



ArcGIS for AutoCAD

Don Kuehne, Product Manager CAD/AEC

Karen Hodge, CAD Lead Developer



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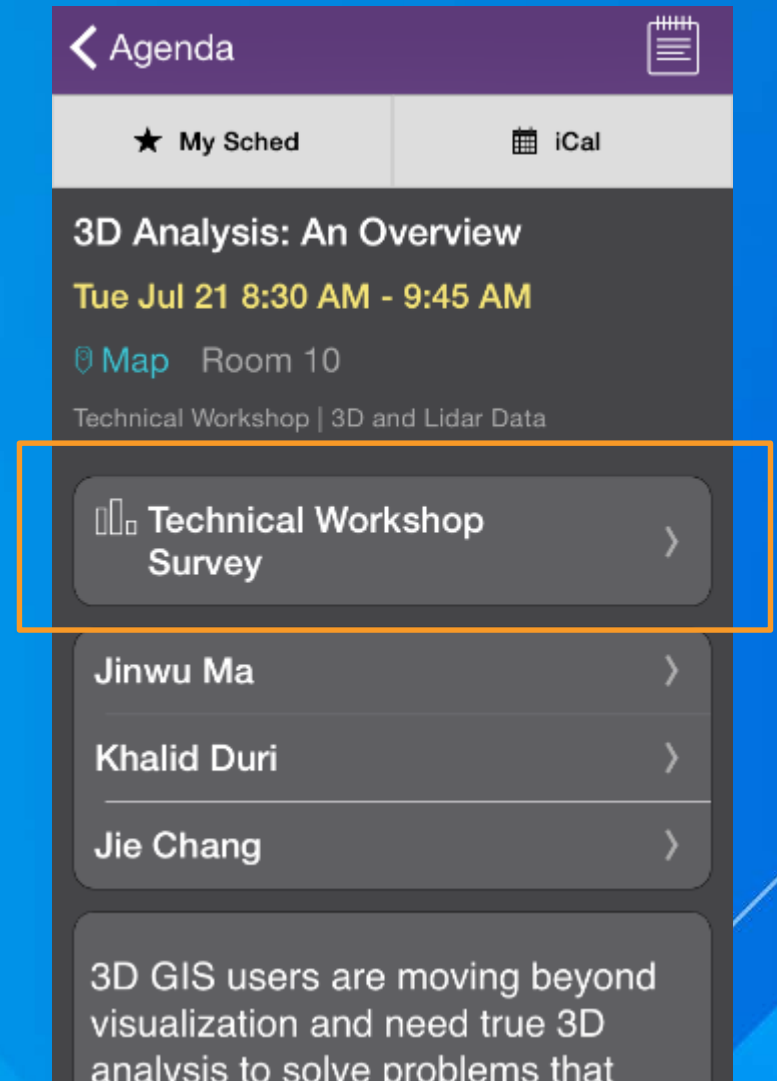


Road Trip!

Road Trip Navigation

Help craft the future of ArcGIS for AutoCAD

- Please fill out the session survey in your mobile app
- Select
-
- **CAD: The ArcGIS for AutoCAD CAD Plug in**
- in the Mobile App
 - Use the Search Feature to quickly find this title
- Click “Technical Workshop Survey”
- Answer a few short questions and enter any comments



Platform



Mapping and GIS
Available Across Your Organization

Fun Facts about ArcGIS for AutoCAD

- Number of AutoCAD Versions Supported
- Number of ArcGIS for AutoCAD downloads?
- Cost to Use ArcGIS for AutoCAD?
- Where do I get it?
 - <http://www.esri.com/software/arcgis/arcgis-for-autocad>

Where Do I Get It?

- <http://www.esri.com/software/arcgis/arcgis-for-autocad>

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Products

ArcGIS for AutoCAD

Overview

Key Features

What You Get

Common Questions

Free Download

What's New

Latest Video
Watch the ArcGIS for AutoCAD Build 350 Overview.

Free Download

For AutoCAD 2013-2014-2015

This latest release of ArcGIS for AutoCAD (release date: September 2014) supports ArcGIS for AutoCAD 2013, 2014, and 2015.

Read the [system requirements](#) and [installation instructions](#) for assistance installing ArcGIS for AutoCAD.

Please select the operating system and the language you want to download.

