Provisional Upload Procedure to Celonis OCDM

Due to recent changes breaking compatibility, the uploader from OCEL to Celonis OCDM is not working anymore. This document specifies a provisional upload procedure, waiting for automated support by the new APIs.

The first step is about downloading the file **splitter.py**:

https://github.com/Javert899/ocel20-celonis-connector/blob/main/splitter.py

And modifying the bottom part (just after __main__) to ingest your OCEL 1.0 / 2.0 object-centric event log using pm4py. Executing the file, a collection of CSVs is stored in the folder "target", which are the base for the next steps of the upload procedure.

For a minimal example, we loaded the OCEL 1.0 event log available at:

https://github.com/pm4py/pm4pycore/blob/release/tests/input_data/ocel/example_log.jsonocel

and filtered that on a minimal configuration of object and event types:

- Object types: order, element
- Event types: Create Order
- Relationships:
 - (Create Order, order) 1:1
 - o (Create Order, element) 1:N

Executing the script, we get the following files inside the "target" folder:

Name	Date modified	Туре	Size
CreateOrder_Element_relations.sql	11/20/2024 10:16 AM	SQL Source File	1 KB
CreateOrder_events.sql	11/20/2024 10:16 AM	SQL Source File	1 KB
Element_objects.sql	11/20/2024 10:16 AM	SQL Source File	1 KB
Order_objects.sql	11/20/2024 10:16 AM	SQL Source File	1 KB

We see the two object types stored as SQL files, the activity stored as SQL file, and the (potentially) many-to-many relationships stored in a separate "relations" SQL file.

The next steps are done inside Celonis.

First, create an empty data pool (in our case, "empty7").

Then, reach the "Objects & Events" feature

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Next

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click on "Object Types" and start the creation of an object type.

Let's start by "Order", adding the additional attributes that are associated to an "Order" in the given OCEL.

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To "inject" the actual objects, reach the "Transformations" page by clicking the corresponding button on the right of the page. Proceed to "Add transformation" and copy-paste inside the SQL instructions. Click "Save" and then "Preview".

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Then, come back to the "Object Types" page of the "Objects and Events" feature. Let's proceed to add the other object type, "Element".

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After creating the attributes, let's add the transformation in a similar way to before.

45 20% 46 SELECT 47 'i6' AS "ID", 48 NULL AS "Oatr1", 49 NULL AS "Oatr2" 50 FROM (SELECT 1) AS dummy 51 MHERE 1=1 52 UNION ALL 54 SELECT 55 SELECT 56 '17' AS "DO", 57 NULL AS "Oatr1", 58 NULL AS "Oatr1", 58 NULL AS "Oatr1", 59 FROM (SELECT 1) AS dummy 60 HERE 1=1
61 62 UNION ALL 63 64 SELECT 65 '18' AS "ID", 66 NULL AS "Oattr1", 67 NULL AS "Oattr2" 68 ESPU (SELET 1) & dummu
69 WHERE 1-1
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Now, reach the "Event Types" part. Let's add the event named "CreateOrder".

CreateOrder		Vie
Created Modified Namespace 11/20/2024 10:45 11/20/2024 10:45 custom		
Description Optional		
 Tags and categories 		
Custom Processes (0)		
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The next step is about adding the relationships to objects. Remind that this event type has 1:1 relation with Order, and 1:N relationship with Element. Use the "Relationships to objects" to add the two relationships.

Add Related Objects	
CreateOrder	
Involves one Involves many	
Object	
Crder	~
Relationship name	
Order	

CreateOrder

Add Related Objects		
CreateOrder		
O Involves one Involves many		
Object		
Element	~	
Relationship name		
Element		

+ Add another object

Then, reach the "Transformation" page and click "Add transformations".

The first transformation that you need to add is the content of the event table, which also contains the "Order" as column (so, the 1:1 relationship is defined). Copy-paste the corresponding content of the SQL file, save and preview.

