



This application is an experimental project dedicated to developers who need to build sql query generating XML.

In addition, the application generates a default xslt FOP template which can be used by a FOP server.

[Download on Github](#)

For generating pdf, we must provide a valid Report server endpoint with FOP installed on tomcat.

I used the [apex5\\_fop project](#) from mikhailidim available on github.

That can be [https://github.com/darklordgrep/APEX-FOP/blob/main/apex\\_fop.jsp](https://github.com/darklordgrep/APEX-FOP/blob/main/apex_fop.jsp) as well, which has been published recently in march 2023.

## Usage

We choose a table or a view and some general rendering options.

then, FOP LAB follows all the Foreign Keys links in order to generate an sql query and a default xslt layout.

If no FK are retrieved, only the master table is printed. In others cases, the master is printed in form display and all the child tables are displayed as xslt tables.

Ie: if we choose EMP table, the « managed people » are displayed as a grid under each master emp.

xslt templates are generated from xslt fragments which can be customized directly in the application.



Wednesday 06  
September  
2023

# Employees

GPM Factory - Demo APEX FOP

Id : 7698  
Ename : BLAKE  
Job : MANAGER  
Mgr : 7839  
Hiredate : 1981-05-01  
Sal : 2960  
Comm : 300  
Deptno : 30  
Dname : SALES  
Loc : CHICAGO

Employees

| Id   | Ename  | Job      | Hiredate   | Sal  | Comm | Deptno |
|------|--------|----------|------------|------|------|--------|
| 7499 | ALLEN  | SALESMAN | 1982-02-20 | 1600 | 300  | 30     |
| 7654 | MARTIN | SALESMAN | 1981-09-28 | 1250 | 1400 | 30     |
| 7844 | TURNER | SALESMAN | 1981-09-08 | 1500 | 0    | 30     |
| 7900 | JAMES  | CLERK    | 1981-12-03 | 950  |      | 30     |



Order Id : 2  
Customer Id : 1  
Order Total : 2380  
Order Timestamp : 2020-05-21T19:51:27.000000 00:00  
User Name : DEMO  
Tags : LARGE ORDER  
Cust First Name : John  
Cust Last Name : Dulles  
Cust Street Address1 : 45020 Aviation Drive  
Cust Street Address2 :  
Cust City : Sterling  
Cust State : VA  
Cust Postal Code : 20166  
Cust Email : john.dulles@email.com  
Phone Number1 : 703-555-2143  
Phone Number2 : 703-555-8967  
Url : http://www.johndulles.com  
Credit Limit : 1000  
Tags :

Demo Order Items

| Order Item Id | Product Id | Unit Price | Quantity |
|---------------|------------|------------|----------|
| 103           | 1          | 50         | 3        |
| 104           | 2          | 80         | 3        |
| 105           | 3          | 150        | 3        |
| 106           | 4          | 60         | 3        |
| 107           | 5          | 80         | 3        |
| 108           | 6          | 120        | 2        |
| 109           | 7          | 30         | 2        |
| 110           | 8          | 125        | 4        |
| 111           | 9          | 110        | 2        |
| 112           | 10         | 50         | 2        |



Id : 1  
Parent Customer Id :  
Customer Name : Carlton Closets  
Customer Account Number :  
Industry Id : 5  
Category Id : 2  
Status Id : 2  
Type Id : 4  
Use Case Id :  
Geography Id : 10  
Country Id :  
Default Timezone :  
Referenceable : Yes  
Marquee Customer Yn : N  
Reference Phase Id : 4  
Ref Recruitment Owner :  
Strategic Customer Program Yn : N  
Tags : CLOUD  
Sales Channel Id :  
Customer Products :

Product Uses

| Id | Row Version Number | Product Id | Reference Type Ids | Internet Contact | Customer Contact Id | Reference Status Id | Valid From | Valid To | Comments | Created  | Created By | Updated  | Updated By |
|----|--------------------|------------|--------------------|------------------|---------------------|---------------------|------------|----------|----------|----------|------------|----------|------------|
| 1  | 1                  | 1          |                    |                  |                     |                     |            |          |          | 20-06-29 | PATRICK    | 20-06-29 | PATRICK    |
| 2  | 1                  | 2          |                    |                  |                     |                     |            |          |          | 20-06-29 | PATRICK    | 20-06-29 | PATRICK    |

Contacts

PDF Report Sample

| Id | Name        | Title | Company         | Address Line1 | Address Line2 | City | State | Country | Zip | Email | Phone | Cell Phone | Fax |
|----|-------------|-------|-----------------|---------------|---------------|------|-------|---------|-----|-------|-------|------------|-----|
| 1  | Barry Bruce | CFO   | Carlton Closets |               |               |      |       |         |     |       |       |            |     |

Notes

| Id | Row Version Number | Contact Id | Note Date | Note   | Tags | Created  | Created By | Updated  | Updated By |
|----|--------------------|------------|-----------|--|------|----------|------------|----------|------------|
| 1  | 1                  | 1          |           | Interested in moving to the cloud in the near future |      | 20-06-29 | PATRICK    | 20-06-29 | PATRICK    |

Eba Cust Customer ReType Ref

| Id | Reference Type Id | Created  | Created By | Updated  | Updated By |
|----|-------------------|----------|------------|----------|------------|
| 1  | 1                 | 20-06-29 | PATRICK    | 20-06-29 | PATRICK    |
| 2  | 2                 | 20-06-29 | PATRICK    | 20-06-29 | PATRICK    |
| 3  | 3                 | 20-06-29 | PATRICK    | 20-06-29 | PATRICK    |
| 4  | 4                 | 20-06-29 | PATRICK    | 20-06-29 | PATRICK    |

The application is mainly intended to generate a sql query which generates in turn some xml stuff.

