esri Deutschland
THE SCIENCE OF WHERE

esri Suisse
THE SCIENCE OF WHERE

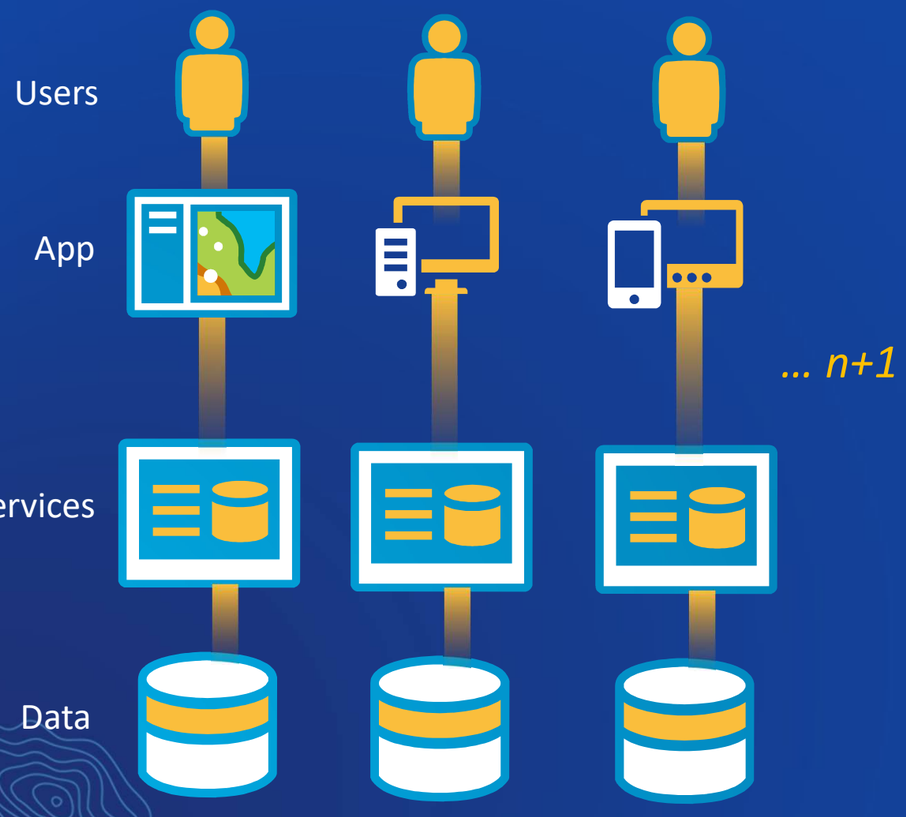
Dienstearchitektur in ArcGIS Enterprise: Das WebGIS Pattern

Matthias Schenker

ArcGIS Enterprise | Server GIS vs. Web GIS

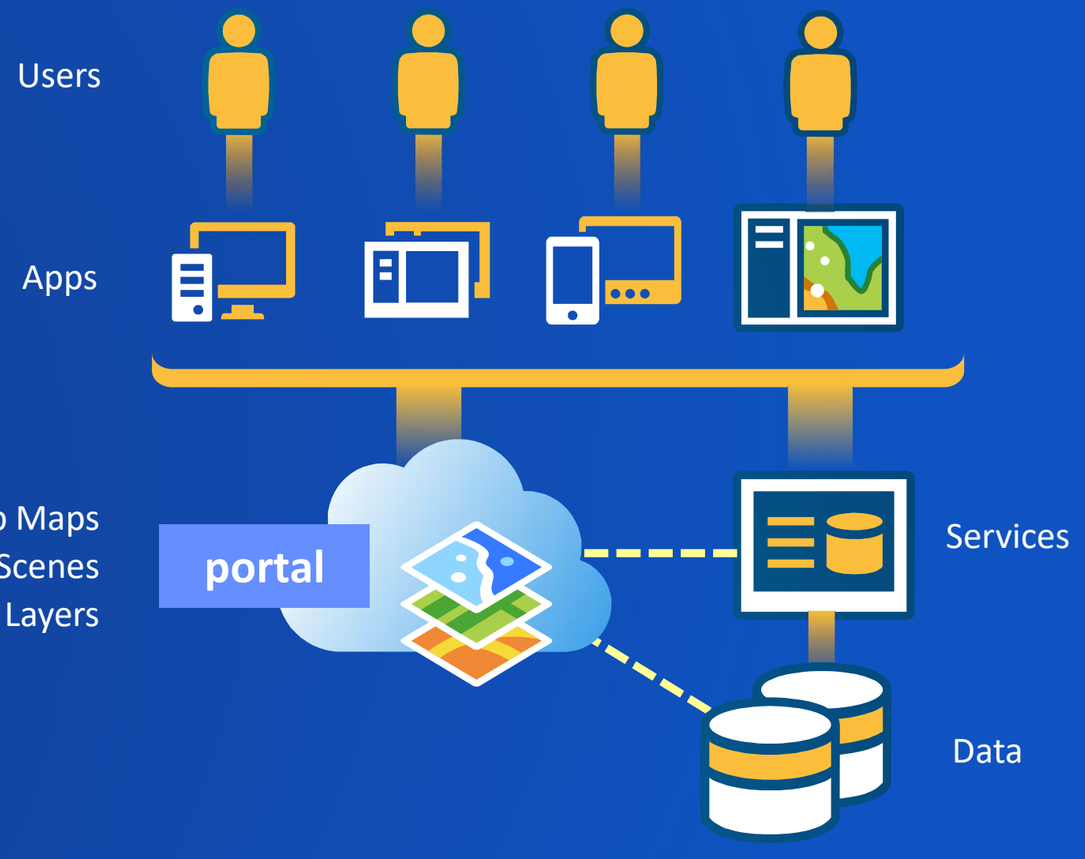
Server GIS

Use of GIS services with custom front end applications



Web GIS

Pervasive use of web layers, scenes, and maps within all of the ArcGIS apps



ArcGIS Enterprise is Foundational Powerful Flexible Collaborative

Desktop	Server	Portal
Layer	Map service	Map image layer
Feature class	Feature service	Feature layer
Mosaic dataset	Image service	Image layer
Address locator	Geocode service	Geocoder
Geoprocessing tool	Geoprocessing service	Web tool
3D scene	Scene service	Scene layer

