

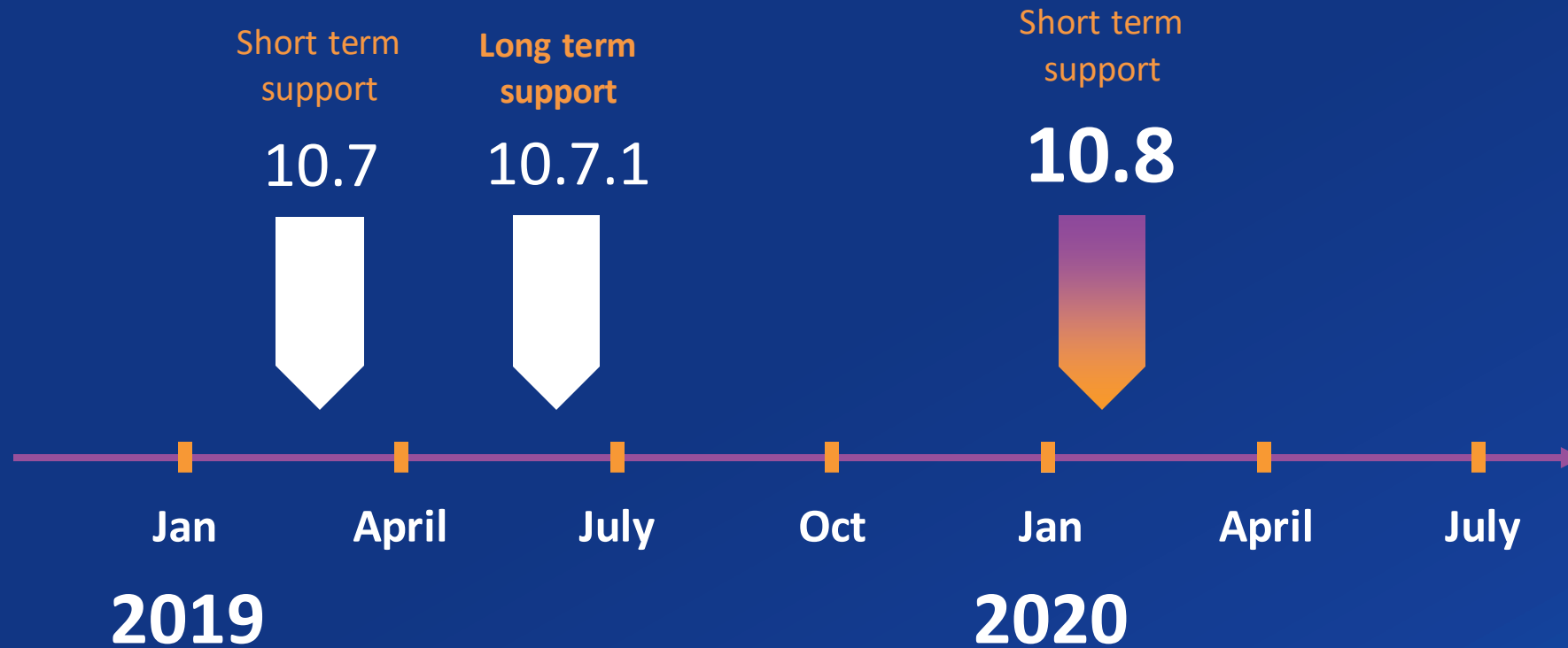


# ArcGIS Enterprise: What's New

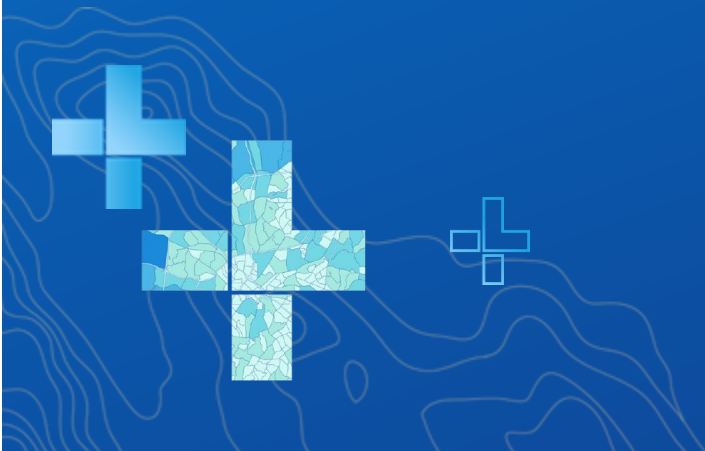
Scott M. MacDonald

2020 ESRI FEDERAL GIS CONFERENCE | WASHINGTON, D.C.

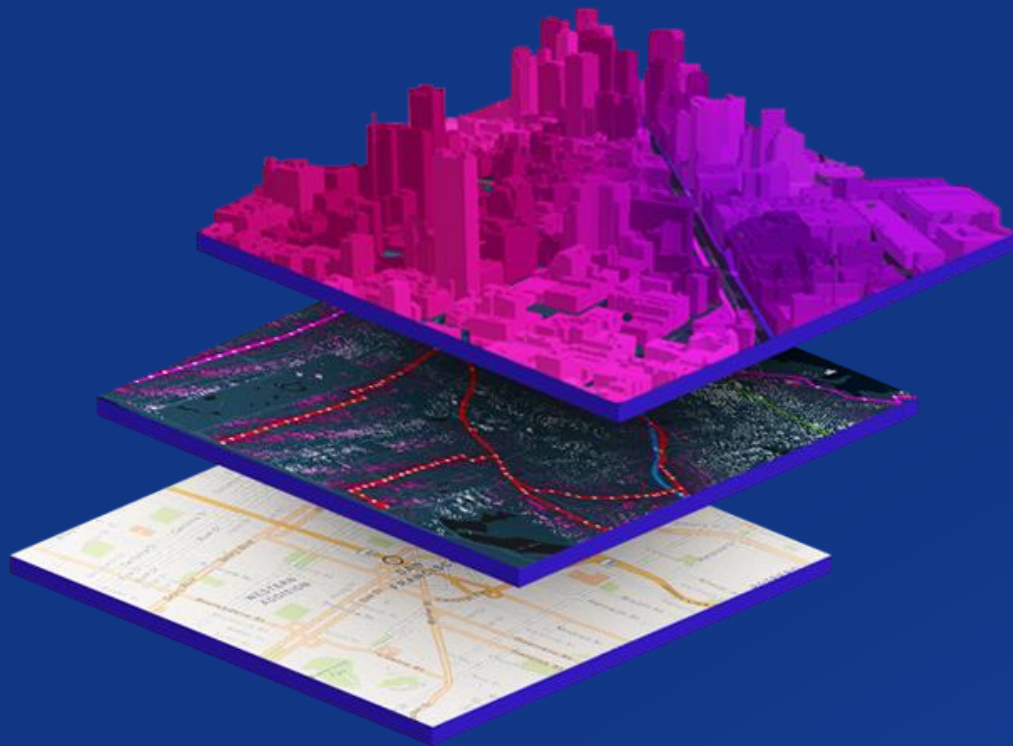
# ArcGIS Enterprise releases



# Data and mapping

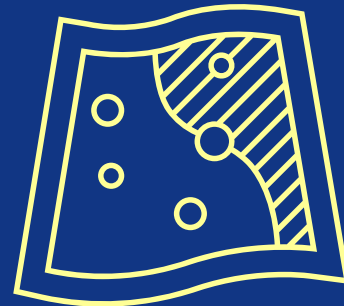


# Hosted map image layers

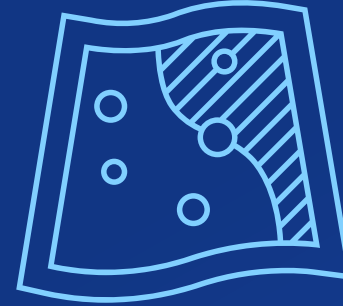


- Fast, server-side rendering and advanced/complex symbology
- Source is a hosted feature layer
- Hosted map image layers provide read-only access to the data
- Workflow is to publish from ArcGIS Pro
- A hosted map image layer maintains its relationship to and dependency on its source hosted feature layer

