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 we're working hard on Linux content, Kimberly's teaching her online IEVLT course, and we're looking forward to the Microsoft MVP Summit next week.

Note: our April/May classes are starting to sell out – don't delay and be disappointed!

SQLskills News

You can find all the details of our upcoming classes (pricing, logistics, registration, curricula) by drilling down from the class schedule page here, and there's a list of classes at the bottom of the newsletter.

If you're looking for a great place to learn best practices in migration, troubleshooting, and performance, join us in Florida in June for our SQLintersection conference where we're going to focus on this incredibly important process. 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!

Live, ONLINE classes: we're delivering an online class every two weeks through the end of March. It's the perfect way to keep learning, keep your systems moving forward, and stay motivated! And our format has received rave reviews: each class is held over three, *slightly-longer-than-half* days with a combination of lecture/demo and open Q&A. You can deep-dive into important content as well as keep up with your office workload! This is the place to learn new tech and get your questions answered!

Live, IN-PERSON classes: we're back in Chicago in April/May 2019 and our classes are open for registration, including a **new class on Power BI** taught by Tim. We've decided that these classes (in Chicago in April/May) are our ONLY in-person, Immersion Events for this year. We are not planning any events in the Fall or in Europe due to other commitments, conferences, and online training. **Many classes are close to selling out!**

Finally, even if you can't join us in person, I've put out a call for **2019 remote user group sessions** and we've got 32 scheduled this year already! If you'd like one of us to present for your user group, check out my blog post here.

Book Review

I haven't finished any books since the last newsletter, so I searched through my archives for read books I haven't already discussed here. Back in 2015 I read three books about maps (one of my passions), so I present them here for you.

First up is Derek Hayes' *Historical Atlas of the Pacific Northwest*. It's an excellent coffee table book detailing the developing cartography of the PNW since its earliest exploration. Filled with more than 300 maps and copious detailed notes, the book follows the various explorations of the Spanish, Russians, British, and Americans by sea and land. It also explains how the territories and states came into being, and I discovered how many of the rivers, waterways, and islands were named, and how many cities came into being. Fascinating stuff!

Secondly, Ashley and Miles Baynton-Williams *Maps of North America*. It's another gorgeous coffee-table book (17x14"!!) covering 400 years of maps of both continents, with many detailed maps of early settlements, states, and territories. For anyone who's into cartography, there are plenty of very rare maps included in the book and the print quality is superb. Each map has a detailed explanation and colophon.

Lastly, Michael Swift's *Mapping the World*. This coffee-table sized book is an excellent pictorial history of cartography. It has very crisp facsimiles of the included maps and a good mixture of geographies and cities.

Highly recommended, especially for cartophiles!

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 was asked last week why moving to a faster I/O subsystem *increases* the number of *WRITELOG* waits.

Read more about why that's the case and what it means in my blog post here.

Ponderings…

(From Paul this time…)

Continuing the 'mapping' theme from the book review section above, this is an updated editorial from exactly five years ago where I wrote about how server sprawl (really 'SQL instance

sprawl') can contribute heavily to your not having time to perform critical tasks on the most important SQL Server instances in your environment.

The solution? Map your environment! (ok, it's a bit of a lame tie-in, but whatever ☺)

I think this problem has become worse in recent years with almost ubiquitous layered products like Microsoft's SharePoint, BizTalk, and Dynamics CRM requiring SQL Server as a back-end data store, not to mention a huge plethora of non-Microsoft layered products. The proliferation of these SQL Server instances, that aren't being used in what we might think of as *traditional* ways has contributed to the server-sprawl headache.

But let's not forget those traditional uses that cause extra SQL Server instances to pop up all over the place on the network:

- Log shipping secondary servers
- Database mirroring mirror servers
- AG secondary replica servers
- Replication Distributor and Subscriber servers
- Development servers
- Test and Q&A servers

And then there are those you might not think of like SQL Express instances in point-of-sale terminals for large retail store chains.

SQL Server is everywhere.

So, how do you keep track of all these servers? Is there a way to reliably find them all?

