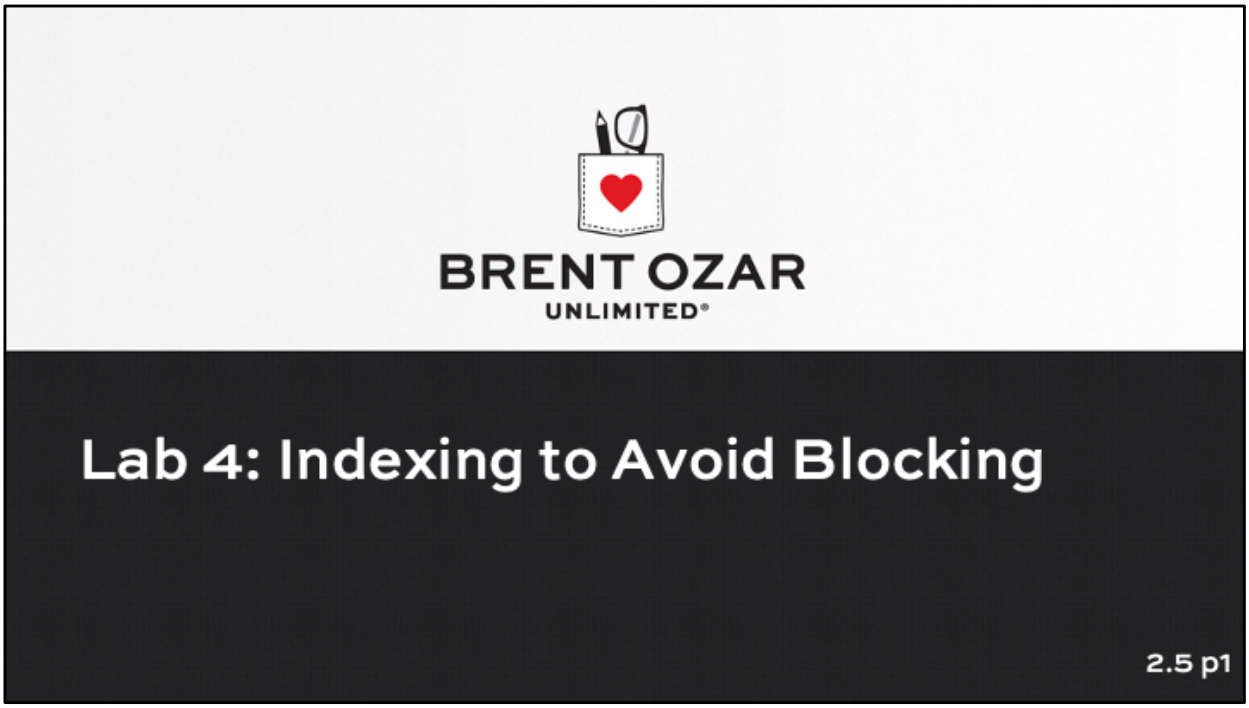
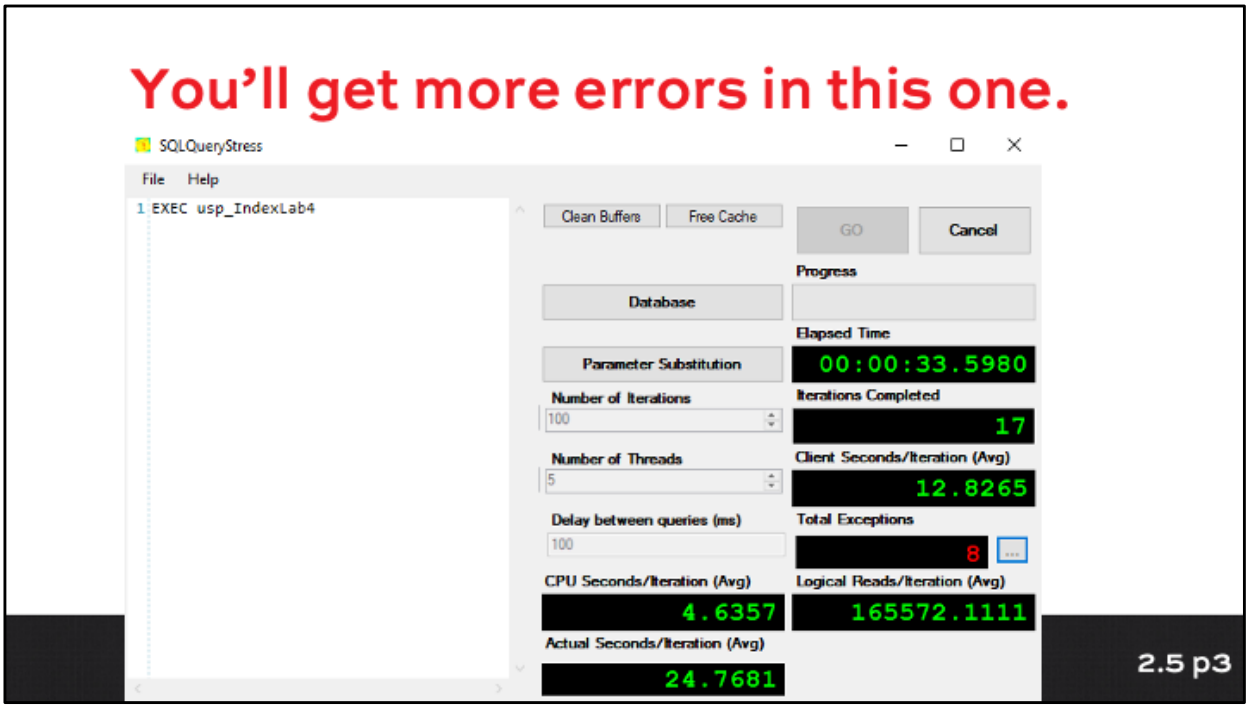