# Replace vector tile layers



New layer



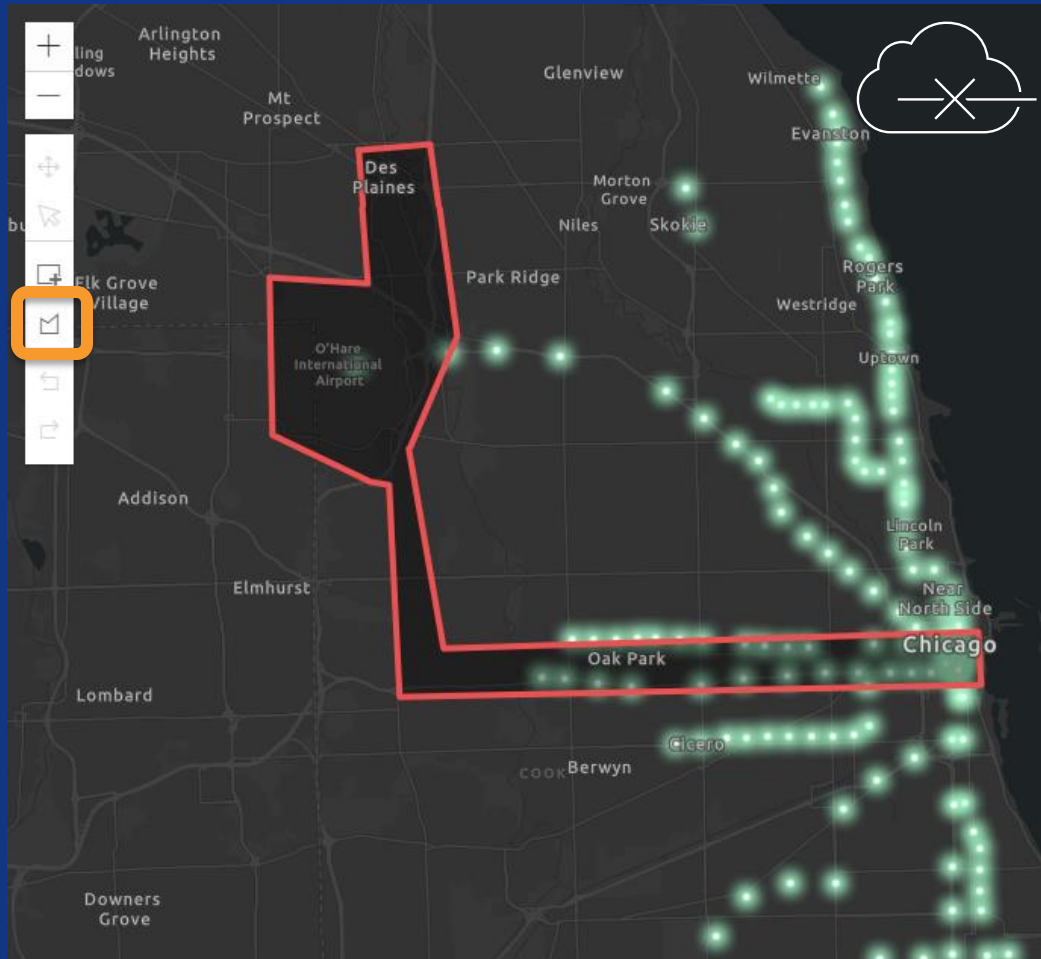
Current layer

- Choose how to archive the layer being replaced
- Preview the style of the new layer
- Be alerted when the current and replacement layer don't match

Old layer\_archive1

Also, you can now update the style of your vector tile layers from within the Map Viewer!

# Offline map areas



## Draw offline map areas using a polygon

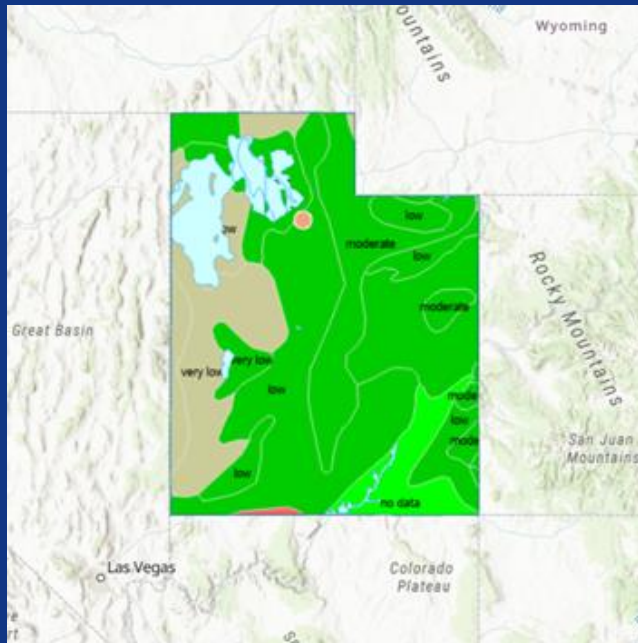
- Create more specific and defined map areas around the boundaries you want to take offline
- Adds to existing options of rectangle/square

## Schedule updates for offline map areas

- Enable scheduled updates that control how often an app gets updated
- Can support a large number of read-only clients



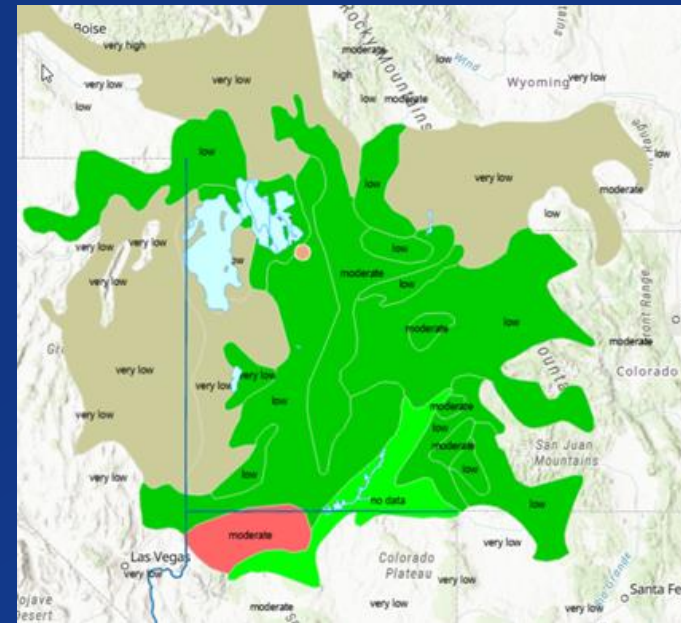
# New map service parameters



1

## Clipping

Masks the part of the layer outside of the clip polygon

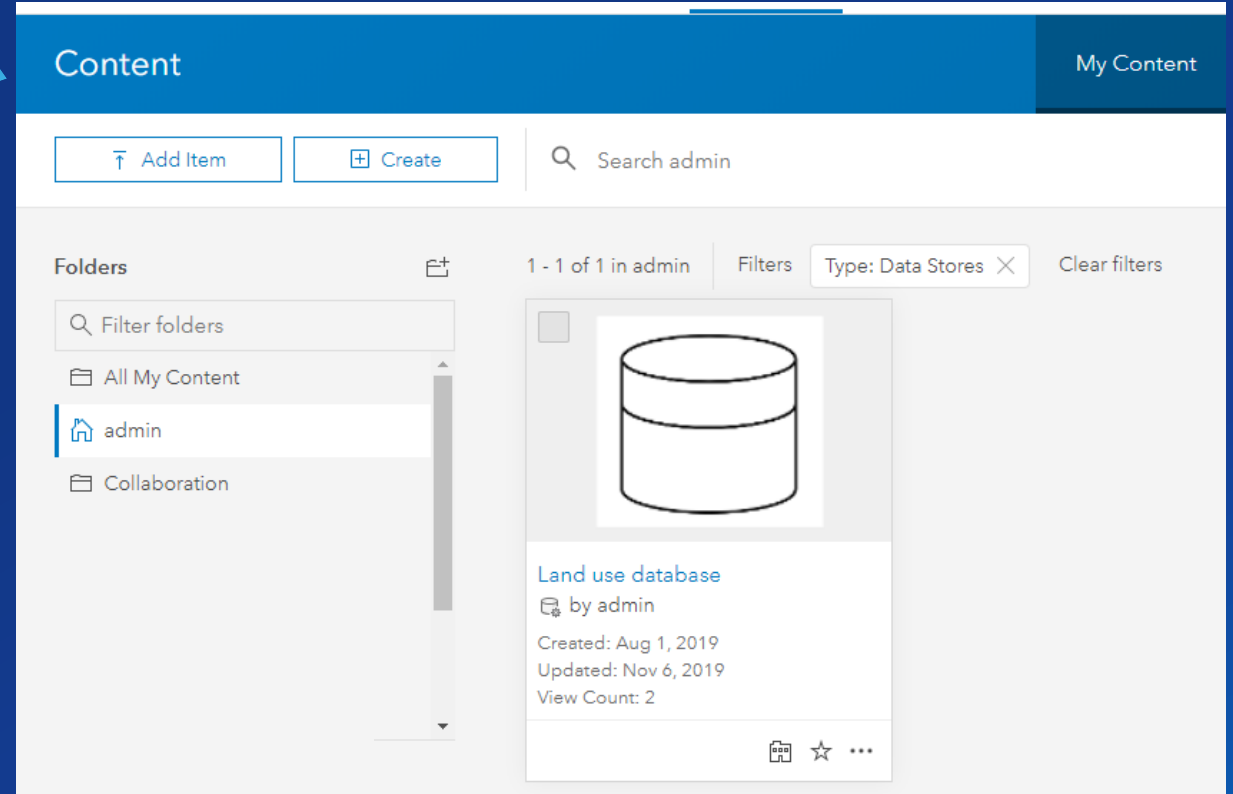


2

## spatialFilter

Only draw or query features that meet filter criteria

# ArcGIS Data Store



## 10.7.1:

- Create a data store item in the portal from a user-managed data source
- Publish all content in bulk from a data store item as map image layers and feature layers
- *When would you use this?*

