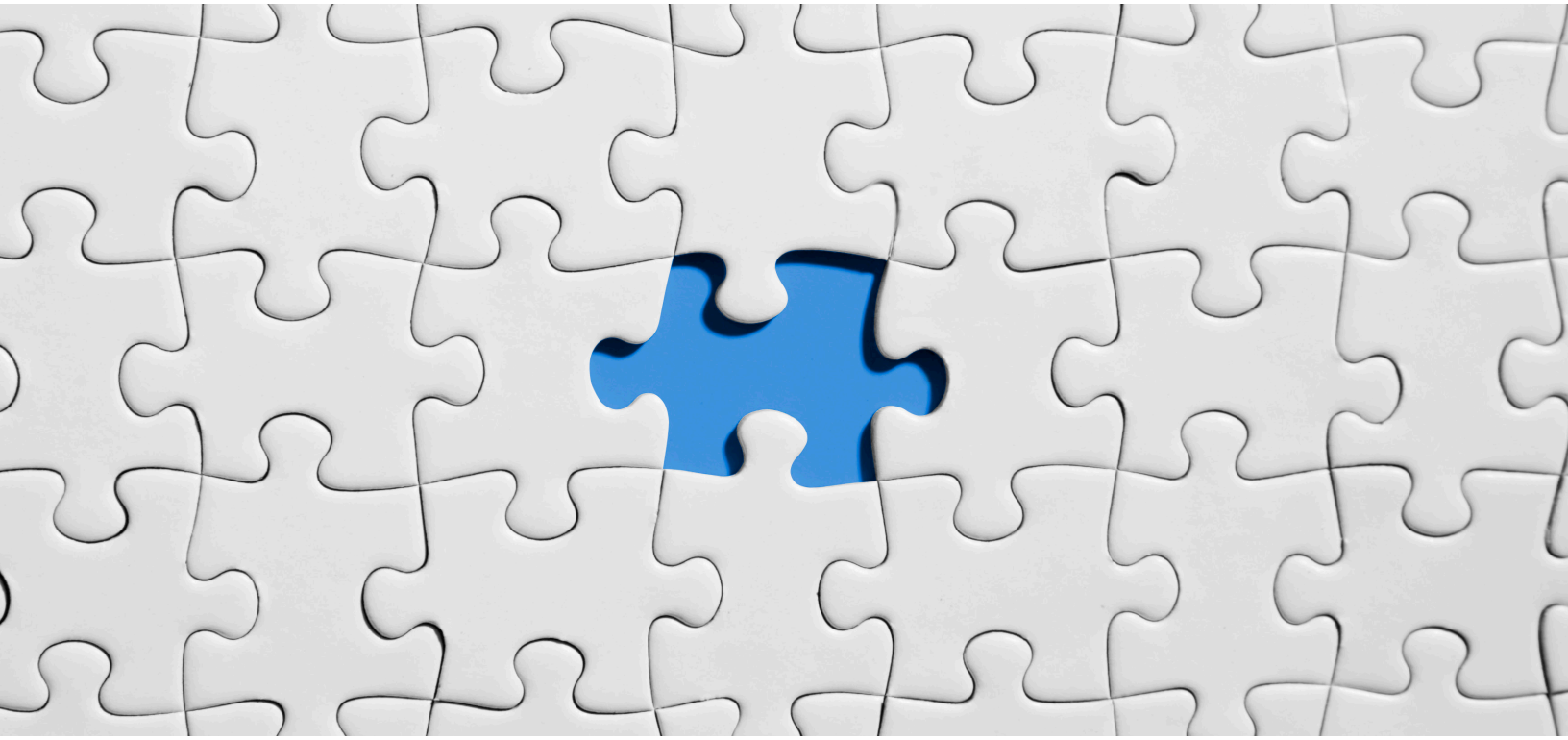
DELL EMC

RECOVERING MAILBOX ITEMS WITHOUT NETWORKER_GLR



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Knowledge Sharing Article

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Introduction

Occasionally, NetWorker Granular Level Recovery (GLR) can not be done due to browse or similar problems. If there is no time to resolve the issue, item level restore can be performed using the method described below (NetWorker and Exchange Management Shell). While using this method, it is explained RDB (Recovery Database) via NetWorker, Soft Recover and Hard Repair via Exchange Management Shell and how to fix "Dirty Shutdown" problem of recovered database from NetWorker and how to restore deleted items via Exchange Management Shell.

