

Business Capability Creation from COBOL

This document describes the steps required to create a set of Digital Capabilities to manage the addition, deletion, updating and retrieval of Data Objects based on an original COBOL structure. This is contained in the following attached file:



Employees.cpy

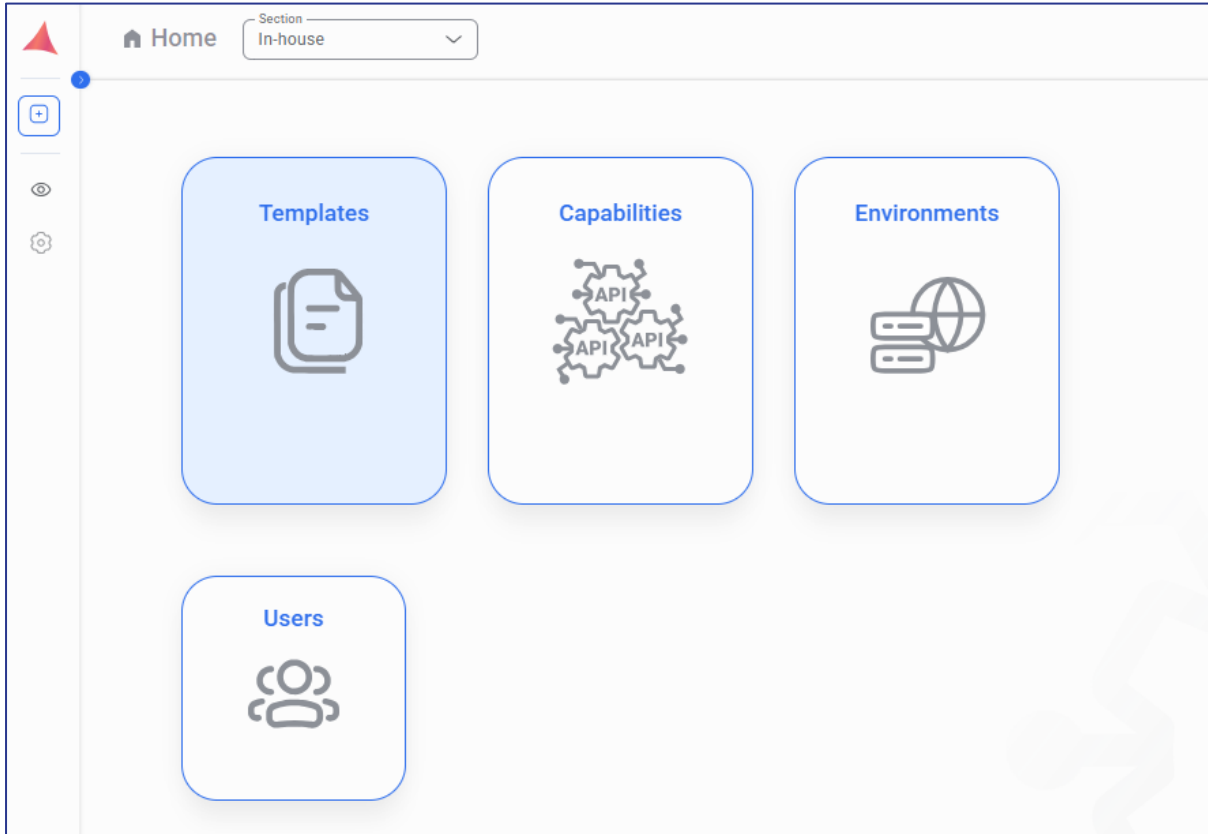
Batch Process the COBOL Structure

This is the process that will create a new Section and populate that with the basic Field Templates based on the COBOL Metadata while also creating a proposed Data Object structure to manage the service data.

