Agenda

• ArcGIS Field Apps overview
• What ways do the apps work together?
  - Demo
• How are the apps able to work together?
• What other ways can the apps communicate?
  - Demo
• Why is this important to you? (with developers in mind)
ArcGIS Field Apps overview

- Workforce for ArcGIS
- Navigator for ArcGIS
- Explorer for ArcGIS
- Collector for ArcGIS
- Survey123 for ArcGIS
ArcGIS Field Apps

Plan, coordinate field work
Create & Manage field assignments
Location Awareness
Complete Field App integration

ArcGIS Field Apps

Navigator for ArcGIS

- Maps built from your own data
- Fully integrated with other Field Apps
- Work Offline
- Route with custom travel modes

ArcGIS Field Apps

Explorer for ArcGIS

The platform ice-breaker

Your maps anywhere

Access information while disconnected

Sketch, annotate, and communicate

ArcGIS Field Apps

Collector for ArcGIS

Map Centric Data Collection
Web Maps
Works offline
High accuracy GPS

ArcGIS Field Apps

Survey123 for ArcGIS

Form Centric Data Collection

Create smart forms

Collect anytime, anywhere

Analyze & share results

ArcGIS Field Apps
What ways the apps work together
ArcGIS Field Apps
What ways the apps work together
ArcGIS Field Apps
What ways the apps work together
Demo: ArcGIS Field Apps working together

- Workforce for ArcGIS
- Navigator for ArcGIS
- Explorer for ArcGIS
- Collector for ArcGIS
- Survey123 for ArcGIS
How are the apps able to work together?
Deep Linking with URL Schemes
How the apps are able to work together

What is deep linking with URL Schemes?

A method of invoking and passing state between applications
A method of invoking and passing state between applications

How the apps are able to work together

What is a URL Scheme?

Contact.app Phone.app

URL Scheme
tel: 555-0155
How the apps are able to work together

Sounds fancy ….

1. Identifying information for the app being invoked – “App Scheme”
2. App specific data or parameters
How the apps are able to work together

1. Identifying information for the app being invoked – “App Scheme”
2. App specific data or parameters

1. Scheme
   MyApp://?argument=value

2. Data
   arcgis-explorer://?itemID=1cde286f20b74fa69b3c36dfa1e81a85
   arcgis-navigator://?stop=41.780618,-88.179449&stopname=Dropped+Pin
What other ways can the apps communicate?

URL Scheme support
- Workforce for ArcGIS
- Navigator for ArcGIS
- Explorer for ArcGIS
- Collector for ArcGIS
- Survey123 for ArcGIS
URL Scheme support

arcgis-survey123://?

- **itemID** – The ID of the form to load
- **field:<field_name>** – assign a value to a given field/question
- **center** – The location for the point question

URL Scheme support
Survey123 for ArcGIS

Demo Examples:

Open survey

arcgis-survey123://?itemID=1a92d27fc41a4d7da3ec30489fc9eee1
URL Scheme support
Survey123 for ArcGIS

Demo Examples:

Pre-populated fields

arcs-gis-survey123://?itemID=1a92d27fc41a4d7da3ec30489fc9eee1&field:name=Daniel&center=39.6276207,-104.9041879,17
URL Scheme support

arcgis-explorer://?

- **itemID** – Web Map or MMPK to open/download on launch
- **center** – center point of map – Lat/Lon, Address, Feature
- **wkid** – provide wkid for Lat/Lon in non-WGS84 spatial reference
- **scale** – scale to display the map at on launch
- **rotation** – custom map rotation
- **bookmark** – center map on bookmark instead of using center param
- **search** – quickly execute search for feature in map

GitHub Repository: https://github.com/Esri/explorer-integration
URL Scheme support

Explorer for ArcGIS

Demo Examples:

Open Web Map

arcgis-explorer://?itemID=0c900ae2a1084d27b608233921ef1a84
URL Scheme support
Explorer for ArcGIS

Demo Examples:

```
ar cgis-explorer://?itemID=6ca5f9cfeaa0c47b2969ee9750693301f
```
URL Scheme support

Explorer for ArcGIS

Demo Examples:

arcgis-explorer://?itemID=0c900ae2a1084d27b608233921ef1a84&center=4807094.8078305572,-1096767.7053304175&scale=1000&wkid=26919
URL Scheme support
Explorer for ArcGIS

Demo Examples:

arcgis-explorer://?itemID=0c900ae2a1084d27b608233921ef1a84&center=43141&scale=500
URL Scheme support
Explorer for ArcGIS

Demo Examples:

arcgis-explorer://?itemID=0c900ae2a1084d27b608233921ef1a84&search=43141
URL Scheme support

arcgis-navigator://?

