Esri International User Conference | **San Diego, CA**

Technical Workshops | **Thursday, July 14, 2011 – 3:40 PM**

Exporting GIS Features to CAD Drawings
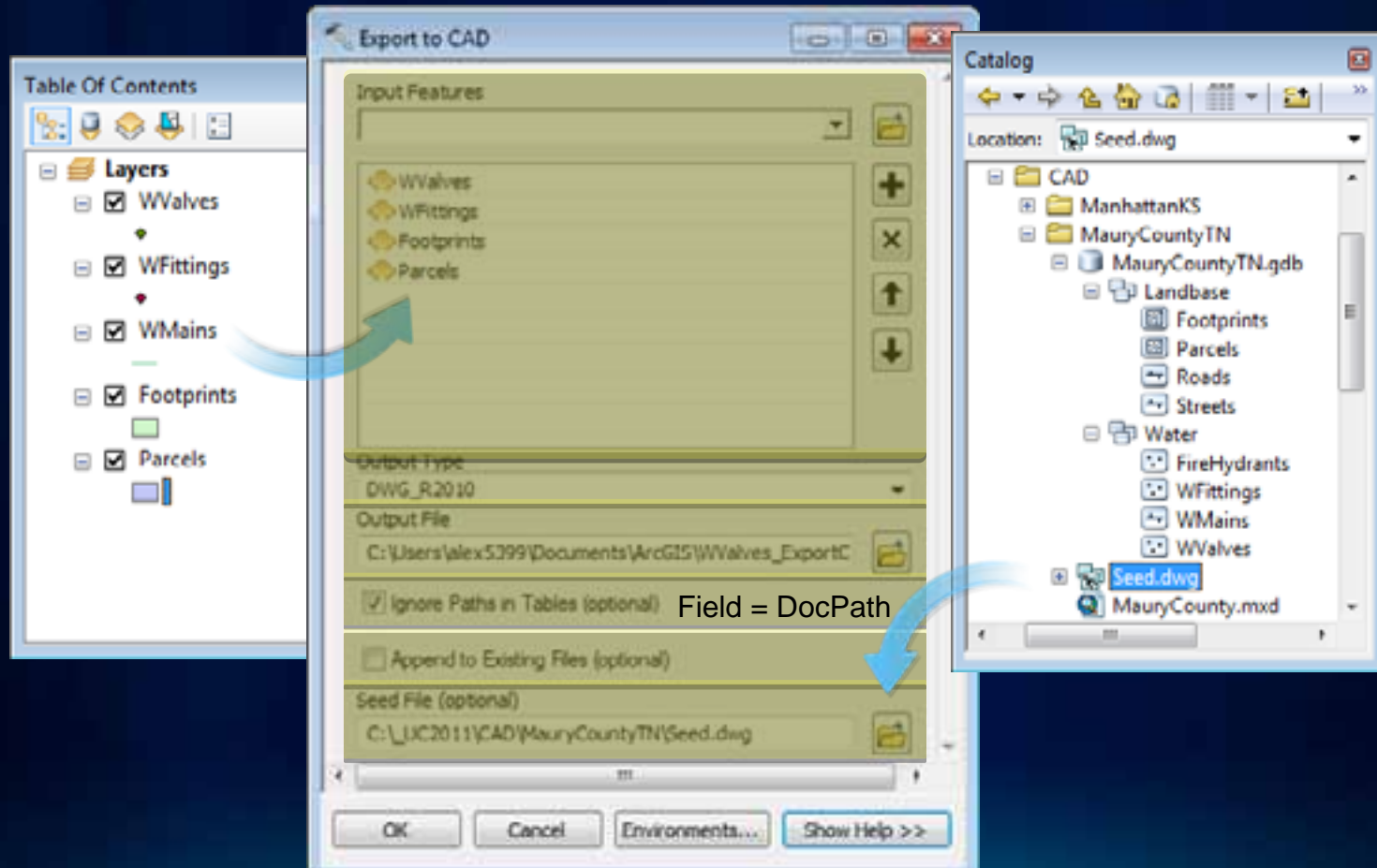
Alex LeReaux

Agenda

- **Anatomy of the Export to CAD tool**

- **Standard output**
  - **Extended output for AutoCAD drawings**
  - **Demo**

- **Customizing output**
  - **Generate specific drawing layers**
  - **Export attributes as CAD text**
  - **Export point features as AutoCAD blocks**
  - **Demo**

