Welcome to UC 2019

This presentation includes forward-looking roadmap and schedule information that may include dates, release numbers, or scope that could change without notice. Customers and partners are advised not to make business or purchasing decisions based on such forward-looking statements.
Full Motion Video Support in ArcGIS

Jamon Johnson
Zach Haubach
It Starts with a Framework

System of Insight

System of Engagement

System of Record
ArcGIS Provides a Comprehensive Imagery Platform

A scalable platform that works with all forms of imagery to create valuable information products.
What is Full Motion Video (FMV)?

- **For**: analysts, imagery or geospatial specialists, and managers
- **Who**: need to support time-critical situation awareness, emergency response operations, or conducting forensic analysis.
- **The Solution**: is integrated with ArcGIS Pro Image Analysts extension.
- **That Provides**: access to live-streaming or achieved videos. The results from FMV analysis are shared in dynamic information products across the organization.


*Works with MISB and non-MISB data*
Visualization and Exploitation
Full Motion Video in ArcGIS Pro 2.2

Features & Highlights:
• Core software, no additional installation required
  - Licensed with Image Analyst Extension
• Included Support for
  - Archived Videos and Live Streams
  - Multi-video display
• Introduced support for 3D Scenes
• Geoprocessing
  - Video Multiplexer
Visualization and Exploitation
Full Motion Video in ArcGIS Pro 2.2

Features & Highlights:

• Digitize on video and display on map
  - Export digitized features to a FeatureClass

• Export video frame and clips
  - Overlay exported frames on the map

• Follow/Zoom/Zoom to Frame
  Pan and Zoom in video window

• Bookmarks save map extent and video time
Visualization and Exploitation

Full Motion Video in ArcGIS Pro 2.3

Features & Highlights:

• Display and Edit existing FeatureClasses in the Video Player
• Sync time-enabled FeatureLayers with Video Player
• Geoprocessing
  - Video Metadata to Feature Class
  - Extract Video Frames to Images
Visualization and Exploitation
Full Motion Video in ArcGIS Pro 2.3

Features & Highlights:
• Export Metadata to FeatureClass or CSV
  - Feature attributes include MISB Metadata
• Export Frames to PowerPoint
• Record Live Streams
• Follow all videos
Visualization and Exploitation
Full Motion Video in ArcGIS Pro 2.4

Features & Highlights:

• Video Search
  - Search against a single video, folder of videos, or FeatureClass of footprints

• Video Moving Target Indicator

• Chip images from the video player

• Measure distance and area in the video player
FMV Workflows

• Inspection
  - Digitize asset information

• Exploitation
  - Digitize locations of objects matching a certain type

• Presentation
  - Incorporate video frames directly into PowerPoint presentations

• Analysis
  - Turn on saving of video metadata to geodatabase to use GP tools for analysis

• Update Basemap
  - Save video frames to directory for inclusion into imagery mosaic dataset
Full Motion Video Demonstration

Zach Haubach
What’s Next
Full Motion Video in ArcGIS Pro 2.5 & Beyond

- Enhanced Analyst Experience
- Video feed management
- Improved symbology in video player to match map symbology
- Enhanced PowerPoint integration
- Follow Video Frame
- Turn on-screen video metadata graphics on and off
- Copy entire frame to clipboard
FMV Support in ArcGIS

• Based on the MISB standard
  - 93 total parameters
  - 11 parameters required for FMV

• FMV-compliant videos

• Brings video and location into a single application
  - Digitize in video and have it show in the map

• Constantly being improved and new functionality added
What to Learn More?

- Sample Video: https://community.esri.com/docs/DOC-8527-cheyennevahospitalmpeg4
Open Table Discussion

- Ideas
- Recommendations
- Issues
- Please send to dbaird@esri.com or jamon_johnson@esri.com
## See Us Here

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<tr>
<th>WORKSHOP</th>
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<td>Full Motion Video Support in ArcGIS</td>
<td>SDCC – Room 17A</td>
<td>4:00PM – 5:00PM, Wednesday 11 July</td>
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<td>Imagery Booths</td>
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