Interoperabilidad con ArcGIS

EDICIÓN ESTUDIANTE









()

7.

Ejercicio



Generar un modelo ETL

ArcGIS Data Interoperability es una extensión que le permitirá llevar datos espaciales de muchas fuentes al entorno de ArcGIS para los procesos de mapeo, visualización y análisis. Si usted es un editor de datos, una empresa dedicada al procesamiento de información podrá usar ArcGIS Data Interoperability para convertir los datos a un formato o modelo ArcGIS que le facilite su uso y distribución.

En este ejercicio, usted podrá desarrollar el siguiente objetivo:

• Aprender la importancia de la interoperabilidad de información.



BOGC

ArcGIS Pro Help: ArcGIS Data Interoperability extension for Desktop

Paso 1: Creación de proyecto en ArcGIS Pro

a. Busque dentro de los programas instalados ArcGIS Pro, de clic en abrir e inicie sesión.
 El usuario y contraseña será suministrado por el administrador de licencias en su organización.



 b. Verifique el licenciamiento de ArcGIS Data Interoperability, una vez se encuentre en el programa, de clic sobre el engranaje que hace referencia a la settings (configuración):



c. Diríjase a la opción de licenciamiento y valide que tenga habilitada la extensión de ArcGIS Data Interoperability, como se muestra en la siguiente imagen:

New					
Open	ArcGIS Pro Named	User License			
	Name	Licensed	Expires		
	Basic	No	N/A		
	Standard	No	N/A		
	Advanced	Yes	21/08/20	024	
ortals	Name		licensed	Evnires	^
ortals	Name		Licensed	Expires	^
	1 turres				
censing	Bathymetry		Yes	21/08/2024	
icensing	Bathymetry Business Analyst		Yes Yes	21/08/2024 21/08/2024	
icensing ptions	Bathymetry Business Analyst Data Interoperability		Yes Yes Yes	21/08/2024 21/08/2024 21/08/2024	
icensing options ackage Manager	Bathymetry Business Analyst Data Interoperability Data Reviewer		Yes Yes Yes Yes	21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024	
icensing Options ackage Manager	Bathymetry Business Analyst Data Interoperability Data Reviewer Defense Mapping		Yes Yes Yes Yes Yes	21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024	_
icensing Options ackage Manager dd-In Manager	Bathymetry Business Analyst Data Interoperability Data Reviewer Defense Mapping Geostatistical Analyst		Yes Yes Yes Yes Yes Yes	21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024	
icensing Dptions lackage Manager udd-In Manager	Bathymetry Business Analyst Data Interoperability Data Reviewer Defense Mapping Geostatistical Analyst Image Analyst		Yes Yes Yes Yes Yes Yes Yes	21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024	
icensing Dptions Package Manager Add-In Manager	Bathymetry Business Analyst Data Interoperability Data Reviewer Defense Mapping Geostatistical Analyst Image Analyst Indoors		Yes Yes Yes Yes Yes Yes Yes Yes	21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024	
icensing Dptions ackage Manager .dd-In Manager elp	Bathymetry Business Analyst Data Interoperability Data Reviewer Defense Mapping Geostatistical Analyst Image Analyst Indoors LocateXT		Yes Yes Yes Yes Yes Yes Yes Yes Yes	21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024	
icensing Dptions Tackage Manager Idd-In Manager Ielp Ibout	Bathymetry Business Analyst Data Interoperability Data Reviewer Defense Mapping Geostatistical Analyst Image Analyst Indoors LocateXT		Yes Yes Yes Yes Yes Yes Yes Yes Yes	21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024	-
icensing Options ackage Manager add-In Manager Help Ibout	Bathymetry Business Analyst Data Interoperability Data Reviewer Defense Mapping Geostatistical Analyst Image Analyst Indoors LocateXT		Yes Yes Yes Yes Yes Yes Yes Yes	21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024 21/08/2024	



3

d. Regrese a la opción de new (nuevo), y de clic sobre la plantilla de map (mapa):

	©	New					Arcus Pro
	New Open	C Recent	New Project				
7		Computer	Map	Catalog	Global Scene	Local Scene	Start without a template
1	Portals Licensing						
	Options Package Manager Add-In Manager		Recent Templates	project templates			Start with another template
	Help About Learning Resources						
	Exit						

- e. Asigne un nombre y ubicación para el proyecto de ArcGIS Pro:
 - Name(Nombre): Interoperabilidad con ArcGIS
 - Location(Ubicación): ubicación dentro de su máquina local, aquí quedara almacenado el proyecto.

Name	Interoperabilidad con ArcGIS		
Location	C:\EsriTraining\Módulo 1		2
	Create a new folder for this project		
		OK	Cancel

f. Una vez inicialice el proyecto, de clic sobre la pestaña de Analysis (análisis) y del grupo de herramientas workflows (flujos de trabajo) seleccione el icono de Data Interoperability



g. Observe como se inicia una nueva interfaz del motor de FME (ArcGIS Pro-Data Interoperability Extension)



 h. Se habilitará la siguiente interfaz, el espacio en blanco hace referencia al espacio de trabajo denominado "canvas":

Open Save Run Stop Cut Copy Paste Undo Redo Select Pan Zoon	In Zoom Dut	
Teadoren's O Los A Constants Constan	Drop files here	
omer caley # x 3 = compose 5 = compose 6 extracted fundaments 7 Met Auh 6 Ausent 100 5 Assent Reads	or Type to add Transformers, Readers and Writers Workbench Essentials	
C Vand breview III III III III III III III III III I	To view data: • Run with caching multical and select a carvias object • Cick Www waver data ♪ • Drog files here	, , , , , , , , , , , , , , , , , , ,

 En la parte superior observe los elementos de reader (lectura), writer (escritura) y transformer (transformador), los cuales le permitan crear el modelo de ETL espacial:



j. De clic sobre el botón de **reader**, se habilitará un nuevo cuadro dialogo, para agregar el primer dato a extraer:



				19.1	
🔓 Add Reader					>
Reader					
Format: <gues< td=""><td>s from Dataset></td><td></td><td></td><td></td><td>\sim</td></gues<>	s from Dataset>				\sim
Dataset: Select e	existing dataset				▼
Parameters	Coord. System	unknown			
Workflow Option	s				
Individual Fea	iture Types 🚆 🕇	○ Single N	lerged Featu	re Type ⊞→	
Help			OK	Car	ncel

 k. De clic sobre el recuadro rojo, para agregar el formato y seleccione More formats (más formatos):

