

Exchange Server 2013: Public Folder Migration from Exchange Server 2007/2010

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Lab Public Folder Migration

Introduction

After all users are migrated to Exchange 2013, you can then upgrade Classic Public Folders to Modern Public Folders

In this lab, you will export the Classic Public Folders list from Legacy Exchange, create Public Folder Mailboxes and migrate to Modern Public Folders

Objectives

After completing this lab, you will be able to:

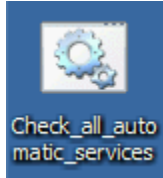
- Export and modify the Classic Public Folder list
- Create Public Folder Mailboxes
- Migrate to Modern Public Folders

Estimated time to complete this lab

60 minutes

Preparation

1. Logon to each Exchange Server using the pfelabs\administrator password = Password1
2. On the Desktop, double-click the check_all_automatic_services on ALL Exchange Servers to make sure all relevant services are started



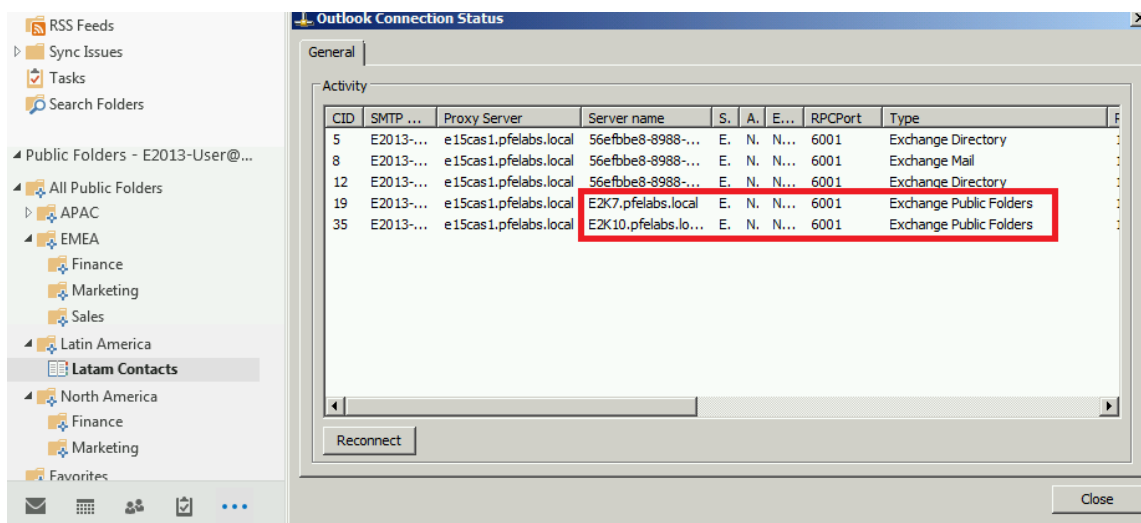
Verify legacy environment

1. Logon to **DC1** as **pfelabs\administrator** password = **Password1**
2. Start **Outlook 2013** and select the Profile **E2013-User**

NOTE: Outlook will display the **Activation Wizard**. This can be ignored and closed and will not affect the lab.

3. Ensure that Outlook 2013 can successfully connect to the mailbox
4. Use Outlook to browse the existing Public Folders, which are located on Exchange Server 2007 and Exchange Server 2010.
 - a. Expand *Public Folders* in the left navigation pane
 - b. Expand *All Public Folders* → *Latin America* → Click *Latam Contacts*
 - c. Expand the *North America* Folder → Click *Finance*
5. Use Outlook's **Connection Status** feature:
 - a. When Outlook is open, press **Ctrl** and right-click the **Outlook Icon** in the Notification Area (lower, right hand corner, next to time & date).
 - b. Select **Connection Status**.

