

data files. The shared global memory pool also provides memory used for satisfying the memory requirements of the `UNDO_BUFFER_SIZE` option used with `CREATE LOGFILE GROUP` and `ALTER LOGFILE GROUP` statements, including any default value implied for this options by the setting of the `InitialLogFileGroup` data node configuration parameter. `SharedGlobalMemory` can be set in the `[ndbd]` or `[ndbd default]` section of the `config.ini` configuration file, and is measured in bytes.

The default value is `128M`.

- `DiskIOThreadPool`

Version (or later)	NDB 8.0.13
Type or units	threads
Default	2
Range	0 - 4294967039 (0xFFFFFFFF)
Restart Type	N (NDB 8.0.13)

This parameter determines the number of unbound threads used for Disk Data file access. Before `DiskIOThreadPool` was introduced, exactly one thread was spawned for each Disk Data file, which could lead to performance issues, particularly when using very large data files. With `DiskIOThreadPool`, you can—for example—access a single large data file using several threads working in parallel.

This parameter applies to Disk Data I/O threads only.

The optimum value for this parameter depends on your hardware and configuration, and includes these factors:

- **Physical distribution of Disk Data files.** You can obtain better performance by placing data files, undo log files, and the data node file system on separate physical disks. If you do this with some or all of these sets of files, then you can (and should) set `DiskIOThreadPool` higher to enable separate threads to handle the files on each disk.

In NDB 8.0.19 and later, you should also disable `DiskDataUsingSameDisk` when using a separate disk or disks for Disk Data files; this increases the rate at which checkpoints of Disk Data tablespaces can be performed.

- **Disk performance and types.** The number of threads that can be accommodated for Disk Data file handling is also dependent on the speed and throughput of the disks. Faster disks and higher throughput allow for more disk I/O threads. Our test results indicate that solid-state disk drives can handle many more disk I/O threads than conventional disks, and thus higher values for `DiskIOThreadPool`.

Decreasing `TimeBetweenGlobalCheckpoints` is also recommended when using solid-state disk drives, in particular those using NVMe. See also [Disk Data latency parameters](#).

The default value for this parameter is 2.

- **Disk Data file system parameters.** The parameters in the following list make it possible to place NDB Cluster Disk Data files in specific directories without the need for using symbolic links.
- `FileSystemPathDD`

Version (or later)	NDB 8.0.13
Type or units	filename