

Batch Processing - Swagger

This document describes the steps required to create the Field Templates and the Data Object Schema(s) required from a Swagger definition. The Swagger used in this tutorial is contained in the following:



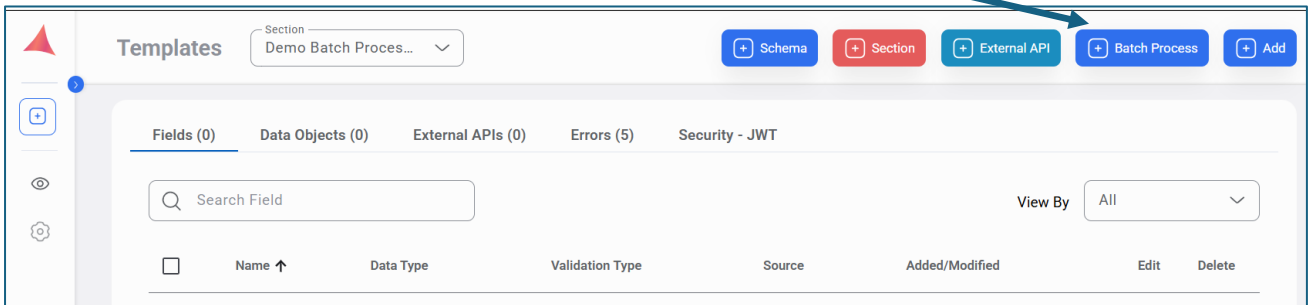
New payment.yaml

This guide assumes that an appropriate section has been created by following the guide: **02-Creating and Preparing a new Section**.

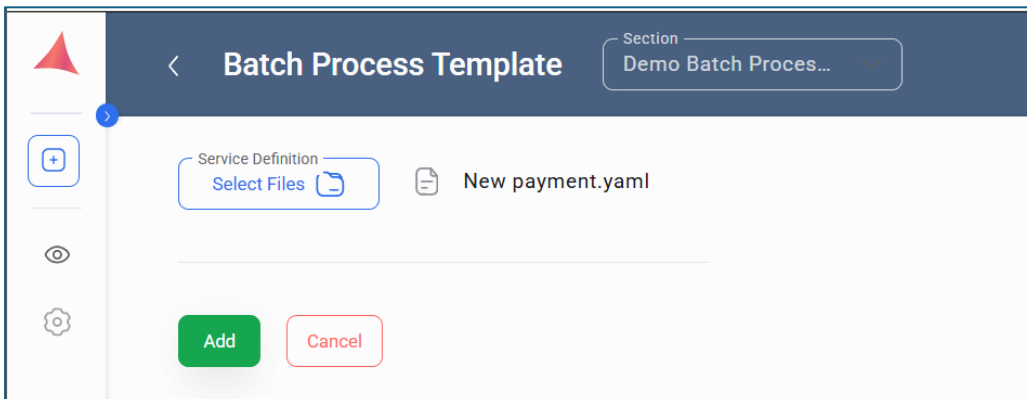
Batch Process the Swagger File

This process will create the proposed Field Templates and will offer a number of proposed Data Object schemas which must be reviewed carefully to select the Data Object Schema or Schemas that will be required to support the Business Capabilities to be created later.

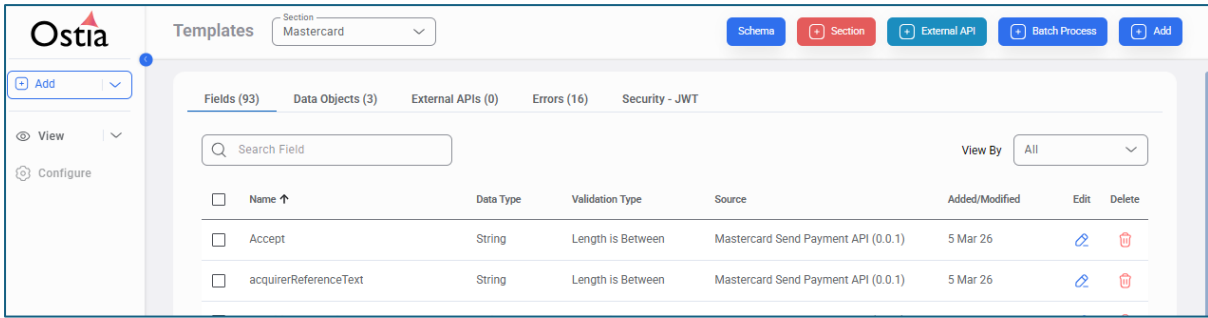
1. Go to the Templates from the main menu and select 'Batch Process' :



