

ArcGIS Enterprise 10.7 und 10.7.1: Neue Funktionen

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Things to consider - Updated product lifecycle

- **Starting with 10.7, ArcGIS Enterprise releases will be either:**
 - **Short term support: 3 years of support including 1.5 years of patches [10.7]**
 - **Long term support: 6 of support including 4 years of patches [10.7.1]**
- **All previous versions will remain long term support**
- When planning your upgrades, take these into consideration
 - Are you updating frequently (every year or two?)
 - Or do you need to choose a version and stay there for a longer time period?



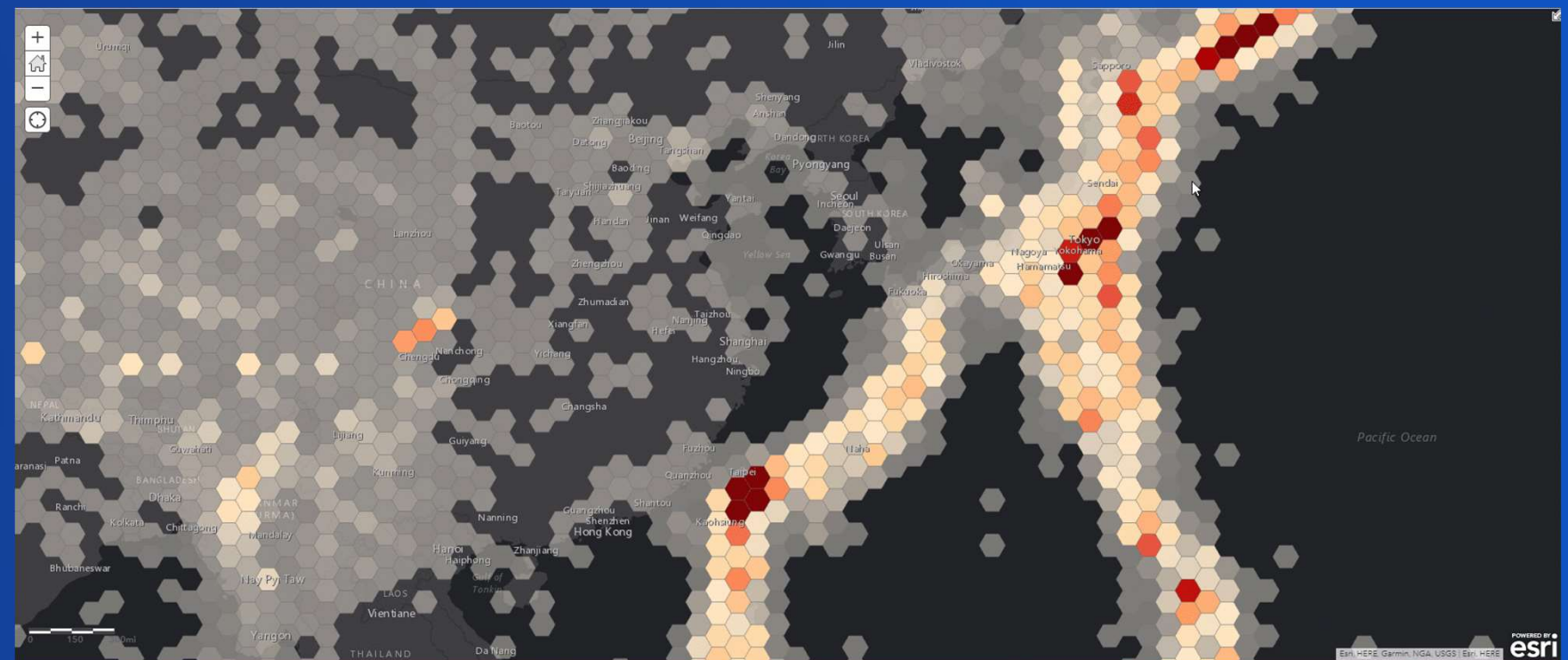
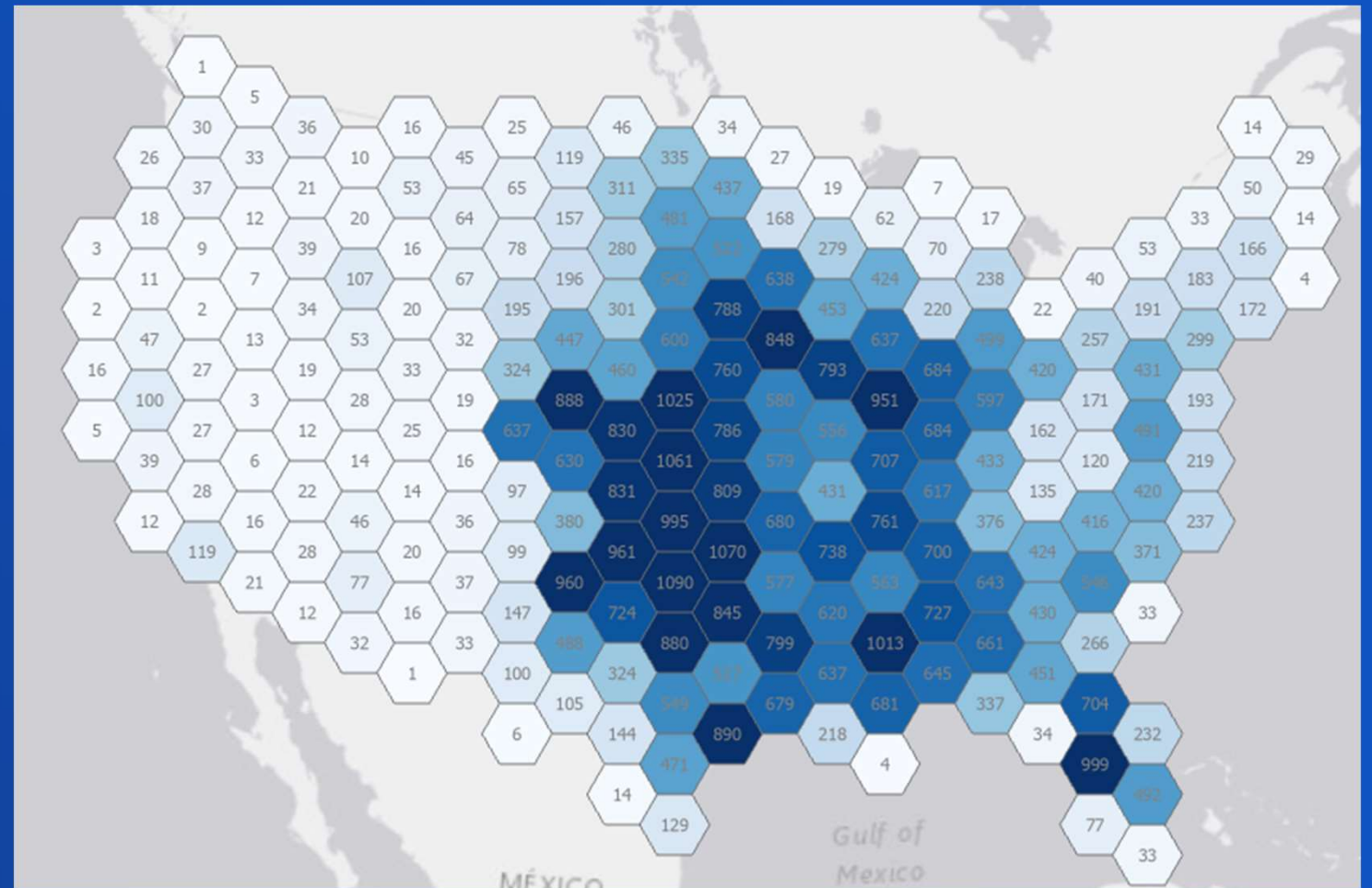
Mapping