The Export To CAD tool

The Export To CAD tool

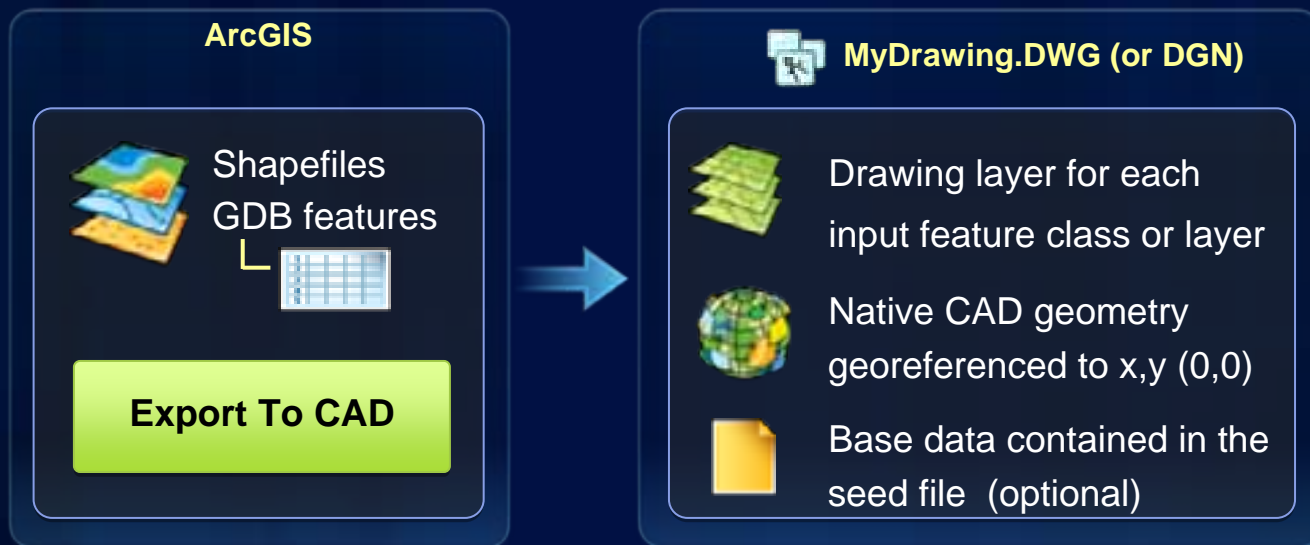**Feature layers/classes, and shapefiles to V8 DGN and DWG/DXF formats.**

Standard output
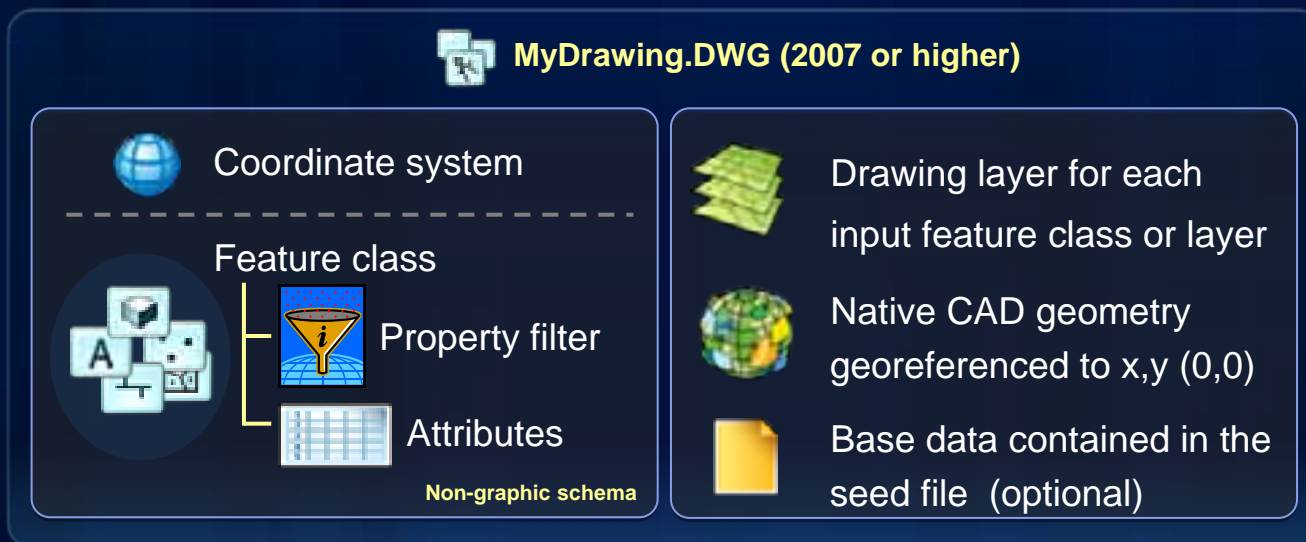
Standard output

Out of the box results

ArcGIS

Shapefiles
GDB features

Export To CAD

MyDrawing.DWG (or DGN)

