

**Username:** Pralay Patoria **Book:** Under the Hood of .NET Memory Management. No part of any chapter or book may be reproduced or transmitted in any form by any means without the prior written permission for reprints and excerpts from the publisher of the book or chapter. Redistribution or other use that violates the fair use privilege under U.S. copyright laws (see 17 USC 107) or that otherwise violates these Terms of Service is strictly prohibited. Violators will be prosecuted to the full extent of U.S. Federal and Massachusetts laws.

## Summary

Maybe you're wondering why you needed to know all this. Well, I suppose the short answer is because what happens beyond the .NET boundary is no longer a mystery. .NET is built on top of the Windows API, and so its impacts and limitations come from there as well.

There will be a knock-on effect from understanding lower-level memory, not least from when you are using performance counters to analyze performance of a server. Many of the metrics available should now make a lot more sense and, taken in concert with how .NET itself is behaving, will now better complement each other to give you a much fuller picture of the system's behavior.

Stopping your education at the .NET level always leaves you open to that uncertainty about "what happens from this point?" Don't get me wrong, abstractions are incredibly useful and, when the systems we're working with are as complex as this, absolutely necessary. But it doesn't hurt to have a deeper understanding.

If you started this book with little or no knowledge of .NET memory management and you've made it this far, then you've finished with a pretty comprehensive understanding of the whole subject. And make no mistake, that's a good thing, because what you do in code will affect how these systems behave, which will determine how your application performs. Understanding what goes on under the hood may change for ever how you write your code.

## SQL Server and .NET Tools from Red Gate Software

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Tom Baker Consultant Software Engineer, EMC Corporation



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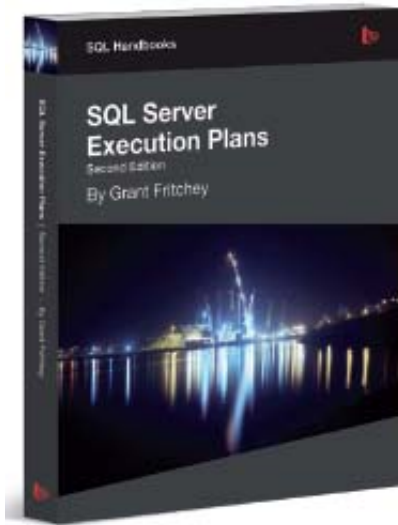
- ➔ Obfuscation: Obfuscate your .NET code to secure it against reverse engineering. Multiple layers of protection defend your software against decompilation and cracking.
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Ed Blankenship  
Technical Lead and MVP

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## SQL Server Execution Plans (2nd Edition)

Grant Fritchey



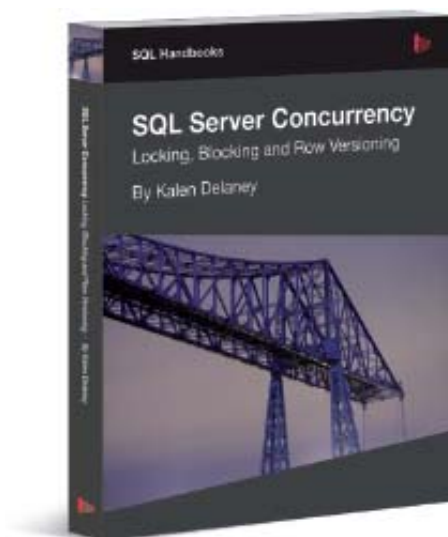
Every Database Administrator, developer, report writer, and any one else who writes T-SQL to access SQL Server data, must understand how to read and interpret execution plans. This book leads you right from the basics of capturing plans, through how to interrupt them in their various forms, graphical or XML, and then how to use the information you find there to diagnose the most common causes of poor query performance, and so optimize your SQL queries, and improve your indexing strategy.

**ISBN:** 978-1-906434-93-9

**Published:** October 2012

## SQL Server Concurrency: Locking, Blocking and Row Versioning

Kalen Delaney



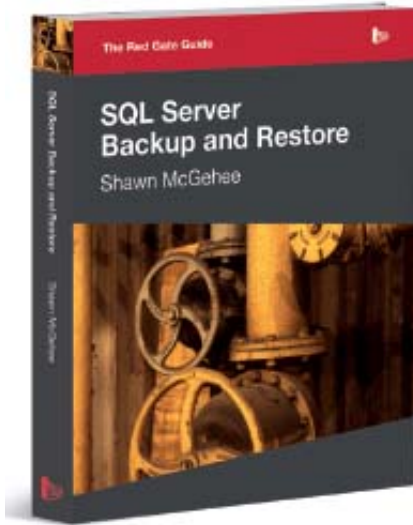
Your application can have impeccable indexes and queries, but they won't help you if you can't get to your data because another application has it locked. That's why every DBA and developer must understand SQL Server concurrency and how to troubleshoot excessive blocking or deadlocking.

**ISBN:** 978-1-906434-91-5

**Published:** September 2012

## SQL Server Backup and Restore

Shawn McGehee



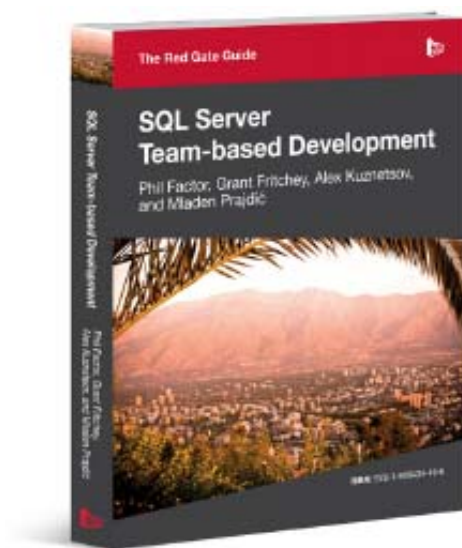
A DBA's tasks from day to day are rarely constant; with one exception: the need to ensure each and every day that any database in their charge can be restored and recovered, in the event of error or disaster. In this book, you'll discover how to perform each of these backup and restore operations using SQL Server Management Studio (SSMS), basic T-SQL scripts and Red Gate's SQL Backup tool.

**ISBN:** 978-1-906434-86-1

**Published:** May 2012

## The Red Gate Guide: SQL Server Team-based Development

Phil Factor, Grant Fritchey, Alex Kuznetsov, and Mladen Prajdić



This book shows how to use a mixture of home-grown scripts, native SQL Server tools, and tools from the Red Gate SQL Toolbelt, to successfully develop database applications in a team environment, and make database development as similar as possible to "normal" development.

**ISBN:** 978-1-906434-59-5

**Published:** November 2010