

Survey123 Tricks of the Trade (Live) Automating Reports

July 6, 2023

[Click here to watch a recording of this session](#)



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Product Engineer



Agenda

- Introducing Survey123 reports and automation
- Live Demonstrations:
 - Create a report when a survey is submitted
 - Schedule reports
 - Combine Survey123 and ArcGIS Power Automate modules
- A few tips and live Q&A



Survey123 reports

- Create beautiful PDF reports from your Survey123 data
- Include maps, photos, signatures, tables and more...
- Create your report templates using Microsoft Word
- Request reports:
 - Interactively
 - Programmatically
 - Through no-code automation

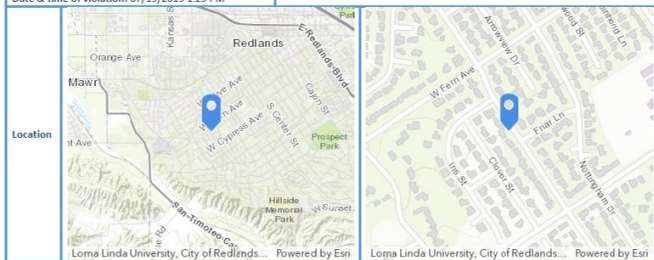
OKLAHOMA HIGHWAY PATROL
Criminal Interdiction Report

CASE DETAILS		
Date: Jul 19, 2019	Time: 11:39	Military Time: 1139 Hours
Criminal Interdiction Case #: CI-1563512400000-A	OHP CR#: CR-000123	Interdiction Type: Narcotic , Weapon Trafficking , Stolen Property , Financial Crimes , Fraudulent Documents , Wanted Person , Human Trafficking , Other
Reason For Stop: Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec aliquam leo vulputate, auctor urna eget, condimentum augue. Ut scelerisque viverra leo sed dapibus. Maecenas sit amet egestas tellus. Nunc condimentum ut sem ut elementum. Proin lectus metus, egestas vitae libero eu, egestas vehicula sapien. Donec tempor justo in aliquet laoreet. Donec vel felis efficitur, mattis risus a, imperdiet ligula. Aliquam erat volutpat. Morbi vitae volutpat odio. In dapibus enim ante, ut vehicula ante congue ac.		


Water Violation Report

Submitted by: Ismael on 07/19/2019 2:00 PM
Date & time of violation: 07/19/2019 1:29 PM
Offender present: Yes

Location



Violations: Assigned day violation
Comments: Sprinklers on Friday. Assigned days are Tuesday, Wednesday, Saturday.
Offender name: John Smith
Offender email: jsmith@gmail.com



John Smith

Not familiar with Reports? [Check this webinar](#)

Survey123 reports

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- Create your report templates using Microsoft Word
- Request reports:
 - Interactively
 - Programmatically
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3800-FM-BCW0521 12/2015 MS4 Outfall Field Screening Report

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION	
Permittee Name: _____	NPDES Permit No.: PA _____
Date of Inspection: _____	Outfall ID No.: _____
Land Uses in Outfall Drainage Area (Select All):	Latitude: _____° _____'
<input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential	Longitude: _____° _____'
<input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential	Dry Weather Inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Open Space <input type="checkbox"/> Other: _____	Date of Previous Precipitation: _____
Inspector Name(s): _____	Amount of Previous Precipitation: _____ in
	Were Photographs Taken? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Are Photographs Attached? <input type="checkbox"/> Yes <input type="checkbox"/> No

OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: _____ in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment
<input type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other	Depth: _____ in Top Width: _____ in Bottom Width: _____	

Dry Weather Flow Present at Outfall During Inspection? Yes No (If No, skip to Certification Section)

Description of Flow Rate: Trickle Moderate Significant N/A

The collage displays various components of a report generated from Survey123 data. It includes:

- Report headers from the Arizona Department of Environmental Quality.
- A detailed 'Inspection Begins' section with checkboxes for various conditions.
- A grid of photographs showing an industrial or construction site with large stacks of tires and buildings.
- Small report snippets overlaid on the photos, demonstrating how data is integrated into the final report.

