LAURIX CONSULTING

Easily use ABAP ranges

Straightforwardly use ranges
utilizing the latest syntax
laurix.com/post/abap/ranges

About ranges

Ranges are internal tables with the same structure as a selection table. They are very useful for flexible reading of database data in ABAP. Range tables always consist of four columns:

Field	Description	Examples
SIGN	whether to in- or exclude records	'I' = Include 'E' = Exclude
OPTION	the selection operator	'EQ' = Equal 'BT' = Between 'GT' = Greater than …
LOW	the lower limit of the interval	
HIGH	the higher limit of the interval	

Fill ranges directly from SELECTs

Gone are the days when it was necessary to first select data and then loop over it to fill a range. With the current syntax ranges can be filled directly in the SELECT statement.

```
SELECT 'I' AS sign,
       'EQ' AS option,
       matnr AS low,
       matnr AS high
  INTO TABLE @DATA(lt_matnr_range)
  FROM mara.
```

Convert internal tables to ranges

Since ABAP 7.40 the FOR operator allows simple conversion from internal table to range table, without the need of directly looping over the table.

```
DATA(lt_matnr_range) = VALUE rsdsselopt_t(
  FOR ls_input_data IN it_input_data
    ( sign   = 'I'
      option = 'EQ'
      low    = ls_input_data-matnr ) ).
```

To do the opposite and extract data from a range table, use CORRESPONDING together with MAPPING.

```
lt_data = CORRESPONDING #(
  lt_matnr_range
    MAPPING low = matnr ).
```

Ranges allow for flexible openSQL selections