

CDA

ZCL\_CRM\_TVARV\_RETRIEVER

Release 740

System

Class: ZCL\_CRM\_TVARV\_RETRIEVER  
Status: Active

Attributes

Description: Variant values retriever  
Instantiation: Public  
Not final  
Not released  
Fixed pt.arithmetic  
Category: General Object Type  
Package: ZPCABAP  
Original lang.: EN  
Created by: P000520  
Created on: 29.12.2014  
Last changed by: P000520  
Last changed on: 29.12.2014

Attributes			
Public attributes			
Attrib. Cat Description Ref.			
Type	Init. value		

AV_NAME	Inst (read only)	ABAP: Name of Variant Variable	TYPE
RVARI_VNAM			

Protected attribute					
Attrib.	Cat	Description	Ref.	Type	Init. value
AT_VALUES	Inst	Variant values	TYPE	CYT_TVARVC	

Methods

Public methods  
CONSTRUCTOR  
Description: CONSTRUCTOR  
Instance mthd

Importing parameter

P\_NAME TYPE RVARI\_VNAM (ABAP: Name of Variant Variable)

```
method CONSTRUCTOR.
  me->av_name = p_name.
endmethod.
```

GET\_SINGLE

Description: Returns a related single value of this object.  
Instance mthd

Importing parameter

IM\_VNAME TYPE STRING OPTIONAL (Name of a variable)

Exporting parameter

EX\_VALUE TYPE ANY (Value)

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```
METHOD get_single.
  DATA lv_search TYPE rvvari_vnam.
  FIELD-SYMBOLS <lw_value> TYPE tvarvc.
  IF me->at_values IS INITIAL.
    me->set_attributes( ).
  ENDIF.
  IF im_vname IS SUPPLIED.
    CONCATENATE me->av_name im_vname INTO lv_search SEPARATED
BY ' '.
    READ TABLE me->at_values WITH KEY name = lv_search
      ASSIGNING <lw_value>.
    IF sy-subrc = 0.
      ex_value = <lw_value>-low.
    ENDIF.
  ELSE.
    READ TABLE me->at_values INDEX 1 ASSIGNING <lw_value>.
    IF sy-subrc = 0.
      ex_value = <lw_value>-low.
    ENDIF.
  ENDIF.
ENDMETHOD.
```

GET\_MULTIPLE

Description: Returns the related range of values of this object.  
Instance mthd

Importing parameter

IM\_VNAME TYPE STRING OPTIONAL (Name of a variable)

```

Exporting parameter
EXT_VALUES TYPE ANY TABLE  (Table holding a range of values)

METHOD get_multiple.
  TYPES  lyr_tvarv TYPE RANGE OF tvarv_val.
  DATA: lv_search TYPE rvari_vnam,
         lr_tvarv  TYPE lyr_tvarv,
         lw_tvarv  TYPE LINE OF lyr_tvarv.
  FIELD-SYMBOLS  <lw_value> TYPE tvarvc.
  DEFINE lm_append.
    lw_tvarv-sign    = <lw_value>-sign.
    lw_tvarv-option  = <lw_value>-opti.
    lw_tvarv-low     = <lw_value>-low.
    lw_tvarv-high    = <lw_value>-high.
    APPEND lw_tvarv to lr_tvarv.
  END-OF-DEFINITION.
  IF me->at_values IS INITIAL.
    me->set_attributes( ).
  ENDIF.
  IF im_vname IS SUPPLIED.
    CONCATENATE me->av_name im_vname INTO lv_search SEPARATED
BY  '_'.
    LOOP AT me->at_values ASSIGNING <lw_value> WHERE name =
lv_search.
      lm_append.
    ENDLOOP.
  ELSE.
    LOOP AT me->at_values ASSIGNING <lw_value>.
      lm_append.

```

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```

      ENDLOOP.
    ENDIF.
    ext_values = lr_tvarv.
  ENDMETHOD.

```

Protected methods

GET\_DB

Description: Returns a database mediator instance.

