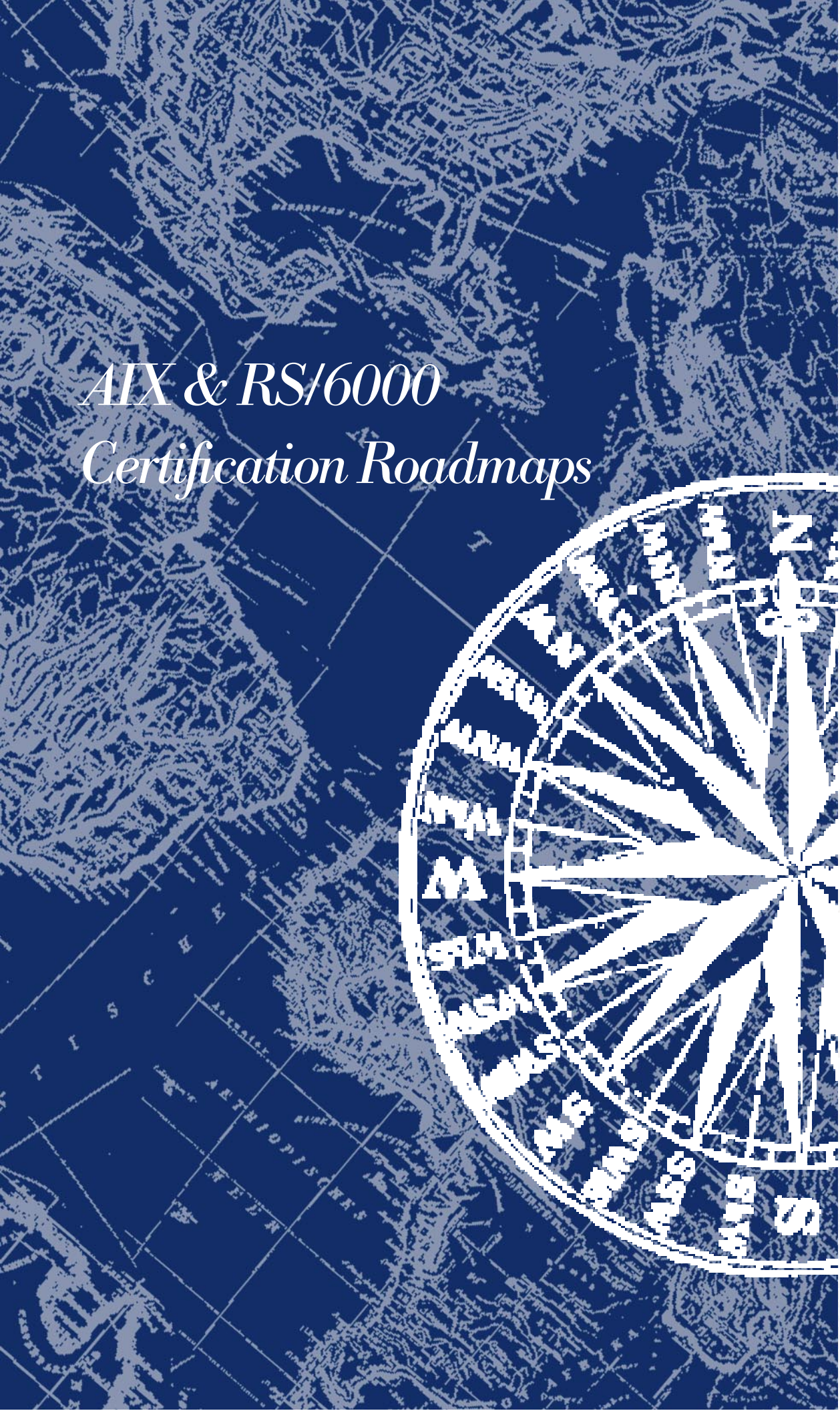
AIX & RS/6000 Certification Roadmaps



Professional Certification Program from IBM

In today's ever-changing business environment, it's essential to keep pace with complex technologies and products. Most businesses are looking for complete solutions rather than tactical efforts. The Professional Certification Program from IBM offers a business solution for skilled technical professionals seeking to demonstrate their expertise to the world.

The program is designed to validate your skills and demonstrate your proficiency in the latest IBM technology and solutions. In addition, professional certification may help you excel at your job by giving you and your employer confidence that your skills have been tested. You may be able to deliver higher levels of service and technical expertise than noncertified employees and move on a faster career track. Professional certification puts your career in your control.

The Professional Certification Program from IBM has developed new certification role names and roadmaps to guide you in your professional development. These include IBM Certified Developer Associate (IBM CDA), IBM Certified Developer (IBM CD), IBM Certified Specialist (IBM CS), IBM Certified Systems Expert (IBM CSE), IBM Certified Solutions Expert (IBM CSE), IBM Certified Instructor (IBM CI), and IBM Certified Advanced Technical Expert (IBM CATE).

Whether you are a network administrator, systems integrator, network integrator, solution architect, value-added reseller, technical coordinator, sales representative or an educational trainer, you can start charting your course through the Professional Certification Program today!

For more information, visit our web site—http://www.ibm.com/certify

IBM education courses are recommended but not required to take certification exams.

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The information contained in this document was current at the time of printing. Current information is at http://www.rs6000.ibm.com/support/aixcert

