

Labels and Annotation: Efficient And Effective Use of Text On Your Map

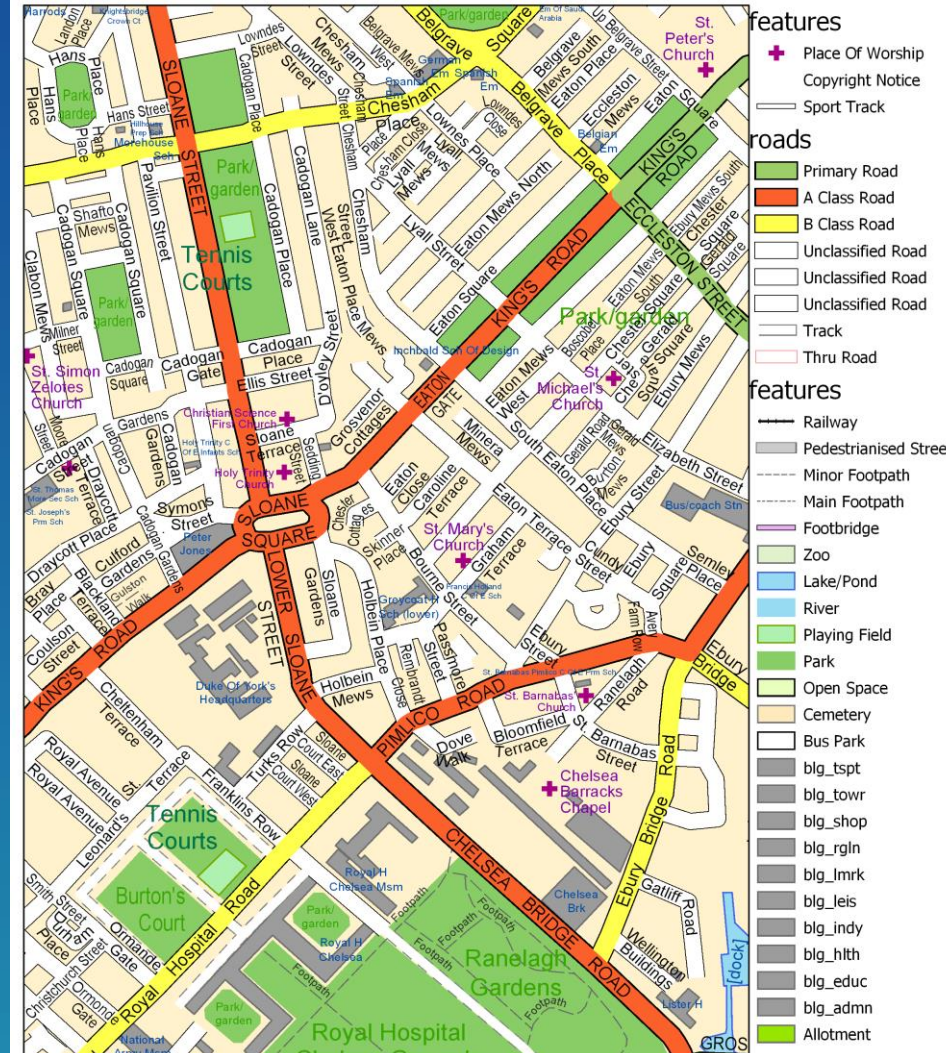
Ciara Rowland-Simms

Samuel Troth

Text

- Map
 - Street names
- Layout
 - Title

London Streets

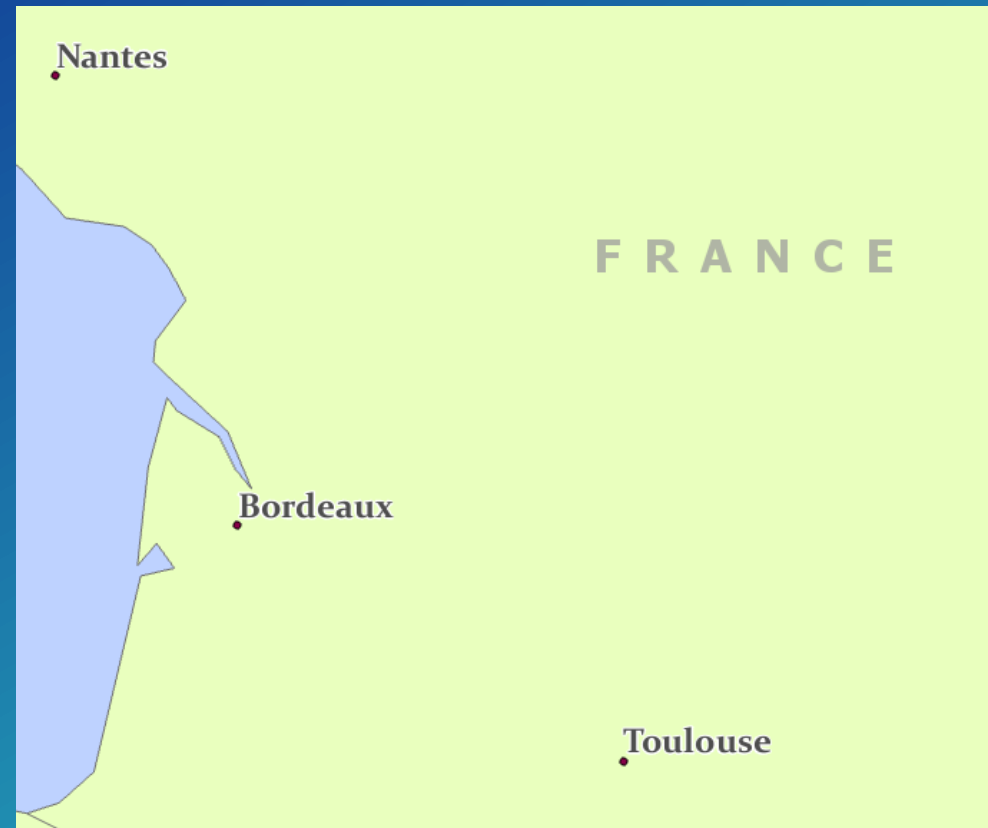


Labeling



Labels

- **Dynamic**
- **Generated from feature attribute(s)**
- **Stored in a map or layer file (.lyrx)**



Maplex Label Engine

- **Advanced high-quality cartographic text placement engine**
- **End goal of reducing map production time and costs**
- **Numerous options**
 - Position
 - Fitting strategies
 - Conflict resolution



Labeling Demo

Text symbol
Label expression
SQL Query
Placement properties
Scale Range

Annotation

Moving forward from 2.0



Annotation

When should I use it?

- When you need to move individual pieces of text
- When you want to add text manually
- When you want text where there is no feature

Annotation

What is it?

- Static text
- Text can be edited
- Can be created through converting labels



Unique properties of annotation

- Editing
- Storage
- Symbol Collection

Annotation Feature Class Properties

RoadsAnno

Annotation | Annotation Classes

▼ Editing behavior

- ☐ Text symbol required to be selected from the symbol table
- ☒ Annotation created with new features
- ☒ Annotation updated when related feature's shape is modified

▼ Labeling

Maplex label engine

Reference scale 1:234,096

Orientation of vertical labels 5°

☐ Allow labels to overlap border

Abbreviation Dictionary Key Numbering Group

▼ Symbol Collection

(2) ARoads

(5) ARoads(Trunk)