Add Rea	der	>
Reader		
Format:	<guess dataset="" from=""></guess>	~
Datacet	Microsoft Excel	
Dataset:	OGC GML (Geography Markup Language)	
Paramet	Esri Shapefile	
	OGC / Google KML	
Workflow	Esri Geodatabase (File Geodb)	
	Autodesk AutoCAD DWG/DXF	
Individe	Autodesk AutoCAD DWF	
	ASPRS Lidar Data Exchange Format (LAS)	-
Help	Autodesk AutoCAD Civil 3D	
	Bentley MicroStation Design (V8)	
	PostGIS	

 Se habilitan la librería de formatos disponibles, en la parte inferior del cuadro de dialogo busque GML, como formato de entrada:

escription	Short Name	Extensions	Туре	Coord. Sys.	Licensed ^
GC CityGML	CITYGML	.xml,*,.gml,.gz	File/U	•	
GC GML (Geography Markup Language)	GML	.xml,*,.gml,.gz	File/U	•	•
GC GML SF-0 (Geography Markup Langu	a GMLSF	.xml,*,.gml,.gz	File/U	•	•
GC GML v2.1.2 (Geography Markup Lang	GML212	.xml,*,.gml,.gz	File	•	•
GC IndoorGML	INDOORGML	.xml,*,.gml,.gz	File/U	•	•
abedML (GML)	SEABEDML	.xml,*,.gml,.gz	File/U	•	•
OSI GML	SOSI_GML	.xml,*,.gml,.gz	File/U	•	· · ·
StUF-Geo vertical messages	STUF-GEO	.xml,*,.gml,.gz	File/U	•	•
vedish I2K/G2K (Interface 2000 GML)	12KGML	.xml,*,.gml,.gz	File/U	•	•
viss INTERLIS (ili2fme)	CH.EHI.FME.MAIN	.xml,.itf,.xtf,.gml,.ili	File		•
S. Census Bureau TIGER/GML	TIGERGML	.xml,*,.gml,.gz	File/U	•	•
OS MastarMan Grannensen Laure (GMI	OC MACTEDMAN CDEENICHACE C	uml* aml as	E3.5/01	•	• • *

 m. Una vez se ha modificado el formato, en la opción de dataset, de sobre los tres puntos finales, seleccione la ruta de datos del ejercicio: C:/EsriTraining/Modulo 1. De clic sobre anden.gml



^	8	
^		= 🕶 🔟 🔞
Nombre	Fecha de modificación	Тіро
📒 Interoperabilidad con ArcGIS	22/08/2023 9:46 a.m.	Carpeta de archivo
SHP	22/08/2023 9:48 a.m.	Carpeta de archivo
anden.gml	22/08/2023 9:48 a.m.	Archivo GML
<		2
aml	✓ GML Files (*.gm ¹)	l *.xml *.qz), Ar 🗸
	Interoperabilidad con ArcGIS ISHP anden.gml	Interoperabilidad con ArcGIS 22/08/2023 9:46 a. m. SHP 22/08/2023 9:48 a. m. anden.gml 22/08/2023 9:48 a. m. GML Files (*.gml

 n. La vista del Add Reader(Agregar lector) se visuaizara como se muestra a continuación, de clic en OK:

🖻 Add Reader	×
Reader	
Format: OGC GML (Geography Markup Language)	\sim
Dataset: "C:\EsriTraining\Módulo 1\anden.gml"	··· 🔻
Parameters Coord. System: Read from source	
Workflow Options	
● Individual Feature Types	e ⊞→
Help 🔻 OK	Cancel

 Una vez cargados los datos, AndenZE es el primer elemento de lectura en el espacio de trabajo



BOGOT/

* GML NONE (Untitled) - Workbench 2022-2					- 0 ×
File Edit View Readers Transformers Writers Ru	n Tools Help				
🗅 📇 🛄 🕨 🔳 🗶 🖻 🗂				お 小 点 10 10	
New Open Save Run Stop Cut Copy Paste	Undo Redo Select Pan Zoom In Zoom Out	Extents Maximize Fu	Screen Reader Writer Transformer Annotation Bookmark	uto-Lavout Center Middle Publish Republish	Download
Navigator 8 ×	Main X				
B anden (GMI)					
Transformers					
Bookmarks					
> 🔞 User Parameters (1)					
> 10 FME Server Parameters	AndenZE (0)				
E Tool Resources					
V [8 Tool Parameters					
B Name: cnot set>					
> B Description					
> 👩 Logging					
> 👩 Reader/Writer Redirect					
> 👩 Translation					
> [@ Scripting					
Q Workspace Search					
Transformer Gallery 8 ×					
> 📅 All (478)					
> Categorized					
Embedded transformers Free Luck					
> TRecent (10)					
Q. Search Results					
					× .
	<u>د</u>				,
	Visual Preview				ē×
	p.				
			To view data:		
	(d)		Run with caching enabled and select a canvas object		
	3		Click View source data		
	<i>₽</i>		Drop files here		
a	Visual Preview Translation Log				
	room renew control cog				

p. Con ayuda de los pasos aprendidos previamente, realice el mismo proceso, agregando un segundo reader:



q. De clic en la opción de format (formato):

🖶 Add Re	ader		×
Reader			
Format:	<guess dataset="" from=""></guess>	,	×.
Dataset:	Select existing dataset		•
Parame	ters Coord. System:	Unknown	
Workflow	v Options		
Indiv	idual Feature Types 🚆 🕇	○ Single Merged Feature Type 🔳 +	
Help		OK Cancel	

r. Seleccione la opción de more formats (más formatos)



🖌 Add Rea	der	×
Reader		
Format:	<guess dataset="" from=""></guess>	\sim
Dataset [,]	Microsoft Excel	
Dataset	OGC GML (Geography Markup Language)	
Paramet	Esri Shapefile	
	OGC / Google KML	(*
Workflow	Esri Geodatabase (File Geodb)	
	Autodesk AutoCAD DWG/DXF	C
Indivi	Autodesk AutoCAD DWF	
	ASPRS Lidar Data Exchange Format (LAS)	
Help	Autodesk AutoCAD Civil 3D	
	Bentley MicroStation Design (V8)	L.je
	PostGIS	0000

Busque en la librería de formatos, Excel y selecciones Microsoft Excel s.

Description	Short Name	Extensions	Туре	Coord. Sys.	License
/licrosoft Excel	XLSXR	.xlsb,.xls,.xlsm,.xlsx,*	File		•
/excel Multi-File Format (M	GDAL_MFF	.hdr,*	Folder	•	•
/excel Multi-File Format (M	GDAL_MFF2	*	File	•	•

Busque el contenido dentro de la siguiente ruta: C:\EsriTraining\Módulo 1 t.