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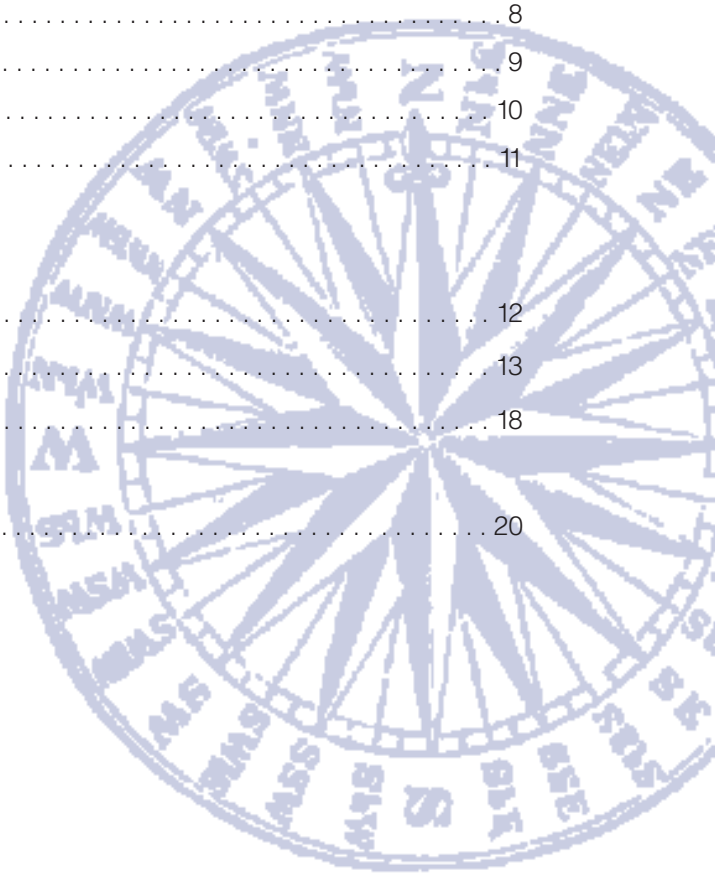

IBM Certified AIX User Version 4

AIX User

Certification Requirement: 1 Test

Role Description:

AIX User: Certifies understanding of AIX Fundamentals, and the ability to apply AIX concepts to effectively use and operate an AIX system.

Recommended Prerequisite:

- Six months experience using the AIX Operating System

Core Requirement (1 Test):

Test 160

Using AIX V4

Benefits:

- *Certificate*
- *Wallet-size certificate*
- *Lapel pin*
- *Certification logo*

Additional sample tests for many AIX exams are provided through an on-line testing system, TOPCAT **(http://www.ibm.com/topcat)**. Advice is given concerning appropriate education after each TOPCAT test is marked. Score reports are sent by email, showing full details of the marking and listing courses related to any incorrectly answered questions.

The information contained in this roadmap (as well as test objectives and sample tests) is available from our website – http://www.ibm.com/certify

IBM Certified Specialist AIX System Administration

IBM Certified Specialist

Certification Requirement: 1 Test

Role Description:

IBM Certified Specialist - AIX System Administration: This certification validates the ability to install, configure, and perform a broad range of AIX system administrative activities. The certification is applicable to AIX System Administrators who are responsible for supporting end-users and the day-to-day operation of an AIX RS/6000 environment.

Recommended Prerequisites:

- Minimum of six months experience administering in an AIX V4 system environment. (Note: Exam 181 contains AIX V4 content up to and including AIX V4.3.)
- One year of AIX or UNIX user experience.
- Training in AIX system administration, or equivalent experience.

Core Requirement (1 Test):

Test 161	or	**Test 181**
AIX V4.1 System Administration (Japan only)		**AIX V4.3 System Administration**

Benefits:

- *Certificate*
- *Wallet-size certificate*
- *Lapel pin*
- *Certification logo*
- *One issue of RISC SYSTEM/6000 CD-ROM Redbook Library*
- *Technical Specialist access to Tech Site*

  Tech Site provides online technical information for the AIX and RS/6000 IBM Certified Professional.

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IBM Certified Specialist AIX System Support

Specialist

Certification Requirement: 1 Test

Role Description:

IBM Certified Specialist - AIX Support: This certification validates a broad scope of AIX problem determination and resolution skills, and the ability to perform general AIX software system maintenance. The certification is applicable to support professionals who conduct AIX problem determination and resolution activities needed to successfully support system administrators, customers, and clients in an AIX environment, in order to maintain system reliability.

Recommended Prerequisites:

- Minimum of six months experience providing AIX Support in version 4 environment(s). (Note: Exam 189 contains AIX V4 content up to and including AIX V4.3)
- One to two years general AIX or UNIX experience.
- Training in system administration and advanced system administration, or equivalent experience.
- Training in TCP/IP and AIX Performance Tuning, or equivalent experience.

Core Requirement (1 Test):

Test 189

AIX V4.3 System Support

Benefits:

- *Certificate*
- *Wallet-size certificate*
- *Lapel pin*
- *Certification logo*
- *One issue of RISC SYSTEM/6000 CD-ROM Redbook Library*
- *Technical Specialist access to Tech Site*

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IBM Certified Specialist AIX HACMP

Specialist

Certification Requirement: 1 Test

Role Description:

IBM Certified Specialist - AIX HACMP*: Certifies a proficiency in the implementation skills required to plan, install, and configure AIX High Availability Cluster Multi-Processing (HACMP) systems, and to perform the diagnostic activities needed to support Highly Available Clusters.

Required Prerequisite:

- Prior to attaining the **IBM Certified Specialist - AIX HACMP** certification, candidates must be certified as either an:
  - **IBM Certified Specialist - AIX System Administration**
    or
  - **IBM Certified Specialist - AIX System Support**

Recommended Prerequisite:

- Minimum six to twelve months implementation experience installing, configuring and testing/supporting HACMP for AIX.

Core Requirement (1 Test):

Test 167

HACMP for AIX V4.2

* High Availability Cluster Multi-Processing

Benefits:

- *Certificate*
- *Wallet-size certificate*
- *Lapel pin*
- *Certification logo*
- *Technical Specialist access to Tech Site*

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IBM Certified Specialist
Business Intelligence for RS/6000

Specialist

Certification Requirement: 1 Test

Role Description:

IBM Certified Specialist - Business Intelligence for RS/6000: This certification validates the ability to facilitate an engagement to implement a Business Intelligence solution on the RS/6000. The certification is applicable to specialists who identify Business Intelligence (BI) opportunities, develop & manage BI solutions for the RS/6000 by planning the appropriate solution design and identifying system requirements, and provide the consulting assistance necessary for implementation.

Benefits:

- *Certificate*
- *Wallet-size certificate*
- *Lapel pin*
- *Certification logo*
- *Technical Specialist access to Tech Site*

Tech Site provides online technical information for the AIX and RS/6000 IBM Certified Professional.

Recommended Prerequisites:

- Minimum of six months experience in Business Intelligence (e.g., Consulting / Planning BI Solutions).
- Minimum of one year experience in AIX and RS/6000.
- Training in Data Warehouse enablement and modeling, or equivalent experience.

