



```
.then((layerView) => console.log(layerView))
// If there were problems with the layerView, you'll get an error here
.catch(console.error);
```

```
map.alllayers
  .filter((layer) => layer.type === 'vector')
  .map((layer) => layer.createLayerView())
  .then((layerView) => console.log(layerView))
// If there were problems with the layerView, you'll get an error here
.catch(console.error);
```

ESRI DEVELOPER SUMMIT 2023

# ArcGIS Maps SDK for JavaScript: Web Editing

Heather Gonzago, Tristan Morrison, Jose Banuelos

Slides available:  
[https://links.esri.com/DS2  
3-web-editing](https://links.esri.com/DS23-web-editing)

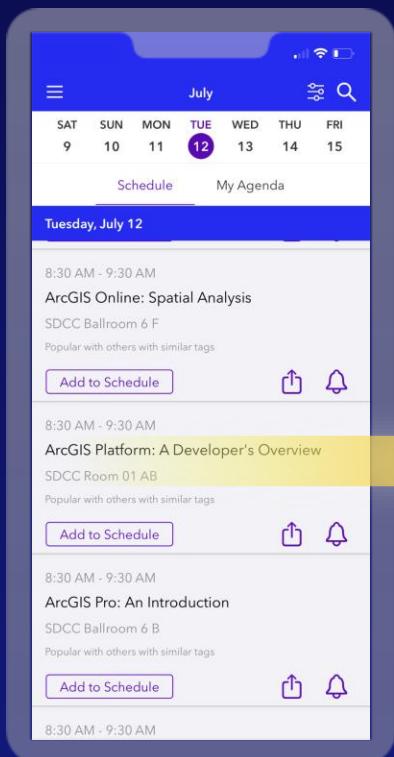
```
const layer = view.map.allLayers.get(0);
view.whenLayerView(layer)
  .then(layerView => console.log(
    // If there were problems with the layer
    // catch them here!
  ))
```



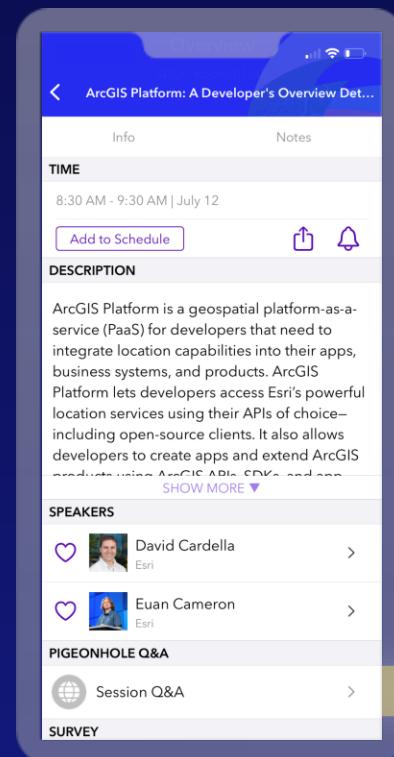
# In-Person Digital Q&A Tool

## for Technical Workshop, Demo Theater and User Presentation Sessions

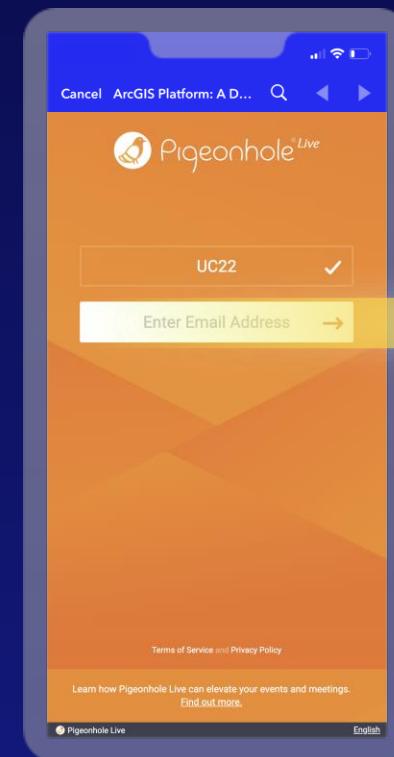
Select your session



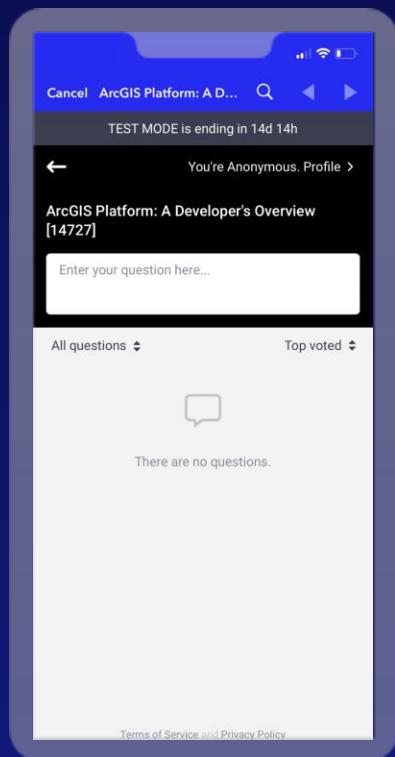
Click on the Pigeonhole Session Q&A link



Enter the email address used when registering



Start asking questions!

