$(May 7^{th}, 2019)$

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,

Wow, can you believe it? This is our *200th* newsletter; I've been writing them roughly every two weeks since March 2011! I really do enjoy bringing you great info every couple of weeks and I hope you enjoy reading them as well!

And this one is coming to you from Chicago where we delivered five Immersion Events last week and we began three more classes yesterday, for a total of 117 happy students who are furthering their careers!

In the 8 years since our first newsletter, we've collectively:

- Taught 162 classes
- Learned 6 new versions of SQL Server (including Azure SQL Database)
- Published more than a thousand blog posts
- Delivered more than 500 user group sessions, in person and remotely
- Recorded 62 Pluralsight courses
- Hosted 12 SQLintersection conferences (next one's coming up in June!)

And I have:

- Taken 353 flights for more than 650 thousand miles, to and from 28 countries on 19 airlines (mostly with Kimberly)
- Read 513 books and more than 1,500 magazines
- Spent almost 37 days underwater on 836 dives (also mostly with Kimberly)

Time certainly flies when you're having fun!

SQLskills News

SQLintersection is coming up in 5 weeks: If you're looking for a great place to learn new features in 2017, upcoming cool stuff in 2019 and best practices in migration, troubleshooting, and performance, then join us in Florida the week of June 10th for our 12th <u>SQLintersection</u>

conference! SQLintersection will teach you the best new features to leverage in 2014 and higher as well as performance strategies to get more out of your servers!

We've got an absolutely incredible line-up this June and ALL of our sessions have been posted! Check out the website to view our pre-conference and post-conference workshops as well as our spectacular line-up including Bob Ward, Buck Woody, Brent Ozar, and most of our SQLskills team! We hope to see you there. You can also check out my blog post about the event here.

Live, <u>IN-PERSON</u> classes: we'll be announcing October deliveries of IEPTO1 and IEAzure sometime in the next two weeks. These will be our only, in-person Immersion Events running this Fall. Watch my blog for details, and definitely in the next newsletter.

Live, ONLINE classes: we finished our first set of 2019 live, online classes in March and we're planning to announce our Fall line-up of online courses at the start of the summer.

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 43 scheduled this year already! If you'd like one of us to present for your user group, check out my blog post <u>here</u>.

Book Review

The most recent book I've read is the culmination of the Ibis Trilogy by one of my favorite authors, Amitav Ghosh. Here are my reviews of all three books:

- 1. <u>Sea of Poppies</u>. I've got a real thing going for writers portraying life in India right now. This book follows the stories of a bunch of people around the time of the Opium Wars, who are linked into the trade in India both Indians and Westerners. Various calamities befall the Indians and they end up on a schooner, the Ibis, heading down to Mauritius. A very compelling story, expertly told and I'll be picking up some more of his novels from Amazon.
- 2. <u>River of Smoke</u>. Amitav Ghosh is one of my favorite writers and this book was really good. It deals with the events leading up to the Chinese crackdown on opium imports in the 1830's and the start of the Opium Wars (that Great Britain eventually wins). As always, the portrayals of characters and relationships are excellent and the events historically accurate.
- 3. <u>Flood of Fire</u>. This is the excellent culmination of the Ibis Trilogy and also works very well as a standalone novel. It draws many of the characters from the previous books together as Britain prosecutes the First Opium War against China in the early 1840's, including naval battles, rampant profiteering and greed, and intrigue. Ghosh's writing is vibrant and I love all his work he's one of the most adept authors at making me really envision his scenes.

All three are highly, highly recommended, and definitely read them in order!

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.

Continuing the theme of using a hex editor to find things, last week I helped someone out over email who had only a RAW filesystem to work with and needed to find where the MDF started so he could try piecing together the file. Sounds crazy, right?

Read about how to do it in my blog post <u>here</u>.

Ponderings...

(This time from Paul...)

In <u>newsletter #4</u> in April 2011 my editorial was a rant about the cloud, and how I was getting tired of hearing about it over and over and being pushed to start using it when it had so many drawbacks and limitations compared to on-premises SQL Server.

Fast forward 8 years and now the cloud is definitely a major force in the I.T. world, whether we're talking about Microsoft Azure, Amazon AWS, or others, and we've embraced it at SQLskills, with classes, Pluralsight courses, and consulting with clients.

The problem I see now is that many on-premises DBAs are wondering whether the cloud is sounding the death knell for their job role. Last week while teaching IEPTO1, I had five people come up to ask me whether I thought the on-premises DBA role was dying.

My answer is an unequivocal 'NO!' The on-premises DBA role is definitely not dying; it's evolving.

It's not dying because there are a huge number of companies with extensive SQL Server environments that will not move to the cloud, for a number of possible reasons:

- They have a huge capital investment in hardware already
- The workloads are (or are perceived to be) too large to be run in the cloud
- The workload performance requirements are (or are perceived to be) too stringent to run in the cloud
- The I.T. infrastructure is (or is perceived to be) too complex to move to the cloud
- They want to maintain complete control over the I.T. infrastructure
- There would not be a cost saving from moving to the cloud

Don't get me wrong – lots of companies *are* moving part or all of their SQL Server environments to the cloud, but lots are not. In these latter companies, on-premises DBAs will obviously still be required for a long time to come. And, even if your company straddles the

fence, with some on-premises servers and some in the cloud, there's still an important role for the DBA.