## 10.8:

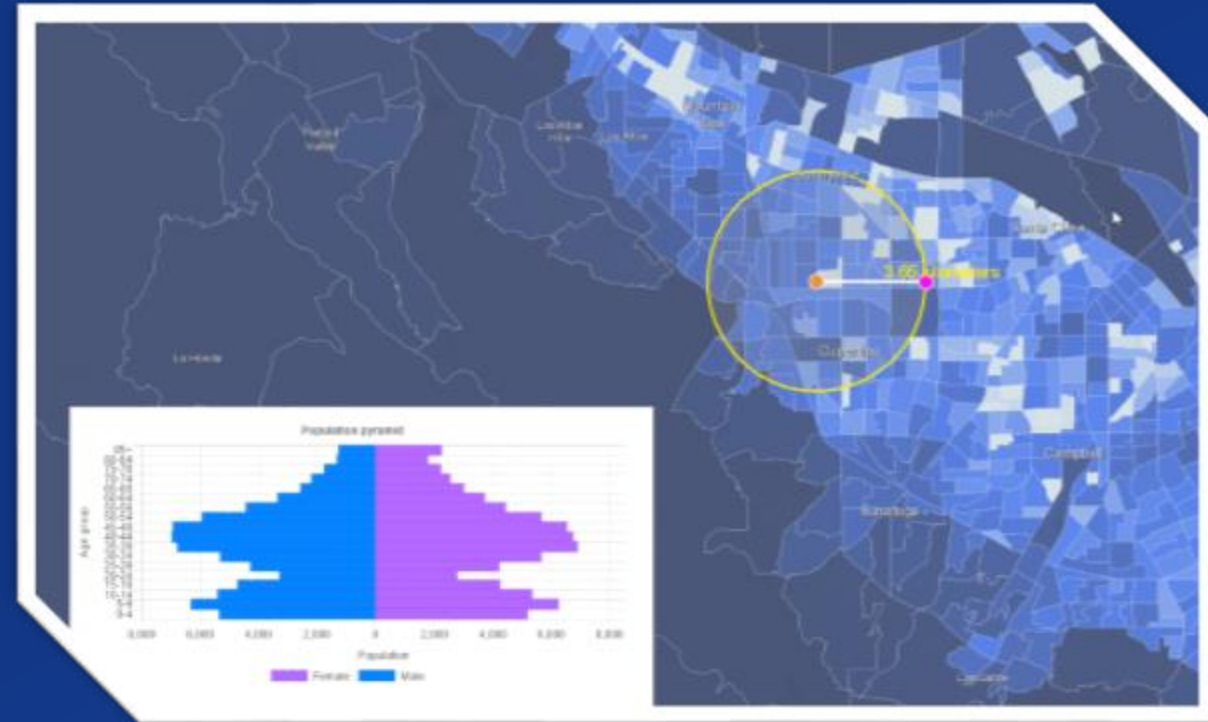
- Create a data store item from an **existing** registered (user-managed) data store



## Performance improvements

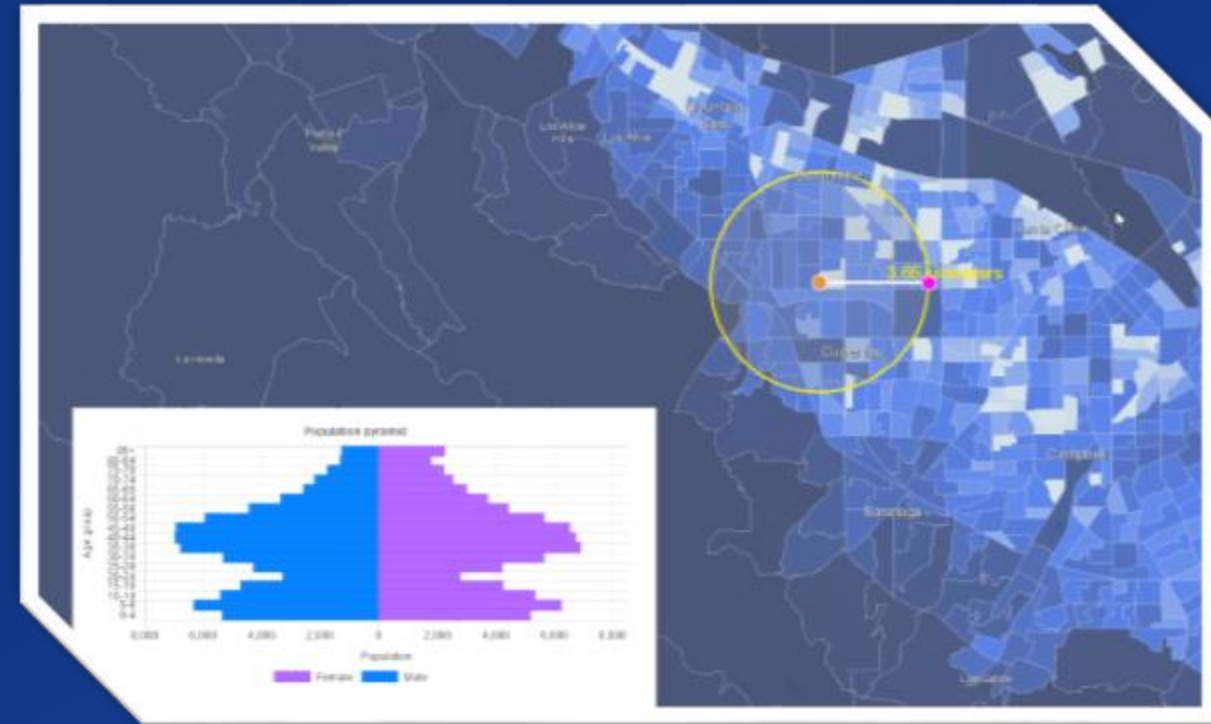
PBF is a new output format that is faster to generate and render in applications.

- (f=pbf) is smaller and faster for Esri clients to parse
- Available for Pro-based map and feature services since 10.7.1
- Available for hosted feature layers with 10.8
- ArcGIS API for JavaScript now requests .pbf by default

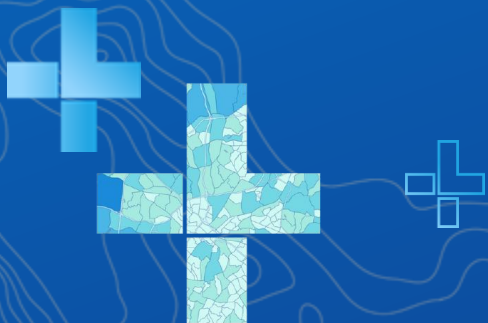


## Performance improvements

- Recent releases (10.6.1+) include other optimizations, like quantization, that load and render large and complex layers very quickly.
- At 10.8, it takes less time to publish hosted feature layers when your relational ArcGIS Data Store already contains a lot of datasets.



# Enterprise administration



# Webhooks

*Webhooks provide automatic notifications when something happens in your ArcGIS Enterprise portal. They work with platforms such as Zapier and Microsoft Flow to provide flexibility – monitor your portal as is best for you.*

At 10.8, you can trigger webhooks when:

- New roles are created or deleted
- When members' roles and user types are updated
- Certain actions happen for any items (e.g. any item is deleted)

`/users/updateUserRole`  
`/users/updateUserLicenseType`  
`/roles`  
`/roles/add`  
`/roles/update`  
`/roles/delete`  
`/items/...`  
`/groups/...`  
`/users/...`

Answer questions like:

- When was a custom administrative role deleted?
- When was this user promoted to a Creator?



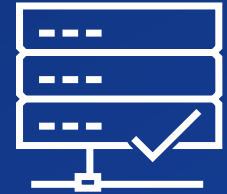
## Shared instances



Optimize your services and server memory based on the amount of anticipated requests.

