

# Tech Tools & EAS Policy Group



MICHIGAN STATE POLICE  
EMERGENCY MANAGEMENT & HOMELAND SECURITY DIVISION

Don Bouffard 2/21/2016

# Tech Tools

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## MSPVideo Portal

- Video portal is at [www.michigan.gov/mspvideo](http://www.michigan.gov/mspvideo)
  - Android, iDevices, Laptop, Tablets
  - Up to 200 users on Internet/ any quality, any format
  - Records
  - Users can be assigned to specific videos
  - YouTube type format
    - All live/recorded video related to incident is displayed for user
    - Users can leave comments
  - Related documents
  - 100 Mb Symmetrical



# Tech Tools

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## MSPVideo Portal

- Video portal is at [www.michigan.gov/mspvideo](http://www.michigan.gov/mspvideo)
  - Sensor data can be embedded in video
    - Camera plus sensors monitoring scene
    - Sensor alarm transmitted via video
    - Sensor data can be translated to position
    - GIS can tag images in video
    - Calculate distance, height, size



# Tech Tools

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## MSPVideo Live Tools

- iPad - Can stream live from an iPad
  - Free application
  - Uses Wi-Fi/ Cell phone hot spot
  - MSP DC's have this capability
- Field Streaming Kit
  - Streams live video from Pelican case
  - Weatherproof
  - Runs 6-8 hours on batteries
  - Battery charger and car inverter



# Tech Tools

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## MSPVideo Live Tools

- Aviation Downlink Truck
  - Satellite uplink, Cell modem, 800 MHz radio
  - Three displays/ one on outside of truck
  - Shore power, Generator power
  - Direct TV
  - Local recording
  - High definition video from helicopter, unmanned aerial systems
  - Display on site and transmit to MSPVideo
  - Connect to video displays in command center



# Tech Tools

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# Tech Tools

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## MSPVideo Live Tools

- Streaming feeds
  - Can accept and retransmit any standard video stream
    - VLC Player
  - If there are a lot of users a video server can be placed on site



# Tech Tools

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## Microwave

- Secure, local vide transmission of video
- Licensed frequencies
- Encrypted video
- Can transmit up to two miles in ideal setting
  - Heavily dependent on location
- Receivers stream into MSPVideo
- Use to send video to local responders



# Tech Tools

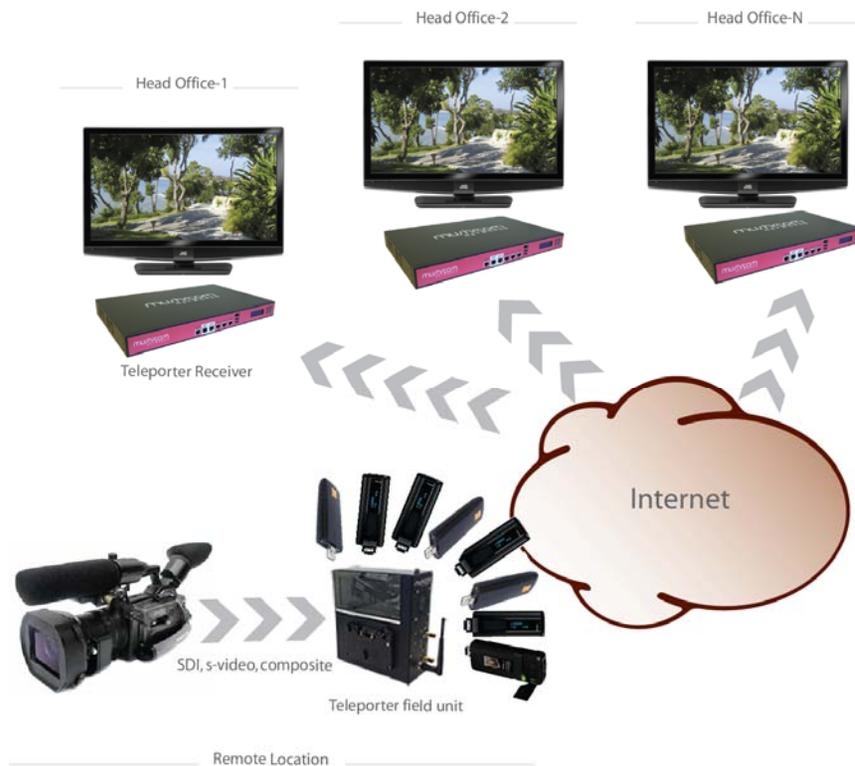
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## Cell multiplexing