Core Requirement (1 Test):

Test 179

Business Intelligence for RS/6000

Additional sample tests for many AIX exams are provided through an on-line testing system, TOPCAT **(http://www.ibm.com/topcat)**. Advice is given concerning appropriate education after each TOPCAT test is marked. Score reports are sent by email, showing full details of the marking and listing courses related to any incorrectly answered questions.

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IBM Certified Specialist Domino for RS/6000

Specialist

Certification Requirement: 1 Test

Role Description:

IBM Certified Specialist - Domino for RS/6000: This certification validates the skills required to implement Lotus Domino solutions on the RS/6000. The certification is applicable to specialists who plan, install, configure, and administer Domino on the RS/6000, and provide integrated Domino solutions in a variety of customer environments which include RS/6000.

Benefits:

- *Certificate*
- *Wallet-size certificate*
- *Lapel pin*
- *Certification logo*
- *Technical Specialist access to Tech Site*

Tech Site provides online technical information for the AIX and RS/6000 IBM Certified Professional.

Recommended Prerequisites:

- Minimum of six months experience implementing Domino on RS/6000.
- Training in AIX system administration, or equivalent experience.
- Training in Lotus Domino administration, or equivalent experience.
- Training in Domino installation on AIX, or equivalent experience.

Core Requirement (1 Test):

Test 176

Domino for RS/6000

Additional sample tests for many AIX exams are provided through an on-line testing system, TOPCAT (http://www.ibm.com/topcat). Advice is given concerning appropriate education after each TOPCAT test is marked. Score reports are sent by email, showing full details of the marking and listing courses related to any incorrectly answered questions.

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IBM Certified Specialist RS/6000 Solution Sales

Specialist

Certification Requirement: 1 Test

Role Description:

IBM Certified Specialist - RS/6000 Solution Sales:This certification validates the ability to identify, manage and close IBM RS/6000 sales opportunities with the appropriate hardware, software, and service offerings. The certification is applicable to sales representatives who demonstrate technical knowledge of the RS/6000 products and deliver a comprehensive business solution to customers through solution identification, product differentiation, competitive positioning, and effective use of resources.

Recommended Prerequisites:

- Minimum of six months sales experience specifically with RS/6000 products.
- Approximately two years general IT sales experience.
- Sales training on RS/6000 products, or equivalent experience.

Core Requirement (1 Test):

Test 171* **RS/6000 Solution Sales**	or	**Test 173** **RS/6000 Solution Sales (Worldwide)**

* Test 171 is currently available in North America only. (Locations other than North America should take test 173.)

Benefits:

- *Certificate*
- *Wallet-size certificate*
- *Lapel pin*
- *Certification logo*
- *Sales Specialist access to Tech Site*

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Additional sample tests for many AIX exams are provided through an on-line testing system, TOPCAT (http://www.ibm.com/topcat). Advice is given concerning appropriate education after each TOPCAT test is marked. Score reports are sent by email, showing full details of the marking and listing courses related to any incorrectly answered questions.

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IBM Certified Specialist RS/6000 SP and PSSP V3

Specialist

Certification Requirement: 1 Test

Role Description:

IBM Certified Specialist - RS/6000 SP and PSSP V3: This certification validates the skills required to install and configure RS/6000 Scalable POWERparallel (SP) system software, and to perform the administrative and diagnostic activities needed to support multiple users in an SP environment. The certification is applicable to specialists who implement and/or support RS/6000 SP systems.

Recommended Prerequisites:

- IBM Certified Specialist - AIX System Administration

  or
- IBM Certified Specialist - AIX System Support

Core Requirement (1 Test):

Test 188

RS/6000 SP and PSSP V3

Benefits:

- *Certificate*
- *Wallet-size certificate*
- *Lapel pin*
- *Certification logo*
- *Sales Specialist access to Tech Site*

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RS/6000 SP - Sales Qualification

IBM Certified™
Specialist

Requirement: 1 Test

Role Description:

RS/6000 SP - Sales Qualification: The RS/6000 SP Sales qualification assesses the ability of sales professionals to identify SP sales opportunities, develop solid RS/6000 SP solutions based upon customer needs and circumstances and identify the appropriate hardware, software and service offerings needed to implement various solutions.

Core Requirement (1 Test):

Test 172*

RS/6000 SP
Sales Qualification

* Please note: This is a Sales Qualification Exam. It is not a Certification Exam.

Benefits:

- *Certificate*
- *Wallet-size certificate*
- *Lapel pin*
- *Certification logo*
- *Sales Specialist access to Tech Site*

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IBM Certified Specialist Web Server for RS/6000

Specialist

Certification Requirement: 1 Test

Role Description:

IBM Certified Specialist - Web Server for RS/6000: This certification validates the skills required to implement Web Server solutions on the RS/6000. The certification is applicable to specialists who plan, install, configure, administer, or support Web Server software on the RS/6000 , and who resolve security or performance issues regarding the RS/6000 Web Server.

Recommended Prerequisites:

- Minimum of six months experience with an RS/6000 Web Server implementation. (e.g., Domino Go, or Apache, or Netscape on the RS/6000)
- One year of general Web administration/implementation experience.
- Training in Web Server installation on AIX, or equivalent experience.

Core Requirement (1 Test):

Test 177

Web Server for RS/6000

Benefits:

- *Certificate*
- *Wallet-size certificate*
- *Lapel pin*
- *Certification logo*
- *Technical Specialist access to Tech Site*

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Additional sample tests for many AIX exams are provided through an on-line testing system, TOPCAT **(http://www.ibm.com/topcat)**. Advice is given concerning appropriate education after each TOPCAT test is marked. Score reports are sent by email, showing full details of the marking and listing courses related to any incorrectly answered questions.

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IBM Certified Advanced Technical Expert RS/6000 AIX

Advanced Technical Expert

Certification Requirement: 3 Tests

Role Description:

IBM Certified Advanced Technical Expert - RS/6000 AIX: Certifies an advanced level of AIX knowledge and understanding, both in breadth and depth. Verifies the ability to perform in-depth analysis, apply complex AIX concepts and provide resolution to critical problems, all in a variety of areas within RS/6000 AIX.

