

(June 22nd, 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 Bellevue, WA, where we've just finished our back-to-back IEPTO1/IEPTO2 classes. It's been a great two weeks of teaching and now we're looking forward to some vacation time, with a week at home before we take our girls off for a couple of weeks of diving.

We've got a busy Fall with our classes running in London, Dublin, and Chicago and another great week at SQLintersection (in Las Vegas this October). We're still working on the final line-up for SQLintersection but we've already posted the pre- and post-conference workshops; it's going to be a great week! Check out more information online at www.SQLintersection.com and don't forget to register with the discount code of SQLskills to save \$50 off your registration.

The latest book I've read is Michael Soluri's [*Infinite Worlds: The People and Places of Space Exploration*](#). This is a really cool book that has a huge collection of NASA photos and interviews/essays with people from the whole history of the space program. The photos are pretty stunning and the anecdotes are really interesting. It's very well put together and a must read for anyone interested in space exploration.

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

Paul's Ponderings

There's quite a tradition in the SQL Server community of not upgrading to the latest version until Service Pack 1 (SP1) is released. We think it's time for that tradition to end.

Let's take a look at the last two SP1 releases – for SQL Server 2012 and SQL Server 2014.

SQL Server 2012 SP1 introduced one of the worst memory manager bugs in the last decade or so (and there were quite a few in 2012 because of the memory manager rewrite). This bug causes heavy freeing of memory in the buffer pool resulting in poor performance. The KB article with the technical explanation is [here](#) and a Microsoft blog post that acknowledges it was introduced in the SP1 build is [here](#).

SQL Server 2014 SP1 had to be almost immediately pulled from release because of a bug around installation when the SSISDB database exists on the instance. You can read about the problems on the [SQL Release Services blog](#) (read bottom up).

The point is that SP1 is not a special release that is guaranteed to be bug free and so it shouldn't be the focus of people's upgrade strategies – there's no build that you should wait for that is going to be more stable than any other.

The simple reality is that everyone should always do two things when they're going to install a patch or upgrade: backup and test. When you're upgrading you must do extensive testing on whatever build is being installed – doesn't matter if that's RTM, a Cumulative Update (CU), or an SP. That means running a real production workload to check for performance issues and exercising all application functionality to make sure that nothing has changed in SQL Server's behavior that's going to affect the workload. And, ideally, you should backup system and user databases prior to the patch as well as after successfully patching (backup system databases for sure).

Testing your workload is even more important when upgrading to SQL Server 2014 because the new Cardinality Estimator can impact query plan choice, which can affect workload performance. We've had clients come to us because they've upgraded to 2014 without proper testing and have experienced poor performance as a result. In some cases we've had to move them to a lower compatibility level and in other cases we've had to make code modifications to force better query plans using hints.

Call to action: Any time you're upgrading to a new build of SQL Server, you simply must perform proper testing to make sure the new build isn't going to introduce problems in your environment. You can't rely on the build being a 'special' build like SP1 and you can't assume that anyone has tested the exact combination of features and workload that you have in your environment.

Video Demo

Data compression is a feature that we're still seeing many people hesitate to try out. In this demo video, Glenn talks about data compression, and how to identify indexes that might be good candidates for being compressed.

The video is about 5.5 minutes long and you can get it:

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

And the demo code is [here](#).

Enjoy!

SQLskills Offerings

We've released all of our classes for 2015, listed below. We'll release the first portion of our 2016 schedule around September/October.

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

London, UK

- August 24-28, 2015: **IEPTO1**: Immersion Event on Performance Tuning and Optimization – Part 1 (formerly IE1) **SOLD OUT!**

Dublin, Ireland

- October 12-16, 2015: **IEPTO2**: Immersion Event on Performance Tuning and Optimization – Part 2 (formerly IE2)

Chicago, IL

- November 16-18, 2015: **IE0**: Immersion Event for the Accidental/Junior DBA
- November 16-19, 2015: **IEPDS**: Immersion Event on Practical Data Science
- November 16-20, 2015: **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.

SQLintersection

We've just finished our Spring SQLintersection event in Scottsdale, AZ and it went off perfectly. We had great speakers, fantastic content, and our second SQLafterDark evening event which includes drinks, a trivia quiz bowl, and a raffle (sponsored by SQLskills and SQL Sentry).

We're already planning our Fall SQLintersection event setup for the week of October 26, 2015 back in Las Vegas; we'll have more details posted online at www.SQLintersection.com shortly! And, when you register, 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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