AutoCAD **Operating System** **Language**

2015 ▾ Windows 64 bit ▾ English ▾ [Download Now](#)

Chinese
English
French
German
Italian
Japanese
Portuguese (BR)
Russian
Spanish

Today's Road Map

Consume

Create

Customize

Collaborate

Consume

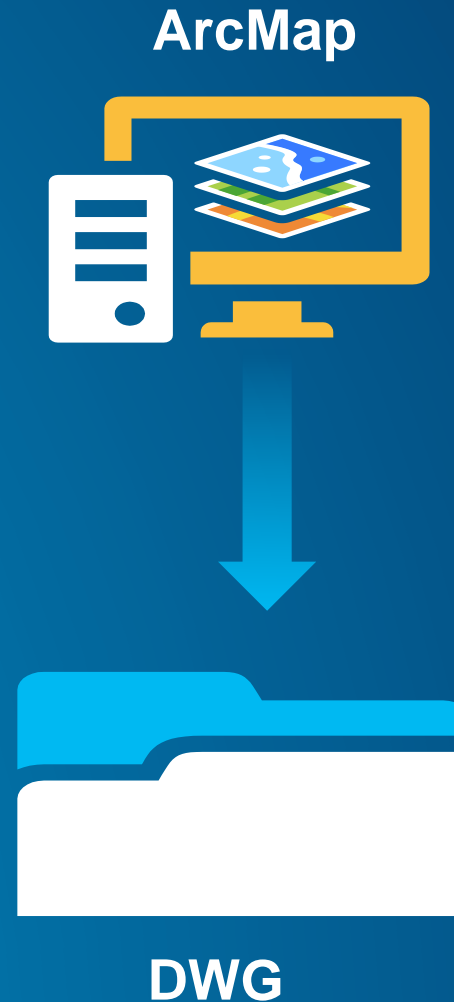
Don Kuehne

EXPORT TO CAD

Create and Append to CAD Files

ArcGIS data in AutoCAD files (MSC)

- Feature Classes
- Attributes
- Coordinate System
- Better than Shapefiles...



ArcGIS Datasets in AutoCAD



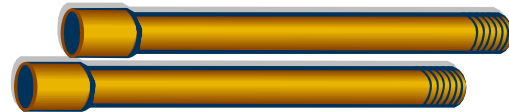
ArcGIS Datasets in DWG File



MODEL SPACE

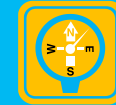
ArcGIS Datasets in DWG File

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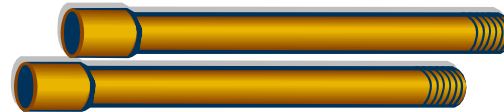


ArcGIS Datasets in DWG File

NAMED OBJECT DICTIONARY

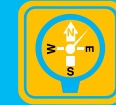


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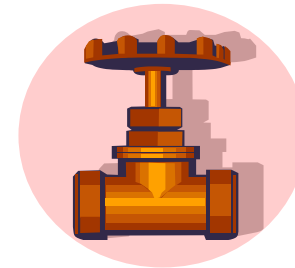
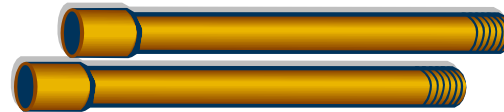
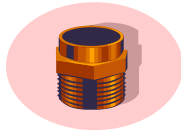


ArcGIS Datasets in DWG File

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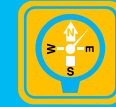


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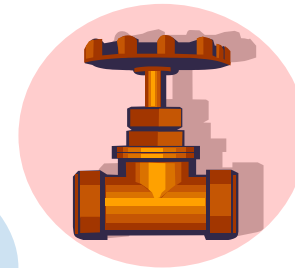
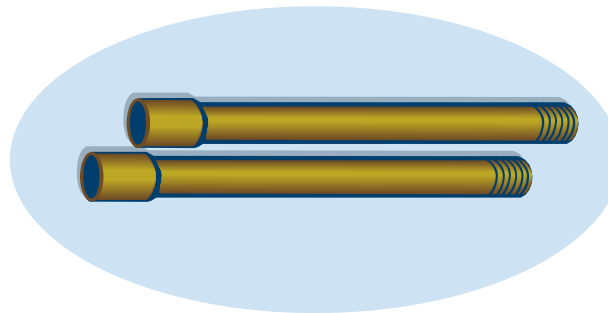
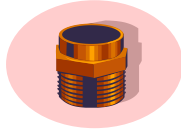


