

KML/KMZ data with attachments to ArcGIS Pro

Autor: Stefan Thorn, May 11 2022

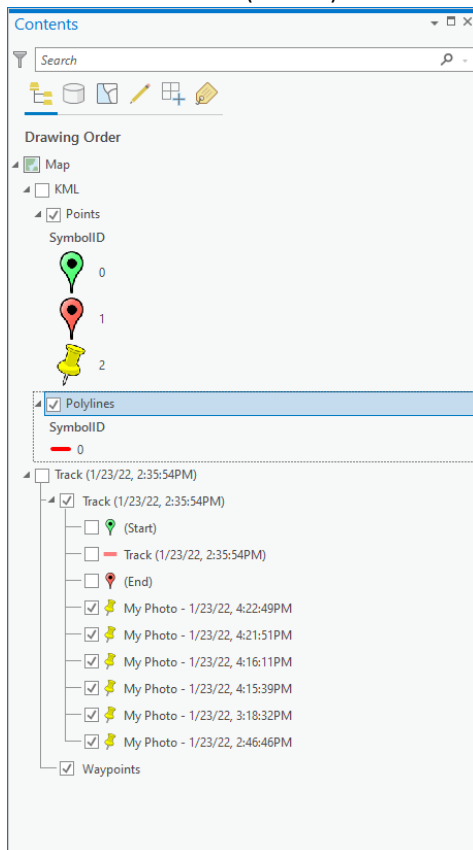
The workaround is based on the data in a post on the the Esri forum:

[Solved: KML to Layer Issue- Is what I'm doing supported? - Esri Community](#)

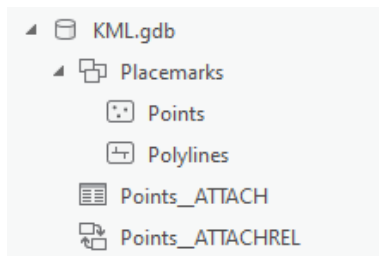
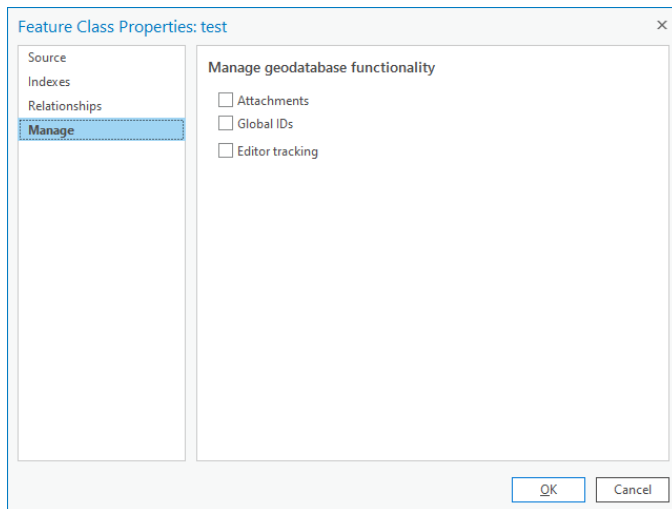
In this workaround only two photo attachments per feature class can be added. Writing a python script will improve the process and could make it possible to add more photos as attachments to a feature class.

ArcGIS Pro

1. Use the Tool KML to Layer to convert the KML/KMZ data to a file geodatabase
2. Result: the data from the KMZ (Track...) is converted to a file geodatabase KML.gdb and added to the TOC:



3. In the created geodatabase create attachments on the point layer:
 - a. Right click Points > Manage> enable Attachments (Global IDs will also be enabled)



4. Open attribute table from the Point layer and add fields:
 - a. Photo1 (text, 255)
 - b. Photo2 (text, 255)

Excel

The next steps are done in Excel but it would be easier and quicker to use a Python script in Field Calculator → who can writing python script?