Not familiar with Reports? [Check this webinar](#)

New to Survey123 Reports?

LIVE STREAM

ArcGIS Survey123 Tricks of the Trade: Create Report Templates

—
April 19, 2023
9:00 AM - 10:00 AM (PDT)

REGISTER NOW



Watch the recording of this [recent webinar](#) to get started with Survey123 Reports.



About Microsoft Power Automate

- Part of Microsoft Office 365
- No-code workflow automation software
 - Automate repetitive tasks
 - Bring together, visually, hundreds of apps and services
- Includes out of the box connectors for ArcGIS and Survey123



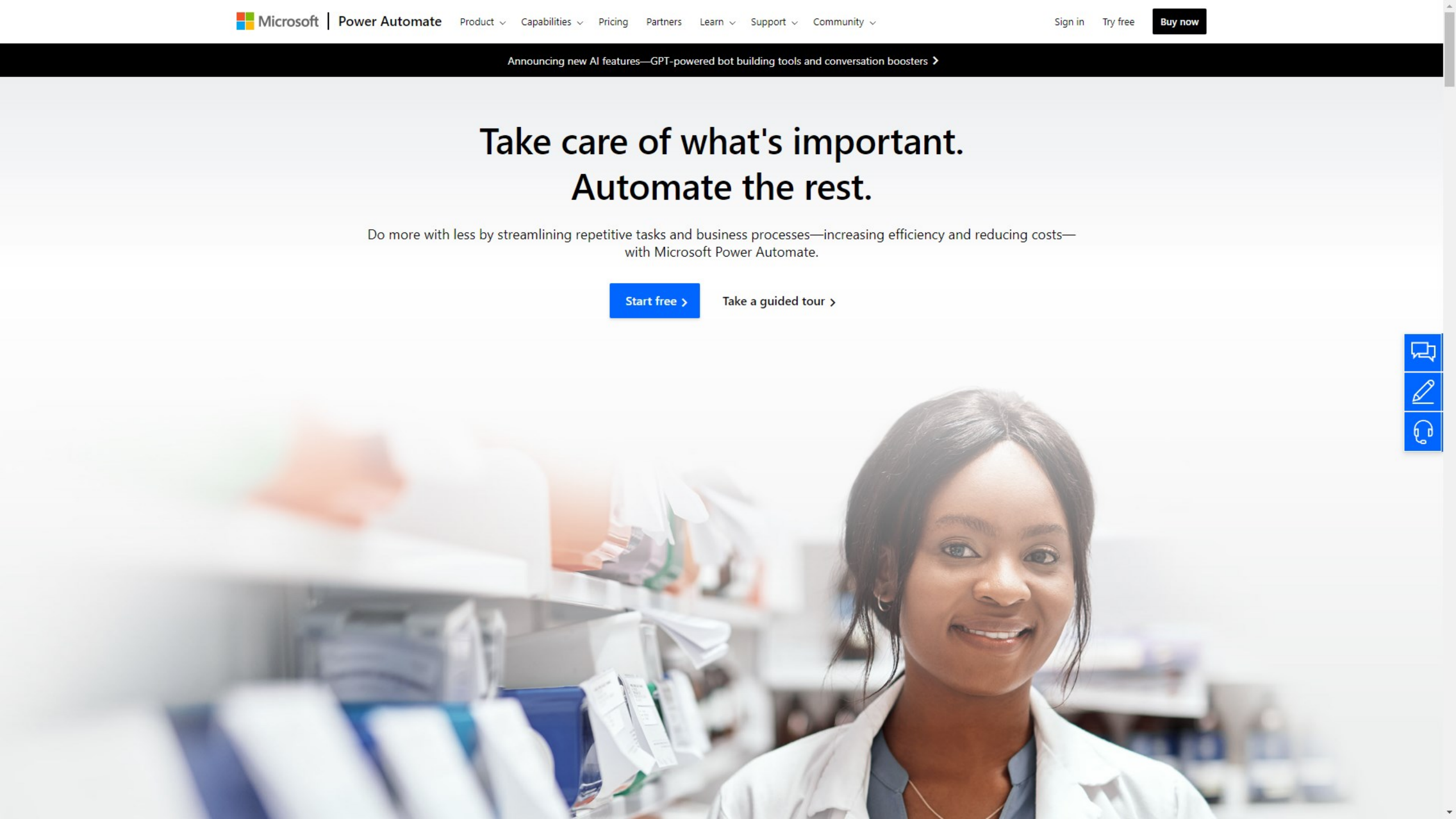
Announcing new AI features—GPT-powered bot building tools and conversation boosters >

