

How to increase unload speed in FastReader.

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Note*: The latest copy of this document is available at
<http://www.wisdomforce.com/dweb/resources/docs/parallelextract.pdf>

In order to significantly increase speed you would need to execute FastReader locally on database server, and preferably in DIRECT mode. Then you would be able to reach a speed on average 150,000 - 200,000 rows per second. In this case 10 million rows could be extracted with FastReader in about 1 minute.

The factors that affecting the speed are as following:

- 1) Running FastReader locally (most important one to boost the speed)
- 2) Running FastReader in DIRECT mode
- 3) In case more than 1 CPU is available on the server, the extract can be executed in parallel.
- 4) Storage is important. When better and faster storage, then extract will be faster

Tune parallel extract with two parameters:

"*Threads Number*" is the number of Tables/Extents which are to be extracted simultaneously.

"*Threads per Segment*" is the number of threads which perform extraction of a single Table/Extent. The total number of concurrent extraction threads is calculated by formula:
[Threads Number] * [Threads per Segment]. (Multiply)

If you are extracting a large amount of similarly sized tables then you would set Threads Number to the required concurrency and Threads per Segment would be 1. If you are extracting one/several large tables of different size then you might want to set Threads Number to 1 and Threads per Segment to the required concurrency.

Please note that the parallel execution is limited by the performance of the IO channel as well as the CPU. Usually the desired concurrency is the number of CPU's but if your IO bandwidth is not high then it might be lower. In particular multi channel IO configurations a concurrency of 2 times the number CPUs can further improve performance.

But let's do it simple at beginning. If for instance there are 4 CPUs are available on the server. If there is a need to unload many different tables then set Threads Number=4 and Threads per Segment=1. If you have few very large tables, then make it opposite: Threads Number=1 and Threads per Segment=4