Key enhancements: making it easier to understand patterns in larger datasets and relationships within datasets using out of the box tools.

Feature binning

Dynamic visualization of large datasets

- Use server-side rendering to quickly and easily aggregate data into bins
- Helpful for very large and very dense point datasets
- Understand your data and see it dynamically adjust as you pan and zoom
- New for map services published from your own databases (2.4 and 10.7.1)





Feature Binning

Waterquality in Europe

Analysis

Key enhancements: building a complete platform for spatial data science; delivering new tools for big data analysis and deep learning.

ArcGIS Notebook Server

Hosts Python notebooks in ArcGIS Enterprise

- Automate analysis and administration
- Open up access to a powerful data science platform
- Code with the Python API and ArcPy
- Isolate each author's workspace in Docker containers

ArcGIS | Crime Analysis: Boston Police | last checkpoint: a few seconds ago (unsaved changes)

File Edit View Insert Cell Kernel Help

In [62]:

```
# Create a spatially enabled dataframe with the results
crime_viz3d_sedf = SpatialDataFrame.from_featureclass(crime_viz3d_wgs)
crime_viz3d_sedf.head()
```

Out[62]:

	OBJECTID	TIME_STEP	START_DATE	END_DATE	TIME_EXAG	ELEMENT	LOCATION	PRECINCTWARDID	VALUE	SHAPE
0	1	0	2016-12-31 22:20:01	2017-01-31 22:20:00	0.0000	0	0	1	3.0	[{"X": -71.00969271899999, "Y": 42.388872945000...
1	2	1	2017-01-31 22:20:01	2017-02-28 22:20:00	128.1868	255	0	1	4.0	[{"X": -71.00969271899999, "Y": 42.388872945000...
2	3	2	2017-02-28 22:20:01	2017-03-31 22:20:00	256.3736	510	0	1	1.0	[{"X": -71.00969271899999, "Y": 42.388872945000...
3	4	3	2017-03-31 22:20:01	2017-04-30 22:20:00	384.5604	765	0	1	3.0	[{"X": -71.00969271899999, "Y": 42.388872945000...
4	5	4	2017-04-30 22:20:01	2017-05-31 22:20:00	512.7472	1020	0	1	1.0	[{"X": -71.00969271899999, "Y": 42.388872945000...

In [73]:

```
# Create a map in 3D mode to visualize the results
viz3d_map = gis.map("Boston", zoomlevel=13, mode='3D')
viz3d_map.basemap='dark-gray-vector'
viz3d_map
```

Out[73]:

World Topographic Map

2016 USA Population Density

2016 USA Median Age

2016 USA Per Capita Income

2016 USA Median Home Value

World Topographic Map

Tile Layer by Esri

Updated: August 21, 2018

Living Atlas Authoritative

This (v2) vector tile layer provides a detailed basemap for the world featuring a classic Esri topographic map style designed for use with a relief map.

Description

This vector tile layer provides a detailed basemap for the world symbolized with a classic Esri topographic map style. This vector tile layer is similar in content and

Add to Notebook

Comes with a rich gallery of sample notebooks to illustrate workflows

ArcGIS Notebook Server

Hosts Python notebooks in ArcGIS Enterprise

Fully integrated with your Enterprise portal:

- Users are granted notebook privileges
- Add and reference portal items from within your notebook
- Share notebooks with other users within your portal

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Add to Notebook

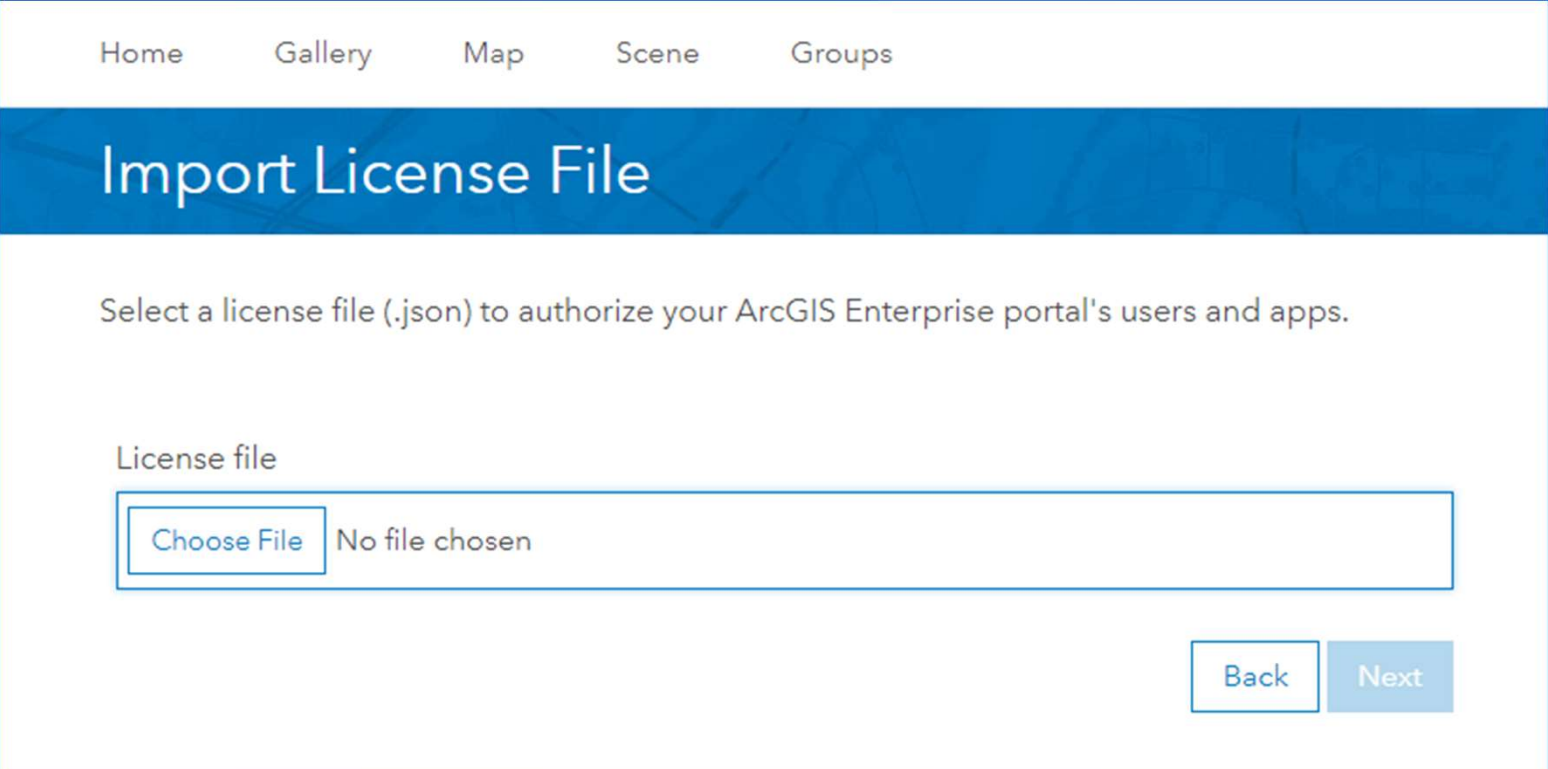
Comes with a rich gallery of sample notebooks to illustrate workflows

