Applications of the Most Modern and Effective Video Surveillance Design Principles and the Most Utilized Intelligent Network Video in Security Surveillance Toolkit

The rapidly changing marketplace, public safety, risk management, increase need for forensic investigation, as well as developments in video surveillance technology necessitates a training that not only is informative but also serves as a valuable source of reference.

Are you ready to enhance your understanding of Modern Video Surveillance System?

This four days Inaugural System Network Based-VSS Applications Seminar is focuses on:

- Engineering methods to achieve high reliability and availability and optimize system performance through strategic application of reliability techniques.
- Presenting methodologies that clearly explain system design considerations, configuration of system devices, the process of recording and exporting video, and how to troubleshoot issues occurring during operation.
- Delivering proven strategies to successfully design, developed, install, operate, maintain, and manage an IP-network driven video surveillance system.
- Demonstrating how video surveillance systems are design, implemented and managed to facilitate forensic review, identification and recognition.
- Benchmarking your traditional Analog-CCTV Surveillance against Modern IP-Video Surveillance System in the market place.
- Demonstrating how digital video management system can be enhanced with video analytics and enable the organization to cost efficiently and proactively monitor large video surveillance installations.
Is your company ready to?

Adapt | Implement | Improve

Today’s security managers face increasing pressure from employers, police commissioners and educational institutions to implement effective video surveillance systems that can reduce threats, vulnerability and risk associate with organization and city security and safety. An understanding of advancement in new technology can help accomplish these conflicting goals.

Without adequate security planning, even the most efficient and seemingly effective law enforcement practices can experience enormous threats due to repeated or undetected crime and subsequent search for offenders.

This comprehensive, hands-on seminar, designed for both the new and seasoned practitioner, provides you with all the tools you need to help initiate your video surveillance system design. Learn about the development and use of world class system design and applications for improving security level in your company or city.

This course provides a comprehensive review of the various aspects of surveillance performance for systems designed for access control, license plate recognition, crime detection, and facial recognition applications. Principal emphasis is placed on the primary means of achieving system effectiveness, which is the deterrence of a crime or high probability of recognition.

It builds on a focused and practical coverage of video surveillance system design considerations and selection of components and provides structured and systematic approach for system configuration and integration.

It also underscores the importance of interactions and cooperation between the three key functions of system design, network integration and system sustainment in achieving the optimum reliability and availability level in the system performance. It enforces key troubleshooting issues with a practical process for finding a solution.

With an accessible blend of video network surveillance security rigor and simplicity, this course is the ideal workshop for novice and expert parishioners seeking to increase recognition and crime detection capabilities at selected locations within their organization or city while providing added security.

Course Objectives

The key general objectives of this course are as follows:

- Provide the scope of technical information required to enable participants to make intelligent selection of VMS and appliances for use with the video surveillance system.
- Provide the means for enhancing the knowledge and skills of the participants in configuring and programming a digital recording device and also configuring an IP Network for a video surveillance system.
- Provides participants with the latest practical methods and tools required for developing an overall process flow for their organization’s video network surveillance system.
- Provide comprehensive details of the fundamentals of the various technologies currently been applied in video network surveillance system applications to enable participants to recommend solutions that are functional, practical and achievable to their organization.
- Discuss the relevance of commissioning system to enable participants to gain an appreciation of the importance of correct and safe installation of appliance in enabling the system to operate as design intended.
- Share information that enables participants to develop and enhance their understanding of video network security and functionality: DHCP, HTTPS encryption, IP address filtering, 802.1X for port-based authentication and IPv6 which supports the next IP addressing standard.
- Present content in such a manner that enables participants to develop knowledge of how to diagnose and troubleshoot issues occurring during operation of the system.
- Systematically outline and illustrates how video surveillance design considerations can be used in the selection of appliance, cables and WMS software required for participants video network surveillance systems.

