

Week 3 Unit 2: Recent Open SQL Enhancements – Part 2



Recent Open SQL Enhancements – Part 2

Outline

Content

- Open SQL enhancements
 - SELECT list (cont.)
 - GROUP BY and HAVING clauses
 - JOIN statements
 - Client handling
- More information

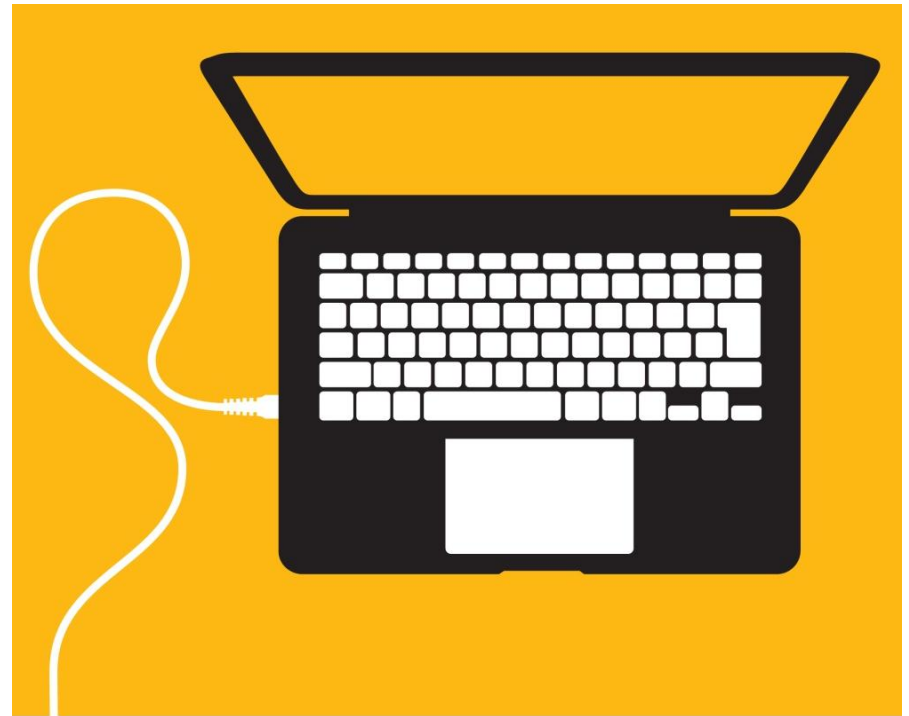


Recent Open SQL Enhancements – Part 2

Open SQL: Demo

Open SQL enhancements

- SELECT list enhancements:
 - Conditional expressions
- Expressions in
 - GROUP BY clause
 - HAVING clause
- JOIN statements
- Client handling



Recent Open SQL Enhancements – Part 2

Conditional Expressions



Additional
Material

CASE Expression

```
"simple case
SELECT so_id,
       CASE delivery_status
         WHEN ' ' THEN 'OPEN'
         WHEN 'D' THEN 'DELIVERED'
         ELSE delivery_status
       END AS delivery_status_long
FROM   snwd_so
INTO TABLE @DATA(lt_simple_case).

"searched case
SELECT so_id,
       CASE
         WHEN gross_amount > 1000
           THEN 'High volume sales order'
         ELSE ' '
       END AS volumn_order
FROM   snwd_so
INTO TABLE @DATA(lt_searched_case).
```

COALESCE Expression

```
SELECT so_id,
       so~gross_amount
         AS so_amount,
       inv_head~gross_amount
         AS inv_amount,
       "potential invoice amount
       COALESCE( inv_head~gross_amount,
                 so~gross_amount )
         AS expected_amount
FROM   snwd_so AS so
LEFT OUTER JOIN
       snwd_so_inv_head AS inv_head
  ON inv_head~so_guid = so~node_key
INTO TABLE @DATA(lt_result).
```

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Expressions in GROUP BY & HAVING Clauses



Additional
Material

GROUP BY Clause

```
SELECT bp_id,
       company_name,
       so~currency_code,
       SUM( so~gross_amount )
         AS total_amount,
       CASE
         WHEN so~gross_amount < 1000
           THEN 'X'
         ELSE ' '
       END AS low_volume_flag,
       COUNT( * ) AS cnt_orders
FROM snwd_so AS so
INNER JOIN snwd_bpa AS bpa
ON bpa~node_key = so~buyer_guid
INTO TABLE @DATA(lt_result)
GROUP BY
  bp_id, company_name,
  so~currency_code,
  CASE
    WHEN so~gross_amount < 1000
      THEN 'X'
    ELSE ' '
  END
ORDER BY company_name.
```

HAVING Clause

```
SELECT bp_id,
       company_name,
       so~currency_code,
       SUM( so~gross_amount )
         AS total_amount
FROM snwd_so AS so
INNER JOIN snwd_bpa AS bpa
ON bpa~node_key = so~buyer_guid
INTO TABLE @DATA(lt_result)
WHERE so~delivery_status = ' '
GROUP BY
  bp_id,
  company_name,
  so~currency_code
HAVING SUM( so~gross_amount ) > 10000000.
```

Recent Open SQL Enhancements – Part 2

Support for JOIN Statements



Additional
Material

Enhancements

- Now available: **RIGHT OUTER JOIN**
- Enhanced **bracketing** in JOIN expressions
- New functionality in **ON** conditions of JOIN statements like:
 - **Necessary requirement** of a field of the right table in the ON condition is dropped
 - Operators like **BETWEEN** or “>” can be used for comparisons
 - Possibility to use **fields of the right table** in the **WHERE** clause of LEFT OUTER JOINS
- Restriction of **maximum number of tables** in JOINS has been increased to 50

```
SELECT
    so_id,
    bp_id,
    gross_amount
FROM snwd_so AS so
RIGHT OUTER JOIN snwd_bpa AS bpa
    ON so~buyer_guid = bpa~node_key
    AND so~gross_amount > 100000
INTO TABLE @DATA(lt_result).
```

Recent Open SQL Enhancements – Part 2

Automatic Client Handling



Additional
Material

Automatic Client Handling

- Well known Open SQL client handling
- Client handling can be overruled with **USING CLIENT**
- Simplified/improved client handling in JOINS

```
SELECT
  bp_id,
  company_name,
  so~currency_code,
  so~gross_amount
FROM snwd_so AS so
INNER JOIN snwd_bpa AS bpa
  ON so~buyer_guid = bpa~node_key
  USING CLIENT '111'
INTO TABLE @DATA(lt_result).
```

Recent Open SQL Enhancements – Part 2

More Information

More information about recent Open SQL enhancements:

- Help Portal (<http://help.sap.com/nw74>):
What's New – Release Notes for
Support Package 05 & 08
- SCN blog:
<http://scn.sap.com/community/abap/blog/2014/02/06/abap-news-for-release-740-sp05>



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What's Next?

Week 3 Unit 3

Core Data Services: What's in It for You?





Thank you

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