Flying Solo with ArcGIS Field Maps

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February 25, 2021

Today's Speakers

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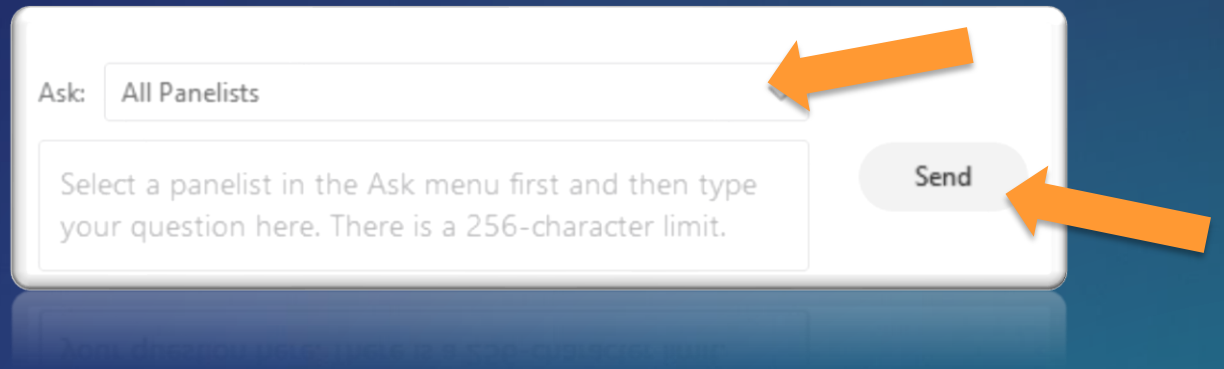
Surveys and Recordings

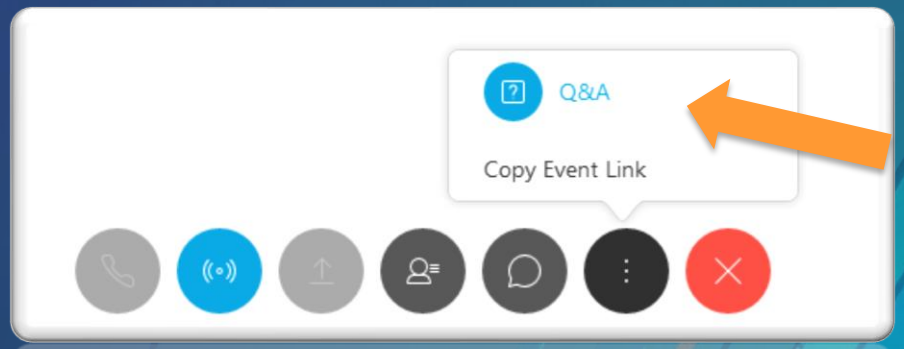
- We are recording today
- Expect an email from us with link
- Please share your thoughts on the exit survey

Open to Questions

- Please use the Q&A panel:
  - Choose *Ask: All Panelists*, type your question and click *Send*



- If you're unable to see the Q&A panel, click the three dots and then the Q&A button on the control dock at the bottom of your screen:



Today's Agenda

This webinar is designed to further your understanding about the new ArcGIS Field Maps, specifically:

1. Using the **Field Maps web app** to enhance your maps
   - Working with the **web map smart form**
2. Tips & Tricks for **migrating** from existing mobile apps to Field Maps
   - For Collector, Explorer & Tracker users
3. **Integrating** Field Maps within your mobile workflows
   - Using Url links
   - Link from assignments in ArcGIS Workforce

Poll … ArcGIS field solutions users …

Which ArcGIS mobile app(s) are you migrating to Field Maps from?

1. **Collector**
2. **Explorer**
3. **Tracker**
4. **Not migrating – new to Field Maps**

Choose as many as apply!

Preparing for mobile data collection with Field Maps

ArcGIS Field Maps: one app to rule them all

Phase I: Fall 2020

- Simple map viewing & markup ~ ***Explorer***
- Field data capture & inspections ~ ***Collector***
- location tracking technology ~ ***Tracker***

- Planning & task management ~ ***Workforce*** **Phase II: TBD**
- Turn-by-turn navigation ~ ***Navigator*** **Phase III: TBD**

★ ***ArcGIS Dashboards, Survey123 & QuickCapture***
to remain as separate apps

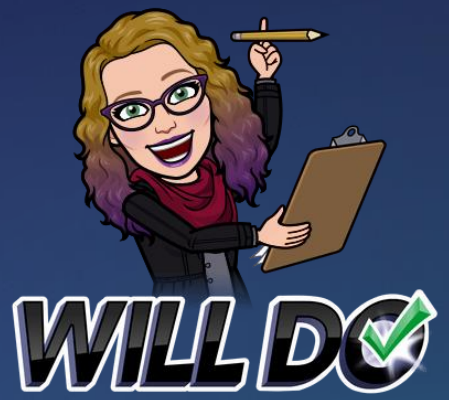
ArcGIS Field Maps: mobile app

Released November 2020, updated December 2020: **iOS & Android**

- **Map Viewing**: includes existing functionality in **Explorer** for read-only maps
  - Access publicly shared maps **without ArcGIS identity/no sign-in**
  - **Mobile Map Packages** (created in ArcGIS Pro & optimized for offline map use: used by Explorer & Navigator)
- **Editing: i**ncludes all existing **Collector** functionality & more
  - Android on par with iOS!
- **Map Markup:**
  - Notes, freehand sketch, markers
  - Share peer-to-peer, by email, to ArcGIS Organization