However, the on-premises DBA role is definitely evolving, and to make sure you're still a highly-desired employee, there are some areas you should look at learning or getting experience with:

- DevOps, to tighten up code releases so it's not just developers throwing code over the wall into production and the DBA has to figure out performance problems
- Data visualization, for instance with PowerBI, even if just to show performance trends on the servers you manage
- Machine learning and data science, to help the company gain valuable insight into the data they have
- The cloud, ironically, so that if your company *does* decide to move any of its environment to the cloud, you're prepared
- The latest releases (2016, 2017, and 2019) as I know there are a lot of you out there still running on 2008, 2008 R2, 2012 and you'll be upgrading those environments soon

Bottom line: the on-premises DBA role is definitely a good career choice still. Almost every week I'm approached by someone I know in the industry to see if I'm aware of any good DBAs that are looking for a job. There's a strong market for DBAs out there and I don't expect it to slack off anytime soon.

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:

- SSMS 18.0 finally released
- SQL Server 2019 CTP 2.5 available
- AMD Ryzen 7 2700X 50th Anniversary Edition

Check it all out on his blog <u>here</u>.

#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.

Producing a performance baseline and other monitoring is the theme this time, so here are some resources for you:

- Erin's Pluralsight course on <u>SQL Server: Benchmarking and Baselining</u> that has 3.5 hours covering what metrics to capture and how to capture them.
- If you're still using Trace/Profiler, Erin's Pluralsight course on <u>SQL Server: Replacing</u> <u>Profiler with Extended Events</u> will be really beneficial.
- And a bunch of blog posts:
 - o Erin: SQL Server Baselines Series on SQLServerCentral.com
 - o Erin (from our Accidental DBA series): (Day 18 of 30): Baselines
 - o Erin: (Day 19 of 30): Tools for On-Going Monitoring
 - o Jon: (Day 21 of 30): Essential PerfMon counters
 - o Paul: <u>Capturing IO latencies for a period of time</u>
 - o Paul: <u>Capturing wait statistics for a period of time</u>

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

- Paul: <u>Introduction to Wait Statistics</u>
- Glenn: Why You Shouldn't Use an Intel Xeon Silver Processor for SQL Server
- Glenn: New HP Spectre x360 Laptop

I hope you find these useful and interesting!

Video Demo

For the 200th newsletter I asked everyone to pick their favorite demo from a Pluralsight course they've written, so here they are for you!

- Erin: Showing Automatic Plan Correction in action, from the course <u>SQL Server</u>: Automatic Tuning in SQL Server 2017 and Azure SQL Database
 - o Video file <u>here</u> (12.5 mins) and demo scripts <u>here</u>
- Glenn: Examining the processor description, from the course <u>SQL Server 2017:</u> Diagnosing Performance Issues with DMVs
 - O Video file here (1 min) and demo scripts here
- Jonathan: Using the pair matching Extended Events target to identifying statements that time out, from the course *SQL Server: Advanced Extended Events*
 - O Video file <u>here</u> (5 mins) and demo scripts <u>here</u>
- Kimberly: Examining plan cache attributes and session setting states during stored procedure execution, from the course <u>SQL Server: Optimizing Stored Procedure Performance Part 2</u>
 - O Video file <u>here</u> (16 mins) and demo scripts <u>here</u>
- Paul: How to attach a detached SUSPECT databases when the file IDs aren't in order, from the course <u>SQL Server: Advanced Corruption Recovery Techniques</u>
 - O Video file <u>here</u> (6 mins) and demo scripts <u>here</u>

- Tim: How to create and deploy and Azure VM, from the course <u>SQL Server:</u> <u>Implementing a Hybrid Cloud Solution in Azure</u>
 - o Video file <u>here</u> (6.5 mins)

Enjoy!

Upcoming SQLskills Events

Our next in-person event is our bi-annual SQLintersection conference in June and in Orlando, FL (see here for details of the June show). Conferences are a great way to learn "nuggets" about a large variety of features and best practices so that you can get amazing ROI out of one week!

And, of course, another big benefit from in-person events is networking; with SQLafterDark as well as smaller, more friendly sessions where you can really get your questions answered! Kimberly and I even spend our lunches in the session rooms chatting with attendees and discussing their environment/concerns and if we can't help you get your issues solved – we'll introduce you to the speaker that can!

We always have great fun at SQLintersection; we hope to meet/see you there some day! Check out our "closing Q&A sessions" recorded as podcasts for RunAs Radio:

- Fall 2013 SQLintersection here: http://www.runasradio.com/Shows/Show/341
- Spring 2014 SQLintersection here: http://www.runasradio.com/Shows/Show/369
- Fall 2014 SQLintersection here: http://www.runasradio.com/Shows/Show/397
- Spring 2015 SOLintersection here: http://www.runasradio.com/Shows/Show/423
- Fall 2015 SQLintersection here: http://www.runasradio.com/Shows/Show/447
- Spring 2016 SQLintersection here: http://www.runasradio.com/Shows/Show/474
- Fall 2016 SQLintersection here: http://runasradio.com/Shows/Show/506
- Spring 2017 SQLintersection here: http://runasradio.com/Shows/Show/536
- Fall 2017 SQLintersection here: http://www.runasradio.com/Shows/Show/558
- Spring 2018 SOLintersection here: http://www.runasradio.com/Shows/Show/582
- Fall 2018 SQLintersection here: http://www.runasradio.com/Shows/Show/619

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, October 2019

• Details in the next newsletter.

LIVE, ONLINE Immersion Events:

• The Fall class lineup will be announced at the start of the summer.

Click <u>here</u> 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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