

$(April 30^{th}, 2012)$

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 bi-weekly Quick Tips is coming from Redmond, WA where we're visiting our 'vacation home' for 6 days after returning from teaching our IE1 and IE2 classes in Chicago and hanging out with our IEDev and IEBI classes as well. On Friday we fly out to London to deliver IE1 and IE2 there and we're working hard on getting our complete 2013 class schedule together so we can publish it in August.

During May we're offering you a *Spring Cleaning special deal*. For new customers from anywhere in the world, we'll give you one of our flagship SQL Server Health Checks for a flat fee of \$1300 (covering a health check of one SQL Server instance (SQL Server 2005+) up to a maximum of 6 hours), which is a saving of 33% off the regular price. All you need to do is <u>send</u> me an email for details before the end of May 2012.

A month ago I mentioned that we'd driven through the Mojave Desert; I just posted some of the photos I took – see here.

The most recent book I've read is Neal Stephenson's *Snow Crash*. I've read this once before about ten years ago but it's so good I've been meaning to re-read it for a while. It's pure sci-fi about high drama chases in real life and in a computer-generated reality – gritty, with good, believable technology. I also recommend reading his books *The Diamond Age, Cryptonomicon*, *Anathem*, and the *System of the World* trilogy. In fact I just went to Amazon to check on the spelling of *Anathem* and saw he's released two new books – *Reamde* and the *Mongoliad* – which are now making their way towards home so I can take them to London. ©

Please <u>let us know</u> 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

During class this week someone asked me about a problem they'd been seeing when running DBCC CHECKDB on a restored copy of master. They were doing this as part of a backup testing strategy where all full backups are restored on a secondary server and then DBCC CHECKDB is run to verify the integrity of the backup AND the database (as of the time the backup was taken).

Master can be restored as a user database but a DBCC CHECKDB will fail as there are some structures in master than can only be present in the database when it is master – for instance the CONFIG block that stores sp_configure options. Details are in these blog posts I just did:

- Is my master database really corrupt?
- Where are sp_configure settings stored? Another reason to backup master...
- New script: When were the sp_configure options last changed?

The middle post is the inspiration for my topic this time: system databases.

I think I'd be safe going out on a limb and saying that many DBAs don't consider their system databases when it comes to backups and disaster recovery. I'm talking about master, model, msdb, and any replication distribution databases.

These databases are critical to your SQL Server instances and need to be protected and integrity checked just as much as your user databases.

There's no point having your data available if you don't have an instance to connect them to or if you can't bring the instance into a working state when master is missing because you don't have all of the necessary login information.

Or maybe you can bring the replication publication database(s) online but because the distribution database was lost, you need to reinitialize all the subscription database(s), meaning downtime for the reporting clients who use them.

If you lose msdb then you've lost all your SQL Agent jobs (think backups and consistency checks), plus all your SSIS packages, and your backup history. In fact, if you don't have access to your backup history in msdb, how do you get your automated user database restore scripts to work?

System databases really are important.

Here are some Books Online links to help you get started:

- (2005 onwards) Considerations for Backing Up and Restoring System Databases
- (2005 onwards) Moving System Databases
- (2005) <u>How to: Install SQL Server 2005 from the Command Prompt</u> (explains how to rebuild system databases in 2005)
- (2008 onwards) Rebuilding System Databases

By the way, there's no workaround for how to consistency check a restored copy of master.

Call to action: Check that your backup strategy, your backup testing strategy, your consistency checking strategy, and your disaster recovery testing also includes your system databases. You need these in their most recent states if your SQL instance gets completely hosed if you want to

perform the fastest possible recovery and get the instance back to the configuration state it was in at the time the disaster occurred.

I'm really interested to know your thoughts on dealing with system databases—feel free to <u>drop</u> me a line, confidentially as always.

Video Demo

In the video for this newsletter Jonathan shows you how to figure out which thread in SQL Server is using all that CPU. The tool he uses is the free Process Explorer tool from the SysInternals suite of tools. This is a short video (about 5 minutes) but that's all that is required to show how cool this is!

I produced the video in WMV and MOV formats so everyone can watch. You can get the videos:

For WMV: <u>here</u>For MOV: <u>here</u>

And you can get the demo code zip from here.

Enjoy!

SQLskills Offerings

We've extended our "buy in bulk" discount where you pre-pay a block of seats now to get a 28% discount off of full price and a 16% off of the early-bird price. See here for details. You can even use these "buy in bulk" seats for classes that no longer offer the early-bird price as long as they are not "sold-out."

Here's our complete 2012 schedule of classes. We're not adding anything else for 2012 but we are planning our 2013 calendar. It was a tough decision as we truly enjoy delivering these and meeting so many great SQL folks, but our schedule is just too full. With the holidays, Fall conferences such as SQL Connections and SQL PASS, and other engagements and projects on our schedule, we just can't add more business travel to our 2012 calendar.

- May 7-11, 2012: Internals and Performance (**IE1**) in London, UK
- May 14-18, 2012: Performance Tuning (IE2) in London, UK
- August 6-10, 2012: Internals and Performance (**IE1**) in Bellevue, WA USA
- August 13-17, 2012: Performance Tuning (**IE2**) in Bellevue, WA USA
- August 13-17, 2012: Immersion Event for Developers (**IEDev**) in Bellevue, WA USA
- August 20-24, 2012: High Availability & Disaster Recovery (IE3) in Bellevue, WA USA
- August 20-24, 2012: Immersion Event for Business Intelligence (IEBI) in Bellevue, WA
 – USA

• August 27-31, 2012: Development Support (**IE4**) in Bellevue, WA – USA

We hope to see you in London or Bellevue this year; otherwise we'll plan to see you in 2013! As a note for 2013, we're currently planning our locations and we're looking at coastal locations (one on the east and one on the west) as well as our Chicago location for domestic events. And, we're likely to head back to London as well. We're planning to release our 2013 calendar in August/September.

As a note for those of you who really want us to come to *your* city... we'd LOVE to. However, we just can't be everywhere (we wish we could! ©). Having said that though, these events are truly *immersion* events and if there isn't one in your city, it might be a good thing to consider the travel and time away. Being in a hotel for the event allows you to participate in evening events, network with your colleagues and focus on the class without the usual requirements of being in your hometown.

To make it easier on you, we work hard to book with hotels where the nightly sleeping costs are reasonable, where you won't need a rental car and in hub cities where flights are cheaper (i.e. Chicago/London/LA/DC). Our Bellevue/Seattle courses are a bit of a departure from this as it's not a major hub city but we balance that with the fact that it's during the summer and many of our past attendees have combined their visit with summer family travel. August in the Pacific Northwest is absolutely stunning and we can give you all sorts of recommendations for sight-seeing if you're interested!

So, that's it for now. Our 2012 schedule is final and we're really looking forward to some great Immersion Events this year as well as planning for 2013. We hope to see you soon!

See <u>here</u> for all the details.

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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