

(September 15th, 2014)

If you know someone who you think would benefit from being an Insider, feel free to forward this PDF to them so they can sign up [here](#).



Quick Tips for our Insider friends!

Hey Insiders!

This newsletter is coming to you from Redmond where we're at home for three weeks before we dive back into our Immersion Events running in Chicago. Waiting in the mail was my PADI Master Scuba Diver certification (Kimberly is too) was waiting for me when we returned. And now we're back into it full steam ahead today with five late-night user group presentations in Australia and New Zealand over the next few weeks, and classes coming up fast in October.

While we were gone, Kimberly's latest Pluralsight course was published: *SQL Server: Optimizing Stored Procedure Performance – Part I* – just over seven hours of performance tuning goodness around parameter sniffing and recompilation, and she's working on Part II now! Check out her new course [here](#).

Registrations are steadily coming in for the next of our popular SQLintersection conferences, in Las Vegas this November – see [here](#) for details. Our show focuses on the troubleshooting and performance problems that we know you're facing today but will also highlight best practices in architecture, design, and SQL Server 2014. For a total of 6 full days – you can immerse yourself into great content with speakers that you know will deliver! Also, use the discount code “SQLskills” and you can save \$50 off registration.

I read a bunch of books while on vacation and I'd like to share three of them with you here. If you're not into books, skip forward, but I'm amazed at how many of you send me emails about books – very cool!

Firstly, Dorothy Dunnet's [Niccolò Rising: The First Book of The House of Niccolò](#). This is the first in the 8-part House of Niccolo series set in and around 15th century Bruges (an excellent city to visit). Full of intrigue, complex plots, and rich characters, this is a great book. It follows the rise of a dyers apprentice to the head of an international trading company. I read the second book too ([The Spring of The Ram](#)) and it's just as good. Highly recommended for historical fiction fans.

Secondly, Hampton Sides' [Americana: Dispatches from the New Frontier](#). What an excellent collection of stories! Collected from the early-90s through to 2003, this is like an anthology of the best stories from Outside/Men's Journal and similar (my favorite bits of the magazines) by Hampton Sides. All of them were very interesting and some were page turners - especially the

one about the 9/11 survivors and the first casualty of second Iraq War. Hugely readable and highly recommended.

Lastly, Anthony Beevor's [*D-Day: The Battle for Normandy*](#). This is an absolutely excellent narrative of the D-Day landings and the following several months of fighting up to the liberation of Paris. What seems obvious is that there was incompetence on both sides, especially around Field Marshall Montgomery on the Allied side and Hitler's incessant micro-management of the German side that led to greater losses of troops, civilian French, and widespread destruction in Normandy. I'm not a big war-history buff (yet!) but I found this a thoroughly engrossing book rather than just a dry battle chronology. I really liked that way Beevor could conjure up little vignettes of action to highlight interesting points in the wider battlefield. Highly recommended!

Please [let us know](#) if you liked what you read/saw here and/or have any suggestions for future Quick Tips.

Note: you can get all the prior Insider newsletters [here](#).

Paul's Ponderings

Not a very long one this time... but a very important one IMHO.

If you had to tell your business owners that all data/transactions/records from the last month are completely lost, how would they react? How would your business's clients/customers react?

Not very well, is the likely response. Such a scenario would likely lead to customer losses and therefore monetary losses for the business. Additionally, it would likely result in job losses for those responsible.

So I'm really, really shocked that I continue to get emails every week from people where they've had some nasty infrastructure failure and the most recent valid backup that works is weeks or more old. It just boggles my mind that businesses today aren't aware of the need for good disaster recovery preparedness – having valid backups and knowing how to use them to recover.

I've written about this type of thing in our newsletter before I would guess that there are still a bunch of you out there that this scenario could happen to.

You might think that performance is more important but really nothing is more important than business continuity. Poor performance could lead to a gradual loss of clients and business income but complete data loss (or a month's data loss) could lead to the business failing very quickly, and you losing your job.