Drawing layer for each input feature class or layer

Native CAD geometry georeferenced to x,y (0,0)

Base data contained in the seed file (optional)

Shape type	Output DWG/DXF	Output to V8 DGN
Point	Point	Zero-length line
Polyline	LWPolyline, line, arc, circle, or ellipse	Complex chain, line, arc, or curve
Polygon	Closed LWPolyline	Complex shape
Annotation	Text	Text

Extended output for AutoCAD drawings

Standard output (continued)

MyDrawing.DWG (2007 or higher)

Coordinate system

Feature class
- Property filter
- Attributes

Non-graphic schema

Drawing layer for each input feature class or layer

Native CAD geometry georeferenced to x,y (0,0)

Base data contained in the seed file (optional)

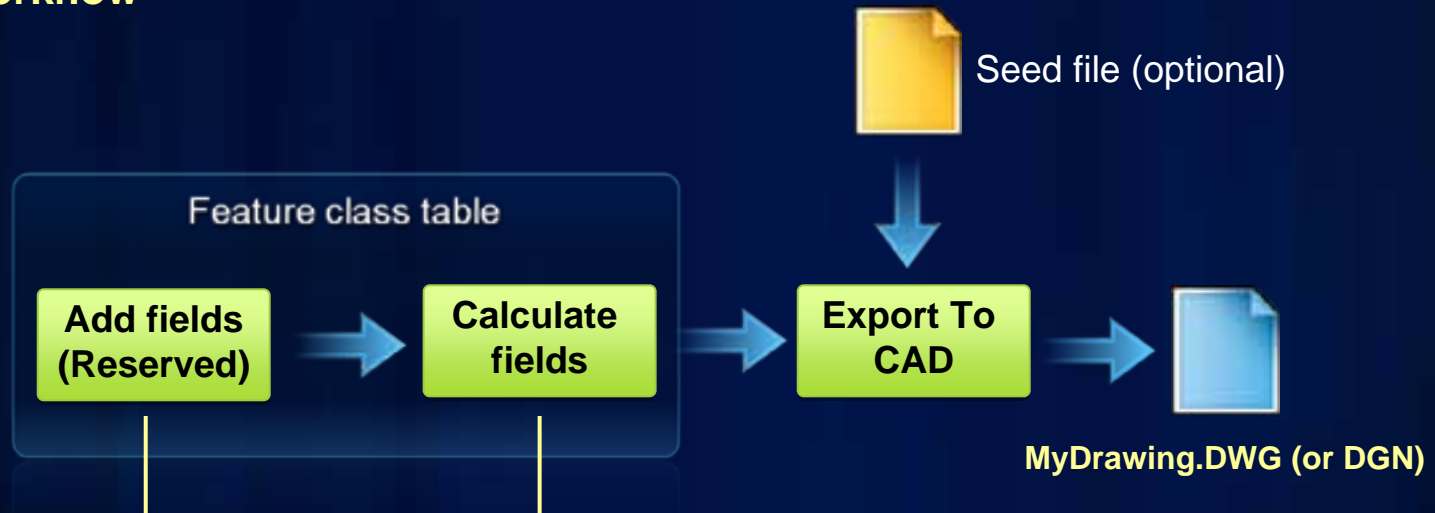| Shape type	Output DWG/DXF	Output to V8 DGN
Point	Point	Zero-length line
Polyline	LWPolyline, line, arc, circle, or ellipse	Complex chain, line, arc, or curve
Polygon	Closed LWPolyline	Complex shape
Annotation	Text	Text

**Demo –
Exporting standard output**

Customizing output

Customizing Output

Workflow

Seed file (optional)

Feature class table

Add fields (Reserved) → **Calculate fields** → **Export To CAD** → MyDrawing.DWG (or DGN)