Required Prerequisite:

- Prior to attaining the **IBM Certified Advanced Technical Expert - RS/6000 AIX** certification, candidates must be certified as either an:
  - **IBM Certified Specialist - AIX System Administration**
  or
  - **IBM Certified Specialist - AIX System Support**

Recommended Prerequisite:

- Minimum six to 12 months experience in performing in-depth analysis and applying complex AIX concepts in a variety of areas within RS/6000 AIX

Benefits:

- *Certificate*
- *Wallet-size certificate*
- *Lapel pin*
- *Certification logo*
- *CATE access to Tech Site*
- *Problem Solving Database access on Tech Site*

  Tech Site provides online technical information for the AIX and RS/6000 IBM Certified Professional.
- *RS/6000 Results Magazine*

Core Requirement (Select 3 Tests):

Test 163+ **AIX V4.2 Installation and System Recovery**	**Test 164+** **AIX V4.2 Performance and System Tuning**	**Test 165+** **AIX V4.2 Problem Determination Tools and Techniques**	**Test 166+** **AIX V4.2 Communications**
Test 167 **HACMP* for AIX V4.2**	**Test 168**** **RS/6000 SP** and PSSP V2.2***	**Test 178**** **RS/6000 SP** and PSSP V2.4***	**Test 188** **RS/6000 SP** and PSSP V3.1***

+ Note: You will receive a Certificate of Proficiency for this test, when passed.

* High Availability Cluster Multi-Processing

** Scalable POWERparallel

*** Parallel System Support Program

**** Only 1 SP test, 168, 178, or 188 can be used for CATE

Additional sample tests for many AIX exams are provided through an on-line testing system, TOPCAT **(http://www.ibm.com/topcat)**. Advice is given concerning appropriate education after each TOPCAT test is marked. Score reports are sent by email, showing full details of the marking and listing courses related to any incorrectly answered questions.

The information contained in this roadmap (as well as test objectives and sample tests) is available from our website – http://www.ibm.com/certify

AIX & RS/6000 Certification Test Descriptions

Following are brief descriptions of the certification exams currently available. For a detailed list of all objectives covered on the exams and Sample Tests, please see the Certification web site at:
http://www.ibm.com/certify

Test Number	***Test Description***
Test 160	The AIX User exam covers the fundamentals of using an AIX operating system including the use of basic commands and the online documentation, and the ability to manage files, directories, processes and print jobs. The exam also includes customization of the user environment, using Xwindows and TCP/IP, and vi editor skills.
Test 163	The Installation and System Recovery exam covers a range of topics including installing the operating system or a licensed program product, updating the system, and applying a selective fix, plus backup, restore and mksysb. In addition, it covers System Recovery topics such as boot failures and filesystem or LVM recovery methods.
Test 164	The Performance and System Tuning exam covers a variety of performance tools and techniques used to identify and correct performance problems and to tune or customize a system. Knowledge regarding performance considerations for multi-processors, VMM, communication networks, I/O devices and more is covered.
Test 165	The Problem Determination Tools & Techniques exam covers a full spectrum of PD tools such as dump, crash, trace, sar and netstat, to name a few. The exam also covers knowledge of interpreting error logs and running system diagnostics. In addition, an understanding of PD activities required to resolve general system problems is included.
Test 166	The Communications exam tests a whole host of communication topics: TCP/IP, NFS, DNS, NIS, SLIP, etc. The exam covers key networking concepts of these, including protocols, interfaces, addresses, routes, mounts, modems, servers and more. In addition, methods to set up and configure a network or to identify and resolve communication problems are covered.
Test 167	The HACMP for AIX exam covers a full range of HACMP activities including conducting an HACMP planning session, evaluating customer availability requirements, installing and configuring HACMP, pre/post event command scripts, HACMP failover testing, and post-installation maintenance. This exam is based on representative HACMP implementation scenarios.
Test 171, 173	The RS/6000 Sales exam covers all aspects of selling an RS/6000 from sizing the opportunity, through identifying a solution, to post-sale support. The exam focuses on key technical knowledge of the RS/6000 including workstations, peripherals, architecture and software packages.
Test 181	The AIX System Administration exam covers a very broad range of administrative and day-to-day operational skills including installation, system management and the administration of filesystems, processes and kernel. The exam also tests the ability to backup the system, manage print queues and set up TCP/IP.
Test 189	The AIX System Support exam covers a broad range of general problem determination and problem resolution skills. This exam is focused on identifying and correcting problems in such areas as installation, boot, configuration, filesystem kernel, Xwindows, communications, etc. The exam tests a basic ability to use AIX problem determination tools.

Education Courses for AIX Certifications

These education courses are offered to assist in preparing for the certification exams, but are not required. All test topics may not be covered in the classroom. Personal experience is also important for success in certification.

- *To register for courses or to request course objectives, call IBM Learning Services.*
- *Information is also available on the Internet – http://www.training.ibm.com/ibmedu*
- *Specific education programs and promotions may be available for IBM Business Partners. Call your Business Partner program for more information.*