(3) BRoads

(4) Motorways

Apply Cancel

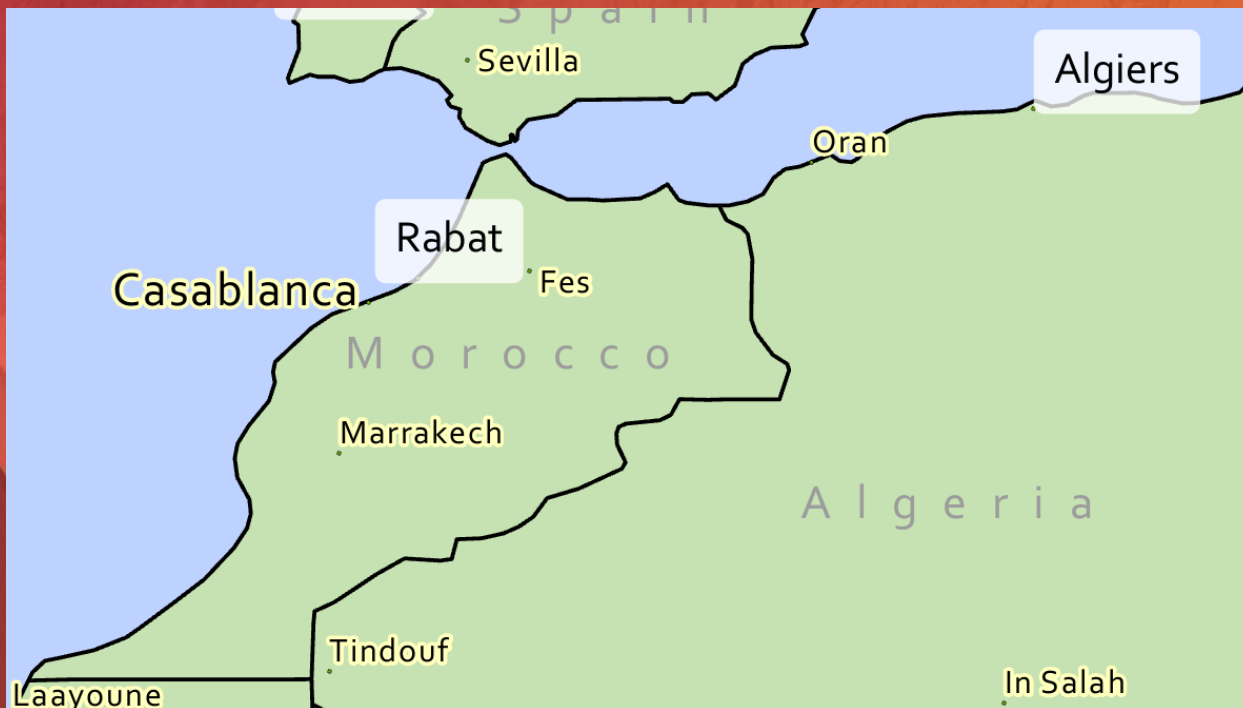
Upgrading annotation

- Use 'Upgrade dataset' GP Tool
- Geodatabase annotation from ArcMap can be upgraded
- Map annotation is NOT supported

Backwards compatibility

- New and upgraded annotation is NOT compatible with ArcMap or earlier versions of ArcGIS Pro