2. Select the Swagger file and hit the Add button:

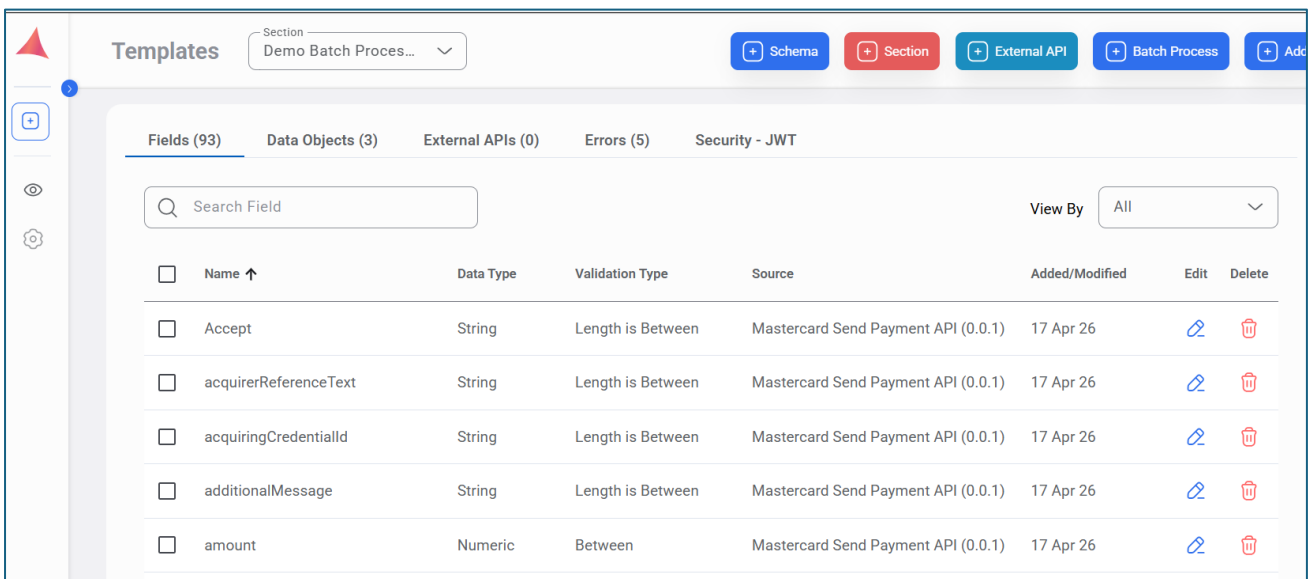


3. The result will be the list of Field Templates and proposed Data Object Schemas from the Swagger.



Review The Field Templates

The Field Templates will be created from the properties in the Swagger. The following is not the complete list:



The fields will be created with validation rules which will reflect how good (or equally how bad) the properties have been defined in the Swagger. The better the property definition, the better the Field Template validation rules will be.