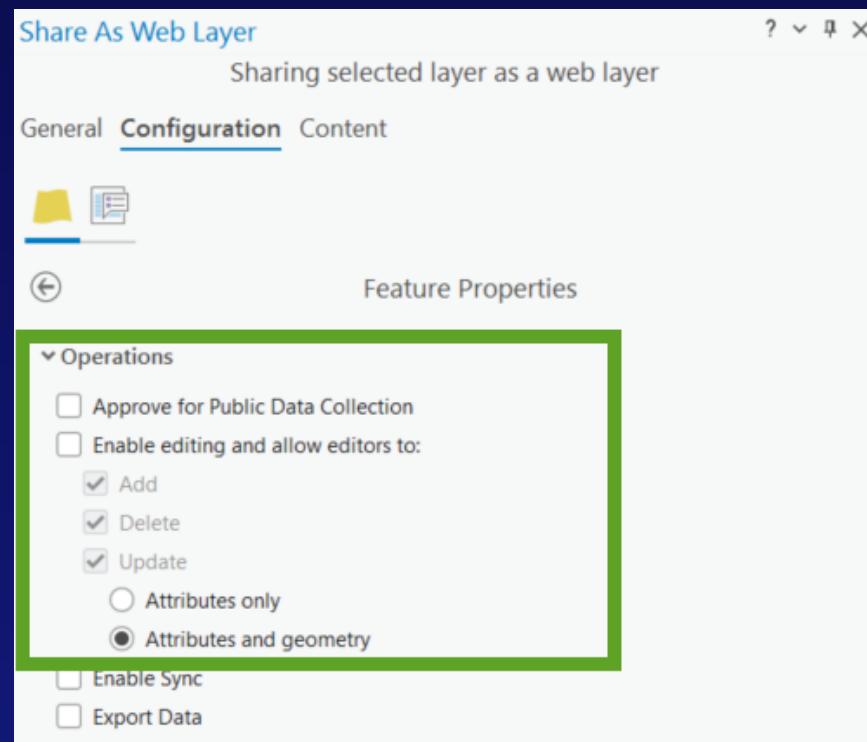


# Agenda

- Web editing overview
  - What is it?
  - Consistency throughout online Apps and App Builders
- Editor building blocks
  - FeatureForm, FeatureTemplates, SketchViewModel,  
Attachments, SnappingOptions
- UI / UX updates from the past year
- Tooltips
- Asynchronous Arcade Expressions
- Preserving data integrity and data precision
- Custom editing workflows

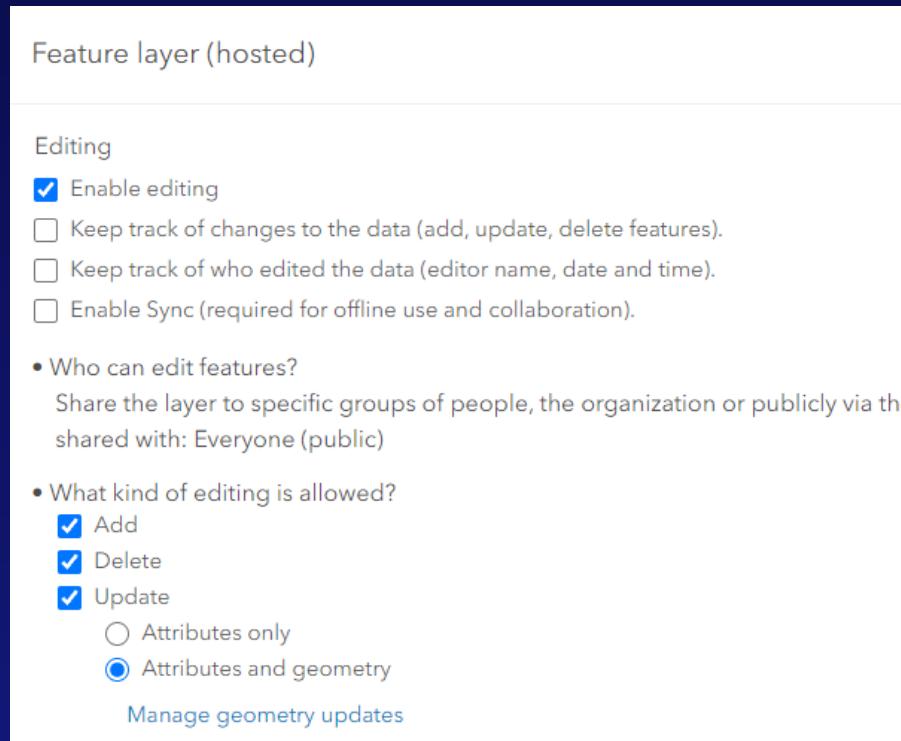
# Enable editable data

- Share as a Web Layer in Pro



# Enable editable data

- Enable editing in ArcGIS Online or Enterprise Portal layer item settings



# App level configuration

- Can restrict editing configurations on the client, if the service supports the operations.
- Can restrict attributes or geometry edits for example

```
const editor = new Editor({
  view: view,
  layerInfos: [
    layer: featureLayer, // pass in the feature layer,
    enabled: true,
    addEnabled: true,
    updateEnabled: false,
    deleteEnabled: false,
    attributeUpdatesEnabled: true,
    geometryUpdatesEnabled: true,
    attachmentsOnCreateEnabled: true,
    attachmentsOnUpdateEnabled: true,
  ]
});
```