- Remote broadcast by news/sports crews
  - Used daily by broadcasters
  - 4-8 cell modems bonded into one connection
  - Allows 4-8 times the bandwidth
  - Secure – must break into 16 separate secure connections
  - High definition video over cell



# Tech Tools



# Tech Tools

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## Data Casting

- Current technology
- Installed at television transmitters
- Became available with change from analog to digital television
- Uses unused old analog signal from television transmitters
- One to many content distribution



# Tech Tools

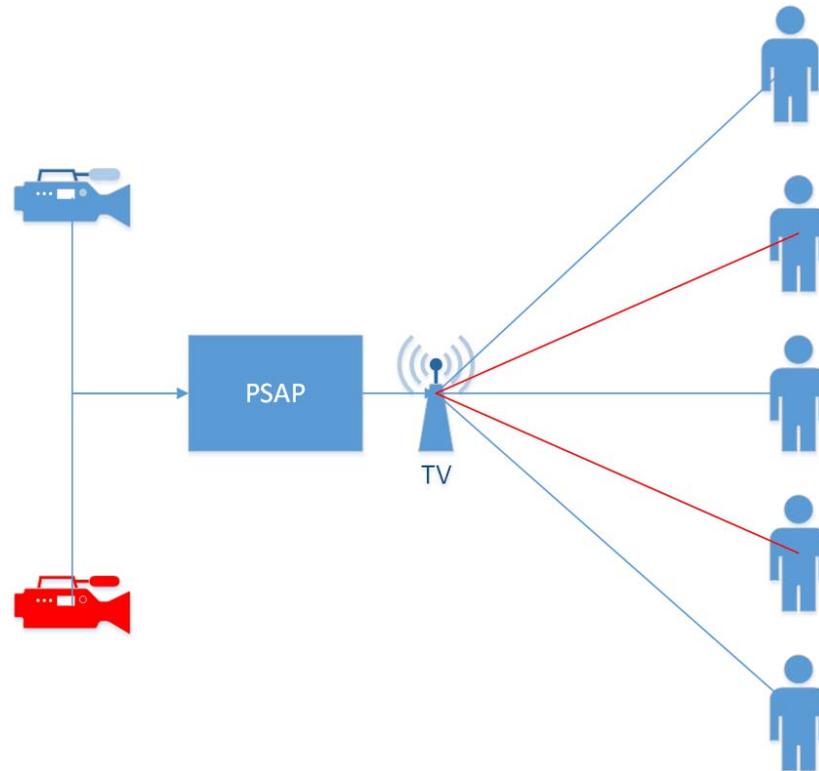
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## Data Casting

- PSAP sends video, audio, files directly to television transmitter
- First responders utilize a receiver with identity
- Receivers download information from television signal
- Can be uniquely addressed to individuals or groups
  - Send CCTV feed from inside building live to law enforcement
  - Send building plans, maps
  - Send secure documentation



# Tech Tools



# Tech Tools

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## Intelligent Video

- Camera is a computer
- Computers can recognize patterns
- Engineers figured out the computer patterns of people
- Engineers figured out the computer patterns of people's behaviors



