

# Sun Java System Directory Server 5.x: Maintenance and Operations (DIR-2337)

## Product Description

### Product Outline/Details

The Sun Java System Directory Server 5.x: Maintenance and Operations, 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 (Directory Server) 5.2 (formerly Sun Open Net Environment (Sun ONE) Directory Server 5.2).

Labs acquaint students with the tools included with Sun Java System Directory Server 5.x. Students should use them to perform tasks such as searching and modifying directory data, exporting and importing data, starting and stopping servers, and troubleshooting. Students should also migrate server versions, create multiple databases, configure servers for replication and tune performance.

This course focuses primarily on maintenance and operations issues related to Directory Server 5.x and not planning and design issues. For planning and design topics, refer to DIR-2217: Sun Java(TM) System Directory Server 5.x: Directory Services Analysis and Planning.

Please note: Sun has recently re-branded Sun ONE Directory Server to Sun Java System Directory Server. You may see reference to either name within the course description and course materials.

<i>Product ID:</i> <b>DIR-2337</b>	<i>Duration:</i> <b>3 days</b>	<i>Price:</i> <b>\$1800.00</b>
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## Who Can Benefit

Students who can benefit from this course are system engineers, support engineers, system administrators, and other technical support personnel with responsibility for troubleshooting and day-to-day maintenance of Sun Java System Directory Server.

## Prerequisites

**To succeed fully in this course, students should be able to:**

- Perform basic UNIX tasks
- Understand basic UNIX commands
- Describe Lightweight Directory Access Protocol (LDAP) services at a high level
- Describe features of the Sun Java System Directory Server (Directory Server)
- Install Directory Server
- Start and use the Directory Server Console
- Understand basic configuration tasks

## Skills Gained

**Upon completion of this course, you should be able to:**

- 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

- Describe Directory Server access control and write access control statements
- Use the Directory Server account and password management tools to enforce account and password policies
- Install a digital certificate and enable Secure Sockets Layer (SSL) on the Directory Server
- Perform directory database backup and restore functions using Directory Server utilities
- Configure and test Directory Server replication
- Tune Directory Server performance
- Describe and set up directory failover for Java System server products
- Migrate directory data to Directory Server 5.x

## Related Courses

- **Before:** ECR-2281: Sun Java Enterprise System: Core Concepts
- **Before:** DIR-1344: Sun ONE System Directory Server: LDAP Concepts
- **Before:** WMO-DIR-1345: Sun Java System Directory Server 5.2 Installation and Administration
- **After:** DIR-2217: Sun Java System Directory Services 5.x: Analysis and Planning
- **After:** DIR-3300: Sun Java System Directory Server 5.2: Advanced Design and Deployment

## Course Content

### Module 1: Sun Java System Directory Server

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- Describe the directory information tree (DIT)
- Describe the Directory Server installation directory
- Describe the Sun Java System Server Console (Server Console) operation
- Identify server processes
- Describe the LDAP Data Interchange Format (LDIF)

### Module 2: Searching and Modifying Directory Content

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- Use the ldapsearch utility to search a directory
- Use LDAP URLs to search a directory
- Use the ldapmodify utility to change directory content

### Module 3: Using Directory Server Log Files

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- Describe the Directory Server log files
- Describe LDAP result codes

### Module 4: Securing Directory Server Access

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- Describe Directory Server security methods
- Describe authentication
- Describe attribute encryption
- Describe access control
- List the default access control instructions (ACIs) provided with Directory Server

- Describe special users' access control
- View access permissions on directory entries

### **Module 5: Enforcing Password Policies**

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- Describe password policies
- Define a global password policy
- Define multiple password policies
- Activate and deactivate accounts

### **Module 6: Using Certificates With Directory Server**

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- Describe cryptography concepts
- Describe SSL
- Enable SSL on the Directory Server

### **Module 7: Backing Up and Restoring Directory Server Databases**

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- Describe Directory Server databases, database files, and backup and recovery scripts
- Back up Directory Server databases
- Restore Directory Server databases
- Export a directory database to LDIF
- Import a directory database from LDIF

### **Module 8: Replicating Directory Server Data**

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- Describe replication concepts
- Describe basic replication topologies
- Configure consumer and supplier servers
- Monitor replication status
- Diagnose and resolve multimaster replication issues
- Describe configuration and schema replication
- Describe issues with ACIs and password policy in a replication environment

### **Module 9: Tuning Directory Server Performance**

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- Tune the operating system for optimal Directory Server performance by running the idsktune utility
- Tune read performance by managing indexes, configuring the nsslapd-allidsthreshold setting, configuring cache sizes, and configuring search limit settings
- Tune write performance by optimizing indexes, increasing disk throughput, and minimizing write traffic
- Identify system monitoring tools

### **Module 10: Configuring for Directory Server Failover**

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- Describe the impact of a Directory Server failure
- Plan a Directory Server failover strategy
- Configure failover for the Server Console

## **Module 11: Migrating to Directory Server 5.x**

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- Identify release differences that impact migration
- Identify steps to migrate from Netscape Directory Server 4.x to Directory Server 5.2
- Identify steps to migrate from Sun ONE Directory Server 5.0 or 5.1 to Directory Server 5.2