Add Field
Name: LyrColor
Type: Short Integer
Field Properties
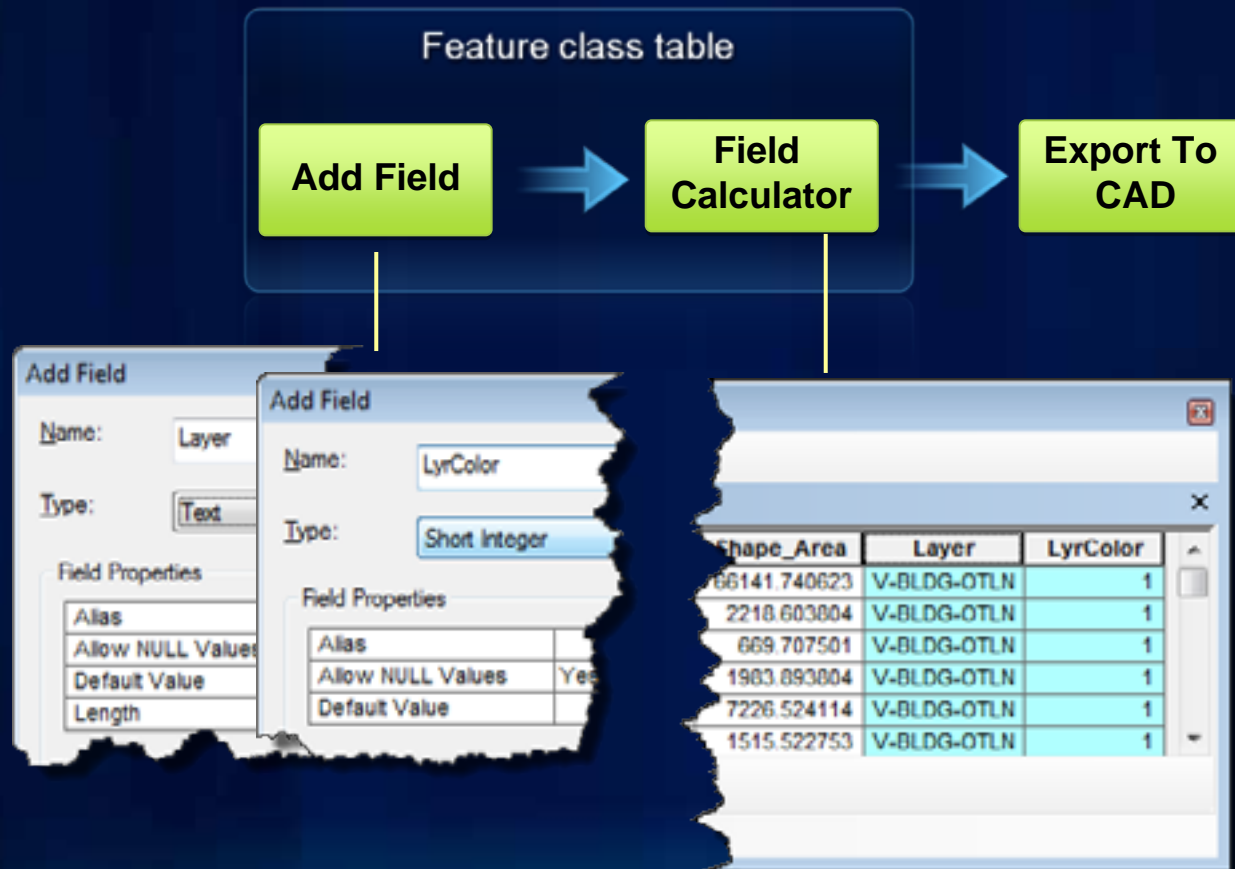Alias
Allow NULL Values   Yes
Default Value

