(April 14th, 2014)

If you know someone who you think 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!

This newsletter is coming to you from Orlando where as it hits your inbox, I'm on stage lecturing about wait statistics. We had a bunch of great pre-conference workshops yesterday (and two pre-preconference workshops on Saturday too) and after the week is done, Kimberly and I are heading over to Cape Canaveral to tick an item off our bucket lists. Amazing that we've been coming to Orlando and Tampa at least once a year since 2006 (and Kimberly even longer) but we're only making it to the Space Center now in 2014 for the first time!

Last week the kids and I re-ignited our interest in geocaching, clocking up more than 45 caches found over several long day trips. It's a great hobby to do with kids as it's like a treasure hunt, but there's a large adult following too. I encourage you to check it out at geocaching.com.

The most recent book I've read is Elizabeth Kolbert's *The Sixth Extinction: An Unnatural History*. This is a very interesting book that examines the role of humans in the ongoing mass extinction of species across the world, and also discusses the history of how the previous big-five extinction events were discovered/hypothesized. One of the simplest ways humans are contributing to species extinction is by enabling the long-distance travel of predatory species, viruses, and fungus that otherwise wouldn't be able to cross the oceans. It's a bit of a depressing book to read because it highlights the almost callous effect humans have on other species. Saying that, however, it's a very valuable thing to read and learn about.

Coincidentally, on the flights down to Orlando on Friday I finished Kim Stanley Robinson's 2312, a near-future portrayal of diaspora and factionalization in the solar system. In one scene, the Earth is re-seeded with animals from many (by then) extinct species that have been bred for genetic diversity in terraria made from hollowed-out asteroids – let's hope it doesn't come to that. I'd recommend both books.

Please let us know if you liked what you read/saw here and/or have any suggestions for future Quick Tips.

Note: you can get all the prior Insider newsletters here.

Paul's Ponderings

Unless you've been living in a cave for the last week, you'll have heard of the Heartbleed security bug in the OpenSSL cryptographic software library that's causing huge amounts of concern across the world. You can read the details at heartbleed.com and the CERT KB article.

Although Azure itself, IIS, and SQL Server are not affected, you might have other portions of your IT infrastructure that are if they use OpenSSL (e.g. Apache web servers, Linux servers) so it's worth making sure that someone is checking your company's environment for vulnerabilities.

Any time a security scare happens, it's a good reminder that SQL Server has security considerations that need to be addressed. Here's a list of things you need to consider:

- Physical security of your servers (can someone walk away with a server or storage?)
- Network security (Windows security, firewalls, encryption, Kerberos, using SQL Browser)
- Attack surface minimization (disabling unused features so they're not available for hackers to attempt to subvert)
- Service accounts (using accounts with the least privileges possible to reduce the likelihood that a compromised account can lead to a wholesale network penetration)
- Restricting use of admin privileges (only those people who *really* need admin rights should have them)
- Authentication mode (whether to allow SQL Server authentication as well as or in place of Windows authentication)
- Authorization (using the principle of least privilege to prevent unnecessary access to data and functionality)
- SQL injection (making sure that dynamic SQL isn't susceptible to attacks that inject escape characters to circumvent security)
- Disaster recovery (ensuring that encrypted data can be properly accessed after performing disaster recovery, e.g. can you restore encryption keys?)
- Auditing (making sure you know who's doing what, both unsuccessfully and successfully)

I wrote a long article for TechNet Magazine back in 2009 that discusses each of these points in more depth, with links to further information. Although the article is five years old, the information is still current and applicable to all versions of SQL Server. Check it out here.

Call to action: It's very tempting when a security problem crops up to put your head in the sand and assume the problem isn't going to affect you or your environment. Wrong answer! Due diligence on your part for your company is to verify rather than assume. And it's always prudent to conduct regular SQL Server security reviews. The list above gives you lots to think about, and the videos I link to below give you even more. Don't be complacent – defense in depth!

I'm curious to hear your thoughts on security and security problems, so please feel free to [drop me a line](#), always treated confidentially, of course.

Video Demo

Continuing the security theme, and as we've all been busy last week preparing for the conference, I'm going to point you to the security videos recorded for the MCM program – they're a great resource!

There are five videos totaling several hours of information, available in a variety of formats:

- [Security: Introduction and Server Setup](#)
- [Security: Authentication and Authorization](#)
- [Security: Keys and Encryption](#)
- [Security: Auditing and Compliance](#)
- [Security: EXECUTE AS and SQL Injection](#)

Enjoy!

SQLskills Offerings

Please know that all of our classes will run and their dates will not change. Additionally, most of our public training courses will be held in the first half of this year. We will add a couple of other classes in the second half of the year, but not all that many (maybe one or two IE1 deliveries and one IE2 and, if added, they'll be held in the US). Please plan accordingly.

Finally, to help your boss understand the importance of focused, technical training, we've added a few new 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](#)

2014 Immersion Events

Chicago, IL

- April 28 – May 2, 2014: **IE1**: Immersion Event on Internals and Performance
- April 28 – May 2, 2014: **IEBI**: Immersion Event on Business Intelligence
- May 5-6, 2014: **IEHW**: Immersion Event on SQL Server Hardware
- May 5-9, 2014: **IE2**: Immersion Event on Performance Tuning (**SOLD OUT!**)
- May 12-16, 2014: **IE3**: Immersion Event on High Availability and Disaster Recovery
- May 12-16, 2014: **IEDEV**: Immersion Event for Developers

- May 19-23, 2014: **IE4**: Immersion Event on Security, PowerShell, and Developer Support
- May 19-21, 2014: **IE0**: Immersion Event for the Accidental/Junior DBA

Bellevue, WA

- June 9-13, 2014: **IE1**: Immersion Event on Internals and Performance
- June 16-20, 2014: **IE2**: Immersion Event on Performance Tuning

See [here](#) for the main Immersion Event Calendar page that allows you to drill through to each class for more details and registration links.

Fall SQLintersection

Our Spring SQLintersection conference is running this week, and if you couldn't make it, now is the time to start planning for the Fall show. This year our Fall SQLintersection conference will be the week of November 10th in Las Vegas. We'll have a lot more details in a month or so when we've worked out the speaker lineup, workshops, and sessions. We hope to see you there!

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