

# Advanced Tools for AIX Performance Analysis

Course code: 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

Affiliate	Duration	Course price	ITB
Praha	4	56 000 Kč	0
Bratislava	4	2 240 €	0

The prices are without VAT.

## Course terms

Date	Duration	Course price	Type	Course language	Location
------	----------	--------------	------	-----------------	----------

The prices are without VAT.

## Who is the course for

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

## What we teach you

- 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

## Required skills

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)*

## Course outline

### 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

**GOPAS Praha**  
Kodařská 1441/46  
101 00 Praha 10  
Tel.: +420 234 064 900-3  
[info@gopas.cz](mailto:info@gopas.cz)

**GOPAS Brno**  
Nové sady 996/25  
602 00 Brno  
Tel.: +420 542 422 111  
[info@gopas.cz](mailto:info@gopas.cz)

**GOPAS Bratislava**  
Dr. Vladimíra Clementisa 10  
Bratislava, 821 02  
Tel.: +421 248 282 701-2  
[info@gopas.sk](mailto:info@gopas.sk)

 **GOPAS**®

Copyright © 2020 GOPAS, a.s.,  
All rights reserved

# Advanced Tools for AIX Performance Analysis

- 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)

## 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)

**GOPAS Praha**  
Kodařská 1441/46  
101 00 Praha 10  
Tel.: +420 234 064 900-3  
[info@gopas.cz](mailto:info@gopas.cz)

**GOPAS Brno**  
Nové sady 996/25  
602 00 Brno  
Tel.: +420 542 422 111  
[info@gopas.cz](mailto:info@gopas.cz)

**GOPAS Bratislava**  
Dr. Vladimíra Clementisa 10  
Bratislava, 821 02  
Tel.: +421 248 282 701-2  
[info@gopas.sk](mailto:info@gopas.sk)

 **GOPAS**®

Copyright © 2020 GOPAS, a.s.,  
All rights reserved