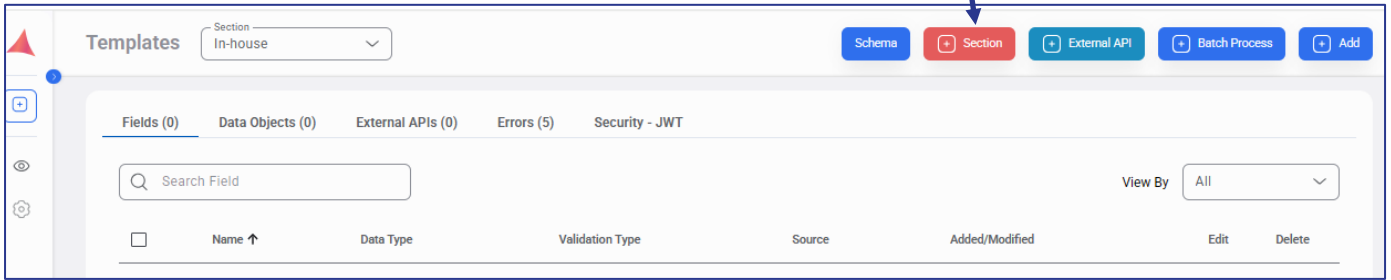
Create New Section

From the main menu:

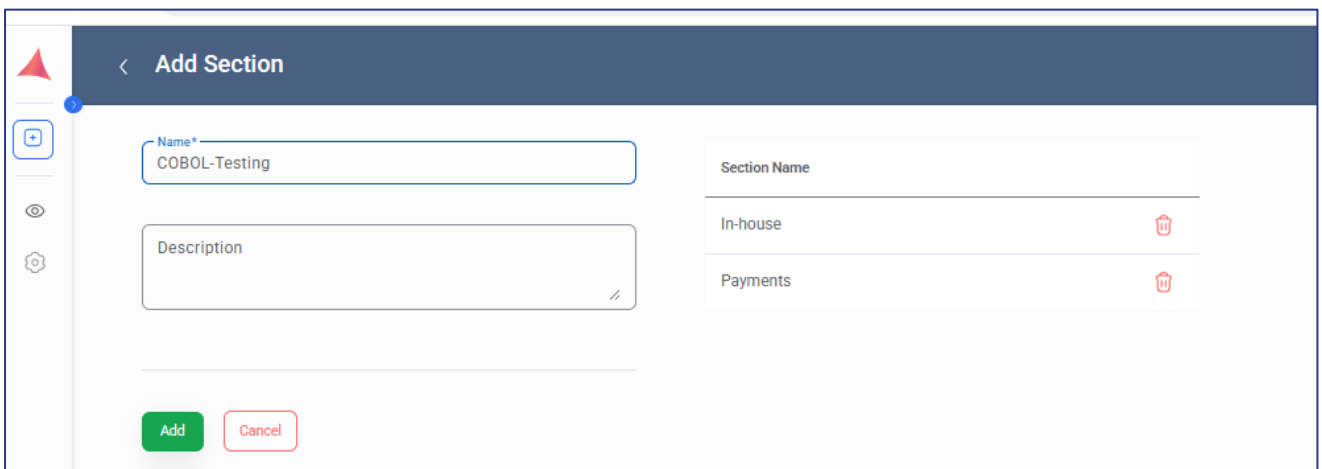
1. Select 'Templates':



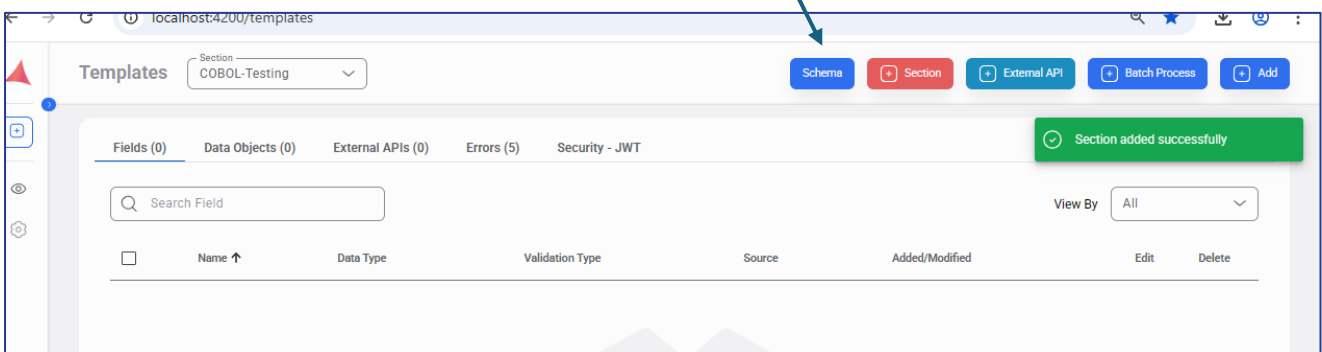
2. Select 'Section':