# Tech Tools



# Tech Tools

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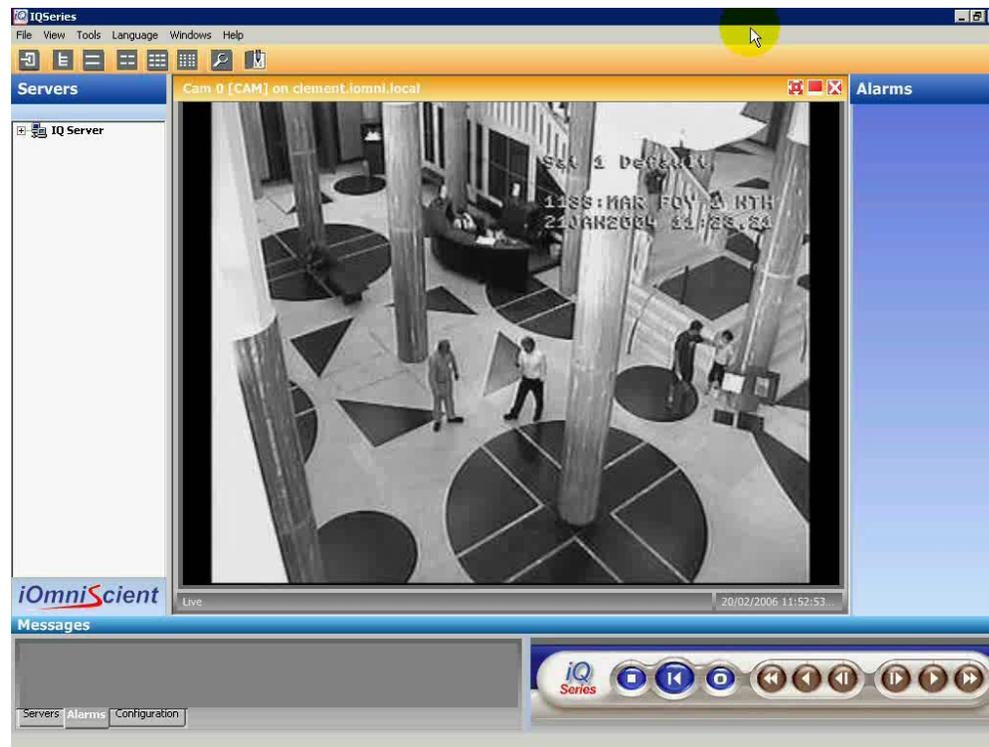
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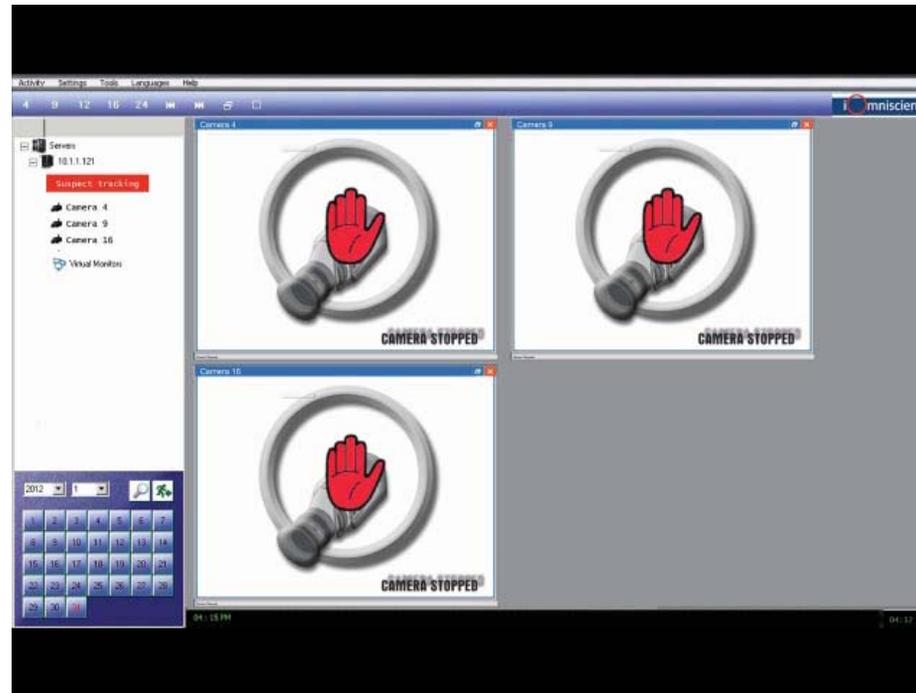
# Tools

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# Tools



# Tech Tools

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## Mutualink

- Connects different radio, audio video systems across Internet
- Connect local radio system to MPSCS
- Connect telephone systems and VOIP systems
- Stream cameras to MSPVideo
- Connect telephone system to radio system



# Tech Tools

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## SEOC Intercom

- Each agency in SEOC has intercom station
- Agencies are on ESF talk groups
- Agencies can tie in phone or teleconference calls
- Agencies can tie in MPSCS radio calls
- Agencies can tie in volunteer radio calls
- Cell application allows push to talk to agency, or agency talk group



# Tech Tools

## BGAN Satellite

- Affordable
- Pre-paid cards or monthly plans are affordable
- Consumer oriented/ easy to use



# EAS Policy Group

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Capt. Kelenske asked for an EAS Policy Group to advise on Emergency Alert System

- Members
  - Broadcasters
  - MSP DC's
  - Emergency Managers at local and municipal level
  - NOAA representatives
- Advise on fiscal, procedural, policy and technical matters



# EAS Policy Group

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## Issues addressed

- Current EMNet system
- IPAWS policy and development
- NWS utilization for public alerting
- Regional plans
- Counties with power plants and those without
- Management of public alerting at state, local and municipal level
- Where should backup and robust alerting capabilities be placed
- Mass notification
- Backup systems
- Educating policy makers
- Broadcaster site access



# EAS Policy Group

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## Future

- White papers/recommendations for local planning groups
- Documentation of EAS policy
- Revisions to EAS policy
- Funding solutions



# EAS Policy Group

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## Questions?

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