

Course Name: Selling and Supporting Video Surveillance Applications

Course Length: 2 days

Course Overview:

The demand for wireless surveillance systems is rapidly growing. This technology combines video, wireless technology and networking technologies and can initially be intimidating. This training class is a unique combination that will allow non-technical professionals the ability to understand the basics while enabling technical professionals to further their knowledge about the latest video surveillance applications.

- Module I: Video Industry, Applications, Benefits and Networks with Equipment Demonstrations
- Module II: Overview of Installation and Maintenance of IP Video Networks

Who should attend?

- Anyone considering migrating to IP Video Surveillance
- Value-Added Resellers
- Sales Professionals
- Municipality Staff
- Government Planners, Engineers or Technicians
- Educational Staff
- Security Managers and Staff
- Government Agents and Security Staff
- Traffic Operators and Engineers

You will learn:

- Trends and Applications Driving Broadband Video
- Legal Side of IP Video Surveillance
- Video Equipment and Networks
- Overview of IP Video Surveillance Technology and Security Basics
- Networking Requirements for IP Video
- Basic IP Video Network Design
- Common IP Video Applications and Deployment
- Basic Testing and Troubleshooting of the IP Video Network
- Hands-on Use of IP Network Equipment and the Configuration of Video Surveillance Systems

Prerequisites: None

Customizable Course: Yes

Course Outline:



Module I: Video Industry, Applications, Benefits and Networks

IP Video Security and Surveillance

- Basic Overview
- Applications for Video Surveillance
- Components of Video
- Benefits and Challenges of Video
- Bandwidth and Throughput
- Planning for the Network

Video Networks and Equipment

- Cameras & Recorders
- Copper, Fiber or Wireless?
- Backhaul Considerations
- IT/Networking Considerations
- Networking, Planning and Engineering
- Verifying Quality Video Service

Video Software

- Video Management Software System Basics
- Camera Configuration
- System Setup and Configuration
- DVR, NVR, RVR
- Monitoring Tools
- Alarming
- False Alarm Detection
- Intelligent Video Analytic Tools
- Intelligent Motion Detection
- Intelligent Object Detection
- Setting Filters and Alarm Triggers
- Setting Virtual Borders and Areas
- Quick Review and Audit of Recorded Video – Smart Monitoring and Smart Search Techniques
- On-demand Recording Configuration – Reducing Storage Capacity

Understanding the Legal Side of Surveillance

- Liability for Installed Surveillance Cameras
- Legal Requirements for Surveillance Camera Installation
- Parameters for Privacy
- The Legal System & Whether Video is Admissible

Equipment, Network and Software Demonstrations Version 1.2 11/5/2007

Module II: Overview of Installation and Maintenance of IP Video Networks



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Basic Networking Review

- OSI Model
- IP Addressing
- TCP/IP Networking
- IP Routing

Video Network Backbones – LAN and WAN Technologies

- Networking for Video Solutions
- Wireless and Wireline Network Options
- 802.3 – Ethernet 10/100/1000Mbps
- 802.11– WiFi
- 802.16 – WiMAX
- Mesh Network Technology
- Fiber Optics
- Internet Access

Network Design for Video Surveillance

- Basics of Video Network Design
- Bandwidth Requirements and Calculation
- Camera Selection and Placement
- Storage Systems and Requirements
- Backups and Redundancy
- QoS Implementation
- Workstation Configuration
- Wireless System Design

IP Video Hardware & Software

- Types of IP Network Cameras
- Video Servers and Recorders
- Cabling
- IP Network Hardware – Routers, Switches, Wireless Access Points, Firewalls
- Computers and Workstations
- Server Software

Installation Testing and Troubleshooting

- Common IP Routing Configuration Problems
- IP Video Network Testing and Troubleshooting Tools and Techniques
- Common Installation and Connectivity Problems
- Camera Installation Troubleshooting
- Testing the Network