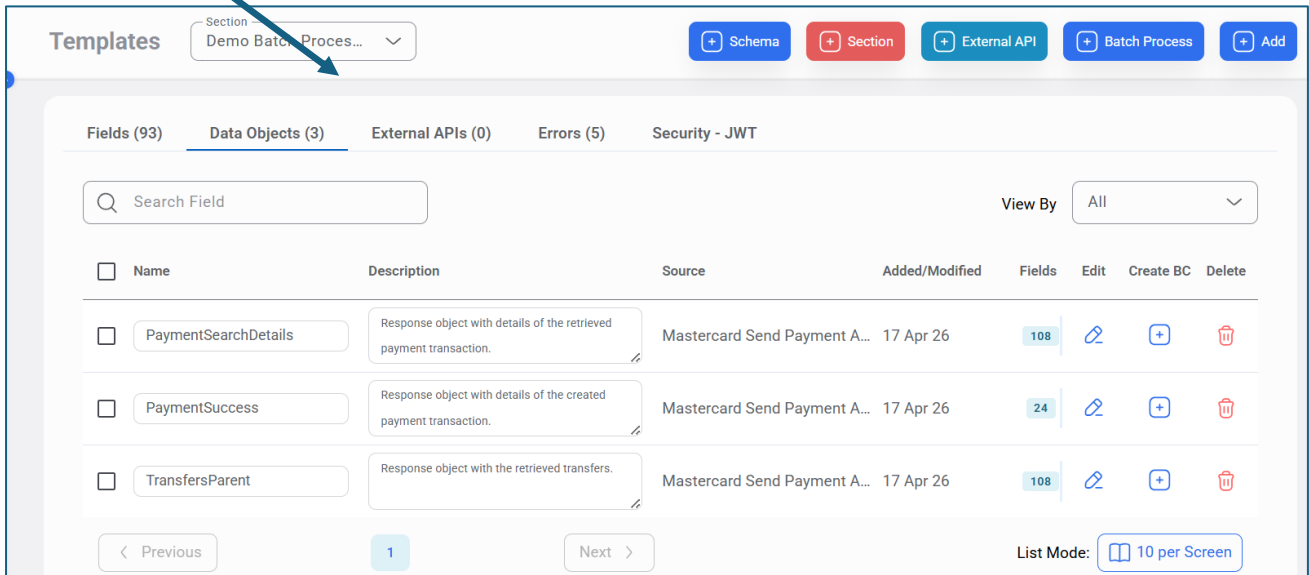
Please refer to the document on Field Template configuration for hints on how to improve these Field Templates if necessary.

Review Data Object Schemas

The Data Object Schema required to support a set of Business Capabilities from a Swagger cannot be specifically extracted from the Swagger. Therefore the system creates a number of proposed Data Object Schemas based on the various Response Bodies that are found for the Endpoints in the Swagger. These must be reviewed and potentially may have to be adjusted before use.

View the List of Proposed Data Objects

Hit the "Data Objects" tab on the Templates screen:

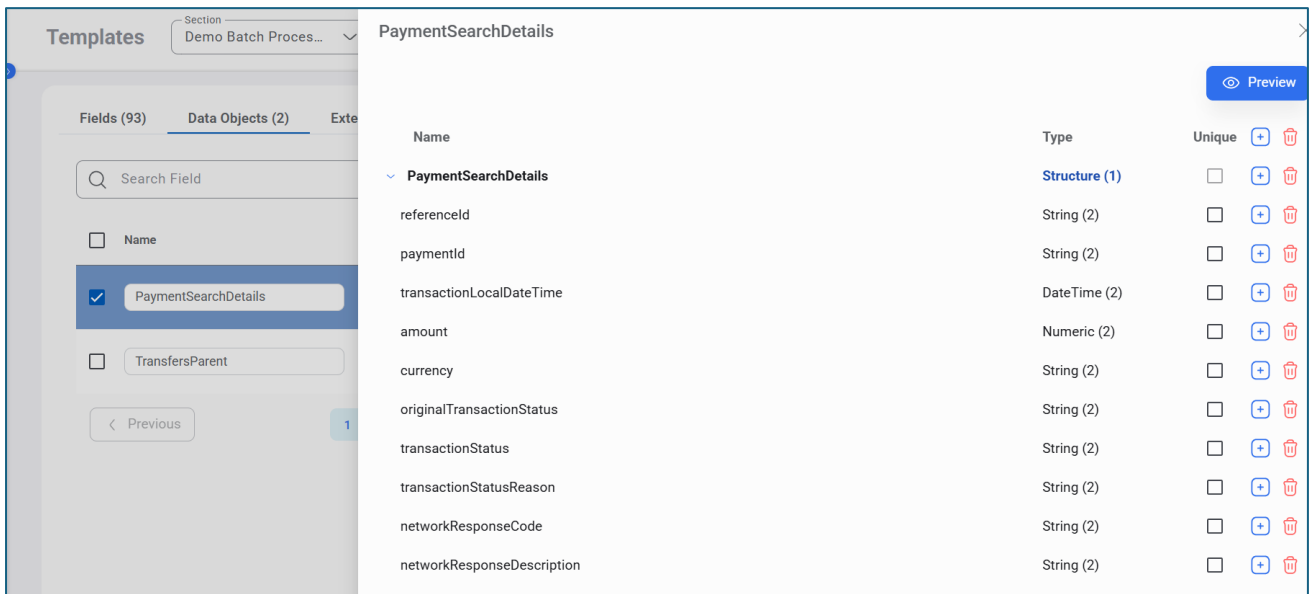


In the simplest case, it is likely that the Data Object Schemas with the lowest number of fields can be discounted as they are unlikely to maintain all the information required by the Business Capability. In this case we will delete the "PaymentSuccess" Data Object Schema.