Converting Labels to Annotation

Summary

Creation of labels

- Editing of labeling properties

- Creation of label classes

Creation on annotation

- Converting labels to annotation

- Editing

- Sharing annotation

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Related Presentations

Advanced Map Labeling Using Maplex

Tuesday 11th 3:15 PM - 4:30 PM : Room 03

Thursday 13th 3:15 PM - 4:30 PM : Room 05 A

ArcGIS Pro Editing: An Introduction

Tuesday 11th 10:15 AM - 11:30 AM : Ballroom 06 A

See us at the Mapping & Visualization area - Exhibit Hall B1/B2



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OF
WHERE

Annotation in ArcGIS Pro 2.0

Creation of annotation feature classes

Creation of annotation features

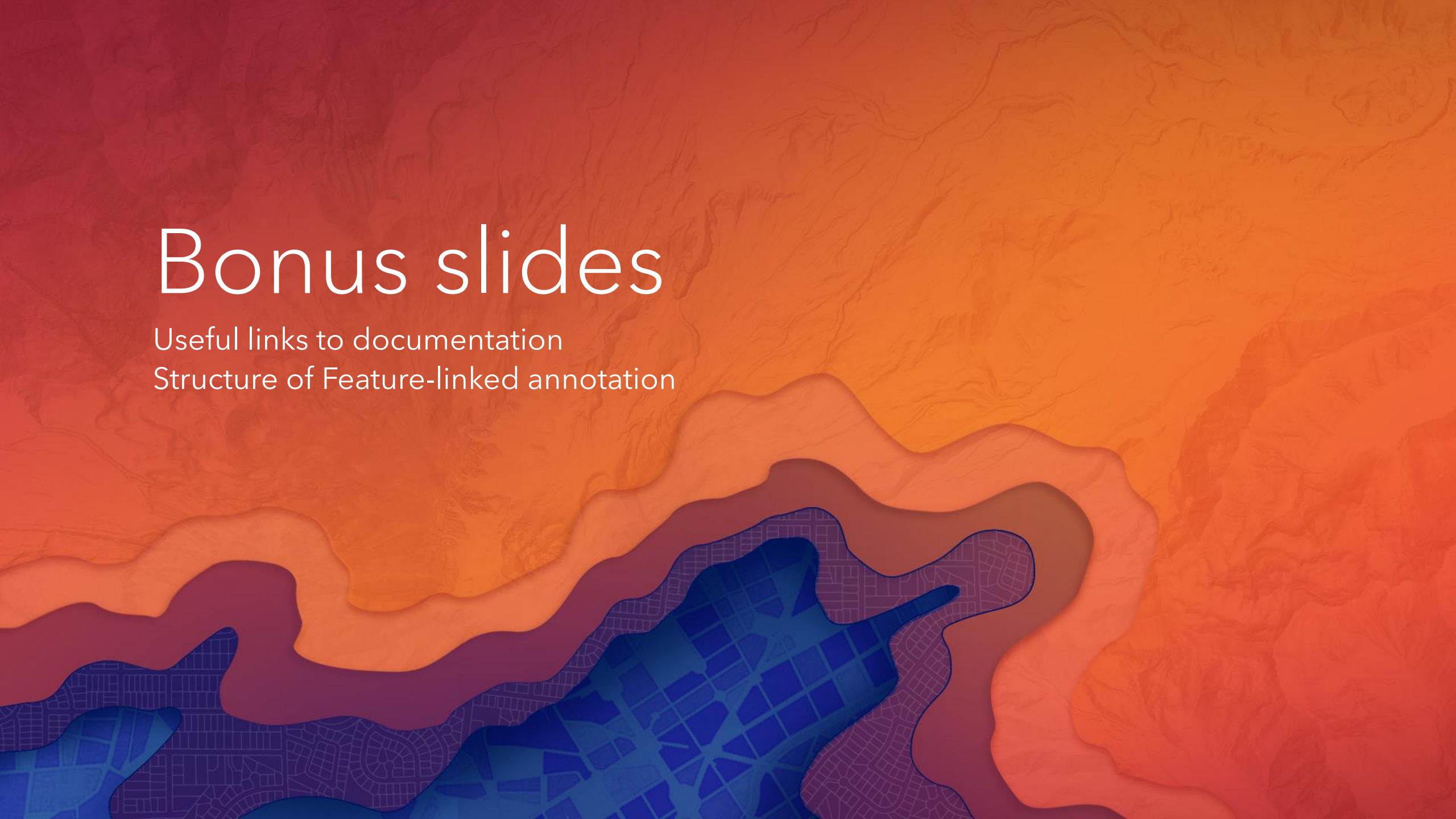
Editing of annotation features

Editing of annotation feature classes

Bonus slides

Useful links to documentation

Structure of Feature-linked annotation



Annotation – Useful Links

General

- **Annotation help:** <http://pro.arcgis.com/en/pro-app/help/data/annotation/annotation.htm>
- **Create annotation feature classes help:** <http://pro.arcgis.com/en/pro-app/help/data/annotation/creating-annotation-feature-classes.htm>
- **Annotation feature class properties help:** <http://pro.arcgis.com/en/pro-app/help/data/annotation/managing-annotation-feature-class-properties.htm>
- **Convert labels to annotation help:** <http://pro.arcgis.com/en/pro-app/help/mapping/text/converting-labels-to-annotation.htm>
- **Convert labels to annotation tool:** <http://pro.arcgis.com/en/pro-app/tool-reference/cartography/convert-labels-to-annotation.htm>
- **Symbol substitution:** <http://pro.arcgis.com/en/pro-app/help/mapping/text/display-geodatabase-annotation.htm>

Annotation – Useful Links

Upgrade

- **Upgrade Annotation help:** <http://pro.arcgis.com/en/pro-app/help/data/annotation/managing-annotation-feature-classes.htm#GUID-9035B765-7E33-47A7-854D-40E434FEB6BE>
- **Upgrade Annotation warning:** <http://pro.arcgis.com/en/pro-app/tool-reference/tool-errors-and-warnings/001001-010000/tool-errors-and-warnings-02126-02150-002145.htm>
