(September 24th, 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 Helensburgh, Scotland (where I grew up) where Kimberly and I are chilling out with my parents for a few days before heading home to prep for our classes in Chicago. Talking of which, there are still a few seats open in the IEPTO1 class…

SQLskills News

Live, ONLINE classes: we have a few classes coming up in the remainder of the year:

- IEVLT: Very Large Tables: Performance/Manageability through Partitioning – October 29-31
- IECS: Columnstore Indexes – November 12-14

The classes are US$495 each and you can get all the details and registration information through the class schedule page here.

Live, IN-PERSON classes: we have two more in-person classes this year, in Chicago in October:

- IEPTO1: Performance Tuning and Optimization – Part 1 – October 7-11
- SOLD OUT: IEAzure: Azure SQL Database, Azure VMs, Azure Managed Instance – October 7-10

These will be our only, in-person Immersion Events running this Fall and you can get all the details and registration information through the class schedule page here.

Fall SQLintersection: If you're looking for a great place to learn best practices in migration, troubleshooting, and performance, join us in Las Vegas in the week of November 18 for our SQLintersection conference where we're going to focus on these incredibly important processes. SQLintersection will not only help you migrate to a newer version of SQL Server but it will teach you the best new features to leverage once you're there! We've got an incredible line-up this Fall and ALL of our sessions have been posted; check out our website to view our spectacular line-up including Bob Ward, Pedro Lopes, Pam Lahoud, Brent Ozar, and most of our SQLskills team! We hope you can join us in November! Check out all out in my blog post here.

PASS workshops: if you're planning to go to the PASS Summit in November, Erin and Jonathan both have pre-conference workshops:

- Erin: Performance Tuning with Query Store in SQL Server – see here
- Jonathan: Bigger Hardware or Better Code and Design? – see here

Finally, even if you can't join us in person, I've put out a call for **remote user group sessions** for the remainder of 2019! If you'd like one of us to present for your user group, check out my blog post here.

Book Review

The most recent book I've read is Tan Twan Eng's *The Garden of Evening Mists*. What a wonderful book! Definitely the best book of the year so far, it totally sucked me in as a page turner and I bought his debut novel as soon as I finished this one. From Amazon: "Malaya, 1951. Yun Ling Teoh, the scarred lone survivor of a brutal Japanese wartime camp, seeks solace among the jungle-fringed tea plantations of Cameron Highlands. There she discovers Yugiri, the only Japanese garden in Malaya, and its owner and creator, the enigmatic Aritomo, exiled former gardener of the emperor of Japan. Despite her hatred of the Japanese, Yun Ling seeks to engage Aritomo to create a garden in memory of her sister, who died in the camp. Aritomo refuses but agrees to accept Yun Ling as his apprentice "until the monsoon comes." Then she can design a garden for herself. As the months pass, Yun Ling finds herself intimately drawn to the gardener and his art, while all around them a communist guerilla war rages. But the Garden of Evening Mists remains a place of mystery. Who is Aritomo and how did he come to leave Japan? And is the real story of how Yun Ling managed to survive the war perhaps the darkest secret of all?" Highly, 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.

I had a question last week asking about *DBCC CHECKDB* messages that showed an object ID of 0 and an index ID of -1, and the person was confused to see them as they don't exist. However, as far as *DBCC CHECKDB* is concerned, they're important…

Read the explanation in my blog post here.

Ponderings…

(It's my turn for the editorial this time but I've been on vacation so I'm re-running (and updating) one on a topic that I always think isn't given enough priority in SQL Server environments – disaster recovery testing. Enjoy!)

Whenever I teach disaster recovery (DR) or consult on it with a client, one of the things I always stress is that practicing DR techniques is crucial for success when a disaster happens for real.

I want to pose a series of questions to you and make you think about an honest answer to each one. I'm sure some of you practice DR techniques regularly, but from surveying classes I know that those of you who do are not in the majority.

