Advanced Tools for AIX Performance Analysis

Duration: 4 Days **Course Code: AN52G** **Delivery Method: Virtual Learning**

Overview:

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.
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) (AX520).

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

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 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

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

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 - II
- (00:40) Exercise 3 - Advanced Memory Topics - II
- (02:00) Unit 4 - Advanced CPU Topics - I
- (00:30) Exercise 4 - Advanced CPU Topics - I
- (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 Head Office 01189 123456 / Northern Office 0113 242 5931

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