



<u>Overview</u>

- Hosted feature layers in **ArcGIS Online** (AGOL) can be opened in either **ArcMap** v10.5.1 or **ArcGIS Pro** v2.2.3 and edited locally (i.e. on your desktop). Edits can then be/are synchronized back to the hosted feature layer in the *ESRI Cloud* so that all users in the *Group* can see the changes in *Web Maps, Dashboards,* and *Web Map Apps*.
- The steps for accomplishing this in *ArcMap* and *ArcGIS Pro* are summarized in this document. This symbol 举 indicates a critical step or criteria to accomplish the task.

8 The Basic Steps

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An ArcMap/ArcGIS Pro comparison of a simplified workflow for editing hosted feature layers on your desktop.

Step	ArcMap v10.5.1	ArcGIS Pro v2.2.3	Step
1	Start ArcMap and open a new or existing Map Document	Start ArcGIS Pro and open a new/existing Project	1
2	Add the hosted feature layer [Page 2]	Add the hosted feature layer [Page 6]	2
3	Create a local copy [Page 3]		
4	Make edits [Page 4]		
5	Synchronize layer to server [Page 5]	Make edits [Page 7]	3
Ed	it changes are now visible in AGOL components		
6	Disconnect local copy [Page 5]		
		Edit changes are now visible in AGOL compone	ents
7	Save Map Document and exit ArcMap	Save Project and exit ArcGIS Pro	4

- 10 Table 1: ArcMap and ArcGIS Pro –Basic Steps
- ArcGIS Pro provides hosted feature layer editing in real-time, ArcMap provides editing in near real-time with manual user actions.
- The discussion that follows provides detailed instructions and screen shots if needed for both *ArcMap* v10.5.1
 and *ArcGIS Pro* v2.2.3.
- 15 ArcGIS Terminology
 - Comparable terminology between...

17	ArcMap ArcGIS Pro
18	Map Document Project
19	Data Frame Map
20	MapLayout
21	LayerWeb Layer
22	Table of Contents Contents
23	Field CalculatorCalculate by Field
24	To select and set domains for a field
25	ArcCatalog → Feature Class → Properties → Fields → Field Properties
26	To manage domains
27	ArcCatalog→XTools Pro→Domain Manger
28	or
29	ArcToolBox→Data Management Tools→Domains

Dudley R. Hartel Science Delivery/Technology Coordinator

706-410-5568 cell <u>× Dhartel@fs.fed.us</u> @ufs_cuif <u>×</u> LeavesOfChangeWeekly.org



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C:\Users\dmartel\Documents\UFST\UFST\UFST\GOL\UFST MANUALS AND INSTRUCTIONS\20180518 UFST HOSTED FEATURE EDITING STEPS ON DESKTOP - ARCMAP AND ARCGIS PRO (31OCT18).DOCX





30 Connecting to a Hosted Feature Layer and Editing Data

<u>ArcMap</u>

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There are several methods for adding a hosted feature layer to ArcMap. It can be done from the **AGOL** user account at the hosted feature layer details page by clicking on *Open in ArcGIS Desktop*...

	louston_Trees_RO_RiskRating_16May18		
* Add to Fevorites Description	May 16 (2018) domains adhering to PAPPG language; read-only for added attributes EXCEPT RiskRating Reature Layer by UFST_GIS01_Partner Created: May 16, 2018 Updated: May 16, 2018 View Count: 18	Open in Map Vir Open in Scer Open in ArcG Export Di	ne Viewer IS Desktop
rating calculation. Set thi interaction with read-onl From 20180514_UFST_F	iage to support TFS's Houston UFST workshops in June 2018 with read-only attributes for USNG and risk is hosted feature layer to RiskRating Read-Only = No (i.e. editable) so that I can test ArcGIS Pro v2.1 y flags. 'APPG_Domains_FC_RO_Template.gdb. RiskRating is then controlled from ArcGIS Pro Fields View to ad-Only = Yes so that Collector does not prompt.	Details Source: Feature Service Data Last Updated: May 1 Size: 208 K8 ★★★★★ T	8, 2018, 12:34:11 PM
Tree Assessments v i Open In ▼	v Stump Length and Read-Only Attributes To ▼ Ø Service URL	Owner	🛓 Change Owner

Figure 1: ArcGIS Online – Hosted feature Layer Details

Or, open **ArcMap** and a new or existing *Map Document*; you may be signed-in to your **AGOL** user account by default, if not, sign-in to your user account. Then with the Add Data →My Hosted Services menus select the desired hosted service...

