

Field Operations Webinar Series

For Utilities, Water, and Telecom



Questions and Answers

Webinar 1: Improving Inspections and Maintenance

- 1. Can we integrate Workforce for ArcGIS assignments with other systems? if so, how? Is there any help documents or support resources?**
 - a. This can be done with scripting and we recommend using the ArcGIS API for Python. You can read more about this process [here](#).
 - b. This [Github](#) repository contains sample scripts.

- 2. Is an integration to Microsoft Teams on your roadmap?**
 - a. While there is no direct integration available with Microsoft Teams, you can embed web apps made in ArcGIS Online or Enterprise within Teams. To do this, add a new tab to a channel and set it as a website. Use the URL from your web app to link the app into Teams. The app will still need to be shared appropriately and those accessing it may still need to be a named user. Please know that ArcGIS does integrate with Microsoft: Excel, PowerPoint, SharePoint, and Power BI. Take a look into [ArcGIS Maps for Office](#), [ArcGIS Maps for SharePoint](#), and [ArcGIS Maps for Power BI](#).

- 3. Can anyone within the utility have access to the dashboard? Does the dashboard require an Esri license?**
 - a. Dashboards can be shared in the same way that you share other items/apps with ArcGIS Online/Enterprise. Simply create your dashboard and then share it with groups, the organization, or publicly. For someone within an organization to view dashboards, they would need at least a “viewer” license. To create one, you need at least a “creator” license. If a dashboard is publicly facing, then no license to view it is necessary.

- 4. Can this system (Collector for ArcGIS, etc.) talk with a non-Esri system? We use MapInfo (OSPI Insight) and QGIS, both enterprise databases.**
 - a. ArcGIS products and apps are designed to work within the Esri platform. If you would like to integrate with other platforms, the data would most likely need to be Extracted, Transformed, and Loaded (ETL) out of Esri and into your other GIS systems. You can also check with those other systems to see if they have any means of integrating with the ArcGIS platform.

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5. When are webhooks coming to Collector for ArcGIS?

- a. Webhooks are currently only supported for [Survey123](#), [QuickCapture](#), and [Enterprise Portal](#).
- b. To gain visibility, submitting this request to [ArcGIS Ideas](#) would be a great next step.

6. How are you using the image of the gas meter setup in Survey123 to select the different parts of the meter? Is this possible in the web version of Survey123?

- a. This process is done using a Scalable Vector Graphic (.svg), a type of image file, and a select_one or select_multiple questions with appearance set to image-map. The SVG file typically has to be custom made to fit your needs. You can follow the steps in [this blog](#) to get started. Currently, this functionality is only possible with surveys made using Survey123 Connect that are used with the Survey123 mobile app. The image-map appearance is not supported in the Survey123 web app.

7. How can we get access to ArcGIS Insights? Is it included with our ArcGIS Online license?

- a. ArcGIS Insights is a premium app for ArcGIS Online/Enterprise and can also be installed locally on your desktop as well. If you are interested in ArcGIS Insights, you can read more about it [here](#) and see its [Frequently Asked Questions here](#). Please contact your Esri Account Manager to learn more.

8. How do you configure Survey 123 to automatically set the inspection in Workforce? I see too much back and forth for the field worker to manage.

- a. You can configure the integration between Survey123 and Workforce within the Workforce project's configuration. Specifically, go to the "Advanced" tab and look under "App Integration." You can integrate with Collector for ArcGIS, Explorer for ArcGIS, Navigator for ArcGIS, and Survey123 for ArcGIS. To learn more about this process, follow this [link](#) and look under "Tip: Integrate other Esri apps."

9. When capturing an issue in the field using a mobile app, how accurate is the GPS location? Any tips or tools that can improve the accuracy of the marked location?

