m_utl_list_operation.sas File Reference

Utilities

Utility macro to perform list operation on sets of word lists

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Description

The macro performs Union, Intersection, Difference operation on sets represented by word lists. When the argument operation is set to Union, the macro combines the Left and Right set items. When set to Intersection, only items listed in both sets are kept. When set to Difference only the items missing in the right set (compared to the left set) are kept. The output list can be modified by adding a comma delimiter between each result item. Left(A B) / right(B C) Operation: Union -> result: A B C
Left(A B) / right(B C) Operation: Intersection -> result: B
Left(A B) / right(B C) Operation: Difference -> result: A
This macro is originally based on the ut_list_operation.sas macro program by Dave Prinsloo (dave.prinsloo@yahoo.com)

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Version

20.1.10

Link

https://github.com/paul-canals/toolbox

Parameters

Input	help	Parameter, if set (Help or ?) to print the Help information in the log. In all other cases this parameter should be left out from the macro call.
Input	leftlist	Character string containing the left word list. The default value is: _NONE_.
Input	rightlist	Character string containing the right word list. The default value is: _NONE_.
Input	operation	Indicator [Union|Intersection|Difference] to select the list operation type. The default value is: Union.
Input	left	Alias of the _leftlist_ parameter.
Input	right	Alias of the _rightlist_ parameter.
Input	op	Alias of the _operation_ parameter.
Input	in_dlm	Indicator [BLANK|COMMA] to select the input delimiter type. The default value is: BLANK.
Input	out_dlm	Indicator [BLANK|COMMA] to select the output delimiter type. The default value is: BLANK.
Input	debug	Boolean [Y|N] parameter to provide verbose mode information. The default value is: N.

Returns

- Result operation word list.

Calls

- m_utl_print_message.sas
- m_utl_print_mtrace.sas

Usage

Example 1: Show help information:

```
%m_utl_list_operation(?)
```

Example 2: The Union between Left(A B) and Right(B C) list:

```
%let result=
   %m_utl_list_operation(
      left      = %str(A B)
    , right     = %str(B C)
    , operation = Union
    , in_dlm    = BLANK
    , out_dlm   = COMMA
    , debug     = Y
      );

%put The Union between Left(A B) and Right(B C) list is: (&result.);
```

Example 3: The Intersection between Left(A,B) and Right(B,C) list:

```
%let result=
   %m_utl_list_operation(
      left      = %str(A,B)
    , right     = %str(B,C)
    , operation = Intersection
    , in_dlm    = COMMA
    , out_dlm   = BLANK
    , debug     = Y
      );

%put The Intersection between Left(A,B) and Right(B,C) list is: (&result.);
```

Example 4: The Difference between Left(A B) and Right(B C) list:

```
%let result=
   %m_utl_list_operation(
      left      = %str(A B)
    , right     = %str(B C)
    , operation = Difference
    , debug     = Y
      );

%put The Difference between left(A B) and right(B C) list is: (&result.);
```

Example 5: The Difference between Left(/bic/A /bic/B) and Right(/bic/B) list:

```
%let result=
   %m_utl_list_operation(
      left      = %str('/bic/A'n '/bic/B'n)
    , right     = %str('/bic/B'n)
    , operation = Difference
    , debug     = Y
      );

%put The Difference between left(/bic/A /bic/B) and right(/bic/B) list is: (&result.);
```

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