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89	ArcGIS Online Sign in or out of ArcGIS C	Online.							
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-									

Figure 2: ArcMap – AGOL Sign-In (left) and ArcMap Add Data (right)

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The selected hosted feature layer will be added to the Map Document Table of Contents (TOC).



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Urban Forestry South ArcGIS: Editing Hosted Feature Layers

- Make certain you are in the List by Drawing Order tab not the List by Data Source tab in the TOC ribbon.
 - Hover your mouse pointer over the TOC ribbon symbols to see List by Drawing Order, List by Data Source, List by Visibility, List by Selection, and Options tooltips.

Right-click on the hosted feature layer group name (not the layer name), and select the Edit Features →Create Local Copy for Editing menus.

Copy Properties

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Paste Layer Properties Zoom To Layer

Visible Scale Range

Use Symbol Levels **Edit Features**

Save As Layer File ...

Show in Folder Properties...

Create Layer Package...

Find Documents and Datasets Find Dataset in Catalog

Make Layers the Only Selectable



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Figure 3: ArcMap – Create Local Copy



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Clay Rd

Groeschke Rd

Create Local Copy for Editing

Synchronize Local Edits with

Disconnect Local Copy from

Create Local Copy for Editing

Create Local Copy for Editing

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48 49 At this point, you can open the attribute table and use *Field Calculator*, or perform other standard feature layer editing on any *Read-Only* = **No** (i.e. editable) attributes.

Table Of Contents			÷ ×	GE		FM 529 Rd			IN OLD IT			202	^ 🧊	
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	Cherry, other	68 Root Plate	Tree Removal (Trunk Split)	Improbable	Very Low	Significant	<null></null>	<null></null>	<null></null>	Low	₹.	Sort Descending	S01_Partner	
	Oak, northern red	99 Root Plate	Tree Removal (Lean >30°)		Very Low	< Select COFI >	<null></null>	<nul></nul>	<nul></nul>	Not Rated		Advanced Sorting	S01_Partner	
	Pine, Virginia	99 Scaffold	Limb Removal (≥2" at Break)	< Select LOF >	< Select LOI >	Significant	<null></null>	<nul></nul>	<nul></nul>	Not Rated		Advanced Soluting	S01_Partner	
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	Tree Assessments w	Stump Length and	Read-Only Attributes									Field Calculator		
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			Sauma Rd			Cullen Park (Lease)	27	fridg.			×	Delete Field	calculation expression. If any of the records in the table are	of
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Figure 4: ArcMap – Attribute Table with Menus

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TreePart			String	.numerator()	
FEMAGuide			ODate	.real()	
Failure_LOF			0	.as_integer_ratio	0
Impact_LOI				.hex()	
Conseq_COFI				.is_integer()	
xDD_Longitude				math.acos()	
yDD_Latitude		~		math.acosh() math.asin()	
Show Codeblock				* / & +	
# RiskRatingCalcu	lationHouston_1	16May 18	ру		-
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nLOF = int(LOF nLOI = int(LOI					
	[0])				
<					>
RiskRating =					
ClassRisk(!Failure	e_LOF! , !Impact	LOI! , I	Conseq_COFI!))	-
About calculating fi	elds		Clear	Load S	
			Clear	LOAD S	Save
				OK	Cancel

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Figure 5: ArcMap – Field Calculator¹

The Python script, *RISKRATINGCALCULATIONHOUSTON_16MAY18.CAL*, was loaded and run (i.e. OK in ArcMap) in this example screen. Continue editing with tools, Python scripts and stand-alone programs.