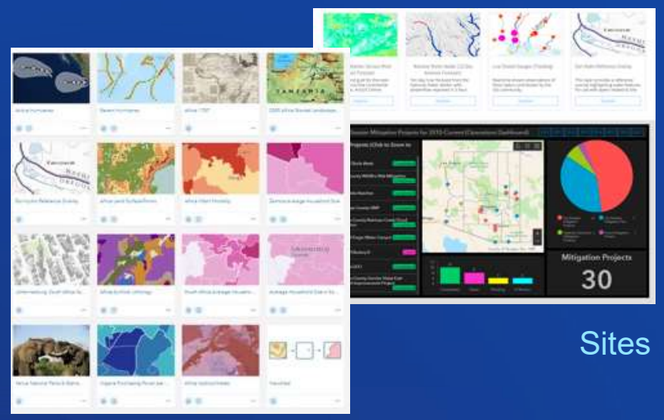
Web maps

Web scenes

ArcGIS

Organizes and Manages All Aspects of Geographic Knowledge

Data, Information Products, Apps, Models . . .
. . . and People and Their Organizations



Catalog

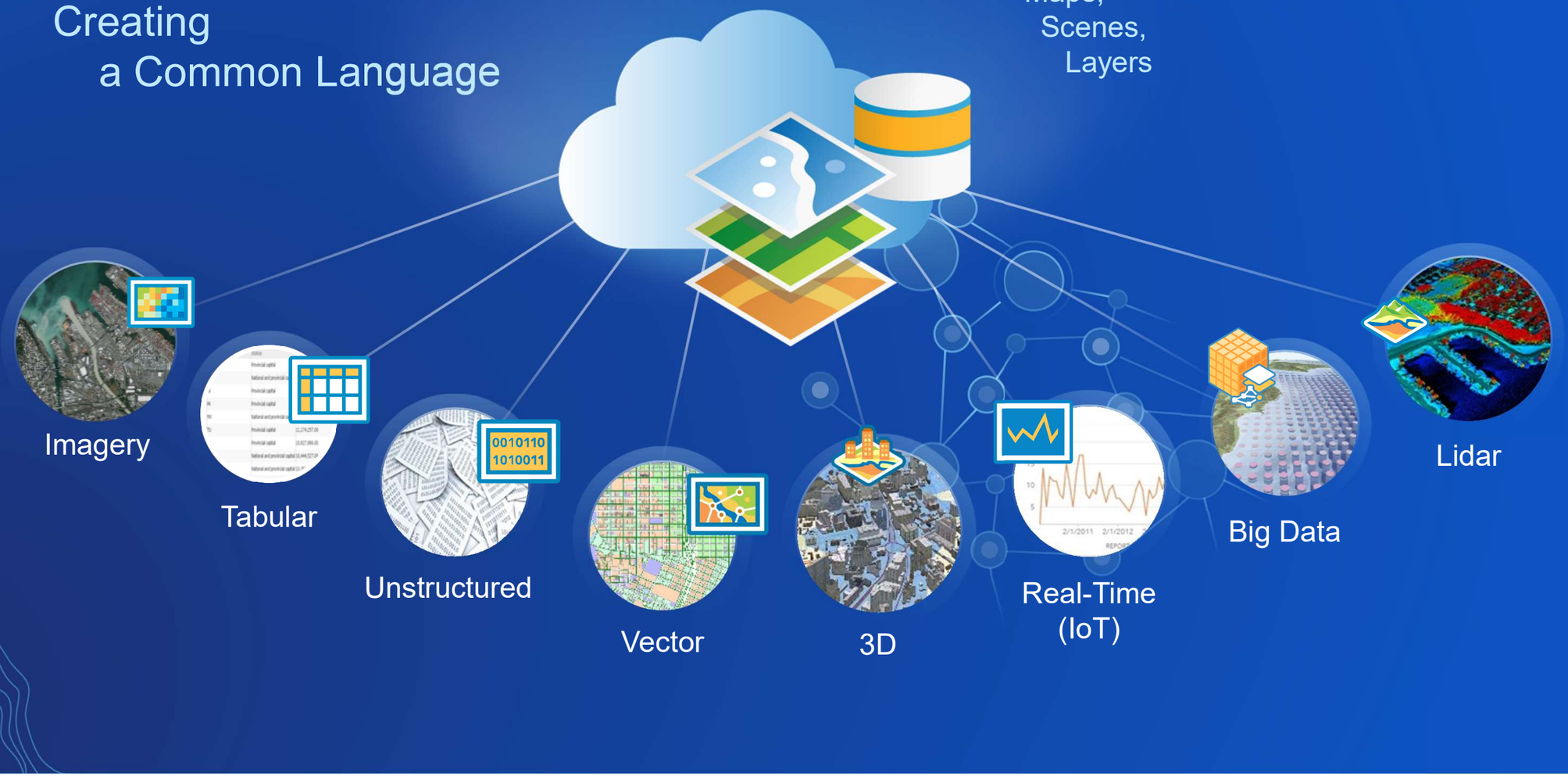
Sites

Integrated User Experiences

ArcGIS

Integrates All Types of Data

Creating
a Common Language



ArcGIS

ArcGIS Online

- Hosted by Esri (SaaS)
  - Upgraded automatically (by Esri)
  - Esri controls SLA

- Esri-provided content and services
  - Basemaps
  - Living Atlas
  - GeoEnrichment, Routing, …

Core Web GIS functionality
(Apps, visualization, smart mapping, analysis…)