Training Methodology

This course combines sound video network surveillance system design, engineering concepts, and the best industry practices and practical solutions. It offers comprehensive coverage of network application for video surveillance and various requirements. It presents both analog-CCTV and IP Video Surveillance design to allow for system comparison.

It places all surveillance function and purposes in context and demonstrates the security principles and trade-offs between video recording schedule and storage requirements. Actual industry application as well as organization’s experience will be reviewed in depth to reinforce every topic.

The course also comprise of lectures, and video demonstration to maximize participant’s benefits. Additionally, an optional “Question and Answer” period is included to provide participant with opportunity to get expert answers on their specific questions.
Design and Applications of IP VSS

Who should participate in this training?

This program is particularly valuable as a must-have comprehensive technical training for managers and engineers, in Security, Operators, Administrators, IT Staff and Police Officers, as well as anyone involved in designing, developing, implementing, administering, integrating, and maintaining the latest surveillance systems.

System Designers: Shall be exposed to various factors that must be considered during planning, system design, installation, operation and system maintenance. They will be exposed to different types of system design and learn how to design system that control or reduce security threats, risk and vulnerability. Ultimately develop a design flow of network monitoring system.

System Administrators: will be able to develop understanding of various elements of the surveillance system so they can relate to system design, functional, performance and security capabilities and ultimately make the best use of this information during configuration and operation of system.

Managers: will find the business aspect of security applications helpful for measuring reliability and cost performance of system installed. They will gain understanding of selecting a particular design for implementation and the cost as well as the effectiveness of the system in detecting security threats.

System Integrator: They will learn what is required to operate the system, configure different equipment, export video, manipulate VMS software and be aware of privacy issues and legal implications relating to the operation of the surveillance system. They will also be exposed to factors essential for successful integration of elements of system architecture.

IT Staff: They will learn how the VSS interface with their network, and also options for having a separate network for VSS. They will also develop an understanding of how video surveillance works and network requirements that will help them determine how they can provide technical support.

System Operators: They will learn how devices are configured, how image are captured and transmitted, how to record and export video. In addition, also develop an understanding of the legal ramifications before use. At the end of the training they will be aware of the requirements placed on them by these laws and procedures that should be in place to enable them to comply.

Police Officers: They will learn how to use system to managed and facilitate forensic review, identification and recognition and how to utilize video analytic with ALPR and FR technologies.

Prerequisite

There are no course prerequisites, anyone with an interest in IP Video Surveillance, whether you are an engineer, sales consultant, police officer or operator this course will provide you with a solid base to further your knowledge and enhance your understanding of this modern security application.

Organizational Impact

- The company will be able to achieve measurable improvement in video surveillance security, crime detection capabilities and recognition capabilities by identifying system design and implementing this new design applications recommended by delegates.
- The company will be able to use vulnerability and risk assessment principles to quantify and prioritize risks, and to allocate resources for optimum benefits.
- The organization will be able to enhance its ability to utilize modern video surveillance operations to potentially deter crime, improve identification and recognition, resulting in improvement in security level or forensic capabilities.
- Recommendations provided by participant relating to the implementation of Intelligent Video Analytics (IVA) will enhance digital video management system and enable the organization to cost efficiently and proactively monitor large video surveillance installations.
- Recommendations provided by participant relating to Video Management System (VMS) will enable company to minimize staffing while increasing security level.

Competencies Emphasized

- Surveillance system designed for effectiveness in accordance with capabilities and approaches to develop a motion detection and recognition system that capture images from a scene then transmit video which can be used as evidence.
- Management of video surveillance systems by means of VMS and intelligent video analytics.
- The identification and assessment of system performance degradation mechanisms and the failures they may cause.
- System vulnerability identification, risk analysis and effective management of video surveillance system.
- Application of diagnostic and troubleshooting methodologies and capabilities in the identification, and solution of system issues.
- Utilizing video surveillance system design considerations in the development of dependable surveillance security system.
- Network functionality and security definition, identification, interpretation and demonstrate understanding of issues.
Personal impact after completion of training:

- Participants will enhance their knowledge and expertise in application of video analytics, and will be equipped with effective guidelines to perform selection of a video analytic solution.
- Participant will gain a sound working knowledge of modern video network surveillance system that will enable them to promote innovation.
- Participant will extend his or her knowledge of criteria’s used for the selection IP cameras for their network as well as distinguish between cameras used for Facial Recognition (FR) and ALPR.
- Participants will expose to different safety standards which the video surveillance system has to comply with before deployment. This will provides them with the knowledge for verifying safety compliance.
- Participants will enhance their core competencies and understanding of what is required to operate system, configure different appliance, export video, manipulate VMS software thereby improves their particular strengths and performance levels as well as making additional value added contributions to their organizations.
- Participant will gain a working knowledge of the techniques of managing video surveillance system and the ability to apply them effectively in improving security level at the organization.
- Participants will enhance their understanding of the general principles and practice of modern video network surveillance as well as how to develop system operational requirements.
- Participant will be able to explain where and when they should invest company’s resources to maximize the potential of video surveillance capabilities as well as developing a solid plan for action for strategy implementation.
- Given a set of operational failure data participants will be able to determine system availability and make decisions regarding system performance.
- Participants will enhance their understanding of privacy issues associated with the use of video surveillance system and camera codes of practice.
- Participants will also enhance their knowledge of all the documentations a contractor must provide when handing over the IP video surveillance system.

Implement modern video surveillance system to reduce security threats, risk, and vulnerability and increase security level.
Day 1 – Schedule based on seminar date

8:30 - Registration & Morning Coffee

9:00 - Chairman’s Opening Remarks

9:15 AM – 4:45 PM Module 1

Fundamentals of IP-Based Surveillance System

- Overview of IP-Based Network Video Surveillance System
- Overall Process flow of Network Video Surveillance System
- Video Surveillance Classification
- Introduction to Digital IP-Based Surveillance technology
- Network Video Surveillance Principles of Operation
- Video Surveillance Administration and Provisioning
- Video Surveillance Procedures and Policies
- Transmission methods: Optical Fiber, coax, twisted pair, and free space
- Elements of a basic IP-Based system: Camera, monitor and digital recorder.
- Camera types and uses: Fixed and movable, indoor and outdoor, monochrome and color, day and night.
- Camera specifications: Sensitivity, signal to noise ratio and resolution.
- Lens types: Fixed and variable focal length; manual and motorized zoom.
- Scene illumination: Lighting considerations, LED’s, infrared lamp maintenance and bulb life. Lighting and how to measure it
- Assessing Video Image Quality

The emphasis here is for the operator, administrator and managers to develop understanding of various elements of the surveillance system so they can relate to system design, functional, performance and security capabilities and ultimately make the best use of

12:00 PM – 1:00 PM - Networking Lunch

2:30 PM – 2:45 PM - Tea and Networking

5:00 PM – Chairman’s Closing Remarks
### Seminar Content * Course Code – LIS 200

**Day 2 – Schedule based on seminar date**

**8:30** - Registration & Morning Coffee

**9:00** - Chairman’s Opening Remarks

**9:15 AM – 3:45 PM - Module 2**

**IP Video Surveillance System Design and Operation**

- Understanding IP-Based system design and product selection
- Design of Video Surveillance System for video Quality
- Relevance of the Operational Requirements
- Executing operation as documented in established process
- Procedures and instructions for operating surveillance system
- Configuring equipment [camera, NVR] for Successful Surveillance
- Capture, Recording footage, Saving and review of Video Footage
- Exporting/Archive video files and Security Concerns
- Application of Video Management Software
- Report Generation Using the Software
- Privacy Issues and Surveillance Camera Codes of Practice

