



Course Name: Configuring Steel-Belted Radius Carrier (CSBR)

Course Code: EDU-JUN-CSBR

Duration: Two Days

Introduction

This two-day online instructor-led course discusses the configuration for Juniper Networks Steel-Belted Radius Carrier. Key topics include installation, client configuration, users, authentication, and replication. Through demonstrations and hands-on labs, students will gain experience in configuring, testing, and troubleshooting basic aspects of SBR Carrier.

This course uses SBR Carrier software running on a Red Hat Enterprise Linux server for the hands-on component. This course is based on SBR Carrier Standalone software release 7.5.0.

Objective

After successfully completing this course, you should be able to:

- Define the role of a RADIUS server.
- Describe authentication, authorization, and accounting (AAA).
- Describe the flow of traffic in a RADIUS environment.
- Identify the components in a typical RADIUS packet.
- Identify RADIUS attributes and their functions.
- Describe shared secrets and their role.
- Identify the protocols used for authenticating end users.
- Describe RADIUS accounting.
- Identify the editions of Steel-Belted Radius (SBR).
- List the supported operating systems for SBR Carrier.
- Identify the installation requirements for SBR Carrier.
- Describe SBR Carrier server roles.
- Locate SBR Carrier system information.
- Configure the SBR Carrier license.
- Describe SBR clients.
- Configure SBR clients.
- Describe the different types of users SBR supports.
- Describe SBR Carrier authentication policies.

- Describe and configure proxy targets.
- Identify and proxy realms.
- Describe directed realms.
- Describe how SBR Carrier can use Structured Query Language (SQL) databases for authentication.
- Configure SQL authentication for SBR Carrier.
- Describe how SBR Carrier can use Lightweight Directory Access Protocol (LDAP) databases for authentication.
- Configure LDAP authentication for SBR Carrier.
- Describe the purpose of attributes, check lists, and return lists.
- Describe how to implement check lists and return lists.
- Describe filters and their purpose.
- Describe how to implement filters.
- Describe Extensible Authentication Protocol (EAP).
- Identify EAP traffic flow.
- Describe the purpose of certificates.
- Configure server certificates.
- Describe EAP mechanisms.
- Configure EAP.
- Describe the benefits of a realm.
- Identify the means by which SBR Carrier can recognize realms.
- Describe how SBR Carrier can handle requests based on realm identifiers.
- Identify other SBR routing methods.
- Identify optional authentication methods.
- Describe and configure SBR Carrier replication.
- Describe high availability (HA) using Session State Register (SSR).
- Locate statistical information.
- Locate and search reports and log files.
- Describe the troubleshooting tools that are available to troubleshoot SBR Carrier.

Prerequisites

The following are the prerequisites for this course:

- Working knowledge of networking concepts
- Knowledge of UDP and TCP/IP

The following are recommended, but not required:

- Working knowledge of Unix Operating Systems
- Basic knowledge of SQL and LDAP protocols

Course Outline

Day 1	
Chapter 1:	Course Introduction
Chapter 2:	RADIUS Overview
Chapter 3:	Introduction to Steel-Belted RADIUS
Chapter 4:	SBR Carrier Clients and Users
Chapter 5:	Statistics, Reports, and Troubleshooting
Chapter 6:	Authentication Policies
Day Two	
Chapter 7:	SQL and LDAP Authentication
Chapter 8:	Attributes
Chapter 9:	Extensible Authentication Protocol
Chapter 10:	Advanced Deployment Options

Training Location

Mideast Communication Systems
Juniper Authorized Training Center