Setting up for lab 4 (20 minutes)

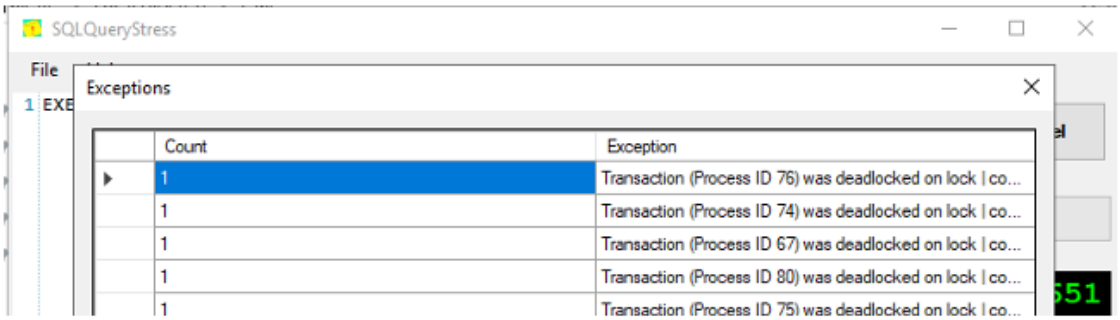
1. Restart your SQL Server service (clear all stats)
2. Restore your StackOverflow database (Agent job)
3. Copy & run the setup script for Lab 4
4. Start SQLQueryStress with the lab #4 workload:
    1. File Explorer, \Labs, SQLQueryStress.exe
    2. Click File, Open, \Labs\IndexLab4.json, Go

In this one, lots of deadlock exceptions are expected.

2.5 p2



They're gonna be deadlocks.