*The emphasis here is for the operator, administrators and managers to understand what is required to operate the system, configure different equipment, export video, manipulate VMS software and be aware of privacy issues and legal implications relating to the operation of the surveillance system.*

**10:30 AM – 10:45 AM – Coffee and Networking**

**12:00 PM – 1:00 PM - Networking Lunch**

**3:00 PM – 3:15 PM - Networking Lunch**

**2:30 PM – 2:45 PM – Coffee and Networking**

**4:00 PM – Chairman’s Closing Remarks**
Seminar Content * Course Code – LIS 200

Day 3 – Schedule based on seminar date

8:30 - Registration & Morning Coffee
9:00 - Chairman’s Opening Remarks
9:15 AM – 12:15 AM - Module 3
Elements of IP Video Surveillance Installation
9:15 AM – 10:45 AM

- Items Required for Installation
- Understanding System Design Drawing
- VSS Validation: System Audit, Commissioning of Electronics Surveillance
- Cables Utilized for Network Video Surveillance System
- Handling video and data storage media
- Setting up digital video recorders
- Storage Calculations and Servers | Calculate Storage Requirements
- Considerations for Camera Installations
- Maintenance of Video Surveillance Systems
- System Safety Considerations
- Electromagnetic Compatibility Directive
- UL 60950-1 Standard: Power Supply Safety Standard

12:15 PM – 1:25 PM - Networking Lunch

The emphasis here is for the operator familiar with the system that is installed and he/she will be monitoring.

1:30 PM – 3:45 PM - Module 4
Basic IP Video Surveillance Troubleshooting

- Identifying faults in video transmission systems
- Identifying insertion losses using CAT5 cable
- Re-setting camera tracking and focusing
- Recognizing Display and termination faults
- Network Video Surveillance Diagnostics
- General Problem and Solutions for IP Camera
- Diagnostic/Troubleshooting procedures/flow charts for (No video, No PTZ, Poor video, IP Network issue, no connectivity, video management system issues)
- General Problems and Solution for NVR
- Surveillance system Diagnostic Flow (can’t log in, PTZ problem, record & playback problem).
- Creating a support ticket | Request for Maintenance Actions

The emphasis here is for the operator and administrator to be able to recognize and diagnose basic issues then write up a report ticket.

2:30 PM – 2:45 PM – Tea and Networking

4:00 PM – Chairman’s Closing Remarks
Day 4 – Schedule based on seminar date

8:30 - Registration & Morning Coffee
9:00 - Chairman’s Opening Remarks
9:15 AM – 2:45 PM - Module 5

Advancement in Video Surveillance Technologies
- Digital Sampling and Compression Techniques
- Mega Pixel and High-definition Technology
- Display screens, VMS application
- Capabilities of Video Analytics
- Risk Analysis and System Vulnerabilities
- Reliability and Availability Analysis of Failure Data
- Introduction to LPR and Face Recognition Technologies
- Management of Modern Network Video Surveillance System

10:30 AM – 10:45 AM - Tea and Networking

12:00 PM – 1:00 PM - Networking Lunch

The emphasis here is to expose administrators, managers of capabilities of system installed, advantages of incorporating Video Analytics as an integral feature of the system. It also aims to introduce them to the benefits of having a risk analysis, availability and reliability analysis done when the system is experiencing failures.

LebenTech’s courses are extensively researched and structured to provide intensive and intimate professional development applicable to your organization. The program is presented in conjunction with SALTEX Group.

3:00 PM – 3:35 PM – Presentation of Certificate

4:00 PM – Chairman’s Closing Remarks
Details of Your Course Presenter

Lennox Bennett

Mr. Lennox Bennett is the founder and lead Reliability Engineering consultant at LebenTech Innovative Solutions Inc. He has more than 20 years of experience providing engineering services. His extensive experience includes application of modeling and analysis within the appliance, broadcast and wireless communication, beverage manufacturing, telecommunication, printing, utility, bauxite mining and security industry. Lennox has detailed knowledge of reliability concepts and application of these concepts to real world situations.

