

Course ID
BHAUL-SEC
Course Duration
1 day

Course Title
Mobile Backhaul Security

Related Courses

- Mobile Backhaul Business and Technology Briefing™ (BHAUL-BRIEF, 1 day)
- Mobile Backhaul Market Briefing (BHAUL-MKT, 1 day)
- Mobile Backhaul Application Case Studies (BHAUL-APP, 1+ days)
- Mobile Backhaul Architecture and Implementation (BHAUL-AI, 3-4 days)
- Mobile Backhaul Standards and Protocols (BHAUL-STND, 3-5 days)
- Mobile Backhaul End-to-End (BHAUL-E2E, 1 day)
- Principles of Network Security: CompTIA Security+ and US DoD Directive 8570.1 (NETSEC, 3-4 days)
- Security, Privacy and Information Integrity for Managers Executives, and Policy Makers (SECURITY-EXEC, 2-3 days)
- IP Security (IPSec) Architecture and Protocols (IPSEC, 2-3 days)

Aimed At

Persons responsible for the security of mobile wireless backhaul will find the greatest value in this course.

Group Size

5-25

Prerequisites

Prior experience in network security and information assurance is a pre-requisite.

Course in a Nutshell

Security and integrity of information from sender to receiver across a network and all of its various components is a complex subject. This course focuses on mitigating vulnerabilities in the physical mobile wireless system as well as the Layer 2 component as L2 frames and their contents travel across the mobile wireless backhaul.

Customize It!

This briefing can be scheduled as a one-day standalone course or part of a larger curriculum. Any single module or selected modules may also be scheduled for web delivery. The course can be optionally taught as a hands-on workshop at no added cost.

Learn How To

- Identify the dependencies of L1 and L2 mobile backhaul security mechanisms and higher layer security mechanisms
- Assure security of information while it is in the mobile backhaul portion of the connection
- Verify that the mobile backhaul portion of the end-to-end connection is not the weak link in overall information security.

**Course
Outline**

Security Introduction

A high level overview of the topic and the briefing.

Security and Privacy

- Layer 1 Issues
 - Physical Security
 - POP/CO
 - CoLo
 - Racks / Equipment
 - Power / HVAC
 - Eavesdropping / Signals Intelligence
 - Metallic
 - Fiber
 - Wireless / RF
 - Wireless / Optical
- Layer 2 Issues
 - Data Link Level Security
 - Client Tunnels
 - Carrier / Service Provider Tunnels
 - Layer 2 Security Mechanism Review
- Higher Layer and Application Layer Security
- Encryption
 - Layer 1 (Bulk Encryption)
 - Layer 2
 - Higher Layer
 - Issues
 - Performance
 - Troubleshooting

Top Threats to Mobile Backhaul

- Threat #1: Physical Service Interruption, HVAC, Power, EMP/HERF
- Threat #2: Denial of Service (DoS)
- Threat #3: Eavesdropping / Wireshark / Sniffers
- Threat #4: Insider Threat
- Threat #7: Unknown Risk Profile

Security Review and Summary

A review of the briefing topics and summary of the program.