- a. The accuracy of the data collected is based on the GPS of your mobile device. At best it's usually accurate to few meters, but this accuracy can also vary based on local or atmospheric conditions (clouds, buildings, trees, phone case, etc.). The easiest way to overcome the positional error would be through using an external, Bluetooth GPS unit. Esri has many partners that make these GPS units that work with mobile devices and Collector, QuickCapture, and Survey123.

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- b. The price can vary based on the manufacturer and the level of accuracy required. Eos, Trimble, Bad Elf, and Juniper units are quite common in the field.

10. How do you add the photo attachment in the e-mail webhook? I've built a few webhooks but never see the images attached in the e-mail. Thanks!

- a. To provide some background, the webhook demonstrated was set up using Integromat. [This blog](#) covers how you can configure the webhook to pull an image taken in the field to add it to an email as an attachment. This works for both Survey123 and QuickCapture. Photo attachments are not currently possible with webhooks made using Microsoft Power Automate (formerly Microsoft Flow).

11. Is there an Esri Blog article about this?

- a. Resources available based on functionality shown in the demonstration:
 - i. [Integrate Workforce with an Enterprise Asset Management System](#)
 - ii. [Integrate Workforce and Survey123](#)
 - iii. [Work with selectable images in Survey123](#)
 - iv. [Integrate Survey123 and QuickCapture](#)
 - v. [Webhooks and QuickCapture](#)
 - vi. [Getting started with Dashboards](#)
 - vii. [ArcGIS Insights Gallery](#)

12. Is there a way to collect data offline and later upload data offline to a database?

- a. Collector for ArcGIS, Survey123 for ArcGIS, and ArcGIS QuickCapture are all capable of working offline. To use Collector offline, you can follow the steps outlined [here](#) (be sure to follow the steps for the appropriate mobile device). For Survey123, simply download the survey to your device before you leave an area with good cellular reception. For QuickCapture, the process is similar to Survey123; download the project before heading into the field. In all cases, the data collected will be stored on the mobile device and can be synced to ArcGIS Online or Enterprise once you return to an area with good cellular connectivity.

13. Is ArcGIS Insights only available in ArcGIS Enterprise? What version?

- a. ArcGIS Insights is available for ArcGIS Online, ArcGIS Enterprise, and can be installed locally on your desktop as well. The version of ArcGIS Insights that you can run in ArcGIS Enterprise depends on your version of ArcGIS Enterprise. The table at the top of [this page](#) can help you determine which

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version of ArcGIS Insights is compatible with each version of ArcGIS Enterprise. Please note that ArcGIS insights is a premium app. If you are interested in accessing this application, please reach out to your Esri Account Manager.

Webinar 2: Optimizing Capital Work

1. I realize the demos are informative using ArcGIS but how would the Utility Network benefit a utility? Or is there an integration?

- a. Understanding the Utility Network: A Guide for Water Utilities (<https://www.esri.com/en-us/landing-page/industry/water/2019/understanding-utility-network>)
- b. Water Distribution Utility Network Foundation (<https://solutions.arcgis.com/water/help/water-distribution-utility-network-foundation/get-started/create-water-utility-network.htm>)
- c. Webinar: Introduction to the Utility Network (<https://www.youtube.com/watch?v=CWEhSUszTRw&t=1880s>)

2. How can we do this operation using Survey123?

- a. Get Started with Survey123 for ArcGIS (<https://learn.arcgis.com/en/projects/get-started-with-survey123/>)

3. How can we enable attachments in Survey123?

- a. Users could go the layer setting in ArcGIS Online/Portal (Item Details) > Overview and enable attachments via the toggle.
- b. Image only at this point.

4. Is snapping still limited to vertices? I would like to have ability to snap to edge.

- a. You can snap to existing point features or vertices of lines and polygons when using the map to create new features or when updating the location of existing ones.
- b. Vertices only at this point

5. I have an issue with bad resolution of satellite images. Do you know how to overcome it and enable the use these tools?