Because writing this kind of query is cumbersome, FOP LAB can be a good friend.

If we need to customize content of a child, the supported method is to create a view with a name identical to the child table and a suffix '\_FOP\_V'. In this case the view supersedes the original table.

IN the following exemple, we use ORDERS\_ITEMS\_FOP\_V instead ORDERS\_ITEMS to display aggregates (Total) and retrieve the product name.

It's needed to add a Foreign key with 'DISABLED' status for linking the view with the ORDERS table.



Order Id : 877  
Order Datetime : 2022-10-12T04:36:38.000000  
Customer Id : 122  
Order Status : COMPLETE  
Store Id : 6  
Full Name : Lenore Sullivan  
Email Address : lenore.sullivan@internalmail  
Store Name : London  
Web Address :  
Physical Address : One South Place London EC2M 2RB

## Order Items

| Quantity | Unit Price | Total  | Product Id | Product             |
|----------|------------|--------|------------|---------------------|
| 5        | 43.71      | 218.55 | 5          | Girl's Shorts (Red) |
| 4        | 30.69      | 122.76 | 11         | Boy's Shorts (Blue) |
| 2        | 9.8        | 19.6   | 25         | Girl's Jeans (Grey) |

## Exemple of generated Sql Query

```
select "ORDERS"
from
(SELECT XMLSERIALIZE(
      CONTENT XMLELEMENT("ORDERS",
        XMLELEMENT("HEADER", XMLELEMENT("report_date", TO_CHAR(SYSDATE, 'Day DD
Month YYYY'))),
        XMLELEMENT("TITLE", ' '),
        XMLELEMENT("DD", TO_CHAR(SYSDATE, 'Day DD')),
        XMLELEMENT("D", TO_CHAR(SYSDATE, 'DD')),
        XMLELEMENT("DAY", TO_CHAR(SYSDATE, 'Day')),
        XMLELEMENT("MONTH", TO_CHAR(SYSDATE, 'Month')),
        XMLELEMENT("YEAR", TO_CHAR(SYSDATE, 'YYYY'))
      ),
      XMLAGG (
        XMLELEMENT("ORDERS_REC",
          XMLFOREST (
            e.ORDER_ID AS "ORDER_ID",
            e.ORDER_DATETIME AS "ORDER_DATETIME",
```



```
e.CUSTOMER_ID AS "CUSTOMER_ID",
e.ORDER_STATUS AS "ORDER_STATUS",
e.STORE_ID AS "STORE_ID",
CUSTOMERS.CUSTOMER_ID AS "CUSTOMERS_CUSTOMER_ID",
CUSTOMERS.FULL_NAME AS "CUSTOMERS_FULL_NAME",
CUSTOMERS.EMAIL_ADDRESS AS
"CUSTOMERS_EMAIL_ADDRESS",
STORES.STORE_ID AS "STORES_STORE_ID",
STORES.STORE_NAME AS "STORES_STORE_NAME",
STORES.WEB_ADDRESS AS "STORES_WEB_ADDRESS",
STORES.PHYSICAL_ADDRESS AS
"STORES_PHYSICAL_ADDRESS",/* ----- ORDER_ITEMS_FOP_V / SYS_C0064516 -
----- */
(select XMLAGG(
    XMLELEMENT("ORDER_ITEMS_FOP_V_ORDERS_REC",
        XMLFOREST(
            ORDER_ITEMS_FOP_V.QUANTITY AS
"QUANTITY",
            ORDER_ITEMS_FOP_V.UNIT_PRICE AS
"UNIT_PRICE",
            ORDER_ITEMS_FOP_V.MNT AS "MNT",
            ORDER_ITEMS_FOP_V.ORDER_ID AS
"ORDER_ID",
            ORDER_ITEMS_FOP_V.PRODUCT_ID AS
"PRODUCT_ID",
            ORDER_ITEMS_FOP_V.PRODUCT_NAME AS
"PRODUCT_NAME"
        )
    )
)
from ORDER_ITEMS_FOP_V
where ORDER_ITEMS_FOP_V.ORDER_ID =
e.ORDER_ID
) ORDER_ITEMS_FOP_V
```



```
        )  
    )  
    )  
    )  
    ) AS "ORDERS"  
from "ORDERS" e ,  
    CUSTOMERS,  
    STORES  
where rownum<100and  
NVL(:PKID,e.ORDER_ID) = e.ORDER_ID  
AND e.CUSTOMER_ID =CUSTOMERS.CUSTOMER_ID  
AND e.STORE_ID =STORES.STORE_ID  
)
```

## Author



[Patrick](#)

GPM Factory