# Creating Efficient Query Plans Using Query Store



Pinal Dave
SQL SERVER PERFORMANCE TUNING EXPERT
https://blog.sqlauthority.com



# Agenda



**Query store** 

Setup and configuration

**Query store reports** 

Real world scenarios

**Demos** 



"Unless you have a definite, precise, clearly set goals, you are not going to realize the maximum potential that lies within you."

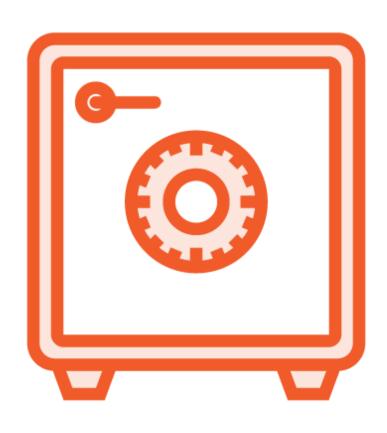
Zig Ziglar



# What is a query store?

A query store tracks query plans, statistics, and historical data to help diagnose performance degradation of the queries over time.





#### **Query store**

- Database level feature
- Available in all editions
- Find performance regression
- Identify resource intensive queries
- Query plan and execution history
- Forcing query plans



# Demo



Query store setup & configuration



#### Three important query stores

- Plan store
- Runtime stats store
- Wait stats store





#### **Query store reports**

- Regressed queries
- Overall resource consumption
- Top resource consuming queries
- Queries with forced plans
- Queries with high variation
- Query wait statistics
- Tracked queries



# Demo



#### **Query store reports**

- Overview
- Various options



# After 60 seconds



### Real World Scenario



Parameter Value = A



Performance: A+



Time B

Parameter Value = B



Performance: D-

#### **Problem Statement:**

How to get optimal performance from a query at all the time with all the parameters?



# Demo



#### Query store real world scenario

- Problem
- Resolution



# Summary



Query store is an efficient and easy way to keep a vigilant watch on your query performance and resource consumption

Free performance monitoring and tuning tool out-of-the-box in all versions of SQL Server 2016 and onwards