		5		
Organizar 🔻	Nueva carpeta			= 🕶 🔟 🔇
oneDrive - Es	sri NOSA	Nombre	Fecha de modificació	n Tipo
F ata anning		📒 Interoperabilidad con ArcGIS	22/08/2023 9:46 a.m.	Carpeta de archi
S Este equipo		📕 SHP	22/08/2023 9:48 a.m.	Carpeta de archi
Descargas		AndenT	21/08/2023 11:53 p. m	n. Hoja de cálculo
and Documento	/S			
🗾 Escritorio				
👼 Imágenes				
🌛 Música				
🗊 Objetos 3D				
📕 Vídeos				
Vídeos 🐛 OS (C:)				
Vídeos				
Vídeos 🐌 OS (C:)	~	<		
Vídeos Uídeos Uí	v Nombre: AndenT	<	 Excel Files (*. 	.xlsx *.xlsm *.xls), A ~



u. Selecciones el archivo AndenT de clic en OK:

🔁 Add Reader	×
Reader	
Format: Microsoft Excel	~
Dataset: "C:\EsriTraining\Módulo 1\Ar	ndenT.xlsx"
Parameters Coord. System:	Unknown
Workflow Options	
Individual Feature Types	○ Single Merged Feature Type ■→
Help 🔻	OK Cancel

v. Observe como se visualiza los dos elementos de lectura:



Paso 2: Agregando transformadores

a. Seleccione la opción de Transformer (transformador):



 Busque dentro de la galería de transformadores Feature Merger y de doble clic sobre el:



FeatureMerger	٩.
FME Transformers	Searching transformer names
FeatureMerger	Merges the attributes and/or geometry of one set of features onto another set of features, based on matching
Custom Transfomers	key attribute values and expressions.
FME Hub Transformers	Browse Additional Help
Readers	
Writers	

c. Una vez lo seleccione, observe como se agrega a su espacio de trabajo:

Andrew Mark	▶
AndenZE SQ3	FeatureMerger 🔅
	Requestor
	Supplier
	Nerged
Andeni	● UnmergedRequestor >
	● UsedSupplier
	🕨 UnusedSupplier
	(▶ <rejected> ></rejected>

d. Realice una conexión de los dos primeros **reader** al **feature merger**, para esto conecte *AndenZE* a *requestor* y *AndenT* al *supplier*, como se muestra en la siguiente imagen:



e. Observe como el engranaje del **FeatureMerger** aparece en color rojo, esto significa que no esta configurado:





INSTITUTO DE DESARROLLO URBANO

BOGOT

f. De clic sobre el para ver las propiedades, en este caso se debe conectar los identificadores que permiten realizar la unión de los reader, el campo en común en este caso es ANDCODIGO

Transformer Name:	FeatureMerger		
Group Processing			
ransformer Mode			
Suppliers First:	No		~
oin On			
Requestor	Supplier	Comparison Mode	
ANDCODIGO	ANDCODIGO	Automatic	
+ - X & C			
+ - X 1 0 Merge Parameters Feature Merge Type:	Attributes Only		~
+ - X B D Arge Parameters Feature Merge Type: Reject Null and Missing Keys:	Attributes Only No		~
+ − X B D Merge Parameters Feature Merge Type: Reject Null and Missing Keys:	Attributes Only No		~ ·
+ − X B D Merge Parameters Feature Merge Type: Reject Null and Missing Keys: Process Duplicate Suppliers Attribute Accumulation	Attributes Only No		~ •
+ − X ⊡ ⊡ Merge Parameters Feature Merge Type: Reject Null and Missing Keys: □ Process Duplicate Suppliers Attribute Accumulation □ Generate List	Attributes Only No		~ ·
+ - X E D Merge Parameters Feature Merge Type: Reject Null and Missing Keys: → Process Duplicate Suppliers → Attribute Accumulation → Generate List Advanced	Attributes Only No		> [

g. Una vez configurado el FeatureMerger no tendrá el engranaje en color rojo:

Andrew 75 State	▶
AndenZE SUR	(FeatureMerger
	Requestor
	Supplier
AndenT 201	(▶ Merged
Andern	(▶ UnmergedRequestor)
	(▶ UsedSupplier)
	(▶ UnusedSupplier)
	(▶ <rejected> →</rejected>

h. Para continuar el desarrollo del ETL Espacial, de clic sobre el Transformer(transformador):





i. Busque en la galería el Transformador de AttributeManager y de doble clic sobre el:



j. Observe como se agrega al espacio de trabajo:



k. Del transformador de FeatureMerge seleccione la salida del Merger y conéctelo al AttributeManager



I. Para realizar la inspección del proceso que ha configurado, repita los pasos de búsquedas del transformador:





m. Seleccione el transformador de **Inspector** y de doble clic sobre el:

Inspector	٩.
FME Transformers	Inspector
冒 Inspector	•
Custom Transfomers	Sends features to the FME Data Inspector for display.
FME Hub Transformers	
T DisableInspectors	Browse Additional Help
📰 InspectorBoundingBoxCreator	
Readers	
Writers	

n. Realice una conexión al transformador de AttributeManager y conéctelo al Inspector:



o. En la barra de herramientas superior de clic sobre el icono de Run:

File	Edit	View	Readers	Transformers	Writers	Run	Tools	Help				
New	Ope	n Sav	e Run	Stop Cut	Сору	D Paste	N Undo	Redo	k Select	¶ Pan	⊕ Zoom In	⊖ Zoom Out

p. Al ejecutar la opción de Run, se activará un segundo cuadro de dialogo que tendrá las rutas de los datos que se están consultando en el modelo. De clic de nuevo sobre el botón Run del cuadro de dialogo de Translation Parameter Values:



AndenZE	FeatureMerger
AndenT	Supplier ImmergedRequestor UnmergedRequestor UsedSupplier UnusedSupplier UnusedSupplier Kejected>
	R Translation Parameter Values
	User Parameters Source Geography Markup Language (GML) File(s): <u>"C:\EsriTraining\Módulo 1\anden.gml"</u>
	Save As User Parameter Default Values
	Options Presets Run Cancel

q. Al terminar se observará el resultado ejecutado y se validará la inserción de 11371 registros:

* MULTI NONE (Untitled) - Workbench 2022.2																		-	٥	×
File Edit View Readers Transformers Writers Run	n Tools	Help		-																
New Open Save Run Stop Cut Copy Paste	Undo I	Redo Select Pan Z	€ (Zoom In Zoo	⊖ om Out	100% 😑 🗌	▲ · · · · ▲ Extents M	aximize Full Screen	Reader Writer	Transformer An	notation Bool	kmark Auto-Lay	-[]- out Center	Middle	12 Publish	Republish	Downloa	đ			
Navigator & X	Main	×																		
> → Ander (0AL) > > → Ander (0AL) > > ■ Ander (0AL) > > ■ Transformer (1) > > ■ ■ Transformer (2) > > ■ ■ Transformer (2) > ■ ■ ■ Transformer (2) > ■ ■ ■ ■ Transformer (2) > ■ ■ ■ ■ ■ Transformer (2) > ■		AndenZE	<u>9</u>	11.371	FeatureMerger Suppler () Nerged () Maneged () Unmerged () UnsetSuppl () UnsetSuppl () ARgetted>	11.371 exceptor 11.371 11.371 11.371 11.372 1.13.202 1.13.202		ager ③	11.371	₽.	<u>@</u> @									^
	<																			
Transformar Gallany 🕺 🗴	< Visual Pr	eview																		7 ×
Transformer Gallery & X	< Visual Pr	eview Iisplay Control		Table							Graphics		_	_					-	5 ×
Transformer Gallery ₫ × > 雪 All (478) > > 雪 Categorized >	< Visual Pr	eview isplay Control	1(11271)	Table Inspec	tor				~	Columns	Graphics		G,	ð @	e	2 7	Q	J. Zana fa		7 X
Transformer Gallery ∅ × > ∰ Al (478) ⇒ <t< td=""><td><</td><td>eview lisplay Control 3 View (11371) 4 C inspector (FFS) 5 H Inspector (</td><td>Q (<u>11371</u>) (11371)</td><td>Table Inspec</td><td>tor gml_parent_id</td><td>gml_parent_property</td><td>gml_id</td><td>ANDCODIGO</td><td>∽ [gml_surfacePr</td><td>Columns</td><td>Graphics Ao ao I 2D 3D Slides</td><td>how Orbit</td><td>Gire Select F</td><td>ී ම Pan Zoom</td><td>G n In Zoon</td><td>a, n Out Z</td><td>Q, pom Selecter</td><td>Zoom Ex</td><td>tents</td><td>7 x</td></t<>	<	eview lisplay Control 3 View (11371) 4 C inspector (FFS) 5 H Inspector (Q (<u>11371</u>) (11371)	Table Inspec	tor gml_parent_id	gml_parent_property	gml_id	ANDCODIGO	∽ [gml_surfacePr	Columns	Graphics Ao ao I 2D 3D Slides	how Orbit	Gire Select F	ී ම Pan Zoom	G n In Zoon	a, n Out Z	Q, pom Selecter	Zoom Ex	tents	7 x
Transformer Gallery Ø × > ∰ Al (478) > > ∰ Categorized monocol ∰ Dindedd Transformers > > ∰ The Hub >	<	eview lisplay Control T View (11371) P Inspector (FFS) I Inspector (i (<u>11371</u>) (<u>11371</u>)	Table Inspec	tor gml_parent_id <missing></missing>	gml_parent_property featureMember	gml_id id9e076c38-94f	ANDCODIGO 43964	yml_surfacePr gml_surfacePr 4 <missing></missing>	Columns	Graphics	how Orbit	Ge Select F	ð Q Pan Zoom	e n In Zoon	n Out Z	Q, pom Selecter	Zoom Ex	tents	5 X >>
Tarsformer Gallery Ø × > 雪 Al (178) > 雪 Categorized - 雪 Dinbedded Tandomers > 雪 Recent (10) > 雪 Recent (10) > 0	< Visual Pr	eview Isplay Control T View (11371) P Inspector (FFS) Inspector (i (<u>11371)</u> (<u>11371</u>)	Table Inspec 1 2	tor gml_parent_id <missing> <missing></missing></missing>	gml_parent_property featureMember featureMember	gml_id id9#076c38-94f idb90d4e3c-64	ANDCODIGO 43964 37395	V gml_surfacePr 4 <missing> 5 <missing></missing></missing>	Columns	Graphics	how Orbit	Ge F	ð Q Pan Zoon	e nin Zoon	n Out z	Q, oom Selecter	Zoom Ex	tents	5 X
Targetomer Gallery Ø × 7 starter (47) > 27 starter (47) > 27 starter (47) > 27 starter (47) > 27 starter (47) > 27 starter (47) > 27 starter (47) > 27 starter (47) 27 starter (47) > 27 starter (47) 27 starter (47) > 27 starter (47)	< Visual Pr X C C C C C C C C C C C C C C C C C C	eview lispley Control 3 T View (11371) 2 T Inspector (FFS 2 T Inspector (9 (<u>11371)</u> (<u>11371</u>)	Table Inspec 1 2 3	tor gml_parent_id <missing> <missing> <missing></missing></missing></missing>	gml_parent_property festureMember festureMember festureMember	gml_id id9a076c38-94f idb90d4e3c-64 id8220a024-7a	ANDCODIGO 43964 37395 40365	gml_surfacePr cmissing> s <missing> emissing> emissing> emissing></missing>	Columns	Graphics	how Orbit	Select	ð Q Þan Zoom	G n In Zoon	n Out Z	Q pom Selecte	d Zoom Ex	tents	5 ×
Transformer Gallery ♂ × 2 雪 Al (470) 3 雪 Categorized 雪 Entredistal Transformers 3 雪 Recret (10) Q. Search Results	< Visual Pr B C C C C C C C C C C C C C C C C C C	eview tisplay Control 3 Uiew (11371) View (11371) inspector (Inspector (9 (11371) (11371)	Table Inspec 1 2 3 4	tor gml_parent_id <missing> <missing> <missing> <missing></missing></missing></missing></missing>	gml_parent_property featureMember featureMember featureMember featureMember	gml_id id9a076c38-94f idb90d4e3c-64 id8220a024-7a ide4792cd5-00	ANDCODIGO 43964 37395 40369 42545	surfacePr gml_surfacePr gml_surfacePr 4 <missing> 5 <missing> 9 <missing> 5 <missing></missing></missing></missing></missing>	Columns	Graphics	how Orbit	Select	ð Q Pan Zoom	e nin Zoon	n Out z	oom Selecter	Zoom Ex	tents	7 X