He is an expert in developing and peer reviewing reliability studies of devices in system operations. His demonstrated analytical abilities in the application of verification, validation and audit of video network surveillance system, fault tree techniques, reliability modeling, engineering risk assessment, Failure Mode Effect and Criticality Analysis, system maintenance planning, vulnerability studies has been used extensively by industrial companies.

His deep experience in developing appropriate solution for process operations to support performance improvements within industrial organizations have saved companies great amounts of time and money. He demonstrates how you and your team can make value based video network surveillance improvement decisions, effectively utilize your resources, work expertly in the least time necessary, and continually improve your video network surveillance security level at your organization. Mr. Bennett holds an M Sc. in Industrial Engineering from California Polytechnic State University and is a B Sc. in Manufacturing Engineering, from the University of Miami.

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Testimonials from past training events

**Lecturer** University of Technology Jamaica – Commented that the training material is very relevant to students and Lennox is very knowledgeable of subject and has excellent presentation skills.

**Manager** National Water Commission - Lennox is very knowledgeable in reliability and maintenance. Training will help us to better analyze current failures and in the selection of maintenance strategies.

**Engineer** Jamaica Public Service - The details provided on power system reliability could not be explained better for me to gain a better command of the subject. I now have a good understanding of reliability assessment methods.

**Maintenance Engineer** JAMACO – The training helps me realize how limited my knowledge of world class equipment maintenance was. I have taken away new and extensive knowledge to share with my team.

**Student** University of Technology Jamaica - The training will help students become more marketable in the work environment and will impact their employment prospects.

**Reliability Engineer** Desnoes & Geddes Limited (Red Stripe) - The training provides the opportunity to get clarification on reliability concepts I misunderstand. I will definitely recommended to other team members.
Design and Applications of IP Based Video Surveillance System
Workshop • Date scheduled based on request

PRICES AND OFFERS

Early Bird Discount
\( \square \) I am registering 3 months before to save US $500 off the seminar price

Seminar Information | Normal Price
---|---
\( \square \) 4 Days Seminar | US$1995
\( \square \) Register on or 2 months before | US$1795
\( \square \) Register on or 1 month before | US$1695

DELEGATE DETAILS

Please photocopy for additional delegates or of delegates with different address

DELEGATE 1

Name: ____________________________
Job Title: ____________________________
Organization: ____________________________
Address: ____________________________
Postcode: ____________________________
Country: ____________________________
Date received: ____________________________
Telephone: ____________________________
Fax: ____________________________
Department: ____________________________
Title: ____________________________
Name of person completing form if different from delegate
Signature: ____________________________ Date: ____________________________

I agree to LebenTech’s payment terms

\( \square \) I am registering as a delegate; please send me an extra set of Seminar Documentation with Audio CD with a US $50 discount: US $300

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Please indicate if you have already registered by Phone \( \square \) Fax \( \square \) Email \( \square \) Web \( \square \)

Please note: If you have not received an acknowledgement before the seminar, please call us to confirm your booking.

PAYMENT METHODS

\( \square \) By Check / Bank Draft: Made Payable to LebenTech

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All bank charges to be borne by payer. Please ensure that LebenTech receives the full invoiced amount.

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PAYMENT TERMS

Payment is required within 5 working days on receipt of invoice. If a booking is received 10 working days before the seminar a credit card number will be taken to confirm your place, likewise if full payment has not been received before the seminar date.

5 WAYS TO REGISTER

Phone: 954-796-7107
Fax: 954-321-4784
Post: P.O. Box 670832 Coral Springs, FL 33067
Online: www.lebentech.com
Email: info@lebentech.com

TEAM DISCOUNT

LebenTech recognizes the value of learning in teams. Group bookings at the same time from the same company receive a discount:

\( \square \) 2 or more 7%  \( \square \) 3 or more 10%  \( \square \) 5 or more 15%

This offer is exclusive of the early bird discount. Call us for a special discount rate for teams of 10 and above (Not applicable to workshop only bookings).

