

Using ArcGIS Solutions to Identify Water Leaks

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ArcGIS Solutions Overview



ArcGIS Includes 400+ Industry Specific Configurations

Organized by 9 Primary Domains



Local Government



State Government



Emergency
Management



Water



Electric



Gas



Defense



Telecommunications



Parks & Gardens

ArcGIS Solutions

A core part of ArcGIS

- Free
- Supported
- Updated and enhanced
- Well documented
- Open source
- Backed by a community

ArcGIS Solution are Accelerators

..for the functionality and value of an ArcGIS deployment

- Rapid deployment of industry specific capabilities
- Quick solutions to common business challenges
- Launch or expand an organizational mapping portal
- Establish best practice geospatial workflows

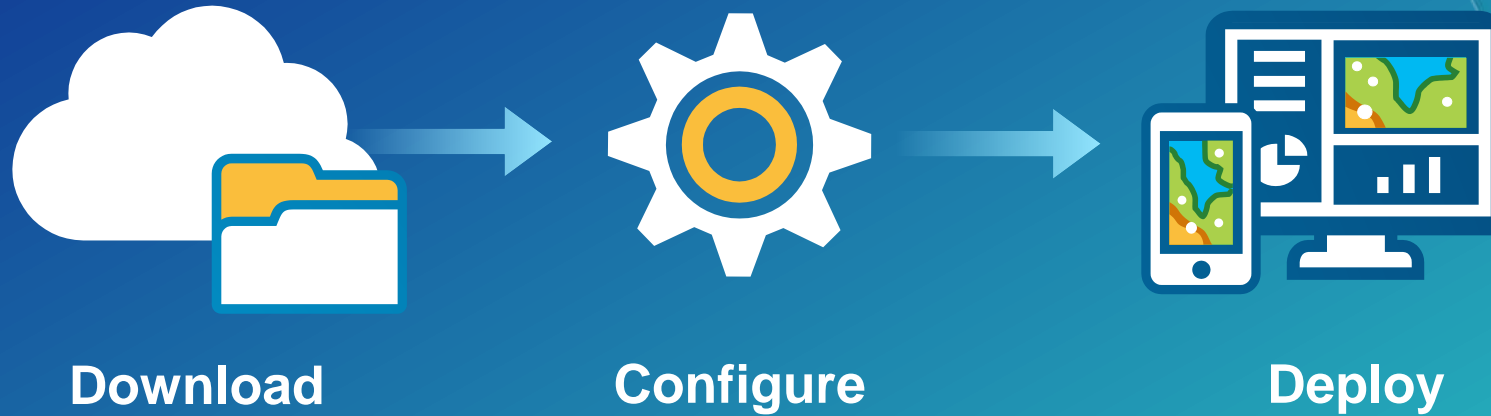
Configurations Are Used in Many Ways

Always providing value

- Production deployment
- First iteration of an app
- Proof of concept
- Code sample
- Workflow example
- Information models
- Requirements for custom application

