Effective Deployment of the Integrated Wireless Network Video Systems for the Homeland Security & Government Sectors

Premier Webinar Program

Inscape Data Corporation
June 8, 2005

Today's Agenda

First 20 Minutes

- Why Homeland Security
- Homeland Security Overview
- Why Security for Government Sector
- Security for Government Sector Overview
- The Challenges
- What Is the Solution?

Last 30 Minutes

- Q&A

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Why Homeland Security?

September 11, 2001, was a loss no one could conceive. As of March 2002, cost estimates ranged from $30 billion to $72 billion. It was also:

- The largest workers compensation loss in history
- The most expensive aviation disaster in history
- The largest property losses in history
- The most expensive business interruption loss in history
- The largest life insurance catastrophe loss in history
- Potentially one of the largest liability claims in history

A small cost of security prevention could save many lives and countless losses

Homeland Security Overview

- Mission
  - To **lead, prevent, deter, and respond** to terrorist attacks on the nation
- Goals
  - To achieve a state of total **Awareness, Prevention, Protection, Response, Recovery, and Service**

Cont'
Homeland Security Overview

Goals:

- **AWARENESS** – Identify and understand threats, assess vulnerabilities,determine potential impacts and disseminate timely information to our homeland security partners and the American public
- **PREVENTION** – Detect, deter and mitigate threats to our homeland
- **PROTECTION** – Safeguard our people and their freedoms,critical infrastructure, property and the economy of our nation from acts of terrorism,natural disasters,or other emergencies
- **RESPONSE** – Lead, manage and coordinate the national response to acts of terrorism, natural disasters, or other emergencies.
- **RECOVERY** – Lead national, state, local and private sector efforts to restore services and rebuild communities after acts of terrorism, natural disasters, or other emergencies
- **SERVICE** – Serve the public effectively by facilitating lawful trade, travel and immigration

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Security Challenges of HLS

Prevention and Protection of people, property and a way of life on our homeland, and to emphasis surveillance and prevention on the following areas with fast response, early notification, mobility, and remote access:

- Harbors
- Airports
- Borders
- Public Safety
- Critical infrastructure and property (Bridges, Rail Way, Mass Transit, Com Towers, Commerce buildings, arenas)

Why Security for Government Sector

Major vulnerabilities of government security that are largely unaddressed include:

- Explosives
- Chemical agents
- Biological agents
- Radiological agents
- Unspecified threats

$2.8B Federal Grant for HLS Related Projects

- The recent Safe TRAINS Act calls for $2.8 billion over the next 3 years to be distributed in a grant program to pay for minimum security necessities through:
  - Cameras
  - Communications equipment
  - Explosive and WMD detection
  - A public awareness campaign
  - Critical employee training, including evacuation drills
  - Capital improvements to secure systems such as ventilation and fire safety
  - Technology necessary to improve survivability in case of attack
  - Emergency response equipment, such as decontaminators

The Government Sector Overview

To ensure daily operation and public safety of the following key government areas

- Public Transportation
- Utilities District
- Police Officer Safety
- Key Entrance and Exits
- Emergency Services
- Building and Structural Surveillance
- Reception and lobby Areas
- Parking areas

Security Challenges of Government Sector

To provide surveillance with fast response, early notification, mobility, and remote access which will aide in public safety and help deter malicious attacks at all levels of government, Federal, State, County and City including

- Public Mass Transit and Rail System
- Court House
- City Buildings
- School systems
- Hospitals
- Police vehicles
- Detention centers
- Public parking lots
- Major city streets and key traffic intersections
- Major bridges, e.g., Golden Gate Bridge
- Major public interest sites, e.g., stadiums & convention centers

General Video Security Surveillance Requirements

- **Centralized management of Surveillance cameras (fast response)**
- **Remote accessibility from multiple locations (Remote Access)**
- **Public transportation systems with dependable and reliable mobile DVR solution with remote access capability (Mobility & Remote Access)**
- **Remote outdoor capability to ensure traffic safety and law enforcement assessment of crime scene to better gauge the situation at hand (Mobility & Remote Access)**
- **Preserve investment of existing CCTV camera system in government and city buildings**
- **Wireless accessibility in hard to access installation sites (Remote Access)**
- **Other video security requirements (Early Notification):**
  - **Secure delivery of encrypted audio and video**
  - **Full motion high quality 30 FPS video and audio capture to ensure video evidence integrity**
  - **Alarm trigger input ports to initialize video capture base on external events**
    - **Radar detectors, motion sensors, light sensors, audio sensors, magnetic sensors etc.**
  - **Remote relay controls to provide on/off capability to key equipment**
  - **Automatic video email alerts sent based on event triggers**

The Solutions

KEY OBJECTIVE: To meet the challenges of fast response, early notification, mobility, and remote access for the homeland security and government security applications.

