Fundamentals of Query Tuning
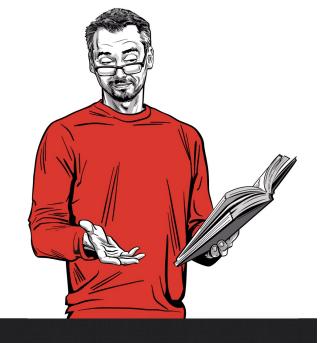
Up first: intros & logistics.

BRENT OZAR
UNLIMITED

99-05: dev, architect, DBA
05-08: DBA, VM, SAN admin
08-10: MCM, Quest Software
Since: consulting DBA

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Introduce yourself in Slack:

	Developer	Development DBA	Production DBA
Write C#, Java code	Daily		
Build queries, tables	Daily	Sometimes	
Tune queries	Sometimes	Daily	
Design indexes		Daily	
Monitor performance		Daily	Sometimes
Troubleshoot outages			Daily
Manage backups, jobs			Daily
Install, config SQL			Sometimes
Install, config OS			Sometimes

Module 1 Slide 3

Slack pro tips

Accidentally close your browser? Want to share screenshots? Lots of pro tips: BrentOzar.com/slack

To share code or T-SQL, click the + sign next to where you type text in, and choose "code or text snippet."

To share files, upload at Imgur.com, paste URL here.

No direct messages please.

Keep the questions on-topic.

Module 1 Slide 4

We're going to cover

- How SQL Server builds plans in phases

- How to find the right slow queries to tune

- How parameters influence cached plans

- How to improve estimation accuracy

- 5 common T-SQL antipatterns
  (and how they wreck cardinality)

We're using Stack Overflow data.

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XML dump: archive.org/details/stackexchange

SQL Server db: BrentOzar.com/go/querystack

StackOverflow2013 database (50GB)
(but you can use newer/larger ones too –
it'll just take longer to create indexes)

About my setup

SQL Server 2022
(but the database will usually
be in an older compat level)

SQL Server Management Studio 19

StackOverflow2013 50GB database

VM with 4 cores, 32GB RAM

Let's do this!