In our experience, the only tool that will reliably find 100% of installed SQL Servers in a domain is the *Microsoft Assessment Planning Toolkit* (which you can download here). There are other methods out there (third-party tools, PowerShell scripts, old favorites like SQLPing) but none of them will catch all installed instances, including those that aren't actually running. This tool will even interrogate Linux servers too! You can read a lot of useful how-to information on the tool at the excellent Microsoft wiki site here.

It's really important that you (or someone) are aware of all SQL Server instances so you can keep track of them for:

- Licensing
- Patching (especially any critical security patches)
- Including in a backup strategy
- Including in a high-availability strategy
- Performing regular maintenance

- Checking for best-practice configuration

And so on.

How often have you been asked to restore a database on a development server that you never knew existed because no-one had told you? Or found out that what started as a personal project on someone's development server has grown into a critical piece of infrastructure that no-one was managing?

Call to action: Make sure you know where all the SQL Servers are in your environment so you're not caught out. Yes, it's one more thing to add to your list of things to do, but it could end up saving you a lot of hassle down the 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 the following:

- Details on a whopping 30% expected decrease in memory prices this year
- Details on the expected 3rd Generation AMD Ryzen Threadripper Processor

Check it all out on his blog [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.

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

- Paul: *[PREEMPTIVE_OS_FLUSHFILEBUFFERS waits on Linux](#)*
- Glenn: *[Intel Cascade Lake-SP Specifications Leaked!](#)*
- Erin: *[Important Query Store Fixes – January 2019](#)*

The theme for #TBT is communication skills so here are some resources for you:

- My Pluralsight course on *[Communications: How to Talk, Write, Present, and Get Ahead!](#)* that has 2.5 hours covering skills for communicating, running and attending meetings, all forms of writing from emails to articles, and how to write and deliver presentations
- And a bunch of blog posts:
  - *[Public Speaking: A Primer](#)*

- *[Ignorance is not stupidity](#)*
- *[It depends. It really, really does.](#)*
- *[RTFM. No seriously, R.T.F.M. Then ask your question.](#)*
- *[Learning to listen](#)*
- *[How to ask questions politely and correctly](#)*
- *[How to answer questions politely and correctly](#)*

I hope you find these useful and interesting!

Video Demo

In this Insider video, Tim shows how you can perform a true point-in-time restore using the less-well known *STOPAT* command while restoring a transaction log backup. Knowing how to utilize this command can drastically reduce the amount of data loss when performing a restore. Administrators that aren't familiar with using *STOPAT* are missing out on being able to restore to a point as close as possible to the time of the event.

The video is 4.5 minutes long and you can get it [here](#).

The demo code is [here](#).

Enjoy!

Upcoming SQLskills Events

Our **ONLY** set of 2019 live, in-person events has been announced for Chicago in April/May and we've also published our full 2019 Q1 lineup of live, online classes.

You still 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, ONLINE Immersion Events:

- **IEVLT**: Immersion Event on Very Large Tables: Optimizing Performance and Availability through Partitioning
  - March 12-14 (started today)
- **IECS**: Immersion Event on Columnstore Indexes
  - March 26-28 **** NEW ****

LIVE, IN-PERSON Immersion Events:

Chicago, IL, April/May 2019

- **IEPTO1**: Immersion Event on Performance Tuning and Optimization – Part 1
  - April 29-May 3
- **IECAG**: Immersion Event on Clustering and Availability Groups
  - April 29-30
- **IEPowerBI**: Immersion Event on Power BI, Power BI Report Server, and SSRS
  - April 29-30 **** NEW ****
- **IE0**: Immersion Event for the Junior/Accidental DBA
  - May 1-3
- **IEUpgrade**: Immersion Event on Upgrading SQL Server
  - May 1-3
- **IEPTO2**: Immersion Event on Performance Tuning and Optimization – Part 2
  - May 6-10
- **IEPML**: Immersion Event on Practical Machine Learning
  - May 6-10
- **IEAzure**: Immersion Event on Azure SQL Database, Azure VMs, and Azure Managed Instance
  - May 6-9 **** SOLD OUT ****

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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