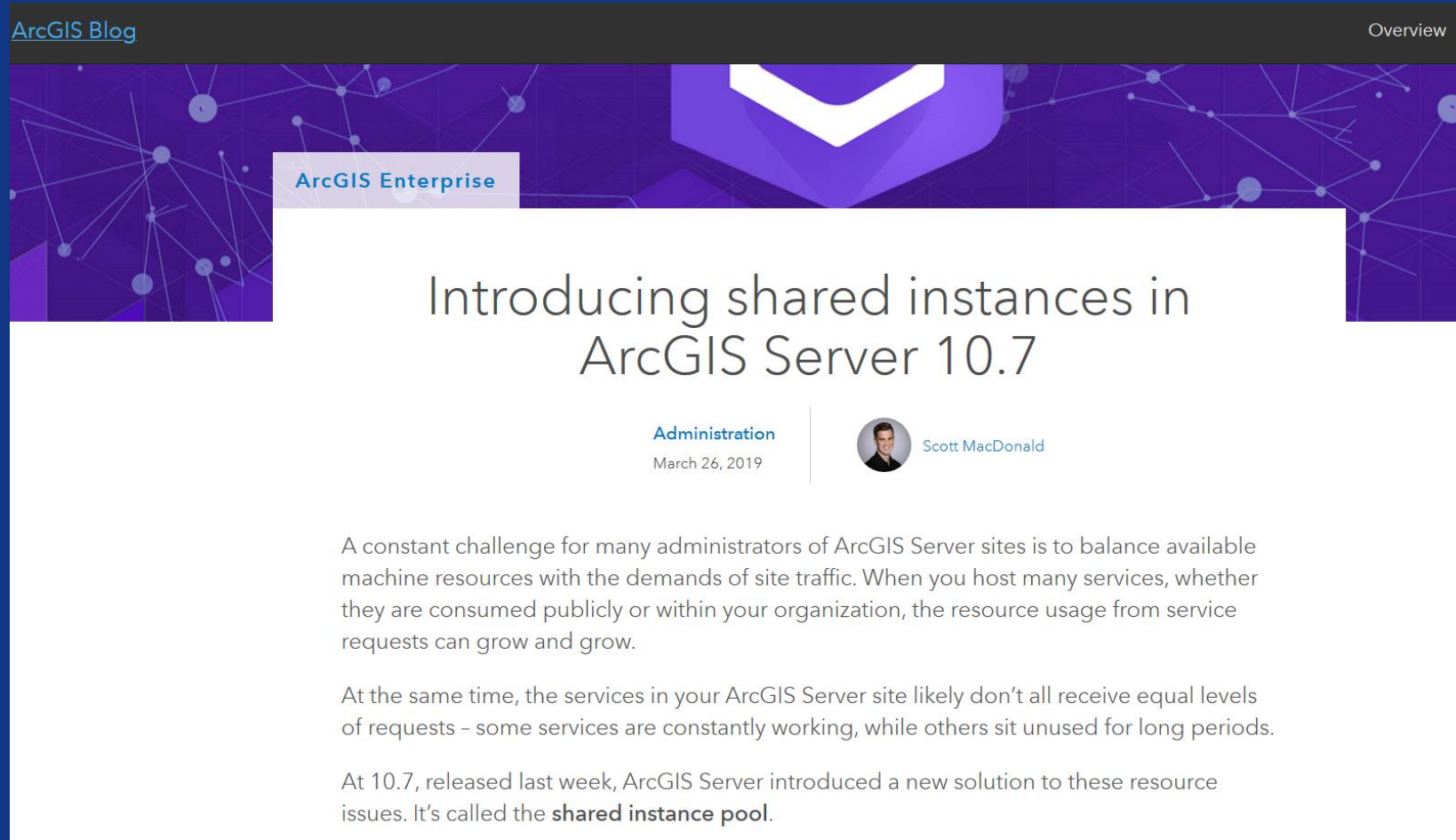


Instead of dedicated instances for each service, you can configure a shared pool used by many services.



This can save significant memory on your server machines and allow you to have more services on each machine.

# Shared instances

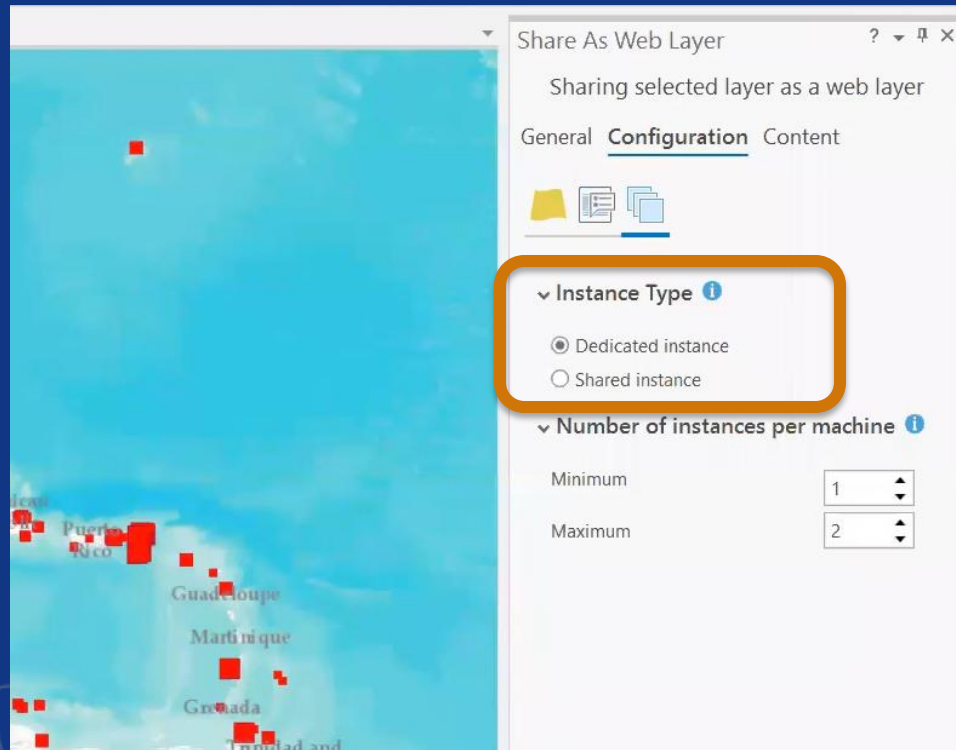


Search for “ArcGIS Blog shared instances”

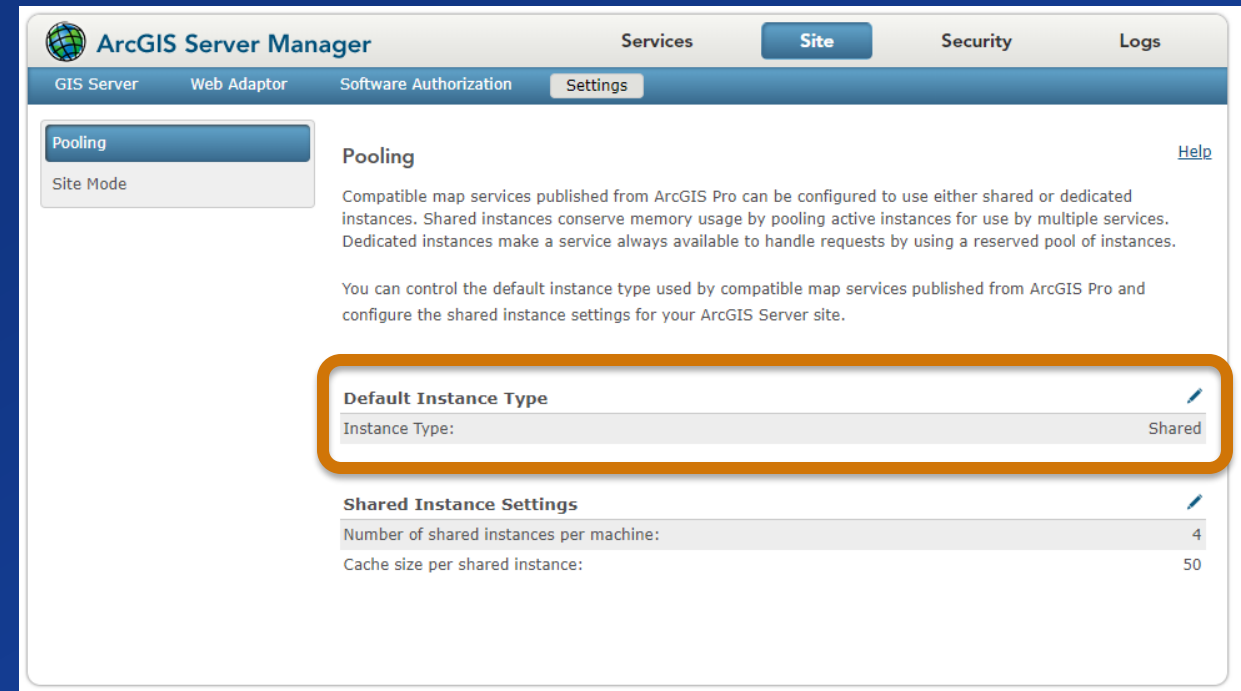


# Shared instances

Choose shared or dedicated instances  
when publishing compatible services from  
ArcGIS Pro 2.5+