5. Select all records, click Copy and paste all records to Excel:
 - a. Save your Excel
6. In the column [PopupInfo] (or other column) information is stored about the attached images in the kml data. We need these filename of the photos to be able add the images as attachments.
 - a. i.e. two photos attached
 Location: 39.69032; -74.67498

 Elevation: 32.8 ft

 Time Created: 1/23/22; 4:22:49 PM EST

7. In Excel: Add the next formula in column:
 - a. I2 = column [PopupInfo]
8. Column Photo1:


```
=SUBSTITUTE(IFERROR(MID(I2;FIND("4; MID (RIGHT (I2; LEN (I2) -
FIND ("|"; SUBSTITUTE (I2; "="; "|"; LEN (I2) -
LEN (SUBSTITUTE (I2; "="; "")) ) ) ; 2; 38) ; "" ) ; ">" ; "" ) ; "" ; "" ) ; "" )
```

- i. The formula will search from right to left in the text.
- ii. If in the text “.jpg” occurs twice the sum is 8 characters and is > 4 and a second filename is in the data, otherwise no output
- iii. Getting the second filename
- iv. Filename of the photos has not always the same length in characters therefor, it is possible that the last the characters “ and/or > after .jpg will be added, substitute will remove the > and “.

a. Edit the formula to get every filename correct or Step 10

10. Add new sheet “attachments”

11. Select all data in “Sheet1” and copy as values to sheet “attachments”

12. In sheet attachments remove all columns except [OID*], [GlobalID], [photo1] and [photo2]

13. In columns [photo1] and [photo2] correct the few filename extensions.

14. Add <Null> in de cells that are empty, i.e.:

OID *	GlobalID *	photo1	photo2
1	{8D7C59A0-CBB8-40D8-B1FA-EEEF06C498F9}	<Null>	<Null>
2	{84F1F947-D522-4C8C-AD66-ADDC4CD03884}	<Null>	<Null>
3	{BDDF4CEB-58DB-462F-88C2-842D56F5365D}	5fb5160cf6769011483434a2806f41547.jpg	7154621148e722e9d1ca07af1146570f14.jpg
4	{2F187CE2-3FB9-4664-AB95-AACF3CD467B1}	83bf2ec67049ac823a360947fbf97c41.jpg	<Null>
5	{56D59542-E842-4593-8F7D-D4C93114977A4}	50d23052b8bfeaea21eb14e1c873192a.jpg	<Null>
6	{8F990E8E-FAEA-4D36-BA7F-A08BE8E16FCB}	3db576afb582806b423adbfacf39445b.jpg	e473f5ebaa828bf9a24b3f42ccc17365.jpg
7	{34472472-C2FF-4C7F-AC0F-D9D339D6DBA9}	223ec5cc8333c595fa62c0f3b15efd57.jpg	<Null>
8	{D9902FEB-8114-4634-A7B4-F2EFD41DE113}	2e0a02dc4b6031cb87ba4d6538512257.jpg	<Null>

15. Save your excel

Now a nice trick in ArcGIS Pro

16. If not trusting, use Join to add the filenames in [photo1] and [photo2] from the Excel.

17. Select the data in column [photo1], right click Copy

A	B	C	D
1	OID *	GlobalID *	photo1
2	1	{8D7C59A0-CBB8-40D8-B1FA-EEEF06C498F9}	<Null>
3	2	{84F1F947-D522-4C8C-AD66-ADDC4CD03884}	<Null>
4	3	{BDDF4CEB-58DB-462F-88C2-842D56F5365D}	5fb5160cf6769011483434a2806f41547.jpg
5	4	{2F187CE2-3FB9-4664-AB95-AACF3CD467B1}	83bf2ec67049ac823a360947fbf97c41.jpg
6	5	{56D59542-E842-4593-8F7D-D4C93114977A4}	50d23052b8bfeaea21eb14e1c873192a.jpg
7	6	{8F990E8E-FAEA-4D36-BA7F-A08BE8E16FCB}	3db576afb582806b423adbfacf39445b.jpg
8	7	{34472472-C2FF-4C7F-AC0F-D9D339D6DBA9}	223ec5cc8333c595fa62c0f3b15efd57.jpg
9	8	{D9902FEB-8114-4634-A7B4-F2EFD41DE113}	2e0a02dc4b6031cb87ba4d6538512257.jpg

18.