I advocate turning on two trace flags on every SQL Server instance in the world: 1118 that disables single-page allocations in tempdb, and 3226 that disables backup success messages. You should enable trace flag 3226 so your error log isn't flooded with success messages (as Glenn demonstrates in the demo video) and you're able to more easily see backup failures.

You should also make sure that your full backups aren't too far apart. There's no really good way to say exactly how often you should take full backups, it's a gut feel thing. For me, I wouldn't be comfortable unless a full backup is being taken at least weekly. Doesn't matter how big the database is, weekly is my minimum. If you say that the database is many terabytes and you have no space, my counter is that you should either archive more aggressively or get more space.

You could reduce data loss through log backups but I've also heard of many broken log backup chains through log backup loss or damage. What could help here are differential backups; however, the costs/benefits of performing differentials also depend on the relative data churn. If your data churn isn't high, then consider bi-weekly full backups twice-weekly differential backups. Remember, you can also programmatically determine when to do a differential with my differential change script [here](#).

You always need to be considering how old your full backup is though, as that's the starting point for any restore sequence. And you should also make sure that your backups are valid. Kimberly always likes to say that "you don't have a backup until you've restored it".

Bottom line: backups and backup validation are the most important responsibilities of a DBA. You really don't want to be sending me email asking for help recovering a corrupt database.

Call to action: For every database that you're responsible for, ask yourself two questions: When was the last successful full backup? When was the last successful test restoration of a full backup? If the answer to either of those questions is more than 1-2 weeks, then I think you're doing it wrong in your environment (unless you have good reasons why).

I'm curious to hear your thoughts on having up-to-date backups and backup validation, so please feel free to [drop me a line](#), always treated confidentially, of course.

Video Demo

In this demo video Glenn explains how to enable and disable global trace flags, using 3226 as an example, and how to setup a trace flag as a startup parameter in SQL Server 2012/2014. He also talks about a really useful new Microsoft KB article about SQL Server configuration options and trace flags.

The video is just over 3 minutes long and you can get it:

- In WMV format [here](#).
- In MOV format [here](#).

You can get the demo code [here](#).

Enjoy!

SQLskills Offerings

We've released all the classes for the remainder of 2014, including two in Australia in December. We expect to release the first half of our 2015 schedule around October.

Finally, to help your boss understand the importance of focused, technical training, we've added a few new items to help you justify spending your training dollars with us:

- [Letter to your boss explaining why SQLskills training is worthwhile](#)
- [Community blog posts about our classes](#)
- [Immersion Event FAQ](#)

2014 Immersion Events

Chicago, IL

- October 6-8, 2014: **IE0**: Immersion Event for the Accidental/Junior DBA
- October 6-10, 2014: **IEPTO1**: Immersion Event on Performance Tuning and Optimization – Part 1 (formerly IE1)
- October 13-17, 2014: **IEPTO2**: Immersion Event on Performance Tuning and Optimization – Part 2 (formerly IE2)

Sydney, NSW, Australia

- December 8-12, 2014: **IEPTO1**: Immersion Event on Performance Tuning and Optimization – Part 1 (formerly IE1)

Canberra, ACT, Australia

- December 15-19, 2014: **IEPTO1**: Immersion Event on Performance Tuning and Optimization – Part 1 (formerly IE1)

See [here](#) for the main Immersion Event Calendar page that allows you to drill through to each class for more details and registration links.

Fall SQLintersection

This year our Fall SQLintersection conference will be the week of November 10th in Las Vegas. See [here](#) for details. Don't forget to use the discount code "SQLskills" (without the quotes and it isn't case-sensitive) and you can save \$50 off registration. We hope to see you there!

Summary

We hope you've enjoyed this issue - we really enjoy putting these together.

If there is anything else you're interested in, we'd love to hear from you - [drop us a line](#).

Thanks,
Paul and Kimberly

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