Take care of what's important. Automate the rest.

Do more with less by streamlining repetitive tasks and business processes—increasing efficiency and reducing costs—
with Microsoft Power Automate.

Start free >

Take a guided tour >



- Home
- Action items
- My flows**
- Create
- Templates
- Connectors
- Data
- AI Builder
- Solutions
- Learn

✔ Your flow ran successfully.

✔ When a survey response is submitted 0s

✔ Condition 1s

INPUTS

Expression result

true

✔ If yes

✔ Send an email (V2) 1s

✘ If no

✔ Add a row into a table 2s



Report automation with Survey123 and Microsoft Power Automate

- New Create report action in the Survey123 module!
- Create reports:
 - When a survey is submitted
 - On a schedule

The screenshot displays the Microsoft Power Automate interface. The top navigation bar includes the 'Power Automate' logo, a search bar, and the user's environment 'Esri (Upgrade)'. The left-hand navigation pane shows a menu with options: Home, Approvals, My flows (selected), Create, Templates, Connectors, Data, Tables, Connections, Custom connectors, Gateways, Custom actions, and Monitor. The main workspace shows a flow titled 'Report on submit' that ran successfully at 7/5/2023 10:33:26 AM. A green notification banner at the top of the flow area states 'Your flow ran successfully.' The flow consists of five sequential steps, each with a green checkmark indicating success and a duration:

- 1. When a survey response is submitted (0s)
- 2. Create report (17s)
- 3. Upload file from URL (2s)
- 4. Get file content using path (0s)
- 5. Send email with options (39s)

Create a report when a survey is submitted

Report automation with Survey123 and Microsoft Power Automate

- New Create report action in the Survey123 module!
- Create reports:
 - When a survey is submitted
 - **On a schedule**

The screenshot displays the Microsoft Power Automate interface. The top navigation bar includes 'Power Automate', a search bar, and 'Environments Esri (Upgrade)'. The left sidebar shows navigation options: Home, Approvals, My flows (selected), Create, Templates, Connectors, Data, Monitor, AI Builder, Process advisor, and Solutions. The main workspace shows a flow named 'Daily Hydrant Inspections' with the following steps: 1. Recurrence (blue step), 2. Create report (green step, highlighted with a red box), 3. Upload file from URL (blue step), 4. Get file content using path (blue step), and 5. Send an email (V2) (blue step). At the bottom of the workspace, there are buttons for '+ New step' and 'Save'.

You can now schedule the creation of reports in Power Automate



Agenda

- Introducing Survey123 reports and automation
- **Live Demonstrations:**
 - Create a report when a survey is submitted
 - Schedule reports
 - Combine Survey123 and ArcGIS Power Automate modules
- A few tips and live Q&A



Demo

Create a report (and email it to someone) when a survey is submitted

The screenshot displays the Microsoft Power Automate interface. At the top, the title bar shows "Power Automate" and "Environments: Esri (Upgrade)". The main content area shows a flow named "Report on submit" that ran successfully at 7/5/2023 10:33:26 AM. A green notification bar at the top of the flow states "Your flow ran successfully." The flow consists of five steps, each with a green checkmark indicating success:

- When a survey response is submitted (0s)
- Create report (17s)
- Upload file from URL (2s)
- Get file content using path (0s)
- Send email with options (39s)

The left sidebar contains navigation options: Home, Approvals, My flows, Create, Templates, Connectors, Data, Tables, Connections, Custom connectors, Gateways, Custom actions, and Monitor.

