# Advanced Tools for AIX Performance Analysis

Kód kurzu: AN52G

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

## Pre koho je kurz určený

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

#### Čo Vás naučíme

- 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

#### Požadované vstupné znalosti

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 (AN510)
- Power Systems for AIX IV: Performance Management (ILO) (AX510)

### Študijné materiály

Príručka ku kurzu firmy Gopas podľa programu kurzu.

# Osnova kurzu

## Day 1

- Welcome
- Unit 1 Trace Facilities
- Exercise 1 Trace Facilities
- Unit 2 Advanced Memory Topics I
- Exercise 2 Advanced Memory Topics I

#### Day 2

- Unit 3 Advanced Memory Topics II
- Exercise 3 Advanced Memory Topics II
- Unit 4 Advanced CPU Topics I
- Exercise 4 Advanced CPU Topics I
- (optional) Exercise 4 Advanced CPU Topics I (Part 2)

# Day 3

- Unit 5 Advanced CPU Topics II
- Exercise 5 Advanced CPU Topics II
- Unit 6 Advanced I/O Topics I

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- Exercise 6 Advanced I/O Topics I Part 1
- (optional) Exercise 5 Advanced CPU Topics II (Parts 2 &3)

## Day 4

- Exercise 6 Advanced I/O Topics I Part 2
- Unit 7 Advanced I/O Topics II
- Exercise 7 Advanced I/O Topics II
- (optional) Exercise 7 Advanced I/O Topics II (Part 3)

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