2	< Visual Pr Bit C C C C C C C C C C C C C C C C C C C	eview isplay Control T View (11371) View (11371) S H Inspector (FFS, S H Inspector (9 (<u>11371</u>) (<u>11371</u>)	Table Inspec 1 2 3 4 5	or gml_parent_id <missing> <missing> <missing> <missing></missing></missing></missing></missing>	gml_parent_property featureMember featureMember featureMember featureMember featureMember	gml_id id9a076c38-94f idb90d4e3c-64 id82209024-7a ide4792cd5-00 id58ed705e-196	ANDCODIGO 43964 37395 40369 42545 38570	gml_surfacePr cmissing>	Columns	Graphics	how Orbit	Select	e Q	e nin Zoon	a n Out z	oom Selecte	Zoom Ex	tents	5 x
Transformer Gallery Ø X 2 St At (476) 3 St Careported 3 St At product and the bodded framformers 2 St At At the bodded framformers 2 St At At the bodded framformers 2 St At the bodded framformers 2 St At the bodded framformers 2 St At the bodded framformers	< Visual Pr X C E E E E E E E E	eview isplay Control 3 Uview (11327) C inspector (FFS 5 I linspector (9 (<u>11371</u>) (<u>11371</u>)	Table Inspec 1 2 3 4 5 6	tor gml_parent_id <missing> <missing> <missing> <missing> <missing> <missing></missing></missing></missing></missing></missing></missing>	gml_parent_property featureMember featureMember featureMember featureMember featureMember featureMember	gml_id id9a076c38-94f idb90d4e3c-64 ide3220a024-7a ide4792cd5-00 id58ed705c-F96 idf009213c-19c	ANDCODIGO 43964 37395 40365 42545 38570 517942	gml_surfacePr cmissing> s <missing> s <missing> cmissing> s <missing> s <missing> s <missing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing></missing></missing></missing></missing></missing>	Columns	Graphics Ao to III 2D 3D Slides	how Orbit	Select	ð Q	e nin Zoon	a Out z	Q com Selecte	d Zoom Ex	tents	5 X
	< Visual Pr Jiii C III II IIII III III III	tview isplay Control 3	(11371) (11371)	Table Inspec 1 2 3 4 5 6 7	tor gml_parent_id <missing> <missing> <missing> <missing> <missing> <missing> <missing></missing></missing></missing></missing></missing></missing></missing>	gml_parent_property featureMember featureMember featureMember featureMember featureMember featureMember	gml_id id9076638-94f idb900463c-64 id6220024-7a id64792cd5-00 id64792cd5-00 id6929170s-196 id607213-19c id672baf98-290 id672baf98-290	ANDCODIGO 43964 37395 40365 42545 38570 517942 518166	v gml_surfacePr 4 <missing> 5 <missing> 9 <missing> 2 <missing> 2 <missing> 2 <missing> 3 <missing> 3 <missing> 4 <missing> 5 <missing> 5 <missing> 5 <missing> 5 <missing> 5 <missing> 6 <missing> 6 <missing> 6 <missing> 7 <missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing>	Columns	Graphics Apo the CE 2D 3D Slides	how Orbit	Select	en Zoon	e nin Zoon	a Out Z	oom Selecte	Zoom Ex	tents	5 X
Transformer Gallery Ø x 3 aff 44(8) 3 3 aff 64(8) 3 3 aff 64(8) 3 3 aff 64(8) 3 3 aff 64(8) 3 9 aff 64(8) 3 9 aff 64(8) 3 9 aff 64(8) 3	< Visual Pr Zi D C C C C C C C C C C C C C C C C C C	eview Isplay Control 3 ① View (11321) 7 ② ① Inspector (FFS 3 ① Inspector (9(<u>11371</u>) (<u>11371</u>)	Table Inspec 3 4 5 6 7 8	tor gml.parent_id <missing> <missing> <missing> <missing> <missing> <missing> <missing></missing></missing></missing></missing></missing></missing></missing>	gml_parent_property featureMember featureMember featureMember featureMember featureMember featureMember featureMember	gml_id id9x076c38-94f idb00de3c-64 id8220x024-7e id64792cd5-00 id58x4705e-196 idf072ba796-290 id2312243b-7d id2312243b-7d	ANDCODIGO 43964 37395 40365 42345 38570 517942 518166 43800	v (gml_surfacePr < <missing> 5 <missing> 9 <missing> 5 <missing> 2 <missing> 2 <missing> 5 <missing> 5 <missing> 5 <missing></missing></missing></missing></missing></missing></missing></missing></missing></missing>	Columns	Graphics Apo & E 2D 3D Slides	how Orbit	Select	en Zoon	e nin Zoom	a Dut z	oom Selecte	Zoom Ex	tents	5 ×
2 g Al (47a) 3 g Al (47a) 3 g Categorized generated Transformers generated Transformers 3 g Pictre (10) Q. Search Results	< Visual Pr Zi C C C C C C C C C C C C C C C C C C C	eview isplay Control 2 User (1321) 2 View (1321) 2 Impector (IFS 5 Impector (J (<u>11371</u>) (<u>11371</u>)	Table Inspec 1 2 3 4 5 6 7 8 9	tor gmLparent_id <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <mi< td=""><td>gni parent, property featureMember featureMember featureMember featureMember featureMember featureMember featureMember</td><td>gml_id id94076c38-94f id95076c38-94f id8209024-7a id878c27502-960 id709213c-19c id709213c-19c id709213c-19c id23122438-7d id47ccc486-005</td><td>ANDCODIGO 43964 33739 40369 42345 38570 517942 518166 43800 43800</td><td>gml_surfacePri smising> smising</td><td>Columns</td><td>Graphics Ao D ID Slides</td><td>how Orbit</td><td>Select</td><td>e e e e e e e e e e e e e e e e e e e</td><td>en In Zoom</td><td>n Out Z</td><td>Q poor Selecte</td><td>Zoom Er</td><td>tents</td><td>»</td></mi<></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing>	gni parent, property featureMember featureMember featureMember featureMember featureMember featureMember featureMember	gml_id id94076c38-94f id95076c38-94f id8209024-7a id878c27502-960 id709213c-19c id709213c-19c id709213c-19c id23122438-7d id47ccc486-005	ANDCODIGO 43964 33739 40369 42345 38570 517942 518166 43800 43800	gml_surfacePri smising> smising	Columns	Graphics Ao D ID Slides	how Orbit	Select	e e e e e e e e e e e e e e e e e e e	en In Zoom	n Out Z	Q poor Selecte	Zoom Er	tents	»