Review and Select Best Schema

If we view the format of each Data Object Schema by editing it, we can see the following:

PaymentSearchDetails:



TransfersParent:

The screenshot shows a Swagger schema editor for a schema named 'TransfersParent'. The schema is defined as an array of objects. The root level is 'Structure (1)', which contains an array of 'transfers *' (Array (2)). Each 'transfers *' element is a 'Structure (3)' containing the following fields:

Name	Type	Unique
referenceld	String (4)	<input type="checkbox"/>
paymentId	String (4)	<input type="checkbox"/>
transactionLocalDateTime	Date (4)	<input type="checkbox"/>
amount	Decimal (4)	<input type="checkbox"/>
currency	String (4)	<input type="checkbox"/>
originalTransactionStatus	String (4)	<input type="checkbox"/>
transactionStatus	String (4)	<input type="checkbox"/>
transactionStatusReason	String (4)	<input type="checkbox"/>
networkResponseCode	String (4)	<input type="checkbox"/>

It is clear from the above that the TransfersParent is an array of data returned which is not suitable to be a Data Object Schema. For this reason we select the PaymentSearchDetails Data Object Schema and delete the unused one.

It also makes sense to rename the Data Object Schema to something more sensible like "Payments" and we end up with:

The screenshot shows the 'Templates' page in a Swagger UI editor. The 'Data Objects (1)' tab is active, showing a list of Data Objects. The table below is a representation of the content shown in the screenshot:

Name	Description	Source	Added/Modified	Fields	Edit	Create BC	Delete
<input type="checkbox"/> Payments	Response object with details of the retrieved payment transaction.	Mastercard Send Payment API (0.0.1)	17 Apr 26	108			

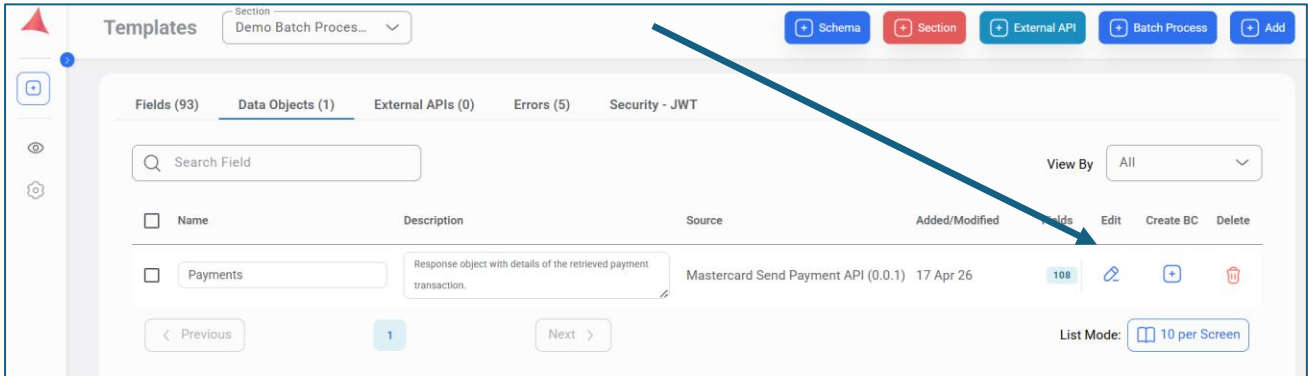
Some points to note:

1. It may be that the best candidate to be a Data Object Schema is within an Array. In this case, the Array level can be deleted so that the Data Object Schema starts with a Structure containing fields. It can also contain sub structures and arrays within it.
2. If the Swagger contains multiple Digital Capabilities that require multiple Data Object Schemas, it will be necessary to select the appropriate Data Object Schema for each functionality.