# Editor building blocks

FeatureForm

FeatureForm

SketchViewModel

Editor

Snapping Controls

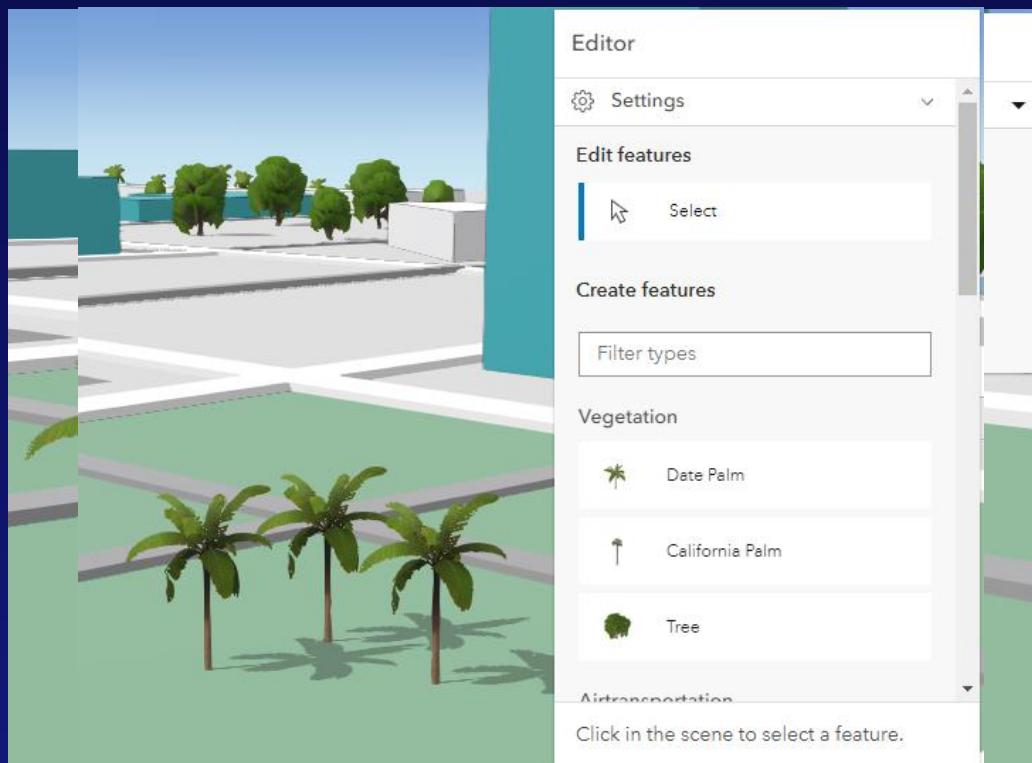
Attachments

# UI / UX Editor improvements

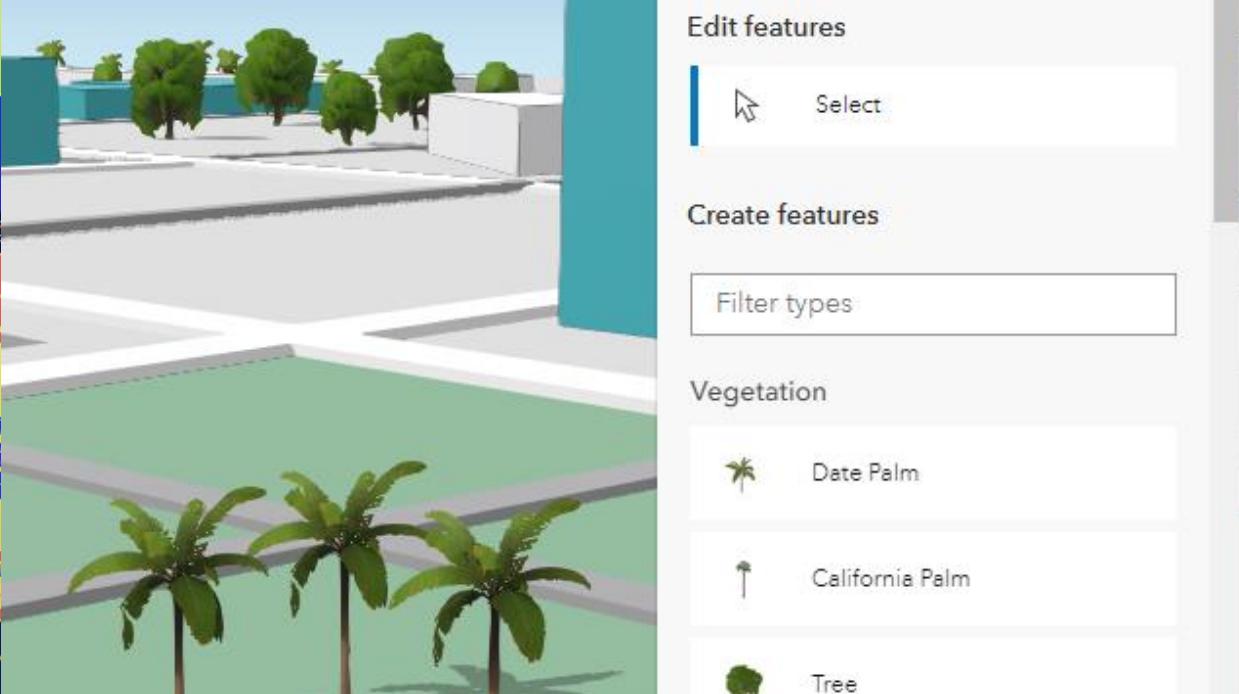
- Improved select and create workflows
  - Removed extra clicks
  - Help message in Editor footer
- Improved UI support for different service editing capabilities
- Date and Time now use calcite components