Administration

Key enhancements: making it easier to manage users and licenses, automate notifications of events, and make your deployment more efficient.

Easier ArcGIS Enterprise Licensing

- **Licensing on My Esri**
 - **Installing and upgrading**
 - Improved user administration
 - Improved license management
- Single portal json file for user types and applications
 - No more portal Software Authorization Wizard



The screenshot shows the 'Import License File' page in the ArcGIS Enterprise web interface. At the top, there is a navigation bar with links for 'Home', 'Gallery', 'Map', 'Scene', and 'Groups'. Below this, the page title 'Import License File' is displayed in a large, bold font. The main content area contains the instruction: 'Select a license file (.json) to authorize your ArcGIS Enterprise portal's users and apps.' Below this instruction, there is a section labeled 'License file' which contains a file selection interface. This interface includes a 'Choose File' button and the text 'No file chosen'. At the bottom right of the page, there are two buttons: 'Back' and 'Next'.

Improved user license management and user administration

- When adding members, can specify default properties & assign licenses

Add members

Choose method

Compile member list

Set member properties

Confirm and complete

Summary

Members

Total members to be added

101

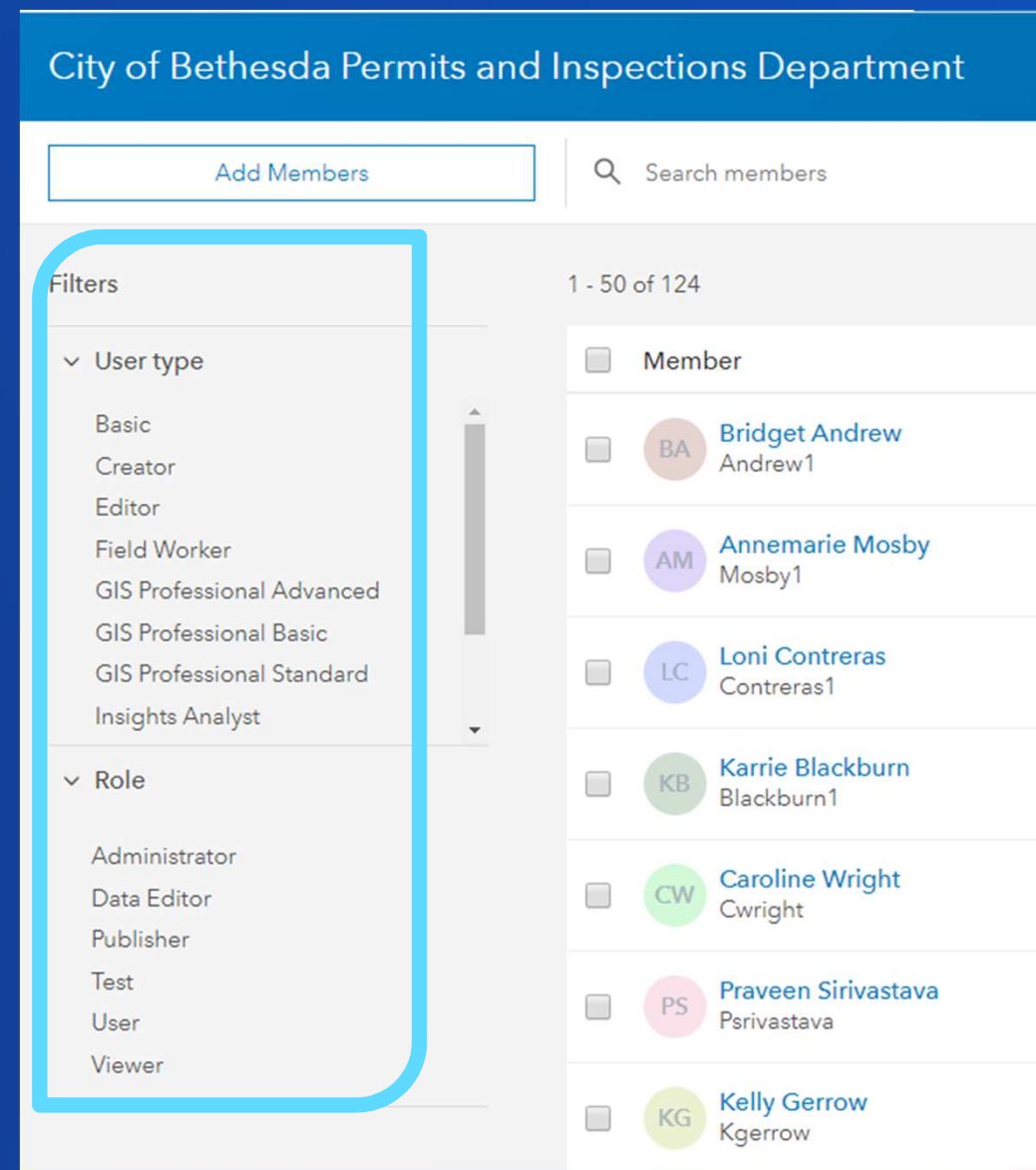
Viewer	47
Creator	38
Field Worker	11
GIS Professional Advanced	5