Transformer Gallery	<	eview Isoplay Control	J (<u>11371</u>) (<u>11371</u>)	Table Inspec 1 2 3 4 5 6 7 8 9 10	tor gml_parent_id <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <m< td=""><td>gml.parent_property Gml.parent_property FeatureMember FeatureMember FeatureMember FeatureMember FeatureMember FeatureMember FeatureMember</td><td>gml_id ds9076c38-94f ds9094432-64 id82208024-7a id64792cd5-00 id6972ba986-705-196 id6072ba986-296 id672ba986-296 id672ba986-296 id47ccc486-005 id5944962-c880</td><td>ANDCODIGO 43964 37395 40365 42545 38570 517942 518166 43800 40813 36705</td><td>gml_surfacePr d <missing> sinsing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> s <missing> s <missing <missing="" s=""> s <missing <missing="" <missing<="" s="" td=""><td>Colums</td><td>Graphics 20 SP C 20 JD Slider</td><td>how orbit</td><td>Select</td><td>e e e e e e e e e e e e e e e e e e e</td><td>e n in Zoon</td><td>n Out z</td><td>Q pom Selecte</td><td>Zoom Er</td><td>tents</td><td>5 × 30</td></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></td></m<></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing>	gml.parent_property Gml.parent_property FeatureMember FeatureMember FeatureMember FeatureMember FeatureMember FeatureMember FeatureMember	gml_id ds9076c38-94f ds9094432-64 id82208024-7a id64792cd5-00 id6972ba986-705-196 id6072ba986-296 id672ba986-296 id672ba986-296 id47ccc486-005 id5944962-c880	ANDCODIGO 43964 37395 40365 42545 38570 517942 518166 43800 40813 36705	gml_surfacePr d <missing> sinsing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> s <missing> s <missing <missing="" s=""> s <missing <missing="" <missing<="" s="" td=""><td>Colums</td><td>Graphics 20 SP C 20 JD Slider</td><td>how orbit</td><td>Select</td><td>e e e e e e e e e e e e e e e e e e e</td><td>e n in Zoon</td><td>n Out z</td><td>Q pom Selecte</td><td>Zoom Er</td><td>tents</td><td>5 × 30</td></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing>	Colums	Graphics 20 SP C 20 JD Slider	how orbit	Select	e e e e e e e e e e e e e e e e e e e	e n in Zoon	n Out z	Q pom Selecte	Zoom Er	tents	5 × 30
Image Ø X 2 ∰ Al (470)	<	eview isplay Control 3	3(<u>11371</u>) (<u>11371</u>)	Table Inspec 1 2 3 4 5 6 7 8 9 10 11	tor gml.parent.id <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing> <missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing></missing>	gnil parent, property featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember	gml_id id9x076c38-94f id9x076c38-94f id90034e3c-64 id9002432c-04 id900213c-196 id900213c-196 id900213c-196 id900213c-196 id912438-7d id9241248-7d id947cc486-005 id949Pe2c-860 id9641090-de	ANDCODIGO 43964 37395 40365 42545 38570 517942 518166 43806 43806 43806 43806 438100 43810 43810	missing>	Columns	Graphics Apo P E C 20 3D Slides	how orbit	Select F	e Q	e n in Zoon	a Dut z	com Selecter	Zoom Ex	tents	5 X
Transformer Gallery	< Visual Pr B C C C C C C C C C C C C C C C C C C	nview isplay Control 1 □ View (1327) 2 □ □ view (1327	1 (<u>11371</u>) (<u>11371</u>)	Table Inspec 1 2 3 4 5 6 7 8 9 10 11 11 12	tor gni parent, id <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <mising> <misi< td=""><td>gnl.parent_property featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember</td><td>gml_id d9a076c38-944 d95076c38-944 d8220024-7a d64792cd5-00 d8584705e+06 d809212-19c d672baf98-29b d872cc486-003 d872cc486-003 d854f982c-880 d594f982c-880</td><td>ANDCODIGO 43964 37395 40365 42545 38570 517942 518166 43800 43800 43805 36692 36692</td><td>gml_surface?r gml_surface?r 4 cmissing> 5 cmissing> 9 cmissing> 1 cmissing> 2 cmissing> 2 cmissing> 3 cmissing> 4 cmissing> 5 cmissing> 6 cmissing> 8 cmissing> 9 cmissing> 2 cmissing> 2 cmissing> 2 cmissing></td><td>Columns</td><td>Graphics Ao to Construction 20 3D Sider</td><td>how orbit</td><td>Select F</td><td>e a en zoon</td><td></td><td>a Dut z</td><td>Q com Selecte</td><td>Zoom Er</td><td>tents</td><td>5 × 30</td></misi<></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising></mising>	gnl.parent_property featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember	gml_id d9a076c38-944 d95076c38-944 d8220024-7a d64792cd5-00 d8584705e+06 d809212-19c d672baf98-29b d872cc486-003 d872cc486-003 d854f982c-880 d594f982c-880	ANDCODIGO 43964 37395 40365 42545 38570 517942 518166 43800 43800 43805 36692 36692	gml_surface?r gml_surface?r 4 cmissing> 5 cmissing> 9 cmissing> 1 cmissing> 2 cmissing> 2 cmissing> 3 cmissing> 4 cmissing> 5 cmissing> 6 cmissing> 8 cmissing> 9 cmissing> 2 cmissing> 2 cmissing> 2 cmissing>	Columns	Graphics Ao to Construction 20 3D Sider	how orbit	Select F	e a en zoon		a Dut z	Q com Selecte	Zoom Er	tents	5 × 30