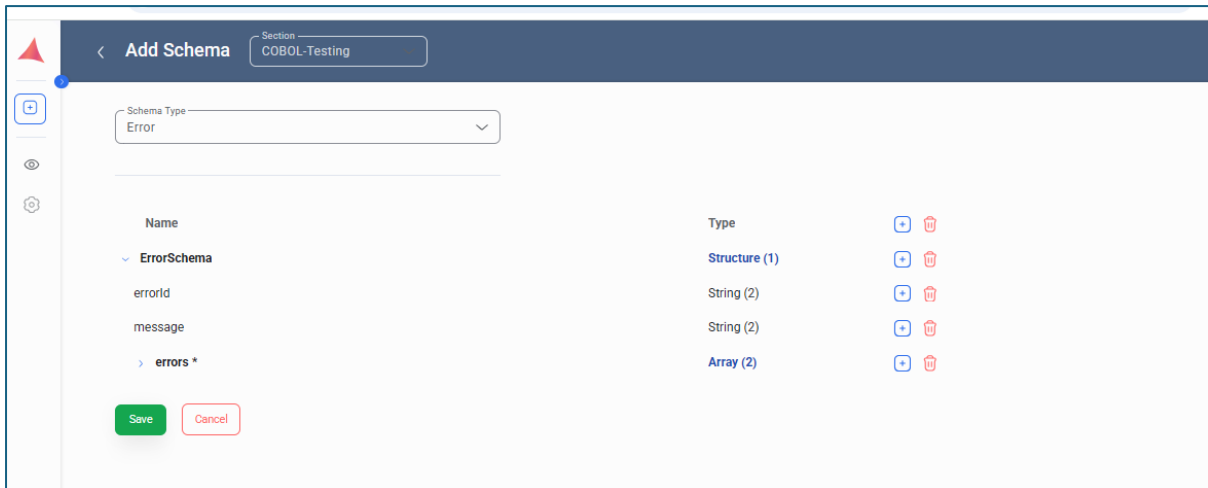
3. Name the Section "COBOL-Testing" and select 'Add' to create the new Section:



4. In the following window, Hit the "Schema" button.



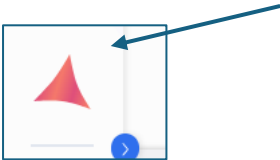
5. Review the structure of the error schema and modify if you wish to structure the error messages in the section differently. *Please note that this can only be done after the section has been created. Once assets are added to the section, **This cannot be changed.***



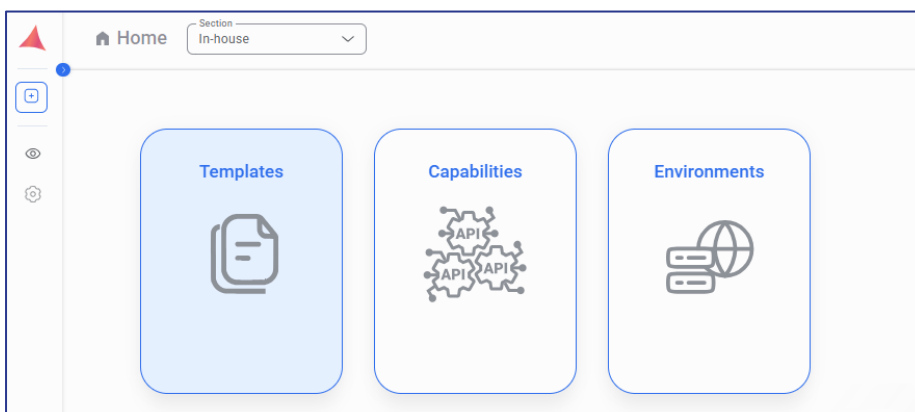
Batch Process the COBOL Structure

This will require the availability of the COBOL copybook Employee.cpy containing the COBOL structure for the Employee, which is provided at the beginning of this document:

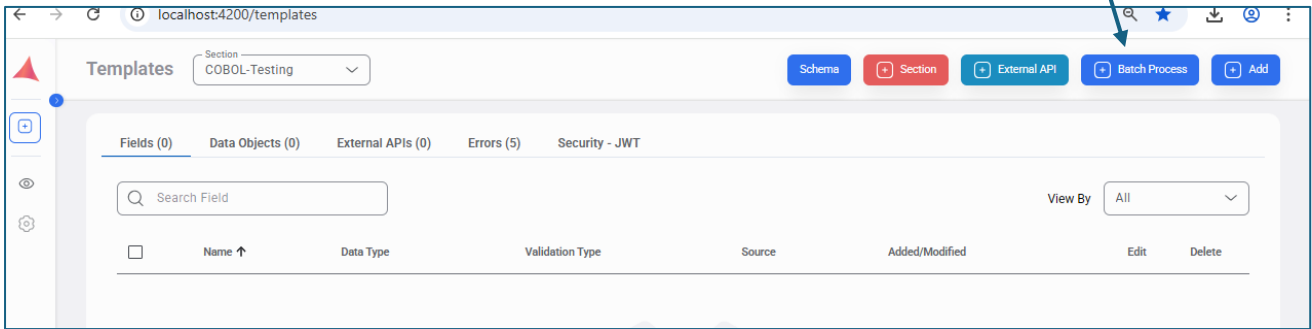
1. Click the Ostia Logo in the upper left of the window to return to the main menu.



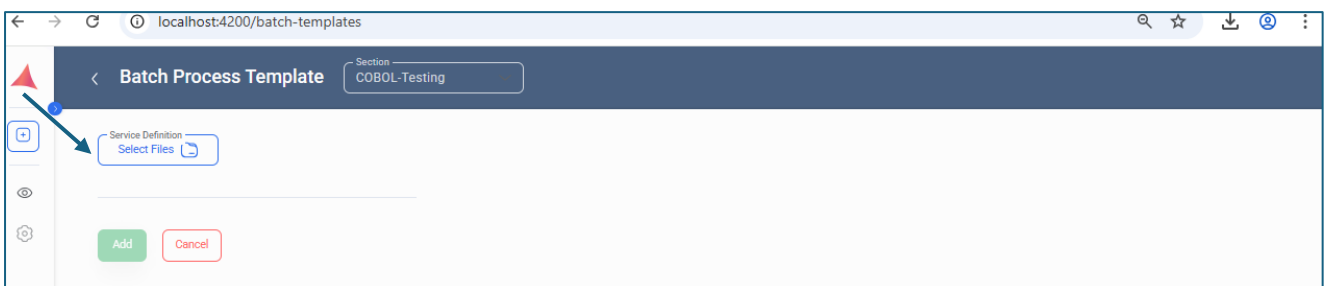
2. Return to the templates window from the main menu :



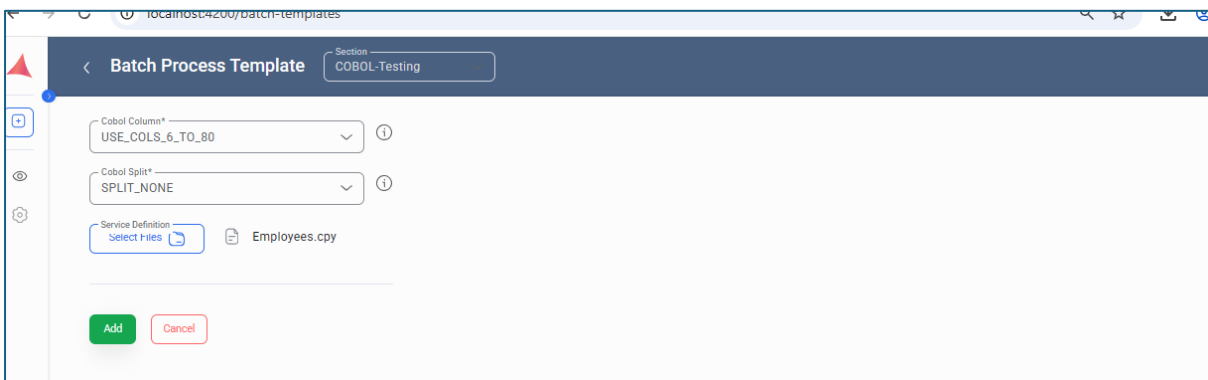
3. From the templates window, select the "Batch Process" button:



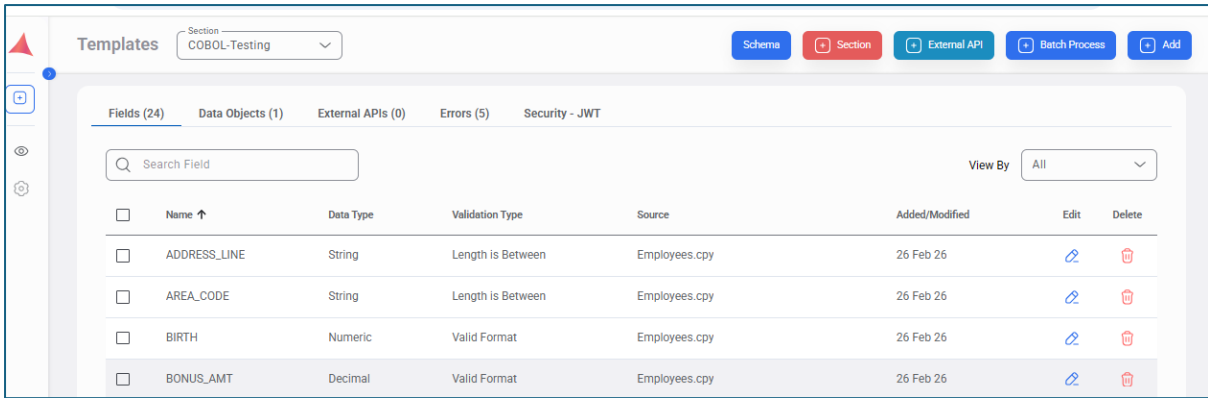
4. Hit the 'Select Files' button and add the Employees COBOL Copybook file:



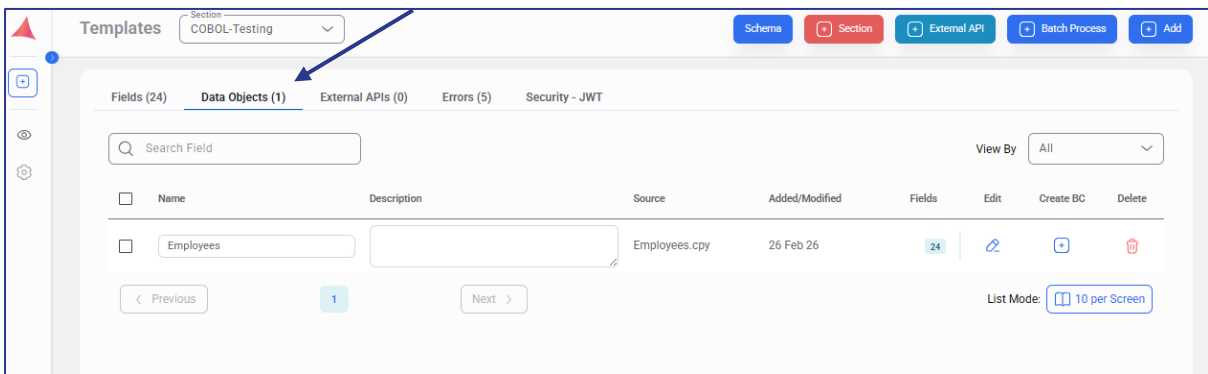
5. You will then be presented with the options for this file, keep the defaults for this exercise:



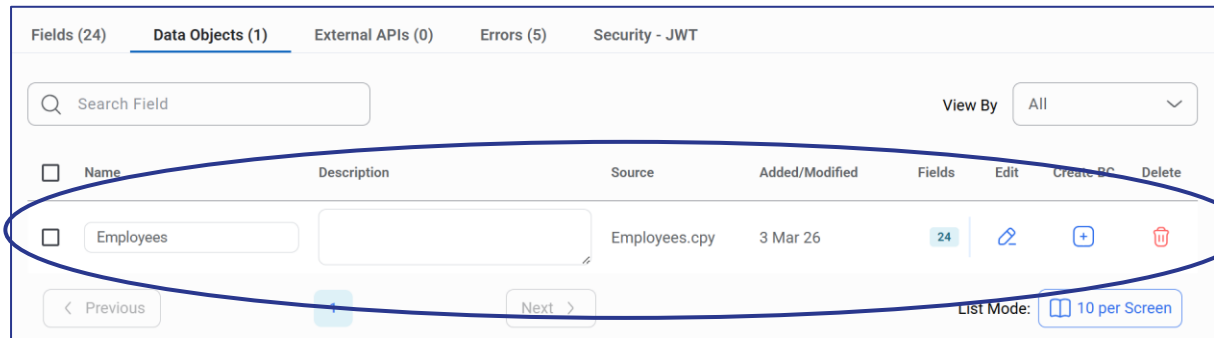
6. The result will be the list of Field Templates created from the COBOL Structure. These should be reviewed and any additional validation rules added to each field.



7. Hit the "Data Objects" tab to show all available data objects:



8. You will see the Data Object Schema that has been created.



9. Hit the "Edit" button for the Data Object Schema

Name	Type	Unique		
Employees	Structure (1)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
PERSONNEL_ID	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
FIRST_NAME	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
MIDDLE_NAME	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
NAME	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
MAR_STAT	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
SEX	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
BIRTH	Numeric (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
CITY	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
ZIP	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
COUNTRY	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
AREA_CODE	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
PHONE	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
DEPT	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
JOB_TITLE	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
> ADDRESS_LINE *	Array (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
> INCOME *	Array (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
> BONUS *	Array (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
> LEAVE	Structure (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
> LEAVE_BOOKED *	Array (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
> LANG *	Array (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>

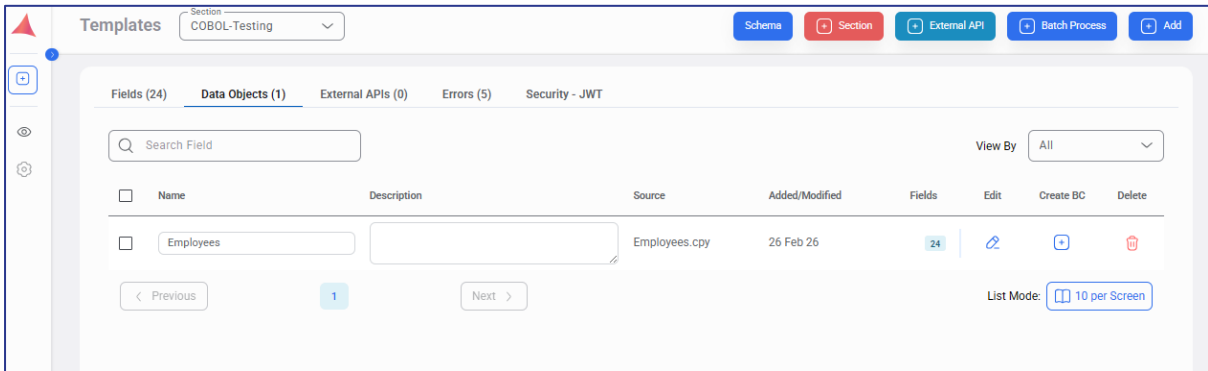
10. This will display the content and structure of the Employee Data Object Schema. Mark the PERSONNEL_ID field, as "Unique" as a Unique "key" field is required to correctly create the base Digital Capabilities and hit the "Save" button.

