

(August 7th, 2011)

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 to you from Redmond where summer's in full swing and Western Washington is baking – at least from my Scottish perspective! ☺

Our four weeks of back-to-back classes in Bellevue, WA have started and the first week was a blast. All of the students seemed to be fast friends – the networking and discussions were plentiful! And, their comments were prolific. Here are a couple of our *short* favorites:

Like taking piano lessons from Billy Joel – Paul and Kimberly are rock stars!

The absolute best course I have ever participated in. Thanks for your deep knowledge and truly fantastic and inspiring personalities.

Appreciated your willingness to stop in the middle of lectures to answer questions.

Next week over 1/2 of the class has attended our week-1 class in the last year – we love that!

The most recent book I've read is Victor Hugo's *Les Misérables*. It's a colossal book that's set in France in the 1830s and deals with the interplay between the convict Jean Valjean and the police inspector Javert. You may know it from the excellent movie with Liam Neeson and Geoffrey Rush – or from the Broadway show. The book has all kinds of social commentary and lavishly described settings and characters. Strongly recommended for anyone who likes period novels (and I recommend the movie too).

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

Paul's Ponderings

Firstly, there are a couple of blog posts this week that I'd like to draw your attention to:

- [RTFM. No seriously, R.T.F.M. Then ask your question.](#)
 - I got fed up this week with some of the lazy questions I get sent in email so I had a rant...
- [Survey: nonclustered index counts \(code to run\)](#)
 - I published some code that will tell you the distribution of indexes in your databases – you'll be surprised at some of the stuff you'll discover (especially with 3rd party app databases!).

Now to this week's topic: responses to database corruption.

Earlier this week I did something that I very rarely do. I'm often helping customers but this week I helped a desperate company (not a prior client) manually fix a corrupt database by hacking the database file. I don't normally even want to try because the chances of success are so slim that it's not worth the client's investment in my time. In this case, the client had a SQL Server 2000 database that had corruption in the sysindexes table and no backups (as I discussed in the previous Insider letter). From the CHECKDB output I figured out that I had a good chance of success manually editing the database so I agreed to take the case. I used a hex editor to manually alter sysindexes to fix-up broken off-row pointers. After realizing that the hex editor XVI32 truncated files bigger than 2GB (and confirming after discussing with XVI32's author), I used the HxD editor to successfully remove the corruption. The client was ecstatic. I was pretty happy too. ☺

But I shouldn't have been needed. And they shouldn't have had to pay a consulting fee: they should have had working backups. I'm not trying to ridicule them here. And I'm not trying to publicize my services here, as I hardly ever agree to try manual editing of database files; I'm just using the story as a good example of a less than optimal response to database corruption. Their alternative would have been a highly problematic export of data into a new database while merging in real-time incoming data.

The default response to database corruption shouldn't be "Oh &%\$@!! Now what?!?!". There should be a plan of action that's been worked out and tested in advance. And there's really no excuse for not having working backups, as I discussed in the [previous newsletter](#).

Corruption is inevitable. Preparation is the key to surviving it.

I have a bunch of corrupt databases with descriptions of how they're corrupt and examples of recovering: see [here](#) for the databases, and my [Corruption blog category](#) for lots of blog posts.

Call to action: think about what your response will be if your main database suddenly becomes corrupt next week. Will you be able to fail over to a redundant system or restore from good backups, all within your acceptable downtime and acceptable data-loss service level agreements? I hope it won't be panic-stations and a phone call to someone to piece things back together manually.

I'm really interested to know your views on responses to database corruption—feel free to [drop me a line](#), confidentially as always.

Video Demo

One of the demos I'm asked about often is for an "up-to-the-minute" backup (or tail-of-the-log backup) so I thought I'd record a demo for you guys, plus showing how to do it when the original SQL instance has been damaged too. The video is about 8 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. And you can get the demo code [here](#).

SQLskills Offerings

We've just opened up registrations for *FOUR* new Immersion Events this year – Performance Tuning (IE2) plus a *new* Developer Immersion in Chicago, October 24-28, and Internals and Performance (IE1) plus a *new* BI Immersion in Atlanta, December 5-9. For our August classes in Bellevue, WA, weeks 1 and 2 are sold-out and there are a few seats left for weeks 3 and 4. See [here](#) for more details. Also, if you're planning to attend our IE2 offering in Chicago in October – it's more than 50% full already.

We have a new combined SQL Server and failover clustering health check available – give us 8 hours and we'll show you what's going wrong with your system, without *our* needing access to your system. We're fast, efficient, and provide serious ROI on your consulting investment. [Let me know](#) if you're interested – special rates for Insiders.

Summary

I hope you've enjoyed this issue - I 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