(February 26th, 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 Redmond, where we've dug out from all the snow and we can leave our house again! We did enjoy being sequestered in the house for about a week though; we caught up on some shows and did quite a few crafts. It wasn't too bad at all!

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 get 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

The latest book I've read is a Haynes Manual by Paul Moss: *London Underground: 1863 onwards (all lines and extensions)*. Haynes is a British publishing house that started out in the 1960s creating in-depth manuals for do-it-yourself car maintenance and repairs for cars available in the U.K. (I used to use them in the 1990s and my Dad has always used them extensively for work on his cars) and has since branched out around the world. They also produce 'manuals' for things like spacecraft, Star Wars/Star Trek ships, and other interesting technical items, such as this one.

I have a bunch of their non-car manuals and this is the third one I've read. I first went on the tube (as it's called) when I was 14, traveling on my own from Glasgow down to a navy base on the south coast of England for a cadet course. It was on the Northern Line, between the great stations of Euston and Waterloo and I remember the stentorian voice saying 'Mind. The. Gap.' over and over in the stations. The book covers the history of all the lines, technology changes, rolling stock, and architecture. Fascinating book, full of photos and diagrams, 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.

I was asked last week whether it's possible to create a table with a *FILESTREAM* column and then populate that column by copying *FILESTREAM* files from another directory in the *FILESTREAM* data container.

The simple answer is no.

Read more about why that's the case and how you can populate a table with *FILESTREAM* data from an existing table in my blog post here.

Ponderings…

(From Tim this time…)

As data professionals, we all know that it's important to stay on top of maintenance and code updates. I'm often asked how these updates impact products in Azure such as Azure SQL Database and Azure SQL Managed Instance. One of the selling features about Azure SQL products is that they are constantly being updated with the latest and greatest and that we as consumers don't have to worry about patching an OS or the database engine.

That often brings up another question, "How do I know when something new comes out?" For that, we must be a bit more proactive. There is an updates page that we can view and even search by product and update type to see what's now available, in preview, or in development. That's a

nice service for Microsoft to offer, but it's an on-demand feature, meaning you must go look (but you can also add the RSS feed to your reader).

There's an Azure blog that you can view too. One of the challenges I have is that Azure is a big platform. Whether you're reading the blog or visiting the update page, you'll have to search out the products in which you're interested. For most of us, those will be several features, so this can be a cumbersome task. In Microsoft's defense, there is no easy way to share all the news affecting Azure other than exactly how they are doing it. They put it all out there for us to digest, so we need to do our part too.

Some notable updates I've seen recently:

- Feb 20th – Protect Azure VMs by using Storage Spaces Direct with Azure Site Recovery
- Feb 12th – ExpressRoute will be renamed VNet Gateway.
- Feb 7th – Database Migration Assistant supports target readiness assessment for Azure SQL Managed Instance, SQL Server Migration Assistant support for Azure SQL Managed Instance, and support for Amazon RDS for SQL Server to Azure SQL Database Managed Instance online migrations
- Jan 9th – Support for SQL to Azure SQL Database online migrations

As you can see from the list above, everything from Azure virtual machines to networking to Azure SQL Database to Azure SQL Managed Instance has had some type of improvement very recently. My advice is to subscribe to some type of RSS Feed Reader and routinely look at the RSS feed for the previous month to see if there is any news that impacts your products, or just geek out on the advancements.

So there you have it, a quick and easy way to stay up-to-date on Azure changes!

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 the upcoming release of PCIe version 5.0
- Market share analysis of AMD EPYC systems
- Possible release dates and details of the 7nm AMD Ryzen 3000 series processors

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: *Using the Wait Statistics Report in Azure Data Studio*
- Glenn: *Creating SQL Server Agent Job Schedules for Ola Hallengren's Maintenance Solution*
- Tim: *How to create a linked server to Azure SQL Database via SQL Server Management Studio*
- Erin: *Use XEvent Profiler to capture queries in SQL Server*

The theme for the TBT this time is FILESTREAM, as that was the most recent Curious Case. Here are some useful links:

- My whitepaper: *FILESTREAM Storage in SQL Server 2008*
- My blog posts:
  - *FILESTREAM directory structure*
  - *FILESTREAM directory structure – where do the GUIDs come from?*
  - *FILESTREAM garbage collection*
  - *FILESTREAM blog category*

I hope you find these useful and interesting!

<u>Video Demo</u>

Segment elimination is one of the performance optimizations that can kick in when searching a columnstore index. In this demo video, Jonathan takes a look at segment elimination and explores the effects of it on query I/O and performance. Lots more on all facets of columnstore in Jon's upcoming class in March IECS: Online Immersion Event on Columnstore!

The video is just over 5 minutes long and you can get it here.

The demo code is here.

Enjoy!

<u>Upcoming SQLskills Events</u>

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:

- **IETLB**: Immersion Event on Transactions, Locking, Blocking, Isolation, and Versioning
  - February 26-28 (started today)
- **IEVLT**: Immersion Event on Very Large Tables: Optimizing Performance and Availability through Partitioning
  - March 12-14
- **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

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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