

# Lab 4: Planning the Work

To prepare, run the Agent job to restore Stack Overflow.

## You have a (?) VM.

We're going to use the StackOverflow database, but the rest of your server is a mystery.

Don't take anything for granted.



### Setting up for the lab

- 1. Restart the SQL Server service (clears stats)
- 2. Restore your StackOverflow database
- 3. Copy & run the setup script, will take 1-3 minutes: BrentOzar.com/go/serverlab4
- 4. Start SQLQueryStress:
  - 1. File Explorer, D:\Labs, run SQLQueryStress.exe
  - 2. Click File, Open, D:\Labs\ServerLab4.json
  - 3. Click Go



#### What you're going to see

In SQLQueryStress, "Iterations Completed" won't move very quickly. (Or at all.)

Take long samples of waits: sp\_BlitzFirst @Seconds = 60, @ExpertMode = 1

See what queries are causing those waits: sp\_BlitzCache @SortOrder = 'reads'

Investigate to see if indexes will help



## How I'd spend this hour

- Setup: 5-10 minutes
- Review current state: 20-30 minutes
  - Server health check with sp\_Blitz
  - · Wait stats now with sp\_BlitzFirst
  - · Make your game plan for what you want to do
- Post your assessment in Slack, and I'll review it.



#### Sample assessment

SQL2019A is heavily overloaded, and it's spending most of its time waiting on reads from storage.

After briefly reviewing queries & indexes involved in the reads, the next step is:

- Tune usp\_UpdateUserComments to fix sargability
- · Design better nonclustered indexes for dbo.Users