Properties

Profile visibility	Organization
Start page	Home
Language	English - English
Number and date format	US - US

Improved user license management and user administration

- When adding members, can specify default properties & assign licenses
- Enhanced filtering when managing users and licenses:
 - Role
 - User Type
 - Groups (coming soon)



Introducing webhooks

Automate notifications based on portal actions

An action occurs.

- Something is published
- A user creates a new account
- An item is deleted

The webhook is triggered.

- Delivers JSON description of event
- Relevant info fields

```
{
  "info": {
    "webhookName": "Group monitoring",
    "webhookId": "72fed926aeb74c9ca8a22aacddc6725a",
    "portalURL": "https://machineURL/portal/",
    "when": 1543192196521
  },
  "events": [{
    "username": "administrator",
    "userId": "173dd04b69134bdf99c5000aad0b6298",
    "when": 1543192196521,
    "operation": "update",
    "source": "group",
    "id": "173dd04b69134bdf99c5000aad0b6298",
    "properties": {}
  }]
}
```

Your platform of choice kicks in.

- IFTTT
- Integromat
- Microsoft Flow

It performs an action.

- Emails you
- Posts in Slack
- Alexa announces it at the dinner table (maybe not)



Webhooks

Notification email on updates

output
previous steps

events x

Check if it is an update of an Item

And ▾

☐ operation x is equal to ▾ update ...

☐ source x is equal to ▾ item ...

+ Add ▾

If yes

Send an email

m.schenker@esri.ch

Portal Item Update Notification

An item in your Portal at portalURL x has been updated.
The User username x has performed the action.
Link to the item: portalURL x /home/item.html?id=id x

Show advanced options ▾

Shared instance pool

A game changer for service performance in ArcGIS Enterprise



GPService



MapService1

Frequent
traffic

Less
frequent
traffic



MapService2



FeatService2



MapService3



MapService4



FeatService1



FeatService3

ARCGIS SERVER SITE



- Conserve memory and power usage from unused instances... **without** performance impact
- Isolate high-volume services in dedicated pools
- Reduce administrative overhead of maintaining separate pools for all services

Shared instance pool New at 10.7



6 ArcSOCs

Participants:
MapService2
MapService3
MapService4
FeatService1
FeatService2
FeatService3

