

# Troubleshooting Expert CTE (R81.20)

**Course Duration : 32 Hours**

**Course code : CTE-R81.20**

## 1. Course Overview

The **Troubleshooting Expert CTE (R81.20)** course is designed for security professionals who want to master advanced troubleshooting techniques for Check Point environments. This course focuses on identifying, analyzing, and resolving complex security gateway and management issues.

## 2. What you'll learn?

- Advanced Check Point architecture troubleshooting
- Traffic flow and packet analysis
- VPN and NAT troubleshooting
- Performance and connectivity issues
- Logs, debugging, and diagnostic tools
- Best practices for issue resolution

## 3. Target Audience

- Check Point security engineers
- Network and firewall administrators
- Technical support engineers
- Security consultants
- Experienced IT professionals

## 4. Pre-Requisites

- Check Point CCSA certification or equivalent knowledge
- Strong understanding of networking concepts
- Hands-on experience with Check Point firewalls

## 5. Course Content (Modules)

### **Module 1: Advanced Check Point Architecture**

- Deep dive into gateway and management components
- Traffic inspection flow

### **Module 2: Traffic, NAT, and VPN Troubleshooting**

- Packet flow analysis
- VPN and NAT issue resolution

### **Module 3: Performance and Connectivity Issues**

- CPU, memory, and throughput troubleshooting
- Network connectivity issues

### **Module 4: Logs, Debugging, and Diagnostics**

- Smart Log and monitoring tools
- Debug commands and analysis

### **Module 5: Advanced Troubleshooting Best Practices**

- Real-world troubleshooting scenarios
- Optimization techniques