



# SolarWinds® DPA Advanced Tuning Comprehensive 3-Day Class



Learn to identify and resolve SQL Server bottlenecks using SolarWinds DPA, focusing on optimization and tuning techniques and identifying physical resource limitations.

#### **Class Overview**

Our SolarWinds Database Performance Analyzer (DPA) Advanced Tuning class is designed for database professionals seeking to enhance their skills in SQL Server performance optimization. This 3-day hands-on class focuses on identifying and resolving SQL Server bottlenecks using SolarWinds DPA. Participants will gain practical experience in SQL Server optimization techniques and learn how to effectively identify and quantify physical resource limitations.

# **Class Objectives**

By the end of this class, participants will be able to:

- Use DPA to identify and quantify hardware and software bottlenecks, both current and historical.
- Describe SQL Server query processing, including optimization and index selection.
- Understand wait type analysis.
- Estimate query performance and identify implementation issues.
- Find and fix problematic statements in queries and stored procedures.

# **Target Audience**

- DBAs
- Observability Administrators
- SQL Developers
- Production Support Engineers

# **Prerequisites**

- Basic knowledge of SQL syntax (SELECT, INSERT, UPDATE, DELETE)
- At least one year of hands-on experience with T-SQL (not mandatory)

#### **Class Outline**

Day	Module	Morning	Afternoon
1	DPA	Introductions and Class Expectations DPA Concepts Fundamentals of Query Processing Query Troubleshooting	SQL Statement Processing Top Impacting Queries (DPA Trends) Index Tuning with DPA
2	DPA	Optimizing Joins with DPA Using Subqueries with DPA Physical Design Concepts Stored Procedures	Session Configuration Dynamic Queries Common Table Expression (CTE) Case Studies
3	DPA HCO SAM SQL Sentry	DPA Installation Wait Time Analysis Current Situation Analysis Identifying Problems That Occurred	Performance Alerts Correlating DPA Resources with HCO/SAM SQL Sentry Compare & Contrast

### **Pre-Class Preparation and Environment Requirements**

This class will utilize the SolarWinds public demo environment for practical exercises. Instructions for accessing this environment will be provided prior to the class. Participants must have SQL Server Developer Edition installed on their laptops before the training (download for free from the Microsoft website). Databases needed for the training will be distributed prior to the class; make sure these files are accessible on your laptop.

#### Class instructor

#### **Jeff Garbus, CEO/Founder - Soaring Eagle Data Solutions**

Jeff has decades of IT experience, with a special emphasis on performance and tuning, scaling, and database administration of large databases. He is very well known in the industry, having spoken at user conferences and user groups since the early 90s, written articles and columns for many magazines nationally and internationally, and published 20 books on database management systems. His experience runs the gamut from programming through CIO/CTO and (currently) CEO.



# Ready to secure your seat?

Visit the Loop1 website to access our up-to-date <u>schedule and calendar</u>, where you can reserve and <u>pay</u> <u>for your seat online</u>. Alternatively, feel free to reach out to your dedicated account manager to initiate a discussion and obtain a personalized quote.