

(December 10th, 2019)

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



Note: As an Insider, you can read all prior Insider newsletters [here](#).

Quick Tips for our Insider friends!

Hey Insiders,

This newsletter is coming to you from the Maldives, where Kimberly and I are enjoying some sun and diving to wind down from the hectic year.

This is the last newsletter this year (next one will be on January 7th). Note you've only got 3 weeks left to get the early-bird price on our in-person classes in the Spring.

We wish you all best wishes for a happy holiday season!

SQLskills News

Live, IN-PERSON classes: we've announced our schedule for Spring 2020 in Chicago:

- IEPTO1: Performance Tuning and Optimization – Part 1 – April 27-May 1
- IE0: Accidental/Junior DBA – April 27-29
- IECAG: Clustering and Availability Groups – April 30-May 1
- IEPTO2: Performance Tuning and Optimization – Part 2 – May 4-8
- IEAzure: Azure SQL Database, Azure VMs, Azure Managed Instance – May 4-7

The classes all have early-bird prices through the end of 2019 and you can get all the details and registration information through the class schedule page [here](#).

Finally, even if you can't join us in person, I've put out a call for **remote user group sessions for 2020!** If you'd like one of us to present for your user group, check out my blog post [here](#).

Book Review

On the way from Seattle to Male we had a 17.5 hour flight from San Francisco to Singapore, and I read two complete books.

The first is Alice Sebold's [The Lovely Bones](#). I've seen this many times in airport bookshops and realized at the start of the flight that I had it on my iPad (don't take real books on Asia dive trips any more) so gave it a whirl. What a page turner! Excellent novel about a girl who is murdered and then watches (from her heaven) her family, friends, and killer continue with their lives over

the next 10 years. Very well written, and well deserved #1 best seller I think, but somewhat haunting at the same time.

The second is Ernest Hemingway's classic [*A Farewell to Arms*](#). This is an excellent semi-autobiographical novel based on Hemingway's time as an ambulance driver in Italy during WWI. It's about an American ambulance driver who's injured and falls in love with an English nurse during his convalescence. Once back at the front he gets caught up in a shambolic retreat and deserts to run away with his love.

Both books are hugely gripping and highly recommended!

The Curious Case of...

This section of the newsletter explains recent problems we've helped with on client systems; they might be something you're experiencing too.

Someone asked me during Thanksgiving week whether it was possible to find out which transactions rolled back after a crash. Absolutely it is, and I wrote a blog post about it back in 2017 – check it out [here](#) (note this doesn't take into account Accelerated Database Recovery in SQL Server 2019).

Ponderings...

(From Erin this time – enjoy!)

[SQL Server 2019](#) was released on November 4 at Microsoft Ignite, the same week as the PASS Summit. It was a topic covered or touched upon in many sessions at both conferences, and at the SQLintersection and Live360 conferences two weeks later. For some companies, a new release means they start getting ready to upgrade. For other companies, it's just another release, one they may or may not upgrade to down the road. I have already heard from two of my customers who are planning to upgrade to 2019, and I'm looking forward to helping with both projects – as well as additional customer upgrades in 2020.

One question I've been getting throughout the fall is: we were planning to upgrade to SQL Server 2017, should we wait for 2019? Or is it too risky to go to a new release? This has been a dilemma for data professionals supporting SQL Server for years, and here's my take...

If someone approaches me today and asks what version to upgrade to, I recommend SQL Server 2019. In general, I always want to see folks on the latest and greatest.

If someone says they have been planning to go to SQL Server 2017, but now are wondering about SQL Server 2019, I'll ask what the cost is in terms of time. How long does it take for you to go through your upgrade testing? If it's a six-month process and you're just wrapping up with the SQL Server 2017 testing, then I would tell you to go to SQL Server 2017. If it's a six-month

process and you're one month in, maybe it's better to cut your losses and start over with testing SQL Server 2019. Is it somewhere in between? What is the cost in terms of time, and is the company willing to accept the time lost to 2017 testing? Also, are there new features or improvements in SQL Server 2019 that you want to leverage or implement immediately?

If someone asks whether it's "safe" to go to SQL Server 2019 because it's a new release, I remind them of two things: Azure SQL Database and the vast improvements Microsoft continues to make in its testing. At this point, the version of Azure SQL Database is ahead of SQL Server 2019. For a box release, development has to "stop" at some point. It didn't stop on November 4; it stopped well before that, to finalize everything for the SQL Server 2019 release. But nothing stopped with Azure SQL Database development, and improvements continue to be made and dropped into the cloud before they ever hit a local installation. I'm ok with that. And if someone says "Oh, they're using the cloud for QA," that's not true either. Here's some perspective...

I was part of a panel discussion, Microsoft Data Engineering Unplugged, at the PASS Summit that included key members of the SQL Server team: Bob Ward, Slava Oks, Asad Khan, Arun Ulagaratchagan, and Mike Flasko. Denny Cherry and I were the only non-Microsoft individuals on the panel, representing the Data Platform MVPs. Attendees could ask any question, and they did, including "You had a recent cumulative update that was problematic for customers as it affected backups with Availability Groups". Ouch. This was CU 15 for SQL Server 2017, which [broke the use of sys.fn_hadr_backup_is_preferred_replica](#), which many customers with Availability Groups use to determine where backups and jobs should be run. There was a workaround, but for a lot of customers, that CU created a lot of extra work.

