

# Log File Size Issues(GenerallywithLargedatabases)

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## Log File Size Issues (Generally with Large databases)

### Symptom

This can happen when customers are frequently scaling between large and small databases. One such example can be scaling from S9 to VCore.

### Cause

If a service tier has a large log max size (Ex: S9) which in turn allows a very large transaction log and customer next scales the database to vCore edition which has a log max size based on 30% of the database maximum size, see for example [Scale single database resources - Azure SQL Database | Microsoft Docs](#) <sup>1</sup> where we say "The amount of data that can be stored in the data files of a database is limited by the configured data storage max size. In addition to that storage, Azure SQL Database automatically allocates 30% more storage to be used for the transaction". So during this scale into the vCore pool we attempt to downscale the log to 30% of the database max size.

So say the customer has set the database MaxSize to 1 GB, so 30% of 1GB is the new log max size. This fails for a period of time because the actual log size is larger than 300MB until the log size becomes small enough the scale operation is stuck.

### Mitigation/Workaround

To work around this scenario, you can increase the database max size to a larger value before scaling, to ensure there is ample log size when downscaling.

### How good have you found this content?