# UI / UX Editor improvements

- Improved select and create workflows
  - Removed extra clicks
  - Help message



```
const view = new SceneView({  
  container: "viewDiv",  
  map: map,  
  environment: {  
    lighting: {  
      directShadowsEnabled: true  
    }  
  }  
})
```

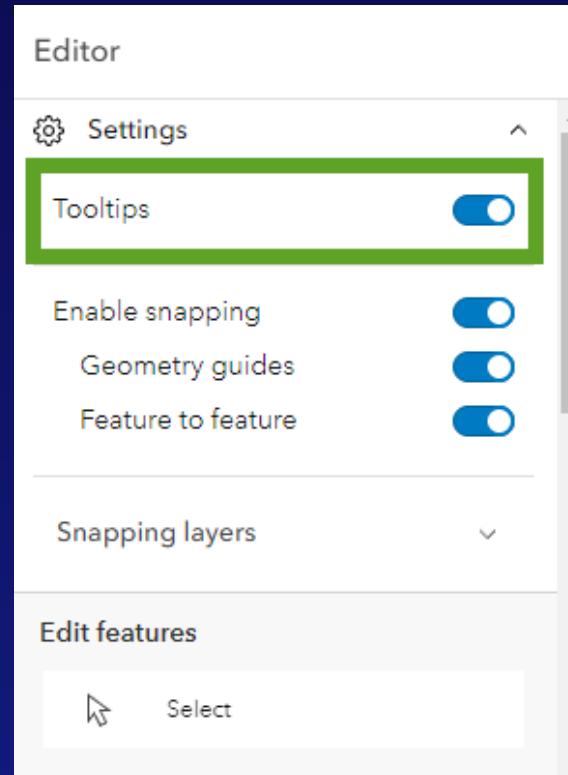


# Editor UI Updates

```
const layerView = map.allLayers.getItemAt(index);  
view.whenReady(() => {  
  const layerView = map.allLayers.getItemAt(index);  
  layerView.whenReady(() => {  
    console.log(layerView);  
  });  
});  
// If you try to do something with the layerView, you'll get an error here
```

# Tooltips

- New toggle to enable / disable tooltips
  - Includes area, length, rotation, orientation, elevation
  - Supported for both 2D and 3D



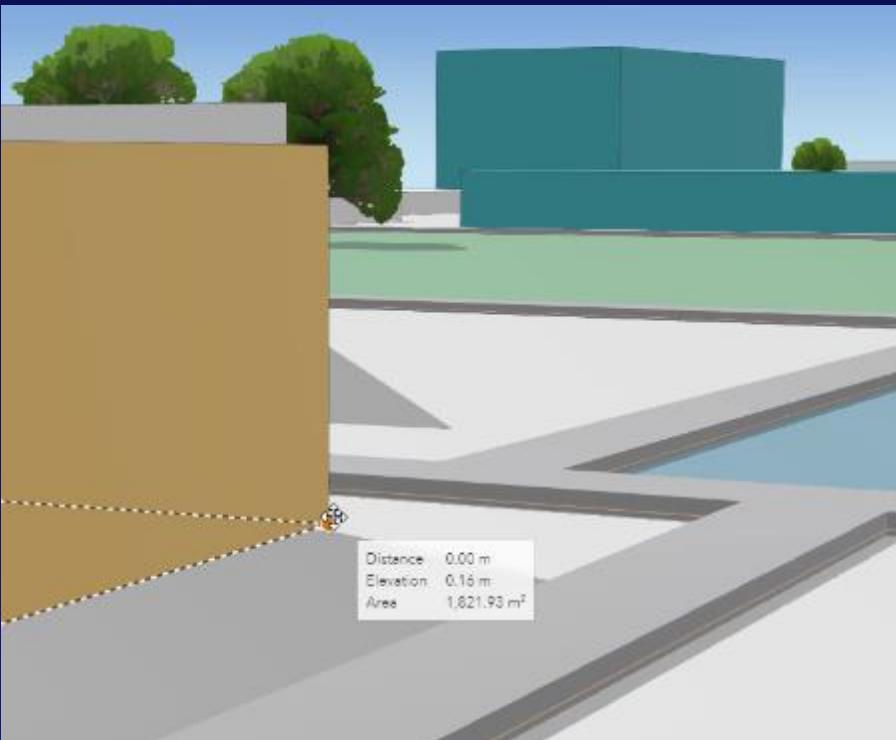
# Tooltips

- New toggle to enable / disable tooltips
  - Includes area, length, rotation, orientation, elevation
  - Supported for both 2D and 3D