Image Image <t< td=""><td>< Visual Pr B C C C C C C C C C C C C C C C C C C</td><td>eview isplay Control 3 (III Vew (1327)) 4 (IIII Control (IPS) 5 (IIIII Control (IPS) 5 (IIIII Control (IPS) 5 (IIIII Control (IIIII)) 5 (IIIII) Control (IIIII) 5 (IIII) Control (IIIII) 5 (IIIII) Control (IIIII) 5 (IIIII) Control (IIIII) 5 (IIII) Control (IIIII) 5 (IIIII) Control (IIII) 5 (IIIII) Control (IIIII) 5 (IIIII) Control (IIII) 5 (IIIII) Control (IIII) 5 (IIIII) Control (IIII) 5 (IIII) Contr</td><td>J(11321) (11321)</td><td>Table Inspec 1 2 3 4 5 6 7 8 9 10 11 12 13</td><td>tor gm[parent_id cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing></td><td>gni parent, property featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember</td><td>gml_id dr9076c38-944_ dr9076c38-944_ dr902443c46_ dr972024750_ dr9720478-796_ dr9720478-796_ dr9720478-796_ dr9720478-796_ dr9720478-796_ dr9720478-796_ dr9720478-796_ dr9720478-796_ dr9810096-46_ dr9720096-65_ dr9720096-65_ dr9720472-664_</td><td>ANDCODIGO 43964 37939 40366 42543 518166 40385 518166 40810 36705 41388 36692 386692 386692</td><td>gml_surfacePr gml_surfacePr 4 rmissing> 5 6 7 8 9 <td>Columns</td><td>Graphics Âo 🍄 🗵 20 30 Sider</td><td>how orbit</td><td>Select</td><td>en Zoom</td><td></td><td>a Out z</td><td>Q com Selecte</td><td>Zoom Er</td><td>tents</td><td>»</td></td></t<>	< Visual Pr B C C C C C C C C C C C C C C C C C C	eview isplay Control 3 (III Vew (1327)) 4 (IIII Control (IPS) 5 (IIIII Control (IPS) 5 (IIIII Control (IPS) 5 (IIIII Control (IIIII)) 5 (IIIII) Control (IIIII) 5 (IIII) Control (IIIII) 5 (IIIII) Control (IIIII) 5 (IIIII) Control (IIIII) 5 (IIII) Control (IIIII) 5 (IIIII) Control (IIII) 5 (IIIII) Control (IIIII) 5 (IIIII) Control (IIII) 5 (IIIII) Control (IIII) 5 (IIIII) Control (IIII) 5 (IIII) Contr	J(11321) (11321)	Table Inspec 1 2 3 4 5 6 7 8 9 10 11 12 13	tor gm[parent_id cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing> cmissing>	gni parent, property featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember	gml_id dr9076c38-944_ dr9076c38-944_ dr902443c46_ dr972024750_ dr9720478-796_ dr9720478-796_ dr9720478-796_ dr9720478-796_ dr9720478-796_ dr9720478-796_ dr9720478-796_ dr9720478-796_ dr9810096-46_ dr9720096-65_ dr9720096-65_ dr9720472-664_	ANDCODIGO 43964 37939 40366 42543 518166 40385 518166 40810 36705 41388 36692 386692 386692	gml_surfacePr gml_surfacePr 4 rmissing> 5 6 7 8 9 <td>Columns</td> <td>Graphics Âo 🍄 🗵 20 30 Sider</td> <td>how orbit</td> <td>Select</td> <td>en Zoom</td> <td></td> <td>a Out z</td> <td>Q com Selecte</td> <td>Zoom Er</td> <td>tents</td> <td>»</td>	Columns	Graphics Âo 🍄 🗵 20 30 Sider	how orbit	Select	en Zoom		a Out z	Q com Selecte	Zoom Er	tents	»
Image: Second	< Visual Pr Bi C C C C C C C C C C C C C C C C C C	eview isplay Control □ Vew (1322) ○ event (1322) ○ impector (FS ○ the protoc (FS) ○	J(11371) (11371)	Table Inspec 3 4 5 6 6 7 8 9 10 11 12 13 * 4	or galparen,id emising> emising emisin	gnl_parent_property featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember featureMember	978.14 1496/076c38-94f 1496/076c38-94f 1482200247 1482200247 1458647054-96 1458647054-96 149702488-76 149702488-76 149702488-76 149702487-964 14980497-964 14980497-964 14980497-964 14980497-964	ANDCODIGO 43964 37395 40565 42545 513164 43800 40513 513164 43800 40513 43800 41385 38000 41385 38000 41385 38000 41385 43800 41385 43800 41385 43800 41385 43800 41385 43800 41385 43800 41385 43800 43000 40000 40000 400000000	missing>	Columns.	Graphics Âo 🍄 🖾 20 30 Sider	how Orbit	Select	en Zoon		a Out z		Zoom Ex	tents	5 × 30
Transformer Gallery	<	instew Ingelay Control	J(11371) (11371)	Table Inspec 1 2 3 4 5 6 7 8 9 10 11 12 13 4 Q	tor gini parent, id emising> emising> emising> emising> emising> emising> emising> emising> emising> emising> emising> emising> emising> emising>	gnt_parent_property featureMomber featureMomber featureMomber featureMomber featureMomber featureMomber featureMomber featureMomber featureMomber featureMomber featureMomber featureMomber featureMomber featureMomber	gml_id ir9x076:38-94/. ds90443-c-64. ds90443-c-64. ds9229024-7a ds9247024-90 ds9247024-90 ds924706-290 ds9212243b-7d. ds427cc486-003 ds947062-c-80 ds947062-c-80 ds947062-c-80 ds947062-c-80 ds947060-b2 ds966877-094 ir5x0470a.c-6.	ANDCODIGO 43964 37393 40565 42543 38370 517942 517942 517942 43800 4001 313 36703 4013 316692 383666 383666 383666 383666 383666 383666 3836666 3836666 3836666 3836666 3836666 3836666 38366666 38366666666	missing>	Columns	Graphics Ao SP (2) 20 3D Sides	how orbit	Select F	en Zoon		a Out Z		Zoom Ex	tents	5 ×