Field Calculator
Parser
VB Script   Python
Fields:
OBJECTID_12
Shape
propaddr
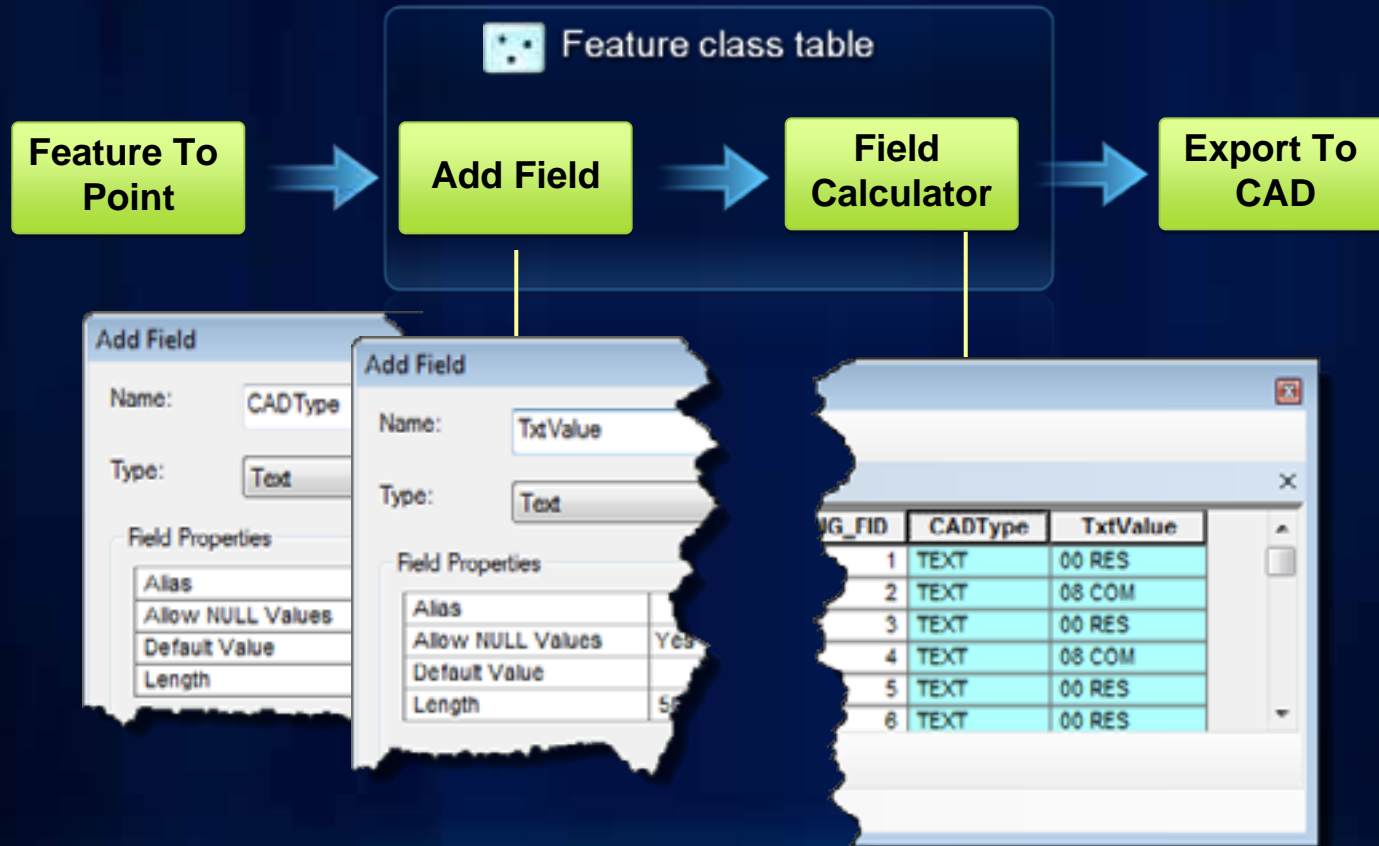proptype
appraisal
PIN
Shape_Length