Part 1: Information

- Do you know where the latest copy of the DR handbook/run book is? Does everyone else know?
- Do you know where the scripts are for automating restores of your backups?
- Do you know who has decision-making authority during a DR situation?
- Do you know how to contact internal and external clients to give them notifications and updates?
- Do you know how to get hold of people from other IT teams in your organization in an emergency?
- Do you know where the installation media for Windows and SQL Server are kept in your environment?
- Do you know where the Windows and SQL Server product keys are?
- Do you know how you'll be able to get new servers if your data center is destroyed?
- And do you know where they will be installed? What about network? Power? HVAC?
- Do you know how to check the applications are running correctly after the SQL Server environment is restored?

Part 2: Techniques

- When was the last time you tried a full restore sequence, including tail-of-the-log backups?
- When was the last time you tried failing over to your secondary servers/data center?
- When was the last time you did a bare-metal install? How long did it take?
- When was the last time you rebuilt or restored master on a server?
- When was the last time you practiced a recovery as if your main server was completely dead? Did you successfully recover?
- When was the last time you practiced a recovery as if your main SAN was completely dead? Did you successfully recover?
- When was the last time you practiced a recovery as if you didn't have onsite backups and the SAN was dead? Did you successfully recover?

Call to action: Think through the answers to the questions above and consider whether you're comfortable with your responses. Now, think whether you'd be comfortable if someone responsible for some of your data (e.g. your bank, 401-k/retirement account holder, doctor's

office, favorite airline, credit-card companies) made those same answers about their DR preparedness. My feeling is that you should be able to answer 'yes' for all the Part 1 questions, and answer 'within the last 3 months' for all the Part 2 questions, to feel fully comfortable that you're practicing enough.

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 the following:

- AMD's release of a fix for the Ryzen 3000 BIOS problems
- The September release of Azure Data Studio

Check it all out in his post here!

#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.

We've helped a few clients perform upgrades over the last few weeks, so that's the theme for this TBT:

- Glenn's course: *SQL Server: Upgrading and Migrating to SQL Server 2016*
- Glenn's course: *SQL Server: Installing and Configuring SQL Server 2016*
- Tim's course: *SQL Server: Consolidation Tactics and Best Practices*
- Glenn's course: *SQL Server 2012: Evaluating and Sizing Hardware*
- Glenn's *one-a-day upgrade blog post series*

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

- Glenn: *Entry-Level 1080P AMD Gaming PC Build Guide*
- Glenn: *Mid-Range 1440P AMD Gaming PC Build Guide*
- Erin: *Why You Need Query Store, Part I: Historical Performance Data*
- Erin: *Why You Need Query Store, Part II: Plan forcing*
- Erin: *Why You Need Query Store, Part III: Proactively analyze your workload*
- Tim: *SQL Database Instance Pools*
- Tim: *Azure SQL Database Serverless*
- Tim: *Tuning SQL Server Reporting Services*

I hope you find these useful and interesting!

<u>Video Demo</u>

One of the benchmarks that Glenn uses when testing the performance of processors is the well-known Geekbench. They've just released a new version and in this video Glenn demonstrates the new Primate Labs Geekbench 5 CPU benchmark, and explains why it is useful for SQL Server.

The video is about 4 minutes long and you can get it here.

Enjoy!

<u>Upcoming SQLskills Events</u>

Our set of 2019 live, in-person classes for Chicago in October are filling up fast and we've announced our Fall live, online events too.

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, October 2019

- **IEPTO1**: Immersion Event on Performance Tuning and Optimization – Part 1
  - October 7-11
- **IEAzure**: Immersion Event on Azure SQL Database, Azure VMs, and Azure Managed Instance
  - October 7-10 **SOLD OUT!!**

LIVE, ONLINE Immersion Events:

- **IEVLT**: Immersion Event on Very Large Tables: Performance/Manageability through Partitioning
  - o October 29-31
- **IECS**: Immersion Event on Columnstore Indexes
  - o November 12-14

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

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