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AAPA July Port Security Seminar  
Intelligent Video and the Future of Integrated Systems

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## Intelligent Video Systems (IVS)

- IVS – What are they?
- Future of Integrated Systems
- Keys to Success

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## IVS – What are they?

- IVS – Key Definitions
- IVS - What they are not
- IVS - What they are
- VMD vs IVS
- Examples of IVS Rules
- IVS Strengths
- IVS Weaknesses
- IVS Key Considerations



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## IVS Key Definitions

- IVSS – Intelligent Video Surveillance Systems
- Intelligent – Having the capacity for thought and reason especially to a high degree
- Surveillance – The ongoing systematic collection, analysis, and interpretation of data
- Analytics – The process of explaining an entity or idea by examining it in terms of its various parts

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## IVS – What it is not!

- Not just CCTV
- Not Video Motion Detection
- Not intelligence blindly applied to a CCTV camera feed
- Not a Video Management Solution



BOTTOM-LINE RESULTS.

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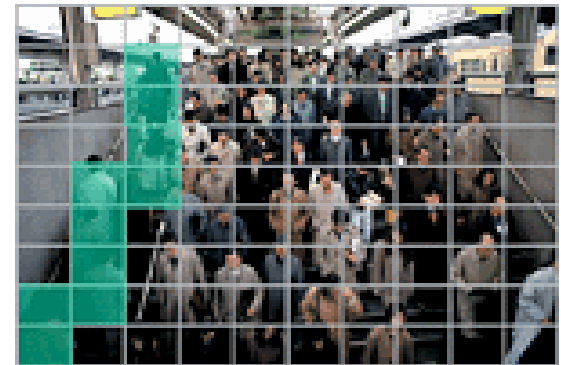
## IVS – What it is!

- It is intelligence strategically applied to CCTV video
- It is the real time analysis of live video
- It is applied computer vision technology
- It is the act of turning live video into intelligent data that can be used for security and business needs
- It is only a component of an overall video management and security solution

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## VMD vs IVS

- VMD – Pixel Based
  - Detects/Alarms on any change to a scene
  - Typical of DVR's (Digital Video Recorders)
- IVS – Object Based
  - Detects and classifies objects in a scene
  - Alarms based on objects breaking rules setup in the scene or environment



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## Examples of IVS Rules

- Virtual Tripwire
- Unattended Objects
- Removed Objects
- Loitering
- Crowd Detection
- People Counting
- Slip & Fall
- Turnstile Violation
- Stopped Vehicle
- Exit Lane
- Perimeter Intrusion
- Unattended objects
- Human Tailgating
- Vehicle Tailgating



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## IVS - Strengths

- More accurate detection of events
  - 24 x 7 operation
  - Consistent detection & adherence to policies
- Enhanced forensics data available
- Frees up guard staff to respond to events
- Linear Scalability



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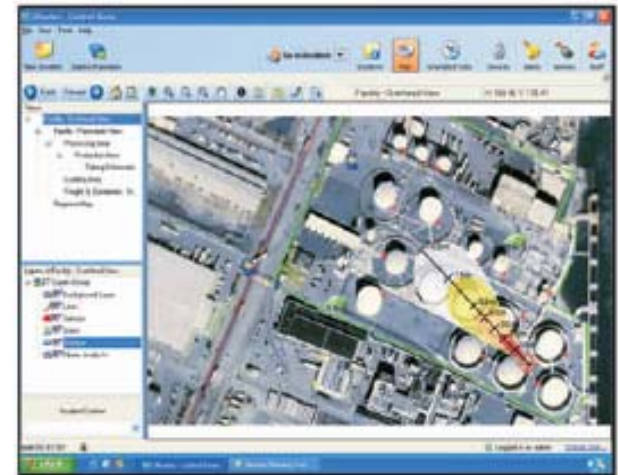
## IVS – Weaknesses

- Complex system to deploy
- Limited use of existing cameras
- Long term maintenance and support

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## IVS - Key Considerations

- Product Application
  - Understanding customer requirements
  - Environment (outside/inside)
  - Water Side or Land Side
  - Proper Field of View
  - Lighting
  - Camera Stabilization



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## IVS – Key Considerations Cont.

- IVS Integrations
  - Video Management Solutions
    - See marked up video real time
    - Configuration Management
  - Alarm management & reporting
    - Do you want a separate alarm system for IVS?

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## Future of Integrated Systems

- Situational Awareness
  - Knowledge of all happenings within security environment
- Situation Management
  - What, when, how and who to respond
- Sensor Consolidation
  - All sensors integrated into single system
  - More intelligent decisions
  - Radar, Sonar, IVS, Access Control etc.

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## Keys to Success

- Solution Oriented
  - Based on your needs
  - How are the various systems to be integrated
- Proper Design
  - Detailed design approach to apply technology
- Configuration & Customization
  - Capable of complex integrations



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## Thank You!

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