

# Configuring Attribute Assistant

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# A tool to...

Streamlining your editing experience In ArcMap

- Increased productivity
- Reduces button clicks
- Ensures data entry
- Simplifies complex operations
- Standardize editing procedures

# Attribute Assistant

ArcMap Add-in

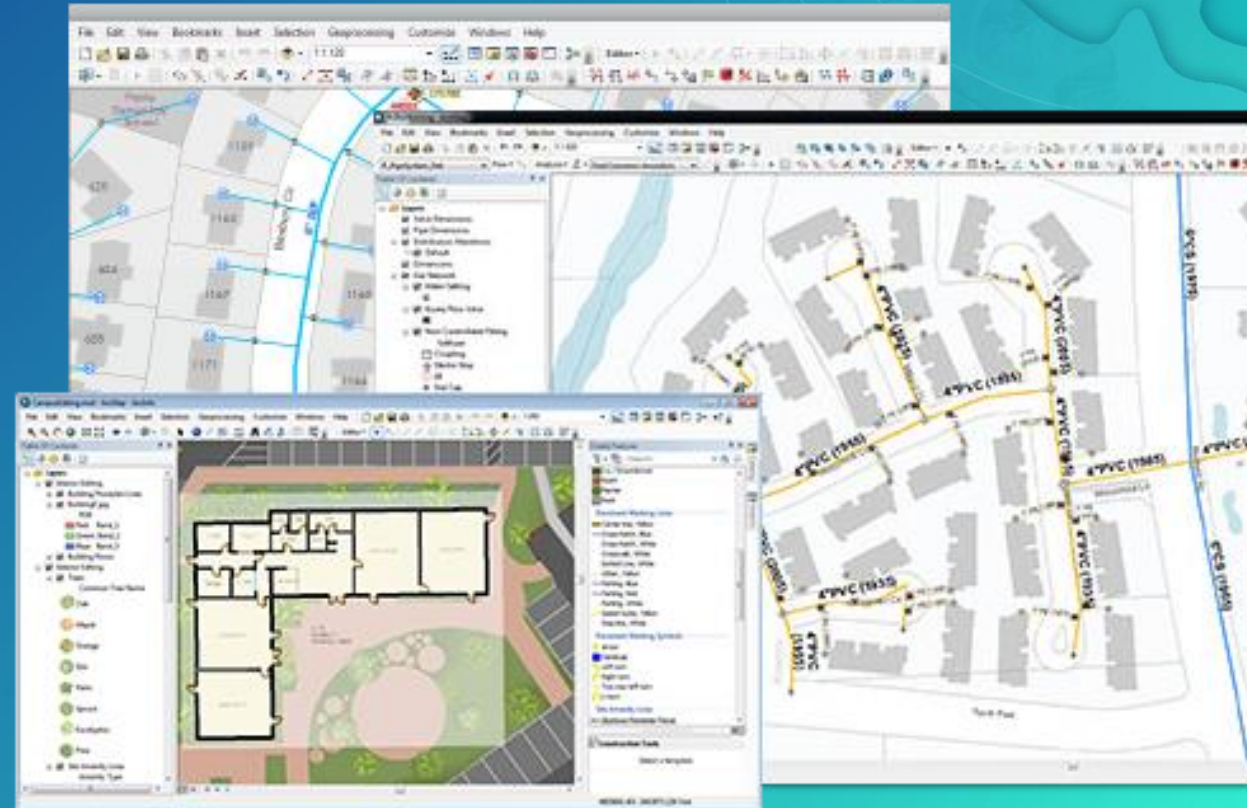
- Editor Extension
- Configured through a GDB table
- 71 methods that can be triggered when
  - Feature created
  - Geometry modified
  - Attribute updated
  - Manually



# Available as part of ArcGIS Solutions

Preconfigured for your industry workflows

- Available by itself
  - <http://solutions.arcgis.com/shared/help/attribute-assistant/>
- Included with
  - Water Utility Network Editing
  - Gas As-Built Editing
  - Nighttime Flow Analysis
  - Pre-incident Planning
  - Campus Editing
  - Road Network Management
  - Street Furniture Inventory
  - Street Tree Inventory
  - Streetlight Inventory



