

(December 10th, 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 is the last Insider newsletter this year, so we'd like to wish you and your families a very happy holiday season!

It's been a great year for us here at SQLskills and we have a lot planned for 2013, with a full line-up of Immersion Events in the US and the UK, plus conferences, SQL Saturdays, user groups, and more than 25 more online training courses via Pluralsight. We're going to be busy!

Our super-early-bird pricing for the US and UK Immersion Events ends December 31st, so if you want to save \$300 on your registration and use up that training budget in 2012, now's the time to talk to you manager! And, since a few folks have asked, none of our events are sold out – our Tampa events in February are the most active with about 10 spots remaining in each.

The most recent book I've read is the Penguin Classic edition of *The Epic of Gilgamesh*. This is a translation 3,700-year old Babylonian epic poetry from stone tablets, which tells a few stories including the precursor to the biblical flood tale. The 60-page introduction describes the archeology which led to the discovery and translation of the tablets, along with the symbolism in the stories and an analysis of the language constructs used. It's heavy going at times, but well worth it for those into ancient history. It was pretty cool a month ago when my 12-year old daughter's World Civilization teacher assigned the book as homework reading and she could tell the teacher that her Dad had it in his library already. ☺

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

One of the problems I see people struggling with is figuring out which high-availability (HA) technology to use when designing an HA strategy. Often the incumbent technology is chosen, just because it's already in place, even though it may not meet the strategy's requirements. Or even worse, an arbitrary technology choice is made (e.g. "let's just use failover clustering!") as there are no clear requirements to use when designing the strategy.

To design the right HA strategy, requirements gathering and analysis simply must be done, or you have no hope of being able to satisfy the business requirements with the strategy you come up with.

For each portion of data the HA strategy will apply to, you need answers to at least the following questions:

1. How important is this portion of data compared to all the others? Very often I will see business managers state that everything is top priority and must be protected equally. That works with a small amount of data, but becomes increasingly impractical with multiple terabytes spread over multiple SQL Server instances.
2. How much data can the business afford to lose? Business owners would understandably like to see zero data loss.
3. How long can the data be unavailable? Business owners would also like to see zero downtime, but unfortunately this isn't achievable in reality, although you can get very close.
4. Do #1 or #2 change at various times of day or at the weekend? This can have a profound effect on your ability to meet requirements, as zero downtime and data loss are far more achievable for a limited period, say 9am to 5pm on weekdays, compared to 24x365.
5. Is it acceptable for workload performance to be compromised to preserve data availability and durability? The only technologies that can provide zero data loss require synchronous mirroring of transaction log records (i.e. database mirroring or 2012 availability groups) or I/O subsystem writes (i.e. SAN replication). Both of these can lead to a processing delay, but it's a trade-off.
6. Does the secondary copy of the data have to be readable and/or writeable?

Once you've got these requirements, you can work through the limitations imposed on you by the business (usually budget is the main one, but there are plenty of others – technical and non-technical – that are beyond the scope of this newsletter), and then compromise. It's very important to realize that the limitations you're working within may mean you can't meet all of the requirements, so you and the business managers will have to agree to a compromise – otherwise the HA strategy you design isn't going to meet expectations. And it's even more likely that your solution will be comprised of multiple technologies, so knowing the limitations of each, as well as how they work together, will be critical to your success.

Call to action: If you've been asked to design a high-availability strategy, do yourself and the business a favor by gathering concrete requirements so you know what you're trying to achieve. I've really only touched the surface of the process here, but I went into a lot more depth in the whitepaper I wrote for Microsoft a few years ago – [High Availability with SQL Server 2008](#) – which I strongly recommend you read. The last thing you want is your high-availability strategy to fail because it wasn't designed correctly.

I'm curious to hear your thoughts about HA strategies you've been involved with, so please feel free to [drop me a line](#), treated confidentially of course.

Video Demo

This time I'd like to point you at an MCM training demo video that Kimberly recorded back in 2010. The video demonstrates some of her wisdom on indexing strategies and how to choose the correct nonclustered indexes, and goes with the lecture video I highlighted back in [January](#).

The video is just over 30 minutes long and you can get the video in a variety of formats [here](#).

Enjoy!

SQLskills Offerings

All of our 2013 public classes are now open for registration! Based on requests from people, attendee ratings of the hotels we used this year, and the ease of using hotels we know, we're using the same locations again. This means we cover both sides of the US, central US, and Europe.

Please know that these classes are final as the hotel contracts are signed, and the classes will not be cancelled or moved for any reason, nor will the dates change.

- February 4-8, 2013: Internals and Performance (**IE1**) in Tampa, FL – USA
- February 11-15, 2013: Performance Tuning (**IE2**) in Tampa, FL – USA
- April 29-May 3, 2013: Internals and Performance (**IE1**) in Chicago, IL – USA
- April 29-May 3, 2013: Immersion Event for Business Intelligence (**IEBI**) in Chicago, IL – USA (co-located but in a different training room. Attendance is for one event or the other; these cannot be combined for one attendee where they move back/forth.)
- May 6-10, 2013: Performance Tuning (**IE2**) in Chicago, IL – USA
- May 13-17, 2013: High Availability & Disaster Recovery (**IE3**) in Chicago, IL – USA
- May 13-17, 2013: Immersion Event for Developers (**IEDev**) in Chicago, IL – USA (co-located but in a different training room. Attendance is for one event or the other; these cannot be combined for one attendee where they move back/forth.)
- May 20-24, 2013: Development Support (**IE4**) in Chicago, IL – USA
- June 3-7, 2013: Internals and Performance (**IE1**) in London – UK
- June 10-14, 2013: Performance Tuning (**IE2**) in London – UK
- June 17-21, 2013: High Availability & Disaster Recovery (**IE3**) in London – UK
- June 24-28, 2013: Development Support (**IE4**) in London – UK
- September 16-20, 2013: Internals and Performance (**IE1**) in Bellevue, WA – USA
- September 23-27, 2013: Performance Tuning (**IE2**) in Bellevue, WA – USA

One thing to note is that the course prices have increased slightly for 2013, reflecting increasing food, logistics, travel, and accommodation costs. We kept our prices the same for the last three years but now we have to raise them a little.

For US classes, the new early-bird price is US\$3,295 and the full-price is US\$3,795. However, for all registrations received before January 1, 2013, and for all past attendees in the 12 months prior to registration, we will only charge the 2012 early bird price of US\$2,995 (the super-early-bird price). **Be sure to get your registrations in early!**

For UK classes, the new early-bird price is US\$3,795 and the full-price is US\$4,295. There is a similar super-early-bird and past-attendee price equal to the 2012 UK early bird price of US\$3,495. **Again, be sure to get your registrations in early!**

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

So, that's it for now. We hope to see you soon!

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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