

# HP Education Services Course Description

ProCurve Networking Security V7.31 (HH254)



This 4-day course is designed to prepare network engineers and network administrators to configure, troubleshoot and implement ProCurve security features used for device management access control, control of user access to the network, and protecting the network from a variety of security breaches. ProCurve course number is 37798

## Audience

- ProCurve Networking channel partner systems engineers, network engineers and network specialists who design and deploy network security solutions
- ProCurve end user network engineers

## Prerequisites

- Adaptive EDGE Fundamentals (AEF v6.11 or higher)

## Course Objective

Learn how to:

- Describe and implement basic management security for ProCurve switches using local passwords, front panel security options and IP authorized managers
- Describe and implement advanced management security features for ProCurve Switches using RADIUS authentication, SNMPv3, SSH, SSL and a Secure Management VLAN
- Describe and deploy network protection features using port-based ACLs, user-based ACLs, port security settings, SNMP trap throttling, DHCP protection, Dynamic ARP protection and connection-rate filtering
- Track network problem events using the ProCurve instrumentation monitor and traffic mirroring features
- Describe and implement access control security using ProCurve device support for 802.1X, Web-based and MAC address-based authentication
- Perform basic troubleshooting of the deployed security features
- Design and implement a solution for network security based on the wide variety of ProCurve security features presented in this course

## Benefits to You

- Attendees will be able to sell and perform services which include design, deployment and support of secure ProCurve networks

## Why education services from HP?

- Experienced and best-in-the-field HP instructors
- Focus on job-specific skills
- More than 80 training locations worldwide
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**Course Title:** ProCurve Networking Security V7.31

**HP Product Number:** HH254

**Category/Subcategory:**

**Course Length:** 4 days; 60% lecture, 40% hands-on lab

**Level:** Intermediate level of proficiency

**Delivery Language:** Varies by country

**To Order:** You can order this course online at <http://www.hp.com/learn>. At the site, select a country, then choose "registration" or "Book a course" and fill out the online registration form

**Next Steps:** ProCurve Security v7.31 prepares participants for ASE – ProCurve Networking certification within the HP Certified Professional program. The exam number is HPO-Y11. The certification test is offered at Prometric test centers. For registration information, contact your HP representative or visit <http://www.procurve.com/network-training/certifications/index.htm>

## Detailed Course Outline

### ProCurve Security Overview

- Security challenges
- Layers of network security
- Network security process and framework
- Security standards-based foundation
- ProCurve ProActive Defense

### ProCurve Device Management Security

- ProCurve switch physical security
- ProCurve switch local passwords
- Authorized IP managers
- RADIUS authentication of management users
- SNMPv3 management access
- SSH management access
- SSL management access
- Secure Management VLAN

### ProCurve Network Protection

- Access Control Lists (ACLs)
- MAC lockdown
- MAC lockout
- ProCurve Port Security
- ProCurve Instrumentation Monitor
- BPDU filtering protection
- SNMP trap message throttling
- DHCP snooping protection
- Dynamic ARP protection
- Connection-rate filtering
- Traffic mirroring

### ProCurve Network Access Control Security

- 802.1X user authentication
- 802.1X user authentication with Open VLAN
- 802.1X user authentication with dynamic VLAN assignment
- Web-based user authentication
- MAC-based user authentication

- Introduction to IDM
- Implementing per-user access control using IDM

### ProCurve Troubleshooting

- Troubleshooting basics
- Information resources and tools
- Troubleshooting access control security

### ProCurve Network Security Design

- ProCurve security design procedure
- Customer, infrastructure and software requirements
- Network segment layouts and integration
- Design scenarios

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