Verify that an Exchange 2013 Mailbox can connect to Exchange 2007/2010 for Public Folder access:



6. From **E2K10**, click Start and open the **Exchange Management Shell**
7. Run the following command to verify the location of the replicas for the folders

```
Get-PublicFolder -Recurse | ft Name,Replicas
```

Migrate Public Folders to Exchange Server 2013

1. Open the Exchange Management Shell on **E15CAS1**
2. Verify there are no existing Public Folder migrations or artifacts from previous migrations. Run the following command on Server **E15CAS1**

```
Get-OrganizationConfig | FL PublicFoldersLockedforMigration,  
PublicFolderMigrationComplete
```

3. Verify that both values are set to **False**
4. Run the following commands on **E15CAS1** and ensure that no values are returned:

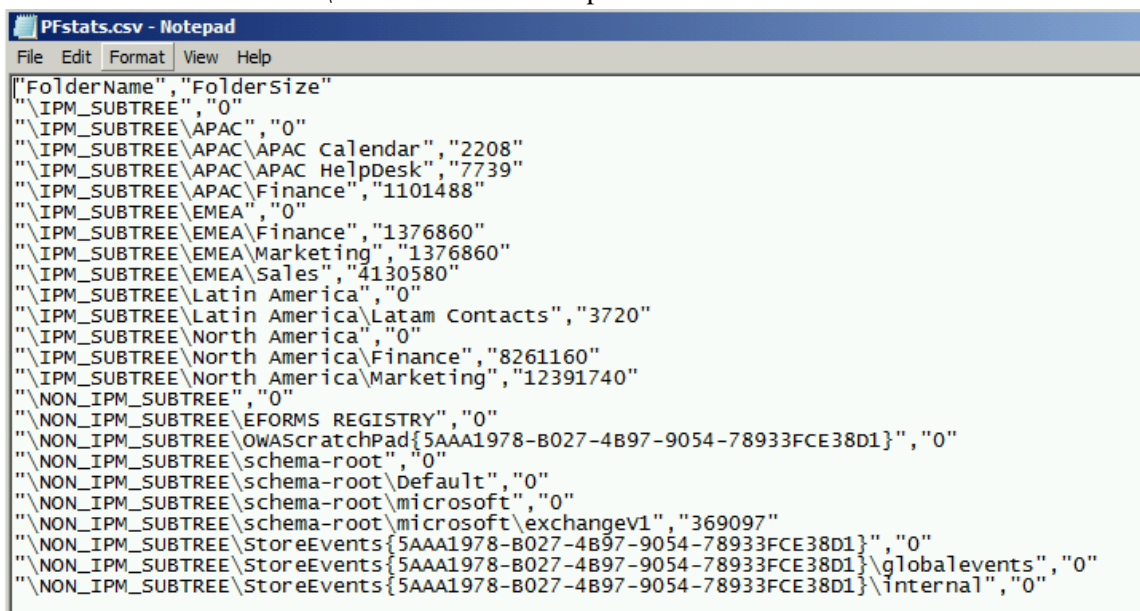
```
Get-PublicFolderMigrationRequest  
Get-Mailbox -PublicFolder  
Get-PublicFolder
```

NOTE: Running Get-PublicFolder will throw an error that “No active public folder mailboxes were found.” Since Exchange Server 2013 will not see the Classic Public Folders on the Legacy versions of Exchange, this is expected.

5. On **E2K10** go to the Exchange Management Shell and run the following commands:

```
cd $exscripts  
  
.\Export-PublicFolderStatistics.ps1 -ExportFile C:\PFstats.csv -PublicFolderServer  
E2K10
```

6. Examine the contents of C:\PFstats.csv with Notepad:



```

PFstats.csv - Notepad
File Edit Format View Help
"FolderName","FolderSize"
"\IPM_SUBTREE","0"
"\IPM_SUBTREE\APAC","0"
"\IPM_SUBTREE\APAC\APAC Calendar","2208"
"\IPM_SUBTREE\APAC\APAC HelpDesk","7739"
"\IPM_SUBTREE\APAC\Finance","1101488"
"\IPM_SUBTREE\EMEA","0"
"\IPM_SUBTREE\EMEA\Finance","1376860"
"\IPM_SUBTREE\EMEA\Marketing","1376860"
"\IPM_SUBTREE\EMEA\Sales","4130580"
"\IPM_SUBTREE\Latin America","0"
"\IPM_SUBTREE\Latin America\Latam Contacts","3720"
"\IPM_SUBTREE\North America","0"
"\IPM_SUBTREE\North America\Finance","8261160"
"\IPM_SUBTREE\North America\Marketing","12391740"
"\NON_IPM_SUBTREE","0"
"\NON_IPM_SUBTREE\EFORMS_REGISTRY","0"
"\NON_IPM_SUBTREE\OWAScratchPad{5AAA1978-B027-4B97-9054-78933FCE38D1}","0"
"\NON_IPM_SUBTREE\schema-root","0"
"\NON_IPM_SUBTREE\schema-root\Default","0"
"\NON_IPM_SUBTREE\schema-root\microsoft","0"
"\NON_IPM_SUBTREE\schema-root\microsoft\exchangev1","369097"
"\NON_IPM_SUBTREE\StoreEvents{5AAA1978-B027-4B97-9054-78933FCE38D1}","0"
"\NON_IPM_SUBTREE\StoreEvents{5AAA1978-B027-4B97-9054-78933FCE38D1}\globevents","0"
"\NON_IPM_SUBTREE\StoreEvents{5AAA1978-B027-4B97-9054-78933FCE38D1}\internal","0"

