Next Generation ArcGIS Apps for SAR

Doug Morgenthaler
Explorer for ArcGIS

Use your maps anywhere

Find field assets using compass mode

Communicate notes via markup
Explorer for ArcGIS | Maps at your fingertips

Work with your maps, connected or disconnected

mobile map packages

web maps
• What can it do?
  - Bookmarks
  - Basemaps
  - Layers
  - Measure
  - Search
  - Compass point
  - Markup
  - Attachments (media, charts, graphs, etc.)
Explorer for ArcGIS | Road Ahead

- On-demand areas
  - User-defined area web map offline from Explorer
  - Functionally equivalent to what is in Collector today

- Pre-planned offline areas
  - Areas are defined in the web map by the author
    - Same experience as Collector (Aurora)

- Offline area optimizations
  - Option to only download the deltas for download maps
  - Should make updating maps very quick/efficient
Survey123 for ArcGIS
Form Centric Data Collection

Simple data collection experience

Web & Native / Desktop & Devices

End to end data collection workflow
Smart Forms for ArcGIS

Easily convert paper forms into Digital Smart ArcGIS Forms
1- Ask Questions
   (Design & Publish)

2- Get Answers
   (Capture Data)

3- Make Decisions
   (View & Analyze)
American Red Cross

- Field damage assessments
- ArcGIS Enterprise
- Thousands of users
- Boost field productivity
- Reduces errors
- Real time decisions
Workflow Integration

• Use a 3rd party provider to integrate with other services (webhooks)
  - Conditional execution, multiple paths supported
  - Example providers: Zapier, Microsoft Flow, Integromat, Tray.io

• Instant Notifications (SMS, e-mail, Push Notifications):
  SMS an emergency team coordinator when a High Priority Incident is submitted

• Instant Data Transfer (Google Drive, Box)
Collector for ArcGIS
Map-centric data collection field app

- Web maps
- Works offline
- High accuracy GPS/GNSS

Collector for ArcGIS | How is it being used?

Collect and Maintain Asset Data

Capture Observations

Perform Field Assessments
CalFire – Damage Assessment

- Assess damaged properties after wildfires
Key Themes

- Better maps
- Improved user experience
- Enhanced collect experience
- Improved offline workflows
- High accuracy improvements
- Several new capabilities
Collector for ArcGIS | Support for Better Maps

• Labels and advanced symbology
  - Support for Arcade expressions
  - Symbol effects and symbol properties

• Vector basemaps
Collector for ArcGIS | Improved User Experience

- Focus on usability
- More intuitive UX
- New sliding panel
Collector for ArcGIS | Enhanced Collect Experience

- Feature placed at crosshairs
  - More accurate manual placement
- Reduced taps to capture photos
- Support video and audio attachments
Collector for ArcGIS | Offline Workflows

- **On-demand**
  - GIS administrator enables and configures maps for offline use
  - Field worker defines the area and level of detail
  - Server processes data for download

- **Pre-planned**
  - GIS administrator defines the map areas for offline use
  - Field worker selects the area to work offline
  - Server processes data once

- **Multiple offline areas**
  - Download discrete work areas for a single map
• **Configurable unit display**
  - Supports a wide variety of notations
    - USNG, Degrees Decimal Minutes, etc.
  - Lines and areas
    - Acres, square miles

• **Compass tool**
  - Shows direction and distance to a location
Collector for ArcGIS | Road Ahead

• Smarter forms
  - More input types
  - Conditional visibility
  - Grouping
  - Attribute rules
• Bulk attribute update

• Beta access: collectorbeta@esri.com
Location Tracking in ArcGIS
Location Tracking Use Cases

- Worker Tracker
- End of day assessment
What Is Location Tracking in ArcGIS

- **Web app**
  - Display and manage users and their location history
  - See only the users that you have access to
What Is Location Tracking in ArcGIS

• Mobile app
  - Simple, schedule-driven tracking experience
  - Supports offline use
  - Optimized for low battery consumption
  - Works in the foreground and background
Mobile

- Option for other apps to use location tracks on the device
  - Single source of truth for location tracks and where users have been
- Option to add the tracks capability to other apps
Plan

• Private Tech Preview going on now!
  - tracker4arcgis@esri.com to join
• Mobile app for iOS and Android platforms
• Release with ArcGIS Enterprise 10.7 and ArcGIS Online early 2019