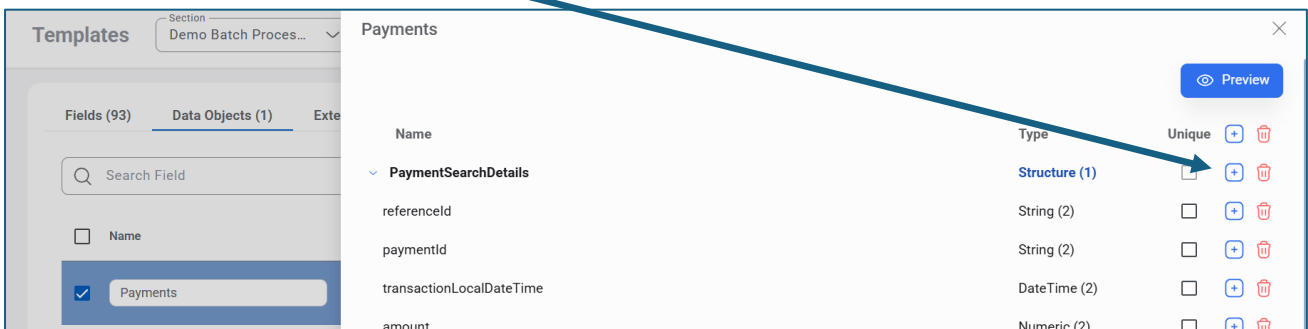
Review and Update the Data Object as Required

For our particular usage, we will require that a Partner Id is included in the Data Object Schema. This will never be part of a Request or Response Body but is supplied as a Header or a Parameter. This can be done by adding this field to the schema as follows:

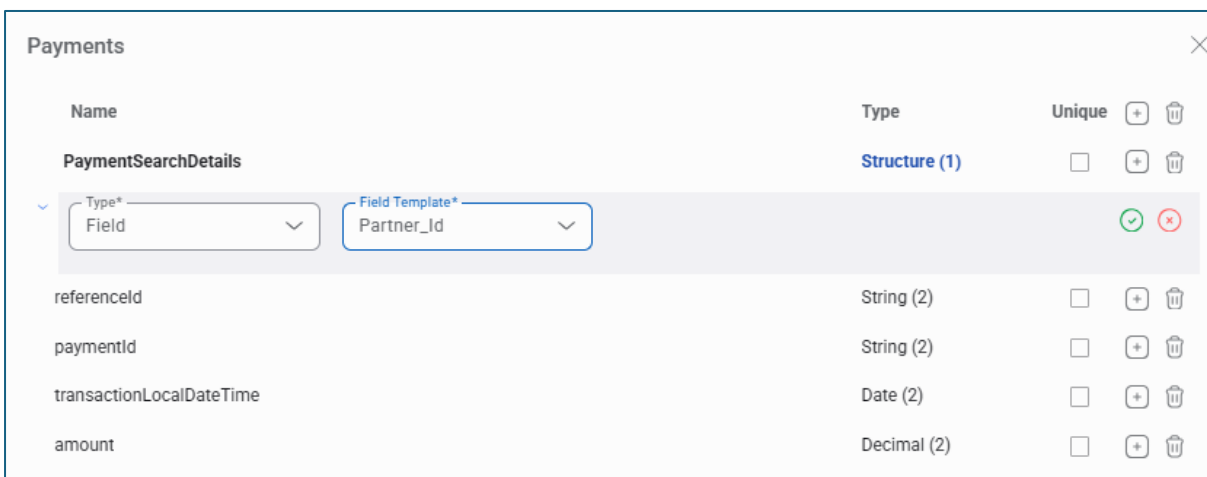
1, Select 'Edit' to open the list of template fields:



2. Select the + symbol beside 'PaymentSearchDetails' to add a new field:



3. Set the type to 'Field' and the Template to 'Partner_Id':



Once this has been completed, we need to make the field or fields that will make a specific Data Object Instance unique. In our case, this is the "Partner_id" value and the "referenceld" value provided by the user. These must be marked as unique as follows:

Name	Type	Unique		
PaymentSearchDetails	Structure (1)	<input type="checkbox"/>	+	🗑️
Partner_Id	String (2)	<input checked="" type="checkbox"/>	+	🗑️
referenceId	String (2)	<input checked="" type="checkbox"/>	+	🗑️
paymentId	String (2)	<input type="checkbox"/>	+	🗑️
transactionLocalDateTime	Date (2)	<input type="checkbox"/>	+	🗑️
amount	Decimal (2)	<input type="checkbox"/>	+	🗑️
currency	String (2)	<input type="checkbox"/>	+	🗑️
originalTransactionStatus	String (2)	<input type="checkbox"/>	+	🗑️

Next Steps

Once completed, you can proceed to the next guide to create the Business Capabilities for this section. See the related document: **04-A-Business Capability Creation from Swagger V1** for the next steps.