

Querying array elements from a table's data blob (useful for non-MetaDB data)

This link is to a very short write up by Angela Zoss on how to query elements out of a table's data blob in the LDP. The formulas here work for simple data elements (elements shown in curly brackets) and array elements (enclosed within square brackets).

<https://wiki.folio.org/pages/viewpage.action?pageId=36578061>

Examples from the po_lines table. The element "cost" has values in curly brackets { }. These would be queried out by the simple "JSON_EXTRACT_PATH_TEXT (po_lines.data,'cost','xxx')" command for each element.

```
"collection": raise,  
"contributors": [],  
"cost": {  
  "currency": "USD",  
  "discountType": "percentage",  
  "listUnitPrice": 0.0,  
  "poLineEstimatedPrice": 0.0,  
  "quantityPhysical": 1  
},  
"description": "741000"
```

The "locations" group elements are enclosed in square brackets AND curly brackets [{ }], so would need a more complex command to get each element: JSON_EXTRACT_PATH_TEXT (JSON_ARRAY_ELEMENTS (JSON_EXTRACT_PATH (po_lines.data, 'locations')), 'locationId') gets the locationId element. You would repeat this, substituting the name of each element needed at the end of the command (quantity, quantityElectronic, quantityPhysical).

```
"locations": [  
  {  
    "locationId": "5212274b-9620-4bf5-af6e-69846de41ae1",  
    "quantity": 1,  
    "quantityElectronic": 0,  
    "quantityPhysical": 1  
  }  
],  
.....
```

Some objects in the data blob are even more complex - an example is the "details" stanza of the po_lines data blob. The information is nested inside curly brackets, square brackets and curly brackets [{ {} }] The information at the link doesn't get into how to parse out those elements. You're on your own!

```
"details": {  
  "productIds": [  
    {  
      "productId": "9450851",  
      "productIdType": "37b65e79-0392-450d-adc6-e2a1f47de452",  
      "qualifier": "(voy)"  
    }  
  ]  
},  
.....
```

Extracting from the updated inventory_instances table: as of the Orchid release, changes were made to inventory_instances table. This example shows how to extract values from the data array when the values are "objects". This example shows getting the subjects from the data blob:

SELECT

```
instances.id AS instance_id,  
  
instances.hrid AS instance_hrid,  
  
subjects.data #>> '{value}' AS subject,  
  
subjects.ordinality AS subject_ordinality
```

FROM

inventory_instances **AS** instances

CROSS JOIN jsonb_array_elements((instances.data #> '{subjects}').::jsonb)

WITH ORDINALITY AS subjects (data)