VENUE & ACCOMMODATION

Venue: To be announced

Accommodation: Hotel accommodation and travel costs are not included in the registration fee. A reduced corporate room rate has been arranged at the hotel for attendees at this seminar. We will provide hotel contact information, so you can take advantage of this special rate. Kindly mention you are attending the Design and Application of IP Video Surveillance System to obtain the special room rate.

SEMINAR DOCUMENT & AUDIO CD

\( \square \) I am registering as a delegate; please send me an extra set of Seminar Documentation with Audio CD with a US $50 discount: US $300

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TERMS AND CONDITIONS

Cancellation, Postponement and substitution policy - You may substitute delegates at any time. For cancellations received in writing more than seven (7) days prior to the Seminar, you will receive a 100% credit minus US$100 service charge. For cancellations received less than seven (7) days prior to the event, no credit will be issued. In the event that LebenTech cancels an event, delegate payment at the date of cancellation will be credited to company. In the event that LebenTech postpones an event, delegate payments at the postponement date will be credited towards the rescheduled date. If the delegate is unable to attend the rescheduled event, the delegate will receive a 100% credit representing payments made towards a future LebenTech event. This credit will be available for cancellation or postponement.

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Program Changes - Please note that speakers and topics were confirmed at the time of publishing however, circumstances beyond the control of the organizers may necessitate substitution, alteration or cancellation of the speakers and/or topics. As such, LebenTech reserves the right to alter or modify the advertised speakers and/or topics if necessary. Any substitution or alteration will be updated on our web page as soon as possible.

Workshop changes - Please note that the Seminar is subject to limited availability. Seminars may be conducted as closed forums and as such LebenTech reserves the right to decline individual registration as necessary.

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Please do not pass my information to any third party.
LebenTech Innovative Solutions, Inc.
Company Registration No. 3,243,035
This training serves as a comprehensive resource of the technology and applications of network video for surveillance systems applications. It provides a special focus on the product and technology advances in network video applications over the years, and sets out what to must be understood from system design perspective, regarding component selection, network capabilities, for successful deployment and safe use of system.
**Fundamental System Design Techniques you can utilize to Transition from Analog-CCTV System to a modern IP-Based Video Surveillance System.**

In this seminar we are presenting an integrated approach to video surveillance system design and demonstrating how the system appliances can be configured. *Design and Applications of IP-Based Video Surveillance System* consist of 5 modules that span every aspect of video surveillance systems and network cameras to wireless technologies and system design, video analytics, system availability and reliability. Each module outline in the table of content includes brief subsections so that you can fully gauge the extent of each topic. Covering the A through Z of IP Video Surveillance from an enhanced technical perspective, this program has been devised to develop the skills of practitioners in design, consultancy and security.

It incorporates numerous illustrations from city installation, ALPR application at toll booth, system design, and brief discussion relating to Facial Recognition Technology. The first two modules sequentially provides an introduction to components that constitutes the network video surveillance system design and system design considerations as well as what is required to configure and operate the surveillance system.

This is followed by explanation and discussion regarding Basic Elements of IP-Based Video Surveillance Installation and commonly used methods for validation of the surveillance system. Special emphasis is given to the safety and maintenance aspects of the network video surveillance system design. The next module provides and exclusive discussion on diagnostic and troubleshooting techniques that can be applied to resolve issues. Various flow charts are presented that illustrates procedures for troubleshooting and resolving different issues.

The course concludes with a module that focuses on advance topics in video network surveillance technology applications that include: management of surveillance system, VMS, Video Analytics, Automatic License Plate Recognition and Facial Recognition Technology. System integration is the design function of interest that is emphasized. System risk, vulnerability, availability and reliability are given special treatment to ensure participants appreciate its value from a system performance perspective.