(October 6th, 2020)

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!

SQLskills Adds Verified Badging, Continues to Celebrate 25 Years, and Presents Super Savings!

From Kimberly:

If you attended training in 2012 or later, you will have already received an email from us regarding the badge(s) that you have waiting for you! However, some of you used different emails when you registered and we've had a lot of bounces! So, you might need to contact US for complete details. Also, it's important to know that we're only badging for courses delivered on supported versions of SQL Server (currently, SQL Server 2012 and higher) so classes delivered in 2010 and 2011 aren't eligible for badges as they were focused on the now-unsupported versions SQL Server 2008/2008R2.

These verified credentials / badging are through Credly/YourAcclaim; this is the same company through which you receive / display your Microsoft certification badges. Check out my detailed blog post here, including the anatomy of our SQLskills badges. And, for those of you that don't have a login on YourAcclaim yet – creating one is FREE and EASY and can be done when you receive your *issued badge email* from me.

So, how do you receive your badge(s) for courses on SQL Server 2012 and higher?

Enter your details on our "BadgeMe" page here.

I'll triple check your name, course dates, etc. and then send you your official badge! You can link this to your LinkedIn "Licenses and Certifications," tweet your credential, display it on FaceBook, send it in email, and even print a certificate to PDF directly on YourAcclaim (once you've accepted the badge – there's a SHARE button at the top of the credential page on your dashboard). These are a GREAT way to display your knowledge and credentials to your peers!

Here's an example of our IEPTO1 badge for SQL Server 2019:

In addition to the great content, we really hope you enjoy this new benefit of having attended a SQLskills Immersion Event. And, of course, let me know if you have any questions about these new badges or our upcoming courses.

Updating your IEPTO2 SQL skills to SQL Server 2019

For those of you who haven't been in one of our Immersion Events in quite some time… **UPDATE your IEPTO2 SQL skills to SQL Server 2019 for HALF PRICE!** Register to RETAKE IEPTO2 as an online class running this October and pay only 50% of the normal course price. This is to be used by students who previously attended IEPTO2 on a version of SQL Server earlier than SQL Server 2019. Some of the benefits of *Updating your SQL skills to SQL Server 2019* with an online course this Fall:

- Update your knowledge to the latest version of SQL Server (SQL Server 2019)
- Review content that you may not have looked at in some time… (wink, wink, nudge, nudge)
- Access your course recordings for the next 12 months so you can review the content
- Receive a copy of your course content in PDF form (for searching and taking notes electronically)
- And, as usual, the ability to ask questions and interact – and really dive deep into SQL Server!

Celebrating 25 Years with 25% OFF!

And, if you or a colleague wants to attend a new course that you've not previously attended, you can still receive 25% off in celebration of our 25th anniversary! Read here for more complete details: **SQLskills Celebrates 25 Years with 25% Off Fall Courses**

Above all, thanks so much for your continued support of our content and our courses and we hope you're staying safe during these difficult times.

SQLskills News

Live, ONLINE classes – filling up FAST: our classes this year will all be live-streamed online in September and October, as it's not feasible to run in-person classes for the foreseeable future. We're running them as a series of half-day sessions so it's less onerous then the usual 9-hour days in our in-person classes. Attendees will also get a recording of the entire class – something we've never done before! See here for new student discounts.

- **IEPTO2**: Immersion Event on Performance Tuning and Optimization – Part 2
    - Half days on 10/19-23 and 10/26-30
- **IECAG**: Immersion Event on Clustering and Availability Groups
    - Running this week already…
- **IEPTO1**: Immersion Event on Performance Tuning and Optimization – Part 1
    - Running this week already…

You can get all the details and registration information through the class schedule page here.

We'll be running more classes in early 2021 and will publicize them in November.

Practical Machine Learning classes in November: our good friend Rafal Lukawiecki, who taught our in-person IEPML classes, is presenting two Practical Machine Learning classes online in November through his own company:

- Azure Machine Learning in Practice: From Fundamentals to Development
- Machine Learning and Data Science in R on Microsoft ML and SQL Servers

Rafal is an excellent instructor and I strongly recommend these classes to anyone who's serious about machine learning in the Microsoft stack. You can get all the details of the courses on Rafal's website here.

Kandio job candidate assessments: we've teamed up with Kandio to produce technical assessments to help companies screen candidates for job recruitment. If you want to make sure someone really knows what they say they know, check out the assessments here.

Online 2019 class recordings: you can buy recordings of all our three-day online classes from 2019, for as little as US$299 each. See here for all the details.

SQLintersection: The Spring show has been canceled and everything has moved to the Fall show in Las Vegas in December. More details here nearer the time.

Book Review

From the 2018 archives, I give you Herman Hesse's *Siddhartha*. What a wonderful book! It follows the life of a wealthy Brahmin, Siddhartha, who follows various paths in his life – from privilege to ascetic samana to lust to wealthy merchant to self-disgust to ascetic ferryman to despairing father of a rebellious, disrespectful son to calm and final enlightenment. Along the way he realizes what he's lacking at each stage, and has much self-reflection. I particularly liked how his childhood friend comes back into the story occasionally and we see how the friend, on a lifelong quest for enlightenment by following the teachings of another, didn't fulfill his quest, but Siddhartha, following his own path did. It's altogether an excellent book, with much to think about and take away for one's own journey through life.