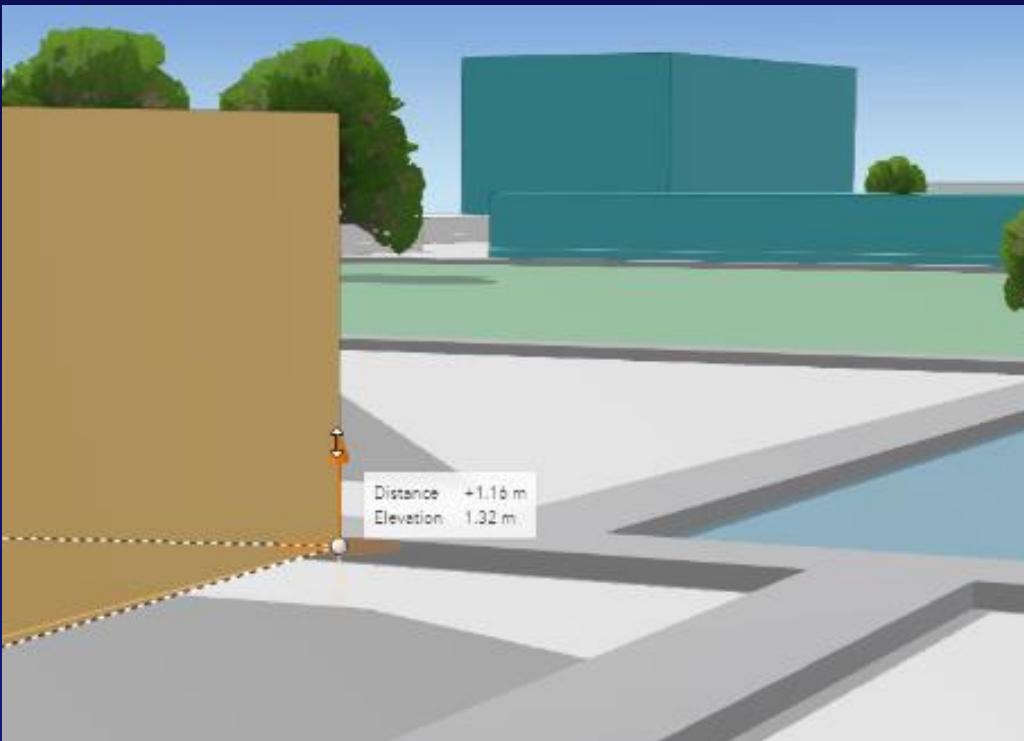
# Tooltips

- New toggle to enable / disable tooltips
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# Tooltips

- New toggle to enable / disable tooltips
  - Includes area, length, rotation, orientation, elevation
  - Supported for both 2D and 3D



```
const view = new SceneView({  
  container: "viewDiv",  
  map: map,  
  environment: {  
    lighting: {  
      directShadowsEnabled: true  
    }  
  }  
})
```



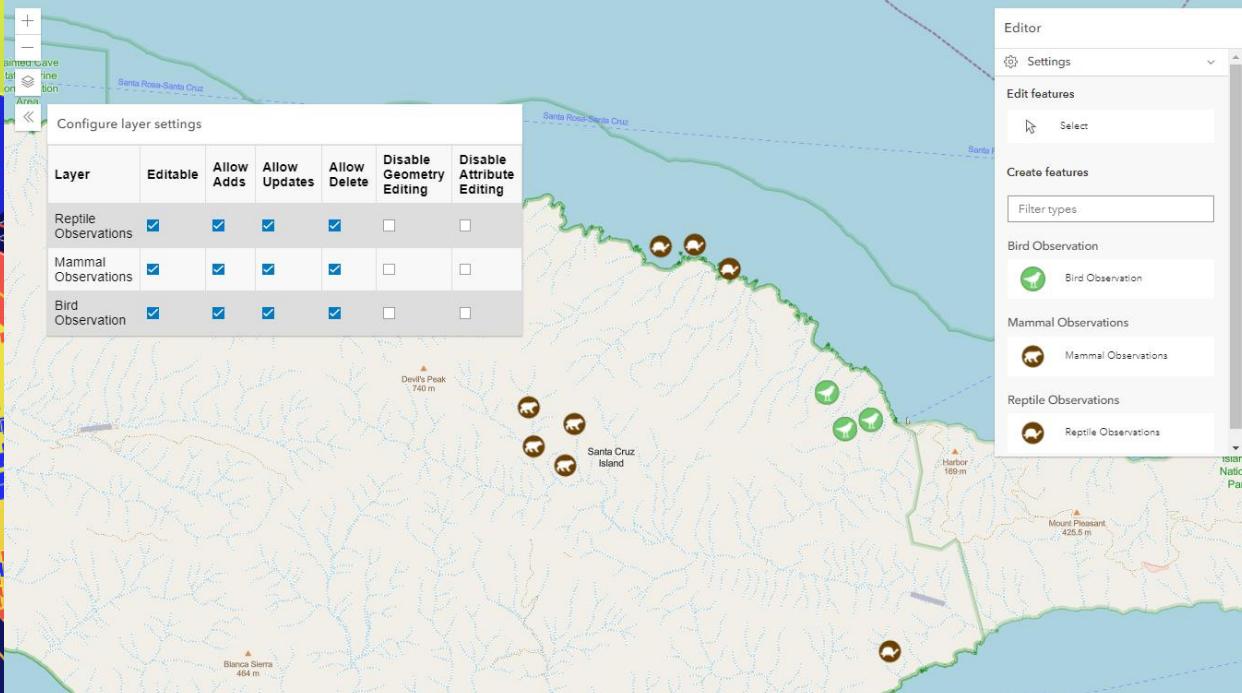
## Tooltips

```
const layerView = map.allLayers.getItemAt(index);  
view.whenReady(() => {  
  const layerView = map.allLayers.getItemAt(index);  
  layerView.on("layer-ready", () => {  
    console.log(layerView);  
  });  
});  
// If you try to do something with the layerView, you'll get an error here
```

# UI / UX Editor improvements

- Improved UI support for different service and app level editing configurations
  - Hide Templates if "Adds" operation is disabled on all visible editable layers
  - Can view attributes when "Update" is disabled
- Attachments
  - Can add attachments on create workflows
  - Can add / delete attachments when "Update" operation is disabled as long as "Adds" is enabled on the service

```
const view = new SceneView({  
  container: "viewDiv",  
  map: map,  
  environment: {  
    lighting: {  
      directShadowsEnabled: true  
    }  
  }  
})
```