ArcGIS Datasets in DWG File

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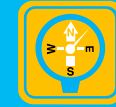
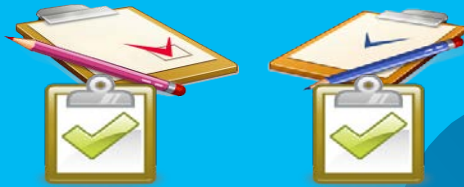


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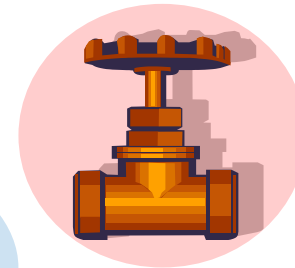
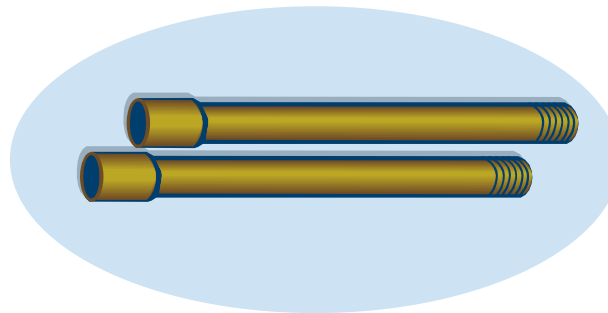
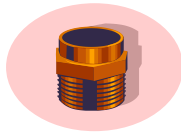


ArcGIS Datasets in DWG File

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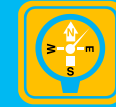
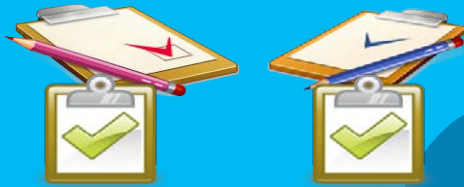


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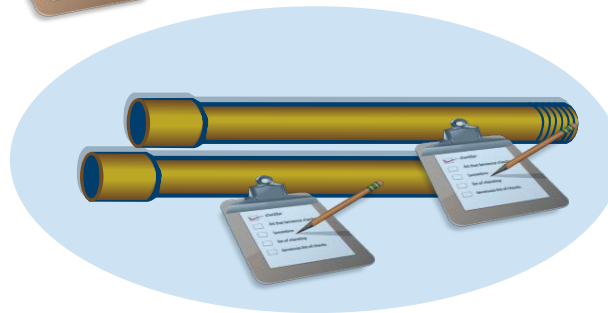


