Media Pack

ESRI International 2010 User Conference

Honolulu Board of Water Supply
Lorna Heller
Established in 1929, HBWS is a Semi-Autonomous Agency Of City and County of Honolulu

- GIS Program Established 1989
- Largest municipal water utility in the State
- Primary Function is to Provide Municipal Water and Fire Protection for Oahu
- Serves One Million Customers On Oahu, & Provides Support Services To Maui & Kauai
- Staff of more than 600 employees
Introduction
• HBWS Media Pack is a GIS-based enterprise system for collecting, managing, and distributing digital media.
  » Digital Photos
  » Video
  » Audio
  » Screen captures
  » Sketching

• Web, mobile, desktop access.

• Built on ESRI technology.
  » ArcSDE
  » ArcGIS Server
  » ArcObjects
  » REST clients (Flex,SilverLight)
  » ArcEngine clients for mobile
Introduction: Why was MediaPack built?

- Thousands of digital photos and video files being collected by individuals.

- These contain valuable current and historical information, but they are not shared, and not easily accessible by other HBWS employees.

- More informed Planning and Decision Support
Introduction: System Goals

- **Standardized** system for adding photos, video, etc to GIS
- **Integration** with existing enterprise GIS viewers
  - HONU (Web – SilverLight)
  - MANO (Mobile – ArcEngine)
  - GISMO (Work Management Mapping)
  - Arc Desktop
- **Enterprise** sharing
- **ESRI**  ArcGIS Server / GeoDatabase Integration
- **Low-tech** - no specialized equipment
- **Low-cost** - utilize existing consumer-grade cameras
- **Minimal** user training
- **Easy** to use
System Overview
System Overview: Process Summary

1. Capture
   - Upload Photos and Video

2. Create
   - MediaPack Server
   - ArcGIS Server
   - GeoDatabase

3. Share
System Overview: Data Capture

1. Capture photos and video
2. Select location for new MediaPack
3. Add data to MediaPack and Save
System Overview: Data Storage

HBWS GeoDatabase

ArcGIS Server

MediaPack Server

Saved MediaPack
MediaPack Software Basics
Basics: Digital Photos
Basics: Video
### Notes

<table>
<thead>
<tr>
<th>Notes</th>
<th>Date Added</th>
<th>Added By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump was replaced on May 12, 2010 due to leaks.</td>
<td>Thu Jun 03 11:22:05 MDT 2010</td>
<td>Keith</td>
</tr>
<tr>
<td>Pump and wellhead inspected on May 15, 2010 - after installation. No issues found.</td>
<td>Thu Jun 03 11:22:45 MDT 2010</td>
<td>Keith</td>
</tr>
<tr>
<td>June 2, 2010 - leak on new pump noticed - requested formal inspection by engineering.</td>
<td>Thu Jun 03 11:23:21 MDT 2010</td>
<td>Keith</td>
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MediaPack Advanced Options
Advanced Options: Sketching

Users can sketch on the photos in order to highlight points of interest.

Graphics can be toggled on/off

Graphics are saved with the MediaPack
Advanced Options: Photo zoom, pan, etc

Zooming -in to see greater detail.
Advanced Options: Media Links

Link to other photos – such as close-up views.

Link to videos
Advanced Options: Keywords and Search Support

Integrated search for easy enterprise access to MediaPacks.

Test MediaPack
Advanced Options: Save to PDF

Save to PDF for printing and easy distribution outside the enterprise.
Workflow Demonstration
Conclusion

• Current Status

  Version 1.0 complete
  300+ Media Packs created by just a few users
  Limited Rollout
  Full rollout in August/September

• Future plans

  • Mobile, Desktop, Work Management (Maximo), SharePoint integration.
  • Share Media Packs with other City of Honolulu departments.
Questions?

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