# Virtual Private Networking with SonicWALL Technical e\*Training

Comprehensive Services from Your Trusted Security Partner

#### **Additional Information**

- A cost-effective, "anytime, anywhere" training solution
- In-depth, self-paced courses that are 6-8 hours in duration
- Available for 90 days after initial activation
- Recommended prerequisite for the Certified SonicWALL Security Administrator (CSSA) course and exam
- List price is \$350 USD;
  Free for SonicWALL
  Medallion Partners

#### Course Description:

The *Virtual Private Networking with SonicWALL* e\*Training course covers general VPN design concepts and technologies, their application via SonicWALL firewall products, installation, configuration and diagnostics. It also covers a general overview of Cryptography and IPSec implementation. Emphasis is placed upon underlying technologies, common configuration, and troubleshooting issues.

#### Who Should Attend:

Those persons tasked with the support, installation, deployment or administration of SonicWALL products including: System Administrators, Security staff, Firewall Administrators, Network Engineers, Pre-Sales Engineers, System Engineers, Reseller Support, Installation Consultants. Completion of this course is strongly recommended in preparation to attend the CSSA 1-day Lab Class and complete the CSSA certification exam.

## **Course Objectives:**

Upon completing this training course, participants should be able to:

- Understand VPN and its Underlying Technologies
- Design SonicWALL VPN Solutions
- Explain SonicWALL's VPN Implementation
- Install SonicWALL-to-SonicWALL VPN
- Understand SonicWALL-to-Other VPN
- Design & Install SonicWALL VPN Client Implementations
- Configure SonicWALL Advanced VPN Features
- Troubleshoot for Common Problems

#### Prerequisites:

- Basic knowledge of networking concepts including network topologies and an understanding of the OSI model of networking protocol stacks
- Understanding of TCP/IP, network addressing, and subnet masks
- Knowledge of basic router concepts
- This course is a prerequisite for all SonicWALL Instructor-led Training courses.





## Virtual Private Networking with SonicWALL Technical e\*Training

### Topics Covered in this Course include:

- VPN Foundations
  - Secure Access through the Internet
  - Types of Risks VPN Averts
  - o Other Problems VPN Solves
  - o How VPNs Work
  - o Types of VPNs
- Cryptography Overview
  - o Encryption Process
  - Ensuring Privacy
  - Ensuring Authenticity
  - Key Exchange Mechanisms
- Implementing an IPSec VPN
  - Components of IPSec
  - Creating an IPSec Security Association
  - Encryption and Authentication Options
  - IPSec Protocol Details
  - o Packet Handling in IPSec
  - IKE Management Protocol
  - o IKE Security Associations
  - IKE Details
  - o Fragmentation and Routing Issues in IPSec
- VPN Design Considerations
  - Defining a VPN Connection Security Policy
  - Design Considerations
  - Design Options for VPN
- SonicWALL VPN Technical Features
  - o VPN Features in SonicOS Standard and Enhanced
  - IPSec Support
  - NAT Traversal
  - VPN Bandwidth management
  - VPN Single Armed Mode
  - o RIP Broadcasts for VPN Tunnels
  - Digital Certificates PKI
  - NetBIOS over VPN
- SonicWALL VPN Configuration
  - Defining Security Associations
  - o Create a Manual Key Tunnel (Lab simulation included)
  - Create an IKE Main Mode Tunnel (Lab simulation included)
  - Extended VPN Features in SonicOS Enhanced
    - User-definable Networks
    - Group Access Policies
    - VPN Zones
    - Flexible NAT
    - Gateway Redundancy
  - o Extended Authentication (Lab simulation included)
  - Global VPN Settings
- Designing SonicWALL VPN Networks
  - Hub and Spoke VPN
  - Create a hub and Spoke VPN (Lab simulation included)
  - o VPN with NAT and Firewall Rules
  - Working with DHCP over VPN
- Global VPN Client
  - o Installing the Global VPN Client (Lab simulation included)
  - o Group VPN Policy
  - o Client Provisioning