ArcGIS Datasets in DWG File

NAMED OBJECT DICTIONARY



MODEL SPACE



Consume

ArcGIS Web Services

Esri Web Services

Location, Maps, Imagery...Features



Create

Karen Hodge

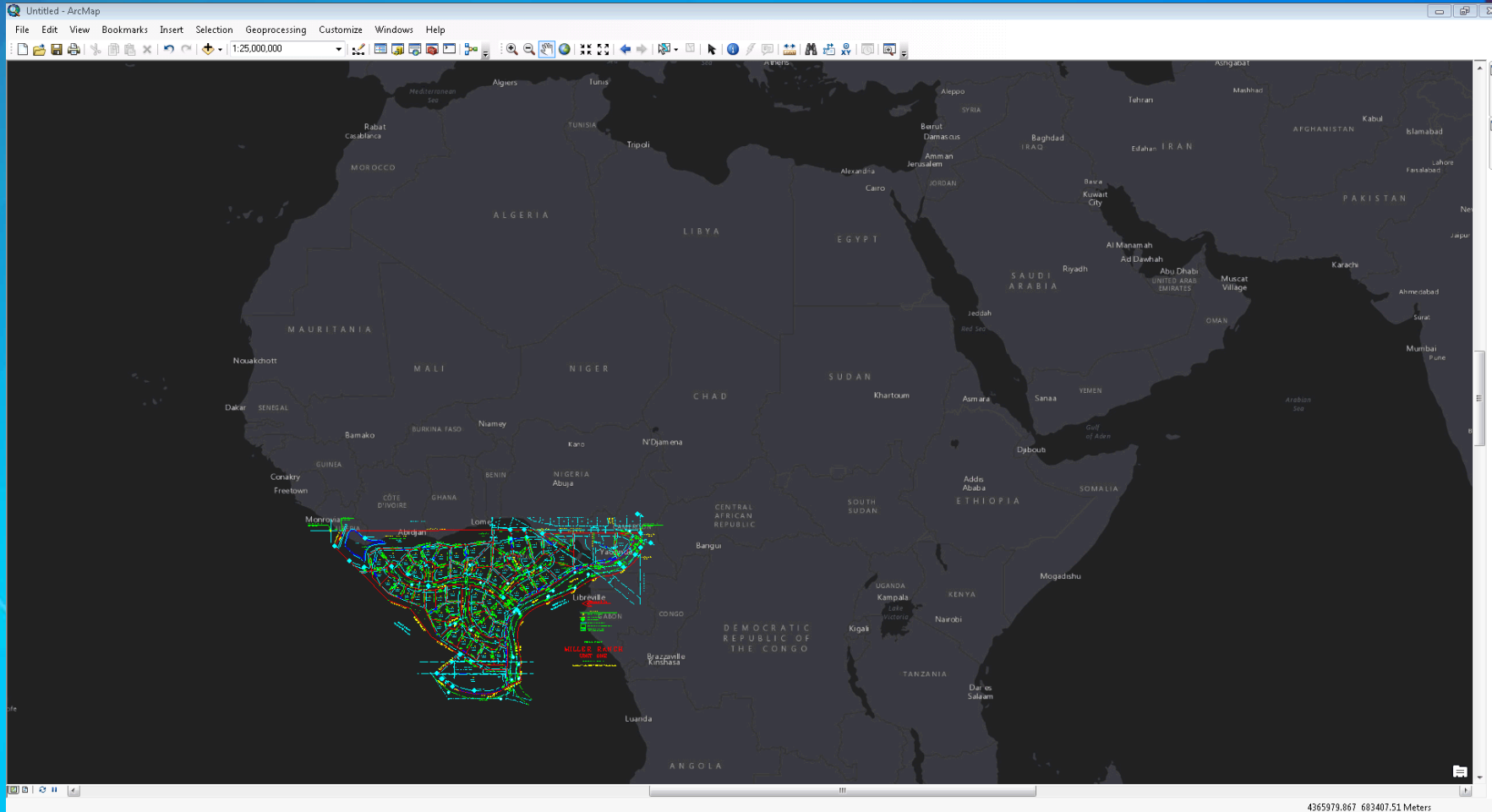
Ways to Create/Edit Data

Which is best?