```

7. Copy the PFstats.csv file to `\\E15CAS1\c$\`
 8. On **E15CAS1** go to the Exchange Management Shell and run the following commands:

```

cd $exscripts
.\PublicFolderToMailboxMapGenerator.ps1 -ImportFile c:\PFstats.csv -exportfile
c:\pfmap.csv -mailboxsize 1GB

```

NOTE: We could be using a Mailbox Size of 500kb here so that it put the folders in multiple Mailboxes. PowerShell understands KB, MB, GB, so for production environments you could use "25GB" for a 25 Gigabyte Mailbox. Currently the script is failing if we set the `-mailboxsize` parameter to anything smaller than the current folder sizes, so you can either map the folders manually or proceed with a single Public Folder Mailbox mapping.

9. On **E15CAS1** open the `c:\pfmap.csv` file with Notepad. You will see the following output:

```

"TargetMailbox","FolderPath"
"Mailbox1","\"

```

Due to the small size of the Public Folders in this lab, a migration request using this mapping file would migrate all Public Folders into a single Public Folder Mailbox, named Mailbox1.

To get a more realistic scenario we pre-created a new Mapping file called `c:\PFMAP_updated.csv`:


```

PFMAP_updated.csv - Notepad
File Edit Format View Help
TargetMailbox,FolderPath
PFMB-APAC,\IPM_SUBTREE\APAC
PFMB-APAC,\IPM_SUBTREE\APAC\APAC Calendar
PFMB-APAC,\IPM_SUBTREE\APAC\APAC HelpDesk
PFMB-APAC,\IPM_SUBTREE\APAC\Finance
PFMB-EMEA,\IPM_SUBTREE\EMEA
PFMB-EMEA,\IPM_SUBTREE\EMEA\Finance
PFMB-EMEA,\IPM_SUBTREE\EMEA\Marketing
PFMB-EMEA,\IPM_SUBTREE\EMEA\Sales
PFMB-LATAM,\IPM_SUBTREE\Latin America
PFMB-LATAM,\IPM_SUBTREE\Latin America\Latam Contacts
PFMB-NA,\IPM_SUBTREE\North America
PFMB-NA,\IPM_SUBTREE\North America\Finance
PFMB-NA,\IPM_SUBTREE\North America\Marketing
PFMB-Other,\NON_IPM_SUBTREE
PFMB-Other,\NON_IPM_SUBTREE\EFORMS REGISTRY

```

NOTE: This file is migrating Public Folders from APAC to a Public Folder Mailbox PFMB-APAC, North America Public Folders to a PF Mailbox named PFMB-NA, etc.
In the next step, we will create those Public Folder Mailboxes

10. Create **six** new **Public Folder Mailboxes** in the **Exchange Management Shell** on **E15CAS1** follows:

```
New-Mailbox -PublicFolder -Name PFMB-HIERARCHY -HoldForMigration
```

NOTE: The first Public Folder Mailbox contains the writable copy of the Public Folder Hierarchy

- a. Create the following additional Public Folder Mailboxes:

```

New-Mailbox -PublicFolder -IsExcludedFromServingHierarchy $true -Name PFMB-APAC
New-Mailbox -PublicFolder -IsExcludedFromServingHierarchy $true -Name PFMB-EMEA
New-Mailbox -PublicFolder -IsExcludedFromServingHierarchy $true -Name PFMB-LATAM
New-Mailbox -PublicFolder -IsExcludedFromServingHierarchy $true -Name PFMB-NA
New-Mailbox -PublicFolder -IsExcludedFromServingHierarchy $true -Name PFMB-Other

```

11. Verify that you created all 6 Public Folder Mailboxes, run:

```
Get-Mailbox -PublicFolder
```

12. Create a new Public Folder Move Request on **E15CAS1** as follows:

```
New-PublicFolderMigrationRequest -SourceDatabase (Get-PublicFolderDatabase -Server E2K10) -CSVdata (Get-Content c:\pfbmap_updated.csv -Encoding byte) -BadItemLimit 5
```

NOTE: Due to the length of time allocated for this Instructor-led lab we are using the `-BadItemLimit` parameter to ensure timely completion.

