



# **Advanced Tools for AIX Performance Analysis**

Duration: 4 Days Course Code: AN52G Delivery Method: Maatwerk

## Overview:

Develop the skills to use kernel traces, trace based utilities, and symon to measure and analyze CPU, memory, and I/O performance issues on IBM systems running AIX. Reinforce each lecture during extensive hands-on lab exercises and get practical experience applicable to their performance management requirements.

This course provides lectures and hands on labs in a face-to-face classroom setting. The course is also offered in a live virtual classroom environment (ILO - Instructor Led Online) with hands-on labs Advanced Tools for AIX Performance Analysis (ILO) (AX520NL).

#### Maatwerk

Global Knowledge biedt zowel standaard- als maatwerkcursussen die zijn afgestemd op uw wensen en die als besloten cursus op uw eigen locatie of onze locatie gevolgd kunnen worden.

# **Target Audience:**

The audience for this advanced training include AIX technical support personnel, performance benchmark personnel, and AIX system administrators.

## Objectives:

- Use the trace facility to collect data and create a trace report
- Use the kernel trace facilities to analyze CPU performance issues
- Describe causes and impacts of high context switching rates
- Identify what causes a thread to block and what causes a later wake up
- Explain the relationship between the output of symon -G, symon -P, and symon -S
- Calculate the amount of memory in use on the system
- Explain the relationship between symon, ymstat, and ipcs output

- Categorize the memory in use on the system by segment type
- Identify which processes are using the most memory
- Identify which segments are using the most paging space
- Describe the characteristics of asynchronous I/O, synchronous I/O, direct I/O and concurrent I/O
- Identify if the expected type of I/O is being executed
- Tune asynchronous I/O

# Prerequisites:

You are expected to have extensive AIX skills. These skills can be obtained by attending the following courses:

- Power Systems for AIX IV: Performance Management (AN510NL)
- Power Systems for AIX IV: Performance Management (ILO) (AX510NL)

# Content:

#### Day 1

- (00:30) Welcome
- (01:00) Unit 1 Trace Facilities
- (01:00) Exercise 1 Trace Facilities
- (02:30) Unit 2 Advanced Memory Topics I
- (00:20) Exercise 2 Advanced Memory Topics I

## Day 2

- (02:30) Unit 3 Advanced Memory Topics -
- (00:40) Exercise 3 Advanced Memory Topics - II
- (02:00) Unit 4 Advanced CPU Topics I
- (00:30) Exercise 4 Advanced CPU Topics -
- (00:25) (optional) Exercise 4 Advanced CPU Topics - I (Part 2)

## Day 3

- (02:00) Unit 5 Advanced CPU Topics II
- (00:30) Exercise 5 Advanced CPU Topics - II
- (02:00) Unit 6 Advanced I/O Topics I
- (00:45) Exercise 6 Advanced I/O Topics - I - Part 1
- (00:30) (optional) Exercise 5 Advanced CPU Topics - II (Parts 2; 3)

#### Day 4

- (00:35) Exercise 6 Advanced I/O Topics - I - Part 2
- (02:00) Unit 7 Advanced I/O Topics II
- (01:45) Exercise 7 Advanced I/O Topics - II
- (00:20) (optional) Exercise 7 Advanced I/O Topics II (Part 3)

# **Further Information:**

For More information, or to book your course, please call us on 030 - 60 89 444

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