# Improved C.R.U.D support

# Data Integrity & Arcade Expressions

Tristan Morrison

```
const layer = view.map.allLayers.get();
view.whenLayerView(layer)
  .then(layerView => console.log(
    // If there were problems with
    // catching errors:
```

```
const view = new
  ol.View({
    projection: 'EPSG:4326',
    center: [0, 0],
    zoom: 10,
    rotation: 0
  });
view.setTarget('map')
```



# Preserving Data Integrity

- Contingent Values
- Expressions
- Required fields
- Default values

# Asynchronous Arcade Expressions

- Support added at 4.25
- Field calculations work with [Form Calculation profile](#)
- ValueExpression, visibleExpression, editableExpression, and requiredExpression
- Updated to work with FeatureSets
- Optimized performance
  - Only evaluate expression when a dependent field changes
  - Reduce number of times expression evaluates while entering data

```
const view = new SceneView({  
    container: "viewDiv",  
    map: map,  
    environment: {  
        lighting: {  
            directShadowsEnabled: true  
        }  
    }  
})
```

Let's  
/STYLE >

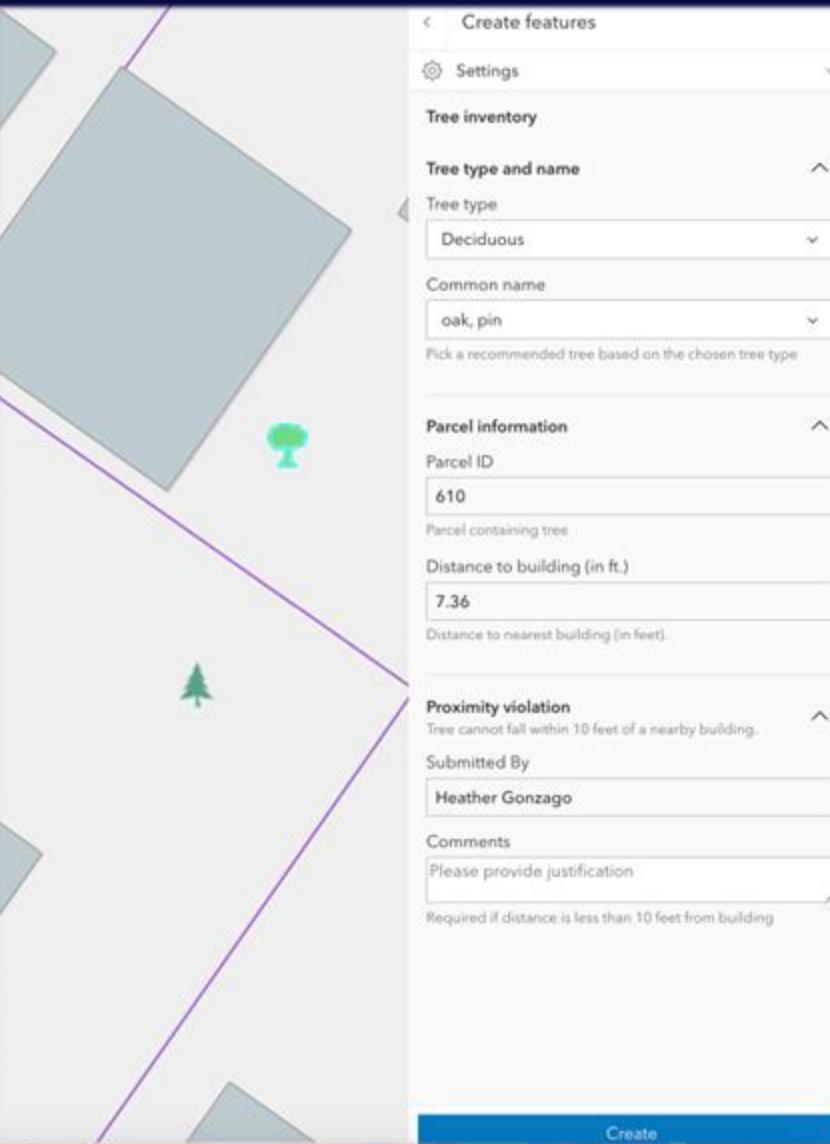
Map

Data

Analysis

Automation

Cloud



# Data integrity: contingent values and Arcade expressions

# Custom Editing Workflows

Heather Gonzago

```
const layer = view.map.allLayers.get();
view.whenLayerView(layer)
  .then(layerView => console.log(
    // If there were problems with
    // catching errors:
```