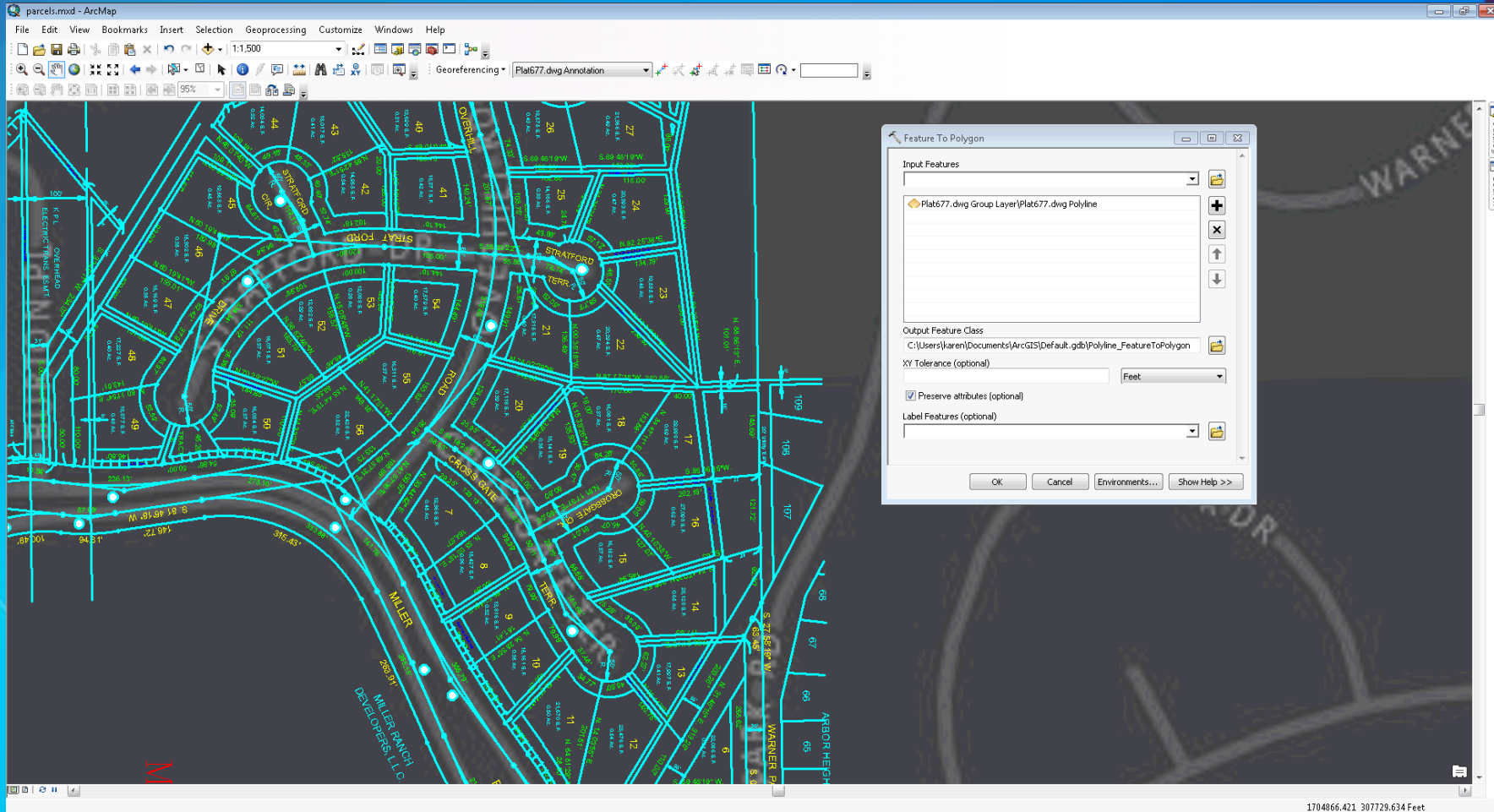
- **ArcMap**
 - Data Integrity
 - Built for GIS editing
- **ArcGIS Professional**
 - Even better GIS editing tools
- **AutoCAD**
 - - Because you need to
 - - Because you already have
 - - Because you can
 - - But not built for GIS editing...problems