	erAttributes X				
6	'o1' AS "Order"				300
7 F	FROM (SELECT 1) AS d	ummy			
8 V	WHERE 1=1				11 P
9					
10 l	UNION ALL				
11					
12 5	SELECT				
13	'e11' AS "ID",				
14	TIMESTAMP '1981-	01-01 00:00:00' AS "Time",			
15	NULL AS "Prova",				
16	NULL AS "Prova2"	,			
17	'o2' AS "Order"				
18 F	FROM (SELECT 1) AS d	ummy			
19 🖡	WHERE 1=1				
20					
21 l	UNION ALL				
22					
23 5	SELECT				
24	'e14' AS "ID",				
	TIMESTAMP '1981-	01-04 00:00:00' AS "Time",			
25					
25 26	NULL AS "Prova",				
25 26 27	NULL AS "Prova", NULL AS "Prova2"	,			
25 26 27 28	NULL AS "Prova", NULL AS "Prova2" 'o3' AS "Order"	,			
25 26 27 28 29 F	NULL AS "Prova", NULL AS "Prova2" 'o3' AS "Order" FROM (SELECT 1) AS d	ummy			
25 26 27 28 29 F 30	NULL AS "Prova", NULL AS "Prova2" '03' AS "Order" FROM (SELECT 1) AS do WHERE 1=1	ummy			
25 26 27 28 29 30 4	NULL AS "Prova", NULL AS "Prova2" '03' AS "Order" FROM (SELECT 1) AS du WHERE 1=1	, unmy	=		+ Edit attributes
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25 26 27 28 29 50 7 7 7 80 7 7 80 7 80 7 80 7 80 80 80 80 80 80 80 80 80 80 80 80 80	NULL AS "Prova", NULL AS "Prova2" '03' AS "Order" FROM (SELECT 1) AS di WHERE 1=1	, unmy	(TTENNO) Prova	(R.GAT) Prova2	+ Edit attributes 요 Pr (STRNO) Order_JD
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The second transformation that you need to add is the 1:N relationship with Element. For this click the add button near "Relationships – Element" on the top left part, and give a name to the relationship:



Then, copypaste the corresponding content of the "relationship" SQL file, save, and preview.

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1	SELECT		1177
2	'i4' AS "Element",		ALC: No.
3	'el' AS "ID"		CONT.
4	FROM (SELECT 1) AS dummy		A State
5	WHERE 1=1		838T.
6			
7	UNION ALL		_83 Z.m
8			
9	SELECT		
10	'i1' AS "Element",		
11	'e1' AS "ID"		
12	FROM (SELECT 1) AS dummy		
13	WHERE 1=1		
14			
15	UNION ALL		
16			
17	SELECT		
18	'i3' AS "Element".		
19	'e1' AS "ID"		
20	FROM (SELECT 1) AS dummy		
21	WHERE 1=1		
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The data modeling part concludes with the creation of an analysis perspective. Reach the "Perspectives" section of the "Objects and Events" feature, click "Create Perspective", and add the two object types. saddsads

Objects Event logs				A Not all objects are connected. Data permissions and filters may not apply to every object.																			
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Element custom	÷																						
Order custom	:																						
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And then, click on "Save".

Then, click "Publish" on the top right corner, and select "Publish to development and production".

Dashboar	d Objects	Events	Perspectives	Transform	ations	Development 🗸	Publish 🗸
					Publish t Publish t	to development	roduction

When this is done, reach the "Data – Data Integration" component of Celonis, click on the data pool, and execute all the transformations inside the "ocpm-data-job". This can be done by clicking the "Execute Data Job" and then "Execute Selection".

Data Pools > OCPM Data Pool										
Data Jobs ~										
Scope: Global Jobs	ocpm-data-job					Execute Data Job				
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📀 ocpm-data-job 🗄	CCDM Transformations	Info	Enabled	Last Edited By	Last Edit	ď				
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	transformation_ENTITY_OBJECT_custom_Offers	0	Yes	N/A	N/A	:				
	transformation_ENTITY_OBJECT_custom_Offers_change	0	Yes	N/A	N/A	:				
	transformation_ENTITY_OBJECT_custom_Temp2SendRejection	0	Yes	N/A	N/A	:				
	transformation_ENTITY_OBJECT_custom_Temp2SendRejection_change	0	Yes	N/A	N/A	:				
	transformation_ENTITY_OBJECT_custom_MATNRWERKS	0	Yes	N/A	N/A	:				

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When this is done, reach the "Data – Data Integration" component of Celonis, click on the data pool, reach the data models, and click on the data name starting with "perspective_":

Data Models 👻									
Name 41	Status 41	Loaded rows 4t	Created By 41	Last Edited By 41	Last Edit 41	Last Execution 41	Data Permissions 41	Multi-Event Log 41	
perspective_custom_saddsads	0		Javert899	Javert899	2024-11-20 10:54:36		Inactive	No	÷
test:perspective_custom_saddsads	0		Javert899	Javert899	2024-11-20 10:54:06		Inactive	No	÷

\leftarrow perspective_custom_saddsads

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 Data loads
 Calendar
 Name mapping
 PQL Preamble
 Object Links



At this point, trigger the load of the data model. Then, the data model is ready for usage in the "Studio" component of Celonis.