# (April 29<sup>th</sup>, 2013)

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 <u>here</u>.



#### **Quick Tips for our Insider friends!**

Hey Insiders!

This newsletter is coming to you from Chicago where we've just started the first of four completely sold-out weeks with two classes running per week. We've got a lot planned over these few weeks including a Techie Tuesday night with SQL Sentry on Tuesday, April 30. If you're in the area (Oakbrook Terrace) feel free to join us – sign up <u>here</u>.

Our London classes in June are all more than half full and the Bellevue classes in September are filling up fast, so make sure you don't delay <u>registering</u> and end up being disappointed.

As for online training, we published a new Pluralsight course last week: Glenn Berry's <u>SQL</u> <u>Server 2012: Evaluating and Sizing Hardware</u> – be sure to check it out!

The most recent book I've read is John Steele Gordon's *Empire of Wealth*. The book is an excellent history of the development of the US economy, from the first settlers up to 2001. It was very interesting to read how the four major wars the US has fought (Civil, WWI, WWII, Cold) developed the economy and changed the balance of fiscal power in the world. This was especially true of WWII, where the US was really the only major power to come out of the war with an intact economy and industrial base. Very much recommended for anyone interested in the development and history of the US.

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

Last Thursday I was wondering what to write about this week when I noticed a #sqlhelp thread on twitter discussing the *CONTINUE\_AFTER\_ERROR* option and thought "perfect!"

SQL Server 2005 introduced the ability to try to force a corrupt database to be backed up, and more importantly, to try to force a corrupt backup, or backup of a corrupt database, to restore. In both cases, the option to use is *WITH CONTINUE\_AFTER\_ERROR*, which instructs the *BACKUP* and *RESTORE* commands to try to cope with the error and continue. It's not always possible, however, depending on how corrupt the database or backup is.

Why would I want to backup a corrupt database, you may ask? Consider this: you have a corrupt database with no backups. The only way to attempt recovery in that case is to use the repair functionality in *DBCC CHECKDB*. Even though you can put the *DBCC CHECKDB* command inside a transaction and roll it back, there are infinite corruption possibilities and repair doesn't cope with them all. Therefore, prudence dictates that you take a backup of the database before attempting the repair, just in case something goes wrong. If the backup operation fails, you can try to use *CONTINUE\_AFTER\_ERROR*. That's safer than having to set the database offline so the files can be copied – because it may not be possible to bring the database online again, even using *EMERGENCY* mode.

The use case for *CONTINUE\_AFTER\_ERROR* during restore is much more obvious: you've lost the database and only have corrupt backups. If the backup fails to restore because of a corruption problem in the database or transaction log within the backup, the only option is to try to force it to restore using *CONTINUE\_AFTER\_ERROR* and then either run repair or try to extract data manually.

There is one catch to beware of though – think very carefully about restoring a transaction log backup that requires *CONTINUE\_AFTER\_ERROR* to successfully restore because doing so guarantees that you're introducing corruption into the restored database. It may be better to terminate the restore sequence before that corrupt transaction log backup, with a non-corrupt database with some data loss, than to proceed and have a corrupt database that needs to be repaired.

Of course, the best solution is not to have to use *CONTINUE\_AFTER\_ERROR* at all – have a redundant copy of the database and have good backup and backup testing strategies.

**Call to action:** If you're involved in a disaster recovery effort, don't forget that the *CONTINUE\_AFTER\_ERROR* option exists. Make sure you've practiced with it before having to do it for real so you know the kinds of problems you might come across from restoring a corrupt backup, or backup of a corrupt database.

I'm curious to hear whether you've ever had to use *CONTINUE\_AFTER\_ERROR*, for either a backup or restore operation, so please feel free to <u>drop me a line</u>, treated confidentially of course.

### Video Demo

From Joe:

For this week's demo recording, I want to show you a rather unsung SQL Server 2012 improvement to queries that perform one regular aggregation in conjunction with a *DISTINCT* aggregation operation. I demonstrate how the query optimization improvement reduces the I/O required for such operations and also improves the quality of the execution plan.

The video is about 4 minutes long and you can get it:

• In WMV format <u>here</u>

• In MOV format <u>here</u>

You can get the demo code <u>here</u>.

Enjoy!

## SQLskills Offerings

All of our 2013 public classes are selling out fast! Based on requests from people, attendee ratings of the hotels we used last 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.

- All classes for Chicago in April and May are sold out except for:
  - May 13-17, 2013: High Availability/Disaster Recovery (IE3), <u>1 SEAT LEFT!</u>
  - May 20-24, 2013: Security, PowerShell, Dev Support (IE4), <u>1 SEAT LEFT!</u>
- 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
- September 16-20, 2013: Internals and Performance (IE1) in Bellevue, WA USA
- September 23-27, 2013: Performance Tuning (**IE2**) in Bellevue, WA USA

See <u>here</u> 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!

### <u>Summary</u>

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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