

Course Description:

Red Hat Enterprise Directory Services and Authentication is an intensive course that provides four days of instruction and labs on cross-platform integration of directory services to provide authentication or information service across the enterprise using the Red Hat Directory Server. An exam is administered on the last day.

Who Should Attend:

RH423 is aimed at senior Red Hat Enterprise Linux system administrators and other IT professionals who need to provide enterprise-wide authentication or information services or who desire training in the management of LDAP-based directory services and customization of Linux authentication using the Red Hat Directory Server.

Prerequisites:

RH423 requires RHCE-level skills. The RHCE certificate on Red Hat Linux 7.1 or later is recommended but not required. Prerequisite skills can be shown by passing the RHCE Exam in either RH302 or RH300, or by taking RH253 or by possessing comparable skills and knowledge. DHCP, and other networking services, and security are also required.

Benefits of Attendance:

Upon completion of this course, students will be able to:

- Understand the basic concepts, configuration, and management of LDAP-based services.
- Understand PAM, the Pluggable Authentication Modules system, and how it is integrated with services that require authentication and authorization.
- Integrate standard network clients and services with the directory service in order to take advantage of its capabilities.

Course Outline:**Introduction to Directory Services**

What is a directory?
LDAP: models, schema, and attributes
Object classes
LDIF

Red Hat Enterprise IPA

Understanding IPA
IPA requirements
Configuring IPA server
Configuring IPA clients

The LDAP Naming Model

Directory information trees and Distinguished Names
X.500 and "Internet" naming suffixes
Planning the directory hierarchy

Red Hat Directory Server: Basic Configuration

Installation and setup of Red Hat Directory Server
Using the Red Hat Console
Using logging to monitor Red Hat Directory Server activity
Backing up and restoring the directory
Basic performance tuning with indexes

Searching and Modifying the LDAP Directory

Using command line utilities to search the directory
Search filter syntax
Updating the directory

Red Hat Directory Server: Authentication and Security

Configuring TLS security
Using access control instructions (ACI's)
ACI's and the Red Hat Console

Linux User Authentication with NSS and PAM

Understanding authentication and authorization
Name service switch (NSS)
Advanced pluggable authentication modules (PAM) configuration

Centralized User Authentication with LDAP

Central account management with LDAP
Using migration scripts to migrate existing data into an LDAP server
LDAP user authentication

Kerberos and LDAP

Introduction to Kerberos
Configuring the Kerberos key distribution center (KDC) and clients
Configuring LDAP to support Kerberos

Directory Referrals and Replication

Referrals and replication
Single master configuration
Multiple master configuration
Planning for directory server availability

Cross-Platform Centralized Identity Management

Synchronizing Red Hat Directory Server with Active Directory
Managing users with Winbind and LDAP
Mapping attributes between Linux and Windows