(November 25th, 2013)

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 <u>here</u>.



Quick Tips for our Insider friends!

Hey Insiders!

This newsletter is coming to you from Redmond where we've finally finished with all business travel, classes, and conferences for the year. We're heading out of town for some R&R and recharging ourselves before hitting the ground running with some cool new projects and material coming in 2014.

Two new Pluralsight courses have just been published:

- My course on <u>SQL Server: Advanced Corruption Recovery Techniques</u> check out the video demo below for an excerpt.
- Jonathan's course on <u>SQL Server: Maintenance Plans</u>.

Also check out the very bottom of the newsletter for details of the Spring 2014 SQLintersection conference and **how you can get a \$50 Amazon gift card for referring someone** to our IE0 and IEHW classes.

The most recent book I've read is Steve Coll's <u>*Ghost Wars*</u>. This book continues my interest in Afghanistan and the other '-stans'. It covers the rise of Al Qaeda and the Taliban before 9/11 and follows the CIA's involvement in Afghanistan, including failures and successes. The whole thing reminds me of The Great Game between Russia and Great Britain in the 1800s and 1900s for control of that region. It's a complicated book to read but well worth it for intelligence fans.

Please <u>let us know</u> 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

In the <u>RunAs Radio show recording</u> of our closing Q&A session at the recent SQLintersection conference, we have a discussion about trace flags and when they should be enabled.

There are only two trace flags that I recommend everyone in the world should have enabled on all their SQL Server instances: 1118 and 3226.

Trace flag 1118 turns off mixed page allocations. By default, the first 8 pages allocated to any allocation unit (the storage underpinning tables and indexes) are one-at-a-time page allocations from data file extents (called mixed extents) where the pages can be allocated to up to 8 different allocation units. After the 8-page threshold is reached, entire extents are dedicated to the allocation unit at a time (and then pages within then are allocated as needed). Mixed page allocations can lead to page latch contention on the SGAM allocation bitmaps that track mixed extents, and this is one of the leading causes of contention in tempdb. Turning on trace flag 1118 removes this cause of contention in tempdb. It also disables mixed extents for all user databases as well, but there's no downside to having this trace flag turned on. The whole mixed extent thing was from 7.0 when people didn't want small tables immediately consuming 64KB of data file space. Nowadays, that's really irrelevant. You can read more about it in <u>this blog post</u> and KB articles <u>328551</u> and <u>2154845</u>.

Trace flag 3226 stops SQL Server from printing backup success message in the error log. If you have several databases that have very frequent log backups, these success messages can flood your error log, leading to very large error log files and difficulty in spotting really useful error log messages. You can read about this trace flag (and others that may be useful to you) in the Books Online topic *Trace Flags* <u>here</u>.

Call to action: Simple – go turn on these two trace flags. Everywhere. Be careful of enabling other trace flags without understanding what they will do and when they will be effective. Just because a certain trace flag helps out a bunch of people, that doesn't mean it's applicable to your environment – it could even be detrimental. If in doubt, look for authoritative advice (e.g. a KB article) and test before enabling in production.

I'm curious to hear your thoughts on using trace flags, so please feel free to <u>drop me a line</u>, always treated confidentially, of course.

Video Demo

In this Insider demo video, I'm giving you an extract from my new Pluralsight course on <u>SQL</u> <u>Server: Advanced Corruption Recovery Techniques</u>. In the demo I show how you can use an older full backup to try to recover data from a data file page that is deleted by a repair operation.

The video is about five and a half minutes long and you can get it in WMV format here.

The demo code is available <u>here</u>.

Enjoy!

SQLskills Offerings

All US classes have alumnus discounts equivalent to 25%-off the full price, and many have a special offer for the first 5 people who register for each class <u>in 2013</u> – buy-1-get-1-free!

If you know someone who would benefit from our IEO: Immersion Event for Accidental/Junior DBA or IEHW: Immersion Event on SQL Server Hardware, refer them to us and when they register we'll send you a \$50 Amazon gift card. Either they or you just need to let us know you referred them, we'll match it up to their registration and send you the gift card.

Please know that these classes are final as the hotel contracts are signed, and the classes will not be cancelled or moved for any reason, nor will the dates change. Additionally, most of our public training courses will be held in the first half of 2014. We might add a couple of other classes in the second half of 2014, but not all that many (maybe one or two IE1 deliveries and one IE2). Please plan accordingly.

Also, 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:

Tampa, FL

- February 3-7, 2014: **IE1**: Immersion Event on Internals and Performance
- February 3-5, 2014: IEO: Immersion Event for the Accidental/Junior DBA
- February 6-7, 2014: **IEHW**: Immersion Event on SQL Server Hardware
- February 10-14, 2014: **IE2**: Immersion Event on Performance Tuning
- February 10-14, 2014: IEBI: Immersion Event on Business Intelligence
- February 17-21, 2014: **IE3**: Immersion Event on High Availability and Disaster Recovery
- February 17-21, 2014: **IEDEV**: Immersion Event for Developers

Australia

- Sydney, NSW; March 10-14, 2014: IE1: Immersion Event on Internals and Performance
- Melbourne, VIC; March 17-21, 2014 **IE1**: Immersion Event on Internals and Performance

Chicago, IL

- April 28 May 2, 2014: **IE1**: Immersion Event on Internals and Performance
- April 28 May 2, 2014: **IEBI**: Immersion Event on Business Intelligence
- May 5-6, 2014: IEHW: Immersion Event on SQL Server Hardware

- May 5-9, 2014: **IE2**: Immersion Event on Performance Tuning
- May 12-16, 2014: **IE3**: Immersion Event on High Availability and Disaster Recovery
- May 13-16, 2014: IETS: Immersion Event on Advanced Transact-SQL
- May 19-23, 2014: **IE4**: Immersion Event on Security, PowerShell, and Developer Support
- May 19-21, 2014: IEO: Immersion Event for the Accidental/Junior DBA

Bellevue, WA

- June 9-13, 2014: **IE1**: Immersion Event on Internals and Performance
- June 16-20, 2014: **IE2**: Immersion Event on Performance Tuning

See <u>here</u> for the main Immersion Event Calendar page that allows you to drill through to each class for more details and registration links.

SQLintersection

Our Spring SQLintersection conference is starting to come together and looks to be an amazing line-up of 5 tracks over 3 days with 7 full day workshops (2 pre-cons on Saturday, 3 on Sunday, and 2 post-cons on Thursday). The conference runs from Sunday, April 13 through Wednesday, April 16, 2014 in Orlando, FL at the JW Marriott. We plan to pack in a lot of information about best practices, architectural/design decisions, platform choices, and new features coming in SQL Server 2014. The specific sessions, titles and abstracts will start to make it up on the SQLintersection site over the next couple of weeks and if you register for the full show package before January 17, 2014, you'll also receive your choice of an XBOX One, Surface RT, or a gift card.

Our confirmed speaker line-up includes: Kimberly L. **Tripp**, Paul S. **Randal**, Brent **Ozar**, Aaron **Bertrand**, Andrew **Kelly**, Bob **Beauchemin**, Bob **Ward**, David **Pless**, Erin **Stellato**, Glenn **Berry**, Grant **Fritchey**, Jeremiah **Peschka**, Jonathan **Kehayias**, Kendra **Little**, Kevin **Kline**, Steve **Jones**, Tim **Chapman**, and a few more surprises still coming!

This is going to be THE *get-your-questions-answered* and *architect-the-RIGHT-solutions* event of the first half of 2014!

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 Paul@SQLskills.com and Kimberly@SQLskills.com