19. Go to ArcGIS Pro

20. In attribute table Points click on column name photo1, ctrl-v

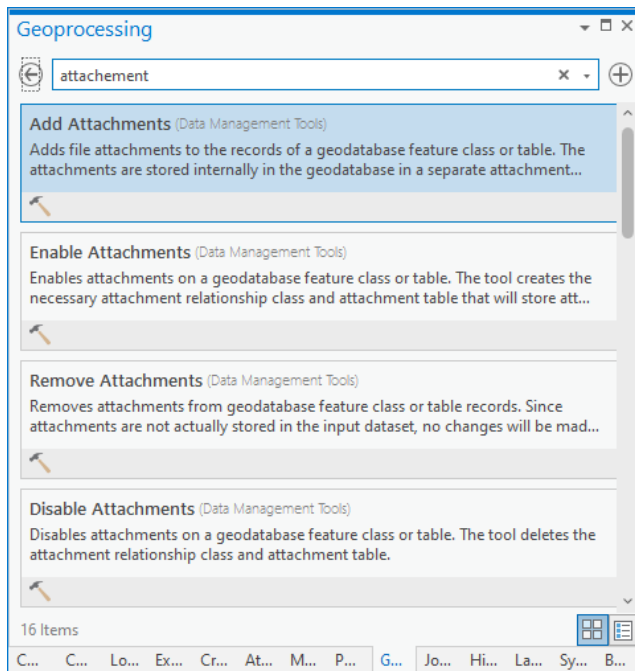
- a. The values will be copied into the records

21. Save edits

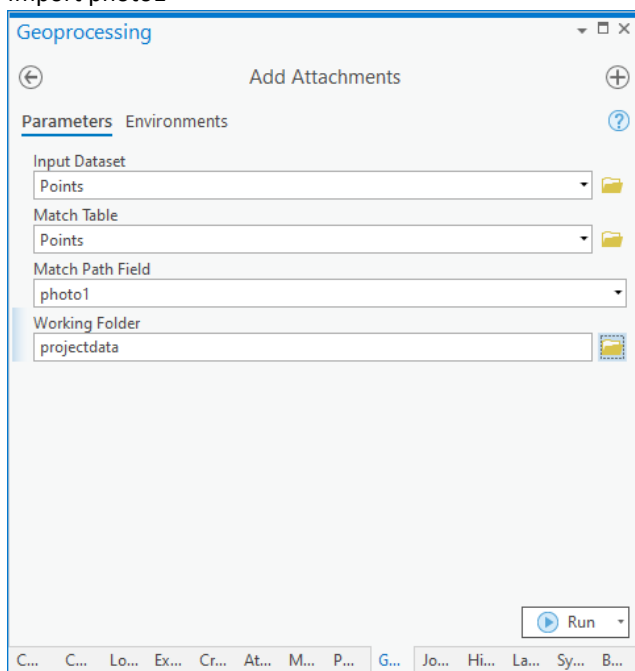
22. Repeat for [photo2]

Import attachments

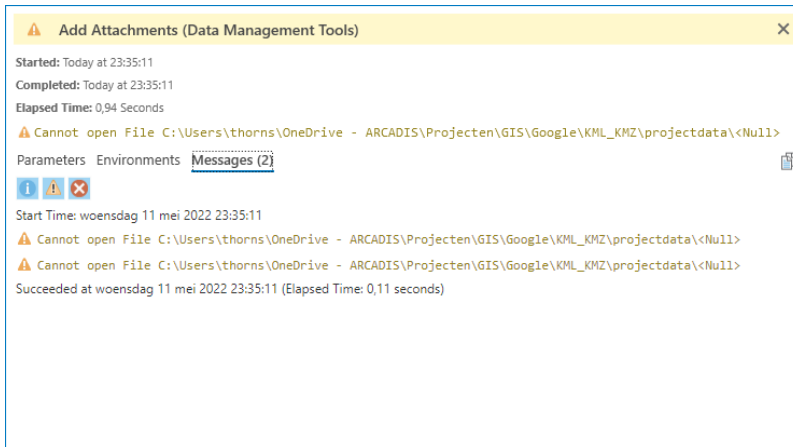
23. Tool ‘Add Attachments’