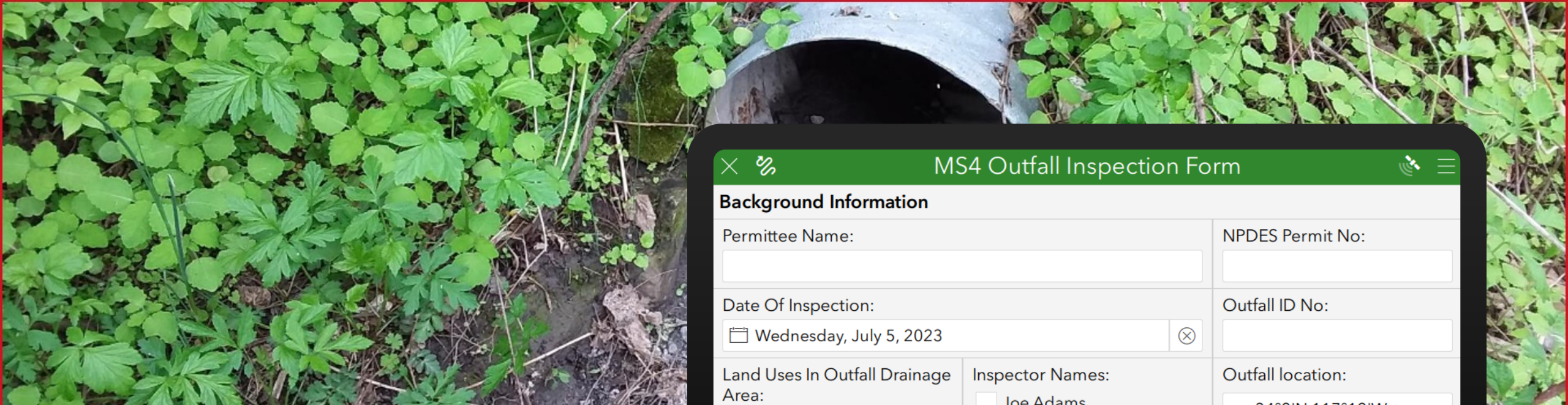




MS4 Field Inspections & Survey123

Integrating Survey123 into your organization's stormwater inspection process

Shane Adams- GIS Specialist - College Township Engineering - Spring Creek Watershed MS4 Partners
December 27, 2022



MS4 Field In Survey123

Integrating Survey123 in
inspection process

MS4 Outfall Inspection Form

Background Information

Permittee Name: <input type="text"/>	NPDES Permit No: <input type="text"/>	
Date Of Inspection: 📅 Wednesday, July 5, 2023	Outfall ID No: <input type="text"/>	
Land Uses In Outfall Drainage Area: <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Open Space <input type="checkbox"/> Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Other	Inspector Names: <input type="checkbox"/> Joe Adams <input type="checkbox"/> Anna Cretes <input type="checkbox"/> Paul Red <input type="checkbox"/> Christa Bol	
Dry Weather Inspection? <input checked="" type="radio"/> Yes <input type="radio"/> No	Date Of Previous Precipitation: 📅 Date	Outfall location: 📍 34°2'N 117°12'W ± 292.0 m
		Amount Of Previous Precipitation: in inches - 0 +

1 of 4





3800-FM-BCW0521 12/2015
MS4 Outfall Field Screening Report

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

MS4 OUTFALL FIELD SCREENING REPORT

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Date of Inspection: _____		Outfall ID No.: _____		
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<input type="checkbox"/> Industrial	<input type="checkbox"/> Urban Residential	Longitude: _____° _____'		
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<input type="checkbox"/> Open Space	<input type="checkbox"/> Other: _____	Date of Previous Precipitation: _____		
Inspector Name(s): _____		Amount of Previous Precipitation: _____ in		
		Were Photographs Taken? <input type="checkbox"/> Yes <input type="checkbox"/> No		
		Are Photographs Attached? <input type="checkbox"/> Yes <input type="checkbox"/> No		
OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: _____ in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment
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Dry Weather Flow Present at Outfall During Inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No (If No, skip to Certification Section)				
Description of Flow Rate: <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Significant <input type="checkbox"/> N/A				
DRY WEATHER FLOW EVALUATION				
Does the dry weather flow contain color? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below. _____				
Does the dry weather flow contain an odor? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below. _____				
Is there an observed change in the receiving waters as a result of the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below. _____				
Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below. _____				