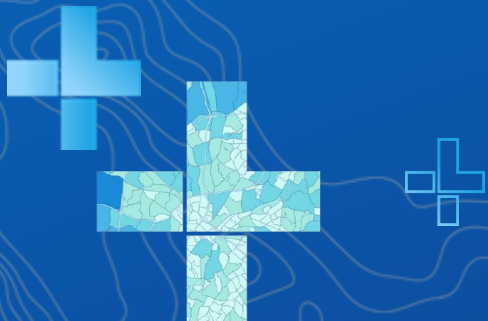


Shared instances will be the  
default for any new ArcGIS  
Server sites created at 10.8+



# ArcGIS Enterprise portal

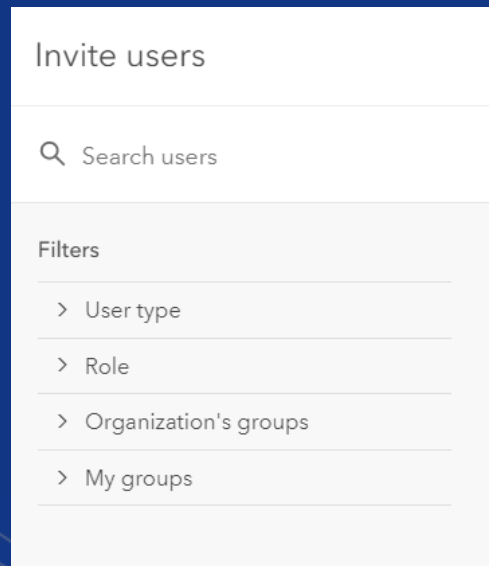
Administrators and group leaders



# Portal group enhancements

Adding members to groups is  
easier

- Filter by user types, roles, and membership
- Sort results in a variety of ways
- Better search algorithm for larger portals



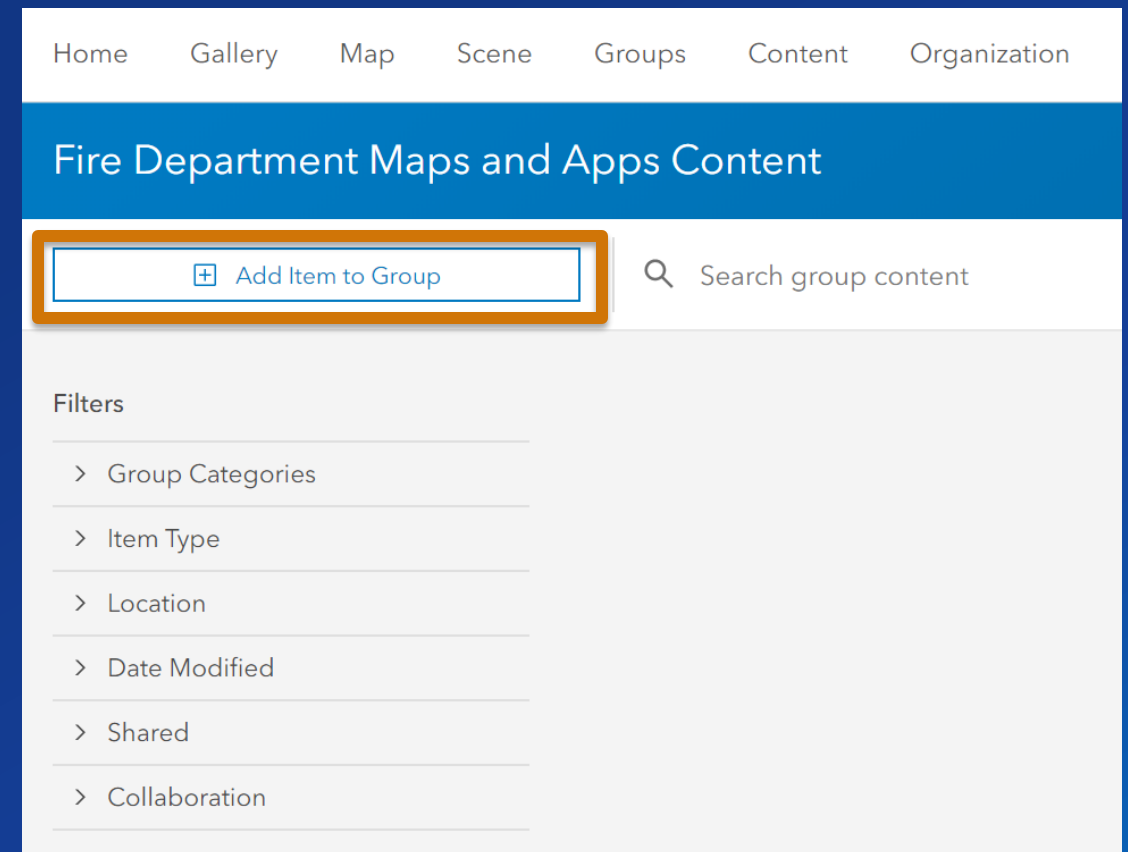
Invite users

Search users

Filters

- > User type
- > Role
- > Organization's groups
- > My groups

Directly add items from within a group



Home Gallery Map Scene Groups Content Organization

## Fire Department Maps and Apps Content

[+ Add Item to Group](#) Search group content

Filters

- > Group Categories
- > Item Type
- > Location
- > Date Modified
- > Shared
- > Collaboration

# Portal group enhancements

## Hide the list of group members

- Protects users' privacy
- Especially helpful for groups visible to everyone
- Item owners, group managers will remain visible
- Members list will not be visible

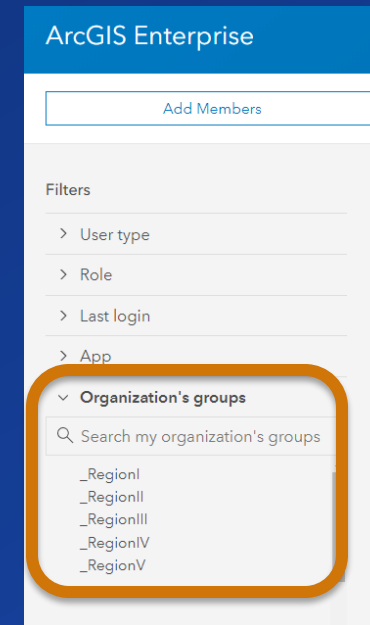
Who can see the list of members on the Members tab?  
All group members

Hide members

Note: Group owner and managers are always shown. Item owners will not be hidden for content in the group.

## Create administrative groups

- Can be used as a filter to help with user management: roles, licenses, user types, adding to groups
- **Idea:** name your administrative groups after departments, offices, regions, locations, and more

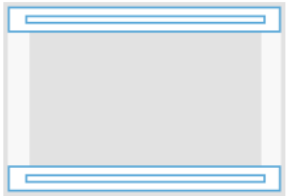


### Administrative group

☒ Members cannot leave this group. Only the group owner or a group manager can remove members from this group.

# Information banners

## Information Banner



Use information banners to alert all users who access your organization about your site's status and content, such as maintenance schedules, classified information alerts, and read-only modes. Banners will appear at the top and bottom of your pages.

[Set information banner](#)

- Displayed as a header and footer whenever anyone accesses the Enterprise portal
- Admins and members with the 'security and infrastructure' privilege can configure (workflow under settings)
- Can be used to notify for system downtime, provide a classification level, and more

This environment will be under maintenance beginning 11/8 and ending 11/9.

[Home](#) [Gallery](#) [Map](#) [Scene](#) [Groups](#) [Content](#) [Organization](#)



**Migrate Test**  
MigrateTest

## Gallery for ArcGIS Enterprise

# Site access notices

## Access Notice



Provide a notice of terms to be displayed to all users who access your organization. Users can proceed only if they accept the terms of the notice. They will not be prompted again for the remainder of their browser session.

[Set access notice](#)

Please accept to continue.

This organization assumes no responsibility or liability for any errors or omissions in the content of this site. The information contained in this site is provided on an "as is" basis with no guarantees of completeness, accuracy, usefulness or timeliness...