Recovery Database (RDB) via NetWorker

1. In the NMM user interface, select the NMM client

2. In the **Recover** > **Exchange Recover Session** > **Database Recovery (default)** > **Advanced Recover**

3. In the **Advanced Recovery** dialog box, select **Recovery Database (RDB) Recovery**, and click **Next**.

4. In the **Recovery Database (RDB) Recovery List** group, to create an RDB, click **Create**.

5. In the **RDB Name** field, type a name for the new RDB.

6. In the **EBD File Path** field, browse and select the file path location for the new RDB.

7. In the **Log File Path** field, browse and select the location for the log file.

Previously, due to a Microsoft requirement, the Exchange Server 2016 databaselogs path and Mailbox databases that reside on the same volume could not be stored in the same file path location. This restriction has been lifted.

8. Click **Create**.

The new RDB is created and appears in the **Manage RDB** dialog box,in **Recovery Database (RDB) List**.

9. Select the created RDB and click **Next**.

The **Exchange Recovery Summary** dialog box appears. This dialog box lists the Exchange Server Recovery options and the NetWorker Recovery Options. It also allows you to review the recovery details before you continue.

10. To continue with recovery, click **Start Recovery**.

11. **Recovery Operation Succeeded.**

** Recovery Database (RDB) via NetWorker is quoted from the NMM for Exchange VSS Release 9.1 User Guide*

Figure 1: Recovery Database (RDB) Operation Succeeded via EMCNetWorker

Soft Recover

1.Recovered Database is being checked. Recovery Database seems to be True.

Command: Get-MailboxDatabase Restore11062017 | select *recovery*

```
\Windows\system32>Get-MailboxDatabase Restore11062017 | select *recovery*

                                                                                Recovery
                                                                                --------
                                                                                    True
```

2.Recovered Database is being assigned to **a.EdbFilePath**.

Command 1: $a=Get-MailboxDatabase Restore11062017

Command 2: $a.EdbFilePath

```
[PS] C:\Windows\system32>$a=Get-MailboxDatabase Restore11062017
[PS] C:\Windows\system32>$a.EdbFilePath


IsPathInRootDirectory : False
PathName              : D:\DBRestore\Restore11062017.edb
IsLocalFull           : True
IsUnc                 : False
DriveName             : D:
ServerName            :
```

3.Recovered Database is being tested.

Command: Test-Path $a.EdbFilePath

```
[PS] C:\Windows\system32>Test-Path $a.EdbFilePath
True
```

4.It looks to be in **"Dirty Shutdown"** state.

Command: eseutil.exe /mh $a.EdbFilePath

```
[PS] C:\Windows\system32>eseutil.exe /mh $a.EdbFilePath

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Initiating FILE DUMP mode...
         Database: D:\DBRestore\Restore11062017.edb
```

```
        cbDbPage: 32768
          dbtime: 29698120 (0x1c52848)
           State: Dirty Shutdown
    Log Required: 71072-71171 (0x115a0-
```

5.After **SoftRecover** (/R), the database was still in **"Dirty Shutdown"** state. Therefore, a Hard Repair (/P) was executed.