ARCGIS SERVER SITE



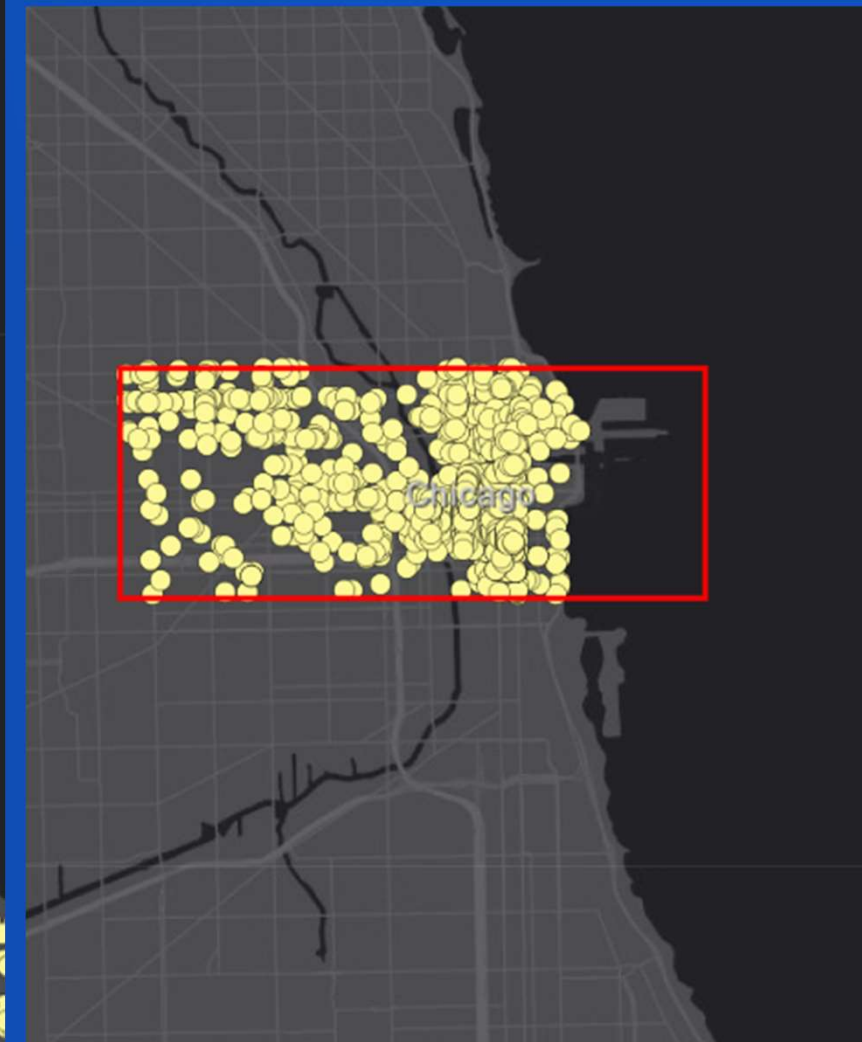
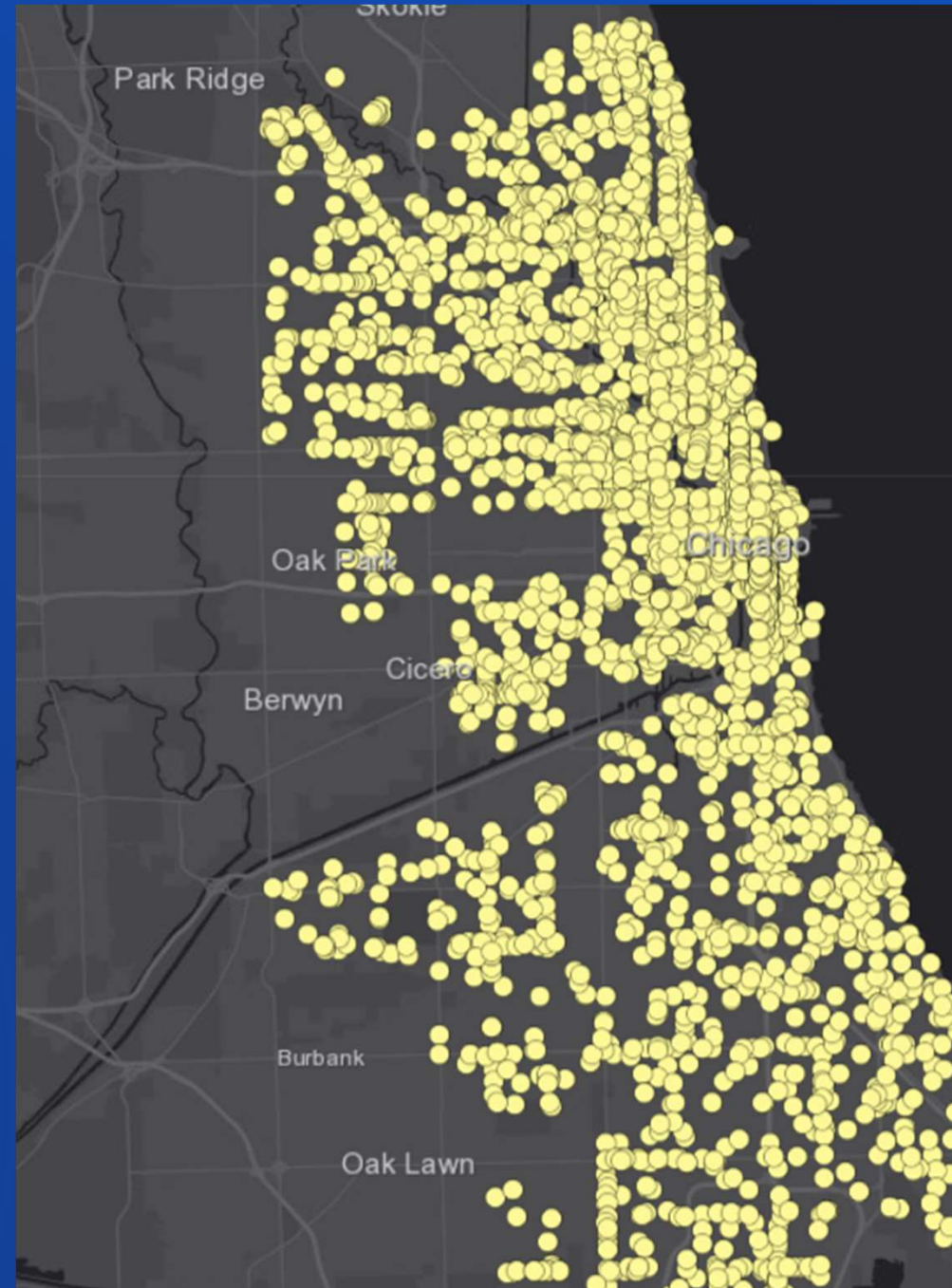
Data

