

## RH 320 - Red Hat Apache and Secure Web Server Administration

### Introduction

The Red Hat Apache and Secure Web Server Administration is designed for Linux and/or UNIX systems administrators who want to configure and maintain a secure Apache Web Server.

### Goal

A web server administrator who can configure and maintain an Apache web server running under Red Hat Linux, incorporating CGI handlers, SSL security, dynamic content, and customization via modules.

### Audience

Linux or UNIX system administrators who desire to obtain intensive hands-on training on configuration and management of an Apache Web Server.

### Prerequisites

- RH253 Red Hat Linux Network Services and Security, or RH300 RHCE Rapid Track Course, or equivalent experience with UNIX or Linux.
- Creating web pages using HTML.
- Some experience with Perl or Python or shell scripting/programming is recommended but not required. RH423 requires RHCE-level skills. The RHCE certificate on Red Hat Linux 7.1 or later is recommended but not required

### Course Objectives

#### Module 1 - Introduction and Basic Apache Configuration

- httpd overview: client/server topology, transactional overview
- History of web servers: NCSA, Apache evolution, The Apache Organization
- Apache today: usage, extensibility, process model, Red Hat's Apache packages
- Basic configuration: configuration files and options, basic daemon control

#### Module 2 - Apache Virtual Hosts

- Understanding Virtual hosts: IP-based, name-based
- Configuration directives and syntax checking
- Using Apache to serve virtually hosted web servers
- Web server log files: formats, configuration, use and analysis
- Server MIME types

Other Information	
RH 320	
Days	4
Starting Time	9:00
Finish Time	4:30
Lunch & refreshments are included with this course.	



### Module 3 - CGI and Server Side Includes

- Understanding CGI: Definition, mechanics, limitations, common CGI languages
- Basic CGI requirements
- Useful CGI tasks: form processing, database manipulation, custom-built tasks
- SSI: similarities to CGI, .shtml implementation, Xbithack directive, examples
- CGI security: proper programming; suEXEC: file placement issues, configuration

### Module 4 - Database Backends

- Available Databases
- Postgres: installation, administration, creating and loading a table; pgaccess
- Query and insert with SQL
- Implementations of query and insert in CGI
- Perl CGI.pm; DBD/DBI.pm

### Module 5 - Apache Customization Through Modules

- Concepts
- mod\_perl
- mod\_php
- mod\_status
- mod\_usertrack
- mod\_rewrite
- Other modules

### Module 6 - Security and Authentication

- Basic access control by host/domain/network
- Apache security strategies
- Implementing Web-based password authentication
- Authentication scenarios

### Module 7 - Advanced Security With SSL

- Basic Cryptography and SSL concepts
- SSL Certificates
- Obtaining a website certificate
- Implementing SSL with Red Hat's Stronghold webserver