



# User Guide



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## 1. Why Use Clean Shutdown?

Clean Shutdown saves you time and money!

Shipping your data out to a lab for recovery can take days before recovery is complete. If your company restores databases for litigation or mitigation, or if you work for a forensic company, Clean Shutdown is a must-have time-saving tool. If you are a recovery company, and your in-house utility will not open the .edb file because of system corruption, this Clean Shutdown will enable your in-house utility to open the file.

*Clean Shutdown has successfully passed rigorous Microsoft testing.  
Clean Shutdown has earned Microsoft ISV (Independent Software Vendor) competency certification running on a Windows Server 2003 platform.*

### Return Your Mailstore to a Clean Shutdown State

If your database did not dismount gracefully, or if you performed a restore, MS Exchange writes a "dirty" bit that marks the database as being in a dirty shutdown state. Usually, when the Exchange database is in an inconsistent or dirty shutdown state, the database is not corrupted; the database is really intact.

Using CLEAN SHUTDOWN, you can bring any version of the MS Exchange mailstore (5.5, 2000, 2003 & 2007) back to a clean shutdown state. If your database is not corrupted, you can move out your .log files and .chk files and mount the database again in just minutes. Exchange can generate new log files based on your current database. There is no need to run an expensive and time-consuming repair utility or restore the entire database from a backup.

**Note:** Often, you can mount the database even if there is corruption. Then you can exmerge the data out to PST files, create a blank store, and merge the exported data back into your mail store. Once the database is back in a clean shutdown state, if you feel that there may be corruption, you can run Isinteg, which is the database repair utility. Many confuse esetuil as the database repair utility, but in fact esetuil is a "File Level" repair utility. As a precaution, before running any utility, make sure you have a file-level copy of your database files.

### Resolve Stream File Mismatch, Log File Time Stamp, and Disk IO Errors

Clean Shutdown resolves the stream file mismatch error, log file timestamp errors, and log file/database mismatches.

A stream file mismatch with the .edb file is a common error that is easily resolved. Clean Shutdown writes a new signature to the .stm file and the .edb file and backs up your original database signature, allowing you to restore it to both the .edb and .stm files.

Often, when running esetuil, you almost immediately receive a DISK IO. Clean Shutdown resolves this error. (Once the database is backed up and running, you should merge the data out immediately or bring up a recovery storage group to get the data out.)

### Repair MS Exchange Server Errors

Clean Shutdown repairs the following MS Exchange Server errors that are associated with a dirty shutdown state:

- JET\_errBadDbSignature-531
- JET\_errDatabaseStreamingFileMismatch-540
- JET\_errDatabaseDirtyShutdown-550
- JET\_errConsitentTimeMismatch-551
- JET\_errInvalidDatabaseld -1010
- JET\_errInvalidDatabase-1028
- JET\_errDatabaseSignInUse-1222
- JET\_errDatabaseCorruptedNoRepair-1224
- JET\_errFileInvalidType -1812

## 2. Running Clean Shutdown

Clean Shutdown has a very simple user interface, takes only minutes to run, and saves time and money!

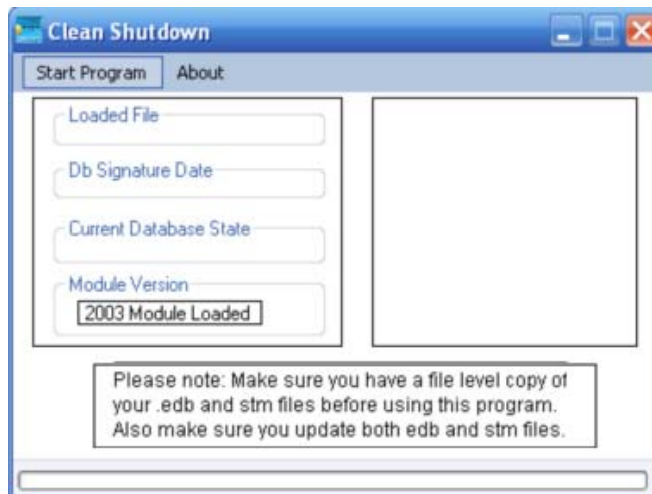
### Before Running Clean Shutdown...

- As a precaution, make sure you have file-level COPIES of your EDB and STM files.

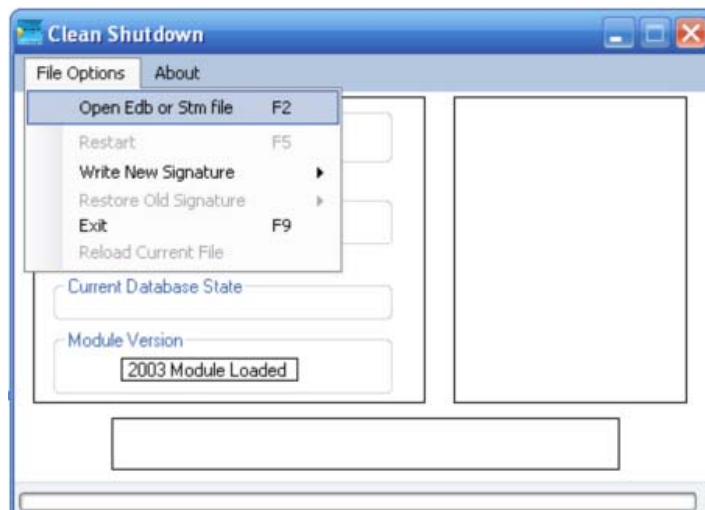
### Running Clean Shutdown...