[Decline](#)

[Accept](#)

- Displays at each browser session
- The Enterprise portal is inaccessible until a member selects OK or ACCEPT
- Can be used for:
  - Privacy statements
  - Terms of use
  - Disclaimers
  - General notices and updates



## Portal read-only mode

- Turn on from Admin Directory
- Portal can still be accessed
- Items, services, and data can be viewed , but not edited, created, or deleted
- Settings can't be modified
- Use when upgrading, creating backups, and making system updates
- Prevents data loss

### Portal Administrator Directory

[Home](#) > [Mode](#)

#### Site Root

Site Mode

**Read Only:**

**Description:** ArcGIS Enterprise is currently in read-only mode. Contact your administrator for further assistance.

**Supported Operations:** [Update](#)

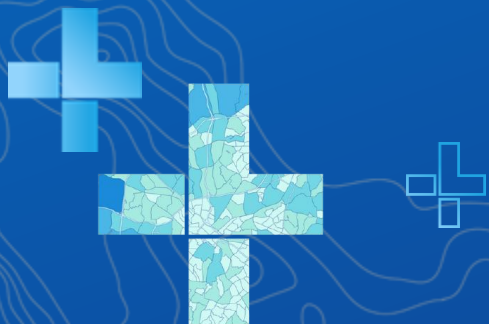
**Supported Interfaces:** [REST](#)

#### Error

ArcGIS Enterprise is currently in read-only mode. Contact your administrator for further assistance.

OK

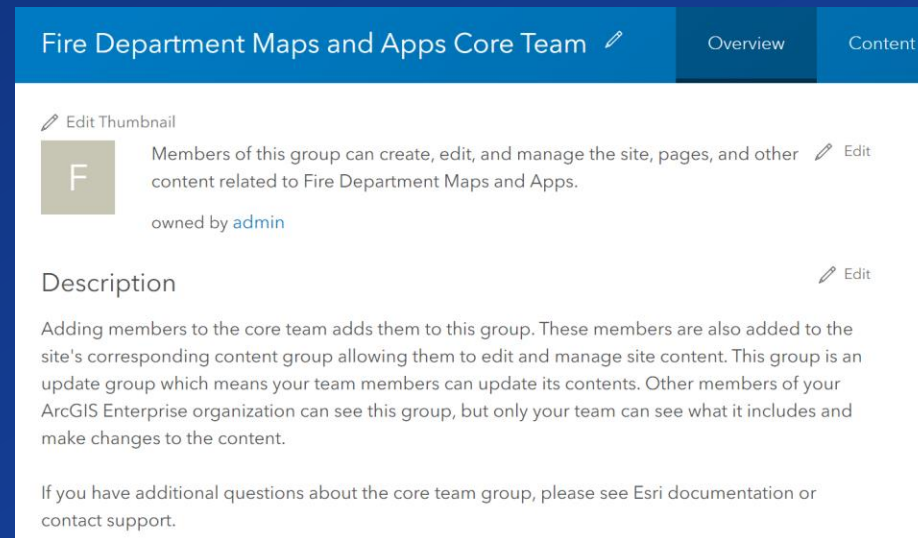
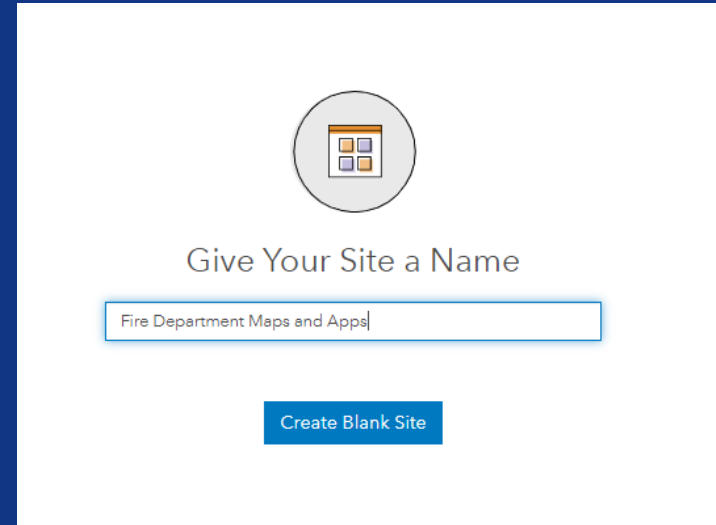
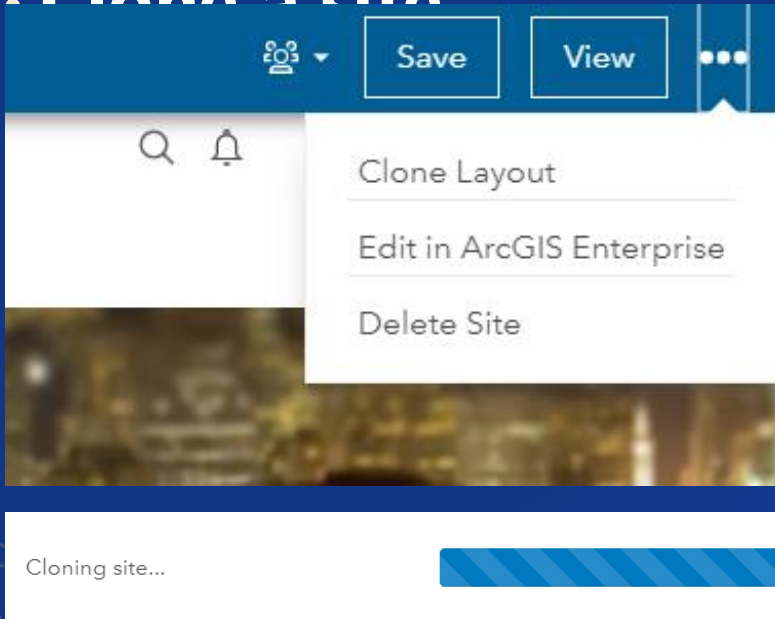
# Apps and server roles



# ArcGIS Enterprise Sites

- New layout
- More flexibility with admins

## Clone a site



# ArcGIS Notebook Server

## 10.8: New Manager app

- Check site stats
- Manage resources
- View and query logs
- Change key settings

ArcGIS Notebook Server Manager ? Overview ▾

### Site Information

Admin URL	<a href="https://billm4.esri.com/turing">https://billm4.esri.com/turing</a>
Version	10.8.1
Running Containers	1
Running Notebooks	0

### Health Check

Machine	Health	Running Containers
HOST.DOCKER.INTERNAL	Pass	1

### Recent Errors

No error messages to display.

### Machines

Machine	Operating System	Processors (physical)	System Memory	Disk Usage
HOST.DOCKER.INTERNAL	Microsoft Windows 10 build 17763	4	32690 / 49819 (MB)	158 / 235 (GB) - 1 Disk

# New apps and products

ArcGIS Mission



Tracker Viewer  
web app



ArcGIS Maps for Power BI  
with Enterprise



ArcGIS QuickCapture  
Designer



Workforce for ArcGIS  
web app



# New apps and products





# ArcGIS Mission



## Mission planning

Define Area  
Provision Data  
Assign People

## Mission management

Monitor Activities  
Engage Team



## Situational awareness

Peer-to-Peer Communication  
Location Tracking  
Chat & Messaging



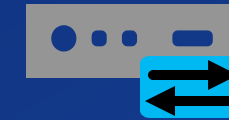
# ArcGIS Mission



## ArcGIS Mission Manager

Focused web application for Mission Analysts to:

- Create and provision missions to Mission Responder
- Collaborate with Mission Members
- View a Common Operational Picture of the current Mission
- Assign Ad-hoc tasks and data during active missions



## ArcGIS Mission Server

- Server technology to facilitate peer-to-peer networking, sharing, communication, and collaboration
- Relays location and presence information of Mission Members



## ArcGIS Mission Responder

Focused mobile application for Mission Responders to:

- Work off the same authoritative map
- Send status and location updates
- Share information through peer-to-peer communication.

