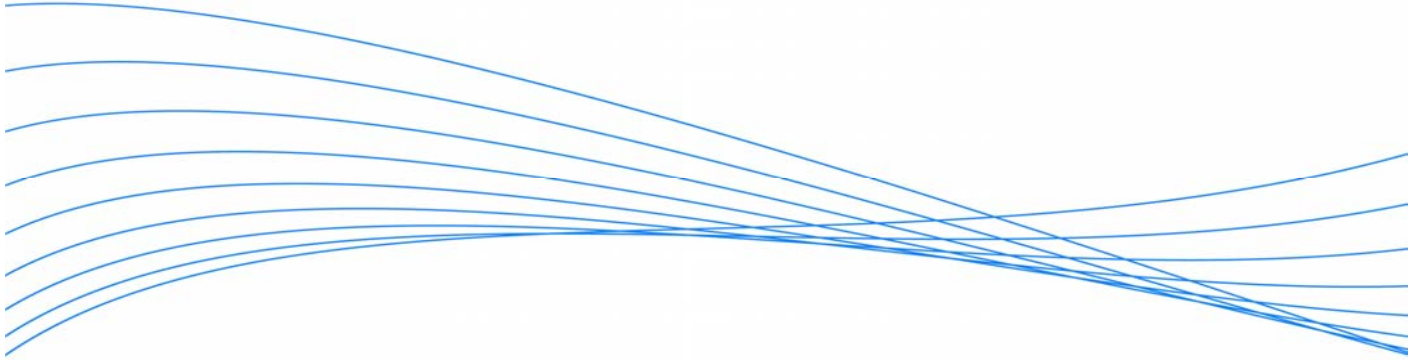


# IP Routing Foundations



## At a glance

IP Routing Foundations consists of four modules designed to prepare students for Routing Switch Essentials, a comprehensive instructor-led course on the configuration and deployment of the ProCurve 9300m Routing Switch series, the Switch 5300xl series, the Switch 3400cl series, and the Switch 6400cl series.

### Format offered

Self-paced. It is available as an Adobe pdf document as well as in a series of recorded webinar sessions (approximately 6-8 hours total).

### Audience

Networking professionals preparing for Routing Switch Essentials

### Prerequisites

Adaptive EDGE Fundamentals

### Elms code

24266

### Cost

There is no charge for this training

### Certification

IP Routing Foundations, along with Routing Switch Essentials, prepares students for one of the required exams for ASE – ProCurve Networking certification within the HP Certified Professional program.

There is no certification exam for this material, however you may be required to take a pretest before enrolling in the Routing Switch Essentials course. The pretest exam number is HP3-102. For more information on ProCurve Networking training and certification, go to

<http://www.hp.com/go/procurvetraining>

# IP Routing Foundations

## Benefits of attending the course

- Learn basic routing and traffic filtering technologies, including redundant default gateway protocols, Router Information Protocol (RIP), Open Shortest Path First (OSPF), and Access Control Lists (ACLs)
- Prepare for the *Routing Switch Essentials v5.11* instructor-led course

## Student performance objectives

After completing IP Routing Foundations, students will be able to:

- Describe common goals and tasks performed by default gateway redundancy protocols
- Provide details on operation of the Virtual Router Redundancy Protocol (VRRP) and its interaction with spanning tree
- Compare and contrast standard VRRP with proprietary default gateway redundancy protocols and enhancements
- List the types of local interfaces that may be defined on a router and applications for each interface type
- List the processes by which a router can learn about remote networks, including static routes and dynamic routing protocols, and describe how routes are redistributed among different processes
- Describe the functional differences between interior and exterior routing protocols
- Compare characteristics of distance-vector and link state-protocols and describe operation of the Routing Information Protocol (RIP)
- Describe how a router chooses the best route to an address range when multiple paths are reported
- Describe OSPF hierarchy and rules for router participation in information exchange
- List the benefits of defining multiple OSPF areas and describe inter-area information exchange
- Describe options for redistributing non-OSPF route information into the OSPF domain
- Describe the goals of IP traffic filtering and packet characteristics that can be used as selection criteria for special handling
- List common applications for traffic filtering and provide command examples using ACL syntax
- Describe how ACLs are used to identify packets for special handling such as prioritization and Network Address Translation

## Topics covered

- Redundant default gateways, VRRP, and VRRPE
- IP routing basics and RIP
- OSPF routing and its role in the contemporary network
- ACLs and their role in shaping traffic and limiting user access to network resources

To find out more about  
ProCurve Networking  
products and solutions,  
visit our web site at

[www.hp.com/go/procurve](http://www.hp.com/go/procurve)



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