

# Implementing Secure Solutions with Virtual Private Networks

Course Code SVPN 5 days

#### Overview

The Implementing Secure Solutions with Virtual Private Networks (SVPN) course teaches you how to implement, configure, monitor, and support enterprise Virtual Private Network (VPN) solutions. Through a combination of lessons and hands-on experiences you will acquire the knowledge and skills to deploy and troubleshoot traditional Internet Protocol Security (IPsec), Dynamic Multipoint Virtual Private Network (DMVPN), FlexVPN, and remote access VPN to create secure and encrypted data, remote accessibility, and increased privacy.

## Audience

Network engineers responsible for selecting, designing and deploying secure solutions using VPNs.

# **Learning Objectives**

By actively participating in this course, you will learn about the following:

- Introducing site-to-site VPN options available on Cisco router and firewalls.
- Introducing remote access VPN options available on Cisco router and firewalls.
- Reviewing site-to-site and remote access VPN design options.
- Reviewing troubleshooting processes for various VPN options available on Cisco router and firewalls.

# **Pre-Requisites**

- Familiarity with the various Cisco router and firewall command modes
- Experience navigating and managing Cisco routers and firewalls
- Clear understanding of the benefits of site-to-site and Remote Access VPN options

## Recommended courses:

- CCNA Implementing and Administering Cisco Solutions
- SCOR Implementing and Operating Cisco Security Core Technologies

## **Course Contents**

#### **Introducing VPN Technology Fundamentals**

- Role of VPNs in Network Security
- VPNs and Cryptography

# Implementing Site-to-Site VPN Solutions

- Site-to-Site VPN Solutions Overview
- Cisco IOS VPN Point-to-Point Solutions
- Cisco ASA VPN Point-to-Point Solutions
- Cisco IOS VTI Point-to-Point Solutions
- Cisco DMVPN Solutions

## Implementing Cisco Internetwork Operating System (Cisco IOS®) Site-to-Site FlexVPN Solutions

- Overview of the Cisco FlexVPN Solution
- Point-to-Point Flex VPN
- Hub-and-Spoke FlexVPN
- Spoke-to-Spoke FlexVPN

# Implement Cisco IOS Group Encrypted Transport (GET) VPN Solutions

- Overview of Cisco GET VPN Solution
- Configure GET VPN

## **Implementing Cisco AnyConnect VPNs**

- Remote Access Overview
- Design Remote Access Solutions
- Basic Cisco AnyConnect VPN on Cisco ASA
- Advanced Cisco AnyConnect TLS VPN on Cisco ASA
- Advanced AAA in Cisco AnyConnect VPNs
- Cisco AnyConnect IKEv2 VPNs

## **Implementing Clientless VPNs**

- Remote Access Overview
- Design Remote Access Solutions
- Clientless TLS VPN Overview
- Basic Cisco AnyConnect TLS VPN on Cisco ASA
- Application Access in Cisco ASA Clientless VPN
- Advanced AAA in Clientless VPN

#### Labs

- Explore IPsec Technologies
- Implement and Verify Cisco IOS Point-to-Point VPN
- Implement and Verify Cisco Adaptive Security Appliance (ASA) Point-to-Point VPN
- Implement and Verify Cisco IOS Virtual Tunnel Interface (VTI) VPN
- Implement and Verify Dynamic Multipoint VPN (DMVPN)
- Troubleshoot DMVPN
- Implement and Verify FlexVPN with Smart Defaults
- Implement and Verify Point-to-Point FlexVPN
- Implement and Verify Hub and Spoke FlexVPN
- Implement and Verify Spoke-to-Spoke FlexVPN
- Troubleshoot Cisco IOS FlexVPN
- Implement and Verify AnyConnect Transport Layer Security (TLS) VPN on ASA
- Implement and Verify Advanced Authentication, Authorization, and Accounting (AAA) on AnyConnect VPN
- Implement and Verify Clientless VPN on ASA

#### **Exam Details**

This course leads to the 300-730 - Implementing Secure Solutions with Virtual Private Networks (SVPN) exam.

Successful completion will earn you the Cisco® Certified Specialist - Network Security VPN Implementation certification and satisfy the concentration exam requirement for the CCNP Security certification.

#### Further Information

For more information or to book this course, please contact our Course Enquiries Team on **01752 227330** (Option 2) or email us at <a href="mailto:enquiries@skilltec.co.uk">enquiries@skilltec.co.uk</a>.