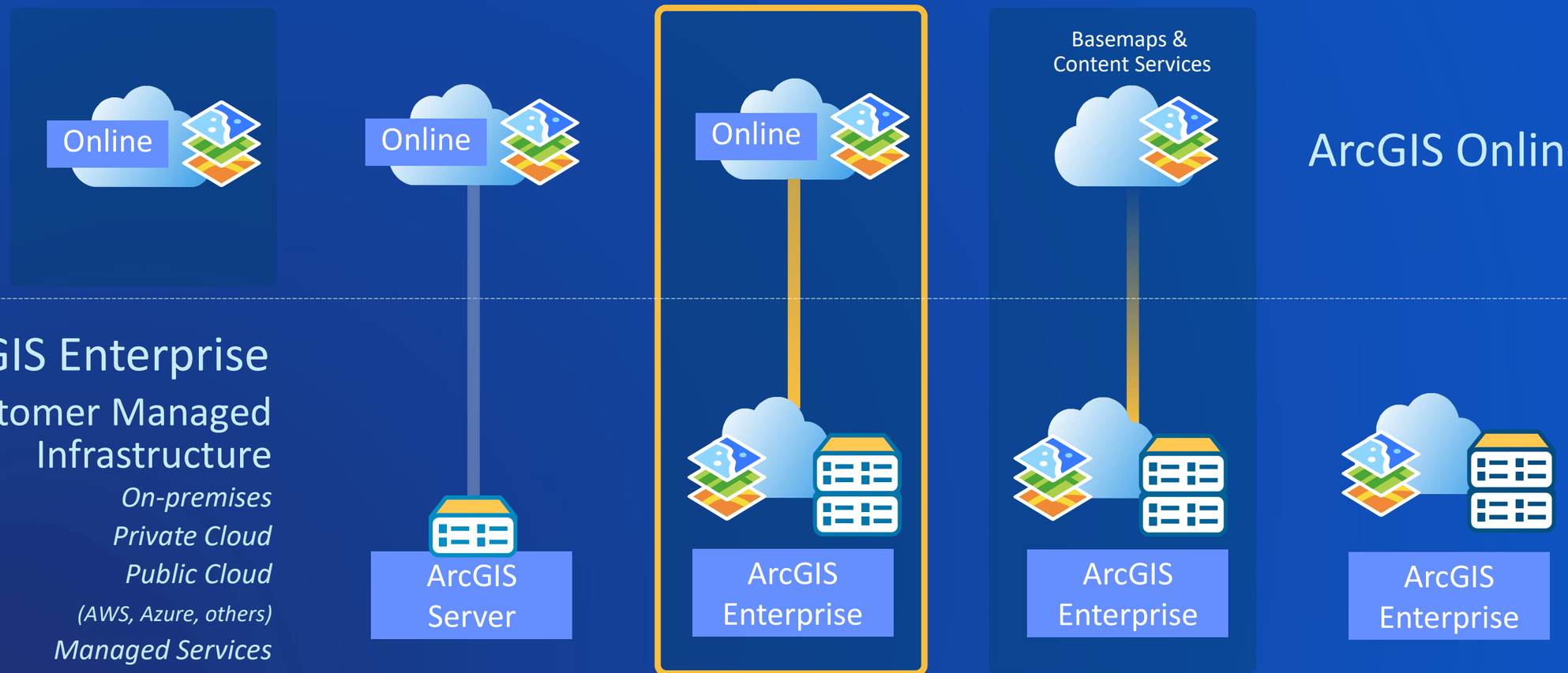
ArcGIS Enterprise

- In your own infrastructure (Software)
  - Upgraded by the organization
  - Organization controls SLA

- Advanced GIS functionality
  - GIS Server
  - Image Server (optional)
  - GeoEvent Server (optional)
  - GeoAnalytics Server (optional)
  - Notebook Server (optional)

ArcGIS Enterprise | Web GIS Pattern Evolution

Begin with ArcGIS Online & SaaS



User Types | Match the way how your team works

ArcGIS Enterprise

ArcGIS Online

Identity

Capabilities

View
Edit
Analyze
Create
Share
Administer

Apps

User Types

Viewer
(equivalent to L1)

Editor

Field Worker

Creator
(equivalent to L2)

GIS Professional

Viewing

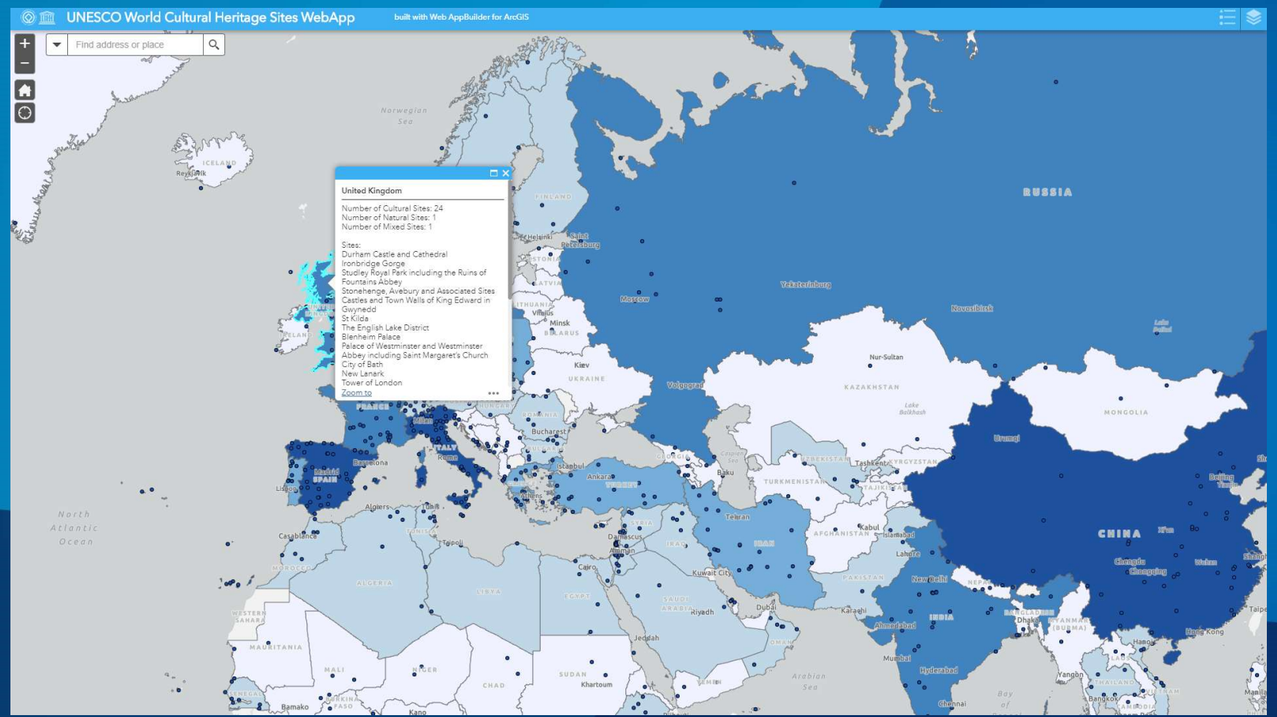
Editing

Authoring, Mapping, & Analysis

- New licensing model for users beginning at 10.7
- Provides the much requested ‘intermediate level’ user
- Each user type has an identity, capabilities and included applications
- Match your licensing to your workflows

