Amy Herold

Sr. Database Administrator,
One Technologies

 in /aherold

 @texasamy

MCITP

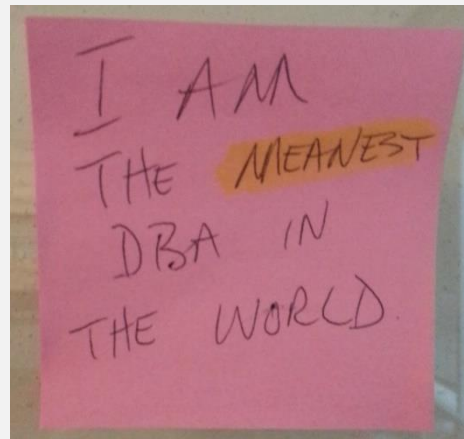Database Administrator, Database Developer

NTSSUG

Director of Programs, North Texas SQL Server User Group

BLOG

www.sqlkitten.com

IDERA ACE

2018

Agenda

- Five Things to Look for in Poor Performing Code

- Different Methods for Gathering Metrics

- New SQL Server Features for Troubleshooting Query Perfomance

5 Thing to Look For in Poor Performing Code

"It depends"

5 Thing to Look For in Poor Performing Code

- Cursors
- Stacked CTEs and Views
- User Defined Functions
- Subqueries
- Table Variable vs. Temp Table

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5 Thing to Look For in Poor Performing Code

- Cursors
  - NOT Set Based
  - RBAR (Row By Agonizing Row)
  - Alternatives
    - Correlated Subquery
    - Temp Table

5 Thing to Look For in Poor Performing Code

- Stacked CTEs and Views

- Can be hard to troubleshoot

- Alternatives
  - Eliminate views from your
  - Temp tables

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5 Thing to Look For in Poor Performing Code

- User Defined Functions
  - Scalar Functions can perform poorly
  - Solution
    - Eliminate the use of the function

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5 Thing to Look For in Poor Performing Code

- Subqueries
  - Not always bad, but can be
  - Review code
  - Alternatives
    - Joins
    - Temp tables

5 Thing to Look For in Poor Performing Code

- Table Variable vs. Temp Table
  - It depends
  - How many records are you pulling back?
  - Test both for performance
  - Data growth

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Different Methods for Gathering Metrics

- Statistics
  - IO, Time, Profile
- Statistics Parser – Richie Rump
  - http://statisticsparser.com/index.html
  - Use for statistics analysis; Easy way to create graphics

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Different Methods for Gathering Metrics

- Execution Plans
  - Graphical
  - XML
- How's My Plan – Daniel Janik
  - http://www.howsmyplan.com/
  - Analyze XML plans quickly, identifying issues and links to more info

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New SQL Server Features for Troubleshooting Performance

- Query Store (SQL Server 2016+)
  - https://bit.ly/2I8UWrr
- Automatic Tuning (SQL Server 2017)
  - https://bit.ly/2Bgr1sQ

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Common T-SQL Coding Mistakes and How to Fix Them

Questions?

Common T-SQL Coding Mistakes and How to Fix Them

Thank you

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