2.5 p4

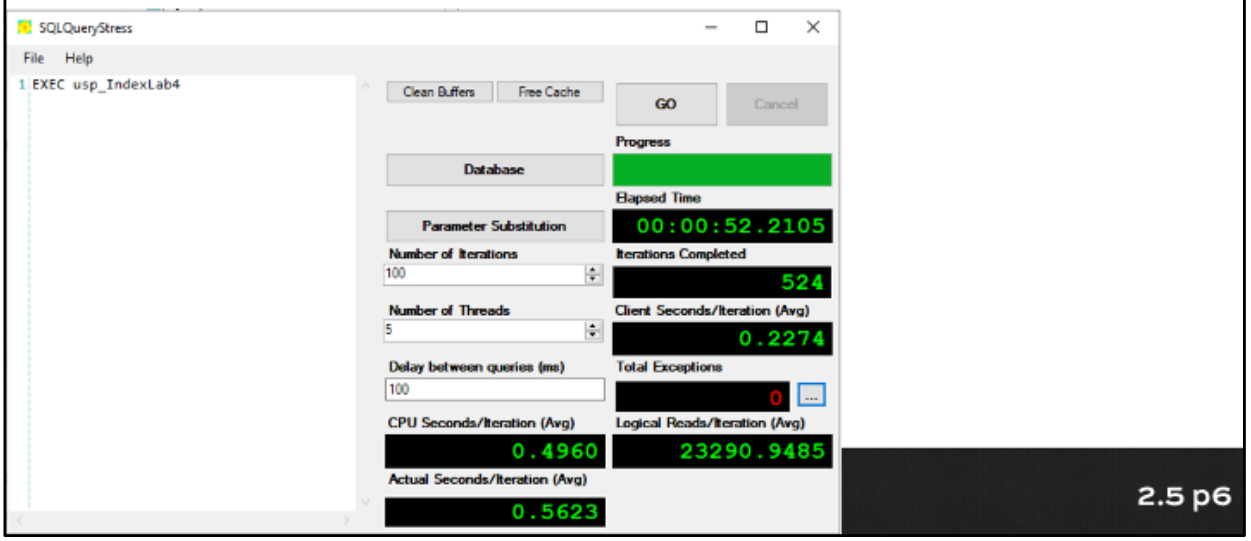
You can use any tool in this lab.

I'll just flat out tell you: you have blocking problems.

1. Use sp_BlitzIndex, sp_BlitzCache, sp_BlitzLock, sp_BlitzWho, sp_WhoIsActive, or all five.
2. Script out changes you want to make, aiming for:
   - 5 or less indexes per table
   - 5 or less fields per index
3. In Slack, tell me what index changes you made, and why.

2.5 p5

With just index changes, you can get the load test to run in 1 minute.



How I'd budget this hour

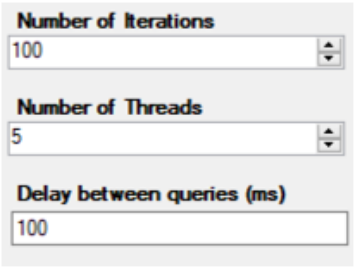
5 minutes to pick a query or table: run sp_BlitzCache, sp_BlitzIndex, or sp_BlitzLock. Focus on one query or index.

10-15 minutes: design an index to make it go faster, then run the query again to measure the impact.

Repeat that process 3x-4x to improve a few queries, asking permissions in Slack before making changes.

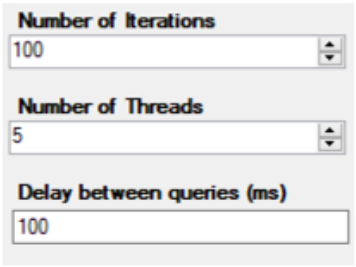
2.5 p7

Want to do the lab in the morning?



Instead of 100 iterations, change that to 1000000 so it runs overnight and piles up lots of data in the DMVs.

If you think you've fixed it, you can push even more load.



SQLQueryStress is doing 5 threads, 100ms delay between queries.

After tuning, if you want to hit even more batch requests per second, try more threads and/or less delay.