User Types | Summary

Viewer	Editor	Field Worker	Creator	GIS Professional
Formerly Level 1			*Formerly Level 2*	
Viewing	**Editing**		**Authoring, Mapping, & Analysis**	
• Essential Apps	• Essential Apps	• Essential Apps • Field Apps	• Essential Apps • Field Apps • Office Apps	• Essential Apps • Field Apps • Office Apps • ArcGIS Pro



Using ArcGIS Enterprise

Upload CSV, Symbology, WebMap, Arcade

Styling Vectortiles

Using vector tiles in your applications

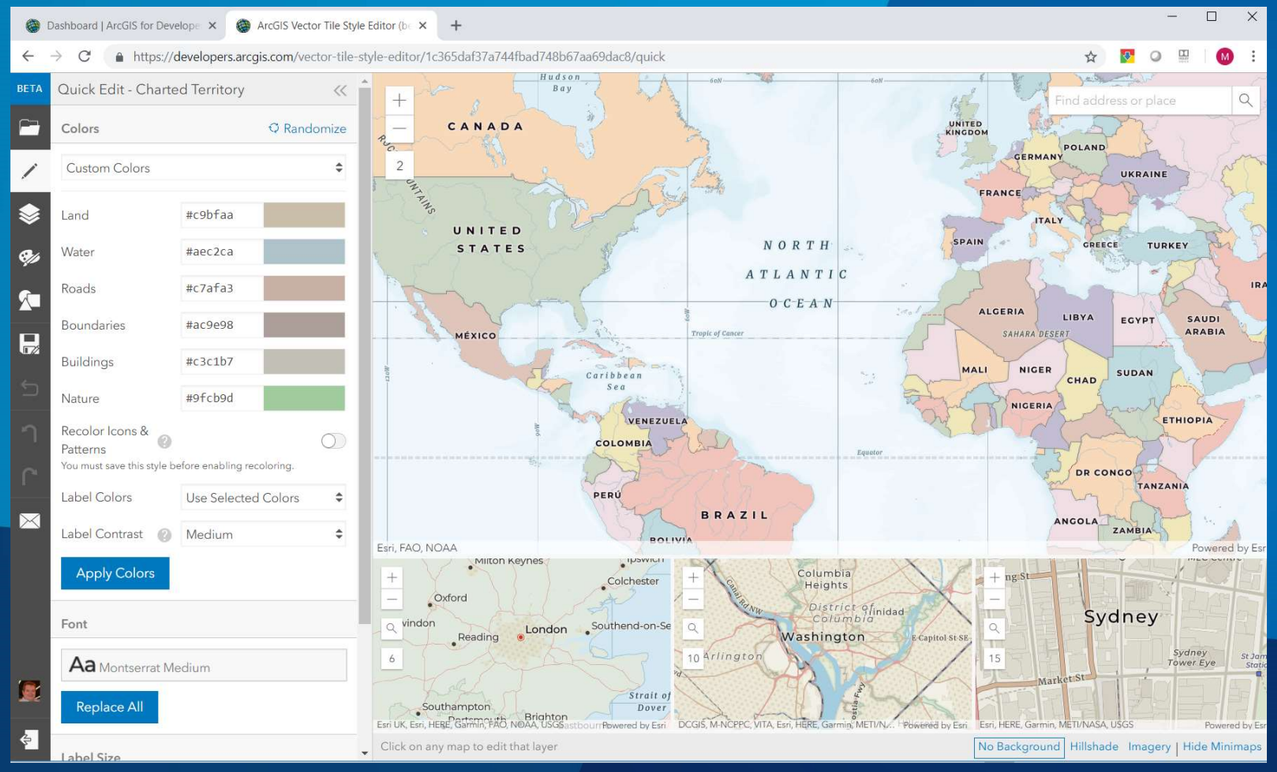
- **Multiple ways to use vector tiles:**
  - **A) Use Esri provided vector tiles / styles**
  - **B) Style Esri vector tiles for your own use**
    - **Change colors**
    - **Drop layers**
    - **Match the needs of your application**
  - **C) Create your own vector tiles from your own data**

