

Rebuild or Create Index fails with Could not allocate a new page for database

Last updated by | Vitor Tomaz | Feb 24, 2023 at 3:32 AM PST

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Issue

When the customer tries to Rebuild or Create an Index he gets the error message:

Could not allocate a new page for database 'x' because of insufficient disk space in filegroup 'PRIMARY'

Investigation/Analysis


You can check the database size on ASC by going to the **Performance** tab -> **Space Issues**.

You can also use Kusto:

```
MonDmIoVirtualFileStats
| where LogicalServerName =~ "server_name"
| where db_name =~ "database_name"
| where is_primary_replica == 1
| where type_desc = 'ROWS'
| project TIMESTAMP, type_desc, spaceused_mb, max_size_mb, size_on_disk_mb =(size_on_disk_bytes/1024/1024), fil
```

Mitigation

Add more space to the database or Managed Instance, if needed.

[SORT ON TEMPDB](#)  can help in some cases (if the issue is on the database max size), since the sorting of intermediate runs are stored on tempdb and not on the database datafile.

Note that this last option will only applies to the sort runs needed to build the index. In the end the database must have space to store the index.

When you create a nonclustered index, you must have available as free space:

- If SORT_IN_TEMPDB is set to ON, there must be sufficient free space in tempdb to store the sort runs, and sufficient free space in the destination filegroup to store the final index structure. The sort runs contain the leaf rows of the index.

How good have you found this content?