MS4 Field Inspection Survey123

Integrating Survey123 into your organization's inspection process

Shane Adams- GIS Specialist - College Township Engineering - Spring Creek Watershed MS4 Partners

December 27, 2022



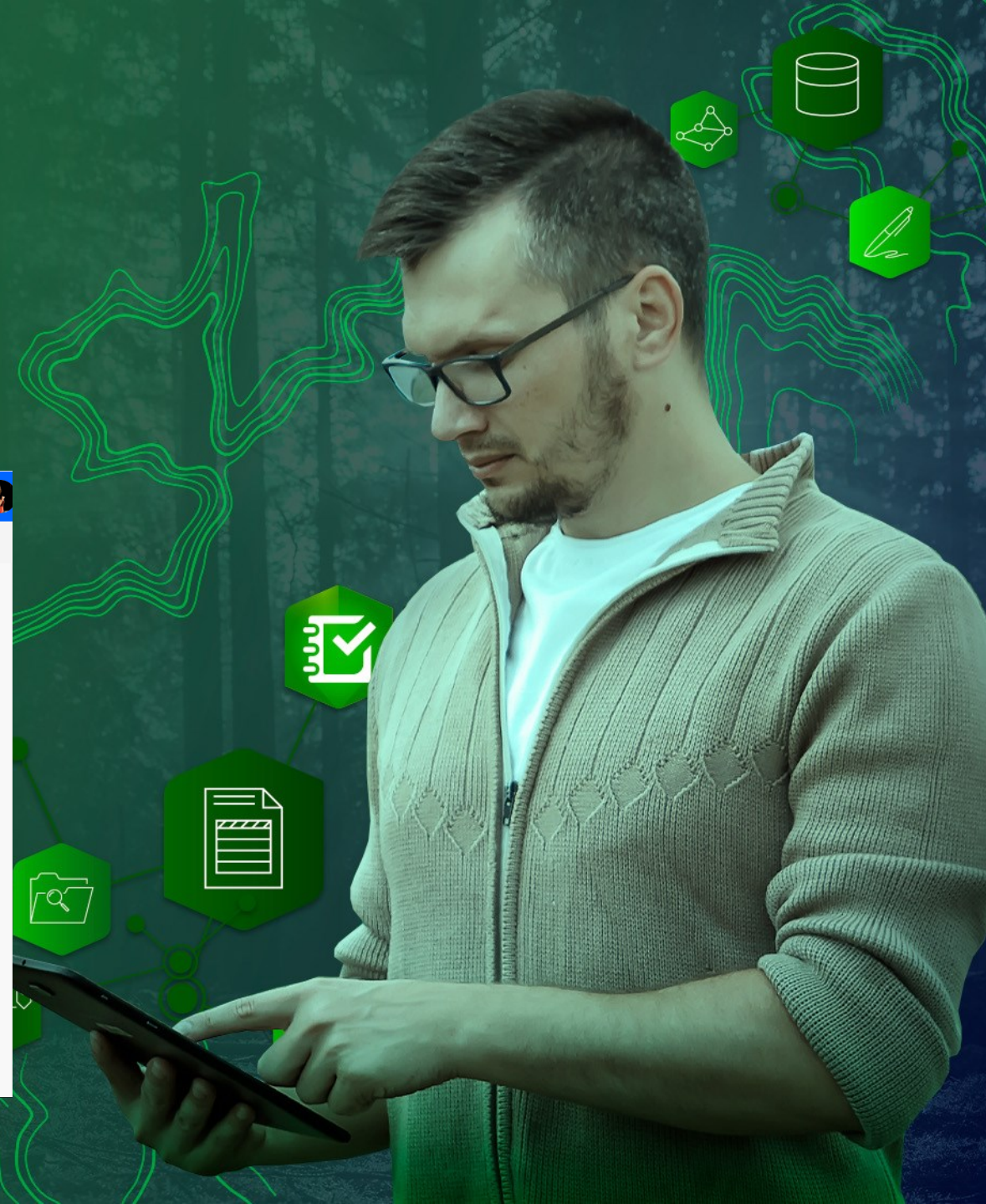
Demo

Create a daily report at 10:00pm

The screenshot displays the Microsoft Power Automate interface. The top navigation bar includes the 'Power Automate' logo, a search bar, and the environment 'Environments: Esri (Upgrade)'. The main workspace shows a flow named 'Daily Hydrant Inspections' with the following steps:

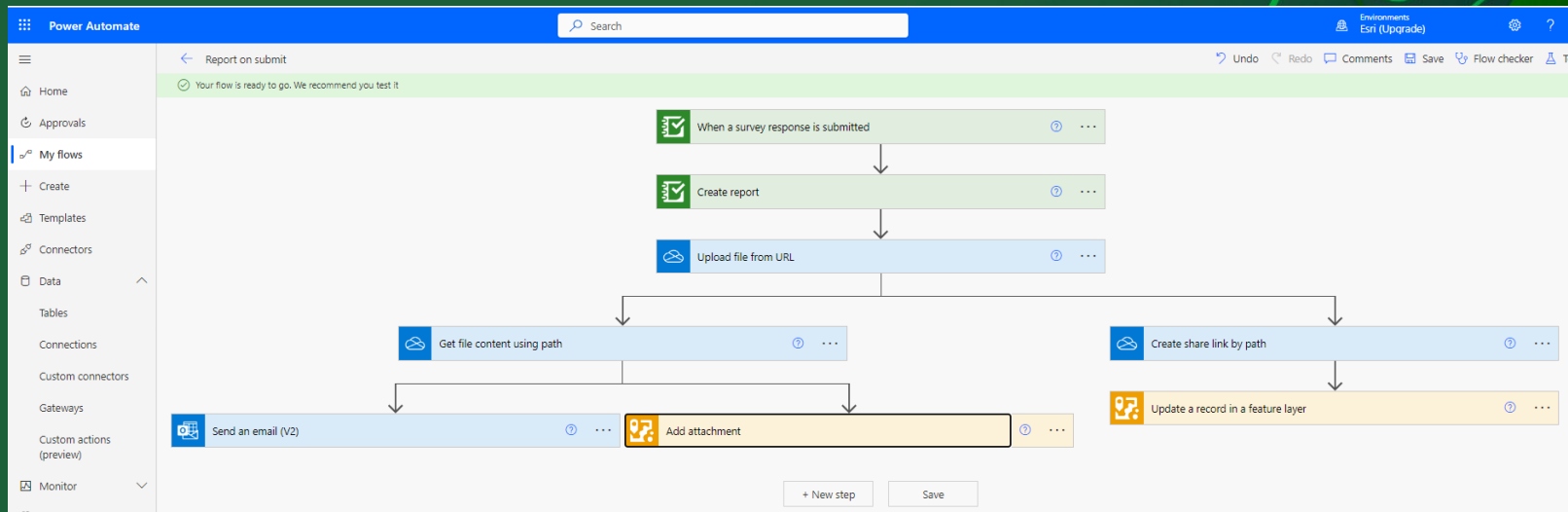
- Recurrence
- Create report
- Upload file from URL
- Get file content using path
- Send an email (V2)

At the bottom of the flow editor, there are buttons for '+ New step' and 'Save'. The left-hand navigation pane lists various options: Home, Approvals, My flows (selected), Create, Templates, Connectors, Data, Monitor, AI Builder, Process advisor, and Solutions. A chatbot icon is also visible at the bottom left.