- High accuracy data collection: support for location & collecting with GNSS
- View, record and share location tracks ~ **Tracker** functionality
- Online & Offline support
- ArcGIS Online & Enterprise 10.8.1+
- Can use with Enterprise 10.6.1 - 10.8: must register the ArcGIS Field Maps app ID

Field Maps in-office workflow



1. **Create & configure your layers**
   - New layers in ArcGIS Organization using templates
   - Existing layers in ArcGIS Organization (hosted feature layer)
   - Existing layers in ArcGIS Server – published to your Enterprise portal
   - Create domains, subtypes, feature templates, set default symbology
   - Allow attachments, restrict editing permissions
2. **Create your web map**
   - In ArcGIS Pro (publish to ArcGIS organization)
   - ArcGIS Organization Map Viewer: recommend Map Viewer Beta as it supports the form
   - Add layers: editing, reference, basemap
   - Configure popup, scale dependencies, add bookmarks *(used in ad-hoc offline)*
3. **Open web map in Field Maps web app & configure options:**
   - Content: Editable layers:
     - Feature templates: use existing or make copy to modify
     - Configure Form for each layer *(read-only forms coming to future release)*
     - Share to groups (uses ArcGIS Organization share settings)
     - Offline (optional)

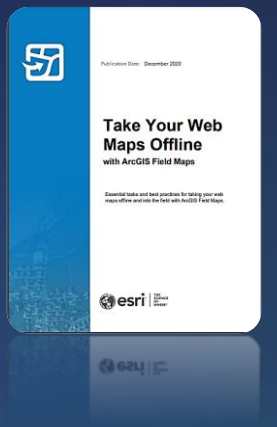
Field Maps Web App:
ArcGIS Online (included)

Enterprise 10.8.1 Installer

10.9 included

Field Maps In-Office Workflow for Offline

Offline Guide



3 options for offline:

1. Configure a web map for download & create map areas for mobile workers to take offline
2. Configure a web map for download & allow mobile workers to define map areas to take offline
3. Create & share an MMPK that can be downloaded by mobile workers or copied directly to devices **(READ ONLY)**

Additional configuration in Field Maps web:

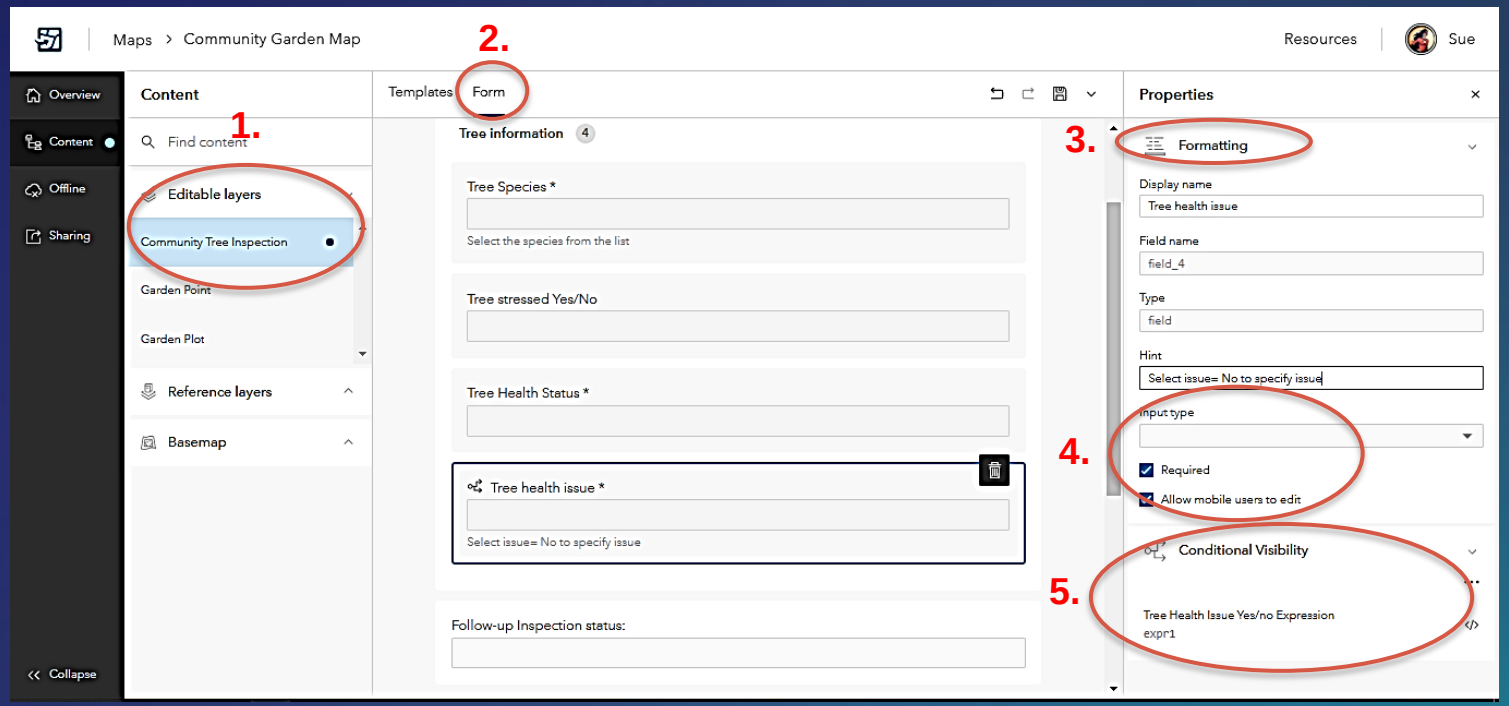
- Enable **offline** for the map; check all layers (editable, reference, tables, basemaps) are enabled for offline
- **Optional: create offline areas**
  - TIP: need to first save a COPY of the same map for connected & ad-hoc offline use!
- Specify Feature & attachment delivery options to optimize download & sync
- Specify to use a tile package for the offline basemap (.vtpk, .tpk or .tpkx – download to device)

