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 Redmond, where I'm proctoring Jonathan's IECS online class that started this morning, and putting the finishing touches on material for SQLintersection. Speaking of that, it's next week in Las Vegas and you still have time to register… see below!

Of course, the big news is that SQL Server 2019 was finally released last week – very exciting!

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.

Fall SQLintersection: If you're looking for a great place to learn best practices in migration, troubleshooting, and performance, join us in Las Vegas next week 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.

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 latest book I've read is Simon Winchester's [The Perfectionists: How Precision Engineers Created the Modern World](). Winchester's books are always extraordinary and this one was really superb. As an engineer by education and training, this topic is fascinating. He orders the book by increasing precision, starting with a bored cylinder for James Watt's steam engine in 1776 that had a tolerance of the width of a shilling, and ending with machines in the LIGO gravity-wave detection facilities (which can measure light to a precision of 1 ten-thousandth the width of a proton, or in another definition, the distance from Earth to Alpha Centauri A to an accuracy of less than the diameter of a human hair). Entertaining, *hugely* educational, and highly recommended (and also all the other books he's written). Enjoy!

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 in email last week from someone who was experiencing very, very poor performance from a database shrink operation prior to setting the database read-only. It turned out she had a large amount of LOB data in the database and that was the cause. I wrote a detailed explanation of why this is the case a few years back – you can read about it in my blog post [here]().

Ponderings…

(From Tim this time – enjoy!)

What training style is right for you?

Recently there were a few conversations that broke out on twitter about different training methods and which may be better than the other, so I thought I would write about it.

The reality is that we all learn differently. Some people can just read a blog post or manual and absorb it all. (I wish I was lucky enough to be like that!) Others need to see something in action to figure it out, while others may need to step through demos themselves.

Early in my career, I had a very smart person tell me that people learn by reading, seeing, and doing and I have found this to be very true for complex topics. I may read a post about some new feature and then watch a short demo about how that feature works. If the author made the demo available, I can then recreate it in my environment and learn the feature in much more detail.

I've always had a curious mind about how things work and I'm one of the people who really learn by doing. As a child, I would sometimes dread the holidays when I would get new toys because I would usually get in trouble for taking them apart to see how they work. One holiday I received a remote-control car, and my dad came home early from work when I had the car fully disassembled. He scooped up the parts in a shoe box and told me it would probably never work

again. That night he tried putting it back together and had many "spare parts". He placed the car and spare parts on my desk and just shook his head. I could see the disappointment.

The next day when I got home from school, I took the car apart again and rebuilt it. No spare parts were left over. When my dad got home, I was playing with the car in the front yard. He was impressed I got it running again and asked how I was able to do it. I replied, "Because I was the one who took it apart, I knew where the parts went". For SQL Server, I am a 'doing' type person too. I need to step through features and work with them to really understand them. I like demos and labs to learn.

Regardless of your learning style, in the SQL Server community, there are many opportunities for training:

- There are in-person training classes if you need live interaction and the ability to be out of the office.
- There are live on-line classes where you can attend from your office or your home. You still have access to the instructor but minimize travel cost.
- There are several in-person conferences you can attend if you need exposure to many topics and networking.
- Pluralsight offers incredible recorded training classes by industry experts that you can watch at your own pace that include demos.
- Microsoft has started providing training classes with labs too.
- There are hundreds of videos on YouTube about SQL Server.
- Many user groups record their sessions and put them online and many industry experts also publish short how-to videos.

Call to action: Regardless of your training style or needs, in the SQL Server community, you have options. The important thing is to keep learning. With SQL Server 2019 going GA at Ignite last week, there is much still to learn!

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 and Intel financial results for Q3 2019
- AMD AGESA 1.0.0.4 begins rolling out for Ryzen 3000 series processors
- Intel delays release of Cascade Lake-X HEDT processors

Check it all 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.

In this TBT I want to point you at a 30-part blog post series that the team did a few years ago that covers a lot of introductory topics, aimed at accidental/involuntary DBAs. Rather than listing all 30 posts, here is a link to the main page for the series. The series covers these main areas:

- Setup and configuration
- Backups
- Implementing maintenance and security
- Troubleshooting performance
- High availability
- General troubleshooting

Although the series was aimed at accidental DBAs, these posts are all worth reading to make sure your basic understanding of topics is current and complete.

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

- Glenn: *SQL Server Diagnostic Information Queries for November 2019*
- Glenn: *Checking To See If Intel Speed Shift Is Enabled*
- Glenn: *Some Thoughts About the Intel Core i9-9900KS Processor*
- Tim: *New Pluralsight exam prep course: SQL Server: Understanding Database Fundamentals (98-364)*
- Paul: *Updated sys.dm_os_waiting_tasks script to correctly parse nodeId*

I hope you find these useful and interesting!

Video Demo

In this Insider video, Tim gives you an important tip when selecting an Azure virtual machine. Microsoft has created families of virtual machines for various business needs. Microsoft SQL Server can fit in several of these families based upon workload and within each family are numerous sizes to pick from. Most DBAs and IT professionals understand selecting a VM based on vCPU, memory, and storage capacity; however an often-forgotten metric is storage throughput. This video shows how to find throughput limitations per virtual machine and explains why it is important to select the correct size VM for storage throughput.

The various links that Tim references are:

- https://portal.azure.com
- https://docs.microsoft.com/en-us/azure/virtual-machines/windows/sizes
- https://docs.microsoft.com/en-us/azure/virtual-machines/windows/sizes-general
- https://docs.microsoft.com/en-us/azure/virtual-machines/windows/disks-types

The video is just over 6.5 minutes long and you can get it 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.

<u>Summary</u>

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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