

(March 3rd, 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!

Hey Insiders,

This newsletter is coming to you from Roca Partida (see this Wikipedia link for more details https://en.wikipedia.org/wiki/Roca_Partida), a few hundred miles out in the Pacific off the Baja Peninsula, where Kimberly and I are taking in a quick dive trip before conference and classes start at the end of the month. Such a cool place, so many sharks!

SQLskills News

Live, IN-PERSON classes: our Spring 2020 classes in Chicago are filling up fast:

- 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

We've also **added a new IEReporting** Immersion Event on Using and Administering SSRS and Power BI, running April 27-28.

You can get all the details and registration information through the class schedule page [here](#).

SQLBits: Kimberly, Erin, and I will all be presenting at [SQLBits](#) in London, March 31-April 4. Our preconns are:

- Paul: 3/31 [Performance Troubleshooting using Waits and Latches](#) SOLD OUT!!
- Erin: 4/1 [Performance Tuning with Query Store in SQL Server and Azure](#)
- Kimberly: 4/1 [Statistics4Performance: Internals, Analysis, Problem Solving](#)

This is the only chance to see us in Europe this year as we won't be bringing classes back to the UK until 2021. We hope to see you at SQLBits!

SQLintersection: Our entire SQLskills team will be in Orlando for performance/troubleshooting/development-focused conference. Remember, better (and earlier!) design will make everyone's lives easier! The Intersection-suite of events can really help your

team improve as our focus is primarily on real-world problems that you're seeing! Our Spring show in Orlando features 9 full-day workshops, 46 technical sessions, and 3 SQL-specific general/keynote sessions plus our SQLafterDark evening event and our RunAs Radio closing session with Richard Campbell. And, you always have the option of attending a session from one of our co-located shows: [DEVintersection](#), [Azure/AI Intersection](#), and [SQLintersection](#). **It's our LARGEST show yet!** But, also a smaller show overall so it's a great place to really meet the speakers / attendees and network! We're really looking forward to it.

As for the SQLintersection workshops, check out our line-up:

- 3 pre-conference workshops on Sunday, April 5
 - [Getting Started as a Data Engineer](#) with Tim Chapman
 - [A Lap Around SQL Server for Linux Folks](#) with Jonathan Kehayias
 - [Leveling up with PowerShell for the DBA](#) with Ben Miller

- 3 pre-conference workshops on Monday, April 6
 - [Performance Troubleshooting using Waits and Latches](#) with Paul Randal
 - [Management, Administration, and Best Practices for the Hybrid DBA \(SQL Server 2016-2019, Azure SQL Database, Managed Instance\)](#) with Tim Radney and David Pless
 - [The Developer's Guide to Consistency, Accuracy, Concurrency, and Transactional Control](#) with Kimberly L. Tripp

- 3 post-conference workshops on Friday, April 10
 - [Kubernetes Zero to Hero: Installation, Configuration, and Application Deployment](#) with Anthony Nocentino
 - [Performance Tuning and Optimization for Modern Workloads \(SQL Server 2016-2019, Azure SQL Database, Managed Instance\)](#) with Tim Radney and David Pless
 - [Query Tuning Tools in SQL Server](#) with Grant Fritchey

There are also co-located workshops with each of the conferences so you can mix and match! Our workshops are scheduled so that you and your developers have multiple paths to get the most out of your workshop and conference experience! Check out the entire session line-up online [here](#). And, be sure to register with the discount code 'SQLskills' to get a \$50 discount.

Finally, even if you can't join us in person, I've put out a call for remote user group sessions for 2020! If you'd like one of us to present for your user group, check out my blog post [here](#).

Book Review

Here's one from the archives: Eric Schlosser's [Command and Control: Nuclear Weapons, the Damascus Accident, and the Illusion of Safety](#). This is an absolutely excellent history of US

nuclear weapon control (or lack of it), accidents involving US nuclear weapons, and US nuclear strategy from the 40s to the 80s. It was really shocking how close the US came to an accidental nuclear detonation several times. It also covers the Damascus accident in great detail, along with the almost laughable ineptitude of the Air Force and SAC in dealing with it. There are very comprehensive notes and sources, which actually led me to buy another 15 or so books over the last two weeks on related topics. 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.

We've had some clients recently who were worried whether physical corruption can propagate to a secondary copy of a database – read through my explanation [here](#)...

Ponderings...

Continuing on the theme of corruption from the Curious Case above, I want to talk to you a bit about continuing to use a database after running repair.

Over the years I've taught countless classes and conference sessions that talk about corruption and how it happens, how to run consistency checks, using *DBCC CHECKDB*, and running repair.

When I'm talking about repair, I explain that if you have to run *REPAIR_ALLOW_DATA_LOSS* and it actually deletes data records, you need to reinitialize any affected replication topologies, and validate any affected constraints. This is all documented in Books Online, but that doesn't mean that people read it and know that. ☺

What **isn't** in Books Online, and I make sure the attendees realize, is that repair is all about making the database structurally consistent – it doesn't know anything about the data relationships between tables (either protected by constraints or just inherent in the schema design). This means that after a data-losing repair, the data relationships in the database may well be broken.

I then always asked the room of people: “How many of you have an application data consistency checker that you can run to validate all the business rules and relationships that the application depends on? In fact, how many of you even have a way to test that the application is working correctly after running a repair or deploying new code?”

Every time I ask, I might get one or two hands go up, out of a class of 30 or a session of 50 or more. I've never had more than two, and usually I don't get any.

It's just not something people think about. They assume that if repair runs correctly then they can carry on and everything will work. No.

Call to action:

You really should have some way to validate that your application is running on correct data. Otherwise, in the best case, it will fail, but in the worst case, it will continue running erroneously – maybe with wrong results that affect your business.

This basically means codifying the required relationships in constraints and/or some code that verifies the required relationships (if they can't be expressed as relational constraints) are correct.

If you have a third-party application, it might be hard or impossible to persuade the vendor to provide such a tool, especially if they specifically don't support running repair on their database.

Bottom line: Your business depends on the applications running in the data tier, and you need to make sure, as much as you can, that they're running correctly.

#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.

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*](#)

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

- Tim: [*Azure SQL Managed Instance Performance Considerations*](#)

I hope you find these useful and interesting!

Video Demo

In this week's video, Jonathan takes a look at some of the changes in SQL Server 2019 Showplan XML using the new lightweight profiling v3 *query_post_execution_plan_profile* event, and the standard profiling methods using the older *query_post_execution_showplan* event and *SET STATISTICS XML ON* for a session, and the effect when standard profiling is enabled on the lightweight profiling methods.

The video is 9 minutes long and you can get it [here](#).

And the demo code is [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 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, IN-PERSON Immersion Events:

Chicago, IL, Spring 2020

- **IEPTO1:** Immersion Event on Performance Tuning and Optimization – Part 1
 - April 27 – May 1
- **IEReporting:** Immersion Event on Using and Administering SSRS and Power BI
 - April 27-28
- **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.

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