Tips for Going offline with Enterprise:

- Configure layers for offline use (hosted feature layers, Server layers)
- Esri Basemaps are NOT enabled for offline use by default : add basemap from ArcGIS Online for offline use

Field Maps Web App – Configure the Form

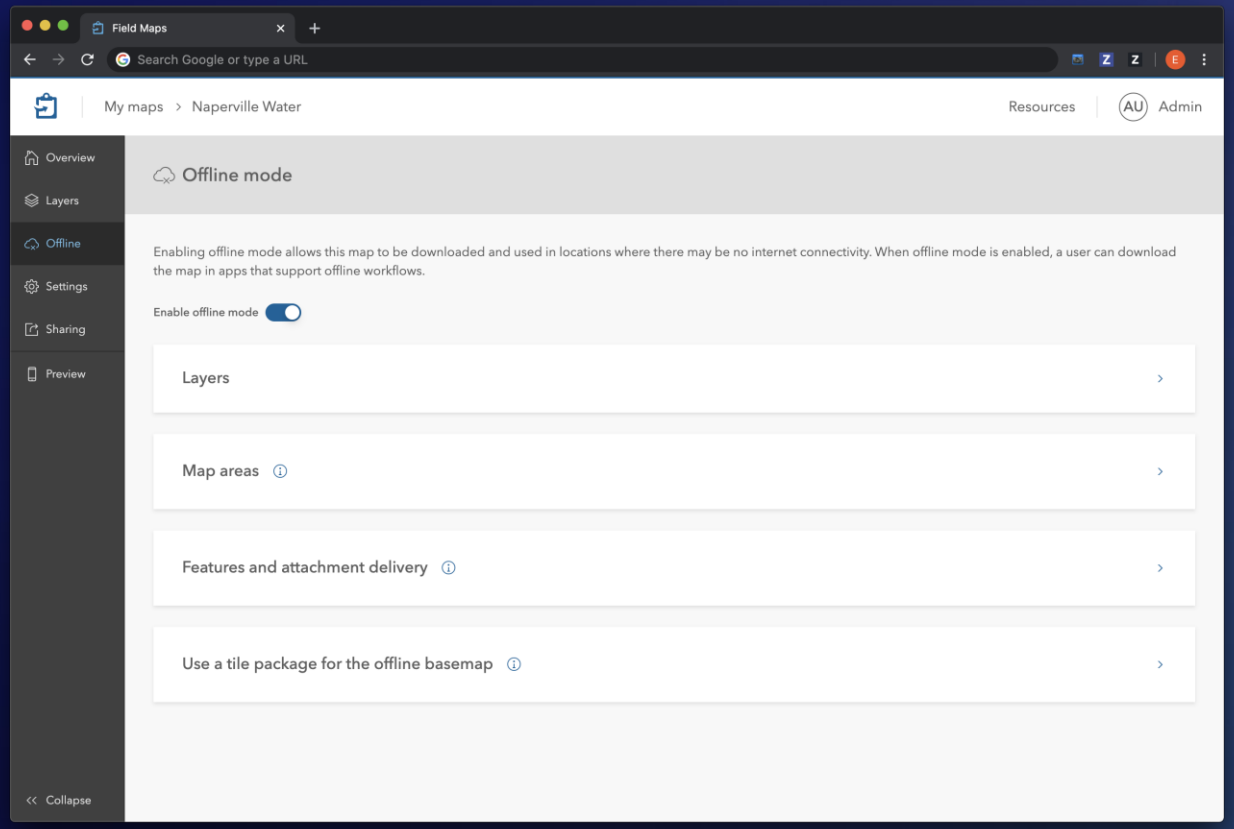
- **Create new or convert** from **map pop-up**
- calculate entries based on formulas & other parts of the form using Arcade
- **Add/Remove attributes**
- Make **Required**
- **Allow users to Edit or make read-only**
- **use default values** from feature template
- **Set input type** (text, numeric & date field options)
- **Use Arcade expressions > Arcade Editor**
  - Apply **conditional visibility** to fields using **Arcade Constraint Profile**
- Setup to scan **barcodes** & **QR codes**
- **Group attributes**
  - Name and description
  - Collapse/Expand
  - Organize, order fields



★ **Tip:** Once you configure & save the form you must use Map Viewer Beta if further *editing* the map or your form will be lost !