Demo

Combine Surve123 and ArcGIS connectors





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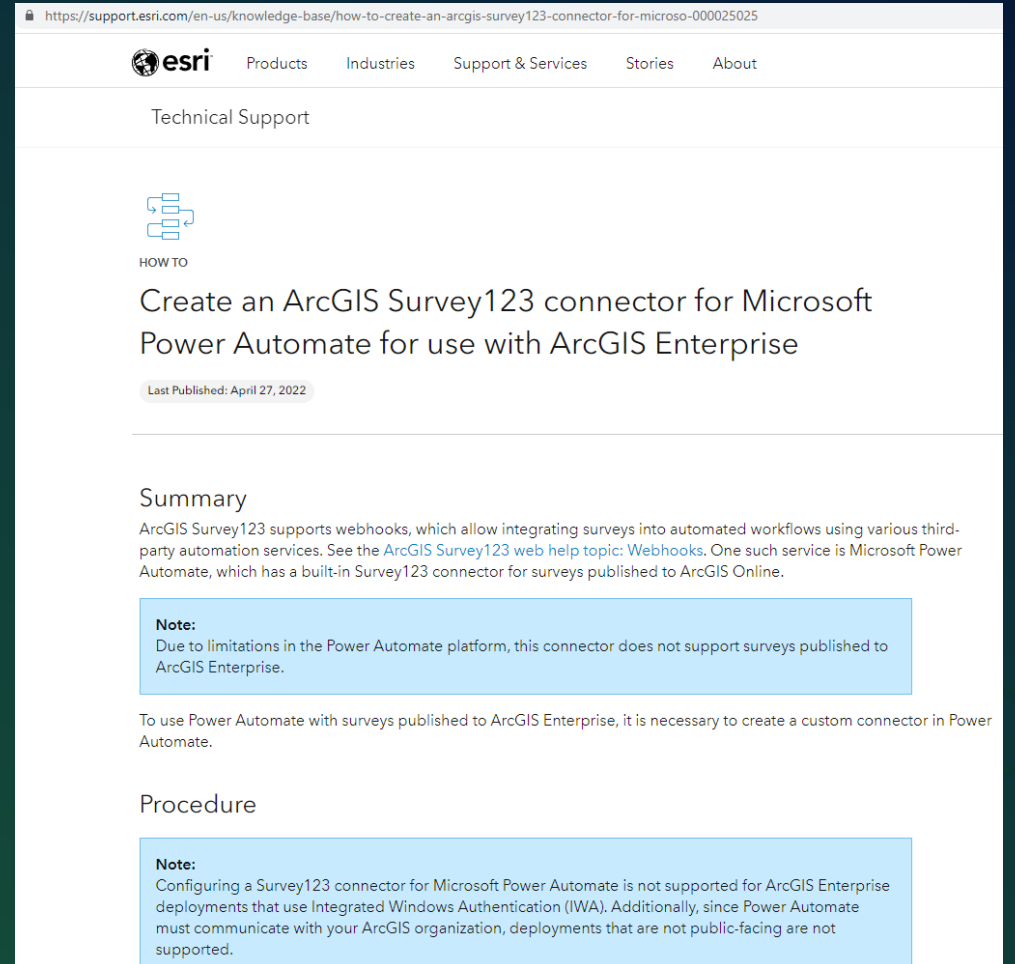


Tip 1: Managing Survey123 Connections

- Survey123 connections expire after two weeks
 - Not a big deal when you use the 'When a survey response is submitted trigger'
 - A real problem when you schedule reports
- Workaround:
 - Refresh your connection before it expires
 - Make sure all your flows use the same Survey123 connection...
 - ... do not create new connections!
- Note: Survey123 development team working with Microsoft to address this

Tip 2: Working with ArcGIS Enterprise

- Create a custom Survey123 connector to automate tasks with ArcGIS Enterprise
- Limitations:
 - IWA not supported
 - Your Enterprise instance must have a web adaptor




