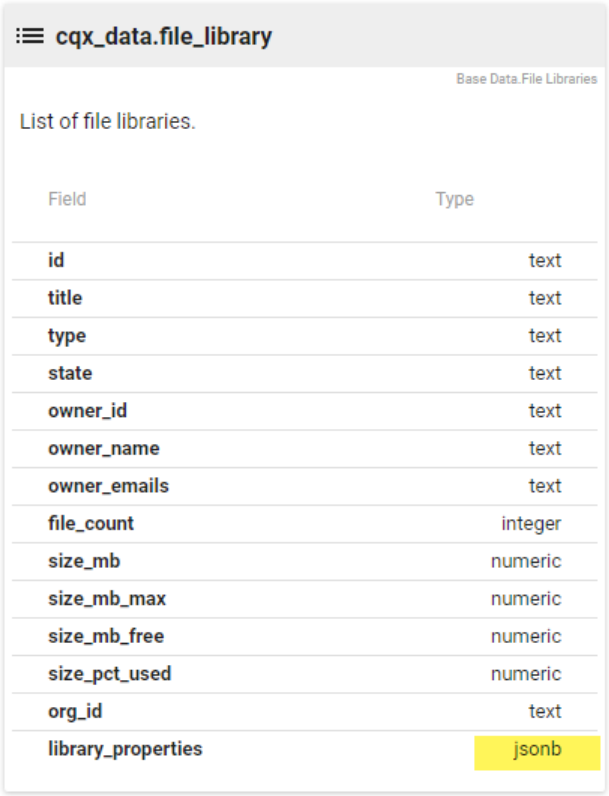
Accessing JSON OBJECTS in database schemas

Accessing data in JSON Objects within DataMiner schema's

Through the database schema's page ("<appliance url>/dm/schema") it is possible to see the various tables and fields that can be queried. In certain cases it is possible that the table contain JSON objects identified as "jsonb" type fields. These are collections of additional fields.



cqx_data.file_library

Base Data.File Libraries

List of file libraries.

Field	Type
id	text
title	text
type	text
state	text
owner_id	text
owner_name	text
owner_emails	text
file_count	integer
size_mb	numeric
size_mb_max	numeric
size_mb_free	numeric
size_pct_used	numeric
org_id	text
library_properties	jsonb

To see what is contained in such an object in your DataMiner query use:

```
SELECT
library_properties::TEXT
FROM
cqx_data.file_library
```

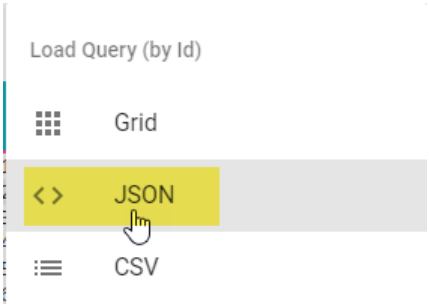
With "library_properties" being the object and "cqx_data.file_library" being the table name. This will show all columns & values in the object as a single string.
The result would then look like:

library_properties
{"size": 30487197, "type": 1, "state": 0, "max_size": 2147483648, "owner_id": "87e0vj4fQ7ur/vSJwk6wqg==", "free_space": 2116996451}
{"size": 0, "type": 1, "state": 0, "max_size": 2147483648, "owner_id": "9+vqkFkfRCGKtrlaK8ECYw==", "free_space": 2147483648}
{"size": 0, "type": 1, "state": 0, "max_size": 2147483648, "owner_id": "3Zvov61HRAu6QFwB+FNoXg==", "free_space": 2147483648}
{"size": 0, "type": 1, "state": 1, "max_size": 2147483648, "owner_id": "r53YM+AiSE+MIG6UwsJENA==", "free_space": 2147483648}
{"size": 10039342, "type": 1, "state": 0, "max_size": 2147483648, "owner_id": "kS2dHamq0EWiAb5S7Ob9kw==", "free_space": 2137444306}

Alternatively you can also run:

```
SELECT
*
FROM
cqx_data.file_library
```

But use the Load Query as JSON instead of grid:



This will show the properties field in a JSON format in most browsers:

Once you know what is in the object you can also retrieve individual elements from it. To get an individual column from the object use the "->>" operator:

```
SELECT
library_properties ->> 'size' AS lib_size
FROM
cqx_data.file_library
```

With the SELECT statement referencing the object and the individual column name and the FROM statement the table name. To determine the column name use the option described above to see what columns are contained within the JSON object.

See also Nested JSON OBJECTS