Where's My Stuff!

- ...we're not in Kansas anymore

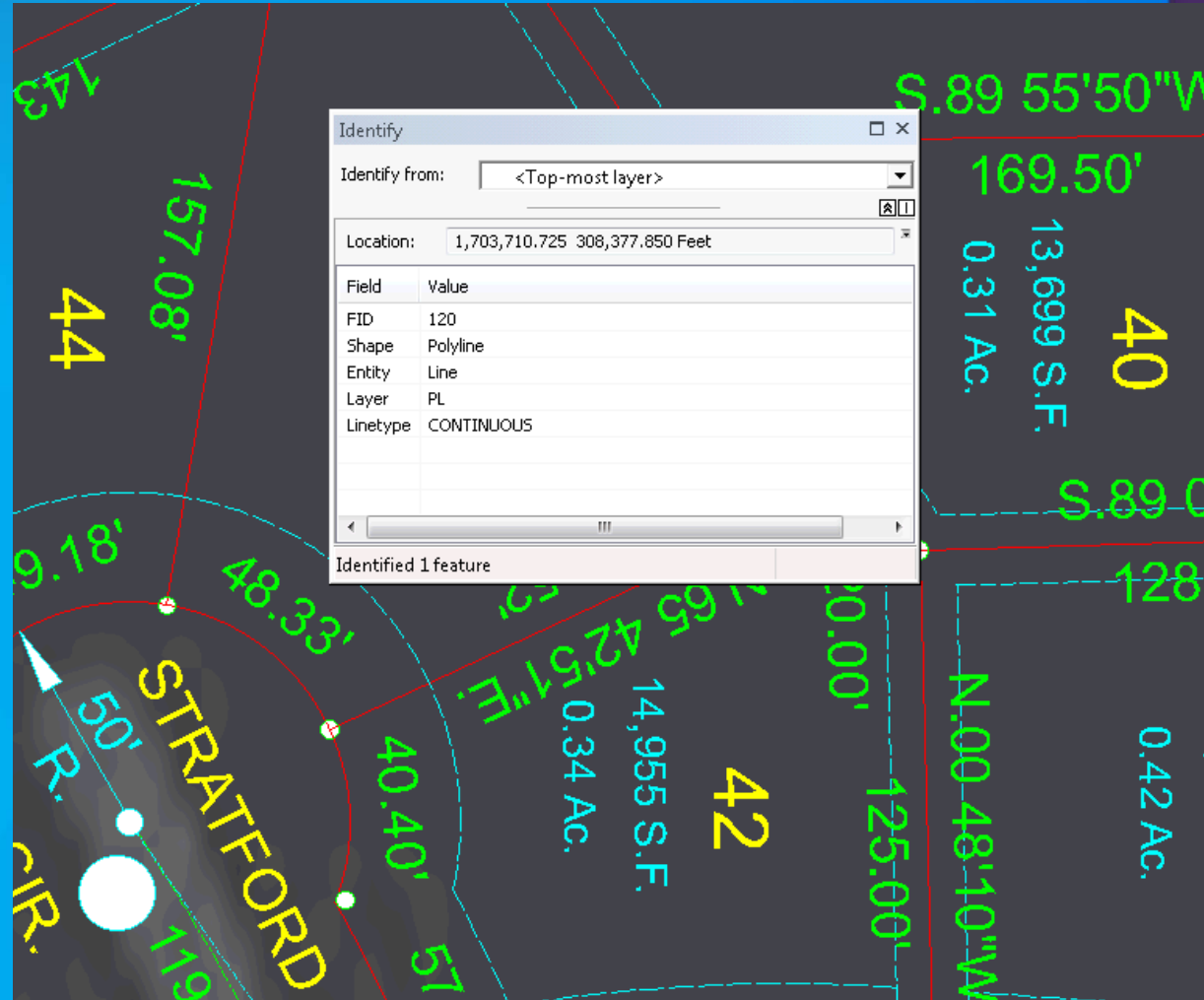


Too...Much...Stuff



Not Enough Stuff!

- How do I find the Lot ID on the Polygon?



Get Better Stuff using ArcGIS for AutoCAD

Best practices for data creation in AutoCAD

- **Begin with the end in mind...use Export to CAD**
- **Draw with simple AutoCAD features in model space**
 - avoid custom objects or clever hacks of block insert
- **Draw to a coordinate system**
 - ...and put the coordinate system in the DWG*
- **Use a layer-based CAD standard**
 - ...and include feature class definitions in the DWG*
- **Use ArcGIS for AutoCAD attributes (or block attributes for points)**
- **Time Saver: Use Project Drawing Templates**

Customize

Don Kuehne

Customize

Implementations for Production Environments

Template Files



Customize

AutoLISP API and ...AutoCAD

AutoLISP API

- **Customize Production Editing Environment**
 - **Combine with *ArcGIS for AutoCAD* COMMANDS**
 - **AutoLISP API Accessible to All Users**
 - **Integrate with AutoCAD**
 - **Combine with Existing AutoLISP**
 - **Menus**
 - **Toolbars**
 - **Etc..**
 - **Control ArcGIS for AutoCAD Objects Programmatically**
 - **Maps, Feature Services, Attributes, Etc...**

Collaborate

Karen Hodge and Don Kuehne

More Fun Facts about ArcGIS for AutoCAD

Results from ArcGIS for AutoCAD User Survey (and talking to users)

- **Who uses ArcGIS for AutoCAD?**
- **Most used feature of ArcGIS for AutoCAD?**
- **Most common complaint about ArcGIS for AutoCAD?**
- **Most frequent, but wrong, expectation?**
- **Most requested, least used, function of ArcGIS for AutoCAD?**

Feature Service Editing

Just the facts...

- **Feature Services are authored in ArcGIS desktop**
 - Based on Enterprise Geodatabases
 - Published through ArcGIS Server
- **AutoCAD Consumes Feature Services**
 - Extract versus Add
- **In AutoCAD, One GIS Layer = One CAD Layer**
 - - The Layer is the key
- **AutoCAD Feature Classes Plus:**
 - Domains
 - Subtypes
 - Tool Palette Templates

Feature Service Editing

- One feature service layer or many
 - - The AutoCAD Layer is the key
- Long Transactions
- Drawing Templates?

<http://goo.gl/oPct4n>



1. Open this ArcGIS WebApp on your phone...
2. URL is CaSE SenSitive...
3. Place yourself in your seat ... when seats appear...
4. Use the appropriate attendee type
5. **Pencil Icon** on ribbon reveals editing panel
6. Add a comment...