The screenshot shows a web browser window displaying an Esri technical support article. The URL in the address bar is <https://support.esri.com/en-us/knowledge-base/how-to-create-an-arcgis-survey123-connector-for-microsoft-000025025>. The page header includes the Esri logo and navigation links for Products, Industries, Support & Services, Stories, and About. Below the header, the text "Technical Support" is displayed. A blue icon representing a connector is shown, followed by the word "HOW TO" in all caps. The main title of the article is "Create an ArcGIS Survey123 connector for Microsoft Power Automate for use with ArcGIS Enterprise". Below the title, it states "Last Published: April 27, 2022". The "Summary" section explains that ArcGIS Survey123 supports webhooks for integration with third-party automation services like Microsoft Power Automate, which has a built-in connector for ArcGIS Online. A blue callout box contains a "Note" stating that the connector does not support surveys published to ArcGIS Enterprise due to limitations in the Power Automate platform. Below this, it notes that a custom connector is necessary for Power Automate to work with ArcGIS Enterprise surveys. The "Procedure" section also includes a blue callout box with a "Note" stating that configuring a Survey123 connector for Microsoft Power Automate is not supported for ArcGIS Enterprise deployments using Integrated Windows Authentication (IWA), and that non-public-facing deployments are also not supported.

https://support.esri.com/en-us/knowledge-base/how-to-create-an-arcgis-survey123-connector-for-microsoft-000025025

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Technical Support

 HOW TO

Create an ArcGIS Survey123 connector for Microsoft Power Automate for use with ArcGIS Enterprise

Last Published: April 27, 2022

Summary

ArcGIS Survey123 supports webhooks, which allow integrating surveys into automated workflows using various third-party automation services. See the [ArcGIS Survey123 web help topic: Webhooks](#). One such service is Microsoft Power Automate, which has a built-in Survey123 connector for surveys published to ArcGIS Online.

Note: Due to limitations in the Power Automate platform, this connector does not support surveys published to ArcGIS Enterprise.

To use Power Automate with surveys published to ArcGIS Enterprise, it is necessary to create a custom connector in Power Automate.

Procedure

Note: Configuring a Survey123 connector for Microsoft Power Automate is not supported for ArcGIS Enterprise deployments that use Integrated Windows Authentication (IWA). Additionally, since Power Automate must communicate with your ArcGIS organization, deployments that are not public-facing are not supported.

Tip 3: Trigger a flow when a record is updated

MS4 v3

Overview Design Collaborate Analyze Data **Settings**

Version

Webhooks

Location sharing

Edit webhook

A POST request will be sent to the payload URL below with selected details of any subscribed events.

Name *

MicrosoftPowerAutomate-427c754d339b4da798af2d77a92f69ef

Payload URL *

https://prod-30.westus.logic.azure.com/workflows/427c754d339b4da798af2d77a92f69ef/triggers/When_a_survey_response_is_submitted/versions/085

Trigger events

New record submitted Existing record edited

Event data

Include following information in the payload

Survey info Server response Submitted record

User info Portal info

Status

On

Save Cancel

Don't miss Survey123 sessions at the Esri UC 2023!

ArcGIS Survey123

An Introduction and What's New

Tuesday, Jul 11 | 10:00 AM - 11:00 AM PDT

Thursday, Jul 13 | 4:00 PM - 5:00 PM PDT

In-Person, Recorded, Live stream

Add To Schedule

ArcGIS Survey123

Advanced Smart Form Design Techniques

Thursday, Jul 13 | 1:00 PM - 2:00 PM PDT

In-Person, Recorded, Live stream

Add To Schedule

ArcGIS Survey123

Modeling Inspection Workflows

Thursday, Jul 13 | 2:30 PM - 3:30 PM PDT

In-Person, Recorded

Add To Schedule

ArcGIS Survey123

Building Forms for Field Data Collection

Wednesday, Jul 12 | 1:00 PM - 2:00 PM PDT

In-Person, Recorded

Add To Schedule

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Live Q&A





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SCIENCE
OF
WHERE**[®]

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