Test Number	Course Title	Duration	Course No.
Test 160	**AIX Version 4 Basics Plus** Learn how to use the AIX Version 4 operating system to do your everyday tasks. This course replaces AIX V4 Basics (Q1113) and AIX V4 Advanced Users (Q1118). Topics include: logging in, changing passwords, executing basic AIX commands and command syntax, managing files and directories, using shell features such as redirection, pipes, metacharacters, variable and command substitution and shell scripts, using utilities such as find, grep, sort, and xargs, customizing the user environment, using and customizing AIXwindows, using and customizing the Common Desktop Environment (CDE), working with processes, the 'vi' editor and AIX on-line documentation. The course includes extensive hands-on machine exercises where students practice the skills that they learn in class.	5 Days	**AU13 (WW)** **Q1213 (NA)**
Test 163	**AIX Version 4 System Administration** This course teaches basic system administration skills with a concentration on configuring and monitoring a single CPU environment.	5 Days	**AU14 (WW)** **Q1114 (NA)**
	AIX Version 4 Advanced System Administration This course teaches skills to perform hardware and software problem determination. It also covers advanced system administration tasks in the areas of security, logical volume management, devices and customization.	5 Days	**AU16 (WW)** **Q1116 (NA)**
	AIX Version 4 Network Installation Manager In this course the student will learn NIM concepts, setup, and usage. The capabilities of NIM are presented primarily within the framework of case studies of NIM usage in the AIX Version 4 Environment. The course also covers NIM support of the mangement of diskless and dataless clients.	2 Days	**AU08 (WW)** **Q1108 (NA)**
Test 164	**AIX Version 4 Performance Management** This course teaches how to monitor, analyze and tune AIX subsystems for optimal performance. It covers the use of standard and advanced AIX performance tools to monitor and tune the performance of each subsystem. Hands-on labs and a case study reinforce the lectures and provide students with practical experience.	4 Days	**AU28 (WW)** **Q1128 (NA)**
Test 165	**AIX Version 4 Advanced System Administration** This course teaches skills to perform hardware and software problem determination. It also covers advanced system administration tasks in the areas of security, logical volume management, devices and customization.	5 Days	**AU16 (WW)** **Q1116 (NA)**
	AIX Version 4 Performance Management This course teaches how to monitor, analyze and tune AIX subsystems for optimal performance. It covers the use of standard and advanced AIX performance tools to monitor and tune the performance of each subsystem. Hands-on labs and a case study reinforce the lectures and provide students with practical experience.	4 Days	**AU28 (WW)** **Q1128 (NA)**
	AIX Application Programming Environment This lecture and lab course introduces basic AIX tools and commonly used calls.	5 Days	**AU25 (WW)** **Q1125 (NA)**
	AIX Version 4 Korn Shell Programming This course teaches how to use Korn Shell scripts and utilities.	3 Days	**AU23 (WW)** **Q1123 (NA)**
	AIX Version 4 Configuring TCP/IP This course teaches how to perform TCP/IP network configuration and administration. It also covers the skills needed to begin implementing and using NFS, DNS, network printing, static and dynamic routing, and PPP.	5 Days	**AU05 (WW) or** **AU07 (WW)** **Q1107 (NA)**

NA = North America US = United States WW = Worldwide

Test Number	*Course Title*	*Duration*	*Course No.*
Test 166	**AIX Version 4 Configuring TCP/IP** This course teaches how to perform TCP/IP network configuration and administration. It also covers the skills needed to begin implementing and using NFS, DNS, network printing, static and dynamic routing, and PPP.	5 Days	**AU05 (WW) or AU07 (WW) Q1107 (NA)**
	AIX Version 4 Performance Management This course teaches how to monitor, analyze and tune AIX subsystems for optimal performance. It covers the use of standard and advanced AIX performance tools to monitor and tune the performance of each subsystem. Hands-on labs and a case study reinforce the lectures and provide students with practical experience.	4 Days	**AU28 (WW) Q1128 (NA)**
Test 167	**HACMP Installation and Implementation** This course prepares you to install and configure a high available cluster using HACMP for AIX. It teaches valuable skills that allow you to perform basic system administration tasks and basic problem determination. The course is supplemented with a series of hands-on laboratory exercises.	5 Days	**AU55 (WW) Q1155 (NA)**
	AIX Version 4 HACMP System Administration This course teaches the student the skills required to administer an HACMP cluster on an ongoing basis after it is installed. The skills that are developed in this course include: - Integrating the cluster with existing network services (DNS, NIS, etc.) - Monitoring tools for the cluster, including HAView for Netview - Maintaining user ids and passwords across the cluster - Recovering from script failures - Making configuration or resource changes in the cluster - Repairing failed hardware - Maintaining required cluster documentation The course involves a significant amount of hands-on exercises to reinforce the concepts. Students are expected to have completed the course AU49 (Q1049) HACMP Operating Principles before attending this course.	4 Days	**AU50 (WW) Q1150 (NA)**
Test 171*	**RS/6000 Shark Camp 1999 CD-ROM** Recommended for anyone seeking to become RS/6000 Sales Certified. This CD will help you develop your sales skills and obtain a deeper understanding of the RS/6000 product line, as well as competitive offerings and IBM resources, services, and support.	CBT	**SV31-8047-00**
	RS/6000 Product Sales Overview Objectives: - Describe the features and benefits of AIX - Understand the RS/6000 product range and associated storage, networking and software offerings available from IBM - Identify the services offered by IBM to support the RS/6000 - Understand where to find information about RS/6000 and AIX on the Internet - Prepare for the IBM Certified Specialist - RS/6000 Solutions Sales Test	2 Days	**AU10A (US) AU10 (WW)**
	Positioning and Selling RS/6000 Computer Based Training (CBT on a PC System) This highly interactive, multimedia course introduces the learner to strategies for positioning and selling RS/6000 solutions in today's competitive marketplace, providing insights and information on a variety of RS/6000 environments and situations. The content is delivered via video clips, audio, graphics and text screens. The CD-ROM pub order number is SV31-3938-00.	8 Hours	**SE11040B**

* A complete and detailed education roadmap for Test 171 is available on the web at http://www.ibm.com/certify