1. Load (start) Clean Shutdown.

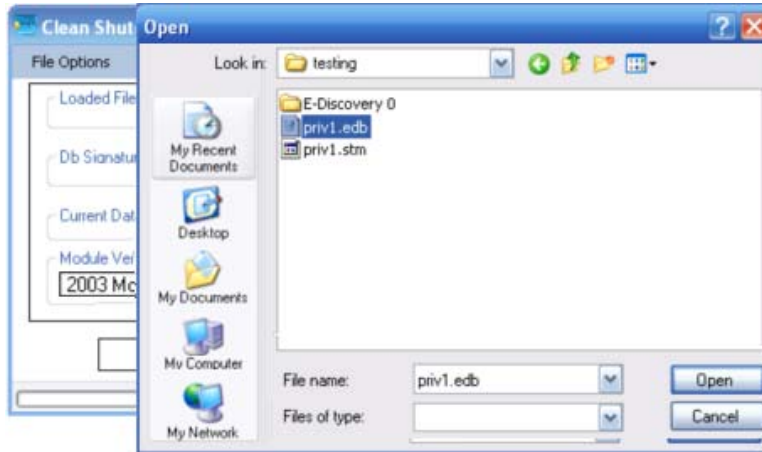
The Clean Shutdown main page is displayed:



2. Verify that the correct module is loaded for your version of Exchange Database.  
If you have purchased multiple modules, you must load the correct module for your Exchange database version. For example, for MS Exchange 2003, you must load the Clean Shutdown 2003 module.
3. Click Start Program.  
Clean Shutdown runs the indicated loaded module.
4. Click File Options > Open Edb or Stm file:



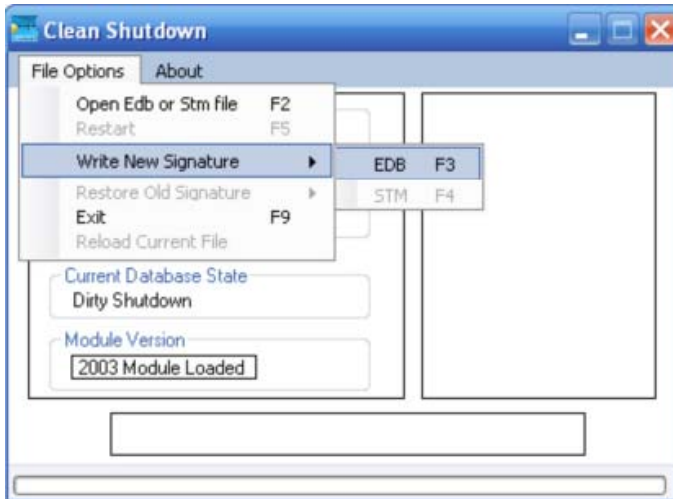
5. Browse for the file you want to open:



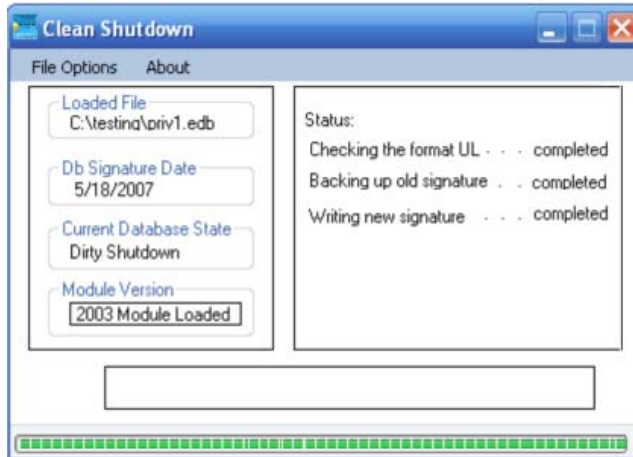
When the file is loaded, the Clean Shutdown displays the Loaded File name, Db Signature Date, and Current Database State:



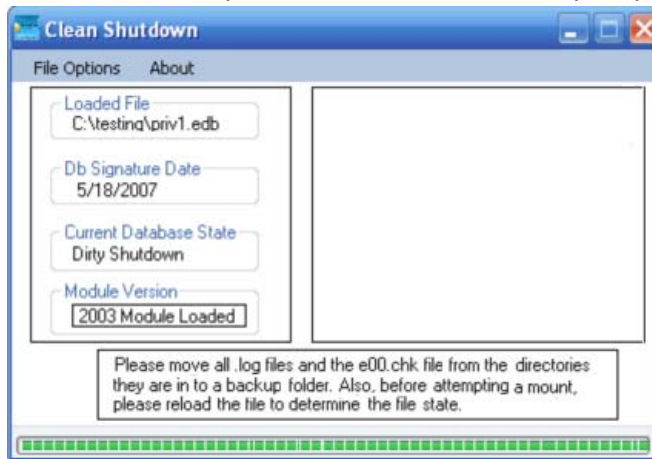
6. If the current database state is "Dirty Shutdown," click File Options > Write New Signature > EDB:



Clean Shutdown checks the UL format version, backs up the existing database signature, and then writes a new signature:



7. If there is an STM file, click File Options > Write New Signature > STM. Clean Shutdown updates the STM file and then prompts you to further action:



8. After updating all mailbox files, do the following:
  - Remove all .log files associated with the database.
  - Remove the e00.chk file (version 5.6+) or the edb.log file (version 5.5 and below)
9. Optionally, click File Options > Reload Current File to verify the database state:

