JANUARY – JUNE 2006

Sun microsystems

SUN TRAINING GUIDE

EXERCISE YOUR POWER OF CHOICE

The Right Choices 2
More Curriculum Choices 3
New Course Offerings 3
Sun Certification Program 4
Java and Web Services Technologies 6
Sun Java™ System 9
Solaris™ OS Administration and Development 12
N1™ Grid 15
Servers and High Availability 16
Storage 17
Hardware Systems 19

For complete and most up-to-date course information, visit **www.sun.com/training**

ADVANCING YOUR CAREER IS ALL ABOUT CHOICES —

THE RIGHT CHOICES

Training on the most-advanced and leading edge technologies can give you the skills to create innovative and effective solutions. Choosing the right training from the right provider enriches your learning experience by exposing you to some of the most creative minds and ideas in the industry.

With Sun, you decide when, where, and how you learn — we'll provide the learning strategies and paths to help you excel in your job and your career.

Sun offers more expert-led and real-time online learning through its Live Virtual Class. Live online learning from Sun puts the instructor and classroom on the web, and compliments both online self-paced and traditional classroom training, to give you industry-leading choice in learning from a single company.

"The Sun server and storage technology, together with Sun support and educational services, have allowed our 4-member team to support 42,000 users and maintain 99.9 percent availability."

—Chris Colomb, Electronic Messaging Services Mgr, Univ. of North Carolina at Chapel Hill

CHOOSE SUN FOR EXCEPTIONAL TRAINING VALUE

Training is an important investment and Sun realizes you have a choice of providers. By training with Sun, you get more than high quality training — you also gain access to some of the hottest technologies and knowledgable instructors in the industry. With Sun, you can choose from:

- Over 5,000 course titles to meet your specific development needs
- 350 delivery centers located throughout the world
- Innovative learning tools and technologies, such as Live Virtual Classes
- Award winning Java™ technology and Solaris™ certification programs

CHOOSE TRAINING TO STRENGTHEN YOUR SKILLS PORTFOLIO

The people who brought you Java technology and the most advanced operating system on the planet — the Solaris OS — know innovation. Innovation often requires learning new approaches and skills. Sun can help you distill the ever-changing list of IT skills requirements and select the training that best meets your needs. So whether you are interested in cyber-security, data center management, server administration, or application development, Sun training can prepare you to thrive in the ever-changing demands of your IT environment. Sun training can help you get ahead, stay ahead, and leverage evolving technologies to your advantage.

CHOOSE A FORMAT THAT FITS YOUR LEARNING STYLE AND BUDGET

With Sun, it's your choice where and how you learn. Whether you choose traditional classroom, or any form of online learning, Sun provides an environment that is highly interactive, challenging, and engaging. If you are preparing for certification, you can choose a Career Accelerator Package that includes training and a certification exam voucher for a reduced price, or you can purchase the components separately. Whatever your choice, Sun has a single vision. We want you to be engaged and actively involved in your training — sharing, interacting, and working together to solve problems.

Exercise your power of choice. Register for Sun training today and experience the difference quality training can make in your career.

The VALUE of CHOICE:

SUN TRAINING OPTIONS

Instructor-led Training
Real-time/Hands-on/ Collaborative

CD-ROM Training
Self-paced/ Cost-effective

Online Training
Self-paced/Affordable/ Interactive

Team Training
Team-focused/ Versatile/ Customisable

Certification Packages
Convenient/Efficient/ Affordable

Live Virtual Class
Online/Real-Time Interactive/ Expert-led

MORE CURRICULUM CHOICES

The recent acquisition of StorageTek by Sun gives you more choices in storage curriculum than ever before.

For more detailed course descriptions and skills gained, please go to: sun.com/training/catalog/storage

Network Storage Software

Archive Solution Administration for Healthcare STK-2205
ASM for UNIX® Maintenance and Troubleshooting STK-0519

Disk

FlexLine FLX2xx/3xx Disk Administration and Connectivity STK-2024
FlexLine 600-Series Administration and Configuration STK-2456
SVAA Administration for OS/390 ..... STK-0684

Tape/Tape Automation

ACSLS HA Systems Administration STK-2187
ACSLS, UNIX® Skills STK-0456
ACSLS Systems Administration STK-0457
ExLM MVS Systems Administration STK-0266
L20/L40/L80 Installation, Configuration, and Operation CDK-0507
L5500 Operation STK-1787
L700/L180 Operations and Administration STK-1453
SL8500 Operator Training STK-2023
SMC/HSC/MVS Nearline Operations STK-0007
SMC/HSC/MVS Nearline Systems Administration STK-0265

SAN and Solutions

SAN Concepts and Connectivity STK-1454
SAN Concepts and Connectivity Implementation STK-1666

Virtual Storage Solutions

VSM: Managing Disaster Recovery in a VSM Environment STK-0777
VSM MVS Systems Administration STK-0267
VSM Operations STK-1629

NEW Course Offerings

	Course Number	Page
NEW – Java™ and Web Services Technologies Courses		
Developing Real Time Applications for the Java Platform	DTJ-4103	On the web
Developing Secure Java Web Services	DWS-4487	7
NEW – Sun Java™ System Courses		
Sun Java™ System Access Manager 7: Configuration and Customization	AM-3480	On the web
Java™ System Access Manager 7: Configuration and Customization	WMO-AM-3480	On the web
Sun Java™ System Identity Manager: Deployment Fundamentals	IDM-345	11
NEW – Solaris™ OS System Administration and Development Courses		
Solaris™ System Performance Management	SA-400	14
Solaris™ System Administration for Experienced UNIX® Administrators	STS-276-S10	15
Solaris™ Operating System Administration for Experienced HP-UX and Tru64 Administrators	STS-277	15
New – Servers and High Availability Courses		
Sun™ Cluster Geographic Edition 3.1 Software Administration	ES-361	16
Sun Fire T2000 Server Administration	PK-VC-ES-5088	On the web
Sun Fire X4100/X4200 Server Maintenance and Troubleshooting	WEB-4923	On the web
Sun Fire X2100 Server Maintenance and Troubleshooting	WEB-5380	On the web
New – Storage Courses		
VERITAS Volume Manager 4.1 Administration	ES-311	18
Sun StorEdge™ 9990 V Software Solutions	HDS-408	On the web
Sun StorEdge ™ 6920 System	NWS-3312	18
Sun StorEdge™ SAM-FS and QFS 4 Update 4 Administration	NWS-4510	18

ON THE WEB
For course details, visit sun.com/training

More than 3 million registered licenses for the Solaris 10 OS have been distributed.

Developers, system administrators and others continue to download the Solaris 10 OS, free of charge, at a rate of about 80,000 licenses per week! Sign up today for Solaris 10 OS online and classroom courses to get the most from this hot new technology and stay 10 moves ahead of your competition.

For more information on Solaris 10 OS training offerings, go to page 12 of this guide or visit: sun.com/training/10_solaris.

Now SeeBeyond is part of Sun.

SeeBeyond developed the industry's first fully integrated suite for the development and deployment of advanced business integration and composite application solutions built on a Service-Oriented Architecture (SOA) — the ICAN Suite.

Training for the ICAN suite is available worldwide. To register for a training center class or to discuss the advantages of holding training at your location, contact Sun's SeeBeyond Educational Services specialists at (800) 425-0541 Option 5, or via email at **US-Training@seebeyond.com.**

To learn more about specific courses, please visit seebeyond.com/services/course_catalog.asp

Look for this icon throughout this Training Guide for links to additional course details and online offerings.

SUN CERTIFICATION PROGRAM

CERTIFICATION PATHS

Validate your knowledge while you gain critical skills.

Getting certified is a great way to invest in your professional development and help boost your earning potential. Recognized industry wide, Sun certifications demonstrate that you have the technical competency, professional dedication and motivation that employer's value. Successful completion of the learning and certification process help enable job placement and career advancement in the highly competitive technology marketplace — now and in the future.

Java

	SUN CERTIFICATION	DESCRIPTION
Java SE™	**Sun Certified Associate for the Java Platform, Standard Edition**	This certification provides an ideal entry into an application development or a software project management career using Java technologies. It validates basic knowledge of OO Concepts, UML representation of OO concepts, the Java programming language, and general knowledge of Java platforms and technologies.
	Sun Certified Programmer for the Java™ 2 Platform	This foundation certification is for programmers interested in demonstrating proficiency in the fundamentals of the Java programming language using the Java 2 Platform, Standard Edition (J2SE™).
	Sun Certified Developer for the Java 2 Platform	This performance-based certification is for developers interested in demonstrating advanced proficiency in the Java programming language using J2SE.
Java EE™	**Sun Certified Web Component Developer for the Java 2 Platform, Enterprise Edition (J2EE™)**	This certification is for developers specialising in the application of JavaServer Pages™ and servlet technologies used to present Web services and dynamic Web content.
	Sun Certified Business Component Developer for the Java 2 Platform, Enterprise Edition	This certification is for Enterprise JavaBean™ (EJB™) technology business component developers who are responsible for designing, developing, testing, deploying, and integrating EJB applications.
	Sun Certified Developer for Java Web Services	This certification is for developers who create web service applications using Java technology components, such as those supported by the Java Web Services Developer Pack and the J2EE 1.4 platform.
	Sun Certified Enterprise Architect for the Java 2 Platform, Enterprise Edition (J2EE)	This certification is for enterprise architects responsible for architecting and designing J2EE compliant applications.
Java ME™	**Sun Certified Mobile Application Developer for the Java 2 Platform, Micro Edition**	This certification is for developers who create mobile applications using Java technologies for cell phones or "smart" devices.

solaris

	SUN CERTIFICATION	DESCRIPTION
SOLARIS™ OS	**Sun Certified System Administrator for the Solaris™ Operating System (Solaris™ OS)**	This certification is for system administrators tasked with performing essential system administration procedures on the Solaris OS and for technical application support staff responsible for administering a networked server running on the Solaris OS.
	Sun Certified Network Administrator for the Solaris OS	This certification is for experienced system administrators who are or will be responsible for administering Sun systems in a networked environment that includes LANs and the Solaris OS.
	Sun Certified Security Administrator for the Solaris OS	This certification is for system administrators with previous experience administering security in a Solaris OS environment.

FOR ALL CERTIFICATIONS: Sun recommends that interested students attend the appropriate supporting courses followed by a minimum of 6 - 12 months post-training experience before attempting to take a certification exam.

Sun℠ Career Accelerator Packages

Sun Career Accelerator Packages provide the right combination of classroom training, online training, online practice certification exams, and actual certification exams to help you achieve your career goals.

sun.com/training/us/java_cap
sun.com/training/us/solaris_cap

ePractice Exams

Sun also offers online practice exams to help professionals prepare for the Sun certification exams.

sun.com/training/certification/resources/epractice.html

Sun Certified Coaching Program

Five-day onsite coaching programs are designed to transform your development team into a certified team.

sun.com/training/team/consulting/coaching.html

The following Sun certifications were identified as 'HOT' and growing in value, in a recent study by Foote Partners, LLC (October 25, 2005). Four of the eight certifications identified were Sun certifications:

Java Technology

- Sun Certified Programmer for Java 2 Platform
- Sun Certified Developer for Java 2 Platform
- Sun Certified Enterprise Architect for Java 2 Platform

Solaris OS

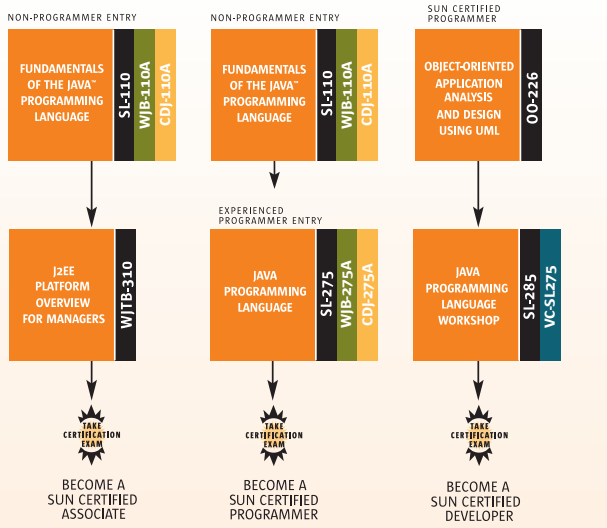
- Sun Certified Systems Administrator for Solaris OS

For the most current certification information, including program details and any new offerings, please visit

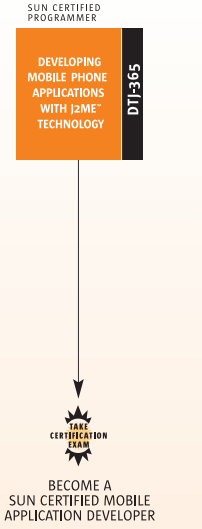
ON THE WEB
sun.com/training/certification

Java™ Technology Certification Paths

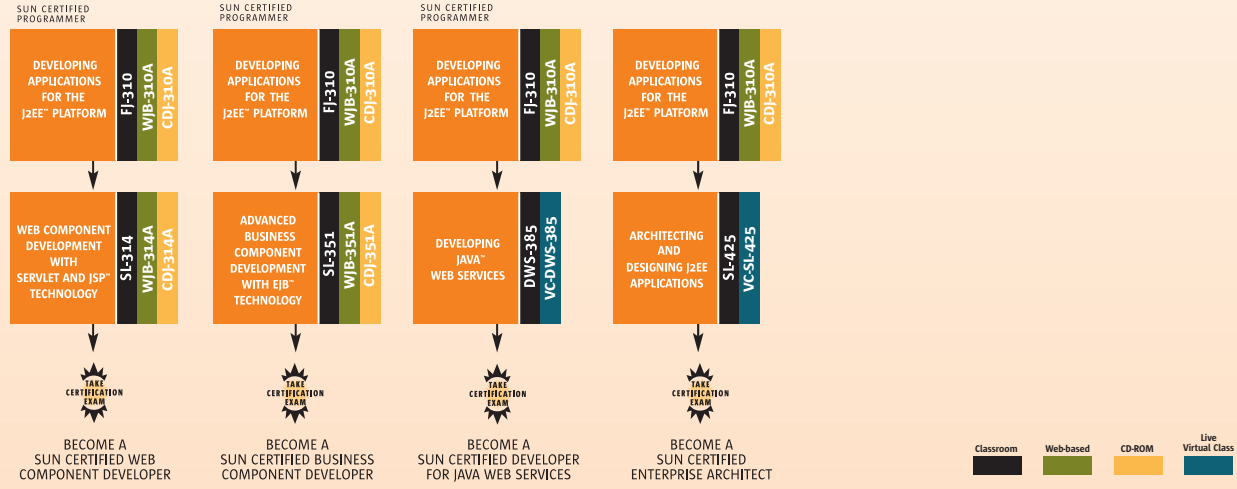
Java SE™



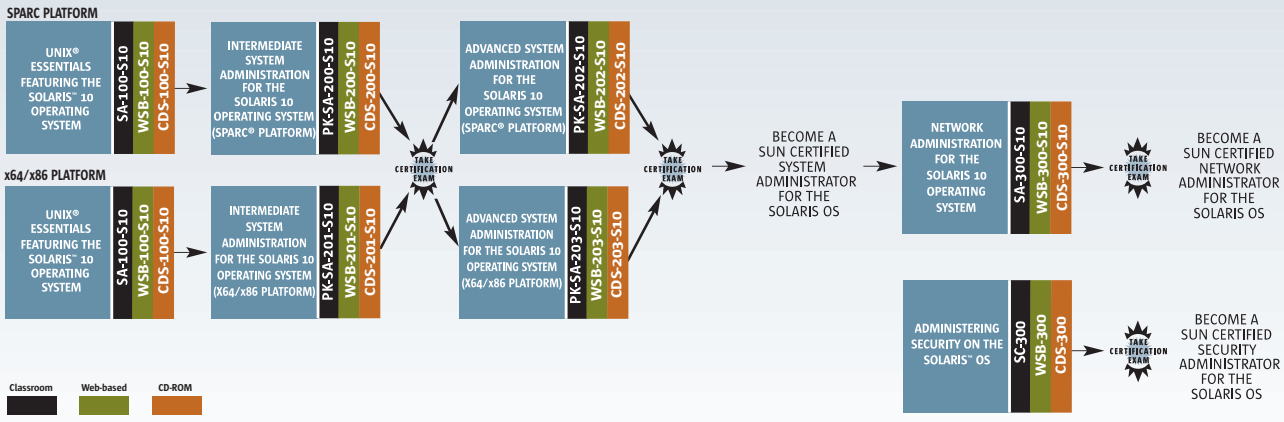
Java ME™



Java EE™



Solaris™ 10 OS Certification Paths



Java™ and Web Services Technologies

JAVA SE™ LEARNING PATH

New Java™ Programmer with Minimal Programming Experience
New Java Programmer Migrating from another Language
Experienced Java™ Programmer Upgrading to Java SE 5.0
Real Time Java Developer
Experienced Java Programmer

					COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
							CLASSROOM	OTHER
1					Fundamentals of the Java Programming Language	Java SE 5.0, Syntax, loops, conditional statements, arrays, OO concepts	SL-110	Web-based WJB-110A CD-ROM CDJ-110A
2					J2EE Platform Overview for Managers	Generics, autoboxing, enums, varargs, static imports, annotations, concurrency		Web-based WJTB-310
✔	✔				ePractice Exam for the Sun Certified Associate for Java SE	Practice Certification Exam		Web-based WGS-PREX-J019C
EXAM	**EXAM**				**Sun Certified Associate for the Java Platform, Standard Edition, Exam Version 1.0**	**Certification Exam**		**EXAM CX-310-019**
3	1		1		Java Programming Language	Java SE 5.0, Syntax, OO concepts, I/O, AWT, threads, sockets, networking	SL-275	Web-based WJB-275A CD-ROM CDJ-275A
4	2	1	2		J2SE Platform 5.0 for the Developer: Language Changes	Generics, autoboxing, enums, varargs, static imports, annotations, concurrency		Seminar SEM-DTJ-2762 Web-based WJO-2762
✔	✔		✔		ePractice Exam for the Sun Certified Programmer for J2SE 5.0	Practice Certification Exam		Web-based WGS-PREX-J055C
EXAM	**EXAM**		**EXAM**		**Sun Certified Programmer for J2SE 5.0**	**Certification Exam**		**EXAM CX-310-055**
			3		Developing Real Time Applications for the Java Platform	Developing Real Time Applications for the Java Platform	DTJ-4103	
		2			J2SE 5.0 Management Internals and Troubleshooting	Debugging, profiling, monitoring, performance tuning tools in J2SE 5.0; Migration, interoperability	DTJ-280	
				1	Object-Oriented Analysis and Design Using UML	OO analysis, UML, dynamic models, design patterns, partitioning	OO-226	
				2	Java Programming Language Workshop	J2SE 5.0, Multi-tier applications, JDBC, design patterns, Java RMI	SL-285	Live Virtual Class VC-SL-285
				EXAM	**Sun Certified Developer for the Java 2 Platform, Standard Edition 5.0**	**Certification Exam**		**STEP 1: ASSIGNMENT CX-310-252A** **STEP 2: ESSAY EXAM CX-310-027**

JAVA EE™ LEARNING PATH

Java EE Project Manager
Web Component Developer
Business Component Developer
Enterprise Java™ Architect

				COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
						CLASSROOM	OTHER
				Sun Certified Java Programmer or Equivalent	Prerequisite		
1				J2EE Platform Overview for Managers	OO project management, J2EE versus .Net; Web services		Web-based WJB-110A
	1	1	1	Developing Applications for the J2EE Platform	J2EE technology intro, JSP™, servlet, EJB™	FJ-310	
	2			Web Component Development with Servlet and JSP Technologies	JSP and Servlet development, multi-tier analysis, custom tag libraries, Apache Tomcat	SL-314	
	✔			ePractice Exam for the Sun Certified Web Component Developer for J2EE 1.4	Practice Certification Exam		Web-based WGS-PREX-J081C
	EXAM			**Sun Certified Web Component Developer for J2EE 1.4 Exam**	**Certification Exam**		**EXAM CX-310-081**
		2		Advanced Business Component Development with EJB Technology	EJB APIs, session and entity beans, security management, J2EE	SL-351	
		✔		ePractice Exam for the Sun Certified Business Component Developer for J2EE	Practice Certification Exam		Web-based WGS-PREX-J090C
		EXAM		**Sun Certified Business Component Developer for J2EE**	**Certification Exam**		**EXAM CX-310-090**
			2	Architecting and Designing J2EE Applications	Architecture and design, J2EE Blueprints and patterns, trade-off decision making	SL-425	
			EXAM	**Sun Certified Enterprise Architect for J2EE**	**Certification Exam**		**STEP 1: EXAM CX-310-051** **STEP 2: ASSIGNMENT CX-310-300A** **STEP 3: ESSAY EXAM CX-310-061**
	3	3	3	J2EE Patterns	J2EE components, messaging, EJB, class diagrams	SL-500	

WEB SERVICES LEARNING PATH

Web Services Developer

	COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
			CLASSROOM	OTHER
	Sun Certified Java Programmer or Equivalent	Prerequisite		
1	Developing Applications for the J2EE™ Platform	J2EE technology intro, JSP, Servlet, EJB	FJ-310	
2	Developing Java™ Web Services	Design, implement, deploy, and maintain web services and web service clients on the J2EE platform	DWS-385	
✔	ePractice Exam for the Sun Certified Developer for Java Web Services	Practice Certification Exam		Web-based WGS-PREX-J220C
EXAM	**Sun Certified Developer for Java Web Services**	**Certification Exam**		**EXAM CX-310-220**
3	Developing Secure Java Web Services	XWS-security, digital signatures and XML encryption, authentication, transport-layer security	DWS-4487	

JAVA ME™ LEARNING PATH

Architect / Analysis and Planning
Mobile Desktop Developer
Mobile Phone Developer
Mobile Application Project Managers

				COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
						CLASSROOM	OTHER
				Sun Certified Java Programmer or Equivalent	Prerequisite		
1		1	1	Introduction to Mobile Java Technologies	Wireless technologies, wireless solution planning, J2ME		Web-based WJB-450
	1			Mobile Desktop Development with Java Technologies	GUI Java development, J2ME overview, CDC development		Web-based WJB-455
2	2	2		Developing Mobile Phone Applications with J2ME Technology	Mobile applications development using Connected, Limited Device Configuration (CLDC) and the Mobile Interface Device Profile (MIDP)	DTJ-365	
		3		J2ME and Mobile Phone Development Topics	Overview of Development tools, and optimisation techniques for Java Technology code		Web-based WJB-460
		✔		ePractice Exam for the Sun Certified Mobile Application Developer for J2ME	Practice Certification Exam		Web-based WGS-PREX-J110C
		EXAM		**Sun Certified Mobile Application Developer for J2ME**			**EXAM CX-310-110**

DTJ-280 J2SE™ 5.0 Management, Internals, and Troubleshooting

INSTRUCTOR-LED **Length:** 2 Days **Price:** $1200 U.S. $1440 CAN

J2SE™ 5.0 Management, Internals and Troubleshooting course provides students with the knowledge and skills required to understand and support the 5.0 release of J2SE™. In this course, students will learn to install and configure the JDK, and use the debugging, profiling, monitoring, management, troubleshooting, and performance tuning tools available in the J2SE™ 5.0 JDK. Students will also learn about upgrade, interoperability, and migration issues with J2SE™ 5.0.

Some of the skills you can gain include:

- Install the Java™ 2 Platform, Standard Edition (J2SE™ platform) Development Kit (JDK™) 5.0 on the Solaris™ Operating System (Solaris OS), the Microsoft Windows platform, and the Linux platform
- Understand the Java Virtual Machine (JVM™) architecture and garbage collection mechanism
- Use J2SE™ 5.0 functionality to tune the JVM™ to meet specific application requirements

DTJ-365 Developing Mobile Phone Applications With J2ME™ Technology

SUPPORTS SUN CERTIFICATION

INSTRUCTOR-LED **Length:** 3 Days **Price:** $1500 U.S. $1800 CAN

The Developing Mobile Phone Applications With J2ME™ Technology course provides students with hands-on experience with developing mobile applications on the Java™ 2 Platform, Micro Edition (J2ME™ platform) using Connected, Limited Device Configuration (CLDC) and the Mobile Interface Device Profile (MIDP). The course provides information about MIDP 1.0 and MIDP 2.0 specifications, concepts, and capabilities.

Some of the skills you can gain include:

- Explain the J2ME platform architecture and the role of configurations and profiles
- Build basic MIDP applications (MIDlets) and incorporate enhanced multi-media into MIDP-based applications
- Create and implement event-driven user interfaces using the high-level and low-level application programming interface (API)

DWS-385 Developing Java™ Web Services

SUPPORTS SUN CERTIFICATION

INSTRUCTOR-LED **Length:** 5 Days **Price:** $2500 U.S. $3000 CAN

The Developing Java™ Web Services course provides business component and client developers with the information they need to design, implement, deploy, and maintain web services and web service clients using Java technology components and the Java 2 Platform, Enterprise Edition (J2EE™ platform) platform.

Some of the skills you can gain include:

- Implement a web service using Java technology components
- Implement a J2EE platform web service
- Implement a web service client that accesses the functionality provided by a J2EE platform web service

DWS-4487 Developing Secure Java™ Web Services

NEW

INSTRUCTOR-LED **Length:** 2 Days **Price:** $1200 U.S. $1440 CAN

The Developing Secure Java™ Web Services workshop provides business component and client developers with the information they need to design, implement, deploy, and maintain secure web services and web service clients using Java technology components and the Java 2 Platform, Enterprise Edition (J2EE™) platform. A J2EE application that implements an online auction house serves as the foundation for the lab exercises in this course. The students design and implement a variety of security solutions for the auction house based on the issues and considerations presented in the course materials. The focus of the course is on message-based security solutions, although other security mechanisms, such as transport-layer security and application-layer security are also addressed during the two day workshop. The workshop labs implement web services according to the WUS (WSDL, UDDI, SOAP) model.

Some of the skills you can gain include:

- Describe the issues and concerns relating to securing web service interactions
- Describe the tools and techniques available for securing a Java web service
- Design and implement a secure Java web service using the tools and technologies provided in the Java Web Services Development Pack version 1.6

FJ-310 Developing Applications for the J2EE™ Platform

SUPPORTS SUN CERTIFICATION

INSTRUCTOR-LED **Length:** 5 Days **Price:** $2500 U.S. $3000 CAN

The Developing Applications for the J2EE™ Platform course provides students with the knowledge to build and deploy enterprise applications that comply with Java™ 2 Platform, Enterprise Edition (J2EE™) platform standards. The enterprise components presented in this course include Enterprise JavaBeans™ (EJB™) technology, servlets, and JavaServer Pages™ (JSP™) technology, and the Java technology clients that use them. Students gain hands-on experience through labs that build an end-to-end, distributed business application. The labs explore session EJB components, which implement the Session Facade pattern and provide a front-end to entity EJB components using container-managed persistence.

Some of the skills you can gain include:

- Describe the application model for the J2EE platform and the context for the model
- Develop and test an EJB technology application
- Develop a web-based user interface to an EJB technology application

OO-226 Object-Oriented Analysis and Design with UML

INSTRUCTOR-LED **Length:** 5 Days **Price:** $2000 U.S. $2400 CAN

The Object-Oriented Analysis and Design with UML course effectively combines instruction on the software development processes, object-oriented technologies, and the Unified Modeling Language (UML). This instructor-led course uses lecture, group discussion, and facilitator-led activities (such as analysing stakeholder interviews) to present one practical, complete, object-oriented analysis and design (OOAD) roadmap from requirements gathering to system deployment.

Some of the skills you can gain include:

- Describe the object-oriented software development process, including object-oriented methodologies and workflows
- Gather system requirements through interviews with stakeholders
- Analyse system requirements to determine the use cases and domain model of the problem domain (the Requirements model)

SL-110 Fundamentals of the Java™ Programming Language

INSTRUCTOR-LED **Length:** 5 Days **Price:** $2000 U.S. $2400 CAN

The Fundamentals of the Java™ Programming Language course provides students who have little or no programming experience with the basics of programming using the Java programming language. This course teaches the significance of object-oriented programming, the keywords and constructs of the Java programming language, and the steps required to create simple Java technology programs. A new teaching tool developed by Sun Services (patent pending) is used throughout the course to help students understand the syntax and semantics of the language. students taking this course receive a solid basis in the Java programming language upon which to base continued work and training.

Some of the skills you can gain include:

- Demonstrate knowledge of Java technology, the Java programming language, and the product life cycle
- Use various Java programming language constructs to create several Java technology applications
- Use decision and looping constructs and methods to dictate program flow

SL-275 Java™ Programming Language

INSTRUCTOR-LED **Length:** 5 Days **Price:** $2000 U.S. $2400 CAN

The Java™ Programming Language course provides students with information about the syntax of the Java™ programming language; object-oriented programming with the Java programming language; creating graphical user interfaces (GUIs), exceptions, file input/output (I/O), and threads; and networking. Programmers familiar with object-oriented concepts can learn how to develop Java technology applications. The course uses the Java 2 Software Development Kit, Standard Edition (J2SE™ SDK), version 5.0.

Some of the skills you can gain include:

- Create Java technology applications that leverage the object-oriented features of the Java language, such as encapsulation, inheritance, and polymorphism
- Execute a Java technology application from the command line
- Use Java technology data types and expressions

SL-285 Java™ Programming Language Workshop

INSTRUCTOR-LED **Length:** 5 Days **Price:** $2500 U.S. $3000 CAN

The Java™ Programming Language Workshop course provides students with practical experience in designing a vertical solution for a distributed, multitier application. students use graphical user interface (GUI) design principles and network-communications capabilities to code a functional Java™ application that interacts with a networked database server. The significant amount of lab time illustrates the workshop nature of this course.

Some of the skills you can gain include:

- Implement and test a "from-the-ground-up" program that could be used in a commercial intranet application
- Develop classes to connect programs to SQL database systems using the core aspects of the Java Database Connectivity™ (JDBC™)
- Develop classes to connect programs to SQL database systems using the core aspects of the Java Database Connectivity™(JDBC™) application programming interface (API)

SL-314 Web Component Development with Servlet and JSP™ Technologies

INSTRUCTOR-LED **Length:** 5 Days **Price:** $2500 U.S. $3000 CAN

JavaServer Pages™ (JSP™) and servlets are the key web tier technologies defined in the Java™ 2 Platform, Enterprise Edition (J2EE™ platform). The Web Component Development with Servlet and JSP™ Technologies course provides experienced Java developers a way to obtain the knowledge and skills necessary to quickly build web applications from JSP and servlet technologies using the Tomcat web container and the Struts framework. Students are exposed to the current methods for analysing, designing, developing, and deploying web applications with Java technologies. Real-world lab exercises provide students with experience in constructing and deploying the small to medium scale web applications found in intranet and low-volume commercial sites.

This course also is an ideal method of preparing for the revised Sun Certified Web Component Developer (SCWCD) for J2EE 1.4 certification examination. However, an SCWCD candidate should also spend six months building real-world web applications using the JSP and servlet technologies before taking the exam.

Some of the skills you can gain include:

- Write Java servlets
- Create robust web applications using Struts, session management, filters, and database integration
- Write JSP pages
- Create easy to maintain JSP pages using the Expression Language, JSP Standard Tag Library (JSTL), and the Struts Tiles framework

SL-351 Advanced Business Component Development with Enterprise JavaBeans™ Technology

INSTRUCTOR-LED **Length:** 5 Days **Price:** $2500 U.S. $3000 CAN

The Advanced Business Component Development with Enterprise JavaBeans™ Technology course provides students with the knowledge on how to develop robust back-end functionality using Enterprise JavaBeans (EJB™) technology. This course uses an online auction scenario to demonstrate how to leverage container-managed services with entity, session, and message beans to resolve the real-world problems presented by an electronic commerce application.

Some of the skills you can gain include:

- Implement business-tier functionality using EJB technology
- Describe best practices and other advanced issues in business component development with EJB technology
- Assemble and deploy EJB technology business-tier components on an application server
- Integrate an EJB technology based application using Java Messaging Service API, the Java Connector Architecture and web services

SL-425 Architecting and Designing J2EE™ Applications

Instructor-Led **Length: 4 Days** **Price:** $2400 U.S. $2880 CAN

The Architecting and Designing J2EE™ Applications course provides students with knowledge needed to use the Java™ 2 Platform, Enterprise Edition (J2EE™ platform) to create robust enterprise applications that allow for rapid change and growth. Participants gain an understanding of the strategies needed to create application blueprints that work well when implementing J2EE technologies. These strategies include effective decision making through the use of systemic qualities (such as scalability and flexibility), J2EE technology blueprints and design patterns, and iterative and incremental development.

Some of the skills you can gain include:

- Make good use of J2EE component technologies to solve typical problems in system architecture
- Derive software systems using techniques outlined in the J2EE Blueprints and solutions defined in the J2EE Patterns Catalog
- Address quality-of-service requirements in a cost-effective manner using engineering trade-off techniques

SL-500 J2EE™ Patterns

INSTRUCTOR-LED **Length:** 4 Days **Price:** $2400 U.S. $2880 CAN

The J2EE™ Patterns course provides students with a thorough description of software design patterns that can be used with the Java™ 2 Platform, Enterprise Edition (J2EE platform) technology to effectively solve complex business problems. Studying design patterns, such as the patterns presented in this course, assists developers in learning tried and proven techniques for solving specific types of common design problems. The design patterns described in this course help developers design enterprise applications that are more flexible, maintainable, reliable, and efficient.

Some of the skills you can gain include:

- Select an appropriate Gang of Four or J2EE pattern to solve a specific problem
- Apply a Gang of Four or J2EE pattern to an architecture and implementation
- Design and implement more effective J2EE applications

Sun Java™ System

SUN JAVA ENTERPRISE SYSTEM COURSE LIST

Associated Sun Product	COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
			CLASSROOM	OTHER
	Java Enterprise System Course List	**Prerequisite: Basic Solaris System Administration and Networking courses**		
Java Enterprise System	Sun Java™ System: Core Concepts	Core services, technologies in Sun Java System, install and configure major servers	ECR-2281	
Java Enterprise System	Sun Java Enterprise System: Installation and Getting Started	Sun Java Enterprise System common architecture, system features, installer architecture and troubleshooting shared components	ECR-2389	
	Identity Management Course List			
Access Manager	Sun Java System Access Manager 6.3: Configuration and Customization	Overview, deployment, installation, services, policies, customization, integration, Liberty features	DIR-3317	Web-based WMO-DIR-3317
Access Manager	Sun Java System Access Manager 7: Configuration and Customization	Overview, deployment, installation, services, policies, customization, integration, Liberty features	AM-3480	Web-based WMO-AM-3480
Federation Manager	Federation Manager: Getting Started	Overview, policies, features		Web-based WMT-AM-3481
Identity Suite	Sun Java System Identity Suite: Integrated Solutions	Overview of Sun Java System Identity Suite, Architectural concepts, Strategic integration considerations	SEM-IDM-1482	Web-based WMT-IDM-1482
Identity Manager	Sun Java System Identity Manager 5.0: Administration and Implementation	User/Password management, audits/reports, data loading, studentd admin, workflow processes, rules/forms, server properties, debug pages, configuration objects	IDM-2525	
Identity Manager	Sun Java System Identity Manager: Deployment Fundamentals	Configuration, Deployment, Administration	IDM-345	Live Virtual Class VC-IDM-3451 Live Virtual Class VC-IDM-3452
Directory Server	Sun Java™ System Directory Server: LDAP Concepts	Fundamentals of Lightweight Directory Access Protocol (LDAP), Directory services and components, LDAP SDK Overview		Web-based DIR-1344
Directory Server	Sun Java System Directory Server 5.x: Analysis and Planning	Directory schema, tree hierarchy, access control rules, evaluate design	DIR-2217	Web-based WMT-DIR-2217
Directory Server	Sun Java™ System Directory Server 5.x: Maintenance and Operations	Maintenance, operations, troubleshooting, server tuning and monitoring, create and manage multiple databases	DIR-2337	
Directory Server	Sun Java™ System Directory Server 5.x: Advanced Design and Deployment	Install, configure, design, and deploy LDAP directory services and architecture	DIR-3300	Web-based WMT-DIR-3300
	Web and Application Services Course List			
Application Server	Sun Java System Application Server 7: Development	Install, assemble, deploy, secure, troubleshoot applications, request flow, database connectivity	IAS-4318	
Application Server	Sun Java System Application Server 7: Administration	Installation, deployment, administration, monitoring, security	IAS-3319	
Application Server	Sun Java System Application Server SE/EE 7 2004Q2: Deployment and Administration	Install, deploy, troubleshoot, high availability, failover, clustering, performance tuning	IAS-4348	
Application Server	Sun Java System Application Server 8: Configuration and Deployment	Install, deploy, administer, logging, security, migration, tuning, troubleshoot	IAS-4404	
Web Server	Sun Java System Web Server 6.1: Installation and Configuration	Product features, functions and architecture, installation, configuration	ECR-1306	
Web Server	Sun Java System Web Server 6.1: Administration and Maintenance	Installation, administration, configuration, SSL, monitor statistics	ECR-2307	

Continued on next page

SUN JAVA ENTERPRISE SYSTEM COURSE LIST

Associated Sun Product	COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
			CLASSROOM	OTHER
	Collaboration and Communication Services Course List			
Message Server, Calendar Server	Sun Java System Communication Services: Administration	Messaging, Calendar, and Instant Messaging Server architecture, installation, configuration, administration	MSG-2379	
Calendar Server	Sun Java System Connector for Microsoft Outlook	Installation, configuration, deployment, basic troubleshooting		Web-based WMT-CAL-1396
Instant Messenger	Sun Java System Instant Messaging: Architecture and Administration	Architecture overview, installation, administration, troubleshooting		Web-based WMT-CAL-1375
Message Queue	Sun Java System Message Queue 3.5: Administration and Deployment	Architecture overview, installation, administration, troubleshooting		Web-based WMO-SMQ-2395
Message Queue	Sun Java System Message Queue 3 2005Q1 – What's New	Install changes, new features and enhancements, relationship to SJS Application Server and the Java Enterprise System		Web-based WMT-SMQ-2442
	Portal Services Course List			
Portal Server	Sun Java System Portal Server: Installation and Configuration	Installation, configuration, architecture, user management, secure remote access	PTL-2309	Web-based WMT-PTL-2309
Portal Server	Sun Java System Portal Server: Customization	Providers and services, UI customization, display profile, APIs, SSO implementation	PTL-4310	Web-based WMT-PTL-4310

DIR-2217 Sun Java™ System Directory Server 5.x: Analysis and Planning

INSTRUCTOR-LED **Length:** 4 Days **Price:** $2400 U.S. $3312 CAN

This course provides students with the technical knowledge and skills necessary to design a directory service solution deploying Sun Java™ System Directory Server 5.x. This course uses a design methodology, as outlined in the Sun Java™ System Directory Deployment Planning Guide, to assist students in designing and documenting a directory service deploying multiple Sun Java™ System Directory Servers.

Some of the skills you can gain include:

- Describe the Directory Services Analysis and Planning (DSAP) process
- Document directory data requirements
- Develop a directory schema

DIR-2337 Sun Java™ System Directory Server 5.x: Maintenance and Operations

INSTRUCTOR-LED **Length:** 3 Days **Price:** $1800 U.S. $2484 CAN

The Sun Java™ System Directory Server 5.x: Maintenance and Operations, formerly Sun™ Open Net Environment (Sun ONE) Directory Server course provides students with the opportunity to learn to perform routine maintenance and troubleshooting techniques, monitor and tune servers, create and manage multiple databases, and perform other tasks encountered in day-to-day operations of Sun Java System Directory Server 5.2.

Some of the skills you can gain include:

- Describe the configuration directory, key files, and common utilities related to Directory Server
- Search and modify directory content
- Describe access, error, and audit log contents and diagnose ldapmodify LDAP Data Interchange Format (LDIF) import errors

DIR-3300 Sun Java™ System Directory Server 5.x: Advanced Design and Deployment

INSTRUCTOR-LED **Length:** 4 Days **Price:** $2800 U.S. $3360 CAN

The Sun Java™ System Directory Server 5.x: Advanced Design and Deployment (formerly Sun ONE Directory Server) course provides students with the knowledge and the skills to install, configure, design, and deploy high performance, highly scalable, highly available, and manageable Lightweight Directory Access Protocol (LDAP) directory services architectures using Sun Java System Directory Server 5.x.

Some of the skills you can gain include:

- Design a high-availability directory architecture through redundancy
- Automate the deployment of multiple Sun Java System Directory Servers and Sun Java System Directory Proxy Servers (Directory Proxy Servers) in a directory architecture
- Design and implement a backup and recovery strategy for Sun Java System Directory Server (Directory Server)

DIR-3317 Sun Java™ System Access Manager: Configuration and Customization

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3500 U.S. $4200 CAN

The Sun Java™ System Access Manager: Configuration and Customization course provides students with a description of the role of the Sun Java™ System Access Manager (Access Manager) in an identity management solution. Students learn to configure, manage, administer, and customize Access Manager services, authentication, authorisation, user interface, and federated identity. This comprehensive course covers a number of identity management concepts and Access Manager functions that range in complexity from introductory to advanced. This course does not cover basic installation, Java™ technology programming, Extensible Markup Language (XML), Lightweight Directory Access Protocol (LDAP), and Sun Java System Directory Server (Directory Server) concepts. These topics are covered in other Sun courses. The hands-on labs offered in this course might involve accessing equipment that resides at a location other than where the training is delivered.

Some of the skills you can gain include:

- Define the role of the Access Manager and list the features and functions of the Access Manager that address key business challenges
- Configure Access Manager instances, identity management, services, and logging and debugging
- Configure and customize authentication using the Access Manager authentication framework

ECR-2281 Sun Java™ Enterprise System 2005Q1: Core Concepts

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3000 U.S. $3960 CAN

The Sun Java™ Enterprise System 2005Q1: Core Concepts course provides a technical introduction to the Sun Java Enterprise System. The course describes the technologies and standards related to each product area. Technologies covered include directory, web, messaging, calendaring, instant messaging, portal, identity, and high availability. The course describes the basic architecture and key functions of the server products that are part of the Sun Java Enterprise System. Course lab work includes installation of most of the server products and simple administration tasks.

Some of the skills you can gain include:

- Describe the basic architecture and key functions of the Sun Java Enterprise System (2005 Quarter 1)
- Describe the technologies and standards related to each Sun Java Enterprise System component
- Install and perform basic administration tasks for the following component products:
  - Sun Java System Directory Server
  - Sun Java System Application Server
  - Sun Java System Portal Server
  - Sun Java System Calendar Server|
  - Sun Java System Web Server
  - Sun Java System Access Manager
  - Sun Java System Messaging Server
  - Sun Java System Instant Messaging

ECR-2307 Sun Java™ System Web Server 6.1: Administration and Maintenance

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3000 U.S. $3960 CAN

The Sun Java™ System Web Server 6.1: Administration and Maintenance course provides students with the skills necessary to administer and maintain the Sun Java™ System Web Server 6.1 (formerly Sun Open Net Environment [Sun ONE] Web Server 6.1.

Some of the skills you can gain include:

- Install the Java™ System Web Server 6.1 Software (Web Server) and perform basic administration and configuration tasks
- Configure and deploy applications on the Web Server Software
- Administer advanced HTTP features on the Web Server

ECR-2389 Sun Java™ Enterprise System 2005Q1: Installation and Getting Started

INSTRUCTOR-LED **Length:** 2 Days **Price:** $1200 U.S. $1656 CAN

The Sun Java™ Enterprise System 2005Q1: Installation and Getting Started course provides students with an overview of the common architecture and system-level features of the Sun Java Enterprise System (Java Enterprise System), describes the installer architecture, the pre-installation and post-installation processes, and explains how to troubleshoot Java Enterprise System shared components during the installation.

Some of the skills you can gain include:

- Describe the Sun Java Enterprise System 2005Q1
- Install the Java Enterprise System
- Perform post-installation configuration tasks

IDM-2525 Sun Java™ System Identity Manager 5.0: Administration and Implementation

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3000 U.S. $3960 CAN

The Sun Java™ System Identity Manager 5.0: Administration and Implementation course provides students with a full introduction to all aspects of the Sun Java System Identity Manager (Identity Manager) tool. The course provides practical exercises to demonstrate how to create and modify administrator and user accounts, edit and customize forms and views, configure resources, create auditing reports, and utilize debugging tools.

Some of the skills you can gain include:

- Install Sun Java System Identity Manager 5.0
- Create, modify, and delete Identity Manager resources
- Manage Identity Manager user accounts

IDM-345 Sun Java™ System Identity Manager: Deployment Fundamentals

NEW

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3500 U.S. $4200 CAN

The Sun Java™ System Identity Manager: Deployment Fundamentals course covers product concepts from a deployment perspective focusing on solving customers business needs by using specific product features. The course is focused on using "out of the box" features that do not require in depth technical knowledge and experience. Students will be exposed to configuring roles, student administration, resources, reconciliation, and users objects in ways that are useful for solving customer requirements. Students will also be introduced to customizing Identity Manager to solve more detailed customer needs through XPRESS, forms, rules and provisioning workflows. This course is a prerequisite to the Advanced Deployment Concepts for individuals that require additional experience customizing Identity Manager.

Some of the skills you can gain include:

- Configure Identity Manager to solve common customer provisioning requirements
- Customize standard forms, workflows and rules to solve more detailed requirements
- Write XPRESS code to transform and validate data

IAS-4404 Sun Java™ System Application Server Platform Edition 8: Configuration and Deployment

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3500 U.S. $4200 CAN

The Sun Java™ System Application Server Platform Edition 8: Configuration and Deployment course provides students with the skills necessary to install, maintain, tune, and troubleshoot the Sun Java System Application Server Platform Edition 8 (Application Server) (formerly Sun™ Open Net Environment [Sun ONE] Application Server 7) in a development environment. Students are introduced to the tools that are used to administer and deploy applications to the Application Server.

Some of the skills you can gain include:

- Install the Application Server
- Describe the Application Server architecture
- Use the asadmin command-line interface (CLI) utility and the administration console to perform administration tasks

MSG-2379 Sun Java™ System Communication Services 2004Q2: Administration

INSTRUCTOR-LED **Length:** 3 Days **Price:** $1800 U.S. $2484 CAN

The Sun Java™ System Communication Services 2004Q2: Administration course provides an overview of the Sun Java System Communications Express and Address Book Server, and demonstrates how to install and configure the software. The course also covers the upgrade process from Sun™ ONE Messaging Server 5.2 to Sun Java System Messaging Server 6.x, as well as new features in the Sun Java System Communication Services 2004Q2 release.

Some of the skills you can gain include:

- Describe the new features in the Sun Java System Communication Services 2004Q2
- Install the Sun Java System Communication Services 2004Q2
- Describe the procedures for upgrading from Sun™ ONE Messaging Server 5.2 to Sun Java System Messaging Server 6.2

PTL-2309 Sun Java™ System Portal Server: Installation and Configuration

INSTRUCTOR-LED **Length:** 3 Days **Price:** $1800 U.S. $2160 CAN

The Sun Java™ System Portal Server: Installation and Configuration course provides students with a focus on how the Sun Java™ System Portal Server is installed and configured. Students learn the basic architecture and components of the Sun Java™ System Portal Server, install the Sun Java System Portal Server (Portal Server) in a classroom environment, install new portals within the Portal Server, customize the Portal Server desktop, manage users, configure services within the Portal Server, install and configure secure remote access (SRA), and install and configure the Portal Server on multiple machines.

Some of the skills you can gain include:

- Describe the basic architecture and components of the Sun Java™ System Portal Server 6 2005Q1
- Install the Portal Server
- Install and customize a new portal desktop

PTL-4310 Sun Java™ System Portal Server: Customization

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3500 U.S. $4200 CAN

The Sun Java System Portal Server: Customization course provides students with the knowledge and skills to customize the Sun Java System Portal Server 2005Q1 (6.3.1) (Portal Server) content and presentation using a variety of tools and techniques. Students learn to modify the look and feel of their portal to create custom branding, modify existing content providers, create custom content providers, integrate external applications and create JSR-168-compliant portal portlets. By completing the lab exercises in each course module, students create a customized portal.

Some of the skills you can gain include:

- Install the Portal Server
- Aggregate information based on an end user's role(s) in the enterprise
- Customize the layout and interface the portal

Solaris™ OS System Administration and Development

SOLARIS™ SYSTEM ADMINISTRATION LEARNING PATH

System Administrator (SPARC® Platform)
System Administrator (x64/x86 Platform)
Sys Admin Migrating from other UNIX® Platform
Senior System Administrator

				COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
						CLASSROOM	OTHER
1	1			UNIX® Essentials featuring the Solaris 10 Operating Environment	CDE, vi editor, Solaris file and directory management	SA-100-S10	Web-based WSB-100-S10 CD-ROM CDS-100-S10
2				Intermediate System Administration for the Solaris 10 Operating System (SPARC® Platform)	Manage file systems, install software, perform system boot procedures, perform user and security administration, manage network printers and system processes, and perform system backups and restores	PK-SA-200-S10	Web-based WSB-200-S10 CD-ROM CDS-200-S10
	2			Intermediate System Administration for the Solaris 10 Operating System (x64/x86 Platform)	Manage file systems, install software, perform system boot procedures, perform user and security administration, manage network printer and system processes, and perform system backups and restores	PK-SA-201-S10	Web-based WSB-201-S10 CD-ROM CDS-201-S10
✔	✔			ePractice Exam for the Sun Certified System Administrator for the Solaris 10 OS, Part I	Practice Certification Exam		Web-based WGS-PREX-S200C
EXAM	**EXAM**			**Sun Certified System Administrator for Solaris 10 OS, Exam I**	**The exam is common for both SPARC and x64/x86 platform**		**EXAM CX-310-200**
3				Advanced System Administration for the Solaris 10 OS (SPARC Platform)	Network basics, manage virtual file systems and core dumps, manage storage volumes, control access and configure system messaging, set up naming services, and perform advanced installation procedures	PK-SA-202-S10	Web-based WSB-202-S10 CD-ROM CDS-202-S10
	3			Advanced System Administration for the Solaris 10 OS (x64/x86 Platform)	Network basics, manage virtual file systems and core dumps, manage storage volumes, control access and configure system messaging, set up naming services, and perform advanced installation procedures	PK-SA-203-S10	Web-based WSB-203-S10 CD-ROM CDS-203-S10
✔	✔			ePractice Exam for the Sun Certified System Administrator for the Solaris 10 OS, Part II	Practice Certification Exam		Web-based WGS-PREX-S202C
EXAM	**EXAM**			**Sun Certified System Administrator for Solaris 10 OS, Exam II**	**The exam is common for both SPARC and x86 platform**		**EXAM CX-310-202**
		1		Solaris™ Operating System Administration for Experienced HP-UX and Tru64 Administrators	Provides experienced HP-UX and Tru64 administrators with information about core Solaris concepts, and focuses on practical experience implementing Solaris features through lab exercises	STS-277	
		1		Solaris System Administration for Experienced UNIX® Administrators	Provides a platform for experienced UNIX administrators to migrate from one of many UNIX platforms to the Solaris Operating System	STS-276-S10	
			1	Solaris 10 new Features for Experienced System Administrators	New functionality found in the Solaris 10 OS including containers, system management, Dtrace, network, security and installation features.	SA-225-S10	
			1	Shell Programming for System Administrators	Bourne and Korn shell scripts: grep, sed, nawk, flow control constructs	SA-245	
			1	Solaris System Performance Management	Tuning, network usage, troubleshooting, I/O, scheduling	SA-400	
			1	Sun Systems Fault Analysis Workshop	Fault analysis, patching, error message interpretation	ST-350	
			1	Administering Security on the Solaris Operating System	Implement, administer, maintain secure Solaris OS against user and network attacks	SC-300	

NETWORK ADMINISTRATION LEARNING PATH

Network Administrator

	COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
			CLASSROOM	OTHER
1	Using LDAP as a Naming Service	Designing and configuring naming services using Native LDAP in a Solaris environment	IN-351	
2	Network Administration for the Solaris 10 Operating System	Internet Protocol (IP) routing, Domain Name System (DNS), Dynamic Host Configuration Protocol (DHCP) and IP version 6 (Ipv6)	SA-300-S10	Web-based WSB-300-S10 CD-ROM CDS-3100-S10
✔	Practice Exam for the Sun Certified Network Administrator for the Solaris 10 OS	Practice Certification Exam		Web-based PREX-5302C
EXAM	**Sun Certified Network Administrator Certification Exam**		**EXAM**	**CX-310-302**

1 2 3 *Numbers indicate order in which courses should be taken.*
Courses identified by the same number can be taken in any order and it is not required that you take all courses.

SECURITY ADMINISTRATION LEARNING PATH

Security Specialist

	COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
			CLASSROOM	OTHER
1	Administering Security on the Solaris OS	Implement, administer, maintain secure Solaris OS against network attacks	SC-300	
EXAM	**Sun Certified Security Administrator for the Solaris OS Exam**			**EXAM CX-310-301**
2	Enterprise Intrusion Analysis	Discover and analyze enterprise intrusions in a UNIX®	SC-375	
3	Solaris Operating System Network Intrusion Detection	Install detection systems and firewall, identify threats and respond	SC-345	
4	Computer Security Forensics and System Recovery	Perform hands-on response to security incidents, using forensic techniques and tools to get back online while preserving evidence	SC-410	

SOLARIS™ OS DEVELOPER COURSE LIST

COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
		CLASSROOM	OTHER
Shell Programming for System Administrators	Bourne and Korn shell scripts: grep, sed, nawk, flow control constructs	SA-245	
Perl Programming	Perl programming language syntax, variables, commands, scripts, subroutines, and modules	DTP-250	
Real-Time Programming for the Solaris Operating System	Concepts, terminology and techniques in real-time programming for Solaris		Web-based WP-4250
UNIX® System Interface Programming	APIs, POSIX, library calls, multi-threaded applications, I/O	SI-220	
Solaris 9 Operating Systems Internals	Kernel subsystems covered include the multithreaded architecture, virtual memory, time-share and real-time scheduling, process lifetime cycles, signal management, the UNIX file system, and swapfs	SP-365	

SA-100-S10 UNIX® Essentials Featuring the Solaris™ 10 Operating System

SUPPORTS SUN CERTIFICATION

INSTRUCTOR-LED **Length:** 4 Days **Price:** $2000 U.S. $2400 CAN

The UNIX® Essentials Featuring the Solaris™ 10 Operating System course provides students with the necessary knowledge and skills to use components of the desktop system, manage files and directories, create and modify files, control the user work environment, archive files, and use remote commands. In addition, this course explains fundamental command-line features of the Solaris Operating System (Solaris OS), including file system navigation, the vi text editor, file permissions, access control lists (ACLs), command shells, file compression, basic network use, and reading shell scripts.

Some of the skills you can gain include:
- Use components of the desktop system
- Use command-line features and help resources
- Manage and view files and directories and change the directory contents

PK-SA-200-S10 Intermediate System Administration for the Solaris™ 10 OS (SPARC® platform)

SUPPORTS SUN CERTIFICATION

INSTRUCTOR-LED **Length:** 5 Days **Price:** $2500 U.S. $3000 CAN

This product package is comprised of a five-day instructor-led class, SA-200-S10 and a 2 hour self-paced web course, WS-240-S10. This package provides students with the necessary knowledge and skills to perform essential system administration tasks in the Solaris 10 OS on both Sparc and x64/x86 platforms, including installing software, managing file systems, performing system boot procedures, performing user and security administration, managing network printers and system processes, and performing system backups and restores. This course is taken in preparation for Part I of the Sun System Administration certification exam.

Some of the skills you can gain include:
- Manage file systems
- Install software
- Perform system boot procedures

PK-SA-201-S10 Intermediate System Administration for the Solaris™ 10 OS (x64/x86 platform)

SUPPORTS SUN CERTIFICATION

INSTRUCTOR-LED **Length:** 5 Days **Price:** $2500 U.S. $3000 CAN

This product package is comprised of a five-day instructor-led class, SA-201-S10 and a 2 hour self-paced web course, WS-241-S10. This package provides students with the necessary knowledge and skills to perform essential system administration tasks in the Solaris 10 OS on both x64/x86 and SPARC® platforms, including installing software, managing file systems, performing system boot procedures, performing user and security administration, managing network printers and system processes, and performing system backups and restores. This course is taken in preparation for Part I of the Sun System Administration certification exam.

Some of the skills you can gain include:
- Manage file systems
- Install software
- Perform system boot procedures
- Perform user and security administration

SA-300-S10 Network Administration for the Solaris™ 10 Operating System

SUPPORTS SUN CERTIFICATION

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3000 U.S. $3600 CAN

The Network Administration for the Solaris™ 10 Operating System course provides students with the knowledge and skills necessary to perform network administration tasks, such as configuration and troubleshooting of a local area network (LAN). This course also provides hands-on experience with topics, such as Internet Protocol (IP) routing, Domain Name System (DNS), Dynamic Host Configuration Protocol (DHCP), IP version 6 (IPv6) and the Solaris IP Filter firewall.

Some of the skills you can gain include:
- Configure the Network Interface layer
- Configure the network (Internet and Transport layers)
- Configure and manage network applications

Solaris OS System Administration and Development

ON THE WEB
sun.com/training/solaris

PK-SA-202-S10 Advanced System Administration for the Solaris™ 10 OS (SPARC® platform)

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3000 U.S. $3600 CAN

This product package is comprised of a five-day instructor-led class, SA-202-S10 and a 2 hour self-paced web course, WS-242-S10. This package provides students with the necessary knowledge and skills to perform advanced tasks in the Solaris 10 OS on both Sparc and x64/x86 platforms, including network basics, managing virtual file systems and core dumps, managing storage volumes, controlling access and configure system messaging, setting up naming services, and performing installation procedures. This course is taken in preparation for Part II of the Sun System Administration certification exam.

Some of the skills you can gain include:
- Describe network basics
- Describe remote administration with the Solaris™ Management Console software
- Manage virtual file systems and core dumps

PK-SA-203-S10 Advanced System Administration for the Solaris™ 10 OS (x64/x86 platform)

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3000 U.S. $3600 CAN

This product package is comprised of a five-day instructor-led class, SA-203-S10 and a 2 hour self-paced web course, WS-243-S10. This package provides students with the necessary knowledge and skills to perform advanced tasks in the Solaris 10 OS on both x64/x86 and SPARC® platforms, including network basics, managing virtual file systems and core dumps, managing storage volumes, controlling access and configure system messaging, setting up naming services, and performing installation procedures. This course is taken in preparation for Part II of the Sun System Administration certification exam.

Some of the skills you can gain include:
- Describe network basics
- Describe remote administration with the Solaris™ Management Console software
- Manage virtual file systems and core dumps

SA-225-S10 Solaris™ 10 New Features for Experienced Solaris System Administrators

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3000 U.S. $3600 CAN

The Solaris™ 10 New Features for Experienced Solaris System Administrators course provides students with a look at some of the new functionality found in Solaris 10 regarding System Management, Dtrace , Network and Installation features.

Some of the skills you can gain include:
- Identify the new features of Solaris Zones
- Identify changes to Authentication Features
- Identify changes to Filesystem Features

SA-245 Shell Programming for System Administrators

INSTRUCTOR-LED **Length:** 5 Days **Price:** $2500 U.S. $3000 CAN

The Shell Programming for System Administrators course provides students with the skills to read, write, and debug shell scripts. The course begins by describing simple scripts to automate frequently executed commands and continues by adding conditional logic, user interaction, loops, menus, traps, and functions to enhance the productivity and effectiveness of the user. This course is intended for system administrators who have mastered the basic Solaris™ Operating System (OS) and who would like to read and understand the various boot scripts, and write their own scripts to automate their day-to-day tasks. This course explores, in detail, the Bourne and Korn shell scripting languages.

Some of the skills you can gain include:
- Develop and debug scripts
- Use local and environmental variables and shell meta-characters in scripts
- Customize system-wide shell initialisation files

SA-327-S10 Dynamic Performance Tuning and Troubleshooting with DTrace

INSTRUCTOR-LED **Length:** 3 Days **Price:** $2100 U.S. $2520 CAN

The Dynamic Performance Tuning and Troubleshooting with DTrace™ course provides students with the ability to use DTrace to diagnose application and system problems.

Some of the skills you can gain include:
- Use DTrace to find the source of intermittent problems
- Use DTrace to look at the cause of performance problems
- Use DTrace to help debug applications
- Find System problems with DTrace
- Troubleshoot DTrace script problems

SA-400 Solaris™ System Performance Management

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3500 U.S. $3600 CAN

The Solaris™ System Performance Management course provides an introduction to performance tuning principles and monitoring tools for the Solaris Operating System (Solaris OS). This course covers the principles of performance tuning and usage of performance measurement tools such as sar, vmstat, iostat, netstat, and nfsstat. Central Processing Unit (CPU), memory, and Input/Output (I/O) bottlenecks are described and solutions are recommended. Determining virtual file system performance is also covered. The Solaris System Performance Management course includes lab exercises that allow students to analyse Solaris OS-related performance issues.

Some of the skills you can gain include:
- Describe performance management fundamentals and the Solaris OS monitoring tools
- View and set tuning parameters
- Monitor processes and threads

SC-300 Administering Security on the Solaris™ Operating System

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3000 U.S. $3600 CAN

The Administering Security on the Solaris™ Operating System course provides students with the skills to implement, administer and maintain a secure Solaris Operating System (Solaris OS).

Some of the skills you can gain include:
- Describe security terminology and common forms of security attack
- Use Solaris OS logging and auditing to identify actual and potential security attacks
- Secure a Solaris OS host against user and network attacks

ST-350 Sun™ Systems Fault Analysis Workshop

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3000 U.S. $3600 CAN

The Sun™ Systems Fault Analysis Workshop provides students with information about how to troubleshoot intermediate and some advanced Sun™ system faults. The workshop presents and guides students through a set of system faults using the Solaris™ Operating System on networked Sun SPARCstation™ technology systems.

Some of the skills you can gain include:
- Differentiate and repair selected hardware, system administration, and software problems
- Use an organized total system approach for fault analysis
- Isolate and repair selected network, port, and printer faults

Solaris OS System Administration and Development

STS-276-S10 Solaris™ System Administration for Experienced UNIX® Administrators

NEW

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3000 U.S. $3600 CAN

The Solaris™ System Administration for Experienced UNIX® Administrators course provides a platform for experienced UNIX administrators to migrate from one of many UNIX platforms to the Solaris Operating System (Solaris OS). This course teaches intermediate to advanced system administration skills using the Solaris OS. The course includes lab exercises that allow students to install and maintain the Solaris OS, perform storage management, manage users, and perform network management.

Some of the skills you can gain include:

- Perform an interactive installation
- Perform patch and package administration
- Boot the Solaris OS

DTP-250 Perl Programming

INSTRUCTOR-LED **Length:** 5 Days **Price:** $2000 U.S. $2400 CAN

This comprehensive course explains the Perl programming language, from basic through advanced syntax. The course is aimed at a wide range of people — programmers, system administrators, Web authors, and operators. It explains how to use the Perl programming language to write quick yet powerful scripts to take advantage of Perl's system administration capabilities and issue Perl commands.

Some of the skills you can gain include:

- Write scripts that create and change scalar variables
- Use control structures to branch or loop
- Create and change array variables

STS-277 Solaris™ Operating System Administration for Experienced HP-UX and Tru64 Administrators

NEW

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3000 U.S. $3600 CAN

The Solaris™ Operating System Administration for Experienced HP-UX and Tru64 Administrators course provides students with the necessary knowledge and skills to perform core system administration tasks in the the Solaris 10 Operating System (Solaris 10 OS). This course describes key system administration tasks in the Solaris 10 OS, and identifies corresponding HP-UX or Tru64 operating system elements. This course is intended to provide experienced HP-UX and Tru64 administrators with information about core Solaris concepts, and focuses on practical experience implementing Solaris features through lab exercises.

Some of the skills you can gain include:

- Install the Solaris operating system and administer software packages and patches
- Demonstrate familiarity with Boot PROM commands
- Perform boot and shutdown procedures on a Solaris system

Sun also provides training on Red Hat products as part of the Sun overall training solution. Please visit our Web site, **sun.com/training/thirdparty**, for details.

N1™ Grid

N1™ GRID COURSE LIST

Associated Sun Products	COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
			CLASSROOM	OTHER
N1 Grid Engine 6.0	N1™ Grid Engine Advanced Administration	Installation, configuration, management and troubleshooting of N1 Grid Engine 6.0	ES-337	
N1 SPS 5.0	N1™ Grid Service Provisioning System 5.0 Configuration and Deployment	Installation, configuration, operation, management, and troubleshooting of the N1 Grid Service Provisioning System 5.0 product	NPS-470	

ES-337 N1™ Grid Engine Advanced Administration

INSTRUCTOR-LED **Length:** 3 Days **Price:** $2100 U.S. $2520 CAN

The N1™ Grid Engine Advanced Administration course provides students with the necessary skills to install, configure, use, and troubleshoot N1 Grid Engine (N1GE). This course describes installation and advanced administration of this product.

Some of the skills you can gain include:

- Perform installation tasks and run basic user commands, including: describing the features and architecture of the N1GE software; describing distributed resource management (DRM); performing a Network File System (NFS) installation of N1GE; and submitting batch and interactive jobs to the grid.
- Configure N1GE, including performing basic queue, host, and cluster configuration; administering complexes; and integrating applications in the grid

NPS-470 N1™ Grid Service Provisioning System 5.0 Configuration and Deployment

INSTRUCTOR-LED **Length:** 4 Days **Price:** $2800 U.S. $3360 CAN

The N1™ Grid Service Provisioning System 5.0 Configuration and Deployment course provides students with the information that they need to install, configure, operate, manage, and troubleshoot the N1 Grid Service Provisioning System 5.0 product. It describes the organisational architecture, including features and functions, resource requirements, and benefits. This course is delivered in a traditional instructor-led classroom environment. It consists of a mix of lecture and remote-lab exercises.

Some of the skills you can gain include:

- Describe the N1 Grid Service Provisioning System product and architecture
- Describe the role of the N1 Grid Service Provisioning System version 5.0 System plug-in

ON THE WEB sun.com/training/n1grid

Servers and High Availability

SERVER ADMINISTRATION COURSE LIST

Associated Sun Products	COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
			CLASSROOM	OTHER
	Sun™ Mainframe Transaction Processing Software Administration	Install, customize, and maintain the Sun MTP software	ES-305	
	Sun Mainframe Batch Manager Software Administration	Install, customize, and maintain the Sun MBM software	ES-306	
E10000	Sun Enterprise™ 10000 Server Administration	Configure, manage, and administer the Sun Enterprise 10000 Server	ES-400	
Sun MC 3.5	Systems Management Using Sun Management Center 3.5	Install, configure, and monitor network resources	ES-419	
Midrange Servers	Sun Fire™ Midrange Server Administration	Administer Sun Fire V1280, E2900, 3800, 4800, 4810, 6800, E4900, and E6900 servers	ES-420	Live Virtual Class VC-ES-420
High-End Servers	Sun Fire High-End Server Administration	Manage and administer the Sun Fire 12K, 15K, E20K, and E25K servers	ES-421	Live Virtual Class VC-ES-421
	Solaris Resource Manager/Solaris Bandwidth Manager Administration	Administer Solaris Resource Manager and Solaris Bandwidth Manager	ES-430	
	Solaris 9 Resource Manager Administration	Administer Solaris 9 Resource Manager	ES-431	
	Sun Fire B1600 Blade Chasis Administration	Manage and administer the Sun Fire B1600 Blade Chassis	ES-485	
Sun Fire T2000	Sun Fire™ T2000 Server Administration	Configure, manage, and administer the Sun Enterprise T2000 Server		Live Virtual Class PK-VC-ES-5088
Sun Fire X4100/x4200	Sun Fire X4100/X4200 Server Maintenance and Troubleshooting	Manage and troubleshoot the Sun Fire X4100/X4200		Web-based WEB-4923
Sun Fire x2100	Sun Fire X2100 Server Maintenance and Troubleshooting	Manage and troubleshoot the Sun Fire X2100		Web-based WEB-5380

SUN™ CLUSTER COURSE LIST

Associated Sun Products	COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
			CLASSROOM	OTHER
Cluster 3.0	Sun Cluster 3.0 Administration	Perform administration tasks such as installation, configuration, and administration on Sun Cluster 3.0 systems	ES-333	
Cluster 3.0	Using Sun Cluster 3.0 Software API: Data Services Integration	Explore custom data service creation using the provided application programming interface (API)	ES-336	
Cluster 3.1	Sun Cluster 3.1 Administration	Perform administration tasks such as installation, configuration, and administration on Sun Cluster 3.1 systems	ES-338	
Cluster 3.1	Sun Cluster Geographic Edition 3.1 Software Administration	Installation, configuration, troubleshooting geographically separated clusters	ES-361	
Cluster 3.1	Sun Cluster 3.1 Advanced Administration	Perform advanced administrative tasks such as upgrades, tune and troubleshoot software running in the Sun Cluster 3.1 environment	ES-438	

ES-338 Sun™ Cluster 3.1 Administration

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3500 U.S. $4200 CAN

The Sun™ Cluster 3.1 Administration course provides students with the essential information and skills needed to install and administer Sun Cluster 3.1 hardware and software systems. Students are introduced to Sun Cluster hardware and software product features, hardware configuration, and software installation along with configuration, data service configuration, and system operation.

Some of the skills you can gain include:

- Describe the major Sun Cluster hardware and software components and functions
- Configure different methods of connecting to node consoles
- Configure a cluster administrative workstation

ES-361 Sun™ Cluster Geographic Edition 3.1 Software Administration

NEW

INSTRUCTOR-LED **Length:** 3 Days **Price:** $2100 U.S. $2520 CAN

The Sun™ Cluster Geographic Edition 3.1 Software Administration course provides students with the essential information and skills needed to install, administer, and troubleshoot the Sun Cluster 3.1 Geographic Edition software. This software runs on top of the Sun Cluster 3.1 software, and controls data replication and application switchover between pairs of clusters that may be geographically separated.

Some of the skills you can gain include:

- Define the architecture of the Sun Cluster Geographic Edition software
- Install the Sun Cluster Geographic Edition software
- Create partnerships

ES-400 Sun Enterprise™ 10000 Server Administration

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3495 U.S. $4195 CAN

The Sun Enterprise™ 10000 Server Administration course provides the student with the essential information for administering the Sun Enterprise 10000 system. Through a balanced mix of lectures and hands-on labs, students will gain skills and knowledge needed to manage system software and hardware, and perform basic system troubleshooting.

Some of the skills you can gain include:

- Identify the major features of the Sun Enterprise 10000 server
- Perform an initial installation of the System Service Processor (SSP) hardware
- Configure the SSP hardware and administer the SSP

ES-420 Sun Fire™ Midrange Server Administration

INSTRUCTOR-LED **Length:** 5 Days **Price:** $4000 U.S. $4800 CAN

The Sun Fire™ Midrange Server Administration course provides students with the information needed to configure, monitor, and manage the Sun Fire V1280, Sun Fire E2900, Sun Fire 3800, Sun Fire 4800, Sun Fire 4810, Sun Fire E4900, Sun Fire 6800, and Sun Fire E6900 midrange servers. Additionally, students implement concurrent maintenance and high availability strategies and use firmware tools and applications to assess a system.

Note: Hardware is stored in a controlled lab environment. Students might not have physical access to this equipment.

Some of the skills you can gain include:

- Understand system controller administration, setup and configure the system controller, and navigate platform and domain shells
- Perform common configuration and administrative tasks
- Create and manage segments and domains

ES-421 Sun Fire™ High-End Server Administration

INSTRUCTOR-LED **Length:** 4 Days **Price:** $3200 U.S. $3840 CAN

The Sun Fire™ High-End Server (HES) Administration course provides students with the skill set necessary to identify the features and architecture specifics of the Sun Fire 15K/12K and Sun Fire E25K/E20K servers.

Some of the skills you can gain include:

- Describe the architecture, functional goals, and advanced reliability, availability, and serviceability (RAS) features of the Sun Fire 15K/12K server
- Identify system components by location, layout, and function
- Perform configuration and platform administration methodologies supported by Sun on the Sun Fire high-end servers

ES-438 Sun™ Cluster 3.1 Advanced Administration

INSTRUCTOR-LED **Length:** 5 Days **Price:** $4000 U.S. $4800 CAN

This course provides students with the skills necessary to upgrade, protect, configure, maintain, and troubleshoot software running in a Sun Cluster 3.1 software environment. Through the use of lecture and hands-on labs, students learn how to upgrade the Solaris™ Operating System (Solaris OS), VERITAS Volume Manager (VxVM), ORACLE®, and Sun Cluster software. Students also learn how to harden security using the Solaris Security Toolkit software and how to protect data using the Sun StorEdge™ Availability Suite software.

Some of the skills you can gain include:

- Upgrade the Solaris OS, VxVM, and ORACLE database software
- Upgrade Sun Cluster software
- Implement business continuity solutions

Storage

STORAGE MANAGEMENT COURSE LIST

Associated Sun Products	COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
			CLASSROOM	OTHER
	Network Storage Course List			
Solaris Volume Manager	Solaris Volume Manager Administration	Install, configure, and administer Solaris Volume Manager	ES-222	
VERITAS Volume Manager	VERITAS Volume Manager Administration	Install, configure, and administer VERITAS Volume Manager	ES-311	
StorEdge Storage Resource Mgmt Suite 6.0	Sun StorEdge Storage Resource Management Suite 6.0	Install and configure Sun StorEdge Resource Manager 6.0	ES-315	
StorEdge Performance Suite, StorEdge Utilization Suite	Sun StorEdge Performance Suite and Sun StorEdge Utilization Suite Administration	Plan and configure archiving, releasing, recycling	ES-451	
Sun StorEdge 9990 V	Sun StorEdge 9990 V Software Solutions	Software overview, features, functions, installation, configuration, and troubleshooting	HDS-408	
Sun StorEdge SAM-FS/QFS	Sun StorEdge SAM-FS/QFS Installation and Administration	Install and Administer SAM-FS/QFS	NWS-4510	
	Disk Subsystems Course List			
All disk products	Storage Fundamentals	Storage concepts, terms, and technologies. Including RAID, SCSI, FC, SAN		Web-based WE-1017
All disk products	Disk Subsystems Fundamentals	Install, configure, and maintain common Sun StorEdge products	ES-215	
StorEdge T3+ Array, 6120 Array	Sun StorEdge T3+ Array and Sun StorEdge 6120 Array Installation and Maintenance	Install, configure, and administer Sun StorEdge T3 and T3+ arrays	NWS-3251	
StorEdge 3310 SCS1 Array, 3510 FC Array	Sun StorEdge 3310 SCS1 and 3510 FC Arrays: Installation, Configuration and Administration	Install, configure, and administer Sun StorEdge 3310 SCS1 and 3510 FC Arrays	NWS-3254	
StorEdge 6320 System	Sun StorEdge 6320 System Configuration and Administration	Install, configure, and troubleshoot the Sun StorEdge 6320 arrays	NWS-3301	
StorEdge 6920 System	Sun StorEdge 6920 System Installation and Administration	Install, configure, and troubleshoot the Sun StorEdge 6920 arrays	NWS-3312	
RAID Storage Systems	Sun Software RAID Storage Systems Maintenance	Troubleshoot and maintain Sun StorEdge D1000, D2, and A5000 series storage arrays	SM-250	
StorEdge 6130 Array	Sun StorEdge 6130 Array Installation, Configuration, and Maintenance	Install, configure, and administer the Sun StorEdge6130 Array		Web-based WE-3300
StorEdge 6320 Array, 6120 Array	Sun StorEdge 6320 and 6120 Array Product Introduction	Features and functionality of the Sun StorEdge 6120 and 6320 arrays		Web-based WE-3567
	Back-up and Recovery Course List			
	Design and Administration of Backup and Recovery Systems	Design and implement a Backup and Recovery System	ES-230	
Solstice Backup 6.x	Solstice Backup 6.x Installation and Administration	Solstice Backup 6.x	ES-250	
StorEdge Enterprise Backup Software 7.x	StorEdge Enterprise Backup Software 7.x Administration	Administering StorEdge Enterprise Backup Software 7.x	ES-260	
Advanced Solstice Backup 6.x	Advanced Solstice Backup 6.x Planning, Tuning, and Troubleshooting	Planning, tuning, and troubleshooting Solstice Backup 6.x	ES-370	
	Solstice Backup Software 6.x to Sun StorEdge Enterprise Backup Software 7.x Differences	Differences between the two software products	ES-380	
	SAN Infrastructure Course List			
	Designing Storage Area Networks	Architect a SAN environment	NWS-4940	
	Installing and Configuring Storage Area Networks	Install, configure, and maintain a SAN environment	PK-ES-490	
	Fundamentals of Storage Area Networks	Fiber Channel basics, SAN components, architecture, security, and management		Web-based WEB-2030

For details on all NEW Storage courses, please see page 3, or go to **sun.com/training/catalog/storage**

Storage Courses

ON THE WEB
sun.com/training/storage

ES-222 Solaris™ Volume Manager Administration

INSTRUCTOR-LED **Length:** 3 Days **Price:** $1800 U.S. $2160 CAN

The Solaris™ Volume Manager Administration course provides students with the essential knowledge and skills needed to perform Solaris Volume Manager software administration tasks. The course provides practical exercises to learn the Solaris Volume Manager software features using both command-line programs and the Enhanced Storage tool.

Some of the skills you can gain include:

- Administer the Solaris Volume Manager software by using command-line programs and the Enhanced Storage tool
- Administer the Solaris Volume Manager software state databases
- Create and administer simple, striped, concatenated, and mirrored volumes

ES-310 VERITAS Volume Manager 4.0 Administration

INSTRUCTOR-LED **Length:** 4 Days **Price:** $2800 U.S. $3360 CAN

The VERITAS Volume Manager 4.0 Administration course provides students with the essential information and skills to manage Sun disk storage arrays using VERITAS Volume Manager (VxVM) software. Students are introduced to the installation, initialisation, and configuration of VxVM and to general performance issues. Basic VERITAS File System (VxFS) installation and configuration is also presented.

Some of the skills you can gain include:

- Analyse and document storage configurations
- Optimize the system and volume configurations for availability and performance
- Install and initialize the VxVM software

ES-311 VERITAS Volume Manager 4.1 Administration

NEW

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3500 U.S. $4200 CAN

The VERITAS Volume Manager 4.1 Administration course provides students with the essential information and skills to manage Sun disk storage arrays using VERITAS Volume Manager (VxVM) software. Students are introduced to the new 4.1 features and enhancements, installation, configuration of VxVM, and advanced administrative tasks.

The course also covers the VERITAS File System (VxFS) software product, including: installation and configuration, online administrative tasks, modifying kernel tunable parameters, and setting VxFS quotas.

Some of the skills you can gain include:

- Analyze and document storage configurations
- Optimize the system and volume configurations for availability and performance
- Install and initialize the VxVM software

NWS-3251 Sun StorEdge™ T3+ Array and Sun StorEdge 6120 Array Installation and Maintenance

INSTRUCTOR-LED **Length:** 4 Days **Price:** $2800 U.S. $3600 CAN

The Sun StorEdge T3+ Array and Sun StorEdge 6120 Array Installation and Maintenance course provides students with the knowledge to successfully install, administer, and maintain the Sun StorEdge T3 array.

Students receive classroom training and hands-on experience with the Sun StorEdge T3 array. Topics include installation, array configuration, volume configuration, array upgrade, and array maintenance. The course covers the existing Sun StorEdge T3 array controller, the new Sun StorEdge T3+ array controller, and the new features of array controller firmware version 2.1.

Some of the skills you can gain include:

- Describe Sun StorEdge T3 array features
- Identify Sun StorEdge T3 array components
- Describe Sun StorEdge T3 array architecture

NWS-3312 Sun StorEdge™ 6920 System

NEW

INSTRUCTOR-LED **Length:** 5 Days **Price:** $4000 U.S. $4800 CAN

The Sun StorEdge™ 6920 System training course provides students with the knowledge to successfully describe, install, configure, and maintain the Sun StorEdge 6920 system. Students receive classroom training and hands-on experience with the Sun StorEdge 6920 system. Topics include installation of the Sun StorEdge 6920 system, data services architecture, storage configuration, volume configuration, and administration.

Some of the skills you can gain include:

- Describe the features, functions, and terminology of the Sun StorEdge 6920 system
- Install and configure the hardware and software components of the Sun StorEdge 6920 system
- Create domains, profiles, pools, virtual disks, and volumes on the Sun StorEdge 6920 system using the command-line interface (CLI) and Web UI

NWS-4510 Sun StorEdge™ SAM-FS and QFS 4 Update 4 Administration

NEW

INSTRUCTOR-LED **Length:** 4 Days **Price:** $3200 U.S. $3840 CAN

The Sun StorEdge™ SAM-FS and QFS 4 Update 4 Administration course provides system support engineers (SSEs), customer care center (CCC)engineers, and Sun partners with the knowledge and skills to ensure proper implementation and support of Sun StorEdge SAM-FS and Sun StorEdge QFS software release 4 update 4. These skills include, but are not limited to, installation, configuration and administration.

Some of the skills you can gain include:

- Install and configure Sun StorEdge SAM-FS software
- Customize archiving, releasing, staging, and recycling behavior
- Use command-line programs to administer Sun StorEdge SAM-FS software installations

NWS-4940 Designing Storage Area Networks

INSTRUCTOR-LED **Length:** 3 Days **Price:** $2400 U.S. $2880 CAN

The Designing Storage Area Networks course provides students with intensive practice creating storage area network (SAN) designs based on the Sun StorEdge™ Open SAN Architecture. A series of real world case studies challenge students to match storage goals with technical infrastructures that will help customers realize a greater return on their SAN investment. This course consists of 30% lecture, 70% case study activities.

Some of the skills you can gain include:

- Determine a customer's business data management challenges
- Design a SAN infrastructure to meet customer data management challenges
- Design a SAN infrastructure to manage capacity and availability

Sun also provides training on VERITAS and Hitachi products as part of the Sun overall training solution. Please visit our Web site, **sun.com/training/thirdparty**, for more details on our VERITAS/Hitachi instructor-led courses.

HITACHI DATA SYSTEMS

VERITAS BUSINESS WITHOUT INTERRUPTION™

NWS-3301 Sun StorEdge™ 6320 System Configuration and Administration

INSTRUCTOR-LED **Length:** 4 Days **Price:** $3400 U.S. $4080 CAN

The Sun StorEdge™ 6320 System Installation and Administration course is designed to give system administrators and personnel at sites maintaining their own Sun StorEdge 6320 systems the knowledge needed to successfully configure, manage, and maintain the Sun StorEdge 6320 system. Students receive classroom training and hands-on experience with the Sun StorEdge 6320 system. Topics include system installation, configuration, administration, diagnostics, and maintenance.

Some of the skills you can gain include:

- Describe the features and functions of the Sun StorEdge 6320 system
- Describe the components and architecture of the Sun StorEdge 6320 system
- Install Sun StorEdge 6320 system hardware

PK-ES-490 Installing and Configuring Storage Area Networks (SANs)

INSTRUCTOR-LED **Length:** 5 Days **Price:** $4000 U.S. $4800 CAN

The Installing and Configuring Storage Area Networks (SANs) course provides students with hands-on experience in implementing storage area networks with the Sun StorEdge™ Open SAN Architecture. Students install Sun-supported Fibre Channel (FC) switches, including Sun StorEdge™ Network FC switches, Brocade Silkworm switches, and McData Sphereon switches. Students then configure various fabric topologies culminating in a large fabric, core/edge configuration. Students also employ techniques, such as zoning, to consolidate large amounts of data in a secure and highly available environment.

Some of the skills you can gain include:

- Install complex fabric SANs with Sun StorEdge™ Open SAN Architecture
- Upgrade SAN versions
- Install new components into an existing SAN and integrate existing SANs

Hardware Systems

HARDWARE SYSTEMS COURSE LIST

COURSE TITLE	SAMPLE KEY TOPICS	DELIVERY OPTIONS	
		CLASSROOM	OTHER
Solaris OS Administration Courses	Prerequisite		
Sun Desktop Systems Maintenance	Install, configure, maintain, troubleshoot, and repair Sun desktop workstations	SM-210	
Sun Enterprise Server Maintenance	Install, configure, maintain, troubleshoot, and repair Sun Enterprise servers	SM-240	
Sun Fire Workgroup Server Maintenance and Administration	Install, configure, maintain, troubleshoot, and repair Sun blade 1500 and 2500 Workstation, Sun Fire 280R, V480/V880, and V490/v890 Servers	SM-258	
Sun Fire Midrange Server Maintenance	Install, configure, maintain, troubleshoot and repair Sun Fire V1280, E2900, 3800, 4800, E4900, 4810, 6800, and E6900 servers	SM-340	

SM-210 Sun™ Desktop Systems Maintenance

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3500 U.S. $4200 CAN

The Sun™ Desktop Systems Maintenance course provides students with information about how to install, configure, diagnose, and verify proper operation of desktop workstations based on Sun SPARC™ technology. Sun desktop systems covered in this course include Sun Blade™ 1000, Sun Blade 100, Ultra™ 80, Ultra 60, Ultra 30, Ultra 10, Ultra 5, and Ultra 2. Students can also learn how to install and configure associated desktop peripherals, including external disk and tape devices. Real problems are introduced into the desktop systems for you to troubleshoot using all available diagnostic tools.

Some of the skills you can gain include:

- Install various desktop systems and associated peripherals
- Verify that all voltages are within specified tolerances
- Describe the systems power-on sequence with a block diagram

SM-340 Sun Fire™ Midrange Server Maintenance

INSTRUCTOR-LED **Length:** 3 Days **Price:** $2100 U.S. $2520 CAN

The Sun Fire™ Midrange Server Maintenance course provides students with the information needed to install, configure, maintain, and troubleshoot the Sun Fire V1280, the Sun Fire E2900, the Sun Fire 3800, Sun Fire 4800, Sun Fire E4900, Sun Fire 4810, Sun Fire 6800 and Sun Fire E6900 workgroup/enterprise servers. Additionally, students remove and replace system components and troubleshoot common hardware and firmware issues.

Some of the skills you can gain include:

- Provide an overview of the product goals; customer roles; major system components; reliability, availability, and serviceability (RAS) features; information resources; and troubleshooting tools for Sun Fire workgroup/enterprise servers
- Set up and configure the system controller and navigate platform and domain shells
- Perform common administrative and maintenance tasks at the platform and domain levels

SM-258 Sun Fire™ Workgroup Server Maintenance and Administration

INSTRUCTOR-LED **Length:** 5 Days **Price:** $3500 U.S. $4200 CAN

The Sun Fire™ Workgroup Server Maintenance and Administration course covers installation, configuration, and maintenance issues on workgroup and mid-range servers within the Sun Blade and Sun Fire architectural line. The course covers the Sun Blade 1000, Sun Blade 2000, Sun Fire 280R, Sun Fire V480, and Sun Fire V880 servers.

The course is designed to provide students with the common concepts, architectures, key features, and configuration techniques for the Sun Blade and Sun Firework group server line. It also provides students with server-specific information on hardware installation and replacement procedures, software configuration procedures, and troubleshooting techniques using software products, firmware diagnostic tools, and hardware utilities.

Some of the skills you can gain include:

- Identify the major features and key technologies of the Sun Blade 1000, Sun Blade 2000, Sun Fire 280R, Sun Fire V880, and the Sun Fire V480 servers
- Identify the features of the Sun Blade 1000, Sun Blade 2000, Sun Fire 280R, Sun Fire V880, and the Sun Fire V480 servers
- Identify architectural features of the Sun Blade 1000, Sun Blade 2000, Sun Fire 280R, Sun Fire V880, and Sun Fire V480 servers

ON THE WEB
sun.com/training/hardware

TRAINING CENTERS

UNITED STATES and CANADA LOCATIONS

UNITED STATES

ARIZONA

Phoenix
ExitCertified
Phone: 800-803-3948

Phoenix
Mesa Community College
Phone: 866-886-6872

CALIFORNIA

Los Angeles
Accenture Learning
390 N Sepulveda Blvd.
Suite 3010
El Segundo, CA 90245
Phone: 310-648-6680

Sacramento
ExitCertified
8950 Cal Center Drive
Suite 110
Sacramento, CA 95826
Phone: 916-669-3970

San Diego
GCA
10616 Scripps Summit Court
Suite 220
San Diego, CA 92131
Phone: 858-795-7470

San Francisco
ExitCertified
450 Sansome Street
6th Floor
San Francisco, CA 94111
Phone: 415-975-3948

San Jose
Accenture Learning
c/o MikroTek
101 Metro Drive
Suite 620
San Jose, CA 95110
Phone: 408-437-7511

COLORADO

Broomfield
Sun Microsystems, Inc.
500 Eldorado Blvd.
Building 1 Training Center
Broomfield, CO 80021
Phone: 303-272-7189

Colorado Springs
TechWise Training
2860 S. Circle Drive
Suite 400
Colorado Springs, CO 80906
Phone: 719-591-9966

CONNECTICUT

Hartford
Strategic Technologies, Inc.
628 Hebron Avenue
Building Two
Glastonbury, CT 06033
Phone: 860-815-0168

FLORIDA

Fort Lauderdale
Strategic Technologies, Inc.
550 W. Cypress Creek Road
Suite 450
Fort Lauderdale, FL 33309
Phone: 954-689-9100

Tampa
GCA
4919 Memorial Highway
Suite 150
Tampa, FL 33634
Phone: 888-422-9786

GEORGIA

Atlanta
Accenture Learning
100 Peachtree Street
Suite 1800
Atlanta, GA 30303
Phone: 678-657-2143

ILLINOIS

Downers Grove
Accenture Learning
1901 Butterfield Road
Suite 350
Downers Grove, IL 60515
Phone: 630-434-4545

KANSAS

Kansas City
Maryville Technologies
9225 Indian Creek Pkwy.
Suite 820
Overland Park, KS 66210
Phone: 913-905-3800

MAINE

Portland
Bridge Education
90 Bridge Street
Westbrook, ME 04092
Phone: 207-321-1111

MARYLAND

Baltimore
Bridge Education
6716 Alexander Bell Dr.
Suite 100
Columbia, MD 21046
Phone: 410-312-3539

MASSACHUSETTS

Burlington
Sun Microsystems, Inc.
1 Network Dr.
Building 4
Burlington, MA 01803
Phone: 781-442-0004

MICHIGAN

Troy
XtraNet
755 W. Big Beaver Road
Suite 245
Troy, MI 48084
Phone: 248-244-0854

MINNESOTA

Minneapolis
Collier Computing
2310 West County Road D
Roseville, MN 55112
Phone: 800-659-7338

MISSOURI

St. Louis
Maryville Technologies
540 Maryville Centre
Suite 300
St. Louis, MO 63141
Phone: 636-519-4100

NEBRASKA

Omaha
Maryville Technologies
9290 W. Dodge Road
Suite 200
Omaha, NE 68114
Phone: 402-952-1300

NEW JERSEY

Edison
eXceed education
379 Thornall Street
4th Floor
Edison, NJ 08837
Phone: 732-767-9800

NEW MEXICO

Albuquerque
Commercial Data Systems
4828 Hardware Drive NE
Albuquerque, NM 87109
505-314-4000

NEW YORK

New York City
Accenture Learning
33 Whitehall St.
Corner Pearl
29th Floor
New York, NY 10004
Phone: 212-510-9700

NORTH CAROLINA

Raleigh
Strategic Technologies, Inc.
301 Gregson Dr.
Cary, NC 27511
Phone: 919-379-8000

PENNSYLVANIA

Philadelphia
eXceed education
200 Four Falls Corporate Center
Suite 308
West Conshohocken, PA 19428
Phone: 610-940-3652

TEXAS

Dallas
Accenture Learning Group
16000 N. Dallas Pkwy.
North Tower, 5th Floor
Dallas, TX 75248
Phone: 972-934-6311

Houston
GCA
3000 Wilcrest Drive
Suite 160
Houston, TX 77042
Phone: 888-422-9786

San Antonio
Maryville Technologies
13750 US 281 North
San Antonio, TX 78232
Phone: 512-422-7033

UTAH

Salt Lake City
ITI
4885 S. 900 East
Suite 100
Salt Lake City, UT 84117
Phone: 801-268-8600

VIRGINIA

Hampton
GCA
1919 Commerce Drive
Suite 200
Hampton, VA 23666
Phone: 757-262-1580

Rosslyn
Accenture Learning
1300 Wilson Blvd.
Suite 1050
Commonwealth Tower
Arlington, VA 22209
Phone: 703-247-4000

WISCONSIN

Madison
TeamSoft
1350 Deming Way
Suite 250
Middleton, WI 53562
Phone: 608-827-7772

WASHINGTON

Seattle
GCA
10900 NE 8th Street
Suite 1650
Bellevue, WA 98004
Phone: 425-454-3533

CANADA

ALBERTA

Calgary
ExitCertified
Suite 204
2333-18th Avenue N.E.
Calagary, AB T2E 8T6
Phone: 403-291-2855

Edmonton
ExitCertified
Scotia Plaza
10060 Jasper Avenue
Suite 810
Edmonton, AB T5J 3R8
Phone: 866-328-3948

BRITISH COLUMBIA

Vancouver
ExitCertified
Pender Place I
700 West Pender Street
Vancouver, BC V6C 1G8
Phone: 604-633-3948

SASKATCHEWAN

Regina
ExitCertified
2002 Victoria Avenue
Suite 1460
Regina, SK S4P 0R8
Phone: 866-328-3948

MANITOBA

Winnipeg
ExitCertified
233 Portage Avenue
Suite 210
Winnipeg, MB R3B 2A7
Phone: 866-328-3948

NEW BRUNSWICK

Saint John
Computer Generated Solutions
1216 Sand Cove Road
Saint John, NB E2M 5V8
Phone: 506-642-4247

NOVA SCOTIA

Halifax
Computer Generated Solutions
6960 Mumford Road
West End Mall
Suite S19
Halifax, NS B3L 4P1
Phone: 877-337-7287

ONTARIO

Etobicoke
Xtranet
180 Attwell Drive
Suite 130
Etobicoke, ON M9W 6A9
Phone: 416-675-1881

Ottawa
ExitCertified
85 Albert St.
Suite 1200
Ottawa, ON K1P 6A4
Phone: 613-232-3948

Toronto
XtraNet
180 Attwell Dr.
Suite 130
Etobicoke, ON M9W 6A9
Phone: 416-675-1881

QUEBEC

Montreal
ExitCertified
Sun Life Building
1155 Metcalfe Street
Suite 2120
Montreal, QC
H3B2V9
Phone: 514-876-1666

NOTE: Courses in this Training Guide may not be available at all training locations. Contact the training center near you for local course availability. Training Centers and Training Center locations may change. Please see sun.com/training/locations/index.xml for the most current center information.

COURSE REGISTRATION AND INFORMATION

UNITED STATES/CANADA

TO ENSURE YOUR TIMELY REGISTRATION, PLEASE FOLLOW THESE STEPS:

1) Verify course availability using one of the following:

- Visit **sun.com/training** or **ca.sun.com/training**
- Send an email to **registrars@sun.com** *(autoresponder U.S.)*
- Send an email to **registrars@sun.com** *(autoresponder CAN)*
- Call **1-800-422-8020** (toll-free inside U.S./CAN) **1-303-464-4097** (from outside U.S./CAN)

2) Determine method of payment and billing information:

This must be included at the time of your registration. Classroom programs are available only to employer-sponsored trainees. Please determine the billing address and all information listed on the Registration Form. Be sure you are authorized to incur a financial responsibility for your organization. For international students, please see the International Enrollments section on this page. We welcome the following forms of payment:

- **CREDIT CARD:** VISA, MasterCard, or American Express
- **CHECK:** Payable to Sun Microsystems, Inc. Include completed Registration Form. Please reference student name and course on check.
- **PURCHASE ORDER (PO):** A hard copy of the PO must be included. Prices quoted do not include any applicable Canadian GST taxes.

3) Register

Please register via one of the following methods:

- **PHONE: 1-800-422-8020** *(toll-free from within the U.S./CAN)* or **1-303-464-4097** *(from outside the U.S./CAN)*
- **WEB:** Visit **sun.com/training** or **ca.sun.com/training**
- **U.S. EMAIL:** Send an email to **registrars@sun.com** *(autoresponder U.S.)*
- **CAN EMAIL:** Send an email to **registrars@sun.com** *(autoresponder CAN)*
- **FAX: 1-303-464-4490** *Please include completed Registration Form and copy of payment method with your fax.*
- **MAIL:** *Only appropriate if your course start date is more than six weeks from today.* Mail your completed form with payment method to:
  Sun Educational Services Registration
  500 Eldorado Blvd., MS UBRM4, Broomfield, CO 80021

4) Await Class Confirmation Information

After payment is received, confirmation information will be mailed, emailed, or faxed to the registered student(s). This will include course and training center information as well as area hotels. We recommend that you wait to make travel and hotel arrangements until you receive confirmation.

NOTE: *If you have not received this information at least one week before the beginning of class, please call our Customer Service Department at 1-800-422-8020 (toll-free inside U.S./CAN) or 1-303-464-4097 (outside U.S./CAN).*

INTERNATIONAL ENROLLMENTS

After determining class availability using the methods listed previously, please fax your completed Registration Form to **1-303-464-4490** or email to **training@sun.com** (please indicate your course choices in English). You may also register by calling our Customer Service Department at **1-303-464-4097**. Hours are Monday - Friday, 6:30 a.m. to 5:30 p.m. MST.

PAYMENT FOR INTERNATIONAL ENROLLMENTS

This is due at the time of your registration. Please use one of the following:

- **CHECK: U.S.** Payable to Sun Microsystems, Inc. Include completed Registration Form.
- **CHECK: CAN** Payable in Canadian dollars plus applicable taxes to Sun Microsystems of Canada, Inc. Include completed Registration Form.
- **CREDIT CARD:** VISA, MasterCard, or American Express
- **U.S. WIRE TRANSFER:** Reference Sun Microsystems Computer Company, ABA #12000358, Account #12335-13480, and send to Bank of America, 1850 Gateway Blvd., Concord, CA 94530. Please fax wire transfer confirmation to 1-303-464-4490.
- **CAN WIRE TRANSFER:** Reference Sun Microsystems Computer Company, USFBA #0698 7379757, CDNFBA #0698 0826205, Toronto Dominion Bank – Code 004, 7085 Woodbine Avenue, Markham Ontario, Canada, L3R 1A3. Please fax wire transfer confirmation to 905-771-2279.

  Funds must be in currency (U.S./CAN) of country attending class in.

NOTE: *For confirmations, see item #4.*

U.S. FEDERAL GOVERNMENT ENROLLMENT

Please fax your government PO# with your completed registration form to 1-303-464-4490. Federal government employees are entitled to a GSA discount. Please call Customer Service at 1-800-422-8020 and select option 3 for details.

Available on GSA Schedule GS-35F-4547G

TERMS AND CONDITIONS

Enrollment in and purchase of Sun Educational Services products and services are governed by the Sun Educational Services Terms and Conditions which are available for your review at: sun.com/training/us/legal. Please review these terms carefully prior to placing your order. No other terms and conditions will apply, unless you and Sun have signed a separate purchase agreement.

Sun Educational Services Cancellation Policy

CANCELLATIONS BY THE STUDENT:

- For cancellations made ten (10) or more business days prior to the start of a course, the student can request to either....
  1. Be rescheduled into another course, or
  2. Receive a full refund from Sun Microsystems.
- For cancellations made within ten (10) business days prior to the start of the course, payment is non-refundable.
- For no-shows payment is non-refundable.
  - "No Shows" is defined as the student does not show up on the date the course starts, and there was no prior communication from the student to cancel or reschedule the course.

SUBSTITUTIONS OF ONE STUDENT FOR ANOTHER

- Substitutions of one student for another for a specific enrollment are accepted with at least two days notice before the class begins, provided the substitute meets the course prerequisites or is approved by Sun Educational Services Management.

RESCHEDULING

- For reschedules made ten (10) or more business days prior to the start of a course, the student can request a different date, a different course, or a different location.
- For reschedules made within ten (10) business days prior to the start of the course, students must reschedule immediately, and are limited to rescheduling one time for only the same course at the same location (i.e., the student cannot request a different course nor a different location). The new course must begin up to a maximum of six months from the original course date. Students can reschedule the course by calling (800) 422-8020.

CANCELLATIONS BY SUN:

Sun's Right to Cancel or Reschedule. Sun may cancel or reschedule any class and will attempt to provide at least ten (10) business days notice when canceling or rescheduling. At Customer's direction, Sun will refund to Customer fees paid for the canceled class or credit the fees toward the fees chargeable for the rescheduled Class.

NOTE: *Travel arrangements are the student's responsibility and Sun assumes no liability for any costs, including non-refundable tickets, that may be incurred in the unlikely event of a course cancellation or rescheduling.*

SELECT INSTRUCTOR-LED and WEB-BASED

COURSES FROM SUN

FEATURED

If you see this symbol, you can find more details online at **sun.com/training** . . . . . ●

If a page number is listed, you can find some information in this *Training Guide* and additional details online 17

JAVA™ AND WEB SERVICES TECHNOLOGIES

CODE . . . . . COURSE TITLE. . . . . FEATURED

DTJ-280 . . . . . J2SE 5.0 Management, Internals, and Troubleshooting 7
DTJ-365 . . . . . Developing Mobile Phone Applications with J2ME™ Technology 7
DTJ-4103 . . . . . Developing Real Time Applications for the Java Platform . . . . . ●
DWS-385 . . . . . Developing Java Web Services. 7
DWS-4487 . . . . . Developing Secure Java™ Web Services 7
FJ-310 . . . . . Developing Applications for the J2EE™ Platform 8
OO-226 . . . . . Object-Oriented Analysis and Design with UML 8
SL-110 . . . . . Fundamentals of the Java Programming Language 8
SL-275 . . . . . Java Programming Language 8
SL-285 . . . . . Java Programming Language Workshop 8
SL-314 . . . . . Web Component Development with Servlet and JSP™ Technology 8
SL-351 . . . . . Advanced Business Component Development with EJB™ Technology 8
SL-425 . . . . . Architecting and Designing J2EE Applications. 9
SL-500 . . . . . J2EE Patterns 9

SUN JAVA SYSTEM

CODE . . . . . COURSE TITLE. . . . . FEATURED

SUN JAVA ENTERPRISE SYSTEM

AM-3480 . . . . . Sun Java System Access Manager 7: Configuration and Customization . . . . . ●
DIR-2217 . . . . . Sun Java System Directory Server 5.x: Analysis and Planning. 10
DIR-2337 . . . . . Sun Java System Directory Server 5.x: Maintenance and Operations 10
DIR-3300 . . . . . Sun Java System Directory Server 5.2: Advanced Design and Deployment . . . 10
DIR-3317 . . . . . Sun Java System Access Manager Configuration and Customization 10
ECR-1306 . . . . . Sun Java System Web Server 6.1: Installation and Configuration . . . . . ●
ECR-2281 . . . . . Sun Java™ Enterprise System 2005Q1: Core Concepts 10
ECR-2307 . . . . . Sun Java System Web Server 6.1: Administration and Maintenance 11
ECR-2389 . . . . . Sun Java Enterprise System 2005Q1: Installation and Getting Started 11
IAS-3319 . . . . . Sun Java System Application Server 7: Administration . . . . . ●
IAS-4318 . . . . . Sun Java System Application Server 7: Development . . . . . ●
IAS-4348 . . . . . Sun Java™ System Application Server SE/EE 7 2004Q2: Deployment and Administration . . . . . ●
IAS-4404 . . . . . Sun Java System Application Server 8: Configuration and Deployment 11
IDM-2525 . . . . . Sun Java System Identity Manager 5.0: Administration and Implementation . 11
IDM-345 . . . . . Sun Java™ System Identity Manager: Deployment Fundamentals. 11
MSG-2222 . . . . . Sun ONE Messaging Services: Analysis and Planning 5.2 . . . . . ●
MSG-2379 . . . . . Sun Java System Communication Services Administration 11
PTL-2309 . . . . . Sun Java System Portal Server: Installation and Configuration 11
PTL-4310 . . . . . Sun Java System Portal Server: Customization 11
WMO-SMQ-2395 Sun Java System Message Queue 3.5: Administration and Deployment . . . . . ●
WMT-IAS-2434 . . Fundamentals of the Highly Available Database (HADB). . . . . ●
WMT-IAS-3435 . . Advanced Management and Tuning of the Highly Available Database (HADB) . . . ●

SUN JAVA DESKTOP SYSTEM

STR- 027 . . . . . StarOffice Migration Partner . . . . . ●
WOB-1601 . . . . . StarOffice 7 End User Bundle (Web Bundle) . . . . . ●
WOD-1000 . . . . . Getting Started with the Sun Java Desktop (Web Course) . . . . . ●
WODB-2005 . . . . Java Desktop System Administration Bundle: Enterprise Edition (Web Bundle) ●
WODT-4255 . . . . Installing the Sun Java Desktop System (Web Course) . . . . . ●
WOD-4260 . . . . . Enterprise Services System Administration for the Sun Java Desktop System (Web Course) . . . . . ●
WODO-0131 . . . GNOME Administration and Support (Web Course). . . . . ●
WODO-1131 . . . Evolution Administration and Support (Web Course) . . . . . ●
WODO-2131 . . . Mozilla Administration and Support (Web Course) . . . . . ●
WODO-3131 . . . StarOffice™ Office Suite Administration and Support (Web Course) . . . . . ●
WODO-4000 Central Configuration Management for the Sun Java Desktop System (Web Course) . . . . . ●

SOLARIS™ OS SYSTEM ADMINISTRATION AND DEVELOPMENT

CODE . . . . . COURSE TITLE. . . . . FEATURED

SOLARIS SYSTEM ADMINISTRATION

PK-SA-200-S10 . . Intermediate System Administration for the Solaris 10 OS (SPARC platform) . . 13
PK-SA-201-S10 . . Intermediate System Administration for the Solaris 10 OS (x64/x86 platform) 13
PK-SA-202-S10 . . Advanced System Administration for the Solaris 10 OS (SPARC platform) 14
PK-SA-203-S10 . . Advanced System Administration for the Solaris 10 OS (x64/x86 platform) . . . 14
SA-100-S10 . . . . UNIX® Essentials Featuring the Solaris 10 Operating System 13
SA-119. . . . . UNIX Essentials Featuring the Solaris 9 Operating System . . . . . ●
SA-225-S10 . . . . Solaris™ 10 for Experienced System Administrators. 14
SA-239. . . . . Intermediate System Administration for the Solaris 9 Operating System . . . . . ●
SA-245. . . . . Shell Programming for System Administrators 14
SA-299. . . . . Advanced System Administration for the Solaris 9 Operating System . . . . . ●
SA-300-S10 . . . . Network Administration for the Solaris 10 Operating System. 13
SA-327-S10 . . . . Dynamic Performance Tuning and Troubleshooting with DTrace 14
SA-400. . . . . Solaris System Performance Management 14
ST-350 . . . . . Sun Systems Fault Analysis Workshop 14
ST-375 . . . . . Introduction to Crash Dump Analysis and the Sun OS Kernel . . . . . ●
STS-276-S10 . . . Solaris System Administration for Experienced UNIX Administrators 15
STS-277 . . . . . Solaris™ Operating System Administration for Experienced HP-UX and Tru64 Administrators 15
SA-SYS1-CPW . . . Certification Prep Workshop: Sun Certified Solaris System Administrator 1 . . . ●
SA-SYS2-CPW . . . Certification Prep Workshop: Sun Certified Solaris System Administrator 2 . . . ●

WEB BASED

WSB-100-S10. . . UNIX Essentials Featuring the Solaris 10 Operating System . . . . . ●
WSB-200-S10. . . Intermediate System Administration for the Solaris 10 OS (SPARC platform) . . ●
WSB-201-S10. . . Intermediate System Administration for the Solaris 10 OS (x64/x86 platform) ●
WSB-202-S10. . . Advanced System Administration for the Solaris 10 OS (SPARC platform). . . . . ●
WSB-203-S10. . . Advanced System Administration for the Solaris 10 OS (x64/x86 platform) . . . ●
WSB-300-S10. . . Network Administration for the Solaris 10 Operating System. . . . . ●

NETWORK MANAGEMENT

IN-351. . . . . Using LDAP as a Naming Service. . . . . ●
SA-399 . . . . . Network Administration for the Solaris 9 Operating System. . . . . ●
SOE-9001 . . . . . What's New in Solaris 9 OS Network Administration . . . . . ●

SECURITY

SC-300. . . . . Administering Security on the Solaris Operating System 14
SC-325. . . . . Trusted Solaris 8 System Administration. . . . . ●
SC-345. . . . . Solaris Operating System Network Intrusion Detection . . . . . ●
SC-360 . . . . . Enterprise Security using Kerberos . . . . . ●

SC-375 . . . . . Enterprise Intrusion Analysis . . . . . ●

SC-410 . . . . . Computer Security Forensics and System Recovery . . . . . ●

SOLARIS OS DEVELOPMENT

DTP-250 . . . . . Perl Programming 15

RED HAT LINUX INSTRUCTOR LED COURSES sun.com/training/catalog/operating-systems/linux.xml

N1™GRID

CODE . . . . . COURSE TITLE . . . . . FEATURED

ES-337 . . . . . N1™ Grid Engine Advanced Administration 15

NPS-470 . . . . . N1 Grid Service Provisioning System 5.0 Configuration and Deployment 15

SERVERS AND HIGH AVAILABILITY

CODE . . . . . COURSE TITLE . . . . . FEATURED

SUN CLUSTER

ES-333 . . . . . Sun Cluster 3.0 Administration . . . . . ●

ES-338 . . . . . Sun Cluster 3.1 Administration 16

ES-361 . . . . . Sun™ Cluster Geographic Edition 3.1 Software Administration 16

ES-438 . . . . . Sun Cluster 3.1 Advanced Administration 17

WE-3330 . . . . . Sun Cluster 3.0 Software Overview (Web Course) . . . . . ●

SERVER ADMINISTRATION

ES-306 . . . . . Sun Mainframe Batch Manager Software Administration . . . . . ●

ES-320 . . . . . High Performance Computing (HPC) Administration . . . . . ●

ES-400 . . . . . Sun Enterprise 10000 Server Administration 16

ES-419 . . . . . Systems Management Using Sun Management Center 3.5 . . . . . ●

ES-420 . . . . . Sun Fire™ Midrange Server Administration . . . . . ●

ES-421 . . . . . Sun Fire High-End Server Administration 16

ES-430 . . . . . Solaris Resource Manager 1.3/Solaris Bandwidth Manager 1.6 Administration . . ●

ES-431 . . . . . Solaris 9 Resource Manager Administration . . . . . ●

ES-485 . . . . . Sun Fire B1600 Blade Chassis Administration . . . . . ●

STORAGE

CODE . . . . . COURSE TITLE . . . . . FEATURED

ES-215 . . . . . Disk Subsystems Fundamentals . . . . . ●

ES-222 . . . . . Solaris Volume Manager Administration 18

ES-230 . . . . . Design and Administration of Backup and Recovery Systems . . . . . ●

ES-250 . . . . . Solstice Backup 6.x Installation and Administration . . . . . ●

ES-260 . . . . . Sun StorEdge™ Enterprise Backup 7.x Administration . . . . . ●

ES-310 . . . . . VERITAS Volume Manager 4.0 Administration 18

ES-311 . . . . . VERITAS Volume Manager 4.1 Administration 18

ES-380 . . . . . Solstice Backup 6.x to Sun StorEdge Enterprise Backup Software 7.0 Differences. ●

ES-451 . . . . . Sun StorEdge Performance Suite and Sun StorEdge Utilisation Suite Administration . . ●

ES-476 . . . . . Sun StorEdge Availability Suite 3.1 Install, Configure, and Troubleshoot . . . . . ●

HDS-408 . . . . . Sun StorEdge 9990 V Software Solutions . . . . . ●

NWS-3251 . . . . . Sun StorEdge™ T3+ Array and Sun StorEdge 6120 Array Installation and Maintenance 18

NWS-3254 . . . . . Sun StorEdge 3310 SCSI and 3510 FC Arrays: Installation, Configuration, and Administration . . . . . ●

NWS-3301 . . . . . Sun StorEdge™ 6320 System Configuration and Administration . . . . . ●

NWS-3312 . . . . . Sun StorEdge™ 6920 System 18

NWS-4510 . . . . . Sun StorEdge™ SAM-FS and QFS 4 Update 4 Administration 18

NWS-4940 . . . . . Designing Storage Area Networks 18

PK-ES-490 . . . . . Installing and Configuring Storage Area Networks (SAN) . . . . . ●

WE-3254 . . . . . Sun StorEdge 3000 Series Array Installation and Administration . . . . . ●

WE-3300 . . . . . Sun StorEdge 6130 Array Installation, Configuration, and Maintenance . . . . . ●

HITACHI INSTRUCTOR LED COURSES . . . . . sun.com/training/thirdparty

VERITAS INSTRUCTOR LED COURSES . . . . . sun.com/training/thirdparty

HARDWARE SYSTEMS

CODE . . . . . COURSE TITLE . . . . . FEATURED

SM-210 . . . . . Sun Desktop Systems Maintenance 19

SM-240 . . . . . Sun Enterprise Server Maintenance . . . . . ●

SM-258 . . . . . Sun Fire Workgroup Server Maintenance and Administration 19

SM-340 . . . . . Sun Fire Midrange Server Maintenance 19

CURRENT WEB-BASED AND CD-ROM COURSES

Sun offers a wide range of Sun and third-party Web-based and CD-ROM courses to support IT business goals. These courses provide self-paced training and are available either to an indivual or a team. CD-ROM and Web-based courses are complementary to other training, like classroom instruction and live virtual classes. They are also integrated into learning and certification paths to provide a blended learning experience. For a current listing of all courses, visit us online at **sun.com/training/catalog/index.xml** and select 'Web-based' or 'CD-ROM'.

HEADQUARTERS

SUN EDUCATIONAL SERVICES, SUN MICROSYSTEMS, INC., 500 ELDORADO BLVD., BROOMFIELD, CO 80021 USA

PHONE: 800 422-8020 FAX: 303-464-4490 INTERNET: sun.com/training

THE NETWORK IS THE COMPUTER ©2006 Sun Microsystems, Inc. All Rights Reserved. Sun, Sun Microsystems, the Sun logo, CacheFS, EJB, Enterprise JavaBeans, FederatedBeans, Forte, Forte Fusion, iPlanet, J2EE, J2ME, J2SE, Java, JavaONE, Java API for XML Parsing, Java Card, Java Foundation Classes, JavaMessage Service, Java Naming and Directory Interface, JavaTransaction, Java University, JavaBeans, JavaMail, JavaScript, JavaServer Pages, JavaSpaces, JavaTutor, JDBC, Jini, Jiro, JSP, JumpStart, Netra FT, NetBeans, OpenBoot, OpenWindows, Solaris, Solaris Resource Manager, Solstice Backup, Solstice DiskSuite, StarOffice, Sun Cobalt, Sun Cobalt RaQ, Sun Cobalt Qube 2, Sun Enterprise, Sun Fire, Sun HPC ClusterTools, Sun Internet Mail Server, Sun Ray, Sun StorEdge Volume Manager, SunScreen, SunSolve, Trusted Solaris, Ultra, Ultra Enterprise and "Write Once, Run Anywhere" are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries. UNIX is a registered trademark in the United States and other countries, exclusive licenses through X/Open Company, Ltd. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the United States and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc. ORACLE is a registered trademark of Oracle Corporation, Redwood City, California. Netscape Navigator is a trademark or registered trademark of Netscape Communications Corporation. Prices, course descriptions and schedules are subject to change. Please visit our Web site for the most current information.

LFC3.2 Printed in the USA 12/05 EE421.0

Sun Fire X2100 rack

POWER YOUR INVESTMENT

Choose Sun training to help maximize your Sun Fire™X64 system availability and productivity in your data center. Sun offers training courses to help you make the most of your new Sun Fire servers. Reinforce your investment by registering for one of the following courses now available:

- **Sun Fire X4100/X4200 Server Maintenance and Troubleshooting – WEB-4923**
  This 4-hour Web-based course includes installing, configuring, and troubleshooting the Sun Fire X4100/X4200 server.
- **Sun Fire X2100 Server Maintenance and Troubleshooting – WEB-5380**
  This 4-hour Web-based course covers installing, configuring, and troubleshooting the Sun Fire X2100 server.

For more information on these courses, go to
sun.com/training/catalog/courses/WET-4923.xml

sun.com/training or ca.sun.com/training
800-422-8020

ATTENTION MAIL ROOM: IF UNDELIVERABLE AS ADDRESSED, PLEASE FORWARD TO THE INFORMATION TECHNOLOGY DEPARTMENT

PRESORTED STANDARD
U.S. POSTAGE
PAID
SUN EDUCATIONAL SERVICES

SUN MICROSYSTEMS
P.O. BOX 201688
AUSTIN, TX 78720-1688

PRIORITY CODE