NA = North America US = United States WW = Worldwide

Test Number	Course Title	Duration	Course No.
Test 172	**SP Sales Training** This course provides a technical introduction to the RS/6000 SP for sales representatives including; typical solutions, technical highlights and how they support these solutions, competition, and advice on sizing and configuration. It is suitable preparation for the RS/6000 SP Assessment Test. By the end of this course delegates should have sufficient technical knowledge of the RS/6000 SP to be able to: - State the elements of an RS/6000 SP customer proposal - Describe the steps to configure a solution to meet a customer's requirements - Understand how to conduct planning sessions designed to implement the solution. - List the elements of ordering the components outlined in a proposal - Describe how to resolve discrepencies associated with the complexities of RS/6000 SP Systems - List where to get additional help with selling RS/6000 SPs	2 Days	**Q1690 (NA)**
	RS/6000 SP Product Overview This course provides a technical overview of the SP in a commercial customer environment. It covers concepts terminology and products for the SP. Those who are interested in formulating SP based solutions will find a good base for building these solutions.	1 Day	**AU90 (WW)** **Q1090 (NA)**
Test 176	**Lotus Domino R5 on RS/6000** Learn to install the Domino server on the RS/6000 platform, customize the server and its powerful Web serving capabilities. Also learn to install the new administrative client and perform simple administrative tasks from this client. The course concludes with a unit on troubleshooting and performance tuning	Distributed Learning	**AT23 (WW)**
Test 177	**IBM HTTP Server Powered by Apache on RS/6000** The reliable operation of Web servers is very important for organizations which have a presence on the Web. The open source Web server Apache is the defacto standard for Web servers. IBM has chosen to support the development of Apache and make it available with security enhancements as part of it's e-business product suite. This course gives a broad understanding of the architecture of the new IBM HTTP server powered by Apache. - Install the IBM HTTP Server - Set up the IBM HTTP Server - Configure the IBM Server - Secure the IBM HTTP Server	Distributed Learning	**AT22 (WW)**
Test 178	**RS/6000 SP Overview, Planning, and Installation** Acquire a technical overview of the hardware and software components of the RS/6000 SP running PSSP. - Outline the hardware and software components of an SP system - Define system planning tasks for the hardware and software environment - Make system planning decisions based on the impact the decisions may have on the performance and management of the system - Perform pre-installation planning activities such as completing worksheets and checklists to reflect the pre-planning decisions - List and describe the contents of the scripts that are run during the installation process - Install PSSP - Execute parallel commands - Monitor the installed system using SPMON - Bring nodes up and down in various modes - Plan for and manage PTFs, LPPs, and upgrades - Understand high availability options - Understand special planning concerns for LAN consolidation - Plan, install, and configure VSDs - Troubleshoot common installation problems	5 Days	**AU91 (WW)** **Q1091 (NA)**
	RS/6000 SP System Administration Learn to manage an SP system and its many resources. This includes coverage of system and user security, central control of user and system files, backup and restore strategies, reconfiguring the system, working with Event and Problem Management, and basic problem determination.	5 Days	**AU96 (WW)** **Q1096 (NA)**
	RS/6000 SP Certification Test Preparation Workshop This workshop provides you with a review of the concepts necessary for the RS/6000 SP Certification exam. You complete a pretest prior to receiving confirmation of enrollment that will help identify your readiness and assist in areas of selected study. Lectures and discussions cover a variety of topics that refresh your knowledge and improve your understanding of concepts to increase your confidence for the exam. The exam is given at the end of the second day and is included in the price of the course.	2 Days	**Q1827 (NA)**

NA = North America US = United States WW = Worldwide

Test Number	Course Title	Duration	Course No.
Test 179	**Data Warehouse Enablement: Methods and Techniques** Learn practical methods and techniques for designing and constructing a data warehouse. Learn how to apply the techniques in the context of an incremental process, suitable for constructing a data warehouse from a departmental or functional workgroup perspective. Also, learn how the process can further be extended for the construction of consistent, corporate-wide data warehouses. You will apply techniques learned in several exercises which are part of a non-trivial case study. You will also participate in several hands-on machine exercises exposing you to several products useful for DW and BI enablement. - Build a data warehouse and understand what it is - Apply the design and construction techniques in practice, in projects of non-trivial scope Other courses which may be helpful include:	4.5 Days	**DW11 (WW)** **DW110 (NA)**
	- Multi-Dimensional Data Warehouse Modeling		**DW12 (WW)** **DW120 (NA)**
	- Populating the Data Warehouse		**DW13 (WW)** **DW130 (NA)**
	- Data Replication: Basic Usage		**DW14 (WW)** **DW140 (NA)**
Test 181	**AIX Version 4 System Administration** Learn the basic system administration skills to support the AIX RS/6000 running the AIX Version 4 operating system. Build your skills in configuring and monitoring a single CPU environment. Administrators who manage systems in a networked environment should attend additional LAN courses.	5 Days	**AU14 (WW)** **Q1114 (NA)**
	AIX Version 4.3 Advanced System Administration Learn to identify possible sources of problems on stand-alone configurations of the RS/6000 and perform advanced system administration tasks.	5 Days	**AU16 (WW)** **Q1116 (NA)**
	AIX Version 4 Configuring TCP/IP and Accessing the Internet Learn how to perform TCP/IP network configuration and administration on AIX Version 4 RS/6000 systems. Learn the skills necessary to begin implementing and using NFS, NIS, DNS, network printing, static and dynamic routing, SLIP and SLIPLOGIN, Xstations, and the Internet.	5 Days	**AU07 (WW) or** **AU05 (WW)** **Q1107 (NA)**
	AIX Education on CD: IBM AIX Essentials The new IBM AIX Essentials series offers a dynamic training experience for those who need convenient and cost-effective AIX education. The series consists of five new, content rich, computer based multimedia training courses based on highly acclaimed, instructor led AIX classes that have been successfully taught for years by IBM Education and Training.	5 Course Series	**5639-E05**
	AIX Essentials Series:		
	AIX Basics	15 Hours	**5639-E04**
	AIX System Administration	20 Hours	**5639-E02**
	AIX TCP/IP Communications	14 Hours	**5639-E07**
	AIX Desktop Environment for Users	6 Hours	**5639-E03**
	AIX Version 4.3 Feature Overview	2 Hours	**5639-E06**
Test 188	**RS/6000 SP Overview, Planning, and Installation** Acquire a technical overview of the hardware and software components of the RS/6000 SP running PSSP. - Outline the hardware and software components of an SP system - Define system planning tasks for the hardware and software environment - Make system planning decisions based on the impact the decisions may have on the performance and management of the system - Perform pre-installation planning activities such as completing worksheets and checklists to reflect the pre-planning decisions - List and describe the contents of the scripts that are run during the installation process - Install PSSP - Execute parallel commands - Monitor the installed system using SPMON - Bring nodes up and down in various modes - Plan for and manage PTFs, LPPs, and upgrades - Understand high availability options - Understand special planning concerns for LAN consolidation - Plan, install, and configure VSDs - Troubleshoot common installation problems	5 Days	**AU91 (WW)** **Q1091 (NA)**