# The Components

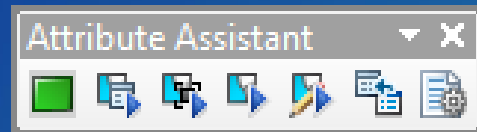
Field Name	Value Method	Value Info	Create	Change	On Manual
FLOOR	INTERSECTING_FEATURE	BuildingFloor FLOOR	True	True	False
BASEELEV	INTERSECTING_FEATURE	BuildingFloor BASEELEV	True	True	False
FACILITYID	EXPRESSION	("FAC-" & [OBJECTID])	True	False	False
NAME	CASCADE_ATTRIBUTE	FacilitySitePoint NAME	False	True	False
FACILITYID	INTERSECTING_FEATURE	FacilitySite FACILITYID	True	False	False
NAME	INTERSECTING_FEATURE	FacilitySite NAME	True	False	False
SUBTYPEFIELD	INTERSECTING_FEATURE	FacilitySite SUBTYPEFIELD	True	False	False
FEATURECODE	INTERSECTING_FEATURE	FacilitySite FCODE	True	False	False
FACAREA	INTERSECTING_FEATURE	FacilitySite SHAPE_Area	True	False	False
FULLADDR	NEAREST_FEATURE_ATTRIBUTES	SiteAddressPoint FULLADDR FULLADD	True	True	False
OWNTYPE	INTERSECTING_FEATURE	FacilitySite OWNTYPE	True	False	False
FLOODIMPID	GENERATE_ID	IMPACTID 0 IMPA-[seq]	True	False	False
FACILITYID	INTERSECTING_FEATURE	FacilitySite FACILITYID	True	True	False
FACILITYID	GENERATE_ID	LEVEEID 0 Levee-[seq]	True	False	False
FLOODIMPID	INTERSECTING_FEATURE	FloodImpactArea FLOODIMPID	True	False	False
CUBYRD	EXPRESSION	((([SHAPE_Length]*[HEIGHT])*([SIDESLO	True	True	False
TOTCOST	EXPRESSION	([CUBYRD]*[CSTCUBYRD])	True	True	False
FULLNAME	EXPRESSION	[ROADPREDIR] + " " + [ROADNAME] + "	True	True	False
STATUS	LAST_VALUE	<Null>	True	True	False
FULLNAME	CASCADE_ATTRIBUTE	RoadCenterline FULLNAME	False	True	False
FULLNAME	CASCADE_ATTRIBUTE	SiteAddressPoint FULLNAME	False	True	False
FACILITYID	INTERSECTING_FEATURE	FacilitySite FACILITYID	True	True	False
FACILITYID	INTERSECTING_FEATURE	FacilitySite FACILITYID	True	True	False
FACILITYID	GENERATE_ID	POLEID 0 POLE-[seq] True	False	False	True



# Four key pieces

To configured the add in

- Attribute Assistant Toolbar
- Dynamic Value Table
- Generate ID Table
- Configuration file