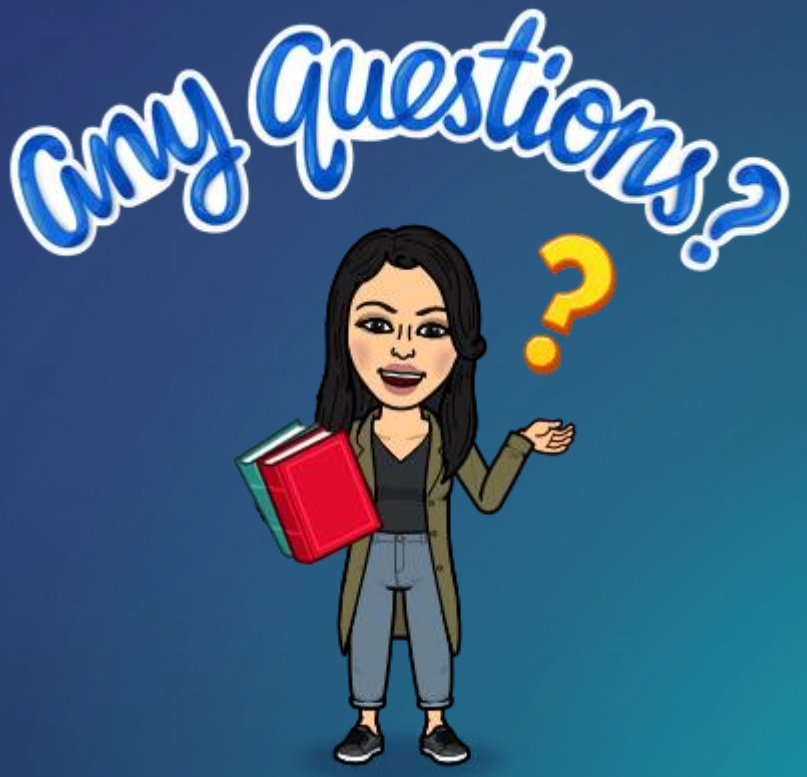
Much more to come to form capabilities in future phased releases…

Field Maps Web App Demo



Q&A: Using Field Maps web app

?



Migrating to the Field Maps Mobile App

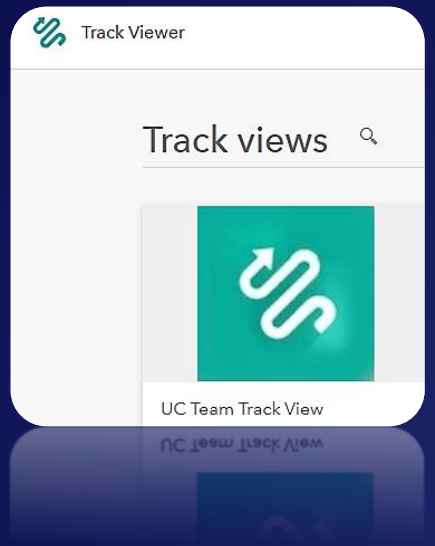
Tricks & Tips for Working With the Field Maps Mobile App:

Collector & Explorer users

- Work with existing web maps used in **Collector** or **Explorer** “as-is” in Field Maps mobile
  - user interface in Field Maps is identical to the UI in Collector and Explorer
  - “Use in Field Maps” setting for web maps is checked on by default
  - Use same web map for read-only users as well as editors
  - Users who do not have editing user types & privileges will only be able to open the map & layers contained as read-only
  - Offline maps previously downloaded onto devices need to be copied into the Field Maps Map Packages folder on the device
  - Offline options: **mmpks** ~ prepare mobile map packages (same process as for Explorer)

Migrating Blog Post **Migration Guide**

Tricks & Tips for using Location Tracking with Field Maps



Location Tracking in your ArcGIS Organization:

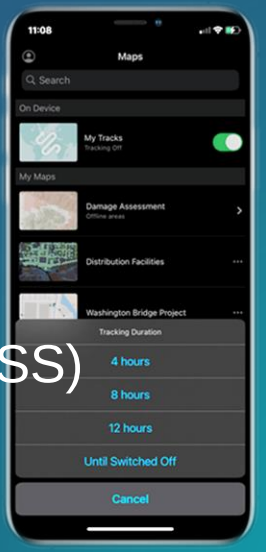
- **Enable ArcGIS organization location tracking capability**
- Track points stored in 2 point layers: Last Known Locations & Tracks
- Purchase & provision **Tracker licenses** as required
  - For any level of users including Viewer
- **Track Viewer web app** to create Track views & Add users
  - View tracks in other maps & apps
- ArcGIS Enterprise 10.7+ (10.8+ Track Viewer automatically installed)

