(April 18th, 2023)

If you know someone who would benefit from being an Insider, feel free to forward this PDF to them so they can sign up <u>here</u>.



Note: As an Insider, you can read all prior Insider newsletters here.

Quick Tips for our Insider friends!

Many thanks for all the kind words after I sent the previous newsletter – things are progressing splendidly! This week I drove down to CA to hang out with Tim Ford, Tim Radney, and Jonathan and do a bunch of tree work for our wonderful friend Stacia Varga on her ranch (and rediscovering muscles I'd forgotten about since leaving Camp Savage last year lol!)

Not surprisingly, a few of you reminded us that we kicked off the December sale with an even lower BlackBelt Bundle price. So, just for our newsletter readers and **starting immediately**, use the discount code BBnews (not case sensitive) to discount the BlackBelt Bundle price an additional \$528.50 to **\$1,596.50** (90% off). However, and just like December, this price is only available for one week. This discount code will stop working at midnight Monday, April 24!

Plus, we created a special bonus for those of you that read the newsletter when you receive it!! If you're one of the **first 10** to use the discount code it will set the price to **\$1,495!** This is the lowest price we've ever offered.

And don't forget, if this is a second purchase – we will remove the expiration date, giving you lifetime access to the content!

As always, take care and be safe!

SQLskills Easter Basket Bundle SALE!

We're having another sale, rolling back our bundle prices to the same as our end-of-year sale, for the month from April 9th through May 8th.

Everything below will be in our shop, from April 9th (GMT).

These SUPER LOW (**AT LEAST 85% OFF**) prices are for all our <u>recorded</u> course bundles. These courses are available for you to stream immediately after a successful payment!

These prices are so low... there are no additional discounts available. If your team wants to bulk purchase courses or bundles for at least 6 people, we can offer an easier way to pay (one bill and then each attendee sets up their accounts after payment is received). Send <u>Training an email</u> to ask about a bulk purchase order.

Orders for individuals are available for credit card payment only.

**** Remove the Expiration Date! ****

If you purchase any bundle a second time, no matter when you purchased the first time, we will remove the expiration dates from the constituent courses, giving lifetime access!

If this is your first purchase and you want to remove the expiration date, purchase it a second time and we'll remove the expiration date.

NOTE: For any of you who have already purchased the BlackBelt bundle, we will give any extra paid (over these low, low prices) toward your second purchase for lifetime access. For example, if you paid \$2,125 for the bundle (for one year) then you will have either a \$528.50 credit or a \$630 credit (if you're one of the first 10). Email training@sqlskills.com for a special code to set the price based on your credit!

NOTE: we'll have to remove the expiration dates manually. Once you complete your second purchase, send an email to <u>training@sqlskills.com</u> with your username and order numbers and we'll remove the expiration dates!

Pricing for our BUNDLES

These prices are for already delivered and <u>recorded</u>, <u>online</u> courses. Access to these courses is available immediately! Access to your courses is for ONE year from date of purchase.

SQL Server Jumpstart Bundle

Courses included: IE0 + IEQuery + IETLB: SALE price: only \$749 ** 85% SAVINGS off full price **

SQL Server Jumpstart+ Bundle

Courses included: IE0 + IEQuery + IETLB + IEQS + IEVLT + IECS SALE price: only \$1,210.50 ** 85% SAVINGS off full price **

Performance Tuning Bundle

Courses included: IEPTO1 + IEPTO2 SALE price: only \$1,198.50 ** 85% SAVINGS off full price **

Complete Short Course Bundle

Courses inlcuded: IEQuery + IETLB + IEQS + IEVLT + IECS SALE price: only \$686.25 ** 85% SAVINGS off full price **

BlackBelt Bundle

Courses include: IEAzure + IEPTO1 + IEPTO2 + IECAG + IEQS + IEVLT + IECS

SALE price: \$2,125.00 ** 87% SAVINGS off full price **

Book Review

With all the 'extra' time I have available now, I've continued to plow through my to-read booklist. Here are two book reviews for you...

The first is Admiral William H. McRaven's *The Hero Code: Lessons Learned from Lives Well Lived.* In this book McRaven presents his code of conduct for living a better life, worthy of honor and respect. The Hero Code, each illustrated with a pertinent story or two, is as follows (capitalizations are his):

- 1. I will always strive to be COURAGEOUS; to take one step forward as I confront my fears.
- 2. I will work to be HUMBLE; to recognize the limits of my intellect, my understanding, and my power.
- 3. I will learn to SACRIFICE by giving a little of my time, my talent, and my treasure to those in need.
- 4. I will be a person of INTEGRITY; every decision I make and every action I take will be moral, legal, and ethical.
- 5. I will be kind and COMPASSIONATE to at least one person every single day and expect nothing in return.
- 6. I will never give up on matters that are important to me, my family, my country, or my faith. I will PERSEVERE.
- 7. Whatever job I am given, whatever DUTY I am bound by, I will do it to the best of my ability.
- 8. I will use my unique talents to inspire others and give them HOPE that tomorrow will be a batter day.
- 9. I will use HUMOR to comfort others, and never be afraid to laugh at myself.
- 10. No matter how great or small the offense against me, I will try to FORGIVE. I will be the victor, not the victim.

Definitely a good code to live by! Highly recommended!

The second is Dr. Richard Smith's <u>The World Beneath: The Life and Times of Unknown Sea</u> <u>Creatures and Coral Reefs</u>. I can't believe it's taken me three years to get around to reading this excellent book by our good friend and dive buddy. Richard is the world expert on pygmy seahorses, pipefish, and sea dragons, a wonderful person, and an amazing underwater photographer! The photos are stunning and the book is engaging and fascinating, more so as Kimberly and I have seen many of the creatures shown and been with Richard on some of the dives where he took photos in the book! It certainly makes me want to change my diving focus from tiny critters and invertebrates to fish. Highly recommended!