- Inscape Data's AirGoggle security surveillance camera / server system
- Ethernet Remote Access:
  - NVS Series
  - NVC Series
- Wireless Remote Access:
  - WVS 1000 1-CH video server system
  - WVS 4000 4-CH video server system
  - WVC 1000 Wireless Video Camera system
  - MVS 1000 Wireless Mobile DVR system

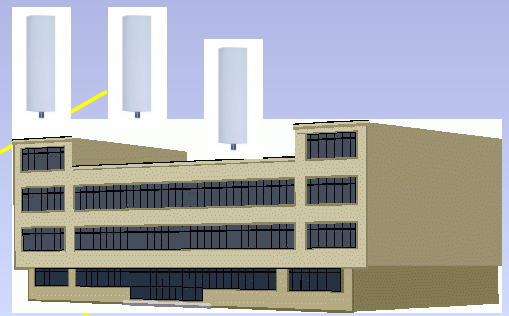
AirGoggle Video System features & Advantages

- **Scalable, easy integration, and cost effective to meet your project's deadline and budget (Fast Response, Early Notification, Mobility & Remote Access)**
- **High transmit power radio, 200mW, w/ high gain antennas enables long range audio and video link beyond 10 miles Point to Point and LOS (Mobility & Remote Access)**
- **Centralize and Remote access and surveillance once not possible is now possible (Mobility & Remote Access)**
- **Event trigger and relay controls ensure advance remote access control and automation of video recording (Early Notification)**
- **Bi-directional audio and built in microphone on camera systems (Fast Response)**
- **Low network bandwidth requirement via MPEG-4 video and ADPCM audio encoding (Fast Response)**
- **Motorized zoom lenses, 10x ~ 20x, with Pan/Tilt/Zoom module (Mobility & Remote Access)**
- **End-to-end system solutions provided by a single vendor (Fast Response, Early Notification, Mobility & Remote Access)**

Surveillance of Critical Homeland Infrastructure

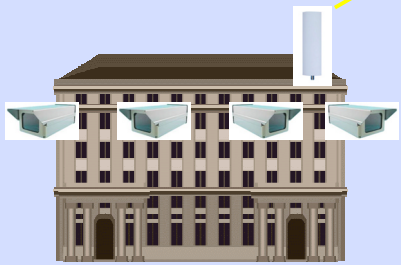
Communications Tower

1



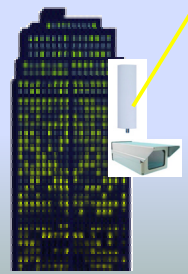
Surveillance Monitoring HQ

2



Government Buildings

3



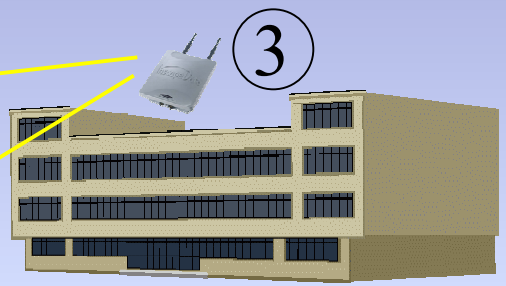
Skyscrapers or Commerce Buildings

Wireless line of site radios establishes audio and video between remote critical infrastructure location to a centralized surveillance and monitoring location

- **System 1**: AirGoggle WVC1000 wireless video camera system
- **System 2**: AirGoggle WVS4000 4-channel Video Server System
- **System 3**: AirGoggle WVC1000 wireless video camera system

