

## Bosch Video Management System 3.0

- Course Title:** Bosch Video Management System 3.0
- Duration:** 3 Days
- Target Audience:** Technicians, Project Managers and IT Professionals
- Total Attendees:** 10
- Objectives:** Upon successful completion of this course the participant should be able to:
- Describe Bosch Video over IP (BVIP) Equipment
  - Define basic encoder configurations and capabilities
    - Configure using BVMS
  - Define basic RAID concepts
    - DLA Storage Appliances and NetApp Options
  - Describe how to design, implement and install
    - iSCSI
    - Edge Recording
  - Describe BVMS System Architecture and Equipment
  - Define basic system configurations
    - Logical Tree concept
  - Install and Configure BVMS from an administrative standpoint, to include:
    - Encoders
    - Decoders
    - Schedules
    - Maps
    - Favorites
    - Users and User Groups
  - Perform Basic Alarm Configurations
  - Install and Configure Bosch's VRM (Video Recording Manager) within BVMS
  - Pass the Final Written and Practical Exams with a 75% or higher score
- Prerequisites:** Read Bosch's Networking Essential Handbook.

## **Course Content:**

### **Module 1: Encoder Technical Aspects and Video Basics**

- Video Basics
  - ONVIF
  - CIF, 2CIF, 4CIF
  - GOP: Frame Basics
  - MPEG-4 and H.264
- Family of Products
  - TI Based Encoders
  - TI + Based Encoders
  - ARM Based Encoders
- Technical Aspects
  - Firmware life cycle
  - Networking Capabilities and Port Usage
- HD Definition Basics

### **Module 2: BVMS Technical Overview**

- BVMS Overview
- System Compatibility and Capacity
- Server Requirements and Hardware Restrictions
- Applications and Services
- BVMS Communications

### **Module 3: BVMS Licensing**

- Licensing Basics
- Packages and Bundles
- Licensing Overview
  - Lite
  - Pro
  - Expansions
  - Demo Packages
- Activation Website
- License Activation

### **Module 4: Encoder Detection and Configuration (Configuration Manager / X1600 Guide Book)**

- Scanning the network via Configuration Manager
- Encoder IP assignment
- Firmware Update

### **Module 5: Configuration Client and Device Tree**

- Using Configuration Client
- Saving and Managing Configurations
- Adding DiBos and NVRs
- Adding Workstations and Decoders
- Adding Allegiant and other devices
- Adding Encoders

## **Module 6: Configuring Encoders**

- Encoder Utilities
- Main and Advanced Settings
- Network Settings
- Stream Quality Settings

## **Module 7: Logical Tree**

- Logical Tree Menus
- Adding Devices
- Adding Folders
- Adding Documents. Web Pages
- Adding Maps
- Scripting

## **Module 8: Schedules and Camera Configurations**

- Schedules
- Holiday and Exceptions
- Camera Configurations and PTZs
- Local Recording Menus
- Stream Configuration
- Recording Settings

## **Module 9: Users and Groups**

- Adding Groups
  - Groups Properties
  - LDAP
  - Logical Tree Permissions
  - Device Permissions
- Adding Users

## **Module 10: Alarms and Events**

- Events
  - Scheduling Events
  - Compound Events
- Alarms
  - Basic Jobs
  - Alarm Properties

## **Module 11: Operator Client**

- Main Page layout
- Menus and Submenus
- Right-click Menus
- Playback Options
  - Events Searches
  - Forensics Search
  - Exporting

## **Module 12: RAID 101**

- RAID Concepts
  - RAID 0
  - RAID 1
  - RAID 4
  - RAID 5
  - RAID DP

## **Module 13: BVMS Recording Options and iSCSI Concepts**

- Edge
- NVR
- iSCSI / NAS or DAS
- VRM

## **Module 14: Basic Retention Concepts**

- Retention Time (pipes and buckets)
- Factors that affect retention time
- Storage, data throughput, and networking together
- Designing basic systems (Retention Calculator)
- Calculator exercises

## **Module 15: Bosch DLA Storage Appliance**

- DLA Storage Appliance Overview
- DLA Re-Imaging
- DLA Disk Replacement

## **Module 16: NetApp iSCSI Raid Devices**

- FAS2020 and 2040 Overview
- Adding Disk Shelves
- Initial Configuration
- Emergency Rebuild Procedures

## **Module 17: VRM Installation and Configuration**

- VRM requirements
- Adding VRM and Storage to BVMS
- VRM Overview
  - All
  - Restricted
  - Failover
  - Preferred
  - Continuous
- Installation and Configuration
  - BVMS Configuration Client
  - VRM Monitor
  - Adding Storage
  - Adding Devices

## **Module 18: VRM Installation and Configuration (continued)**

- Troubleshooting
  - Debug and Log Training

## **Module 19: Final Exam / Reviews**

- Students TEST out and are Graded!
- Course Reviews

### **Practical Content:**

At least 75% hands-on

### **Written Exam:**

At least 75% correct

ical Content: At least 70% hands-on