(January 16th, 2017)

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.



Quick Tips for our Insider friends!

Hey Insiders,

Happy New Year!

This newsletter is coming to you from Redmond, where we're home for a couple of months, working hard on new content and enjoying the crisp, clear weather.

At the end of last year I published my traditional two blog posts:

- 2016: the year in books
- 2016 review: the year by the numbers

We're looking forward to seeing a bunch of you this year in our classes in Chicago in April/May, our classes in Bellevue in July/August, and our Spring SQLintersection conference in Orlando in May. See here for the class schedule and here for SQLintersection details.

And even if you can't join us in person, we're still taking requests for remote sessions for this year. We have 37 scheduled so far; if you'd like one of us to present for your user group, check out my blog post here.

This is a wonderful book where Pisani recounts her travels around the country's sprawling archipelago in 2012, after living and working there some years before. It gives a wealth of info on the history of the region and the many cultures that she encounters, all bound together under the Indonesia state umbrella. I particularly enjoyed the first part of the book where she's in the eastern half of the country, as that's where we've spent many months over the years diving, so I recognized many of the far-flung towns and ports she visited. She also throws in a lot of language tidbits, which is helpful as we're both learning Indonesian this year to better communicate with the people we meet there. Highly recommended.

Note: you can get all the prior Insider newsletters <u>here</u>.

The Curious Case of...

This section of the newsletter explains problems we've found on client systems; they might be something you're experiencing too.

I had a random email from a former Immersion Event student last week who was interested in being able to tell which transactions failed because of a server crash.

The answer is relatively simple.

First of all you need to know the time of the crash. You won't be able to get this exactly (from SQL Server) unless SQL Server decides to shut itself down for some reason (like tempdb corruption). You will be able to get the time that SQL Server restarted, which is good enough, as you just need to know a time that's after transactions started before the crash, and before those transactions finished rolling back after a crash.

Then you can search in the transaction log, using the *fn_dblog* function, for *LOP_BEGIN_XACT* log records from before the crash point that have a matching *LOP_ABORT_XACT* log record after the crash point, and with the same transaction ID.

After that, the tricky part is matching what those transactions were doing back to business operations that your applications were performing. If you don't name your transaction, that's going to be pretty hard, as all you've got are the generic names that SQL Server gives transactions (like *INSERT*, *DELETE*, *DROPOBJ*).

I'll do a blog post on this during the week that'll give you some code to use and a walk-through example.

Bottom line: your applications should be written so they gracefully handle transaction failures and leave the database in a consistent state (as far as your business rules are concerned – of course SQL Server leaves the database in a transactionally-consistent state after a crash).

Paul's Ponderings

(This editorial is adapted from my traditional first-newsletter-of-the-year editorial that I've been doing since 2014.)

At the start of every New Year it's always tempting to come up with a series of resolutions about things you're going to start doing, and it's tempting for me to write an editorial about planning to do new things. It's really easy to come up with ideas for cool things to *start* doing, which is why it's the easy route to take at the start of a new year.

But before you go too crazy with new ideas, consider a post mortem of your goals and plans from 2016. Look back at the year and see what didn't go well, and then figure out how to improve on those things. In my opinion, that's going to have a more positive effect on your life than continuing to do poorly on those things, and also try to add new things as well. (From 2014 to 2016, Kimberly commented "the SQL development team could learn from this too…", but

with SQL Server 2016, they really did go back and fix a bunch of things that were broken or outdated.)

During 2015, one of the things I had reinforced through the year while I mentored 50+ people in the SQL community is that *everyone* has something with which they need help or advice, and I continued to swap emails with a few mentees when they asked for advice during 2016. I strongly advise you to get a mentor outside your management chain (and preferably outside your company) – someone to whom you can bounce questions and one that has no vested interest – other than just helping you out.

And I'm not just talking about things in your work life; I'm also talking about things in your personal life. Here are some examples of things that may not have gone too well in 2016, just to get you thinking:

- Your work/life balance
- The support your immediate manager gave you
- Your interactions with some of your colleagues
- Your interest in some aspects of your job
- Your career/skills development
- Resistance to change
- Keeping on top of performance fires
- Keeping track of goals and to-do lists
- Saying 'no' when you're already overloaded
- Accepting a poor status quo at work instead of looking for a better job
- Finding time for disaster recovery planning/testing
- Finding time for all the little things that it's easy to procrastinate about
- Finding time for your hobbies
- Finding time and motivation to become/stay healthy
- Keeping in touch with old friends and distant family
- Finding time to reads some books or learn something new that's non-work
- Your work/life balance (again, because it's *so* important)

All of these can cause significant amounts of stress, so fixing them should be the first priority. Only once you have these items fixed, should you embark upon new and additional goals!

(Kimberly added: And, don't get us wrong, this is just as hard for us as it is for you!)

Call to action: Before you set cool, new goals for 2017 (whether at work or at home), do a post-mortem and work to fix the stuff from 2016 that was broken or didn't go so well. Not only will it feel good but it'll also reduce stress. And try to get a mentor!

Video Demo

In this demo, Jonathan shows how to force service for an Availability Group when only a single replica is available after a disaster.

The video is about 8 minutes long and you can get it:

- In WMV format here.
- In MOV format here.

The demo code is available here.

Enjoy!

SQLskills Offerings

The classes for both Spring and Summer 2017 are all available for registration!

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

Upcoming Immersion Events

Chicago, IL, April/May 2017

- **IE0**: Immersion Event for Junior/Accidental DBAs
 - o April 24-26
- **IEPTO1**: Immersion Event on Performance Tuning and Optimization Part 1
 - o April 24-28
- **IESSIS1**: Immersion Event on Learning SQL Server Integration Services
 - o April 24-28
- **IEBI**: Immersion Event on Business Intelligence
 - o May 1-5
- **IEPTO2**: Immersion Event on Performance Tuning and Optimization Part 2
 - o May 1-5
- IESSIS2: Immersion Event on Advanced SQL Server Integration Services
 - o May 1-5
- **IEPS**: Immersion Event on Powershell
 - May 8-10 **NEW** class
- IEPDS: Immersion Event on Practical Data Science

- o May 8-12
- **IEHADR**: Immersion Event on High Availability and Disaster Recovery
 - o May 8-12

Bellevue, WA, July/August 2017

- **IEPTO1**: Immersion Event on Performance Tuning and Optimization Part 1
 - o July 31-August 4
- **IEPTO2**: Immersion Event on Performance Tuning and Optimization Part 2
 - o August 7-11

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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