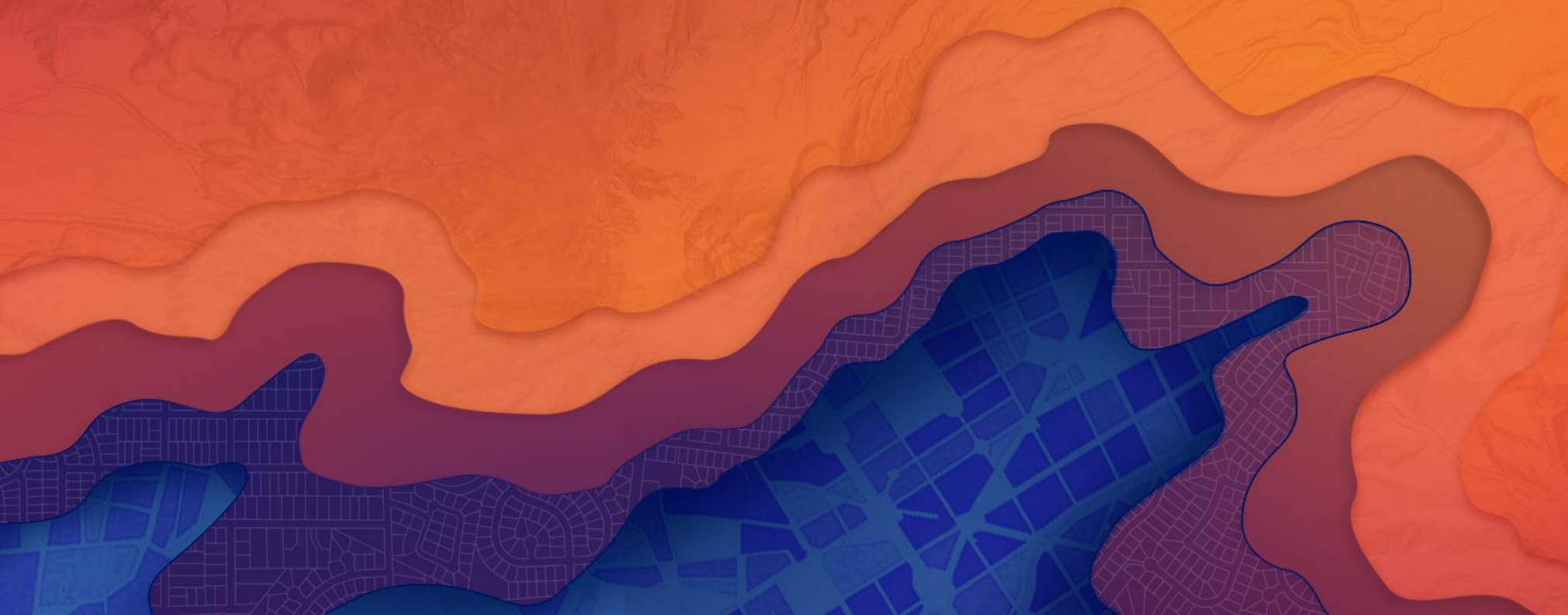
Configurations are Designed to be Ready-to-Use

Deployment made easier with the ArcGIS Solution Deployment Tools



Reducing Water Loss

Identifying leaks



Why use ArcGIS to Identify and Respond to Leaks

Benefits not only the utility, but the customer and visitors

- Reducing nonrevenue water loss
 - 35 GPM Leak cost approximately \$37,000 a year
- Provide better and more reliable service
- Prioritize capital projects
- Staying out of the news and preventing negative social media
- Streamlining field response

Finding Visible Leaks

Apps for the public, interns or staff to report location

- Simple and focused app to report a water leak
- Maybe part of a larger request application
- Could be a task design for summer interns
- Solution Apps:
 - [Water Service Request](#)
- Other Options:
 - [Survey 123](#)
 - [Crowdsource Reporter](#)

Responding to a Reported Leak

Apps to get more details on visible leaks

- App designed for internal staff to gauge severity of leak
- Leak record could be monitored to send notifications
- Solution Apps:
 - [Water Leak Investigator](#)
- Other Options:
 - [Survey 123](#)
- Get Notified with GeoEvent

Isolating a Leak

Shutting down a series issue

- Designed to understand the network and find the closest valves
- Web based for fast response
- Desktop based for accurate customer list
- Results can be shared to the public
- Solution Apps:
 - WebApp Builder for ArcGIS
 - [Utility Isolation Trace](#)
 - ArcMap
 - [Water Utility Network Editing and Analysis](#)

Note: Each optionally use the [Outage Viewer](#) solution.