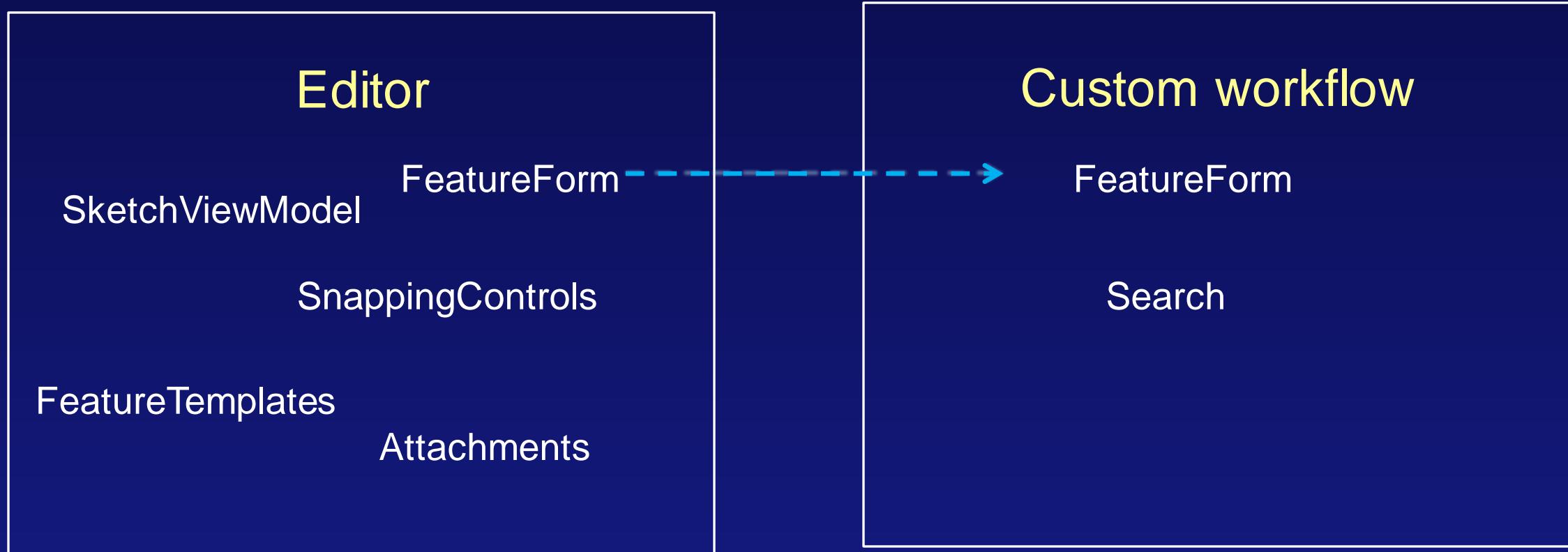
```
const view = new
  ol.View({
    projection: 'EPSG:4326',
    map: map,
    center: [0, 0],
    zoom: 0
  });
map.setView(view);
```

# Custom Editing Workflows

- Task-based requirements
- Narrows down editing steps for user
- Removes unnecessary UI functionality not needed for task
- Efficiency and productivity

# Custom editing workflows

- Editor components
- Use with other API components



```
const view = new SceneView({  
  container: "viewDiv",  
  map: map,  
  environment: {  
    lighting: {  
      directShadowsEnabled: true  
    }  
  }  
})
```

Streetlamp Status Reporter

1. Location      2. Details      3. Review

**Streetlamp Information**

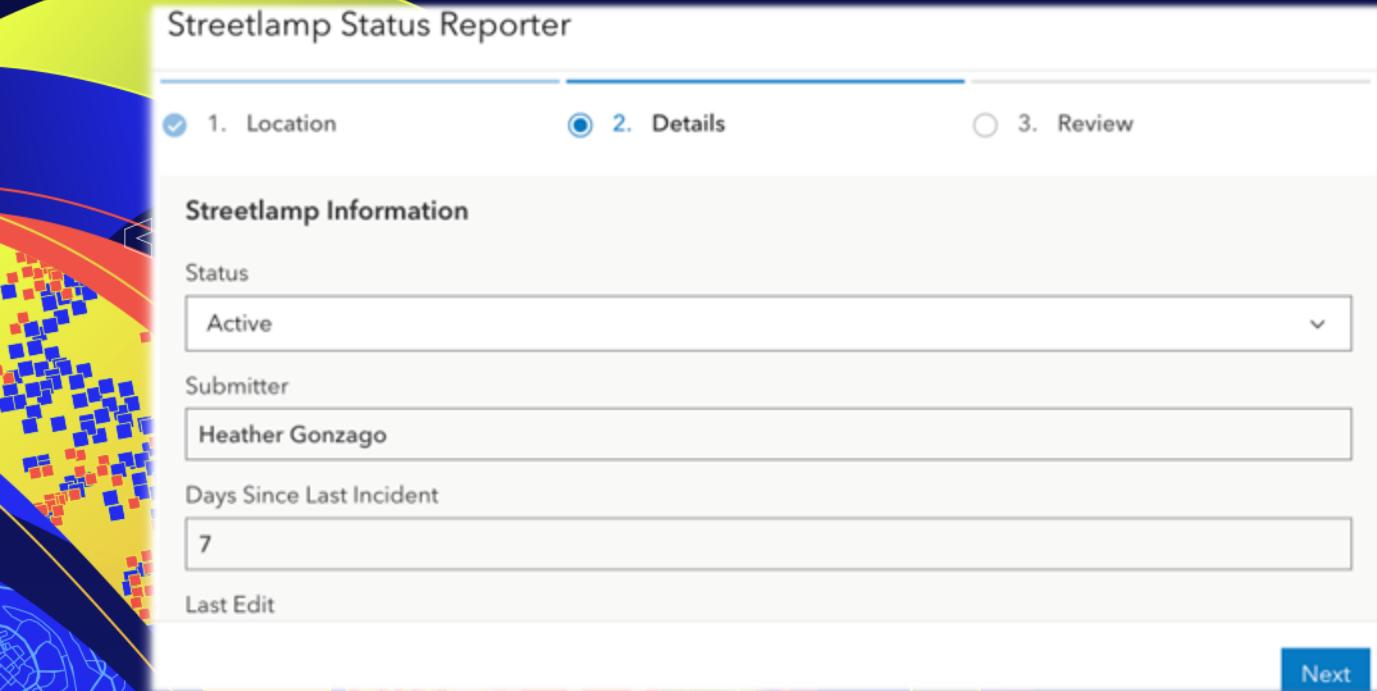
Status: Active

Submitter: Heather Gonzago

Days Since Last Incident: 7

Last Edit:

**Next**



# Custom workflows

# Consistency throughout Online Apps

- All the new features added to Editor widget are immediately available in:

- MapViewer
- SceneViewer
- Experience Builder
- Instant Apps

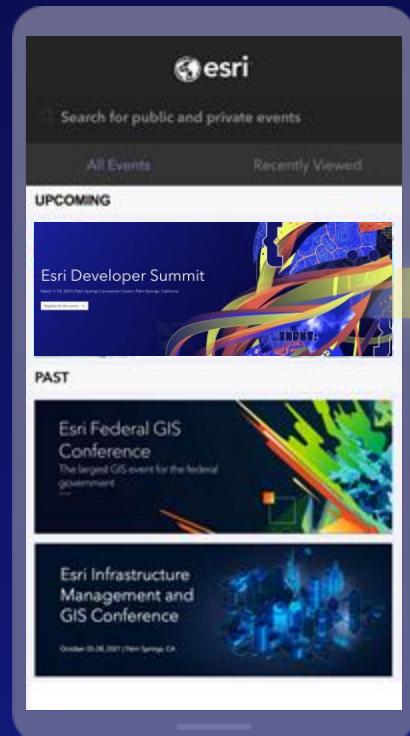
Slides available:  
[https://links.esri.com/DS23-  
web-editing](https://links.esri.com/DS23-web-editing)

```
const layer = view.map.allLayers.get(0);  
view.whenLayerView(layer)  
.then(layerView => console.log(  
// If there were problems with  
// catching errors:
```

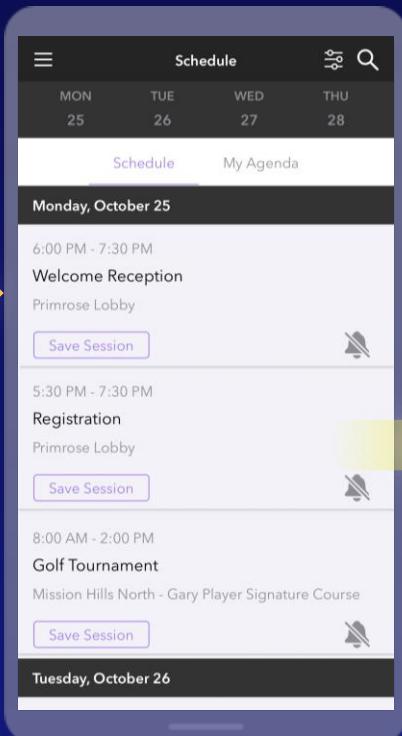
```
const view = new  
  esri/views/MapView;  
const map = new  
  esri/Map({  
    basemap: "topo"  
  });  
const layer = new  
  esri/layers/FeatureLayer({  
  url: "https://services.../arcgis/rest/services/.../FeatureServer/0"  
});
```

# Please Share Your Feedback in the App

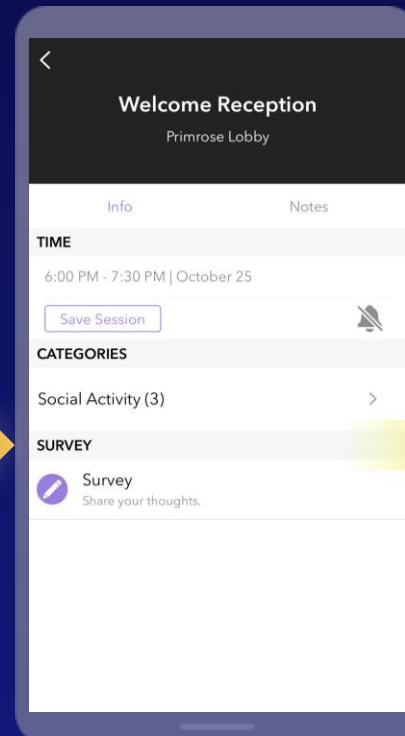
Download the Esri Events app and find your event



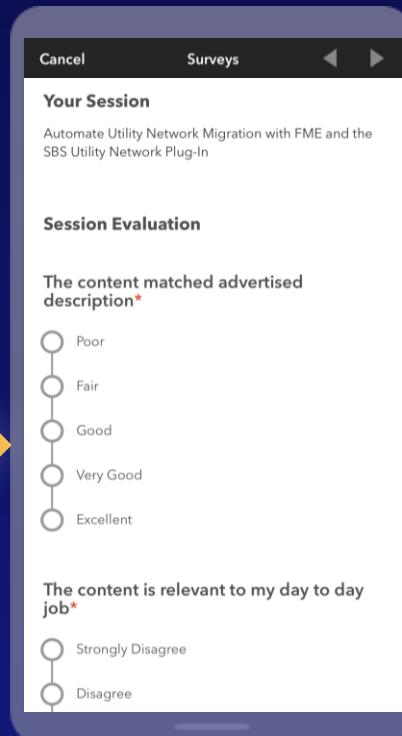
Select the session you attended



Scroll down to "Survey"



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  -  [github.com/EsriDevEvents](https://github.com/EsriDevEvents)
  -  [links.esri.com/EsriDevCommunity](https://links.esri.com/EsriDevCommunity)

```
const layer = view.map.addLayer({  
  ...  
  view.whenLayerVisible(layer)  
    .then(layerView => console.log(  
      // if there were problems with  
      // catch() console.error()  
    )  
  }  
})
```



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