Styling vector tiles

- **Simple Style Copy**
  - **Save tile layer to Enterprise or Online account**

- **ArcGIS Vector Tile Style Editor now available in ArcGIS Online**

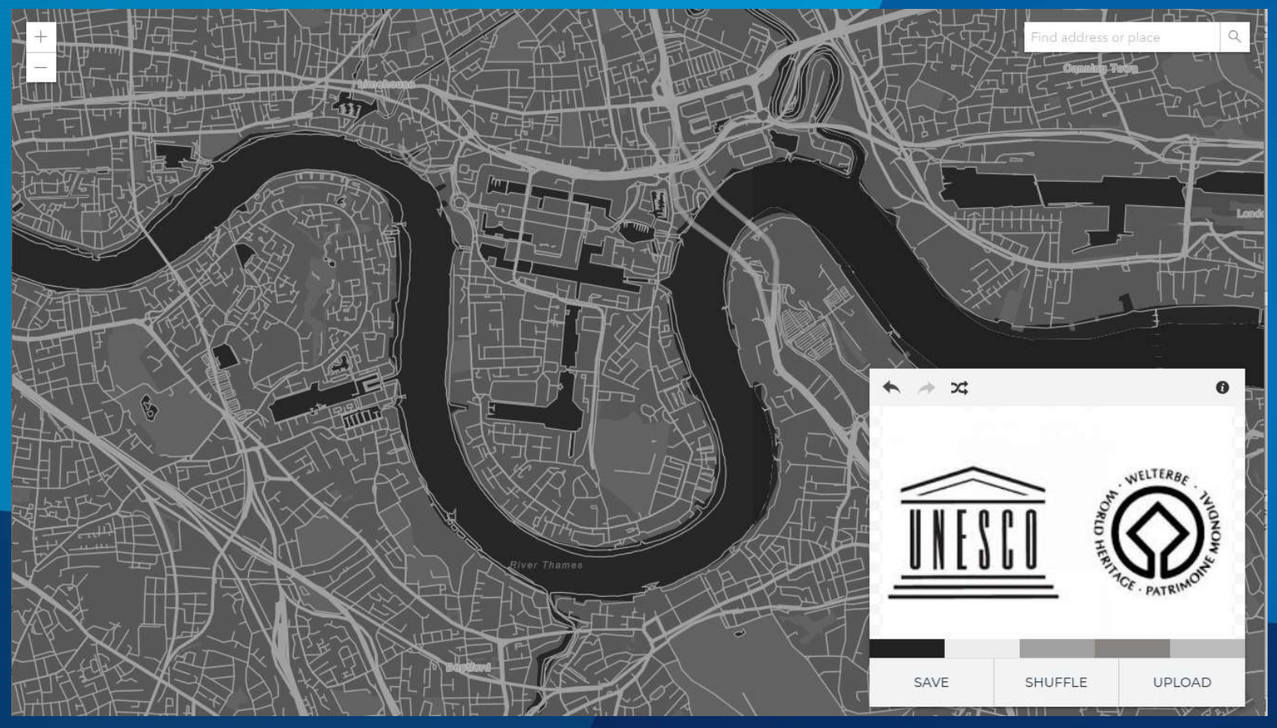
- **Two additional sample Vector Styling Apps simplify this:**
  - **Vector Style JSON Editor - GitHub**
  - **Vector Basemap Style Editor – GitHub**
  - **Mapstyler by Esri UK- GitHub**
  - **Hand editing JSON and uploading is also an option**



Styling vector tiles

Demo

[Vector Basemap Style Editor]