NA = North America US = United States WW = Worldwide

Test Number	Course Title	Duration	Course No.
Test 188 (cont'd)	**RS/6000 SP System Administration** Learn to manage an SP system and its many resources. This includes coverage of system and user security, central control of user and system files, backup and restore strategies, reconfiguring the system, working with Event and Problem Management, and basic problem determination.	5 Days	**AU96 (WW)** **Q1096 (NA)**
	RS/6000 SP Certification Test Preparation Workshop This workshop provides you with a review of the concepts necessary for the RS/6000 SP Certification exam. You complete a pretest prior to receiving confirmation of enrollment that will help identify your readiness and assist in areas of selected study. Lectures and discussions cover a variety of topics that refresh your knowledge and improve your understanding of concepts to increase your confidence for the exam. The exam is given at the end of the second day and is included in the price of the course.	2 Days	**Q1827 (NA)**
Test 189	**AIX Support Certification Test Preparation Workshop** This two-day workshop will provide a knowledgeable AIX professional with a review of AIX concepts necessary for the AIX Support Certification exam. A pretest is used to help identify student's readiness and assist in areas of selected study. The lecture and discussion oriented workshop will cover a variety of topics to help the student refresh knowledge and improve understanding of concepts to increase their confidence for the exam. Students will also be given an out-of-class reading assignment. The classroom will contain lab equipment for those students that desire hands-on activities. The AIX Support Certification exam will be available at the end of the second day.	2 Days	**Q1825 (NA)**
	AIX Version 4 System Administration Learn the basic system administration skills to support the AIX RS/6000 running the AIX Version 4 operating system. Build your skills in configuring and monitoring a single CPU environment. Administrators who manage systems in a networked environment should attend additional LAN courses.	5 Days	**AU14 (WW)** **Q1114 (NA)**
	AIX Version 4.3 Advanced System Administration Learn to identify possible sources of problems on stand-alone configurations of the RS/6000 and perform advanced system administration tasks.	5 Days	**AU16 (WW)** **Q1116 (NA)**
	AIX Version 4 Configuring TCP/IP and Accessing the Internet Learn how to perform TCP/IP network configuration and administration on AIX Version 4 RS/6000 systems. Learn the skills necessary to begin implementing and using NFS, NIS, DNS, network printing, static and dynamic routing, SLIP and SLIPLOGIN, Xstations, and the Internet.	5 Days	**AU07 (WW) or** **AU05 (WW)** **Q1107 (NA)**
	AIX Education on CD: IBM AIX Essentials The new IBM AIX Essentials series offers a dynamic training experience for those who need convenient and cost-effective AIX education. The series consists of five new, content rich, computer based multimedia training courses based on highly acclaimed, instructor led AIX classes that have been successfully taught for years by IBM Education and Training.	5 Course Series	**5639-E05**
	AIX Essentials Series:		
	AIX Basics	15 Hours	**5639-E04**
	AIX System Administration	20 Hours	**5639-E02**
	AIX TCP/IP Communications	14 Hours	**5639-E07**
	AIX Desktop Environment for Users	6 Hours	**5639-E03**
	AIX Version 4.3 Feature Overview	2 Hours	**5639-E06**

Additional sample tests for many AIX exams are provided through an on-line testing system, TOPCAT (http://www.ibm.com/topcat). Advice is given concerning appropriate education after each TOPCAT test is marked. Score reports are sent by email, showing full details of the marking and listing courses related to any incorrectly answered questions.

NA = North America US = United States WW = Worldwide

Publications for AIX Certifications

To order a publication, refer to the IBM Direct publications catalog on the Internet at http://www.elink.ibmlink.ibm.com/pbl/pbl or in the U.S. and Canada call 1-800-879-2755 and select option 1.

Test Number	Publication Title	Order No.
All Tests	**Techlib (IBM AIX Technical Library/6000)** This CD-ROM is a repository of comprehensive AIX documentation and service and support information for RISC System/6000. The CD is updated quarterly.	**Z360-3505**
Test 160	**AIX V4 Getting Started** This book provides information for first-time users who have little or no experience with RISC System/6000 products and the AIX Operating System. It introduces basic system commands such as starting and stopping the system, using a keyboard or mouse, logging in and out, running basic file commands and identifying and using various user interfaces. Also covered are Visual System Management Applications and the different ways to obtain online help.	**SC23-2527**
	AIX V4.1 System Management Guide: Operating System and Devices This book contains essential information about the base operating system. It also introduces the tools AIX provides for system administration.	**SC23-2525**
	Printing for Fun and Profit Under AIX V4 This Redbook focuses on the printing facilities available in AIX V4 for the RISC System/6000. It includes the manner in which the AIX V4.1 print spooling subsystem functions, how to install printers, how to configure printers and the print spooling subsystem, how to print files and manage the progress of print requests through the print spooling subsystem, and advanced printing topics such as remote printing, printing via terminals and Xstations, and configuring nonsupported printers.	**GG24-3570**
Test 163	**AIX V4.1 Installation Guide** This book describes how to install AIX V4.1 and optional software products on stand-alone machines. It also describes how to perform a set of configuration tasks.	**SC23-2550**
	AIX V4.1 Network Installation Management Guide This book describes how to install AIX and optional software on one or more diskettes, databases and stand-alone machines from a control server.	**SC23-2627**
Test 164	**AIX V4.1 Performance Tuning Guide** This book focuses on performance concepts, tools and some key aspects of the workstation.	**SC23-2365**
Test 165	**AIX V4.1 Problem Solving Guide and Reference** This book provides information to help users investigate, define and fix problems with the operating system, software or hardware or other programs installed on the systems.	**SC23-2606**
	AIX V4.1 Software Problem Debugging and Reporting for the RISC System/6000 The goal of this Redbook is to make problem reporting easier, faster and as accurate as possible.	**GG24-2513**
Test 166	**AIX V4.1 System Management Guide: Communications and Networks** This book contains information on configuring mail, transmission control protocol/internet protocol (TCP/IP), Network File System (NFS), High-Availability-MFS (HA-MFS), Basic Networking Utilities (BNU) and much more.	**SC23-2526**
	AIX V4.1 Asynchronous Communications Guide This book contains information for evaluating and designing asynchronous devices. It also describes devices and software, programming concepts and communications for 8-port, 16-port, 64-port and 128-port adapters for the RISC System/6000.	**SC23-2488**
Test 167	**High Availability on the RISC System/6000 Family** This Redbook is created for those who wish to implement a highly available AIX environment, using the HACMP for AIX product. It includes information on how to use standard AIX operating system facilities to enhance the availability of a single system, and also describes how to set up an HACMP cluster. This Redbook also provides many helpful hints and tips to make your implementation easier.	**SG24-4551**
	Bullet-Proofing Your Oracle Database with HACMP This Redbook describes the implementation of the Oracle database products in a highly available AIX cluster using HACMP. This Redbook was written for those who are planning to implement an Oracle database installation in a highly available HACMP cluster. The book covers a variety of configurations, including concurrent and non-current access. Several scripts and configuration files are provided with the book to make the configuration of the database and the cluster easier.	**SG24-4788**
	IBM Certification Study Guide: AIX HACMP This redbook (technical manual) helps AIX HACMP Specialists seeking a comprehensive and task-oriented guide for developing the knowledge and skills required to pass the exam. It is designed to provide a combination of theory and practical experience needed for a general understanding of the subject matter. It also provides sample questions that will help in the evaluation of personal progress and provide familiarity with the types of questions that will be encountered in the exam. This book will not replace the practical experience you should have, but is an effective tool which when combined with education activities and experience, should prove to be a very useful preparation guide for the exam. Due to the practical nature of the certification content, this publication can also be used as a desk side reference. So, whether you are planning to take the HACMP for AIX exam, or if you just want to validate your AIX HACMP skills, this book is for you.	**SG24-5131**

