

(January 19<sup>th</sup>, 2021)

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!**

This newsletter comes to you from Redmond, where I'm home-alone this week as Kimberly is helping move our youngest down to San Diego where she's starting college after delaying a semester. It's a sad time as we lost a great friend last week to COVID-19, Gareth Swanepoel, who many of you knew from the SQL community and conferences. Erin includes a brief eulogy in her video this week. RIP Gareth.

### **Take care and stay safe out there!**

#### **SQLskills News**

**Live, ONLINE classes in 2021:** our classes this year will again be live-streamed online, as it's not feasible to run in-person classes for the foreseeable future. Just like our last deliveries, we'll be running them as a series of half-day sessions so it's less onerous than the usual 9-hour days in our in-person classes.

Students loved the split training days, from the comfort of watching in sweatpants to the ability to still get some of their regular duties accomplished. We had rave reviews for the format. And, all attendees of a live class receive lifetime streaming access to the recording of the entire class – something we'd never done before this year!

### **TAKE NOTE that we have extended our HUGE discounts through the end of January!**

Our upcoming live, online classes for spring 2021 are as follows:

- **IEAzure:** Immersion Event on Azure SQL Database, Azure VMs, and Azure Managed Instance
  - February 23-24-25 and March 2-3-4, 2021
- **IEPTO1:** Immersion Event on Performance Tuning and Optimization – Part 1
  - March 15-16-17-18-19 and March 22-23-24-25-26, 2021
- **IEPTO2:** Immersion Event on Performance Tuning and Optimization – Part 2
  - April 12-13-14-15-16 and April 19-20-21-22-23, 2021
- **IEQS:** Immersion Event on Solving Common Performance Problems with Query Store
  - May 4-5-6, 2021

- **IEVLT:** Immersion Event on Very Large Tables: Optimizing Performance and Availability through Partitioning
  - May 17-18-19-20, 2021

These classes are available for registration individually or as part of a discounted bundle. You can get all the details on our [training options page](#) or just go directly to our [new shop](#). However, before you buy, be sure to review all of the new options and discounts, we're very excited to offer our new Blackbelt Badge and Bundles!

### **NEW: Streaming recordings of all classes!**

We've built a new system that allows you to buy streaming access to all our 2019 and 2020 class recordings. All classes are available for a complete year of access and a few heavily discounted courses for 90 days of access, plus you can purchase them individually or as part of a discounted bundle. You can get all the details in our [training options page](#) or just go directly to our [new shop](#), and there are **huge discounts running through the end of January!**

**SQLintersection:** The usual show is planned for June in Orlando, but Kimberly and I decided late last year to cut out business travel and step away from involvement in the show. You can read about our decision [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](#).

### **Book Review**

From the 2012 archives, I present Gore Vidal's [Lincoln](#). What an utterly fabulous novel! The book is an extremely well-done fictionalization of Lincoln's presidency and the Civil War – reinforcing Vidal's place as my favorite historian. The dramatis personae are complete and there are numerous rich portrayals of the eminent statesmen and generals of the day. It's incredibly interesting to read about the re-forging of the Nation, even in fictional form. I cannot recommend this book enough!

### **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.*

Several times recently I've been asked why differential backups are failing to restore. You can read about the answer in my blog post [here](#)...

### **Ponderings...**

*(From Jonathan this time – enjoy!)*

Performance has different levels....

There are people with amazing natural talent, like Usain Bolt, and then there are people like myself, that no matter how hard I train, are never going to catch up to someone that has a natural ability to run. While I am a pretty decent runner in my own right, I am not suited to compete at the same level of performance as other runners out there.

The same holds true in technology. One of my favorite questions is: what's going to be faster X or Y? It depends... Just because you can make something do a task doesn't mean that it's going to be the best at doing it, and just because something isn't the best doesn't mean that it won't work well enough with the right amount of effort.

It really is a balancing act in technology between what something is supposed to do and what can it be reasonably made to do. Choosing the wrong technology for a problem and trying to force it to work is a recipe for disaster. You can make me run a marathon, and I would probably be able to complete the task, but I'm not going to impress anybody with how long it takes me to do it. I have NEVER been a distance runner, nor am I a sprinter.

Unfortunately we often see in consulting where a customer only has a hammer so every problem MUST be a nail. If you are trying to drive a screw into a board with a hammer and it's not going fast enough, the solution ultimately is not get a bigger hammer. The correct solution is either to change the tool to a screw driver, or change the screw to a nail.

However, it could also be that you have a railroad spike and you are trying to drive it into a board with a ball peen hammer. If the requirement is to secure a rail to a railroad tie, then the correct solution would be a bigger more powerful hammer, but what if the requirement is making a picture frame hang on the wall? A bigger hammer is only going to split the wood when it forces the spike through it.

You have to apply the right solution to the problem, there isn't a one size fits all solution.

Does this sound like a ridiculous analogy? Perhaps to some, but how many of you have heard: *we can't change that design so we need more CPUs or RAM?* Or what about: *we don't need to normalize the tables because storage is cheap?* Or even: *index fragmentation doesn't matter anymore with SSDs?*

One of the statements I absolutely hate to hear is "It should be faster because it has more hardware." Nothing could be further from the truth in technology today. More CPU cores at a slower clock speed won't make a workload faster. At best it will only provide additional capacity for the workload, at worse the slower clock speed will make queries run longer to the point that capacity doesn't increase due to the slower execution.

In the past year we've seen multiple examples of bigger hardware simply creating bigger problems due to a bottleneck in the design, or a limitation of a technology being used for a purpose it was never intended. This is why it is so important sometimes to stop and ask "What problem are we trying to solve here?" because the problem might not be the performance issue that is immediately visible. It might be that you have an ordinary Joe, trying to keep up with Usain Bolt, and that's a totally different level of requirements and features.

## **#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.*

Partitioning is the theme for this TBT:

- Kimberly's intro to partitioning post: [SQLskills SQL101: Partitioning](#)
- Original partitioning whitepaper that Kimberly wrote (which is scenario based so it's still very applicable to all versions): [Partitioned Tables and Indexes in SQL Server 2005](#)
- Additional whitepaper written with focus on features rather than scenarios: [Partitioned Table and Index Strategies Using SQL Server 2008](#)
- Kimberly's [recorded IEVLT class](#)

I hope you find these useful and interesting!

## **Video Demo**

The topic for this week's video comes from a Twitter conversation Erin had about whether queries executed using EXEC(@String) are captured in Query Store. Check out the video to find out the answer!

The video is 8 minutes long and you can get it in WMV format [here](#).

The demo code is [here](#).

Enjoy!

## **Upcoming SQLskills Events**

Our 2021 classes will be entirely online in the spring and they're open for registration!

With our new streaming system, you can now choose to attend a live, online event or purchase a recording to watch at your leisure, either individually or as part of a bundle. And all attendees of live events get lifetime access to the class recordings too!

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](#)
- [Community blog posts about our classes](#)
- [Immersion Event FAQ](#)

## **LIVE, Online Immersion Events:**

Spring 2021

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## **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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