Instance mthd

Returning parameter

VALUE(RO\_DB) TYPE REF TO OBJECT (Database mediator instance.)

```

METHOD get_db.
  DATA lo_db TYPE REF TO lcl_db.
  lo_db = NEW lcl_db( ).
  ro_db = lo_db.
  FREE lo_db.
ENDMETHOD.

```

## SET\_ATTRIBUTES

Description: Retrieves the attributes of this object.

Instance mthd

```

METHOD set_attributes.
  DATA lo_db TYPE REF TO lcl_db.
  lo_db ?= me->get_db( ).
  TRY .
    lo_db->get_tvarvc_values( EXPORTING
                              p_vname = me->av_name
                              IMPORTING
                              rt_values = me->at_values ).
    CATCH cx_sy_sql_error.
      FREE lo_db. RETURN.
  ENDTRY.
  SORT me->at_values.
  FREE lo_db.
ENDMETHOD.

```

## Redefined Methods

## Local Types

```

*** use this source file for any type of declarations (class
*** definitions, interfaces or type declarations) you need for
*** components in the private section
Local class definitions

```

```

*** use this source file for the definition and implementation of
*** local helper classes, interface definitions and type
*** declarations

```

```

*-----*
* Specification structure:
*   .Classes:

```

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```

*      ..OVERVIEW clause: A conceptual description of the class.
*      .Methods and Procedures (Sub-routines):
*      ..REQUIRES clause: states a precondition, e.g., a an
obligation on
*
*          the client (ie, the caller of the
method).
*
*          It?s a condition over the state in which
the
*
*          method is invoked. If the precondition
does not
*
*          hold, the implementation of the method is
free
*
*          to do anything (including not
terminating,
*
*          throwing an exception, returning
arbitrary
*
*          results, making arbitrary modifications,
etc).
*      ..EFFECTS clause: states a postcondition, e.g., an
obligation on
*
*          the implementor of the method. If the
precondition holds for the invoking
state,
*
*          the method is obliged to obey the
postcondition,
*
*          by returning appropriate values,
*
*          throwing specified exceptions, modifying
or not
*
*          modifying objects, and so on.
*      ..MODIFIES clause: identifies which objects or data
structures may
*
*          be modified.
*-----*
*-----*
*-----*
* Class LCL_DB
* OVERVIEW: Objects of this class mediates database accesses. It
aims
*
*          to isolate this API from external dependencies, as
might
*
*          be desirable in tests.
*          The instances of this object are provided by the
protected
*
*          method GET_DB of the main class,
ZCL_CRM_TVARV_RETRIEVER.
*
*          By redefining the method GET_DB one can provide
*
*          appropriated stubs, which must redefine the desired
*
*          methods of LCL_DB, instead of accessing real
database
*
*          tables.
*-----*
*-----*
CLASS lcl_db DEFINITION.
    PUBLIC SECTION.
        METHODS get_tvarvc_values IMPORTING p_vname          TYPE
rvari_vnam
                                EXPORTING VALUE(rt_values)
                                TYPE
                                zcl_crm_tvarv_retriever=>cyt_tvarvc

```

```

                                RAISING    cx_sy_sql_error.
*-----*
----*
* Method GET_TVARVC_VALUES
*-----*
----*
* REQUIRES: The variant name must be provided.
* EFFECTS.: If no related data is found, raises an exception of
type
*           CX_SY_SQL_ERROR, otherwise returns a table holding
the
*           related variant content.
*-----*
----*
*   -> P_VNAME      ABAP: Name of Variant Variable.
*   <- RT_VALUES    Variant values.
*-----*
----*
ENDCLASS.
CLASS lcl_db IMPLEMENTATION.
    METHOD get_tvarvc_values.
        DATA lv_vname TYPE rvari_vnam.
        lv_vname = p_vname && '%'.

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```

        SELECT * FROM tvarvc
            INTO TABLE rt_values
            WHERE name LIKE lv_vname.
        IF sy-subrc <> 0.
            RAISE EXCEPTION TYPE cx_sy_sql_error.
        ENDIF.
    ENDMETHOD.
ENDCLASS.

```

Macros  
 \*\*\* use this source file for any macro definitions you need  
 \*\*\* in the implementation part of the class

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