



BRENT OZAR
UNLIMITED®

Mastering Parameter Sniffing

**Intros, logistics, and
a quick recap of fundamentals.**

1.1 p1

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

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Slack pro tips

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

No direct messages please – use
the public room.

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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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My job: 2-day SQL Critical Care®

Day 1, morning: rapidly assess a single SQL Server, database indexes, queries running against it, team

Day 1 afternoon & day 2 morning: write findings

Day 2 afternoon: deliver findings & training to get the team out of the emergency, quickly

Clients constantly call about parameter sniffing: this problem isn't going away.

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Recapping the Fundamentals



In Fundamentals, we covered

What parameter sniffing is (and isn't)

The kinds of queries that are susceptible

Lab: write a query that's susceptible

See what triggers sniffing emergencies

Learn how to react to emergencies

Lab: tackle a sniffing emergency

Understand why you can't test using local variables



The biggest takeaways

You were doing the things that cause emergencies:
rebuilding indexes, updating stats

They caused emergencies when SQL re-evaluated:
parallelism, seeks vs scans, memory grants

To react to parameter sniffing emergencies:

1. `sp_BlitzCache`
2. Save the bad plan, remove it from cache
3. Then start making it less susceptible



**Parameter sniffing
rarely goes away.**



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**We just use tools to
reduce the effects.**

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This class covers:

Reducing the stench via:

- Index changes
- Query changes
- System-level changes

How to gather:

- Parameters with issues
- Varieties of plans

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To the demos!

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