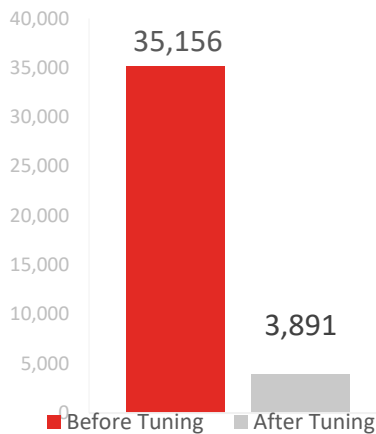


# Performance Tuning Report

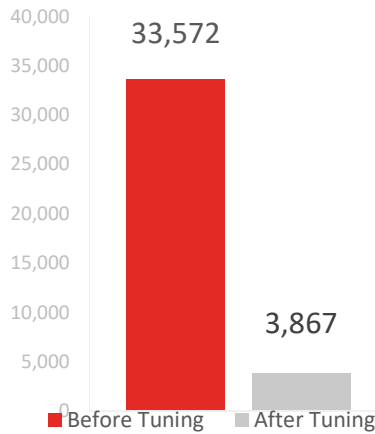


**CPU**

CPU is **9X**  
times faster

OR

**904%**  
CPU improvement

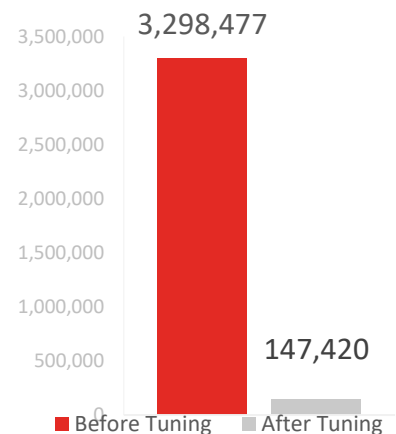


**Speed**

Speed is **9X**  
times faster

OR

**868%**  
Speed improvement



**Disk**

Disk is **22X**  
times faster

OR

**2,237%**  
Disk improvement

## Description:

Time to run stored proc **before** tuning: **34s**  
Time to run stored proc **after** tuning: **4s**

TextData	Duration	Reads	Writes	CPU
<b>BEFORE tuning</b>				
-- Create a Queue declare @rc int ...	9	60	0	0
exec BIL_ECLAIM_ ...	35998	3298477	15	35156
exec BIL_ECLAIM_ ...	33572	3298508	9	33578
exec BIL_ECLAIM_ ...	33200	3298495	9	33172
<b>AFTER tuning</b>				
TextData	Duration	Reads	Writes	CPU
-- Create a Queue declare @rc int ...	2	0	0	0
exec [SP_MV_Tuning] 1166,0,'U','01...	3859	147420	133	3828
exec [SP_MV_Tuning] 1166,0,'U','01...	3853	147424	140	3843
exec [SP_MV_Tuning] 1166,0,'U','01...	3867	147430	129	3891

### Technical Background:

Most SQL Servers bottleneck on Disk access (or disk “reads”).

It’s not CPU or RAM – which most customers often suspect first.

And that makes a lot of sense. Here is why.

Inefficient queries scan (or read) lot of data. Data read in is stored in RAM. As more data is read in, “older” data is pushed out from RAM. If there isn’t enough RAM to keep ALL data in memory (which is often not possible), SQL Server has to read from disk – and that is the slowest operation SQL Server can do.

When query can be tuned to read 10 rows vs 10M – less CPU and RAM automatically are necessary. Therefore, tuning for less disk “reads” is often the primary goal.

To the end user nothing is more important than Speed (or Duration of the query) though.

Tuning to reduce CPU/RAM resources are helpful too.

When queries are tuned to need less CPU & RAM, it means that same server now has more capacity. Which means that same server can process double or triple the load. Which means it extends lifespan of the same server. Which means hardware upgrades can be pushed out further into the future.

**If you want your SQL Server to go faster, let us know! We would love to have you as a client!**