13. Monitor the progress of the migration request:

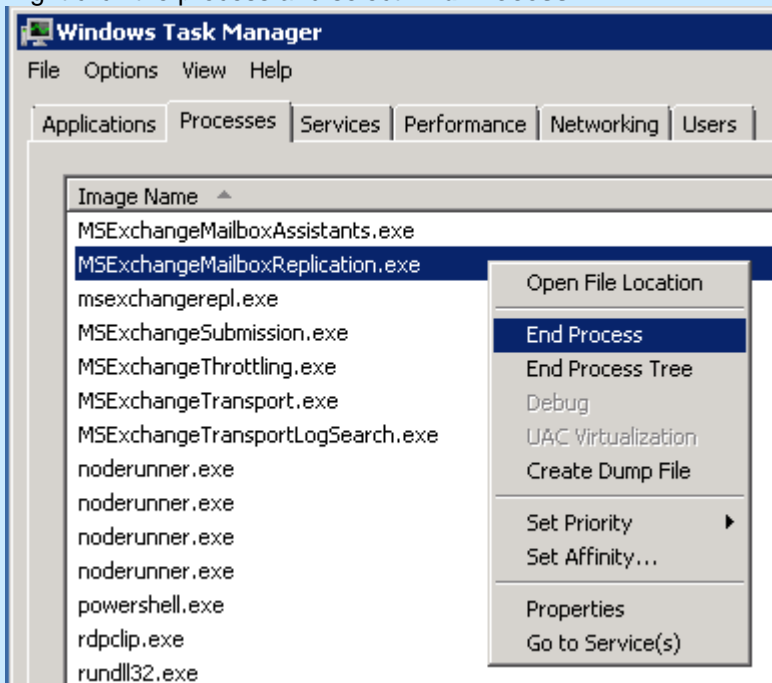
```
Get-PublicFolderMigrationRequest | Get-PublicFolderMigrationRequestStatistics
```

NOTE: If you receive the StatusDetail: StalledDueToReadUnknown:

1. Restart the **Microsoft Exchange Mailbox Replication** service on **E15MBX1** *.
2. From **E15CAS1** run: **Get-PublicFolderMigrationRequest | Resume-PublicFolderMigrationRequest**

* Occasionally, the Mailbox Replication service will not stop through the services console. In this case, it is necessary to end the process through Task Manager.

1. On **E15MBX1**, right click on the Taskbar → click **Start Task Manager**.
2. Locate the **MSExchangeMailboxReplication.exe** process under the *Image Name* column.
3. Right click the process and select **End Process**



4. Start the **Microsoft Exchange Mailbox Replication** service on **E15MBX1**:
Start-Service MSExchangeMailboxReplication
5. From **E15CAS1**, run: **Get-PublicFolderMigrationRequest | Resume-PublicFolderMigrationRequest**

If the StalledDueToReadUnknown or StalledDueToMailboxLock is displayed:

1. Restart the **Microsoft Exchange Information Store** service on **E2K7** and **E2K10**

2. From **E15CAS1**, run: **Get-PublicFolderMigrationRequest | Resume-PublicFolderMigrationRequest**

14. Monitor the move request until **StatusDetail** reaches “**AutoSuspended**” indicating it is now ready to complete.

```
[PS] C:\Program Files\Microsoft\Exchange Server\U15\scripts>Get-PublicFolderMigrationRequest | Get-PublicFolderMigrationRequestStatistics
```

| Name | StatusDetail | SourceDatabase | PercentComplete |
|-----------------------|---------------|----------------|-----------------|
| PublicFolderMigration | AutoSuspended | PFDB | 95 |

15. Open **Outlook** on **DC1** as **E2013-User** and create additional **Top Level Public Folder** and **Regular Public Folders**.

NOTE: Those folders are not in the mapping file, and we will examine later how they are migrated.