The Curious Case of...

This section of the newsletter explains recent problems we've helped with on client systems or been asked about over email or #sqlhelp; they might be something you're experiencing too.

Over the last week we were approached by two companies that had corruption in PFS pages and Storage Engine system tables. I explained that there was nothing I could do to help them as PFS pages can't be repaired or reconstructed without a great deal of manual effort. You can read through my explanation <u>here</u>...

Ponderings...

(As I'm away this week, this is a re-run of a Ponderings from a few years ago. Apart from the companies mentioned above, I also heard from several people recently who had repaired databases, with no backups, and were going to immediately start running again in production...)

Continuing on the theme of corruption from the Curious Case above, I want to talk to you a bit about continuing to use a database after running repair.

Over the years I've taught countless classes and conference sessions that talk about corruption and how it happens, how to run consistency checks, using *DBCC CHECKDB*, and running repair.

When I'm talking about repair, I explain that if you have to run *REPAIR_ALLOW_DATA_LOSS* and it actually deletes data records, you need to reinitialize any affected replication topologies, and validate any affected constraints. This is all documented in Books Online, but that doesn't mean that people read it and know that. ⁽ⁱ⁾

What *isn't* in Books Online, and I make sure the attendees realize, is that repair is all about making the database structurally consistent – it doesn't know anything about the data relationships between tables (either protected by constraints or just inherent in the schema design). This means that after a data-losing repair, the data relationships in the database may well be broken.

I then always asked the room of people: "How many of you have an application data consistency checker that you can run to validate all the business rules and relationships that the application

depends on? In fact, how many of you even have a way to test that the application is working correctly after running a repair or deploying new code?"

Every time I ask, I might get one or two hands go up, out of a class of 30 or a session of 50 or more. I've never had more than two, and usually I don't get any.

It's just not something people think about. They assume that if repair runs correctly then they can carry on and everything will work. No.

Call to action:

You really should have some way to validate that your application is running on correct data. Otherwise, in the best case, it will fail, but in the worst case, it will continue running erroneously – maybe with wrong results that affect your business.

This basically means codifying the required relationships in constraints and/or some code that verifies the required relationships (if they can't be expressed as relational constraints) are correct.

If you have a third-party application, it might be hard or impossible to persuade the vendor to provide such a tool, especially if they specifically don't support running repair on their database.

Bottom line: Your business depends on the applications running in the data tier, and you need to make sure, as much as you can, that they're running correctly.

<u>#TBT</u>

(Turn Back Time...) Blog posts we've published since the previous newsletter plus some older resources we've referred to recently that you may find useful.

In this TBT I want to point you at a 30-part blog post series that the team did a few years ago that covers a lot of introductory topics, aimed at accidental/involuntary DBAs. Rather than listing all 30 posts, <u>here</u> is a link to the main page for the series. The series covers these main areas:

- Setup and configuration
- Backups
- Implementing maintenance and security
- Troubleshooting performance
- High availability
- General troubleshooting
- Although the series was aimed at accidental DBAs, these posts are all worth reading to make sure your basic understanding of topics is current and complete.

I hope you find these useful and interesting!

Video Demo

(Another re-run as I'm away from the office – six videos for you!)

For the 200th newsletter I asked everyone to pick their favorite demo from a Pluralsight course they've written, so here they are for you!

- Erin: Showing Automatic Plan Correction in action, from the course <u>SQL Server:</u> <u>Automatic Tuning in SQL Server 2017 and Azure SQL Database</u>
 - Video file <u>here</u> (12.5 mins) and demo scripts <u>here</u>
- Glenn: Examining the processor description, from the course <u>SQL Server 2017:</u> <u>Diagnosing Performance Issues with DMVs</u>
 - Video file <u>here</u> (1 min) and demo scripts <u>here</u>
- Jonathan: Using the pair matching Extended Events target to identifying statements that time out, from the course <u>SQL Server: Advanced Extended Events</u>
 - Video file <u>here</u> (5 mins) and demo scripts <u>here</u>
- Kimberly: Examining plan cache attributes and session setting states during stored procedure execution, from the course <u>SQL Server: Optimizing Stored Procedure</u> <u>Performance – Part 2</u>
 - Video file <u>here</u> (16 mins) and demo scripts <u>here</u>
- Paul: How to attach a detached SUSPECT databases when the file IDs aren't in order, from the course <u>SQL Server: Advanced Corruption Recovery Techniques</u>
 - Video file <u>here</u> (6 mins) and demo scripts <u>here</u>
- Tim: How to create and deploy and Azure VM, from the course <u>SQL Server:</u> <u>Implementing a Hybrid Cloud Solution in Azure</u>
 - \circ Video file <u>here</u> (6.5 mins)

Enjoy!

Upcoming SQLskills Events

We've decided to record SQL Server 2022 updates relevant to our class material rather than running full classes, as, to be honest, not much has changed in our space and 2022 focused a lot on Azure extensions.

With our new streaming system, you can now choose to attend a live, online event or purchase a recording to watch at your leisure, either individually or as part of a bundle. And all attendees of live events get lifetime access to the class recordings too!

To help your boss understand the importance of focused, technical training, we've also added a few items to help you justify spending your training dollars with us:

- Letter to your boss explaining why SQLskills training is worthwhile
- <u>Community blog posts about our classes</u>
- Immersion Event FAQ

You can get all the details on our training options page or just go directly to our shop.

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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