

## What's new

The December 2016 update includes enhancements to hosted web layers and other improvements throughout the site.

### Hosted web layers

- You can now [create multiple views](#) of a hosted feature layer. This allows you to publish your data once and create tailored views for each audience, all referencing the same underlying data but with different capabilities, cartography, and filtering. For example, you might want to share your hosted feature layer with the public while also allowing certain members of your organization to keep the data up to date. In this case, you could share your hosted feature layer with the organization members, and create a view of the hosted feature layer that references the original layer but with editing disabled. Because the two layers share the same data, as members edit the original layer, the general public will see those data changes immediately.
- If you require OGC-compliant feature layers, you can [publish hosted WFS layers](#) from an existing hosted feature layer. Additionally, you can now access [hosted tile layers as OGC Web Tile Map Service \(WMTS\) layers](#).
- Editable hosted feature layers have a new option to [allow users to add features but not view them](#) or any other features in the layer. This is useful when you want the public to contribute information but not view publicly sourced information until you've had a chance to review it.
- You can now [publish hosted scene layers from hosted feature layers \(beta\)](#). During the beta period, organizations will not consume credits when publishing or storing hosted scene layers from hosted feature layers.
- You are now [prevented from deleting source data](#) from hosted web layers unless you first delete the hosted web layers.
- [Storage reports](#) are now available for vector tiles and scenes. In addition, feature storage reports now include a list of the organization's hosted feature layers that use storage credits.

### Analysis

- A new [Join Features](#) tool allows you to transfer attributes from one layer or table to another based on spatial and attribute relationships. You can use this tool to do the following:
  - Append common boundary or demographic information to your incident data.
  - Identify the closest facilities to a known location.
  - Determine the number of residences that fall within flood zones.
  - Identify common habitats for different wildlife species.
- The new [Find Outliers](#) tool creates a map showing any statistically significant clusters and spatial outliers present in your data. Use this tool to identify features that have values that are significantly different from their neighbors. Ask questions such as the following:
  - Where do we find anomalous spending patterns?
  - Where are the sharpest boundaries between affluence and poverty in the study area?
  - Do we have stores that are struggling with low sales despite being surrounded by high performing stores?
  - Are there counties in the United States with unusually low life expectancy compared to their neighbors?

### Scene viewer

- Point cloud data can now be visualized on the web. The new layer type, [point cloud scene layers](#), is optimized to quickly display many kinds of 3D sensor data, including LiDAR. You can display large amounts of surveyed point cloud data of buildings and the surrounding terrain, including trees, bridges, and parks.
- [Vector tile layers](#) can now also be used in 3D. They provide faster loading and can be brought into your scenes as operational layers or as basemaps. You can also use [Esri vector basemaps](#) in your scenes.
- 3D object symbols are now available out-of-the-box. The scene viewer provides a new gallery with a wide variety of 2D marker and 3D object symbols to choose from to create captivating scenes. The symbols include street furniture, transportation, trees, and thematic icons to add to your scene to help better tell your story.
- Apply [new drawing styles](#) that use your attributes to drive the visualization of point layers. For instance, if you have population as a numeric attribute, you can easily visualize your data with proportional symbols for color and size based on the population value. Additionally, with the new style slider in the scene viewer you can adjust the size and color interactively.
- The camera animation for geographical point-to-point flights has been enhanced to provide a smoother user experience, such as in searches and slide navigation.

## Map viewer

- You can now author, edit, or apply existing custom expressions written in [Arcade](#), a new scripting language, when [styling](#) and [labeling](#) feature layers in the map viewer. For example, an Arcade expression might be created to derive a yearly sales figure for individual sales territories by summing the value of monthly sales fields. The yearly sales figure can then be represented as different-sized symbols on the map.
- Feature layer [attribute tables](#) in the map viewer now offer additional capabilities. You can edit or delete attributes directly in the table, and view and edit related records, photos, and files.
- If your web map contains a time-enabled layer, you can now [configure the time settings](#) to start time animation from the time position saved with the map instead of at the beginning of the time span. When the web map is reopened after it has been saved with this setting, the time slider defaults to the position at which the map was saved. This allows you to control where the time slider starts in the extent you've configured.
- The map viewer now supports [labeling](#) in ArcGIS Server map image layers that support dynamic layers.
- When [adding a WMTS layer](#) to a map, if the layer does not support a coordinate system and tiling scheme that aligns with the current map, you now have the option of adding the layer as a basemap and choosing a tiling scheme.
- As an alternative to generating routes using the current time, you now have the option of specifying a start time for the route. The [directions](#) also include the arrival and departure time at stops and the typical travel time.