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.

Last week someone emailed me asking why SQL Server doesn't base query plan compilation on what's in memory in the buffer pool… You can read through my explanation here…

Ponderings…

(From me this time. I was going to write about no reinventing the wheel as several times last week people were surprised to find scripts I'd written many years ago on my blog that helped them out, but I found that I'd already written about that, so now I'm not reinventing the wheel when talking about reinventing the wheel. How meta! ☺)

Something I've seen repeatedly since I started working with SQL Server (on the SQL Server team back in February 1999) is people reinventing the wheel. And I don't just mean with T-SQL scripts, I also saw it over and over inside Microsoft, where developers would want to write their own version of code to do function X rather than re-using someone else's code that already does function X.

Writing code, in whatever language, to do something that someone else has already coded is usually a big waste of time, unless the only example you can find is poorly written or you really want to understand how something works, and writing code to use it would provide that understanding.

A prime example of this, that I see constantly, is writing a query involving DMVs. As you probably already know, many of the DMVs don't provide really useful (or actionable)

information unless the results are manipulated in some way or joined with another DMV or catalog view.

An example would be one of my favorite DMVs: *sys.dm_io_virtual_file_stats*. On its own, it gives the cumulative read and write latencies for all I/Os done for all files in the instance, and the files are identified by database ID, file ID, and a hexadecimal file handle.

This information isn't really useful in that form. By doing some math on the output, basically converting the cumulative latencies into per-read/write latencies, and joining with *sys.master_files* to get file names and paths, the output becomes readable and easily understood.

Did I write the code to do that? No, I used some code that Jimmy May wrote a long time ago and whenever I show it when teaching, I give credit to Jimmy for it.

There's no shame in using or adapting code that someone else wrote and published. People in the SQL Server community publish code on blogs specifically so you can use it to save yourself time and get useful information from SQL Server.

If I'm ever going to write a new DMV-based query, I always check first to see if someone has already done the work – especially if I know it's going to involve joining with a few other DMVs and system catalogs and I'm going to have to play around to figure out which columns to join on.

I don't like reinventing the wheel – I'm too busy to spend my time doing that, and I think you are too. Here are a few links to scripts on SQLskills you may find helpful:

- Kimberly's super-duper *sp_helpindex* rewrite
- Kimberly's script to identify duplicate indexes (with background reading)
- Jonathan's scripts to identify problems using analysis of the plan cache
- Erin's collection of scripts for producing a performance baseline
- Some of my more useful scripts:
  - Wait statistics main script and lots of links to other scripts
  - I/O latencies
  - How much has changed since the last full backup
  - Is a database really in the full recovery mode
  - All open transactions for a database
  - Wasted space in the buffer pool
  - Index counts for all tables
  - Potential space savings from changing a cluster key
  - Identifying queries with SOS_SCHEDULER_YIELD waits

And I remember the very first public SQL Server script I published, which was Example E in the Books Online entry for *DBCC SHOWCONTIG*, which I'd just rewritten for SQL Server 2000,

and the script made use of the new *DBCC INDEXDEFRAG* I'd written. It's still there in the official docs even today in 2020! Nowadays I'd always recommend someone uses (or uses code from) Ola Hallengren's excellent Maintenance Solution (yes, other people have published scripts to do similar, but Ola's are the gold standard IMHO so I won't recommend anything else).

Call to action: Any time you're trying to figure out a script to do X or Y or use DMV Z, if you just want the job done and you're not trying to learn the ins-and-outs of the DMV or how SQL Server works, do a quick Google or Bing search to see if someone already written a script, and then if you can't find anything ask on Twitter using the #sqlhelp tag and if a script exists, someone will point you to it. Don't reinvent the wheel if you really don't need to.

#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 SQLBits last week 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.

I hope you find these useful and interesting!

Video Demo

For the Insider video this time I'm sharing a couple of videos from my popular soft-skills Pluralsight course *Communications: How to Talk, Write, Present, and Get Ahead!* I've been recommending it to some of my current batch of mentees and thought it would be useful to some of you here. Two of the most important skills in inter-personal communications are how to ask pertinent and clear questions and how to really listen when someone else is speaking.

Each video is about 3 minutes long and you can get them in WMV format:

- Precision questioning here
- Listening here

Enjoy!

Upcoming SQLskills Events

Our 2020 classes have moved to be entirely online in September and October and 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 a more broad set of topics at SQLBits / SQLintersection! 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:

Fall 2020

- **IEPTO2**: Immersion Event on Performance Tuning and Optimization – Part 2
    - Half days on 10/19-23 and 10/26-30
- **IECAG**: Immersion Event on Clustering and Availability Groups
    - Running this week already…
- **IEPTO1**: Immersion Event on Performance Tuning and Optimization – Part 1
    - Running this week already…

Spring 2021

- We'll be announcing our Spring 2021 online class schedule in November.

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