSSession | remove-PSSession

Connect-ExchangeOnline -UserPrincipalName **\$admin** -ShowProgress \$true

- **GET-RECOVERABLE ITEMS**

**\$user** = "[AFFECTED@USER.com](#)" # *Affected User – please Modify*

**\$start** = Get-Date -date \$(Get-Date).AddDays(-90) # *past -90 days*

**\$end** = Get-Date -date \$(Get-Date)

**\$search** = Get-recoverableitems -Identity **\$user** -FilterStartTime **\$start** -FilterEndTime **\$end**

**\$search** | FL subject,SourceFolder,ItemClass # *see results*

**\$search** | restore-recoverableitems # *recover results*

- **OPTIONAL PARAMETERS to filter Types**

-SourceFolder *PARAMETER* PurgedItems / DeletedItems / RecoverableItems

-FilterItemType IPM.**Appointment** # *calendar items*

-FilterItemType IPM.**Contact**

-FilterItemType IPM.**File**

-FilterItemType IPM.**Note** # *E-mails*

-FilterItemType IPM.**Task**

## (9) softdeleted mailboxes (disconnected/inactive)

ONPREM disconnected/softdeleted

<https://docs.microsoft.com/en-us/exchange/disconnected-mailboxes-exchange-2013-help>

```
$dbs = Get-MailboxDatabase
```

```
$dbs|{%{Get-MailboxStatistics -Database $_.DistinguishedName }|?{$_.DisconnectReason -ne $Null } |  
Format-Table DisplayName,Database,DisconnectDate
```

ONCLOUD \* (softdeleted) → (New Mailbox) \* new-mailboxrestorerequest

**\$Source** = get-mailbox -InactiveMailboxOnly "INACTIVE@Mailbox.com"

**\$target** = get-mailbox "NEW@Mailbox.com"

**\$S** = \$Source.ExchangeGUID.GUID

**\$T** = \$target.ExchangeGUID.GUID

**write-host "Deleted NAME: \$(\$Source.displayname) + GUID: \$(\$S)" -foregroundcolor yellow**

**write-host "Target NAME: \$(\$target.displayname) + GUID: \$(\$T)" -foregroundcolor green**

**new-mailboxrestorerequest -SourceMailbox \$S -TargetMailbox \$T -AllowLegacyDNmismatch**

- Check

```
get-mailboxrestorerequest
```

```
Get-MailboxRestoreRequest -Status Failed | Get-MailboxRestoreRequestStatistics -IncludeReport
```

- create PST (only onprem)

**New-MailboxExportRequest -Mailbox MAILBOXUSER -FilePath \\192.168.250.2\PSTFileShare\USER.pst"**

**DUPLICATE mailbox (1) onprem and (2) oncloud (please escalate with below logs) (Ref.-[Link](#))**

- CMD / local AD :

```
ldifde -f c:\BadUser1.txt -r "(UserPrincipalName=User1@domain.com)"
```

```
ldifde -f c:\GoodUser1.txt -r "(UserPrincipalName=User2@domain.com)"
```

- Exchange management shell (on-prem)

```
get-remotemailbox -identity user1@domain.com | fl | out-file C:\BadRemoteuser.txt
```

```
get-remotemailbox -identity user2@domain.com | fl | out-file C:\GoodRemoteuser.txt
```

- Exchange Online (Cloud)

```
$FormatEnumerationLimit=-1
```

```
get-mailbox -identity user1@domain.com | fl | out-file C:\BadEXOuser.txt
```

```
get-mailbox -identity user2@domain.com | fl | out-file C:\GoodEXOuser.txt
```

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```
if (!$value = Read-Host "Value [$default]") { $value = $default }
```