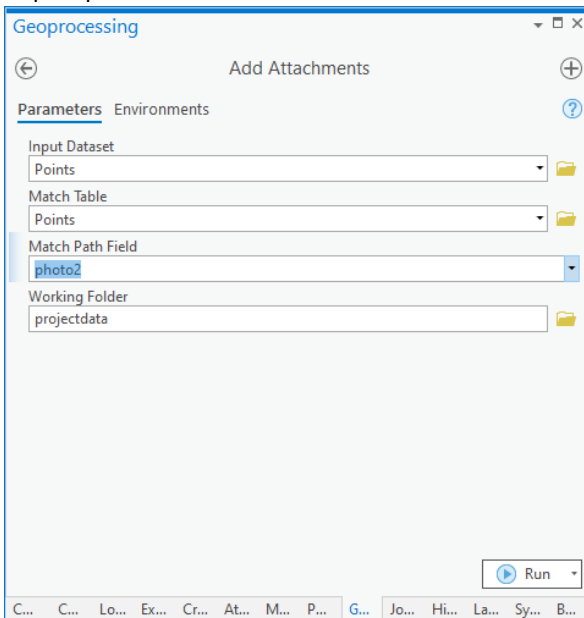
24. Import photo1



- a. For the <Null> values you will get error messages or when a filename is not correct.

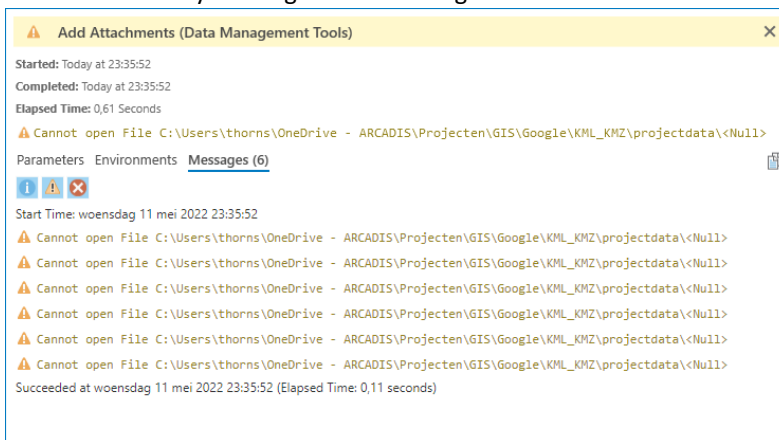


25. Import photo2



26.

a. For <null> values you will get error messages



Results

Left: popup from the KML data opened in ArcGIS Pro


Right: popup from the data converted to file geodatabase

Pop-up

- ▲ Points (1)
 - My Photo - 1/23/22, 4:22:49PM
- ▲ Polylines (1)
 - Track (1/23/22, 2:35:54PM)
- ▲ Track (1/23/22, 2:35:54PM) (1)
 - My Photo - 1/23/22, 4:22:49PM

Track (1/23/22, 2:35:54PM) - My Photo - 1/23/22, 4:22:49PM

My Photo - 1/23/22, 4:22:49PM
 Location: 39.69032, -74.67498
 Elevation: 32.8 ft
 Time Created: 1/23/22, 4:22:49 PM EST



74,6749795°W 39,6903165°N


Pop-up

- ▲ Points (1)
 - My Photo - 1/23/22, 4:22:49PM
- ▲ Polylines (1)
 - Track (1/23/22, 2:35:54PM)
- ▲ Track (1/23/22, 2:35:54PM) (1)
 - My Photo - 1/23/22, 4:22:49PM

Points - My Photo - 1/23/22, 4:22:49PM

FolderPath	Track (1/23/22, 2:35:54PM)/Track (1/23/22, 2:35:54PM)/My Photo - 1/23
SymbolID	2
AltMode	-1
Base	0
Snippet	
PopupInfo	Location: 39.69032, -74.67498 Elevation: 32.8 ft Time Created: 1/23/22, 4:22:49 PM EST
HasLabel	-1
LabelID	0
GlobalID	{BDDF4CEB-58DB-462F-88C2-842D56F5365D}
photo1	5fb5160cf67690a183434a2806f41547.jpg
photo2	715462a18e722e9d1ca07afa16570f14.jpg

715462a18e722e9d1ca07afa16570f14.jpg



74,6749792°W 39,6903216°N