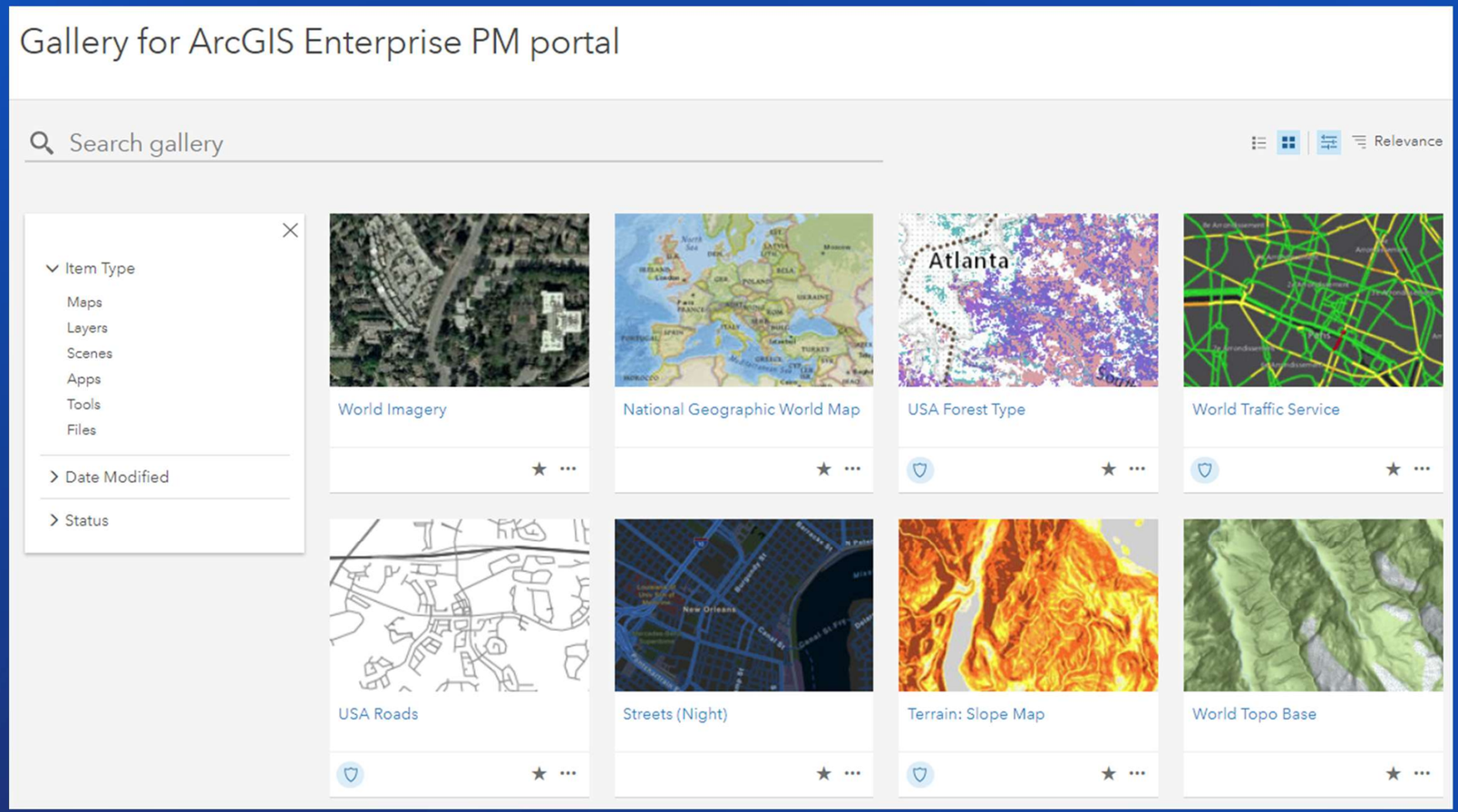
Mapstyler

Demo

Sharing Content

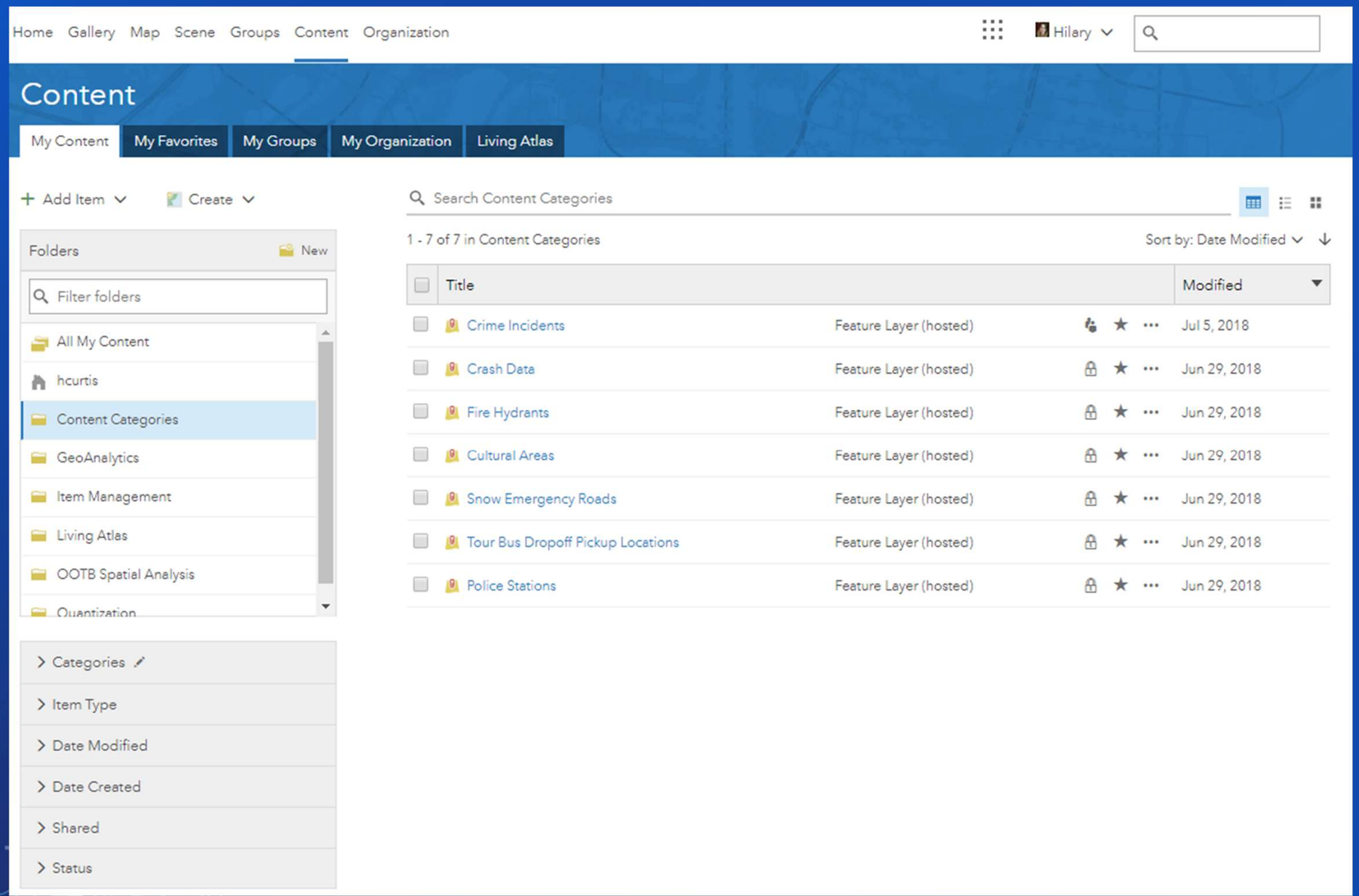
with ArcGIS Enterprise

Gallery



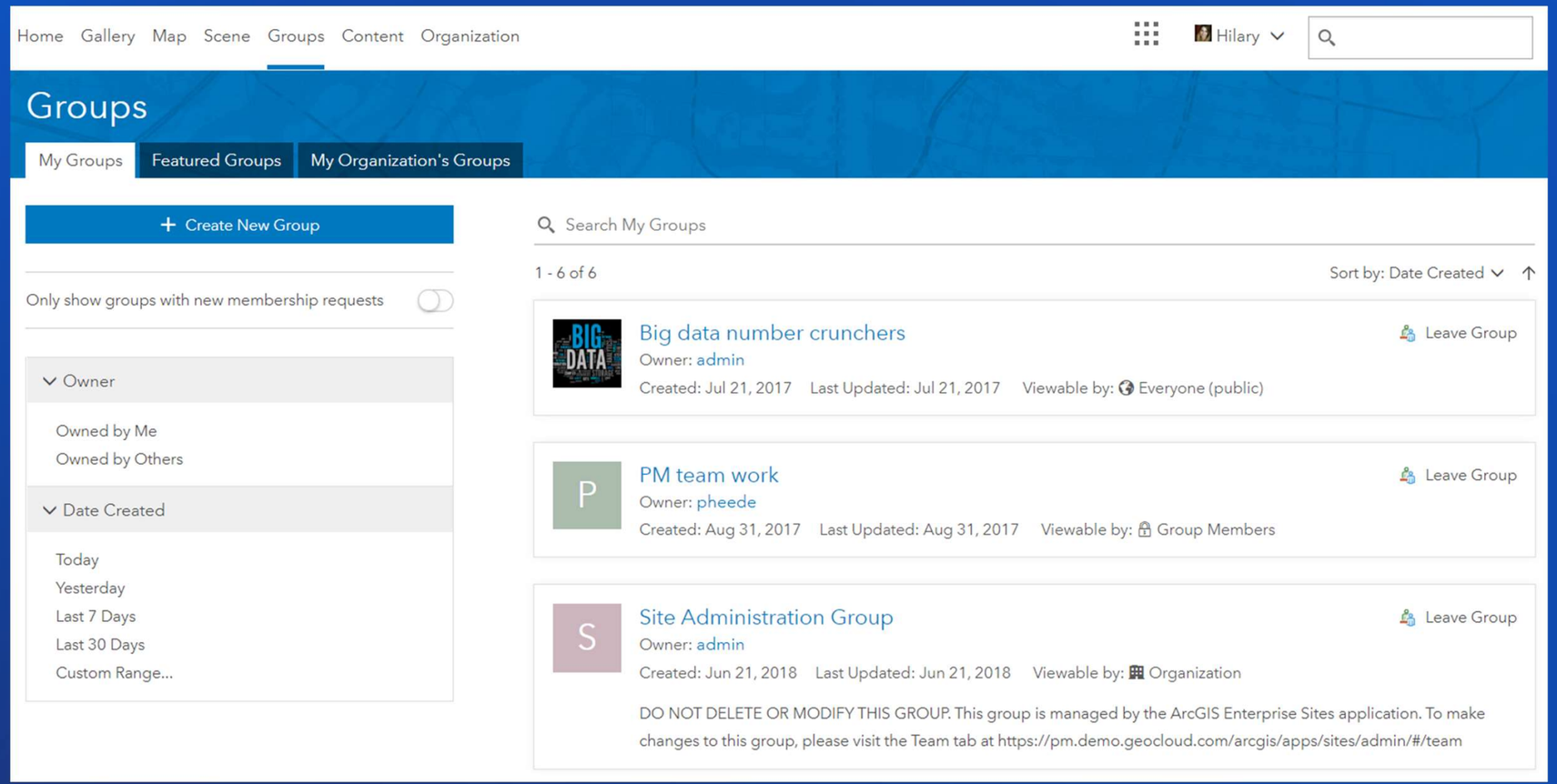
- View all content or a curated group
- Filters: Date Modified, Status
- Search
- Living Atlas tab (‘Esri Featured Content’) moved to Content page

