

# Migrate SQL server to TDE encrypted location

## Step-by-step guide

1. [Set up TDE](#)
2. [Install TDE client](#)
3. Create a smartpoint to the database location on disk
  - a. The SQL Smartpoint must allow these apps encrypt/decrypt permission. Other applications may be necessary depending on the environment.
    - i. C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\Binn\sqlsvr.exe
    - ii. C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\Binn\sqlagent.exe
    - iii. C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\Binn\ReportingServicesService.exe
    - iv. C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\Binn\msmdsrv.exe
    - v. C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\Binn\AccessToSql.exe
    - vi. C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\Binn\DatabaseMail.exe
    - vii. C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\Binn\SQLMaint.exe
4. To move a SQL server database, the database must be detached, then the files must be moved to a new location and then the database can be attached again.

### Change the file locations with an ALTER DATABASE command:

```
USE master; --do this all from the master
ALTER DATABASE foo
MODIFY FILE (name='DB_Data1'
             ,filename='X:\NewDBFile\DB_Data1.mdf'); --Filename is new location
```

Note: Changes to the path do take effect immediately, but will be applied the next time the database starts.

### Take the database offline

Using WITH ROLLBACK IMMEDIATE will disconnect all users and roll back all currently open transactions:

```
ALTER DATABASE foo SET OFFLINE WITH ROLLBACK IMMEDIATE;
```

### Copy the files to the new location

Copy the files to the new location using your

```
COPY C:\sqlfiles\DB_Data1.mdf X:\NewDBFile\DB_Data1.mdf
```

Note: Do not use any "Move" functions to copy the database files to their new location or transparent disk encryption will not be applied.

### Bring the database online

```
ALTER DATABASE foo SET ONLINE;
```

## Related articles