- a. Customize Basemap
 - i. Design and Publish Basemaps (<https://learn.arcgis.com/en/projects/design-and-publish-basemaps/>)

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- ii. Customize basemaps in Portal for ArcGIS

(<https://enterprise.arcgis.com/en/portal/latest/administer/windows/customize-basemaps.htm>)

- b. There are also partners that provide High Resolution Aerial Imagery products to customers such as Nearmap & EagleView (formerly Pictometry)

6. Does the data from Collector for ArcGIS have the same input fields as the dashboard?

- a. Yes, they are all pointing at the same feature service.
- b. They are fully configurable on the data fields you would like to display as well.

7. If we are using a separate design tool, what is our best format/interface to send a design to Esri for inclusion in a constructability review application?

- a. We could leverage a data conversion process to bring over and publish the design to an ArcGIS Online or Portal for ArcGIS Environment for field operations.
- b. Supported Data Types and Format (<https://pro.arcgis.com/en/pro-app/help/projects/supported-data-types-and-items.htm>)

8. Is the May 14th webinar available for watching if we weren't registered for it?

- a. Yes. Webinar recordings and presentations can be found here: go.esri.com/InspectConstructInnovate

9. Are the annotation polygons an SDE feature class?

- a. Yes, it could be.

Webinar 3: Transforming Fieldwork with Advanced Technologies

1. Can the QR Code image be added to mapping? Possibly a popup window that workers can scan to enter inspection data?

- a. The QR code in this demo opens a Survey123 survey using URL parameters. It is possible to include a location question in the survey and then have a point added to the inspection data automatically when the QR code is scanned.
- b. Check out this link that contains information on how to configure a Survey123 link to prepopulate fields (<https://community.esri.com/groups/survey123/blog/2019/02/06/survey123-tricks-of-the-trade-web-form-url-parameters>).

2. How much of this functionality is enabled in ArcGIS Runtime?

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3. How did they pinpoint the points? Was it with the drone's coordinates?

a.

4. Michael - can you use the AI processes to ID and locate trees?

a. You sure can! There are some built in processes that can identify items in a few different ways. For example: if you want to know an area has trees, you can do that. If you want to identify how many trees, you can do that. If you want to know what kind of tree it is, you can do that too. If you wanted to include this data within a vegetation management process or to know what assets may be at risk of damage from a fallen tree, this would be perfect.

5. Would you have a workflow for the image classification process used in Pro and for this webinar?

a.

6. How does the QR Code know where to push the data to? How do we configure this in Survey 123? Do we make our own QR Codes for this to work?

- a. The data is pushed to wherever the survey was created (ArcGIS Online or Portal).
- b. Check out this link that contains information on how to configure a Survey123 link to prepopulate fields
(<https://community.esri.com/groups/survey123/blog/2019/02/06/survey123-tricks-of-the-trade-web-form-url-parameters>).
- c. To create the QR code we used a free online QR Code generator that was then exported as an image.

7. What about the use of RFIID instead of Barcoding?

- a. If you have an RFIID reader that connects to your mobile device, then you could use RFIID technology. It would require a URL to be transmitted from the RFIID tag.
- b. Check out this link for more information on how to configure a Survey123 URL to prepopulate fields (This link contains information on how to configure a Survey123 link to prepopulate fields
(<https://community.esri.com/groups/survey123/blog/2019/02/06/survey123-tricks-of-the-trade-web-form-url-parameters>).

8. Can I use ESRI's imagery for analysis?

- a. If you are asking about basemaps, not necessarily. The analysis needs to look at the layers and imagery that has been added to the map on top of the basemap.

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9. How well does voice recognition work with various English dialects across the US and with industry specific jargon?

- a. Voice recognition is dependent on the device you are using.

10. On damaged assets like a broken power line crossarm from your experience what gsd level images would be required?

- a. It would be a case by case basis on the level of damage you are looking to identify. I would suggest.

11. Which drones models are supported with the flight planning software?

- a. Most drones can use the flight planning software and new drones are currently being added. Most drones that we have done tests with are DJI.