

# Advanced Tools for AIX Performance Analysis

Kód kurzu: AN52G

Develop the skills to use kernel traces, trace based utilities, and svmon 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

## Pro koho je kurz určen

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

## Co 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 svmon -G, svmon -P, and svmon -S
- Calculate the amount of memory in use on the system
- Explain the relationship between svmon, vmstat, 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 vstupní 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)*

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

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## 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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