

Knowledge Base Article

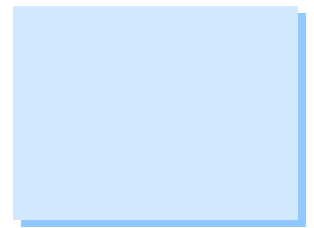
Product Group: Software
Product: SQL Server database file
Version:

Abstract

This article discusses how to improve SQL server performance by moving database files to separate drives.

Overview

On occasions customers experience performance issues with the database as a result of increased I/O operations. I/O operations with database files include the data file and the log file. In this case for Analyst databases most customers have two files, skfuser.mdf and skfuser_log.ldf.



The example and steps below describe moving a log file (the skfuser log file) from a location on "C" drive to one on "D" drive. The example can be easily adapted for a data (mdf) file.

Prerequisites

- Stop all services connecting to skfuser database or Analyst. Services include Transaction Server, IMX service, etc.
- Display the location and status of the skfuser files before processing any changes, using:

```
SELECT name, physical_name AS NewLocation, state_desc AS
OnlineStatus
FROM sys.master_files
WHERE database_id = DB_ID(N'skfuser')
```

1	name	NewLocation	OnlineStatus
2	skfuser	C:\Databases\DataFiles\skfuser.mdf	ONLINE
3	skfuser_log	C:\Databases\DataFiles\Vale\skfuser_log.ldf	ONLINE

Note:

Please execute each statement in the steps below separately, before proceeding with the next step.

Step 1

- Alter the logical file location within SQL Server to match the path of the physical location where the log file is going to be placed. To do this use:

```
ALTER DATABASE skfuser
MODIFY FILE ( NAME = skfuser_log, FILENAME =
'D:\DatabaseLogFiles\skfuser_log.ldf')
```

Step 2

- Disconnect the skfuser database from all external activities by taking it offline, using:

```
ALTER DATABASE skfuser SET OFFLINE
```

Step 3

- With the database offline, move the skfuser_log.ldf file to the new location:

Drag and drop (or cut and paste) skfuser_log.ldf to the location specified in step 1.

Step 4

- Bring database back online for the changes to take effect and so users can resume normal activities.

```
ALTER DATABASE skfuser SET ONLINE
```

- Verify that the file move was successful by displaying current location and status in SQL Server:

```
SELECT name, physical_name AS NewLocation, state_desc AS  
OnlineStatus  
FROM sys.master_files  
WHERE database_id = DB_ID(N'skfuser')
```

1	name	NewLocation	OnlineStatus
2	skfuser	C:\Databases\DataFiles\skfuser.mdf	ONLINE
3	skfuser_log	D:\DatabaseLogFiles\skfuser_log.ldf	ONLINE

For further assistance, please contact the Technical Support Group by phone at 1-800-523-7514 option 8, or by e-mail at TSG-CMC@skf.com.