

Performance Analysis and Capacity Planning for IBM i

Duration: 4 Days Course Code: OL66G

Overview:

This course will help the student to better understand the techniques of performance analysis and capacity planning on systems and partitions running IBM i, and to develop an appreciation of how IBM i operates and interfaces with applications. The student will build skills to better manage performance and capacity on systems and partitions running IBM i. In this course we will explain IBM i concepts, including the Technology Independent Machine Interface (TIMI), main storage pools, auxiliary storage pools, management of jobs, threads, tasks, job run-time structure, performance monitoring, data collection, and analysis of performance data. This 4-day course includes hands-on activities using performance data from IBM i systems to help the student appreciate the concepts discussed.

This course is designed for those running Power Systems on IBM i. While it includes i 7.1 content, it is suitable for those currently using prior versions of IBM i. First we will focus on teaching the performance management process, the performance considerations of key hardware components and virtualization options, and tuning options to help optimize performance. During these lectures, students should gain an appreciation of the unique storage management and work management components in the IBM i architecture, and how these components need to be managed for optimal performance. Then the class focus on the tools and techniques to monitor, analyze, and plan for performance of IBM i systems and partitions. The primary analysis tool that will be used is the Performance Data Investigator (PDI) which is included with IBM Systems Director Navigator for i. PDI is also used with IBM Systems Workload Estimator (WLE) for capacity planning activities.

Target Audience:

This intermediate course is for IBM clients, Business Partners, and technical support and service individuals interested in performance management and capacity planning on systems and partitions running IBM i.

Objectives:

- Acquire the skills to better manage performance on systems running IBM i.
- Enhance your knowledge of IBM i storage management, job/thread/task management, and the use of performance data collection, monitoring and analysis tools to better manage IBM i work.
- Learn how to manage the latest virtualization and logical partitioning features of Power Systems for optimal performance.
- Learn the latest tools and methodologies in i6.1 and i7.1 to manage and analyze system and application performance.
- Get hands-on experience with Performance Data Investigator in Systems Director Navigator for i, and tools such as Job Watcher and Disk Watcher through hands-on lab exercises.
- Learn how to use Performance Data Investigator, IBM Workload Estimator and other performance tools to perform sizing and capacity planning on Power Systems.
- Learn methodologies for identifying and selecting appropriate performance data when planning upgrades and other capacity planning tasks.

Prerequisites:

It is advantageous if the student has completed the following courses or has equivalent skills or experience on the IBM i work management and basic tuning:

- IBM i Structure, Tailoring and Basic Tuning (OL23GB)
- Knowledge of IBM Query for i5/OS or other query options will be useful

- IBM Power Systems performance considerations
 - Components of performance
 - Disk performance considerations
 - Logical partition performance considerations
 - Work management review and tuning options
 - Real-time monitoring
 - Collection Services: Data collection
 - Performance Data Investigator overview
 - Investigating data: Collection Services
 - Performance Tools reports and graphs
 - Capacity planning
 - Collection Services data files
 - Run-time (run/wait) analysis
 - Advanced Performance Analysis Investigating with Disk Watcher and Job Watcher
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Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

training@globalknowledge.com.eg

www.globalknowledge.com/en-eg/

Global Knowledge, 16 Moustafa Refaat St. Block 1137, Sheraton Buildings, Heliopolis, Cairo