Public Safety on Mass Transit Systems

AirEther AP11 2.4 GHz Access Point



Point to Multipoint
WiFi Hot Zones

1

AirGoggle MVS1000 enabled District School Bus

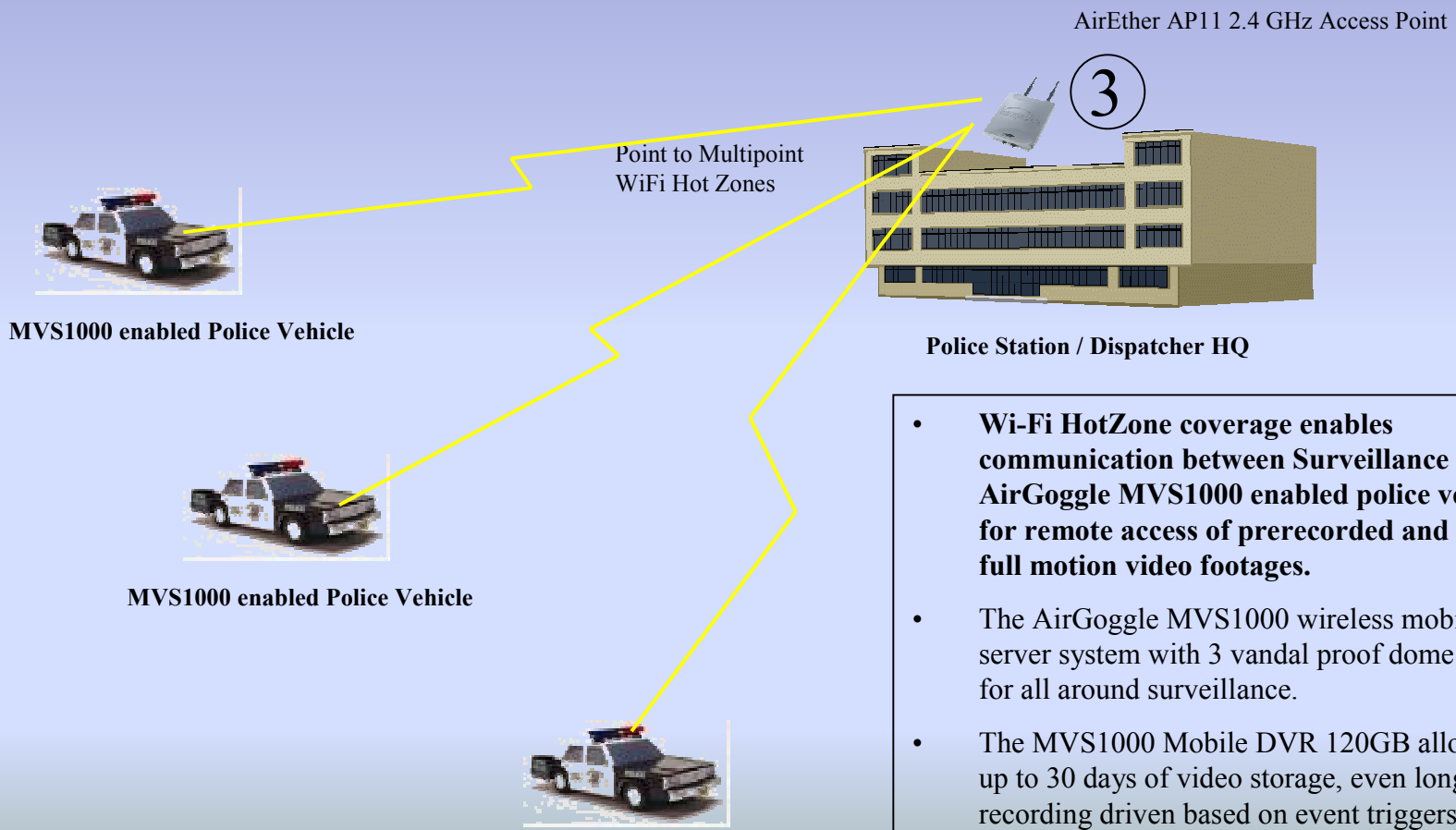
Surveillance Monitoring HQ

2

AirGoggle MVS1000 enabled Municipal Light Rail System

- **Wi-Fi HotZone coverage enables communication between Surveillance HQ and the AirGoggle MVS1000 enabled vehicles for remote access of prerecorded and 30 FPS full motion video footages.**
- **System 1**: AirEther MVS1000 wireless mobile video server system with 4 vandal proof dome cameras.
- **System 2**: 3 Car Light Rail vehicle with 3 AirEther MVS1000 wireless mobile DVR and 12 vandal proof dome cameras.
- **System 3**: AirEther AP11 IP68 certified outdoor access point