- **Upgrade Dataset tool:** <http://pro.arcgis.com/en/pro-app/tool-reference/data-management/upgrade-dataset.htm>

Annotation in ArcGIS Pro 2.0

Creation of annotation feature classes

Converting labels to annotation
Creating empty feature class from Catalog Pane

Creation of annotation features

Indirectly → Feature-linked updates
Directly → Editing tool 'Create Features'

Editing of annotation features

Indirectly → Feature-linked updates
Directly → Editing tools, attributes

Editing of annotation feature classes

Annotation feature class properties edited from the catalog pane in ArcGIS Pro

Maintenance of Annotation

Standard vs Feature-linked

- Standard
 - Text with a geographical location
- Feature-linked
 - Associated with another feature class

Feature-linked annotation

Composite Relationship

Text derived from field(s) in the feature class

Shape	ObjectID	StreetName	TownName
Polyline	27	Cowbridge Rd	Cardiff
Polyline	28	Westgate Rd	Cardiff

Base Feature Class

Shape	ObjectID	TextString	FeatureID
Polygon	1	Cowbridge Rd, Cardiff	27
Polygon	2	Westgate Rd, Cardiff	28

Annotation Feature Class

Cowbridge Rd, Cardiff

Westgate Rd, Cardiff

Convert Labels to Annotation

Geoprocessing tool

- Output Geodatabase
- Extent
- Feature-linked or standard

Geoprocessing

Convert Labels To Annotation

Parameters | Environments

Input Map
Isle of Wight Hampshire

Conversion Scale
234096

* Output Geodatabase

Anno Suffix
Anno

Extent
As Specified Below

← 441435.91271885 → 496536.193501016
↓ 76873.5796369575 ↑ 115473.506551802

☒ Convert unplaced labels to unplaced annotation
☐ Require symbols to be selected from the symbol table
☐ Create feature-linked annotation

Output Layer
GroupAnno

Feature-linked annotation

- Annotation updates with linked-feature
- Create annotation when new features are added
- Update annotation when feature's shape is modified

Geoprocessing

Convert Labels To Annotation

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