When the question was asked during the panel, Slava Oks took the microphone and owned the mistake. Completely. And then he started talking about the testing they do, how the testing has changed over time, and how they still continue to iterate and improve. I asked Bob Ward to talk about the level of automation that now exists for testing, and he shared information about the work that Bob Dorr has done, and continues to do, with developing test harnesses that contain myriads of options to run against SQL Server builds. Software isn't perfect, because people aren't perfect, and people write the software. But Microsoft is making a solid effort at testing and releasing software that is extremely stable.

Back to my point: the cloud is not QA as there is significant testing that occurs before a build ever gets to the cloud, and I believe that the SQL Server 2019 release is as stable, if not more so, than any previous release. On top of that, there are some FANTASTIC new features in the release, AND there some changes to what each Edition supports; there are more features supported in Standard Edition! Amit Banerjee wrote a [great post listing out capabilities in 2019 Standard Edition](#) that I definitely recommend reading.

What are my favorite features in 2019? I've already talked about the [new Query Store options](#), so you know that's at the top of my list. I think [Accelerated Database Recovery](#) will be a game-

changer for some customers, AND it's in Standard Edition (check out last week's Insider Video to see a demo). I'm waiting for the customer that needs to move [tempdb metadata to In-Memory](#) (see this week's video!) and I definitely have customers that will benefit from the expanded [intelligent query processing](#) capabilities. There's so much good stuff! If you haven't already looked at the [new features list](#), start there, and send in your questions. We're looking forward to more upgrades in the coming year – I know there are a lot of 2008/2008R2 installs out there still ☺ and if you need help, drop us a line!

Glenn's Tech Insights

Recent news and views from the hardware and Windows worlds that we think will be interesting to SQL Server community members.

In Glenn's regular roundup of tech news this time he talks about Intel releasing their new Cascade Lake-X HEDT processors – check it out in [this post](#)!

#TBT

(Turn Back Time...) Blog posts we've published since the previous newsletter plus some older resources we've referred to recently that you may find useful.

One of my favorite sessions at SQLIntersection a couple of weeks back was my Mythbusters talk, so that's the theme for #TBT this time. Here are some myths resources for you:

- The very first Pluralsight course we (I) recorded: [SQL Server: Myths and Misconceptions](#) that has almost four hours covering a plethora of SQL Server myths.
- My blog post series from April 2010 – *A SQL Server DBA Myth A Day* – and [this blog post](#) has links to all 30. Some of the later ones had 20+ myths busted in one post, as I got a bit carried away ☺
- The same blog post series, but organized as a [handy PDF file](#).

Here are the blog posts we've published since the last newsletter:

- Paul: [Calling all user group leaders! We want to present for you in 2020!](#)
- Jonathan: [SQL Server PDB Symbols and Callstacks The Easy Way](#)
- Erin: [Encrypted Stored Procedures and Query Store](#)
- Glenn: [SQL Server Diagnostic Information Queries for December 2019](#)

I hope you find these useful and interesting!

Video Demo

In Erin's Insider Video this week she takes a look at another new feature in SQL Server 2019: memory-optimized tempdb metadata. Hardware keeps getting bigger, storage keeps getting faster, yet SQL Server installations still have issues with tempdb contention. Might this new feature finally address all your tempdb woes? Tune in to find out.

The video is just over 11 minutes long and you can get it [here](#).

The demo code is [here](#).

Enjoy!

Upcoming SQLskills Events

Our Spring 2020 classes are all open for registration!

You have multiple learning opportunities as every event has a different focus as well as different benefits – from deep-technical training in our Immersion Events to wide-ranging topics at SQLintersection where you can learn more effectively how to keep moving forward in both your environment and your career! And, of course, one benefit you'll always get from in-person events is networking; we hope to meet/see you at an event soon!

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](#)
- [So why do you want to come to our training? And the winners are...](#)
- [Community blog posts about our classes](#)
- [Immersion Event FAQ](#)

LIVE, IN-PERSON Immersion Events:

Chicago, IL, Spring 2020

- **** All classes have early-bird prices through 12/31/19 ****
- **IEPTO1:** Immersion Event on Performance Tuning and Optimization – Part 1
 - April 27 – May 1
- **IE0:** Immersion Event for the Junior/Accidental DBA
 - April 27-29
- **IECAG:** Immersion Event on Clustering and Availability Groups
 - April 30 – May 1
- **IEPTO2:** Immersion Event on Performance Tuning and Optimization – Part 2
 - May 4-8

- **IEAzure:** Immersion Event on Azure SQL Database, Azure VMs, and Azure Managed Instance
 - May 4-7

LIVE, ONLINE Immersion Events:

- More coming in 2020!

Click [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

Paul@SQLskills.com and Kimberly@SQLskills.com