r. De clic sobre el transformador de Inspector y con ayuda del botón suprimir de teclado elimine el transformador:



Paso 3: Agregar los elementos de carga

a. De clic sobre el botón de writer(escritura) para agregar la carga de información:



b. De clic sobre el format(formato) y expanda las opciones disponibles:

写 Add Writer					×
Writer					
Format:					\sim
Dataset: Type a name	for dataset			🗧	
Parameters	Coord. System:	Same as	source		
Add Feature Type(s)					
Feature Type Definition	n:				\sim
Help			OK	C	ancel

c. En la galería de formatos disponibles busque la opción de Esri Geodatabase (File Geodb):

🕤 Writer Gallery					3
Description	Short Name	Extensions	Туре	Coord. Sys.	Licensed
Esri Geodatabase (ArcSDE Geodb Mosaic	GEODATABASE_SDE_MOSAIC_DATASET		None	•	•
Esri Geodatabase (ArcSDE Geodb Raster	GEODATABASE_SDE_RASTER_DATASET		None	•	•
Esri Geodatabase (ArcSDE Geodb)	GEODATABASE_SDE		None	•	•
Esri Geodatabase (File Geodb Mosaic Dat	GEODATABASE_FILE_MOSAIC_DATASET	.gdb	Geodatabase	•	•
Esri Geodatabase (File Geodb Open API)	FILEGDB	.gdb	Geodatabase	•	•
Esri Geodatabase (File Geodb Raster Dat	GEODATABASE_FILE_RASTER_DATASET	.gdb	Geodatabase	•	•
Esri Geodatabase (File Geodb)	GEODATABASE_FILE	.gdb	Geodatabase		
Search	Custom Formats				
Esri Geodatabase	New	Import Edit Delete	OK	Cancel	Details

d. Para la opción del dataset, ingrese a la ruta donde se ha generado su proyecto de ArcGIS Pro y seleccione la File Geodatabase que se genera por defecto:



Select 'Geodatabase'			×
Look in:	📙 C:\EsriTrai con ArcGIS 🗸 🤇	0	
S My Computer	Name .backups GpMessages ImportLog Index Interoperabilidad con ArcGIS.gdb	Size	Type Filelder Filelder Filelder Filelder
	<		>
Geodatabase (.gdb) Folder: Files of type:	File Geodatabase Folders (*.gdb)	~	Open Cancel

e. En la opción de *Feature Class or Table Definition* deje por defecto **Copy from Reader**. De clic sobre el botón de OK:

📲 Add Writer	×
Writer	
Format: Esri Geodatabase (File Geodb)	~
Dataset: d con ArcGIS\Interoperabilidad con ArcGIS.gdb*	-
Parameters Coord. System: Same as source	
Add Feature Type(s)	
Feature Class or Table Definition: Copy from Reader	~
Help 🔻	Cancel

f. Al copiar el esquema del elemento de entrada, seleccione la capa de AndenZE, esto con el fin de que tome los atributos del archivo de GML que utilizo como reader en pasos anteriores:

😤 Select Feature Type	×
AndenT [AndenT [XLSXR]] AndenZE [anden [GML]]	
Q Filter	Select all Sorted
	OK Cancel



g. Agregue la conexión del transformador de AtttributeManager a la capa de writer de AndenZE

▲ AndenZE ②	FeatureMerger	
165.173 €	Requestor Supplier Image: Instruction of the second secon	AndenZE gml_parent_id gml_parent_id gml_d ANDCODIGO gml_surroperty gml_mulroperty

h. Observe el engranaje de color de rojo, indicando la configuración del writer



i. De clic sobre el engranaje, en los parámetros seleccione la **Geometry(Geometría)** y escoja la opción de **geodb_polygon**

😤 Feature Type		×
Parameters User Attribut	es 🌵 Format Attributes	
General		
Feature Class or Table Name	AndenZE	~
Writer	Interoperabilidad con ArcGIS [GEODATABASE_FILE]	~ ()
Geometry	aeodb polyaon	v
Dynamic Schema Definition	3.000-boy 2011	
Table		^
General		
Feature Operation:	Insert	~ -
Table Handling:	Create If Needed	~ 🔻
Update Spatial Column(s):		~ -
Row Selection		
 Table Creation 		
Feature Dataset:		•
Contains Z Values:		~ –
Contains Measures:		~ –
Origin and Scale		
Annotation		
N A.J		¥
Help Apply to 		OK Cancel

j. De clic sobre la cinta de **User Attributes**, elimine los atributos que ha insertado y deje solamente el atributo de **ANCODIGO**



Name	Туре	Width	Precision	Value
gml_parent_id	char	2048		_
gml_parent_property	char	2048		
▶ gml_id	char	2048		_
ANDCODIGO	integer			_
gml_surfaceProperty	char	2048		_
gml_multiSurfaceProperty	char	2048		
>				

k. La visualización de Feature Type en la configuración de atributos, se debe ver como la siguiente imagen:

○ Automatic ● Manual ○ Dynamic	:			
Name	Туре	Width	Precision	Value
ANDCODIGO	integer			
Þ				

- I. Agregue tres campos de tipo
 - 1. VERIFICACIÓN (char)
 - 2. ANO (char)
 - 3. RESPOSABLE (char)

Después de agregar los nuevos atributos de clic en OK:



	+ Tomac Attributes				
Attribute Definition					
O Automatic III Mianual O Dyna	mic				
Name	Туре	Width	Precision	Value	
ANDCODIGO	integer				
VERIFICACION	char	20			
▶ ANO	char	20			
RESPONSABLE	char	20			
⊳					
⊳					
Þ					
⊳					
⊳					
⊳					

m. Visualice el modelo ETL espacial con los elementos de lectura , transformación y carga:

AndenZE	11.371 FeatureMerger		
AndenT OID_ ANDCODIGO ANDCIV ANDMATERIA POR VERIFICAR ANO RESPONSABLE	165.173 ▶ Merged 11.371 - ▶ UnmergedRequestor ▶ UsedSupplier 2 11.371 ▶ UnusedSupplier 153.802 ▶ <rejected></rejected>	AttributeManager Output gml_parent_id gml_parent_id ml_parent_id gml_parent_id ml_pa	ANDCODIGO

n. Conecte el atributo de POR *VERIFICAR* del transformador de **AttributeManager** al campo de *VERIFICACION* de la capa de salida de *AndenZE:*



o. De clic sobre el botón de Run:



p. Se activará un segundo cuadro de dialogo donde se confirmaran las rutas de carga de datos, de clic de nuevo en el botón de Run en el panel de dialogo de Translation Parameter Values:



q. Observe como se ejecuta la herramienta, para observar los cambios realizados, regrese a ArcGIS Pro, busque la ruta del proyecto donde se encuentra la File Geodatabase:

Catalog	~ ů ×
Project Portal Computer Favorites	=
🛞 🚊 Search Project	~ م
D 👩 Maps	
Toolboxes	
Databases	
D 😥 Styles	
4 📻 Folders	
4 📷 Interoperabilidad con ArcGIS	
Interoperabilidad con ArcGIS.gdb	
AndenZE	
🖻 🚞 .backups	
GpMessages	
🖻 🚞 ImportLog	
Record State Action And State Action And Action Act	
▷ 🐖 Locators	

r. Al expandir las opciones observe la capa de **AndenZE**, visualice los registros dentro de la capa explorando el dato y el tabla de atributos:



BOGO



s. Guarde el proyecto.



Bogotá I (1) 650 1550 I Cll. 90 # 13 - 40 Esri.co Copyright © 2022 Esri Colombia. Todos los derechos reservados.

Más información:

En Colombia: entrenamiento@esri.co https://esri.co/entrenamiento/cursos/









()

2