- **start** – Start location
- **startname** – Name of start
- **stop** – Location of a stop
- **stopname** – Name of stop
- **callback** – Callback URL scheme
- **callbackprompt** – Prompt displayed in the app
- **optimize** – Boolean to determine if route is optimized
- **travelmode** – Travel mode used when calculating the route

GitHub Repository: https://github.com/Esri/navigator-integration
URL Scheme support

Navigator for ArcGIS

Demo Examples:

Route to single stop

arcgis-navigator://?stop=Mile+High+Stadium
URL Scheme support

Navigator for ArcGIS

Demo Examples:

- `arcgis-navigator://?stop=Mile+High+Stadium&stop=Pepsi+Center+North+Door&stop=Coors+Field+Denver&stop=Denver+International+Airport&stop=Red+Rocks+Amphitheatre`
URL Scheme support

Demo Examples:

Optimize route to many stops

Arcgis-navigator://?stop=Mile+High+Stadium&stop=Pepsi+Center+North+Door&stop=Coors+Field+Denver&stop=Denver+International+Airport&stop=Red+Rocks+Amphitheatre&optimize=true
URL Scheme support

Collector for ArcGIS

arcgis-collector://?

- **itemID** – item ID of the webmap you want to open on launch
- **center** – coordinates of centering point
- **featureSourceURL** – the URL to the layer to collect a feature
- **featureAttributes** – JSON dictionary of attributes for new feature

GitHub Repository: https://github.com/Esri/collector-integration
URL Scheme support

Collector for ArcGIS

Demo Examples:

Open Web Map

• arcgis-collector://?itemID=abcb9fea08984c489bcd4ff940be5755
URL Scheme support

Collector for ArcGIS

Demo Examples:

Set location for new feature

arcgis-collector://?itemID=abcb9fea08984c489bcd4ff940be5755&center=39.6276207,-104.9041879
URL Scheme support

Demo Examples:

• `arcgis-collector://?itemID=abcb9fea08984c489bcd4ff940be5755&center=39.6276207,-104.9041879&featureSourceURL=https://services6.arcgis.com/0p6i4J6xhQas4Unf/arcgis/rest/services/Denver_Breweries/FeatureServer/0&featureAttributes=%7B%22Name%22:%22Daniel's Brewery%22,%22Address%22:%224900 S Syracuse St, Denver, CO%22%7D`
URL Scheme support

Workforce for ArcGIS: Default app integrations

Collector for ArcGIS
1. Select map
2. Assignment type
3. Select information to pass

Explorer for ArcGIS
1. Select map
2. Assignment type

Navigator for ArcGIS
Survey123 for ArcGIS
1. Select map
2. Assignment type
3. Select information to pass
URL Scheme support

Workforce for ArcGIS: Custom app integrations

1. Select map
2. Assignment type
3. Select information to pass

Collector for ArcGIS
Explorer for ArcGIS
Navigator for ArcGIS
Survey123 for ArcGIS

Your custom app
1. ????
URL Scheme support

Workforce for ArcGIS: Add custom app integrations

https://ago-assistant.esri.com/
URL Scheme support

Ways to deep link to ArcGIS Field Apps

- Host a web page with links
- Email or text message
- Email or text attachment
- Custom app
Why is this important to you?
(with developers in mind)
Why is this important to you?
Not only our apps can talk to each other
Why is this important to you?

Not only our apps can talk to each other

- **Custom integrations in Field Apps**
  - Shown from Workforce for ArcGIS
- **Integrate to Field Apps from custom app**
  - Shown from QR codes
- **Custom integrations from Field Apps**
  - Let’s see how…

✓ Why is this important to you?
  - Not only our apps can talk to each other
Overview

• ArcGIS Field Apps overview
• What ways the apps work together (Out of the box integrations)
• How the apps are able to work together (Deep linking with URL Scheme)
• What other ways the apps can communicate (URL Scheme support)
• Why is this important to you? (Integrate with custom / 3rd party applications)
Resources and Questions

GitHub repos

- Navigator: https://github.com/Esri/navigator-integration
- Collector: https://github.com/Esri/collector-integration
- Explorer: https://github.com/Esri/explorer-integration
Please Take Our Survey on the App

Download the Esri Events app and find your event

Select the session you attended

Scroll down to find the feedback section

Complete answers and select “Submit”