Content



- Tabs for Subsets
- Filters: categories, date modified, date created, shared, status
- Sort by date modified, title
- Display: grid, table, list
- Search

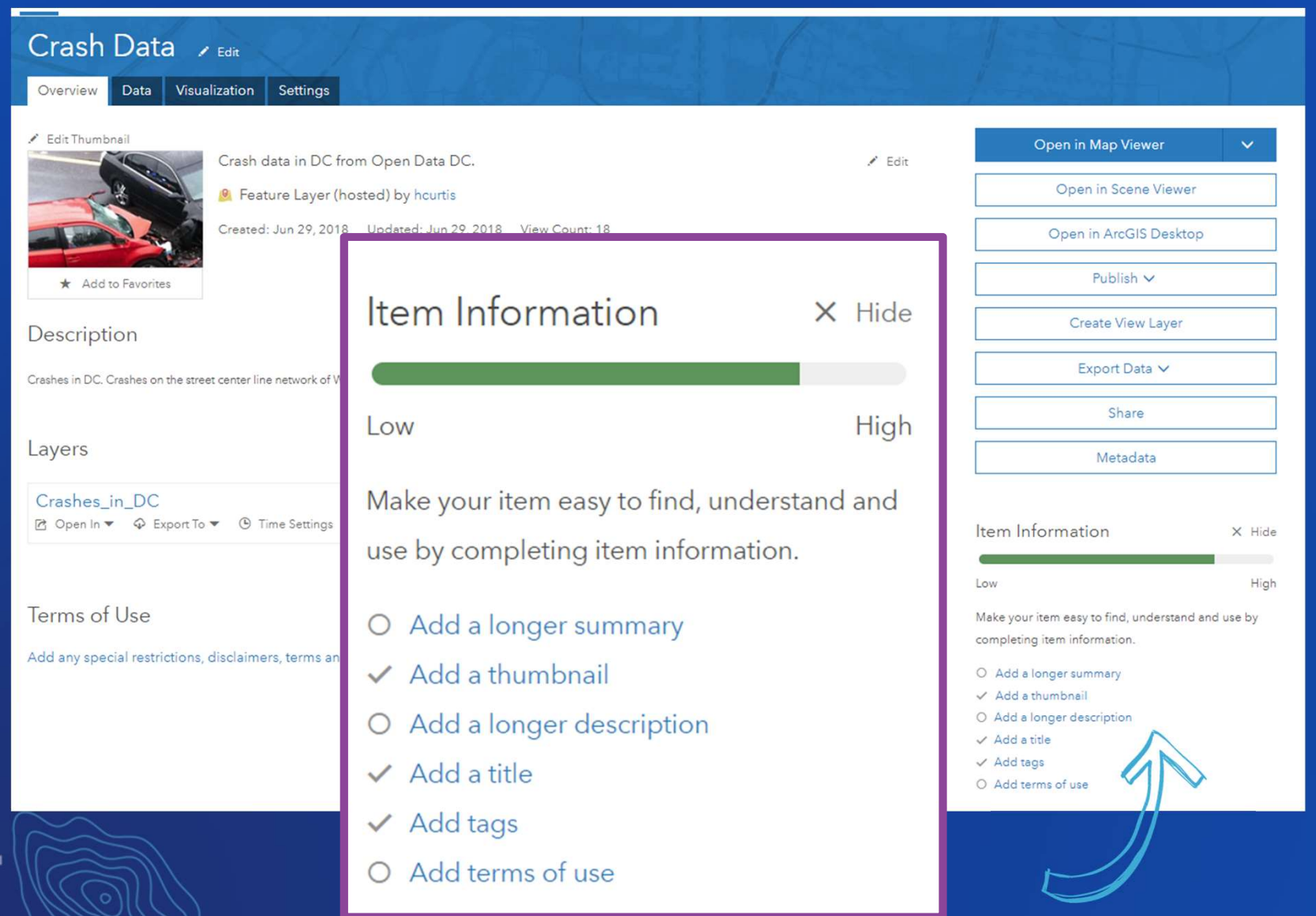
Groups



- Filters: date created, viewable by
- Sort by title, date modified, date created
- Search

