Integrating GIS and UWAM to Optimize Electric Field Operations

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Agenda

• Business Drivers
• Application Architecture
• User Interface and Features
• Value Derived
Business Drivers
Previous Workflow

- Print UWAM SR report to see the day’s work.
- Print map and mark up locations to visit.
- Go out to field.
- Perform work.
- Take notes of work done and parts used.
- Return to office.
- Manually enter SR notes and finish UWAM SRs.
- Manually create stock checkout requests to replenish used stock (not tied to SRs).

Business Drivers
Drawbacks

- Time consuming
- Error prone
- Inadequate data captured
Application Architecture
Architecture Diagram

HTML5/JavaScript
Web Client

ArcGIS Server
Oracle Fusion

ArcSDE
Assets
Oracle
UWAM
Technologies Used

- HTML5/JavaScript Web Client
  - ArcGIS API for JavaScript
  - jQuery/Dojo/Media Queries/CSS3/C#
  - JavaScript Libraries (moment.js, notydefault.js, etc).
  - Google Maps API – Street View
- Python Script to Load Asset Data from UWAM to ArcSDE
- ArcGIS for Server Web Services
- UWAM Web Services
  - PL/SQL Backend
  - Java-Based REST Endpoint
User Interface & Features
Responsive UI

User Interface & Features

Desktop UI

Mobile UI
Value Derived
Organizational Benefits

- Provides more accurate asset information on demand.
- Faster, easier, and more accurate work and parts logging.
- Valuable BI.
- Cost tracking by work task.
- Lifecycle cost tracking by asset.
- Faster turnaround and increased customer satisfaction.
- Supports 50 office workers and 12 field workers.

Value Derived
Questions?