Test Number	*Publication Title*	*Order No.*
Test 171	**IBM RS/6000 Shark Camp 1999 CD-ROM** Recommended for anyone seeking to become RS/6000 Sales Certified. This CD will help you develop your sales skills and obtain a deeper understanding of the RS/6000 product line, as well as competitive offerings and IBM resources, services, and support.	**SV31-8047**
	Exploring IBM RS/6000 Computers This combination book and companion "for readers only" web site provides a concise and constantly updated overview of IBM's popular RS/6000 line of workstations and servers. Coverage includes all RS/6000 models, options, peripherals, AIX operating system, middleware, application programs, communications configurations, and more. Three hypothetical businesses are described and outfitted with the appropriate RS/6000 hardware/software solutions. Written by Jim Hoskins/Doug Davies and published by Maximum Press.	**GA23-2674**
	Fundamentals of Selling RS/6000 Products and Technology This self-paced sales training course teaches how to sell RS/6000 Products and Technology.	**SV31-4017**
	Positioning and Selling RS/6000 Computer Based Training (CBT on a PC System) This highly interactive, multimedia course introduces the learner to strategies for positioning and selling RS/6000 solutions in today's competitive marketplace, providing insights and information on a variety of RS/6000 environments and situations. The content is delivered via video clips, audio, graphics and text screens. The CD-ROM pub order number is SV31-3938-00.	**SV31-3938**
	IBM RS/6000 BP Sales Kit All the facts about the RS/6000 are just a keystroke or two away thanks to the innovative Business Partner Sales Kit CD (US version). No need to carry around dozens of printed brochures and spec sheets, everything you need is available instantly. More convenient than the Internet - faster too - the CD can help create a more professional impression in customer presentations.	**SK2T-9772**
	RS/6000 Sales Education: 4Q Product and Competitive Update Information update for IBM and Business Partner sales forces on RS/6000.	**SV31-8003**
Test 178 and 188	**RS/6000 SP Certification Study Guide** This redbook (technical manual) helps RS/6000 SP specialists seeking a comprehensive and task-oriented guide for developing the knowledge and skills required to pass the exam. It is designed to provide a combination of theory and practical experience needed for a general understanding of the subject matter. It also provides sample questions that will help in the evaluation of personal progress and provide familiarity with the types of questions that will be encountered in the exam. This book will not replace the practical experience you should have, but is an effective tool which when combined with education activities and experience, should prove to be a very useful preparation guide for the exam. Due to the practical nature of the certification content, this publication can also be used as a desk side reference. So, whether you are planning to take the RS/6000 SP and PSSP exam, or if you just want to validate your RS/6000 SP skills, this book is for you.	**SG24-5348**
Test 181	**IBM Certification Study Guide: AIX V4.3 System Administration** This redbook (technical manual) helps AIX System Administrators seeking a comprehensive and task-oriented guide for developing the knowledge and skills required to pass the exam. It is designed to provide a combination of theory and practical experience needed for a general understanding of the subject matter. It also provides sample questions that will help in the evaluation of personal progress and provide familiarity with the types of questions that will be encountered in the exam. This book will not replace the practical experience you should have, but is an effective tool which when combined with education activities and experience, should prove to be a very useful preparation guide for the exam. Due to the practical nature of the certification content, this publication can also be used as a desk side reference. So, whether you are planning to take the AIX System Administration exam, or if you just want to validate your AIX administrative skills, this book is for you.	**SG24-5129**
Test 189	**IBM Certification Study Guide: AIX V4.3 System Support** This redbook helps AIX support professionals seeking a comprehensive and task-oriented guide for developing the knowledge and skills required to pass the exam. It is designed to provide a combination of theory and practical experience needed for a general understanding of the subject matter. It also provides sample questions that will help in the evaluation of personal progress and provide familiarity with the types of questions that will be encountered in the exam. This book will not replace the practical experience you should have, but is an effective tool which when combined with education activities and experience, should prove to be a very useful preparation guide for the exam. Due to the practical nature of the certification content, this publication can also be used as a desk side reference. So, whether you are planning to take the support exam, or if you just want to validate your AIX system support skills, this book is for you.	**SG24-5139**

General Program Information

Test Preparation

- **Education Courses** are offered through IBM Learning Services worldwide. For class schedules and prices, call the IBM Learning Services Center nearest you, or on the Internet go to – http://www.training.ibm.com/ibmedu.
- **Test Descriptions, Test Objectives and Sample Tests** are valuable tools to help you prepare for certification exams. This information is available from the Professional Certification Program from IBM web site – http://www.ibm.com/certify.
- **Publications** will help you prepare for the tests. You can order publications worldwide from the IBM Direct publications catalog on the Internet – http://elink.ibmlink.ibm.com/pbl/pbl. Also, in the U.S., you can call 1-800-879-2755 and select option 1; in Canada call 1-800-IBM-4YOU (1-800-476-4968).
- **Additional sample tests** for many AIX exams are provided through an on-line testing system, TOPCAT (http://www.ibm.com/topcat). Advice is given concerning appropriate education after each TOPCAT test is marked. Score reports are sent by email, showing full details of the marking and listing courses related to any incorrectly answered questions.

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