FAQs

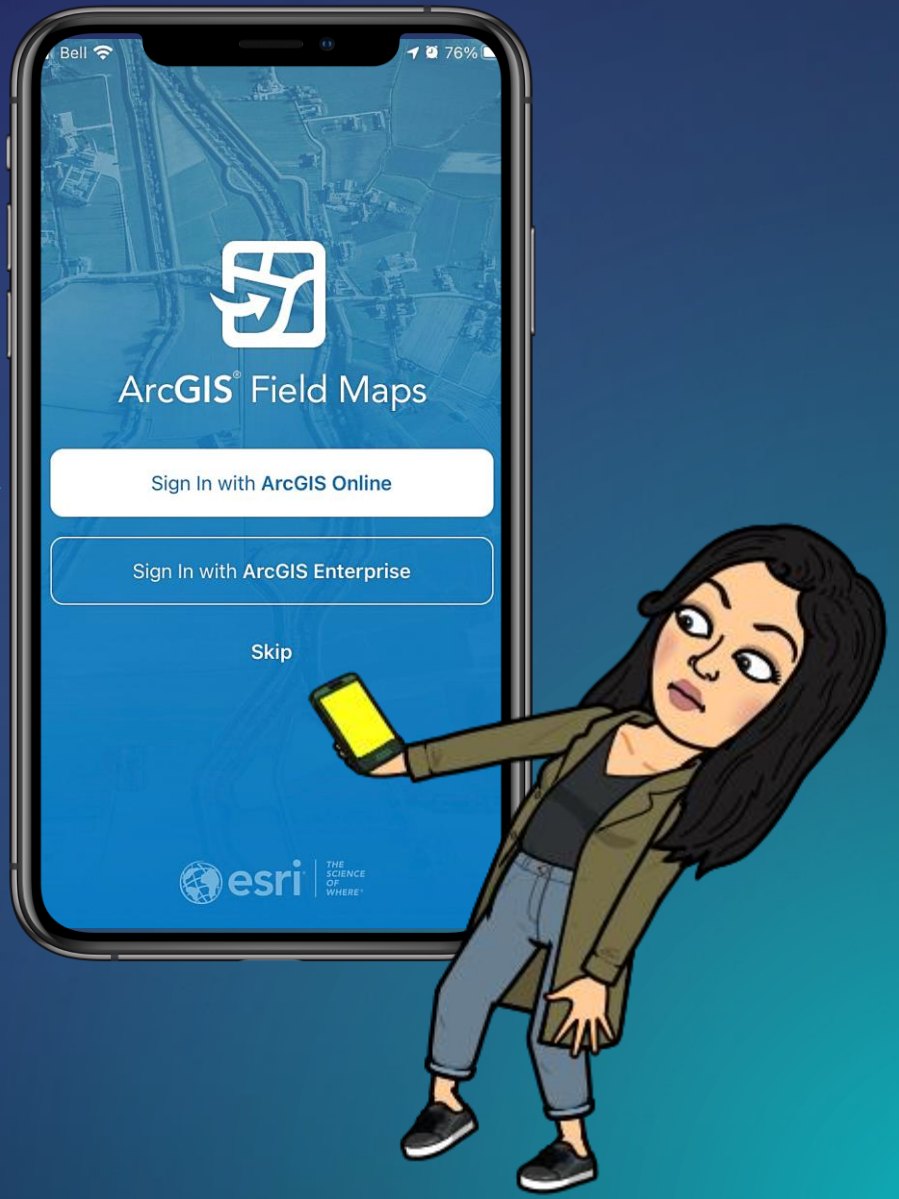
Blog Post

Location tracking in the Field Maps mobile app:

- Turn on tracking from maps list upon sign-in or from GPS banner in map
  - Set duration for tracking (4, 8, 12 hours, until switched off)
  - Turn on My Tracks form Layers to view in map
- Track with or without cellular/wifi connection (uses your device GPS or external GNSS)
- Apple Watch support: start tracking, set duration
- Tracker users: use Field Maps only for tracking > view in any shared map (optional)



Field Maps Mobile App Demo



Q&A: Field Maps mobile app

Field Maps: Integration using Mobile App Links

1. Open Field Maps from a Universal app link

- **Help Topic Open your map from a link to learn more about constructing app links**

https://fieldmaps.arcgis.app?parameter=value&parameter=value

- Supports a number of parameters including open map, search and set location, set initial feature capture & more:
  - *itemID (map id), scale, bookmark, center (coordinates), geometry, feature attributes (populate Specified entries), callback, GNSS AntennaHeight & LocationProfile*

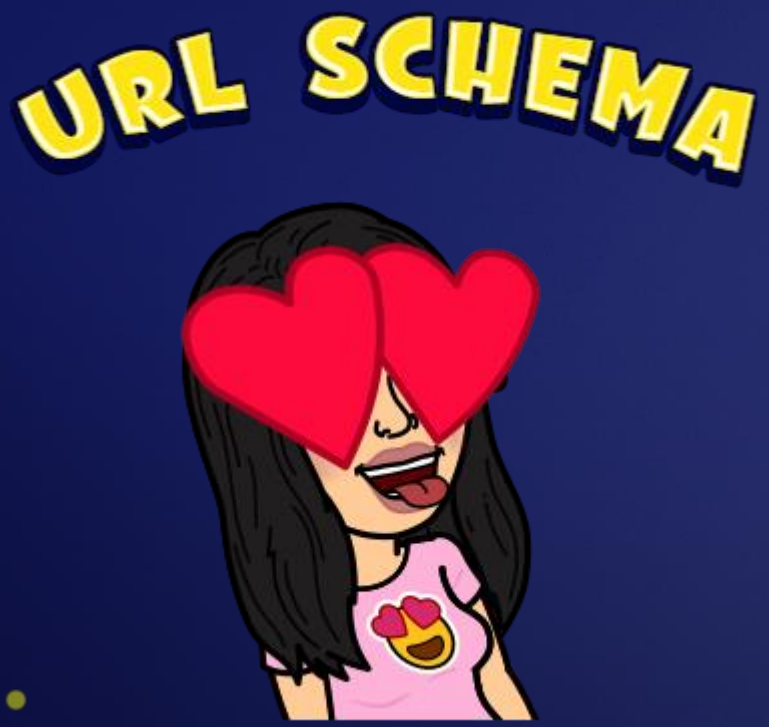
2. Open other ArcGIS mobile apps from Field Maps:

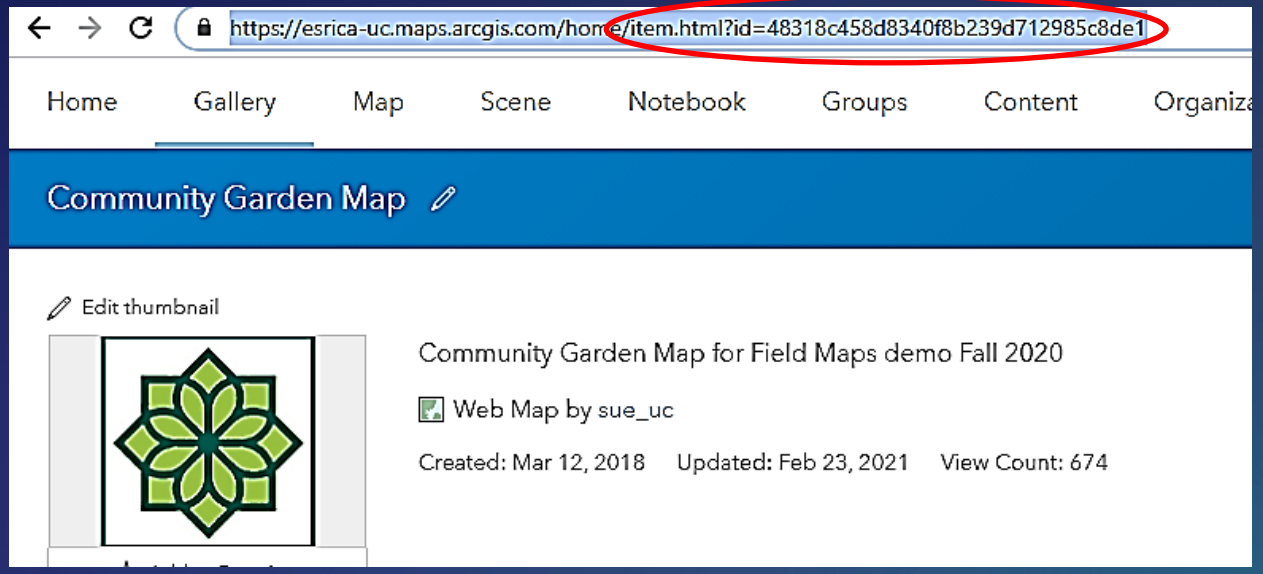
- Configure link in a custom popup for attribute(s)
  - Pass parameters to fill out – including attribute values
  - Link to **Survey123**: documentation, blog posts
  - Link to **QuickCapture**
  - Directions > **Navigator** option from settings

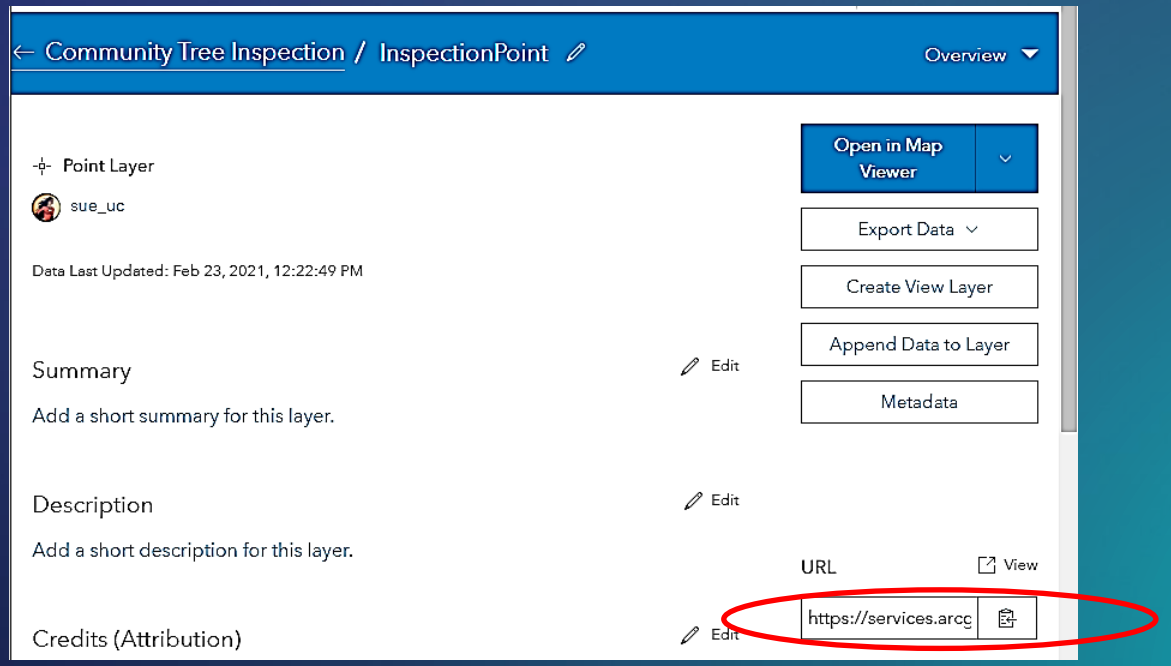
Other integration option:
link from assignments using
ArcGIS Workforce