Wrapping Up

Karen Hodge and Don Kuehne

ArcGIS for AutoCAD

Consume

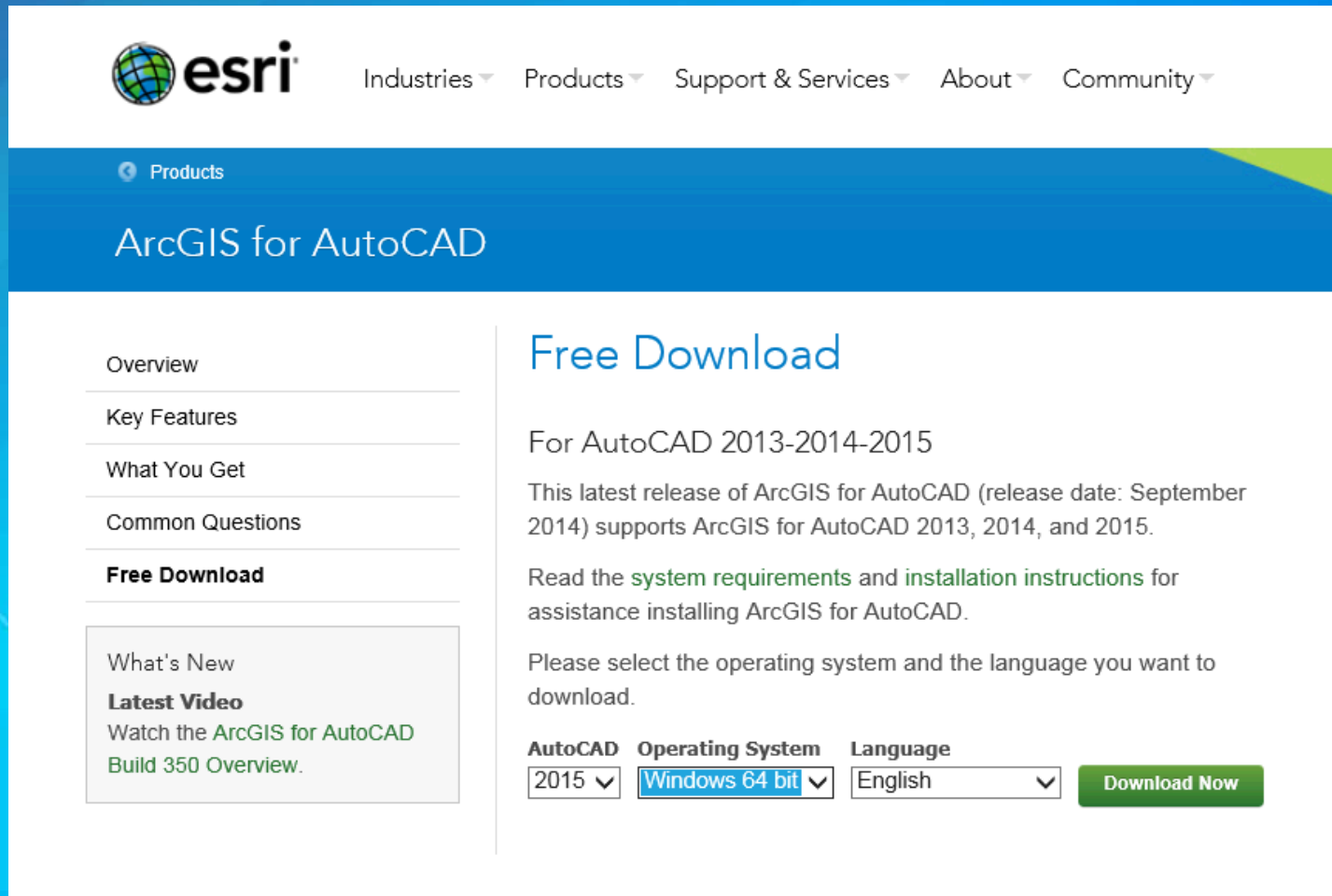
Create


Customize

Collaborate

Where Do I Get It?

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Products

ArcGIS for AutoCAD

Overview

Key Features

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Common Questions

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Latest Video
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Please select the operating system and the language you want to download.

AutoCAD **Operating System** **Language**

2015 ▾ Windows 64 bit ▾ English ▾ [Download Now](#)

Want to learn more?