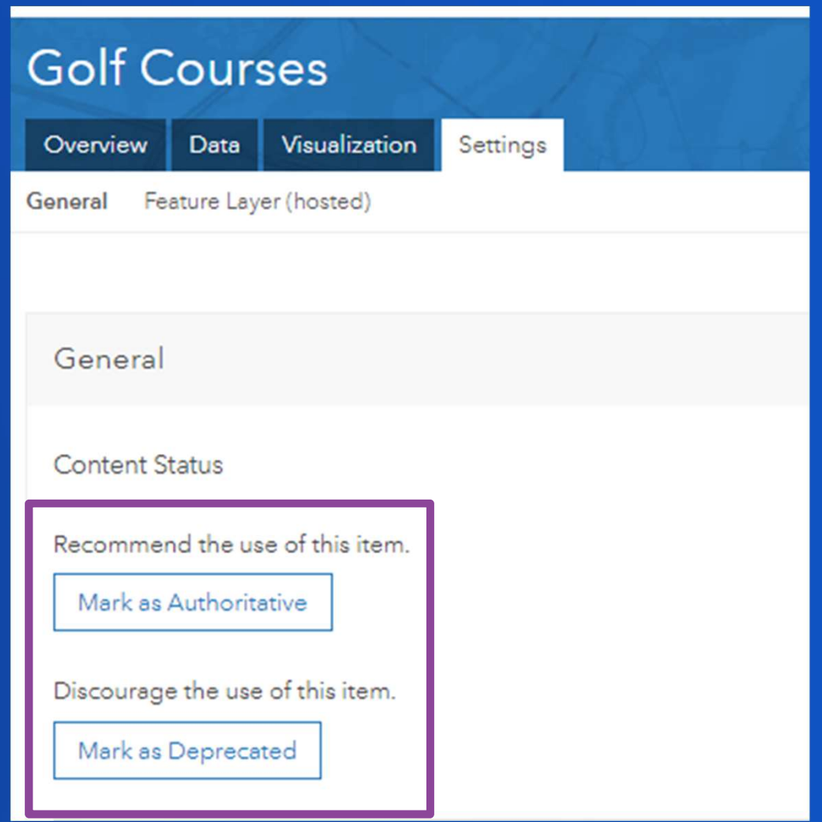
Item level enhancements

- New item information bar



Encourage quality metadata

- Authoritative and deprecated badges

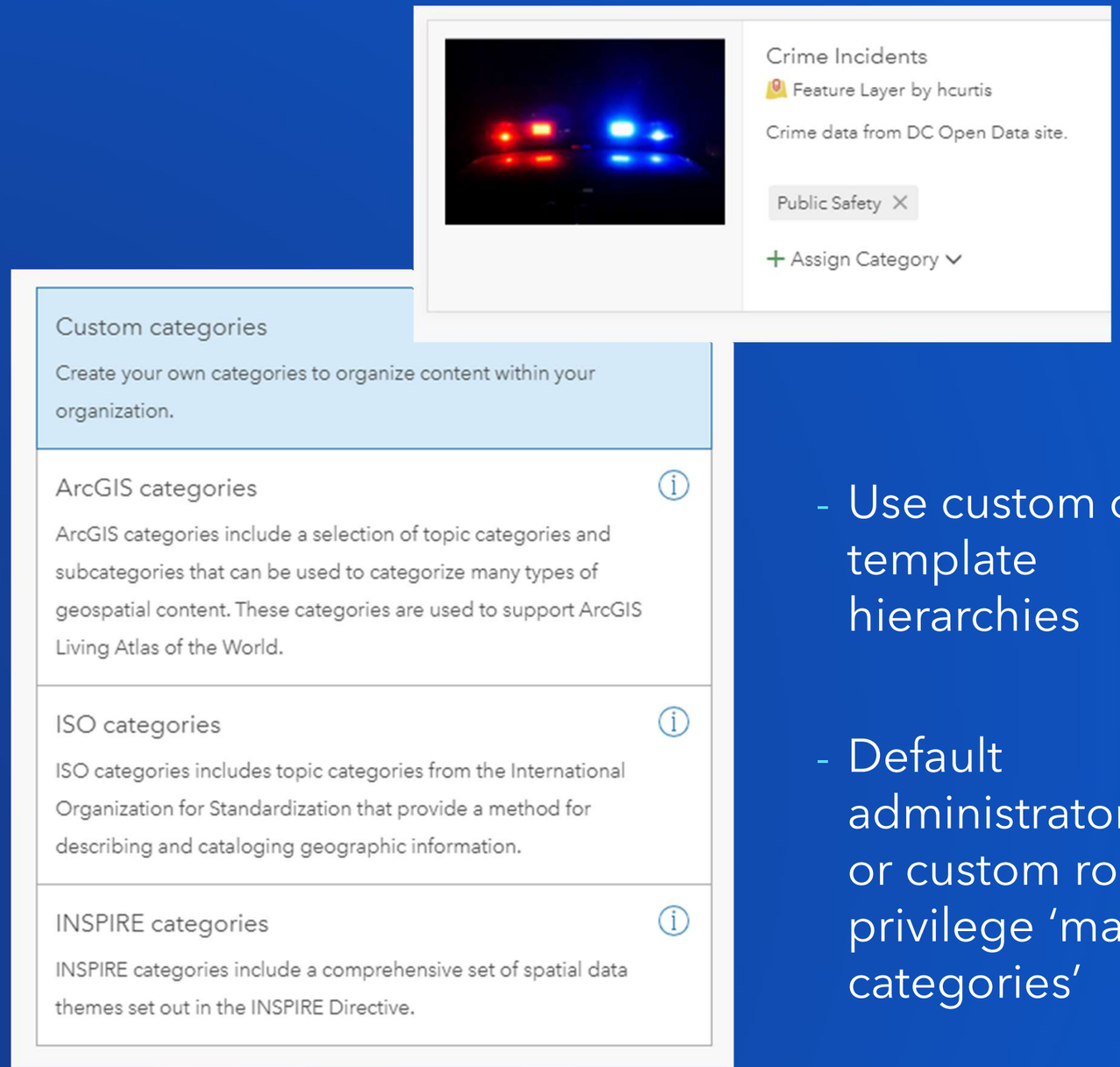


Promote quality items

Content categories

- A way to arrange and discover content based on organization-wide themes

- Categories allow members to organize items consistently and provide a simple way to browse content in the organization



- Use custom or template hierarchies

- Default administrator role or custom role with privilege ‘manage categories’

Questions ?

esri Deutschland
THE SCIENCE OF WHERE

esri Suisse
THE SCIENCE OF WHERE