Police Officer Safety

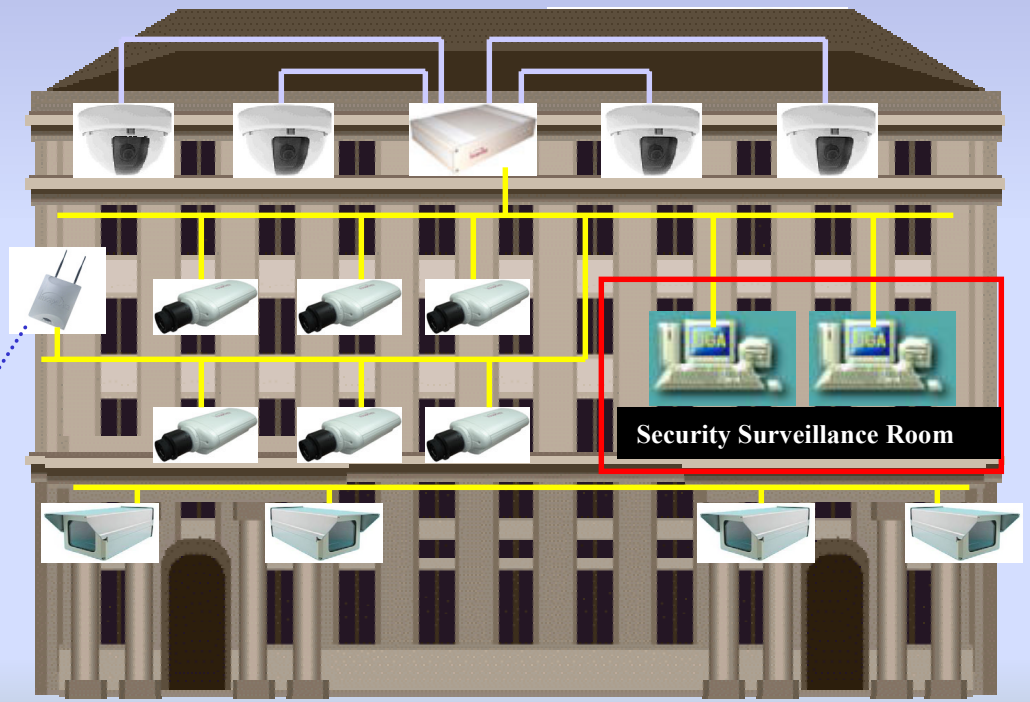


- **Wi-Fi HotZone coverage enables communication between Surveillance HQ and AirGoggle MVS1000 enabled police vehicles for remote access of prerecorded and 30 FPS full motion video footages.**
- The AirGoggle MVS1000 wireless mobile video server system with 3 vandal proof dome cameras for all around surveillance.
- The MVS1000 Mobile DVR 120GB allows for up to 30 days of video storage, even longer if recording driven based on event triggers i.e. police siren turns on.

Surveillance of Government Buildings Entrance and Lobby

- **Combination of AirGoggle NVC network video camera and NVS network video server allows for easy integration of existing dome camera and network ready professional IP cameras.**
- **10 Professional AirGoggle IP cameras saved time and cost by running 10 Ethernet Cat V cable vs. 30 sets of dedicated Coax cables.**
- **With the AirEther AP11 outdoor Access Point, security officer patrolling the perimeter may have access to all of the AirGoggle video system at the palm of his/her hands: PDA Viewer software for Pocket PC 2002/2003.**

Wireless PDA with PDA viewer installed



Summary

Critical Design Consideration

- Fast response
- Mobility
- Early notification
- Remote Access

Key Features of Inscape Data's Solutions

- End-to-end integrated wireless video surveillance systems
- Low bandwidth MPEG-4 video with bi-directional audio
- Centralize and remote access capabilities
- Event trigger and relay
- Integrated long range wireless with the video security systems
- Scalable, easy to integrate, and cost effective

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Question & Answer

Company Info/ Website / Email

- Future webinars:
  - JUNE, “Integrated Wireless Network Video Systems for the Homeland Security and Government Sectors”
  - JULY, “Wireless Backhaul and Hotspot Base Station Systems”
  - AUGUST, “Integrated Wireless Network Video Systems for the Transportation and Networked Campuses Sectors”
- For more product details, please visit www.inscapedata.com
- For any additional product information and pricing, please contact your distributor
- Or send your questions to service@inscapedata.com