

Restoring Exchange 2000; When Transaction Logs Have Been Lost

Background

The Exchange transaction logs are 5MB files used to maintain a record of every message stored in a storage group and provide fault tolerance in the event that a database must be restored.

This document describes what to do if the exchange transaction logs are deleted and you are unable to mount your exchange datastores.

This document assumes that you have no way of restoring the transaction logs and that you have not used an Exchange aware backup system to backup the database.

Warning: It is likely that you will lose some data as a result of this process and this should only be used as a last resort.

Method

Before you Begin: Make backups of both of the public and private datastore folders as they exist now. These are usually stored on different drives.

(e.g. the public store may be located in c:\program files\exchsrvr\MDBDATA and the private store located in d:\exchsrvr\MDBDATA.)

Once you have made backup copies of both of these folders you are ready to begin the recovery process:

1. Take a look in the public datastore folder (c:\program files\exchsrvr\mdbdata). Delete any files other than the pub1.edb and pub1.stm files. This includes any remaining .log or .chk files.
2. Do the same for the private mdbdata folder, make sure that the only files in this folder are priv1.edb and priv1.stm.
3. Stop the Microsoft Information Store service.

The next step is to run the eseutil program to return the datastores to a consistent state.

4. Open the command prompt and navigate to c:\program files\exchsrvr\bin.
5. Type the following (the path may vary depending on the location of your private store):

```
eseutil /p "d:\exchsrvr\MDBDATA\priv1.edb"
```

A warning will appear telling you that data maybe lost, click 'OK'.

The eseutil program will process the private data store and return it to a consistent state. Eseutil processes about 4Gb of data an hour so this may take some time depending on the size of the private store.

6. Repeat the process for the public store:

```
Eseutil /p "c:\progra~1\exchsrvr\MDBDATA\pub1.edb"
```

Click 'OK' when the warning message appears. Allow eseutil to process the pubic store.

Now that the stores have (in theory) been returned to a consistent state we need to see if they are mountable:

7. Restart the Microsoft Exchange Information store (and any other exchange services that have been stopped).

If both of the stores are in a consistent state, starting the Information store service should cause both of the Stores to mount automatically.

8. To check they have mounted go to the Exchange System Manager Navigate to 'First Storage Group'. The Mailbox Store and Public Folder store will have a red mark next to them if they have not been mounted correctly.

NB: If either of the stores has not mounted; go to the section entitled 'My Data Store Won't Mount', at the end of this document.

Assuming that both of your stores have mounted correctly you now need to dismount them and run an integrity check on both of the datastores to make sure that they do not contain any errors.

Leave all of the exchange services running (including the information store service) whilst you run this integrity check.

9. Using the command prompt again; navigate to c:\program files\exchsrvr\bin. Run isinteg as follows:

```
isinteg -s servername -fix -test alltests
```

You will be asked which store you want to check/fix (e.g. 1 for private, 2 for public). Check the private store first.

isinteg will run about 20 tests on the private data store. Once it has completed these tests, you will be able to look at the report for each test.

10. Looking at each line of the isinteg report, see if isinteg has noted any errors or fixes (e.g. "4 errors, 3 fixes").

If errors or fixes have occurred, run isinteg again on the same datastore. Do this until the report shows 0 errors 0 fixes on each line of the tests. You may have to do this three or four times.

11. Now repeat steps 9 & 10 for the public datastore.
12. Once you have completed the isinteg integrity checks, all you have to do is remount the public and private datastores from the exchange system manager and everything *should* work as normal.

Job Done.

My Data Store Won't Mount

If either of the stores hasn't mounted you may be in trouble. You need to speak to Microsoft at this stage because you are potentially facing data loss with the unmountable store, be it public or private.

It may be worth repeating the eseutil process on both of the databases and attempting to mount them again. Check that you have any anti-virus software disabled when you do this.

In a situation where you are able to manually mount the private store but not the public store, and you are prepared to loose all of the data in the public store; then it is possible to create a new (empty) public store using the following method:

1. Stop the information store service. Dismount the private store if it is mounted.
2. Delete the entire contents of the public mdbdata folder (c:\program files\exchsrvr\mdbdata)

NB: This includes any log files that have just been created by mounting the private store (if this folder is also the default location for the transaction logs). Remember; you have returned the private database to a consistent state. It is not yet dependent on these transaction logs.

3. Restart the information store service.
4. Open the Exchange System Manager and Navigate to 'First Storage Group'.
5. Mount the Private Store (Mailbox Store).

6. Attempt to mount the Public Folder Store; You should receive an error message saying the store doesn't exist and asking if you would like to create a new store. Click OK/Yes.

Exchange will now create a completely new public store that subsequently mounts itself.

You now need to Return to Step 9, dismount both of the stores and run the isinteg integrity check on the private mail store (you do not need to do this for the public store because it has just been created).