OBJECTID *	Table Name	Field Name	Value Method	Value Info	Create	Change	On Manual	Comments	Rule Wei	On Chang
128	BuildingInteriorSpace	FLOOR	INTERSECTING_FEATURE	BuildingFloor\FLOOR	True	True	False	<Null>	<Null>	True
129	BuildingInteriorSpace	BASEELEV	INTERSECTING_FEATURE	BuildingFloor\BASEELEV	True	True	False	<Null>	<Null>	True
90	FacilitySite	FACILITYID	EXPRESSION	("FAC-" & [OBJECTID])	True	False	False	<Null>	<Null>	False
97	FacilitySite	NAME	CASCADE_ATTRIBUTE	FacilitySitePoint\NAME	False	True	False	<Null>	<Null>	False
91	FacilitySitePoint	FACILITYID	INTERSECTING_FEATURE	FacilitySite\FACILITYID	True	False	False	<Null>	<Null>	True
92	FacilitySitePoint	NAME	INTERSECTING_FEATURE	FacilitySite\NAME	True	False	False	<Null>	<Null>	True
93	FacilitySitePoint	SUBTYPEFIELD	INTERSECTING_FEATURE	FacilitySite\SUBTYPEFIELD	True	False	False	<Null>	<Null>	True
94	FacilitySitePoint	FEATURECODE	INTERSECTING_FEATURE	FacilitySite\FCODE	True	False	False	<Null>	<Null>	True
95	FacilitySitePoint	FACAREA	INTERSECTING_FEATURE	FacilitySite\SHAPE_Area	True	False	False	<Null>	<Null>	True
96	FacilitySitePoint	FULLADDR	NEAREST_FEATURE_ATTRIBUTES	SiteAddressPoint\FULLADDR\FULLADD	True	True	False	<Null>	<Null>	False
98	FacilitySitePoint	OWNTYPE	INTERSECTING_FEATURE	FacilitySite\OWNTYPE	True	False	False	<Null>	<Null>	True
99	FloodImpactArea	FLOODIMPID	GENERATE_ID	IMPACTID[0]IMPA-[seq]	True	False	False	<Null>	<Null>	False
121	LandscapeArea	FACILITYID	INTERSECTING_FEATURE	FacilitySite\FACILITYID	True	True	False	<Null>	<Null>	True
100	Levee	FACILITYID	GENERATE_ID	LEVEEID[0]Levee-[seq]	True	False	False	<Null>	<Null>	False
101	Levee	FLOODIMPID	INTERSECTING_FEATURE	FloodImpactArea\FLOODIMPID	True	False	False	<Null>	<Null>	True
102	Levee	CUBYRD	EXPRESSION	((([SHAPE_Length]*[HEIGHT])*([SIDESLO	True	True	False	<Null>	<Null>	False
103	Levee	TOTCOST	EXPRESSION	((CUBYRD)*[CSTCUBYRD])	True	True	False	<Null>	<Null>	False
17	MasterStreetName	FULLNAME	EXPRESSION	[ROADPREDIR] + " " + [ROADNAME] + "	True	True	False	<Null>	1	False
18	MasterStreetName	STATUS	LAST_VALUE	<Null>	True	True	False	<Null>	<Null>	False
49	MasterStreetName	FULLNAME	CASCADE_ATTRIBUTE	RoadCenterline\FULLNAME	False	True	False	<Null>	1	False
50	MasterStreetName	FULLNAME	CASCADE_ATTRIBUTE	SiteAddressPoint\FULLNAME	False	True	False	<Null>	1	False
124	PavementMarkingLine	FACILITYID	INTERSECTING_FEATURE	FacilitySite\FACILITYID	True	True	False	<Null>	<Null>	True
125	PavementMarkingPoint	FACILITYID	INTERSECTING_FEATURE	FacilitySite\FACILITYID	True	True	False	<Null>	<Null>	True
140	Pole0	FACILITYID	GENERATE_ID	POLEID[0]POLE-[seq]	True	False	True	<Null>	10	False

```
loaded aa.config
14 | WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
15 | See the License for the specific language governing permissions and
16 | limitations under the License.
17 ---
18
19
20 <configuration>
21 <Name>Attribute Assistant Release</Name>
22 <appSettings>
23
24 <!--Options for the Attribute Assistant-->
25 <!--Option to turn on the AA on startup-->
26 <add key="AttributeAssistant_EnabledOnStartup" value="True" />
27 <!--Option to turn on the AA on when editing is started-->
28 <add key="AttributeAssistant_EnabledOnStartEditing" value="False" />
29 <!--The name of the table that defines the functions for the Attribute Assistant-->
30 <add key="AttributeAssistant_TableName" value="DynamicValue" />
31 <!--The table used for Unique ID Generation-->
32 <add key="AttributeAssistant_GenerateId_TableName" value="GenerateId" />
33 <!--Activate the debug mode which writes a log file-->
34 <add key="AttributeAssistant_Debug" value="false" />
35 <!--Path to store the log file, do not include the file name. The default location is %USERPROFILE%\ArcGISO
36 <add key="AttributeAssistant_Debug_Path" value="" />
37 <!--Option to clear the last values between toggling it on and off-->
38 <add key="AttributeAssistant_ClearLastValue" value="False" />
39 <!--Option to clear the last value array when you switch a version-->
40 <add key="AttributeAssistant_ClearLastValueStopEdit" value="False" />
41
42 <!--The geocoder used by the AA for the Get_Address rule-->
43 <add key="Geocoder" value="http://geocode.arcgis.com/arcgis/rest/services/World/GeocodeServer/" />
44
45 <!--Field names in the Generate ID Table-->
46 <add key="SequenceName" value="SEQNAME" />
47 <add key="SequenceCounter" value="SEQCOUNTER" />
```

t AA processing related records. If True, delete operations will be much  
value="True"/>

of On Change Geometry when a line or polygon is split using the Split Tool  
False"/>

OBJECTID *	Sequence Name	Sequence Counter	Comments	Interval Value
9	ADDRESSPOINTID	52	<Null>	1
10	ADDRESSRANCHED	4	<Null>	1
11	SITEADDRESSID	11	<Null>	1
12	PSTLADDID	5	<Null>	1
13	CENTERLINED	12	<Null>	1
14	IMPACTID	1	<Null>	1
15	LEVEED	1	<Null>	1
16	PREPLAN	3	<Null>	1
17	PRECOMPLEX	1	<Null>	1
18	STREETID	300	<Null>	1
19	STREETINTID	88	<Null>	1
20	WHYDRANT	1439	<Null>	1
21	MANHOLE	2493	<Null>	1
22	WSYSTEMVALVE	4817	<Null>	1
23	WMETER	8193	<Null>	1
24	WCONTROLVALVE	6	<Null>	1
25	PICLEANOUT	36	<Null>	1
26	WATERMAIN	4280	<Null>	1
27	WATERLATERAL	19659	<Null>	1
28	POLED	7	<Null>	1
29	SIGNID	16	<Null>	1
30	SIGNALID	1	<Null>	1
31	STREETLIGHTID	1	<Null>	1