# New apps and products

ArcGIS Mission



Tracker Viewer  
web app



ArcGIS Maps for Power BI  
with Enterprise



ArcGIS QuickCapture  
Designer



Workforce for ArcGIS  
web app



Create views, visualize,  
and interrogate  
Tracker for ArcGIS tracks

Now comes installed

# New apps and products

ArcGIS Mission



Tracker Viewer  
web app



ArcGIS Maps for Power BI  
with Enterprise



ArcGIS QuickCapture  
Designer



Workforce for ArcGIS  
web app



Integrate ArcGIS Enterprise  
content and services  
with Microsoft Power BI

# New apps and products

ArcGIS Mission



Tracker Viewer  
web app



ArcGIS Maps for Power BI  
with Enterprise



ArcGIS QuickCapture  
Designer



Create and manage  
QuickCapture  
(field observation)  
projects

Workforce for ArcGIS  
web app



Now comes installed



# New apps and products

ArcGIS Mission



Tracker Viewer  
web app



ArcGIS Maps for Power BI  
with Enterprise



ArcGIS QuickCapture  
Designer



Workforce for ArcGIS  
web app



Administer and dispatch  
workforce coordination

Now comes installed



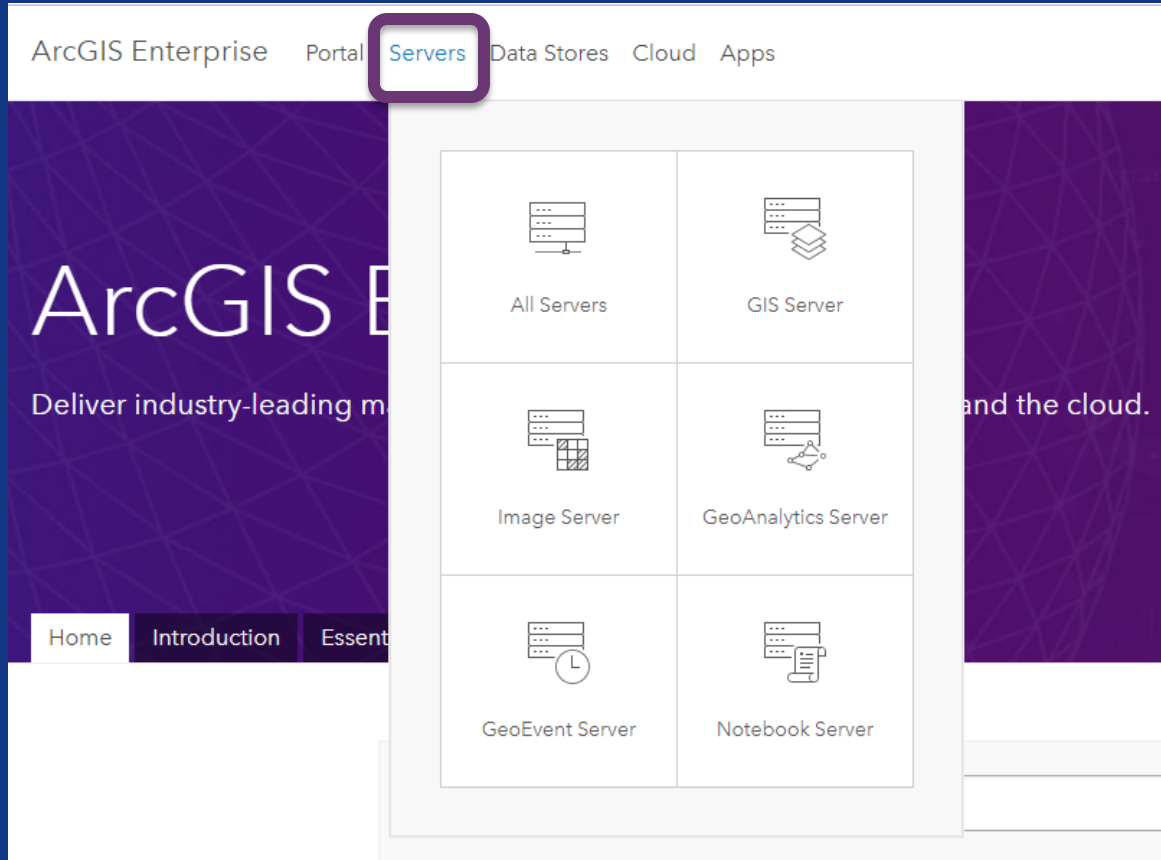
# Best practices for ArcGIS Enterprise in 2020

1. Deploy and upgrade your system using an automated tool.
2. Design for isolation, know your security, and have a backup strategy.
3. Keep distributed collaboration in mind.
4. Use the layers and service types that are appropriate for each setting.
5. Don't be afraid to use ArcGIS Online alongside ArcGIS Enterprise.
6. Read the documentation and other resources.