Key enhancements: supporting offline workflows, data integrity and quality & improvements to search, sharing, and collaboration.

Hosted feature layer views

New option for drawing an area of interest

- Views stay connected to your source data but can have different:
 - Editing settings
 - Sharing settings
 - Symbology
- Expose only a subset of your data using any of these definitions:
 - Area of interest (new!)
 - Feature definition
 - Field definition



Publishing

Key enhancements: new options for making your data widely accessible to others, new features and functionality when publishing from ArcGIS Pro.

New in publishing

1

Publish services from ArcGIS Pro to a standalone (unfederated) ArcGIS Server

2

Publish OGC services from ArcGIS Pro

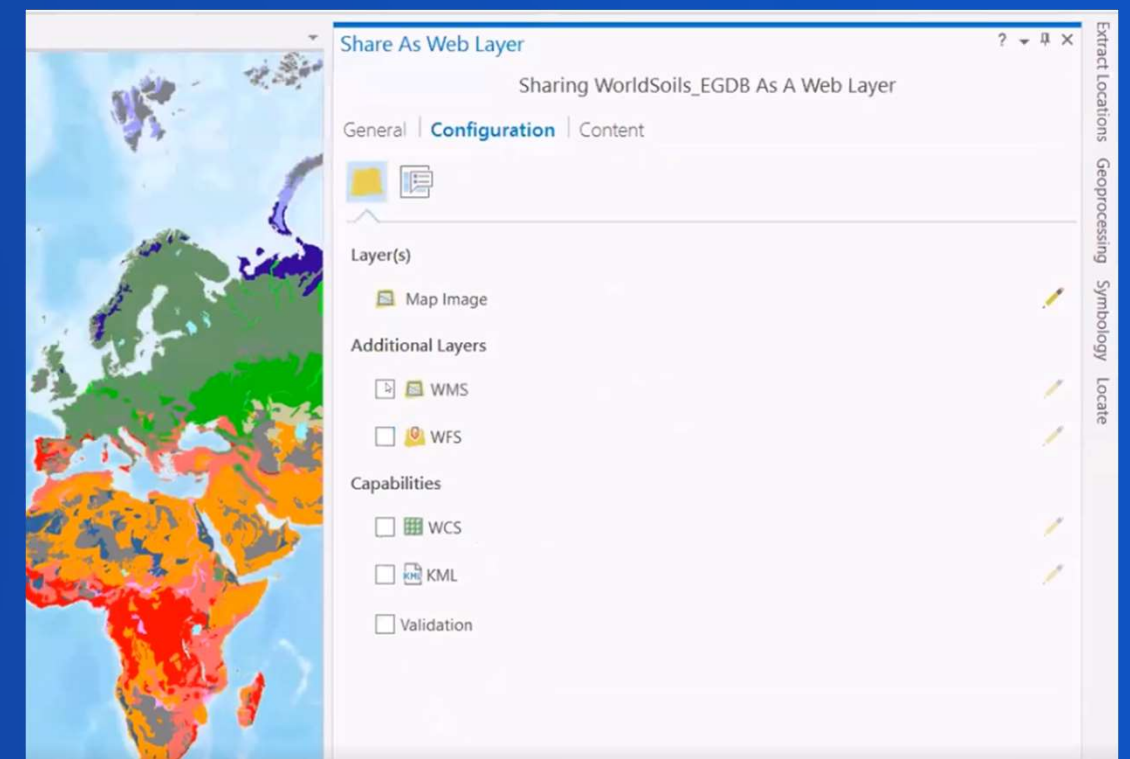
- WMS, WFS, WCS, KML

3

Replace vector tile layer (with enhancements at 10.8)

