

(October 26th, 2015)

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 Seattle, where I'm on stage right now presenting my pre-con workshop on wait statistics at the 2015 PASS Summit (Kimberly presents hers on query plan statistics and cardinality estimation tomorrow after returning from presenting a Sunday preconference workshop at SQLIntersection). Then the rest of the week is a whirlwind of presentations and travel as Kimberly returns and we finish up at PASS to head down (back down for Kimberly) to Las Vegas for our SQLIntersection show. And of course everyone else on the team is presenting at PASS or SQLIntersection or both!

We've just announced our 2016 classes in Chicago (April/May – with a slight schedule change such that a few have moved one week later), London (June), and Bellevue (September), including **two brand new classes on SSIS**, written and presented by our new and exciting training partner *Linchpin People*. We have extremely high standards for our Immersion Event instructors and we're really excited about these new classes that we're adding to our incredible Immersion Event lineup.

You can save up to \$200 off all our 2016 classes by registering before the end of the year and as an alumnus, you can always get the lowest (frequent-flyer) discount! Schedule details are [here](#) and you can read more on the new SSIS classes [here](#).

The latest book I've read is Walter Isaacson's [*The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution*](#). I love books about the history of computing and technology development and this one really packs it in its 500 pages. It has a chapter each for the early development of computer architecture, programming, transistors, microchips, video games, the internet, PCs, software, being online, and the web! The writing style is very enjoyable and not dry in the least. Highly recommended!

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

Paul's Ponderings

It's a bit of a mish-mash of stuff this time as we're busy preparing for the conferences this week.

Firstly, in the previous newsletter I talked about index fanout and key size and how having a large key size increases the index depth, which can lead to performance issues for select-heavy

workloads. I promised to do a more in-depth blog post, which I did last week – check it out [here](#). It shows that index depth and fanout do have an effect on the performance of single-row select statements – from 0.4-0.5 extra microseconds of CPU time per index level for an index traversal (on my test system).

Secondly, there have been a slew of recent bug fixes in DBCC CHECKDB for SQL server 2012 and 2014:

- SQL Server 2014 SP1 CU1
 - [FIX: DBCC CHECKDB and DBCC CHECKTABLE take longer to run when SQL CLR UDTs are involved in SQL Server 2012 or SQL Server 2014](#)
 - [FIX: Memory leak occurs when you run DBCC CHECKDB against a database in SQL Server 2014](#)
- SQL Server 2014 SP1 CU3
 - [FIX: DBCC CHECKFILEGROUP reports false inconsistency errors on database that has partitioned table in SQL Server 2014](#)
 - [FIX: DBCC CHECKDB doesn't report metadata inconsistency of invalid filegroups in its summary in SQL Server 2014](#)
 - [FIX: It takes a longer time than earlier versions of SQL Server when you run DBCC CHECKDB in SQL Server 2012](#)

It usually pays to try to be on the latest build of SQL Server so you don't get bitten by bugs that crop up – just make sure you test adequately before going live.

Lastly, that reminds me of a couple of new clients we've been working with over the last few weeks where production systems have been upgraded in place, without adequate testing, and severe performance problems have resulted.

It's really imperative that you do real-workload performance testing before placing a new version of SQL Server in production. For instance, with the new cardinality estimator in SQL Server 2014, we've seen quite a few cases where performance has degraded because of query plan changes. Many of these have been product bugs, but you don't want to be finding these problems in your workload in production.

Video Demo

In this video, Glenn explains about changes in the @@VERSION global variable and the SERVERPROPERTY function in the latest releases, and how they might affect legacy code that parse @@VERSION.

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

- In WMV format [here](#).

- In MOV format [here](#).

The demo code is available [here](#).

Enjoy!

SQLskills Offerings

We've released the majority of our 2016 classes for registration, listed below. It's possible that we might add one or two classes in Chicago in the Fall, but that will depend on the Fall conference schedule as well as demand. **Note that you can save up to \$200 by registering for these classes before the end of this year.**

To help your boss understand the importance of focused, technical training, we've also added a few 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](#)

Upcoming Immersion Events

Chicago, IL, 2015

- **IE0:** Immersion Event for the Accidental/Junior DBA
 - November 16-18 **(1 seat remaining!)**
- **I EPDS:** Immersion Event on Practical Data Science
 - November 16-19 **(SOLD OUT!)**
- **IEPTO1:** Immersion Event on Performance Tuning and Optimization – Part 1
 - November 16-20 **(SOLD OUT!)**

Chicago, IL, 2016

- **IE0:** Immersion Event for Junior/Accidental DBAs
 - April 25-27 **(US\$120 discount for registering in 2015)**
- **IEPTO1:** Immersion Event on Performance Tuning and Optimization – Part 1
 - April 25-29 **(US\$200 discount for registering in 2015)**
- **IEBI:** Immersion Event on Business Intelligence
 - April 25-29 **(US\$200 discount for registering in 2015)**
- **IEPTO2:** Immersion Event on Performance Tuning and Optimization – Part 2
 - May 2-6 **(US\$200 discount for registering in 2015)**
- ****NEW** IESSIS1:** Immersion Event on Learning SQL Server Integration Services
 - May 2-6 **(US\$200 discount for registering in 2015)**

- **IEHADR:** Immersion Event on High Availability and Disaster Recovery
 - May 9-13 (**US\$200 discount for registering in 2015**)

London, UK, 2016

- **IEPTO1:** Immersion Event on Performance Tuning and Optimization – Part 1
 - June 13-17 (**US\$200 discount for registering in 2015**)
- **IEPTO2:** Immersion Event on Performance Tuning and Optimization – Part 2
 - June 20-24 (**US\$200 discount for registering in 2015**)

Bellevue, WA, 2016

- **IEPTO1:** Immersion Event on Performance Tuning and Optimization – Part 1
 - September 12-16 (**US\$200 discount for registering in 2015**)
- **IEPTO2:** Immersion Event on Performance Tuning and Optimization – Part 2
 - September 19-23 (**US\$200 discount for registering in 2015**)
- ****NEW** IESSIS2:** Immersion Event on Advanced SQL Server Integration Services
 - September 19-22 (**US\$160 discount for registering in 2015**)

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

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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