## Organization administration

- Administrators can leverage two [levels of membership](#) when assigning roles and privileges to members. Levels allow organizations to control the scope of privileges that can be assigned to members through roles.
- Administrators can now [change the short name](#) of the organization through the general settings tab. This is a permanent change that cannot be undone. Some URLs will need to be manually updated, for example, apps created with Web AppBuilder for ArcGIS that are hosted in the organization.
- Organizations have an additional security setting to [allow portal access](#). By configuring a list of redirect URIs, the organization gives members who use enterprise logins access to secured content in web apps hosted on other portals.

## Accounts

- Organizations can now [configure social logins](#), which allows members to [join the organization](#) using their Facebook or Google credentials. Once members have created their account, they can sign in to the organization and their apps using their social network login. In addition, administrators can enable Esri access on the social logins so members have access to Esri web resources such as GeoNet.
- Bosnian and Indonesian languages are now supported [in the website](#).
- Portuguese (Portugal) language is no longer supported in the help.

## ArcGIS content

- Esri vector basemaps have been updated in several areas and several known limitations have been addressed. They are no longer in beta and are available to use in production web maps and apps. There will be regular updates to the vector basemaps going forward.
- Topographic basemap has been updated to include detailed map data for China with English labels, referencing authoritative map services built and maintained by the National Geomatics Center of China.
- World Imagery basemap has been updated with additional sets of DigitalGlobe imagery for several countries, including detailed imagery for many metro areas. More imagery will be deployed over the coming months.
- Detailed boundary layers for several dozen more countries have been added to Living Atlas and made available for display and analysis through the map viewer and ArcGIS apps.
- Demographic maps for the United States have been updated for selected data, including Retail Marketplace and Shopping Centers. A new variable for daytime population is now available for mapping and analysis.
- Demographic maps for the following countries have been updated with the latest demographic data: Belgium, Canada, China, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Poland, Russia, Spain, Sweden, Switzerland, and United Kingdom.
- Brunei Darussalam is now available as a [region](#).

- For the latest information, see the [ArcGIS Online blog](#).

## Configurable apps

- The configuration pane in several of the configurable apps has been redesigned. The configurable options now appear as tabs across the top, and the pane includes your map, scene, or group.
- In [Story Map Journal](#) and [Story Map Series](#), you can now drag images from your computer directly into these story maps as you build them. Images are uploaded to your ArcGIS account and share the same permissions as the story. This means you no longer need to host your images publicly to use them in stories that are only shared to your organization or a group. In addition to uploading images that appear in your story, you can also upload a logo image file that is shown in the story's header.
- In [Story Map Journal](#), text sizes, styles, and spacing have been updated to improve readability and the appearance of your stories. New and existing stories will reflect these changes.
- The [Story Map Cascade \(beta\)](#) builder now reports issues with your story such as images and maps that are missing or not shared properly. Errors and warnings appear in line in your story along with easy ways to fix or otherwise address issues. The app also includes additional font files so that stories written in languages with special characters properly display those characters.
- New themes have been added to [Basic Viewer](#), [Elevation Profile](#), and [Map Tools](#) to support different layouts.
- [Crowdsourcing Polling](#) now supports using a URL parameter to open the app to a specific feature as well as sorting items by the values in any field. Comments on features can now include attachments such as images and documents.
- New configuration parameters have been added to [Crowdsourcing Reporter](#) to provide more control over the text and appearance of the app. These settings make it easier to find splash screen images and to tailor the language in the app to other use cases. Configuration parameters have also been added to restrict where reports can be submitted and to allow reporters to update and delete their submissions. Comments on reports can now include attachments such as images and documents.
- [Finder](#) and [Find, Edit, Filter](#) are now in [mature support](#).