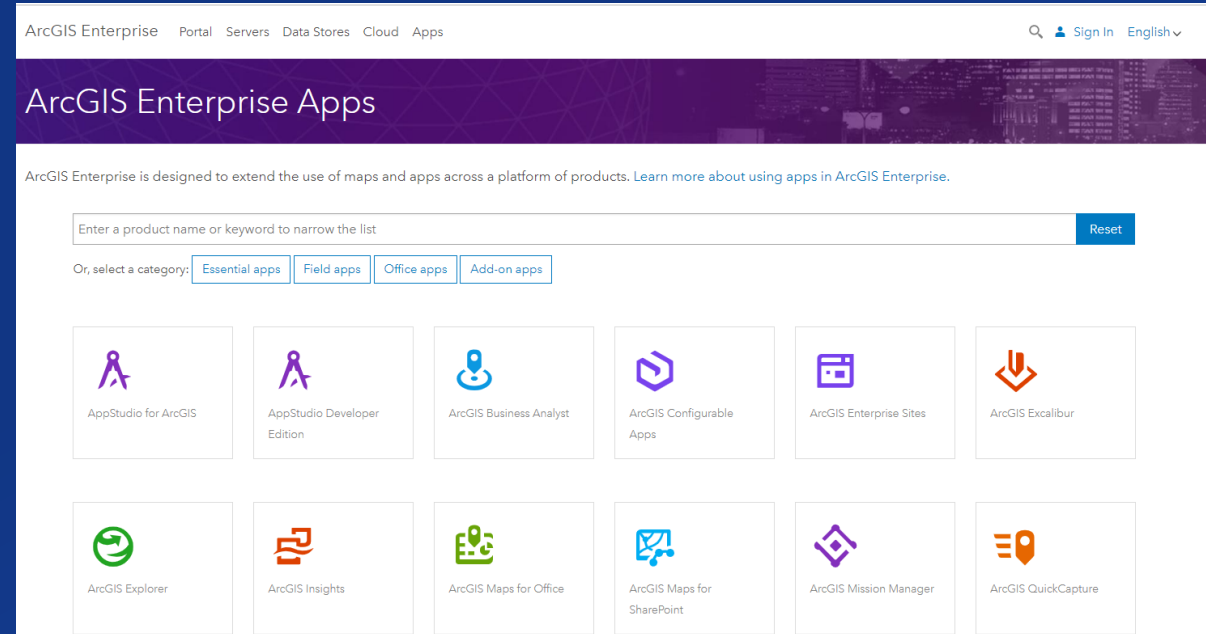


**Where can you find more  
information about what's  
new and what's coming?**

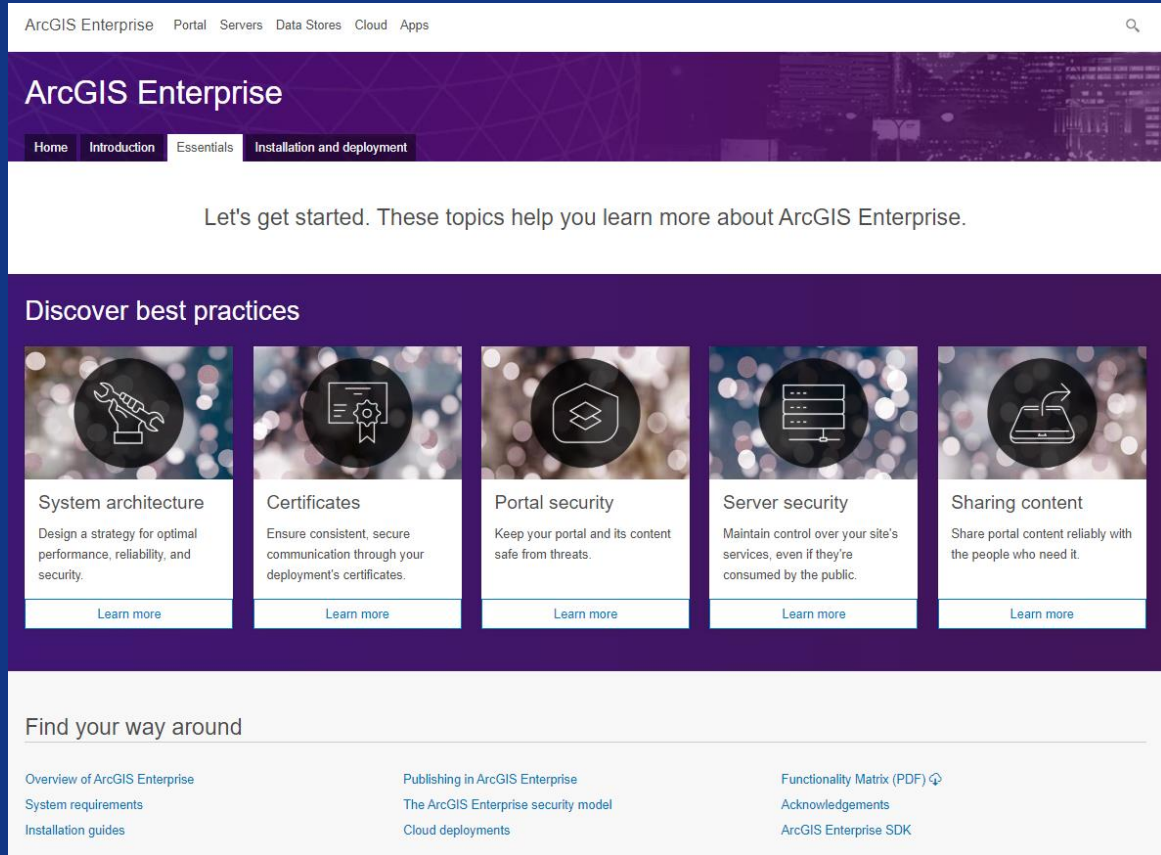




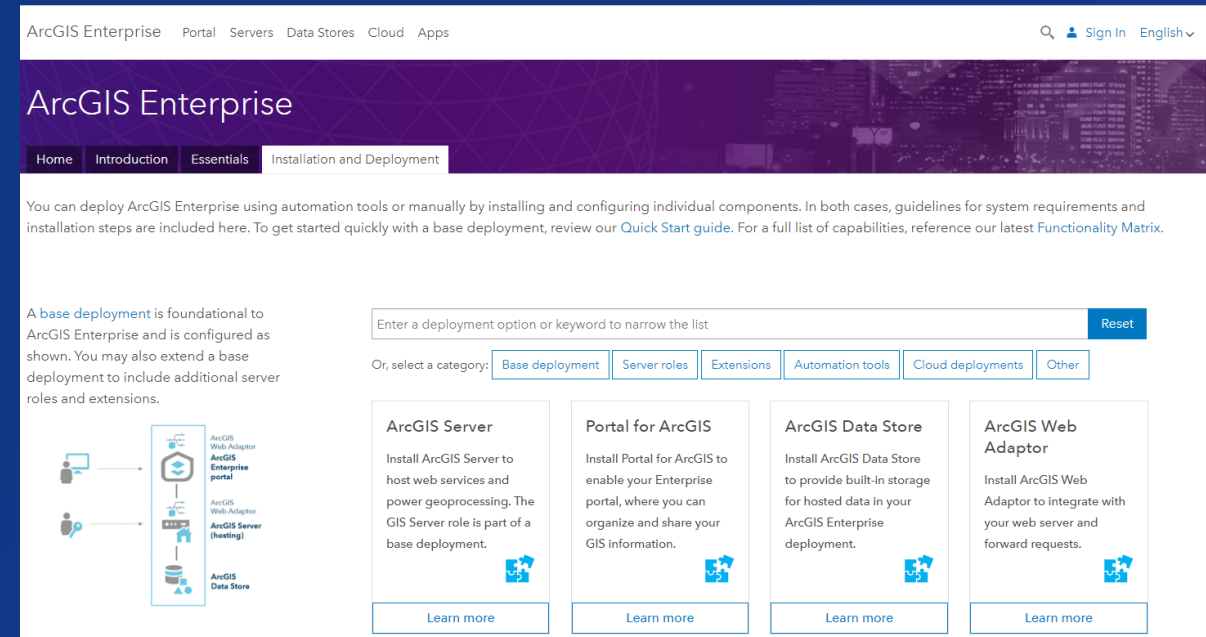
Easy access to server role documentation



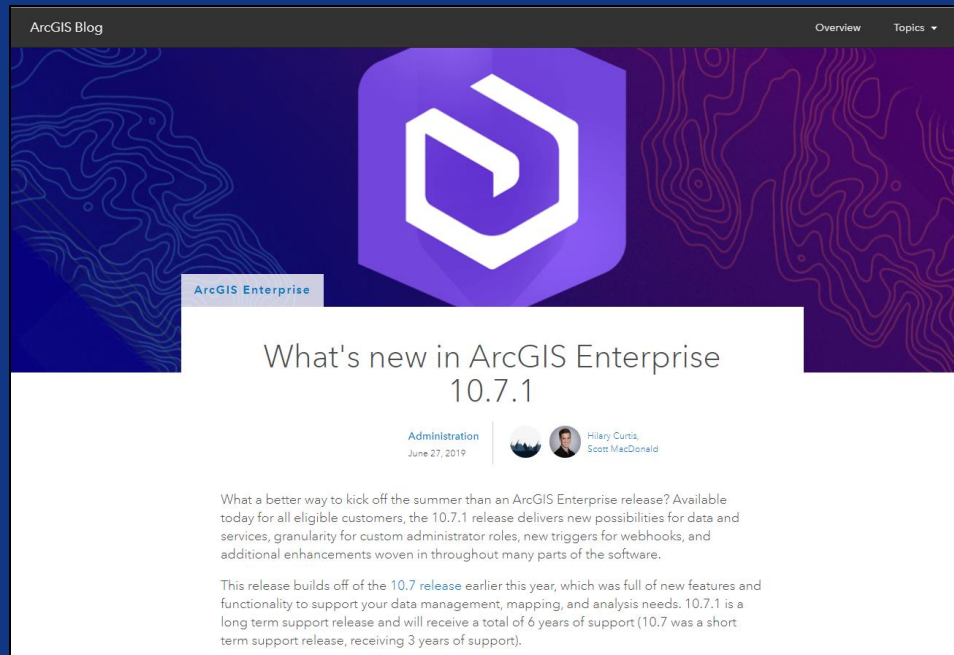
Brand new applications landing page



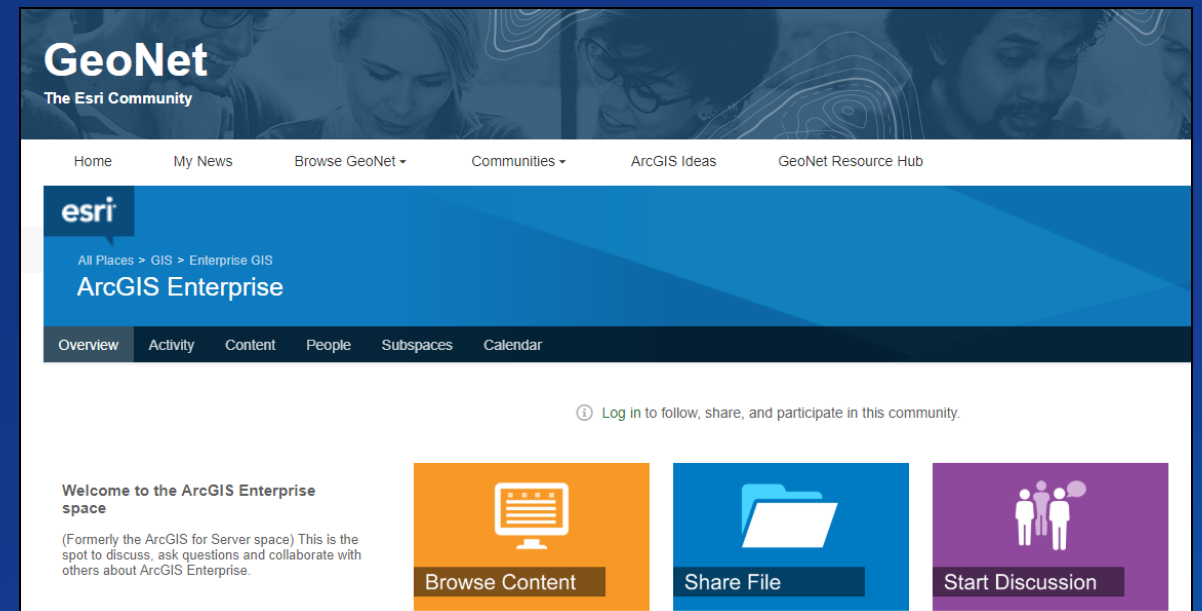
## New Essentials tab with best practices



## Updated installation guides landing page



## ArcGIS Blog “What’s New” series



## GeoNet announcements and ideas

# What we covered today

ArcGIS Enterprise 10.8 to be released this month

Data and mapping

- Hosted map image layers
- Replace Layer for vector tiles
- Clipping and Spatial Filter for map services
- PBF output format
- Quantization and publishing improvements
- Data store items in the portal
- Bulk publishing

Offline map areas

- Draw them using a polygon
- Schedule updates

Administrative updates

- Webhooks - new endpoints
- Shared instances - expanded at 10.8

For portal administrators

- Administrative groups, hide member lists
- Share items from within a group
- Improved experience when inviting members
- Information banners
- Access notices
- Portal read-only mode

ArcGIS Enterprise Sites

- New layout
- Content and core teams
- Clone a site

Apps and server roles

- ArcGIS Notebook Server Manager
- Introducing ArcGIS Mission
- Nearby configurable app with Zone Lookup
- New tools for GeoAnalytics and Image Servers

Thank you! Feel free to email me – [SMMacDonald@esri.com](mailto:SMMacDonald@esri.com)