Defining DMAs and Sub-DMAs

Metered areas to track down areas with high water loss

- Not just a single app, but a configuration of many ArcGIS Apps
- Planning a DMA
- Creating the DMA
- Entering observed flow
- View the results
- Retiring an DMA
- Solution Apps:
 - ArcMap, Web App Templates and GeoEvent
 - Nighttime Flow Analysis

Find leaks on a Pipe

Using acoustic leak detectors

- Use your network to better place the detectors
- Minimize overlap
- Visualize gaps
- Solution Apps:
 - ArcMap, Web App Templates and GeoEvent
 - [Leak Logger Analysis](#)

Summary

Many solutions to help reduce water loss

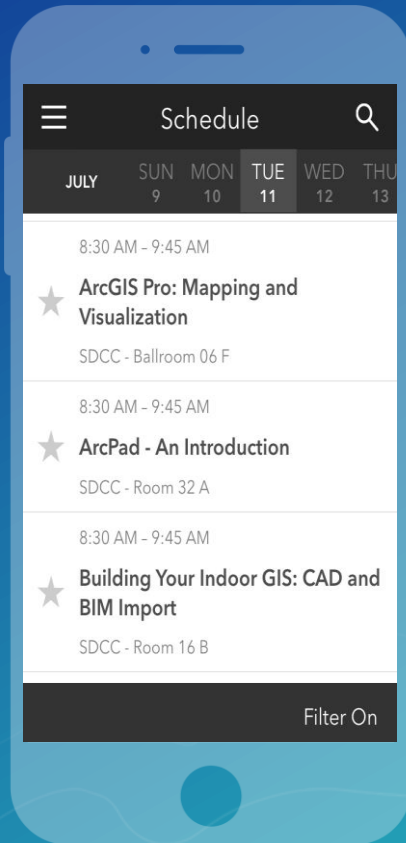
- ArcGIS can help with reducing water loss and identify leaks
- Use the solutions to jump start your water loss apps
- Let us know what other solutions you need to identify leaks and reduce water loss

Please Take Our Survey on the Esri Events App!

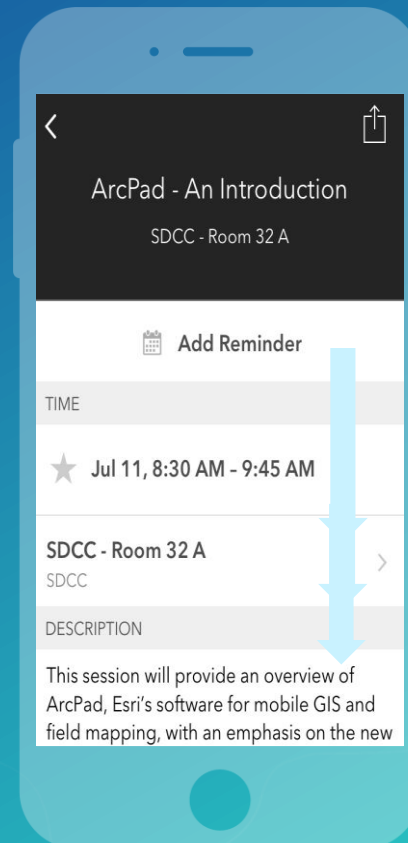
Download the Esri Events app and find your event



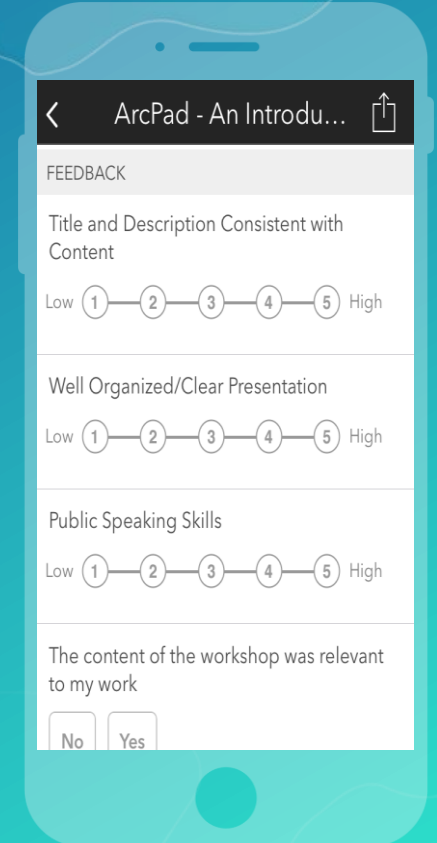
Select the session you attended



Scroll down to find the survey



Complete Answers and Select "Submit"





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