URL links work online & offline - as long as forms & maps & projects downloaded to device

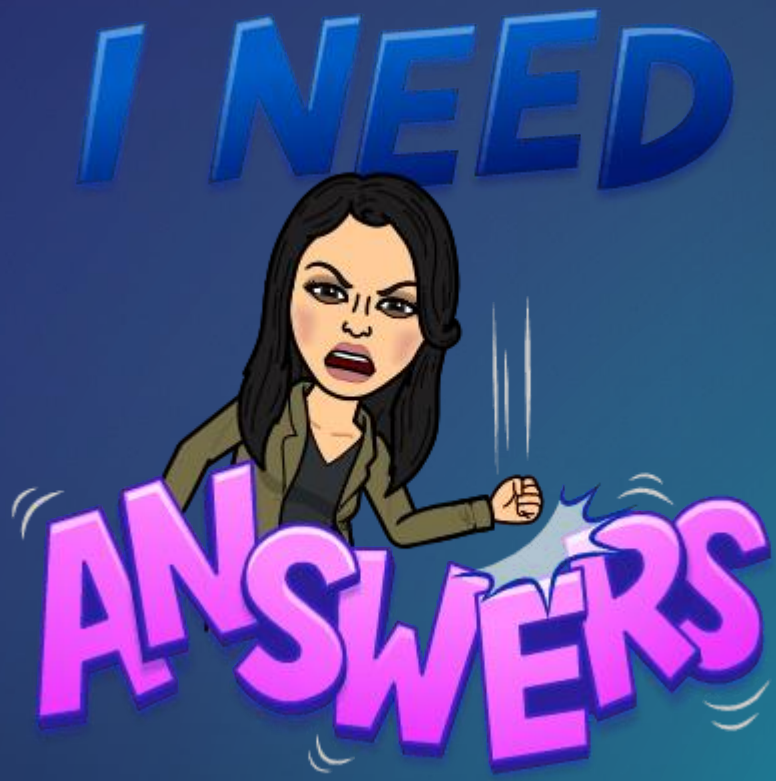
Demo: URL Links

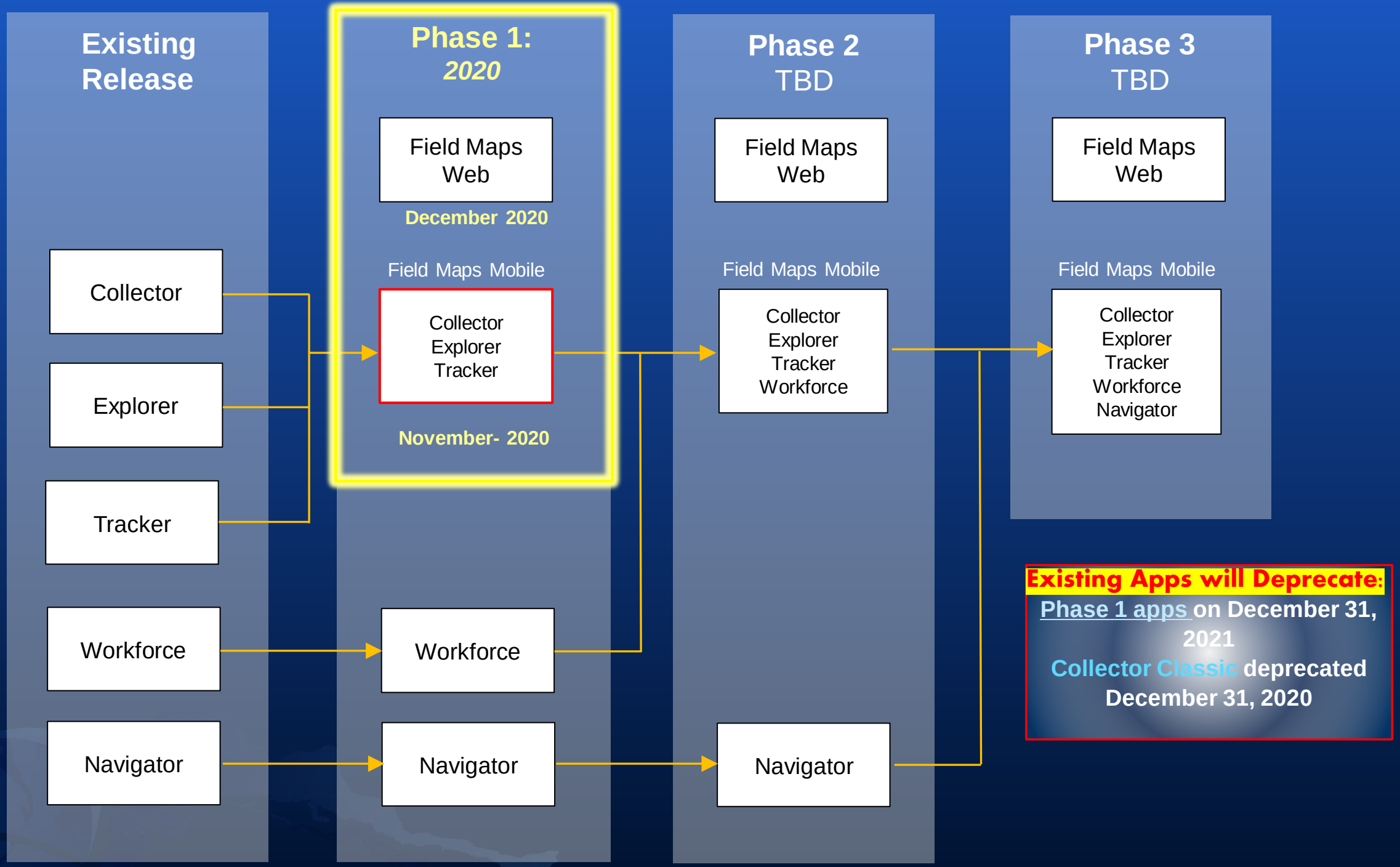






Q&A: Using url parameters




Existing Release
Collector
Explorer
Tracker
Workforce
Navigator
Phase 1:
2020
Field Maps Web
December 2020
Field Maps Mobile
Collector
Explorer
Tracker
November- 2020
Workforce
Navigator
Phase 2
TBD
Field Maps Web
Field Maps Mobile
Collector
Explorer
Tracker
Workforce
Navigator
Phase 3
TBD
Field Maps Web
Field Maps Mobile
Collector
Explorer
Tracker
Workforce
Navigator
Existing Apps will Deprecate:
Phase 1 apps on December 31, 2021
Collector Classic deprecated December 31, 2020

ArcGIS Organization Licensing

Available in ArcGIS Online and Enterprise

- **Field Maps** honours existing licenses, user types & privileges
- Named user type determines what users can do in ArcGIS Mobile Apps: in-office and in the field
- App bundles provide access to mobile apps (part of Field Apps bundle)

Viewing	Editing	Authoring

Viewer

- Simple map viewing
- * *Location tracking*
- * *Turn by turn navigation*

Editor

Field apps bundle ad-on
- Simple map viewing
- **Data capture & editing**
- **Receive assignments**
- * *Location tracking*
- * *Turn by turn navigation*

Field Worker

Field apps bundle included
- Simple map viewing
- **Data capture & editing**
- **Receive assignments**
- * *Location tracking*
- * *Turn by turn navigation*

Creator

Field apps bundle included
- Simple map viewing
- Map editing
- Receive **& Create** assignments
- ***Create maps & apps***
- * *Location tracking*
- * *Turn by turn navigation*

GIS Professional

Field apps bundle included
- Simple map viewing
- Map editing
- **Receive & Create** assignments
- ***Create maps & apps***
- ***Desktop GIS & Analysis***
- *Location tracking*
- *Turn by turn navigation*

*** Add-on license: any level**

* Navigator & Tracker

A few more FAQs for migrating to Field Maps:

Q: Will Field Maps be released on Windows?

A: This is currently not under development. Go to Field Maps Ideas & make a suggestion!