ArcGIS for AutoCAD Resources

- **Download and Documentation**

- **ArcGIS for AutoCAD Free Download:**
<http://www.esri.com/software/arcgis/arcgis-for-autocad>

- **Training and Tutorials**

- **Free Five Part Training Series:**
<http://video.arcgis.com> (Search for “ArcGIS for AutoCAD Training”)
- **More Free Training Videos on YouTube :** [GISCADChannel](#)

- **Additional Resources**

- **ArcGIS for AutoCAD on GeoNet:**
<https://geonet.esri.com/groups/arcgis-for-autocad>
- **Free ArcGIS for AutoCAD Bonus Tools:**
[ArcGIS.com](#) (search for ArcGIS for AutoCAD bonus tools)
- **Don’s Blog:** <http://giscadblog.blogspot.com/>

More CAD at UC

Session Title	Date/Time	Room
<u>CAD: Introduction to using CAD Data in ArcGIS</u>	Tue 7/21/2015 08:30 AM - 09:45 AM	Room 03
<u>CAD: The ArcGIS for AutoCAD CAD Plug in</u>	Tue 7/21/2015 01:30 PM - 02:45 PM	Room 03
<u>CAD: The ArcGIS for AutoCAD CAD Plug in</u>	Wed 7/22/2015 03:15 PM - 04:30 PM	Room 31 B
<u>CAD: Introduction to using CAD Data in ArcGIS</u>	Thu 7/23/2015 08:30 AM - 09:45 AM	Room 15 A

Session Title	Date/Time	Room
<u>CAD: Lining Up CAD Data in ArcGIS</u>	Wed 7/22/2015 10:00 AM - 10:30 AM	Tech Theater 16 Exhibit Hall A
<u>CAD: Lining Up CAD Data in ArcGIS</u>	Thu 7/23/2015 10:00 AM - 10:30 AM	Tech Theater 16 Exhibit Hall A

Thank you...

For attending and helping craft the future of ArcGIS for AutoCAD

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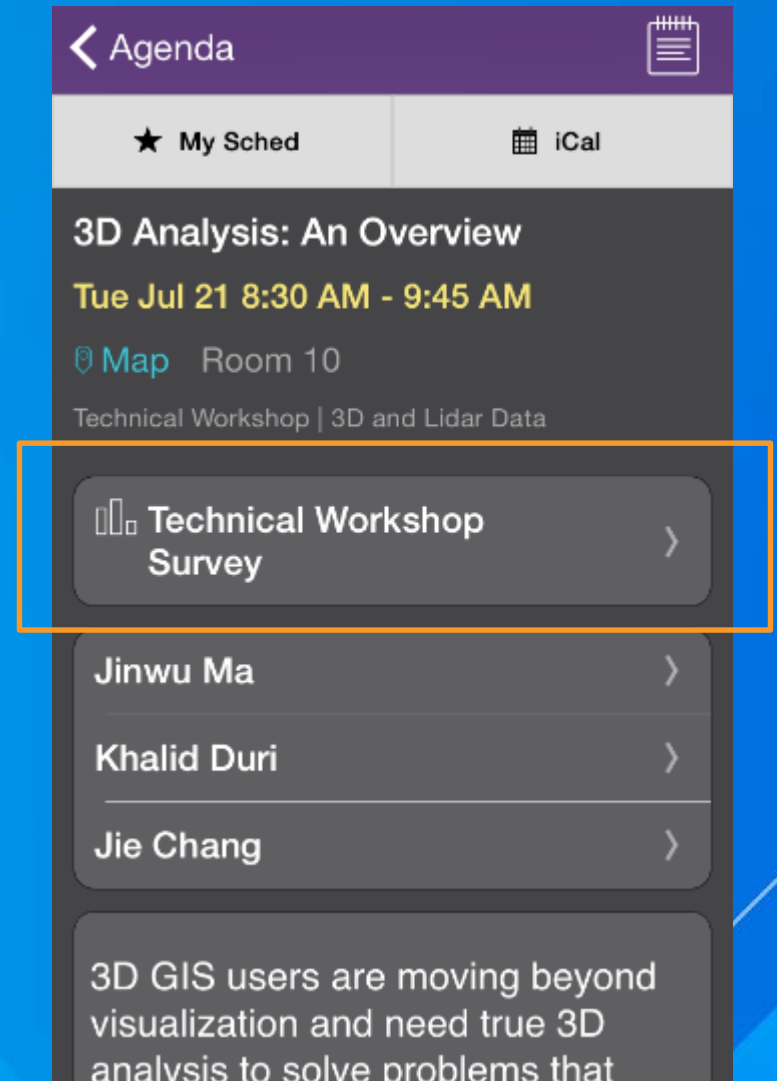
- Select

CAD: The ArcGIS for AutoCAD CAD Plug in

in the Mobile App

- Use the Search Feature to quickly find this title

- Click “Technical Workshop Survey”
- Answer a few short questions and enter any comments





Understanding our world.

GIS and CAD

Interoperability