Name	Type	Unique		
Employees	Structure (1)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
PERSONNEL_ID	String (2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
FIRST_NAME	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
MIDDLE_NAME	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>
NAME	String (2)		<input type="checkbox"/>	<input type="button" value="+"/> <input type="button" value="🗑️"/>

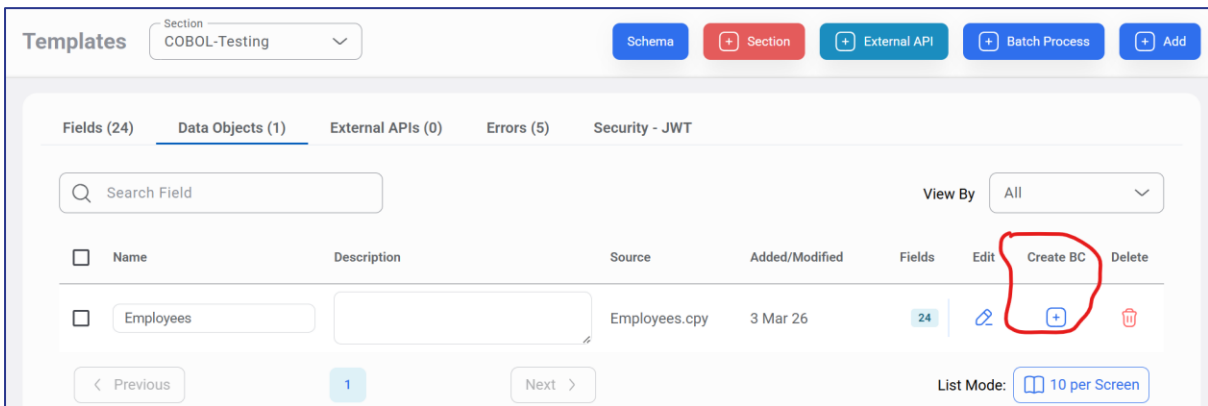
Create Digital Capabilities

This will use the created Data Object schema as the input to create the base Digital Capabilities.

1. Go to the Data Object list in the Templates section:



2. Hit the "Create BC" Button:



3. In the following window, Provide a name and description for the BC and hit the "Create" button:

The form is titled 'Create Business Capability from Employees'. It contains the following fields and options:

- Name* (dropdown menu)
- Description (text area)
- Generate Get
- Generate Get Multiple
- Generate Get Multiple With RSQL
- Generate Post
- Generate Put
- Generate Patch
- Generate Delete

At the bottom, there are 'Create' and 'Cancel' buttons.

4. This will result in the creation of seven Digital Capabilities with a default configuration. Each of these are described in detail in the next section.

#	Name	Description	Type	Endpoint	Steps
1	Delete_Employees	This endpoint enables you to delete data for the Employees data object	DELETE	/Delete_Employees/(PERSONNEL_ID)	6
2	GetSingle_Employees	This endpoint enables you to retrieve one instance of the Employees data object	GET	/GetSingle_Employees/(PERSONNEL_ID)	5
3	Patch_Employees	This endpoint enables you to patch data for the Employees data object	PATCH	/Patch_Employees/(PERSONNEL_ID)	6
4	Post_Employees	This endpoint enables you to add data for the Employees data object	POST	/Post_Employees	3
5	Put_Employees	This endpoint enables you to update data for the Employees data object	PUT	/Put_Employees/(PERSONNEL_ID)	6
6	RSQLSearch_Employees	This endpoint enables you to find zero or more instances of the Employees data object	GET *	/RSQLSearch_Employees	3
7	Search_Employees	This endpoint enables you to find zero or more instances of the Employees data object	GET *	/Search_Employees	3

The Default Digital Capabilities

This describes each of the Digital Capabilities generated, its purpose and what changes you may wish to make. Note these names are based on the Data Object Schema name. If you use a different name, the names will change.

General Changes

The base configuration for each Digital Capability is a functional configuration, but further configuration may be required for all:

- Often business logic to restrict access to specific data may need to be included.
- There may be changes needed to the data returned in many cases.

Delete_Employees

This will enable the deletion of a specific Data Object instance based on the unique field or fields configured in the Data Object Schema.