## Web AppBuilder for ArcGIS

- A new Extent Navigate widget is available for navigating the map to its previous or next extent.
- Add Data now supports adding layers from groups and local files including shapefile, CSV, GPX, and GeoJSON.
- Basemap Gallery has a new option to always synchronize with the basemap gallery setting of the organization at run time and allows you to import basemaps from a group.
- When running a query against a related table, all the related features are now highlighted on the map and listed in the Query panel. Further, you can change the symbol at run time to highlight the query result differently on the map.
- Filter and Query now support the ability to filter values by all applicable expressions in addition to the previous expressions.
- Directions now supports predefined start and end stops and displays the default travel modes at run time when the travel mode URL is not specifically configured.
- Smart Editor now hides the cache layer from the app so it no longer shows on the Layer List and Legend widgets.
- Near Me and District Lookup add new options for advanced search and using a pushpin button to set location.
- Symbol Picker now supports custom images as point symbols.
- You can now add markers to the features and locations you are interested in or remove markers from them.
- For more information, see the [Web AppBuilder for ArcGIS help](#).

## Apps for the field

Apps for the field have made numerous enhancements since the previous ArcGIS Online update including the following:

- Collector for ArcGIS 10.4, with support for high-accuracy GPS receivers, is now available on iOS, Windows, and Android devices. For more information, see the [Collector for ArcGIS help](#).
- Explorer for ArcGIS released 10.2.10 on iOS in December to fix some bugs in the app. For more information, see the [Explorer for ArcGIS help](#).
- Navigator for ArcGIS is now available on Android devices. For more information, see the [Navigator for ArcGIS help](#).
- Operations Dashboard for ArcGIS has updates in both the browser and Windows apps. On the web, you'll see support for two new languages, Indonesian and Bosnian, along with some bug fixes. For Windows, version 10.3.4 brings extensibility bug fixes. For more information, see the [Operations Dashboard for ArcGIS help](#).

- Survey123 for ArcGIS 1.9 released in November. With this release, you can now share your surveys publicly. This allows field workers to capture data without signing in to an organization. Authoring smart forms from your web browser is now more powerful with new types of questions such as email. Minor enhancements have been added to the Survey123 web and native apps. For more information, see the [Survey123 for ArcGIS help](#).
- Workforce for ArcGIS updated in October, including an improved search, the ability for dispatchers to create multiple assignments, support for users from other organizations, and new languages. For more information, see the [Workforce for ArcGIS help](#).

## Apps for the office

Apps for the office have made numerous enhancements since the previous ArcGIS Online update including the following:

- Esri Maps for IBM Cognos 6.1.1 offers significant updates and enhancements, including new interactive behaviors to update the map, automatic clustering of point layers, and the ability to create and use labels. The user experience for several other features has been improved. Esri Maps for IBM Cognos 6.1.1 was released in September 2016. For more information, see the [Esri Maps for IBM Cognos help](#).
- Esri Maps for MicroStrategy 3.0 features a streamlined app that contains many user experience improvements, including the ability to customize map tools and settings, apply predefined or custom themes to a map, and create and use labels. The user experience for several other features has been improved, and the Esri Maps for MicroStrategy Mobile plug-in now supports MicroStrategy Web version 10.5. Esri Maps for MicroStrategy 3.0 was released in September 2016. For more information, see the [Esri Maps for MicroStrategy help](#).
- Esri Business Analyst Web App 5.4 now works seamlessly with both ArcGIS Online and ArcGIS Enterprise. Other enhancements include updated analytic and visualization workflows and a new project-based content management structure that helps you store, organize, and share your content. You can also leverage the new daytime population data for the United States and a number of international data updates including demographics for Canada, China, Russia and several European countries. For more information, see the [Esri Business Analyst Web App help](#).

## AppStudio for ArcGIS

- AppStudio now supports virtual devices using Android emulators and iOS simulators.
- A new advanced configuration tool guides you through configuring a Qt kit to work with AppStudio.
- Enterprise logins are now supported.
- AppStudio Player has been enhanced with improvements to the app gallery, camera support, and more.
- Map Tour template now supports sorting images by distance and name, sending email feedback through your app, and playing story map videos within your app.
- Map Viewer template includes additional information on the map such as a layer list, map units, scale, and location accuracy.
- Quick Report now includes an option to show a custom message after submitting the report, the ability to add multiple photos, offline support for creating and editing reports, and the ability to display maps on the location page.
- For more information, see the [AppStudio for ArcGIS help](#).