Generating specific drawing layers

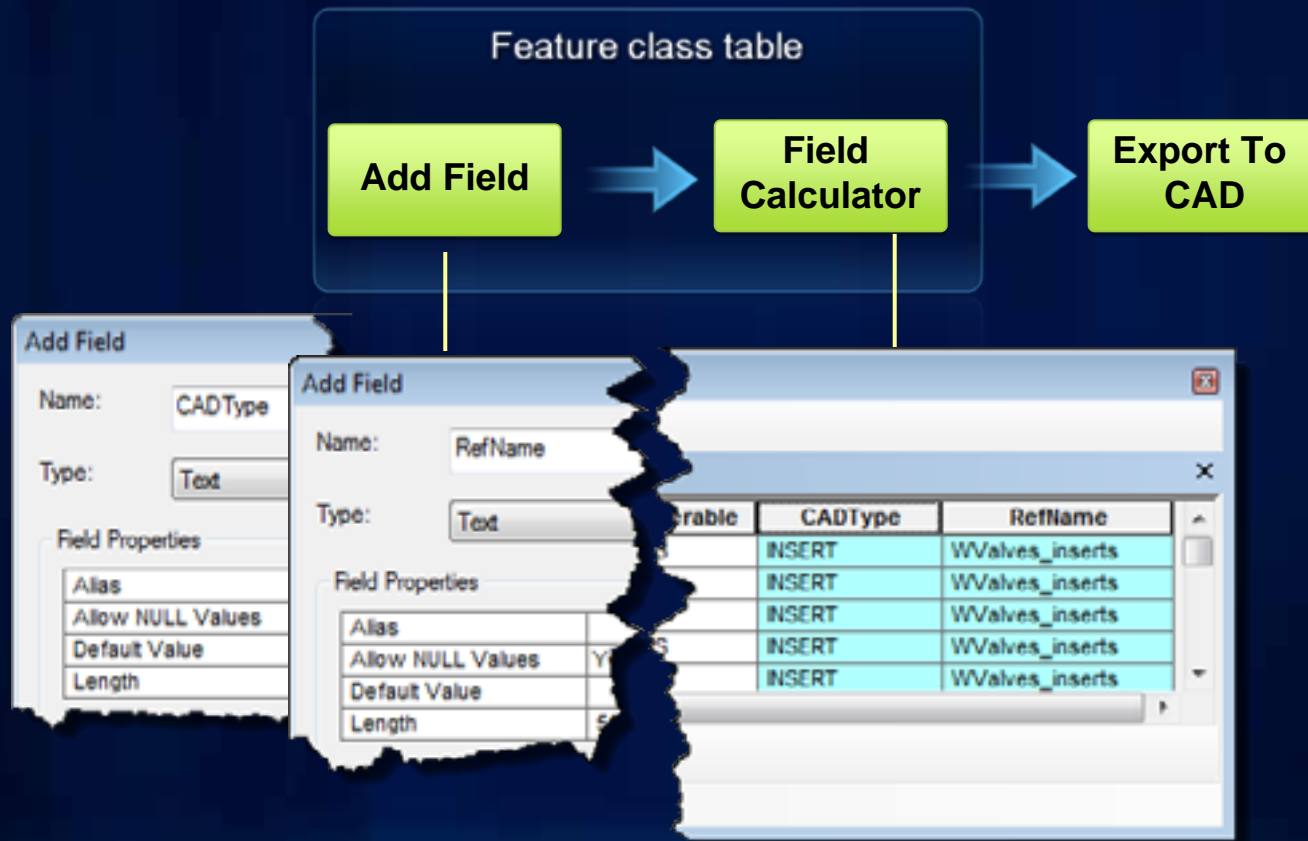**Reserved fields Layer (as text) and LyrColor (as an integer)**

Exporting attributes as CAD text

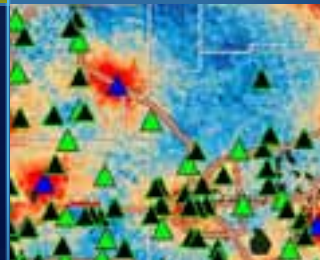**A point feature and fields CADType (as text) and TxtValue (as field value)**

Feature class table

| Feature To Point | → | Add Field | → | Field Calculator | → | Export To CAD |

Add Field

Name: CADType

Type: Text

Field Properties

Alias	
Allow NULL Values	
Default Value	
Length	

Add Field

Name: TxtValue

Type: Text

Field Properties

Alias	
Allow NULL Values	Yes
Default Value	
Length	5

UG_FID	CADType	TxtValue
1	TEXT	00 RES
2	TEXT	08 COM
3	TEXT	00 RES
4	TEXT	08 COM
5	TEXT	00 RES
6	TEXT	00 RES

Exporting point features as AutoCAD blocks

Fields CADType and RefName, and a seed file with AutoCAD blocks

**Demo -
Exporting customized output**

Exporting GIS Features to CAD Drawings

- **One tool: Export To CAD**

- **Georeferenced geometry and a drawing layer for each input feature**

- **Standard output to AutoCAD drawing includes the coordinate system, feature class schema, and attaches attribute values to geometry**

- **CAD professionals can use ArcGIS for AutoCAD or custom .NET and/or AutoLISP.**

- **Customize output with reserved CAD fields and a seed files**

Thank You

- Please fill out evaluations at www.esri.com/sessionevals