Command: eseutile.exe /R E07 /l L:\LogRestore /d D:\DBRestore

```
PS] C:\Windows\system32>eseutil.exe /R E07 /l L:\LogRestore /d D:\DBRestore

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nitiating RECOVERY mode...
   Logfile base name: E07
           Log files: L:\LogRestore
         System files: <current directory>
  Database Directory: D:\DBRestore

erforming soft recovery...
                    Restore Status (% complete)

          0    10   20   30   40   50   60   70   80   90  100
          |----|----|----|----|----|----|----|----|----|----|
          ..................................................
```

Hard Repair

1.Trying to fix "Dirty Shutdown" by **"Hard Repair".**

Command: eseutil.exe /p D:\DBRestore\Restorre11062017.edb /t D:\Tmp\temprepair.edb

```
[PS] C:\Windows\system32>eseutil.exe /p D:\DBRestore\Restore11062017.edb /t D:\Tmp\temprepair.edb

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Initiating REPAIR mode...
        Database: D:\DBRestore\Restore11062017.edb
  Temp. Database: D:\Tmp\temprepair.edb

Checking database integrity.

The database is not up-to-date. This operation may find that
this database is corrupt because data from the log files has
yet to be placed in the database.

To ensure the database is up-to-date please use the 'Recovery' operation.

                      Scanning Status (% complete)

          0    10   20   30   40   50   60   70   80   90  100
          |----|----|----|----|----|----|----|----|----|----|
          ..................................................


Scanning the database.

                      Scanning Status (% complete)

          0    10   20   30   40   50   60   70   80   90  100
          |----|----|----|----|----|----|----|----|----|----|
          ..................................................


Repairing damaged tables.

                      Scanning Status (% complete)

          0    10   20   30   40   50   60   70   80   90  100
          |----|----|----|----|----|----|----|----|----|----|
          ..................................................


Repair completed. Database corruption has been repaired!
```

2.Database goes from **"Dirty Shutdown"** state to **"CleanShutdown"** state and ready to be mounted.

Command: eseutil.exe /mh $a.EdbFilePath

```
[PS] C:\Windows\system32>eseutil.exe /mh $a.EdbFilePath

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Initiating FILE DUMP mode...
         Database: D:\DBRestore\Restore11062017.edb
```

```
        dbtime: 101957386 (0x613bf0a)
         State: Clean Shutdown
 Log Required: 0-0 (0x0-0x0)
```

*After this, we can mount Recovered Database and restore the deleted mailboxes.

Mount Recovered Database

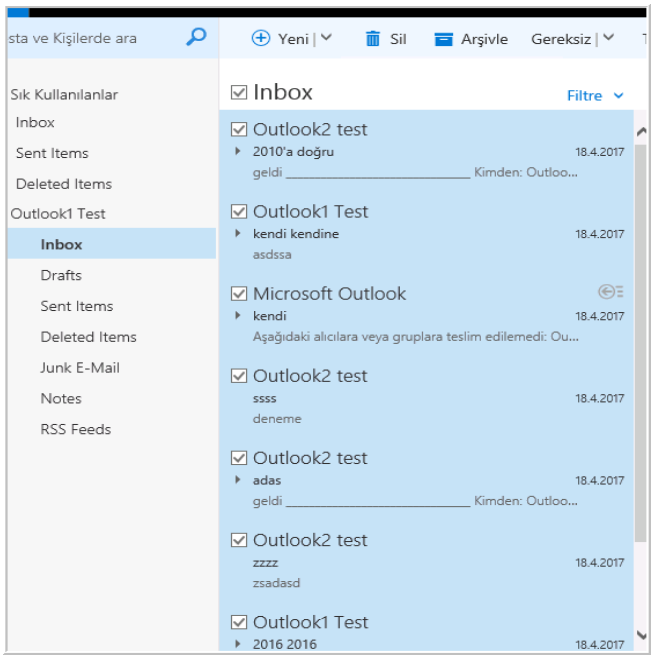
Recovered database is mounted.

