CROSSBEAM ESSENTIALS TRAINING

COURSE DESCRIPTION

Crossbeam Essentials Training introduces students to Crossbeam Network Security solutions. Participants will be thoroughly prepared to properly install, configure, and operate Crossbeam X-Series Platform with certified best-in-class security applications from our Partners.

In addition, students use established Crossbeam best-practices to complete hands-on lab exercises in the Crossbeam Remote Training Lab to reinforce concepts and build real-world skills.

Upon successful completion of Essentials training, Crossbeam Advanced training is highly recommended to expand expertise and self-sufficiency in maximizing your Crossbeam solution.

AUDIENCE

This course is appropriate for experienced network and security engineers who are responsible for designing, planning, installing, configuring, deploying and operating Crossbeam security solutions using the X-Series Platform.

COURSE LENGTH

This is a 4-day instructor led course.

PREREQUISITES

- Basic to advanced networking skills (TCP/IP, switching and routing)
- Security application training from the vendor or vendor ATP
- Security application implementation

AVAILABILITY

The Crossbeam Essentials training course is delivered in a variety of ways to best meet your needs:

- Crossbeam instructors onsite at the customer location
- Crossbeam instructors at a Crossbeam learning center
- Crossbeam certified instructors at one our Approved Training Provider partners
- Online using the Crossbeam eLearning system

COURSE OBJECTIVES

Students will demonstrate mastery of the course material as follows:

- Describe in-depth, the XOS concepts and X-Series Platform architecture.
- Perform initial provisioning of an X-Series Platform.
- Configure the X-Series Platform using XOS in preparation for security application installation and configuration.
- Install and configure certified applications, connect with application management consoles, push security policies.
- Configure multiple VAP groups in serialized and parallelized solutions
- Perform software and firmware updates
- Configure fault tolerant single- and multi-system high availability (HA) solutions
- Manage and troubleshoot XOS, X-Series hardware, and security applications using XOS, GEM, and XMS monitoring and health status applications.

CERTIFICATION

Students who attend the class, complete the lab exercises, and pass the certification exam achieve the Crossbeam Certified Specialist (CCS) certification.

COURSE CONTENT

DAY 1:

Lesson 1: X-Series Platform Hardware Overview

- Brief review of Crossbeam solutions
- The X-Series Platform Architecture
- The X-Series modules: CPM, APM, NPM

Lesson 2: Installation and Configuration Fundamentals

- Console port access and interview
- Command line interface (CLI) introduction
- Basic configuration concepts of XOS
- Configuration files
- CLI context - CBS, CPM Linux, VAP Linux
- Hands-on Labs

Lesson 3: Flow Processing

- Flow identification
- Load balancing
- Master VAP
- Routing options overview
- Identifying flows
- Hands-on Labs

DAY 2:

Lesson 3: Flow Processing (continued)

- What is Secure Flow Processing
- What is Serialization
- Serializing Applications at OSI Layer 2 and Layer 3
- L2-L3 Serialization with Check Point VSX NGX R67
- Serializing 3 applications: L2-L3-L2
- XOS configuration parameters, commands, options
- Hands-on Labs

Lesson 4: High Availability

- System level redundancy
- Single Box High Availability (SBHA)
- Dual Box High Availability (DBHA / VRRP)
- How to monitor status
- Hands-on Labs

DAY 3:

Lesson 5: System Maintenance

- Back-up and restore functionality
- Upgrades
- Automated Workflow System (AWS)
- Hands-on Labs

Lesson 6: System Management

- Crossbeam Management System (XMS)
- Command Line Interface (CLI)
- Greenlight Element Manager (GEM)
- USB Installer
- Hands-on Labs

Lesson 7: Monitoring & Troubleshooting

- Monitoring using GEM, XMS & Swatch tool
- CLI commands
- Password recovery
- Hands-on Labs

Lesson 8: Application specific topics

- Architecture
- Performance
- Management

DAY 4:

Lesson 8: Application specific topics (continued)

- Configuring VAP groups, circuits, logicals
- Interface Configuration
  - Simple Interface
  - Multi-system High Availability
- Installing the Application
  - Manual installation
  - Installation using Automated Workflow System (AWS) if applicable
  - Applying updates/upgrading the application
  - Adding capacity – adding VAPs to existing VAP group
  - Monitoring from XOS
  - Application Monitoring tools
- Troubleshooting
  - Best practices
  - Log files
  - Application By-pass
  - Troubleshooting tools
  - Hands-on Labs

Crossbeam Certified Specialist Certification Test

ABOUT CROSSBEAM

We improve the sophisticated networks of enterprises, government agencies, and service providers by architecting platforms that are more adaptable, high-performing, reliable, and secure.