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¹ Field Calculator has a tendency to switch to VB Script even if you load a Python script!





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When all edits are complete, right-click on the hosted feature layer group name, and select the *Edit Features* →*Synchronize Local Edits* menus. Again, make certain you are in the *List by Drawing Order* tab not the *List by Data Source* tab in the *TOC* ribbon.



Figure 6: ArcMap –Synchronize Local Edits

That's it!

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- Your local edits are available at *AGOL* and in all components (e.g. *Web Maps, Web Map Apps, Dashboards,* and *Story Maps*) that use the hosted feature layer.
- 64 When you no longer need to synchronize edits disconnect the local copy from the server to clean up 65 metadata on the client and server.







ArcGIS Pro

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Open *ArcGIS Pro* and a new or existing *Project*; you should be signed-in to your *AGOL* user account by default. Then with *Add Data*, select the *AGOL* Group, and the hosted service layer...

Add Data		х			
€∋↑ 🔣 « Groups UF	ST - Houston - TFS ・ ・ ・ で ひ Search Groups	- م			
		ETT			
🔺 📩 Project	R08_UFST_Houston_BearCreek_02May18				
🔂 Databases	R08_UFST_Houston_Trees_03May18				
Folders	R08_UFST_Houston_POI_03May18				
✓ Contal A My Content	Ro8_UFST_Houston_Trees_ReadOnly_14May18				
Groups	R08_UFST_Houston_Trees_RO_Rebuild_14May18				
All Portal	R08_UFST_Houston_Trees_RO_RiskRating_16May18				
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4 [Computer					
🧮 Desktop	Find more items				
Nar	me R08_UFST_Houston_Trees_RO_RiskRa Default	•			
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Figure 7: ArcGIS Pro –Add Data→Groups to Select Hosted Feature Layer

The hosted feature layer is symbolized in the *TOC* (*List by Data Source* tab), but you can verify the hosted source by right-clicking on the feature layer name (not the hosted feature **group** name this time) from either the *List by Data Source* or the *List by Drawing Order* tabs and then selecting from the *Properties* → *Source* menus.



Figure 8: ArcGIS Pro –Verifying the Source of a Hosted Service Layer

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Dudley R. Hartel Science Delivery/Technology Coordinator

706-410-5568 cell <u>X DHARTEL@FS.FED.US</u> @UFS_CUIF <u>X</u> LEAVESOFCHANGEWEEKLY.ORG



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Now right-click on the feature layer name, and select Open Attribute Table...

Contents		→ ‡ ×	🛃 Bear Creek	🛃 Bear Creek Layout	Bear Creek from
▼ Search ► ○ □ ✓ □ ↓ ↓ ↓	L	- م			Clay Rd
Drawing Order				Creek	
Bear Creek from Service					
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Tree Assessments w Stump Length a	Copy				Eggling
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	Design	Þ			$\mathbf{\lambda}$
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	Create Chart	Þ			
	🙇 Zoom To Layer				

Figure 9: ArcGIS Pro – Open Attribute Table Menu from Contents

At this point you can perform a variety of geoprocessing tasks including *Calculate Field* and other standard feature layer editing on any *Read-Only* = **No** (i.e. editable) attributes.



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Figure 10: ArcGIS Pro – Attribute Table and Geoprocessing (Calculate Field)

Figure 10 illustrates the geoprocessing dialog for Calculate Field (RiskRating).

That's it!

Your local edits are available at *AGOL* and in all components (e.g. *Web Maps, Web Map Apps, Dashboards,* and *Story Maps*) that use the hosted feature layer. Real-time! No local copy! No sync needed!

Dudley R. Hartel Science Delivery/Technology Coordinator

706-410-5568 cell <u>X DHARTEL@FS.FED.US</u> @UFS_CUIF X LEAVESOFCHANGEWEEKLY.ORG



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