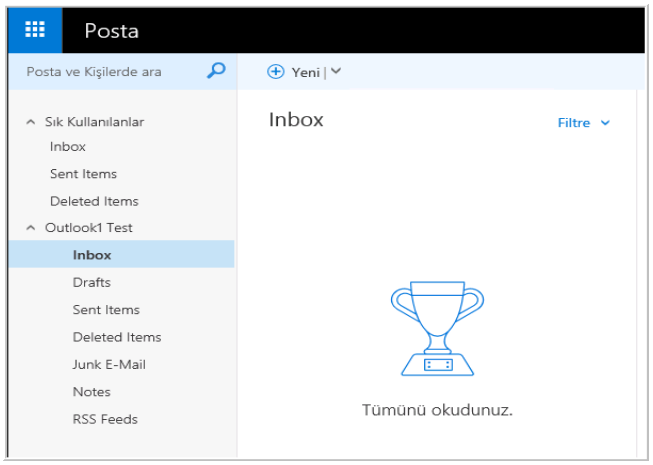
Command: Mount-Database Restore11062017

```
[PS] C:\Windows\system32>Mount-Database Restore11062017
```

Delete All Mail

To test the restore, all email in the **Test Account** was deleted as shown in the following captures:





Restore Mailbox

Test Mailbox restore was issued and was completed without any issues.

Command: New-MailboxRestoreRequest -Name "Outlook1 Test" -SourceDatabase Restore11062017 -SourceStoreMailbox "Outlook1 Test" -TargetMailbox "Outlook1 Test"

```
[PS] C:\Windows\system32>New-MailboxRestoreRequest -Name "Outlook1 Test" -SourceDatabase Restore11062017 -SourceStoreMai
lbox "Outlook1 Test" -TargetMailbox "Outlook1 Test"

Name                                               TargetMailbox                                      Status
----                                               -------------                                      ------
Outlook1 Test                                      [redacted].local/[redacted]AddressList/GenericMailA... Queued
```

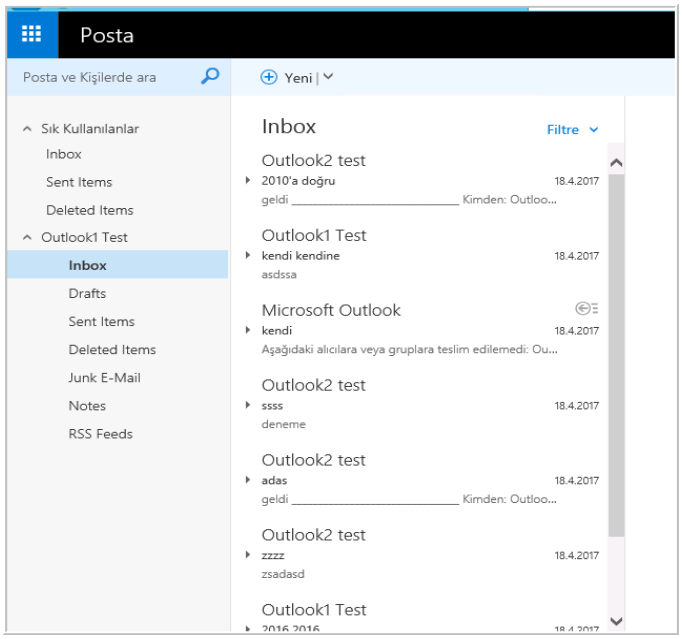
Command: Get-MailboxRestoreRequest "xx.local/xxAddressList/GenericMailAccounts/Outlook1 Test\Outlook1 Test"

```
[PS] C:\Windows\system32>Get-MailboxRestoreRequest "[redacted].local/[redacted]AddressList/GenericMailAccounts/Outlook1 Test\Out
look1 Test"

Name                                               TargetMailbox                                      Status
----                                               -------------                                      ------
Outlook1 Test                                      [redacted].local/[redacted]AddressList/GenericMailA... Completed
```

After Restore

Test Mailbox restore completed.



Conclusion

With this method, Exchange Mailbox Restore is easily done. If NetWorker Granular Level Recovery is not successful, this method can be used easily, as well.

Bibliography

1. Dell/EMC_NetWorker Module for Microsoft for Exchange VSS Release 9.1 User Guide
2. NetWorker 9.1
3. Exchange2016 Server