

Metadata Best Practices

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1) Why Metadata Matters

Discoverability and Search inside AGOL

AGOL search indexes default item fields, title, tags, summary, description, type. Crafting these well directly improves your ranking and how often you are found.

Filtering and Browsing

Users can filter by item type, date, tags, categories, status (authoritative or deprecated), and location. Complete details make your items surface correctly in these filters.

Organization wide categories

Using content categories improves browsing and discovery across your organization and groups.

Machine readable metadata and FAIR principles

When your organization enables standards based metadata the metadata becomes viewable and exportable for Open Data. This supports FAIR: Findable, Accessible, Interoperable, Reusable.

Proper citation and attribution

Clear Credits (Attribution) and Terms of Use help others cite correctly and avoid misuse. This also allows the user to contact the data provider if needed.

2) Metadata Components

Any item (feature layers, web maps, apps, etc.) in AGOL has an item details page where various aspects of metadata can be populated. See the Metadata Checklist in the section below for reference.

A. Descriptive Title

Format: Dataset name, year, location

Example: Library Districts of Indiana 2025 or Indiana Imagery Current.

B. Summary

A concise abstract users can read quickly. Appears in search results as the snippet.

C. Description

Include:

- What the dataset is, how and why it was created, update cadence
- Agency full name and abbreviations and URL
- URLs to related information (methods, reports, services, apps)

D. Thumbnail

Adding a consistent and branded thumbnail that indicates the item type, item name, and organization/user who published the item is recommended. Optionally, participants in this workshop may use the IGIO thumbnail template provided in the Metadata Checklist below.

E. Terms of Use

State how the item may be used and by whom. Some organizations develop custom terms of use, others may use [Creative Commons Terms of Use](#).

F. Categories

Assign one or more appropriate ArcGIS standard categories (ArcGIS or ISO categories).

G. Tags

- Use descriptive keywords.
- Include agency or organization acronym or name.
- Aim for 5+ tags.
- Include at least one theme such as Agriculture, Boundaries, Climatology or Meteorology or Atmosphere, Economy, Elevation, Environment, Geoscientific Info,

Health, Imagery or Basemaps or Earth Cover, Inland Waters, Location, Planning or Cadastre, Society, Structure, Transportation, Utilities or Communication.

H. Credits (Attribution)

Provide agency name and acronym clearly.

I. Spatial Reference, Extent, and Data Quality

Confirm spatial reference, full extent, and update frequency.

3) Configure AGOL Item Details

1. Open your items and go to Overview.
2. Use Edit next to Title, Summary, and Description.
3. Apply Categories and Tags.
4. Upload a Thumbnail using the IGIO templates.
5. Add Terms of Use and Credits.
6. Verify spatial reference and extent.
7. Check the Item information score and fix issues until the bar is green.

Metadata Checklist

Item	Description
Descriptive Title (affects data discoverability)	Dataset name, year, location (ex: Library Districts of Indiana 2025)
Summary	A short description, ideal 2-3 sentences
Description (affects data discoverability)	- Detailed description, 3-5 + sentences - Agency full name and abbreviations - Agency URL - URLs to related information
Thumbnail	- Use the IGIO thumbnail template - Otherwise, use your agency's standard thumbnail
Terms of Use	- Info about how the item may be used and by whom - If not sure, IGIO has a standard catch-all terms of use which can be applied
Categories (affects data discoverability)	- Assign data to an appropriate data theme – users can choose more than one - ESRI Content Categories: https://doc.arcgis.com/en/arcgis-online/reference/content-categories.htm
Tags (affects data discoverability)	- Commonly used, descriptive keywords or phrases - Agency acronym (ex: IGIO) - Tag all applications (story maps, experience builder, dashboards) with “application” - Try to include 5+ tags - Include at least one data theme category: - Agriculture - Boundaries - Climatology, Meteorology, Atmosphere - Economy - Elevation - Environment - Geoscientific Info - Health - Imagery, Basemaps, Earth Cover - Inland Waters - Location - Planning, Cadastre - Society - Structure - Transportation - Utilities, Communication
Credits (Attribution)	Agency name and Acronym

Resources

- ArcGIS **Content Categories** (ArcGIS/ISO/INSPIRE):
 - <https://doc.arcgis.com/en/arcgis-online/reference/content-categories.htm>
- ArcGIS **Browse & Search**:
 - <https://doc.arcgis.com/en/arcgis-online/reference/search.htm>
- ArcGIS **Advanced Search** fields:
 - <https://doc.arcgis.com/en/arcgis-online/reference/advanced-search.htm>
- ArcGIS **Configure Item Details & Item Information Score**:
 - <https://doc.arcgis.com/en/arcgis-online/manage-data/configure-item-details.htm>
- ArcGIS **Metadata in AGOL** (FAIR, styles):
 - <https://doc.arcgis.com/en/arcgis-online/manage-data/metadata.htm>
- ArcGIS **Configure Items (org-level metadata & categories)**:
 - <https://doc.arcgis.com/en/arcgis-online/administer/configure-details.htm>
- ArcGIS **Export metadata** (ISO 19139/19115-3):
 - <https://doc.arcgis.com/en/allsource/latest/data/export-metadata-to-a-standard-format.htm>
- ArcGIS **Create ISO 19115-1/-3 metadata**:
 - <https://doc.arcgis.com/en/allsource/latest/data/create-iso-19115-1-and-iso-19115-3-metadata.htm>
- ArcGIS **Feature Search in Web Maps**:
 - <https://doc.arcgis.com/en/arcgis-online/create-maps/configure-feature-search.htm>
- ArcGIS **Thumbnails**:
 - <https://doc.arcgis.com/en/allsource/latest/data/create-a-thumbnail.htm>
- ArcGIS Online Search:
 - https://mediaspace.esri.com/media/t/1_pgm6twv9/309413912
- Creative Commons:
 - <https://creativecommons.org/terms/>