

(February 20<sup>th</sup>, 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 rounds out the first year of producing this newsletter – time flies when you’re having fun! I’ve had a ton of feedback over the year and I’m really glad you’re enjoying the newsletters and find them valuable – long may they continue!

I’ve posted the first set of underwater photos from our January dive trip [here](#) and Kimberly’s posted some on Facebook here:

- [Raja Ampat Diving – Favorites](#)
- [Nudis of Raja Ampat](#)

For our classes, Chicago and London are filling up and Tampa has a few spots still available. For new registrations to the Tampa classes only, if you register during February with the discount code ‘insider’ we’ll give you a \$250 hotel bill credit!

Some of the most recent books I’ve read have been coffee-table books of underwater photos. Here are some of my favorites:

- *Ocean Soul* with the photographs of Brian Skerry
- *Sea* with the photographs of Mark Liata
- *Beneath Cold Seas* with the photographs of David Hall

All of these showcase stunning underwater photos but the final one has really enthused us to dive around Puget Sound this year rather than only diving in warm water (Puget Sound water averages 55 degrees). Dry-suit certification – here I come!

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

Obviously consistency checking is one of my passions and as you can imagine, I get quite a few questions in email about how to run consistency checks and interpreting CHECKDB output.

Over the last year or so it’s been more frequent that I’m asked for my opinion on various schemes people have come up with to try to avoid running consistency checks on the production

SQL Server – as consistency checking is very resource intensive and can take a long time on a large database.

One scheme that I was asked about recently seemed good at first glance but was actually incorrect. The idea was to run consistency checks against a log shipping secondary database after restoring the log backups in STANDBY mode (to give a temporarily-recovered, read-only database).

So what's the problem with this method?

It's not checking the I/O subsystem of the log shipping primary database – only that the log backups are working correctly and the I/O subsystem on the log shipping secondary isn't causing problems. Log shipping only ships transaction log backups – so any corruptions to the data files from the I/O subsystem on the primary will likely not be detected by the offloaded consistency checks.

A similar argument prevents running consistency checks on a database mirroring mirror's database snapshot as a way of avoiding consistency checks on the database mirroring principal (or a transactional replication subscriber, or a SAN replication secondary, and so on). The lack of corruptions on the mirror's I/O subsystem implies nothing about the health state of the principal's I/O subsystem.

I've heard it discussed that the SQL Server 2012 Availability Groups feature can allow consistency checks to be offloaded to one of the secondary copies – no – by the same argument.

The only way to offload consistency checks and still be checking the I/O subsystem of the production server is to take a full backup, restore it somewhere else, and then run consistency checks on the restored database. The full backup will pick up the production database in its entirety, including any corruptions in the I/O subsystem – and then restoring this on another system will restore the corruptions too, thus enabling the offloaded consistency checks to 'see' the corruptions that existed on the production I/O subsystem at the time the full backup was performed.

**Call to action:** Make sure that whatever method you're using to offload consistency checks from your production systems is actually checking the I/O subsystem (either directly or indirectly) on the production system. Only checking the I/O subsystem on a secondary system isn't good enough! (And nor is NOT running consistency checks!)

I'm really interested to know your thoughts on offloading consistency checks from production servers—feel free to [drop me a line](#), confidentially as always.

## **Video Demo**

Finding what statement caused a spike in resources on a SQL Server instance can be a challenging task so in the next video in his series on free tools, Jonathan looks at a little known

feature of SQL Server Profiler that can help you correlate Performance Monitor data with trace activity inside of SQL Server. It's about 14 minutes long.

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

- For WMV: [here](#)
- For MOV: [here](#)

I recommend downloading before watching. No demo code this time. Enjoy!

### **SQLskills Offerings**

Registrations are piling in for our 2012 classes and right now we're doing our final preparations for our Tampa Immersion series (IE1-IE2-IE3). But, for some of you, we also know that getting travel and training sorted is difficult early in the year as budgets are still being defined. To help you take advantage of last minute travel deals, we'll add one of our own – if you register for a Tampa class before the end of February then we'll take \$250 off of your hotel bill! Just use the 'insider' discount code when you register.

And, we've also 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."

| We are offering all of our Immersion Events in 2012—[here](#); these classes are available for registration now!

- February 27 – March 2, 2012: Internals and Performance (**IE1**) in Tampa, FL
- March 5-9, 2012: Performance Tuning (**IE2**) in Tampa, FL
- March 12-16, 2012: High Availability/Disaster Recovery (**IE3**) in Tampa, FL
- April 16-20, 2012: Internals and Performance (**IE1**) in Chicago, IL
- April 16-20, 2012: Business Intelligence (**IEBI**) in Chicago, IL
- April 23-27, 2012: Performance Tuning (**IE2**) in Chicago, IL
- April 23-27, 2012: Developers (**IEDev**) in Chicago, IL
- May 7-11, 2012: Internals and Performance (**IE1**) in London, UK
- May 7-11, 2012: Business Intelligence (**IEBI**) in London, UK
- May 14-18, 2012: Performance Tuning (**IE2**) in London, UK
- May 14-18, 2012: Developers (**IEDev**) in London, UK
- August 2012: **IE1-IE2-IE3-IE4, IEDev**, and **IEBI** in Redmond/Bellevue (WA) again!

NOTE: These are the **only** locations/classes/cities being planned from January through August 2012. We are likely to offer only one more IE1 & IE2 combination later in the year and we're currently considering Houston, Newark and Atlanta.

See [here](#) 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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