# **SQLintersection**

**Session: Monday, 11:45-12:45am** 

# **Understanding SQL Backups and Restores**

Tim Radney tim@sqlskills.com





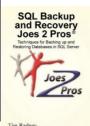
## **Tim Radney**

Microsoft Most Valuable Professional

- Consultant/Trainer/Speaker/Author
- Principal Consultant, <u>SQLskills.com</u>
  - Email: Tim@SQLskills.com
  - Blog: https://www.SQLskills.com/blogs/Tim
  - Blog: http://www.timradney.com
  - Twitter: @TRadney
- Microsoft Data Platform MVP
- Chapter Leader "Columbus GA SQL Users Group"
- PASS Regional Mentor "South East USA"
- Outstanding PASS Volunteer
- Regular presenter at worldwide conferences on administration, disaster recovery and performance tuning.
- Friend of Red Gate
- (I also like electronics, aquaponics, farming chickens, goats, veggies, and tilapia)







## **Reminder:** Intersect with Speakers and Attendees

- Tweet tips and tricks that you learn and follow tweets posted by your peers!
  - □ Follow: #SQLintersection and/or #DEVintersection
- Join us Tuesday Evening for SQLafterDark
  - Doors open at 7:00 pm
  - Trivia game starts at 7:30 pm Winning team receives something fun!
  - Raffle at the end of the night Lots of great items to win including a seat in a SQLskills Immersion Event!
  - The first round of drinks is sponsored by SentryOne and SQLskills







### **Overview**

#### Know your backup types

- SLAs matter
- Which is correct for you
- Know your backups are valid
- An approach for backing up large databases

#### Know how to restore your backups

- Have a restore strategy
- Performing point in time restores
- Performing piecemeal restores

#### Have a plan

Have a solid restore strategy and proven disaster recovery plan



# **Backup Types**

- Which is the correct choice for you?
  - Full
  - Partial
  - Differential
  - Filegroup
  - File
  - □ Log
  - COPY ONLY
- A combination of the above is usually warranted to meet your SLAs
  - Service Level Agreements



#### **VLDBs**

- A good approach for Very Large DataBases (100s of GBs or more)
  - Split data into multiple filegroups
  - Partitioned views
  - Sliding window using partitioning
- Allows for partial restores
  - Restore active partitions/filegroups more quickly



## **Recovering Transactions**

#### You have to restore, now what do you do?

- Do you need to perform a tail-log backup?
  - http://www.timradney.com/taillogrestore
- Restore last known good full backup
- Restore most recent differential backup, if you have them
- Restore transaction log backups
- (Restore tail-of-the-log backup?)



## Have a Plan

#### Know how to recover

- Test that your backups restore
- Have a disaster recovery plan
- Test your disaster recovery plans frequently
- Have user objects scripted out
  - http://support.microsoft.com/kb/918992

#### Know your facts

Know how long restores take



## Demo

## **Various Restore Options**



# **Summary**

#### Know your backup types

Have the proper backups to meet your customers' SLAs

#### Know how to recover

- Have a restore strategy
- Know how long restores will take
- Know how to perform point in time restores

#### Have a plan

- The first time you perform a restore should not be in production
- Know you have a solid backup strategy that meets requirements
- Have a proven disaster recovery plan in place
- Demo scripts https://www.sqlskills.com/sql-server-resources



# **Questions?**



Don't forget to complete an online evaluation!

# **Understanding SQL Backups and Restores**

Your evaluation helps organizers build better conferences and helps speakers improve their sessions.



Thank you!

# Save the Date

www.SQLintersection.com