# Attribute Assistant Methods

Extend editing with additional capabilities

- Attribute operations
- Editor tracking
- Feature creation
- Geometric Network
- Intersecting features
- Location
- Related table
- Sequences and ID
- Shape updates
- Spatial operations
- Validation

# Attribute Assistant Methods

71 different ways to tailor your editing experience

1.	Angle	20.	Generate ID By Intersect	39.	Map Info	57.	Trigger Attribute Assistant Event Intersecting Feature
2.	Autonumber	21.	Get Address From Centerline	40.	Minimum Length	58.	Trigger Attribute Assistant Event To Edge
3.	Cascade Attributes	22.	Get Address Using ArcGIS Service	41.	Multiple Field Intersecting Values	59.	Trigger Attribute Assistant Event To Junction
4.	Copy Features	23.	Get Address Using Geocoder	42.	Nearest Feature	60.	Update From Edge Field
5.	Copy Linked Record	24.	GUID	43.	Nearest Feature Attributes	61.	Update From Junction Field
6.	Create Linked Record	25.	Intersecting Boolean	44.	Offset	62.	Update Intersecting Feature
7.	Create Perpendicular Line	26.	Intersecting Count	45.	Previous Value	63.	Update Linked Record
8.	Create Perpendicular Line to Line	27.	Intersecting Edge	46.	Prompt	64.	Update To Edge Field
9.	Current Username	28.	Intersecting Feature	47.	Set Measures	65.	Update To Junction Field
10.	Edge Statistics	29.	Intersecting Feature Distance	48.	Side	66.	Validate Attribute Lookup
11.	Expression	30.	Intersecting Layer Details	49.	Split Intersecting Feature	67.	Validate Attributes
12.	Feature Statistics	31.	Intersecting Raster	50.	Timestamp	68.	Validate Connectivity
13.	Field	32.	Intersecting Statistics	51.	To Edge Field	69.	Validate Domain
14.	Field Trigger	33.	Junction Rotation	52.	To Edge Multiple Field Intersect	70.	X Coordinate
15.	From Edge Field	34.	Last Value	53.	To Edge Statistics	71.	Y Coordinate
16.	From Edge Multiple Field Intersection	35.	Latitude	54.	To Junction Field		
17.	From Edge Statistics	36.	Length	55.	Trigger Attribute Assistant Event From Edge		
18.	From Junction Field	37.	Link Table Asset	56.	Trigger Attribute Assistant Event From Junction		
19.	Generate ID	38.	Longitude				



# Attribute Assistant Methods

Focusing in on the most used methods

1. Generate ID
2. Intersecting Feature
3. Get Address Using ArcGIS Service
4. Rotation
5. Expression
6. Validate attribute lookup
7. Previous Value
8. Cascade Attributes
9. Last Value
10. To Junction / From Junction

# Summary

Designed to save time, improve accuracy and streamline data maintenance

- Use the solution apps and help to learn the rules
- Start with a blank Dynamic Value Table
- Iterate when developing your rule base
  - Use the log file
- Does work in a versioned environment
  - Do not version the Generate ID Table

# Please Take Our Survey on the Esri Events App!

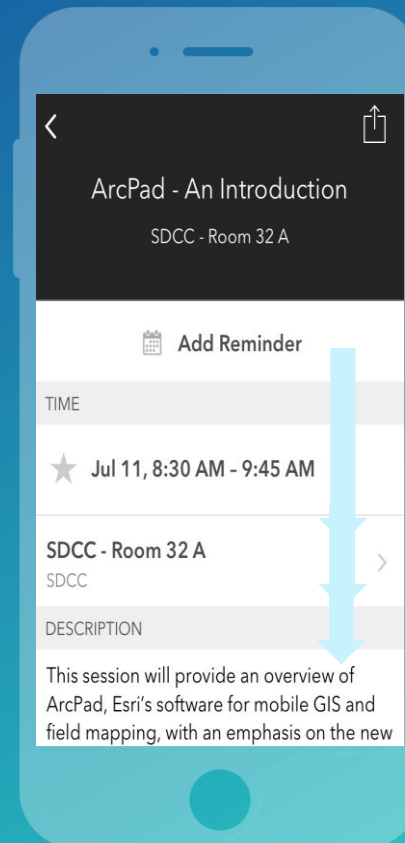
**Download the Esri Events app and find your event**



**Select the session you attended**



**Scroll down to find the survey**



**Complete Answers and Select "Submit"**







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