4

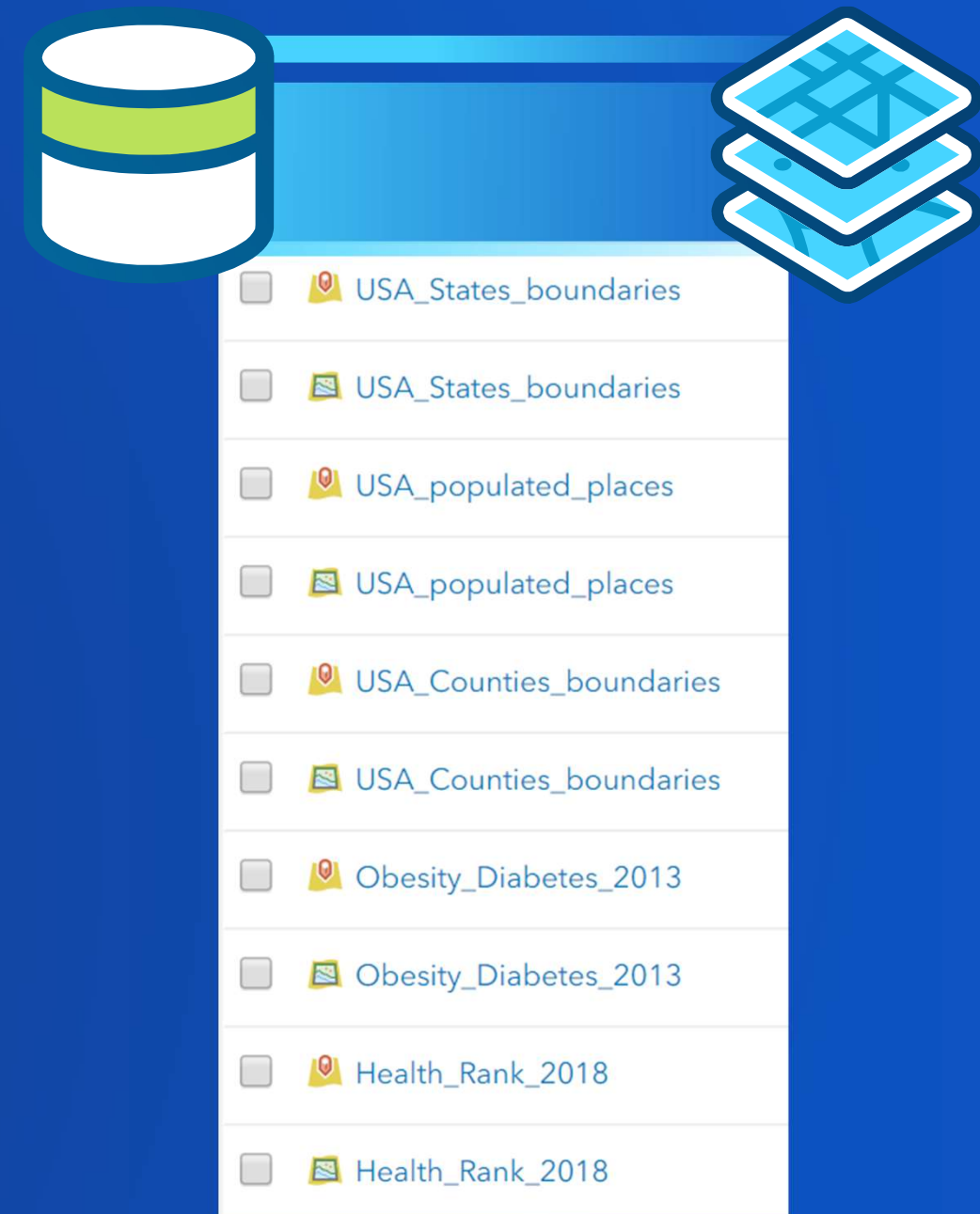
Publish feature classes, tables, and imagery in bulk



Bulk publishing

Quickly and easily create web services from your own data stores

- Creates layers, en masse, from user-managed storage: databases, folders
- Makes data from your own sources easily accessible across your organization: 10s, 100s of layers
- Layers (map and feature) will by default be read-only and use shared instances



Questions ?