GetSingle_Employees

This will enable the return of a specific Data Object instance based on the unique field or fields configured in the Data Object Schema.

Patch_Employees

The Patch Digital Capability is there to update a limited number of fields within a Data Object instance. As such it is likely that this will be modified to only accept field values to be updated by that Digital Capability.

Post_Employees

This is provided to create a new Data Object instance on the database. This should be reviewed to determine what is creating the unique key value for the Data Object instance. If this is generated internally, it will always be unique. If the unique value is provided in the Request Body, a check must be added to make sure it doesn't already exist and throw an error if it does.

Put_Employees

This is there to update the entire contents of a Data Object instance based on the Data Object instance identified by the unique field or fields configured in the Data Object Schema.

RSQLSearch_Employees

This is a Digital Capability that is intended to allow comprehensive search capability using RSQL expression for sets of Data Objects on the database. This is most useful when exposed as an MCP Tool.

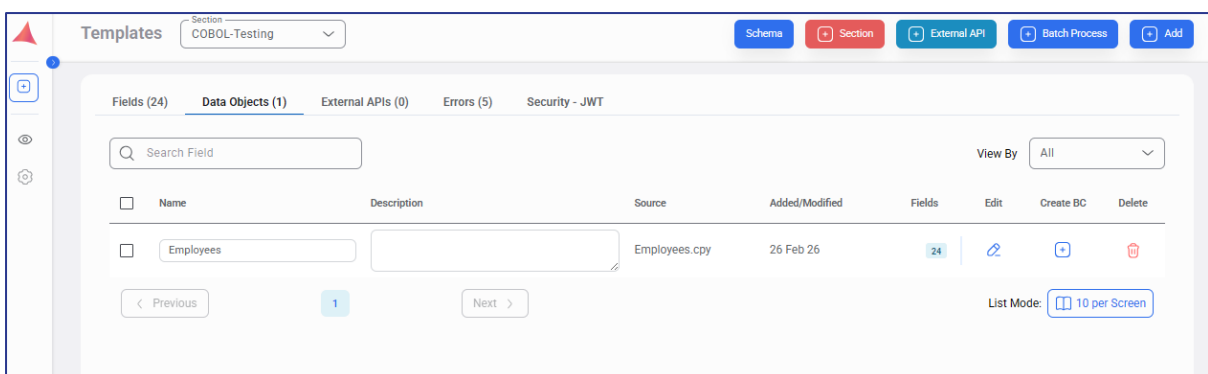
Search_Employees

This allows searching for Data Object Instances using multiple fields in the Data Object Schema. All key fields are included by default and often there will be a requirement to reduce the search fields available to be searched.

Adding Digital Capabilities

Once a Business Capability has been created, it is possible to create additional Digital Capabilities in the Business Capability as follows:

1. Go to the Data Object list in the Templates section:



2. Hit the "Create BC" Button on the existing employees Data Object and select the existing Business Capability:

- From the Name field dropdown, select existing BC:

The screenshot shows the Ostia interface for creating a Business Capability from Employees. The form is titled 'Create Business Capability from Employees'. On the left, there is a sidebar with 'Add', 'View', and 'Configure' options. The main form area contains the following fields and options:

- Name***: A dropdown menu with 'Employee_Management' selected.
- Description**: A text area for entering a description.
- Generate Get**: A checkbox that is checked, with a 'Get Qualifier*' text field below it.
- Generate Get Multiple**: A checkbox that is checked, with a 'Get Multiple Qualifier*' text field below it.
- Generate Patch**: A checkbox that is checked, with a 'Patch Qualifier*' text field below it.

At the bottom of the form, there are two buttons: a green 'Create' button and a red 'Cancel' button.

- There are limited Digital Capabilities that can be added as the majority only required once. The qualifier for each is to ensure the Endpoint and Name are different to the initially created Digital Capability. The following are available for the following reasons:
 - GET – There may be a desire for different GET endpoints to return different information in the Response.
 - GET Multiple – There may be different sets of fields to be exposed on different GET Multiple Digital Capabilities and/or there may be a desire to return different information in the Response.
 - Patch – There may be multiple Patch requests required to update different individual fields within a Data Object Instance.