16. From **E15CAS1**, lock the legacy folders by running the following command:

```
Set-OrganizationConfig -PublicFoldersLockedForMigration:$true
```

17. Using the **Exchange Management Shell** on both **E2K7** and **E2K10** run *Restart-Service MExchangeIS* so Public Folder databases pick up the change

NOTE: In a normal production environment, customers can wait for Public Folder replication to complete for Exchange to see this change.

18. Verify using **Outlook** on **DC1** that you cannot connect to Public Folders anymore. (You might need to restart Outlook)

19. Allow the migration requests to finish by running this command:

```
Get-PublicFolderMigrationRequest | Set-PublicFolderMigrationRequest -PreventCompletion:$false
```

20. Resume the Migration so that it can finish:

```
Get-PublicFolderMigrationRequest | Resume-PublicFolderMigrationRequest
```

NOTE: If you receive StatusDetail of Relinquished, restart the **Microsoft Exchange Mailbox Replication** service on **E15MBX1**

21. The Migration will enter a Completed state

| Name | StatusDetail | SourceDatabase | PercentComplete |
|-----------------------|--------------|----------------|-----------------|
| PublicFolderMigration | Completed | PFDB | 100 |

- Verify within the **Exchange Management Shell** that the Public Folder content has been distributed correctly across the Public Folder Mailboxes, run:

```
Get-PublicFolder -Recurse | ft Identity,ContentMailboxName
```

- Run the following command to unlock the public folders for all other users.

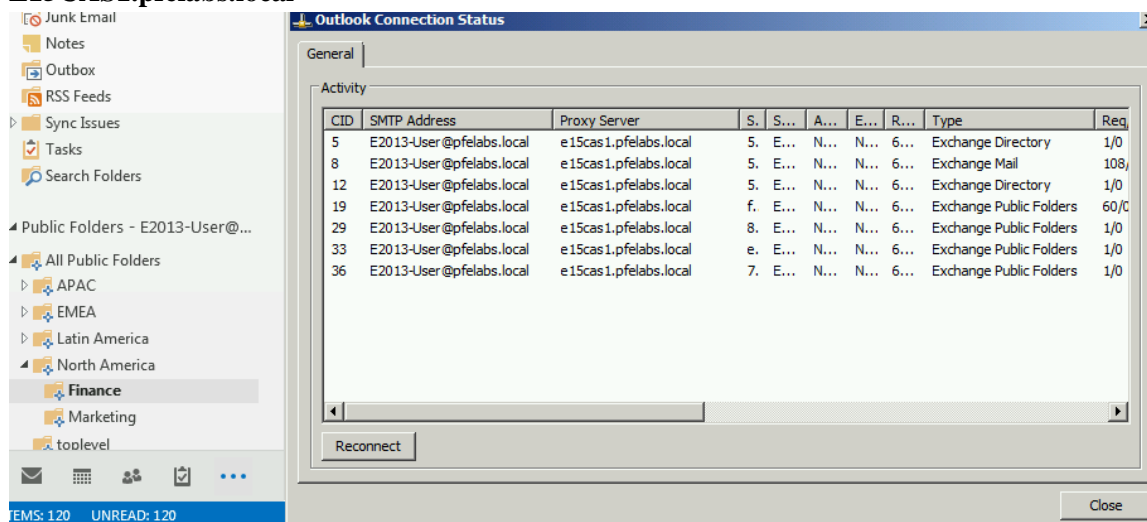
```
Get-Mailbox -PublicFolder | Set-Mailbox -PublicFolder -  
IsExcludedFromServingHierarchy $false
```

- Open the Exchange Admin Center (EAC) on **E15CAS1**. Open Internet Explorer and browse to <https://mail.pfelabs.local/ecp>. Logon as **pfelabs\administrator** and pwd: Password1
- Within the EAC, navigate to **Public Folders** and examine where the Public Folders created mid-migration (Step 15) are stored.

Connect to migrated Public Folders on Exchange 2013

- Switch to **DC1** and restart Outlook using the **E2013-User** profile
- You may notice that at first, you will no longer see the Public Folders in Outlook for the first few minutes
- You should then see them come back up
- Browse the Public Folders and examine the contents
- Check Outlook’s **Connection Status** and notice that Outlook is not connecting to **E2K7** or **E2K10** for Public Folders. It is instead connecting to Exchange Server 2013

E15CAS1.pfelabs.local



CONGRATULATIONS! You have successfully migrated to Exchange Server 2013 Modern Public Folders! Please fill out the evaluation.