- Alternative is **ArcGIS Pro 2.7 with GNSS support** for location & data collection
- ArcGIS Pro 2.7 also directly reads mobile geodatabases (format used offline in Field Maps)

Q: Can Field Maps be customized?

A: No, it is all configuration only. Review how much it does meet your workflow needs.

- While we always emphasize configuration before customization, other options are **Survey123** & QuickCapture – source code provided by **AppStudio**

Q: Is Field Maps the new Collector123/will provide all Survey123 capabilities in the form?

A: No: Survey123 provides many unique capabilities built upon XLS Form. It will continue to be supported & developed. Web map smart form capabilities are built upon the feature layer & map.

- Try out the new web map smart form to see what it can do for your workflows
- Test workflow with both apps & compare which meets your needs the best
- Much more is coming with the web map smart form – this is just the first release
- Web map smart forms will work across ArcGIS system: beta map viewer today, Pro & other apps later = advantage

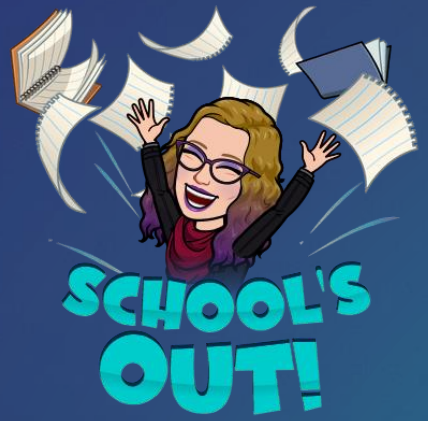
☺ **FACT:** You can use existing Phase 1 apps & Field Maps on the same device ~ so test your maps & workflows to make sure everything works the way you need it to

Resources

- Field Maps GeoNet : Blog, Ideas, Questions
- Blog posts: https://www.esri.com/arcgis-blog/?s=#&products=field-maps
- Documentation
- Guides: Migration guide, offline guide
- Early Adopter- https://earlyadopter.esri.com/key/ArcGISFieldMaps
- Beta Alias - ArcGISFieldMapsBeta@esri.com
- learn.arcgis : Field Maps lessons
- YouTube Playlist
- Esri Canada:
  - Webinars: Introducing Field Maps recording November 5, 2020
  - Training: Field Data Management & Collection using ArcGIS
  - Blogs: https://www.esri.ca/en-ca/news-events/news/esri-canada-blog

Thank You

- The recording will be available online at: resources.esri.ca/webinars
- If you have any additional questions about the content presented to you, feel free to contact us:
  - **Jasmine Sohal: jsohal@esri.ca**
  - **Sue Enyedy-Goldner: senyedygoldner@esri.ca**



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