COPYSTRUCT

COPYSTRUCT action

Function

The action copies the specified row/rows of the structured local variable to other local structured variable (i.e. local variable of *Record* type).

Declaration

```
COPYSTRUCT _dstStruct, _fromRow, _firstRowToCopy[, _lastRowToCopy]
```

or

```
COPYSTRUCT _dstStruct, _fromRow, _srcStruct
```

Parameters

_dstStruct	in / out	Identifier of local variable of *Record* type - destination structure.
_fromRow>	in	Identifier of *Int* type - first row in destination structure (*_dstStruct*). Specified row, rows or whole structure will be copied (inserted) to destination structure from it (including).
_firstRowToCopy	in	Identifier of a row of source local variable - first row to be copied.
_lastRowToCopy	in	Optional parameter - identifier of a row of source local variable - last row to be copied. **Note:** If the parameter is not specified, the action will copy just the row specified by the parameter *_firstRowToCopy*.

Description

The action copies:

- *one row* - only the parameter *_firstRowToCopy* is specified (the parameter _lastRowToCopy is NOT)
- *rows* - both the parameters *_firstRowToCopy* and *_lastRowToCopy* are defined
- *whole structure* - 2nd declaration (the parameter *_srcStruct*)

The row, rows or entire structure to be copied and inserted into the local variable specified by the parameter *_dstStruct* on the position given by the parameter *_fromRow* and below.
If the size of destination structure *_dstStruct* is not sufficient, the action will generate the error *_ERR_RANGE_ERROR*.

The local variables *_dstStruct*, *_firstRowToCopy* and *_srcStruct* must be the same type (they must have the same structure definition).

If the parameter *_lastRowToCopy* is specified, the action copies the rows between the parameters *_firstRowToCopy* and *_lastRowToCopy* including. In this case both the parameters must represent a row of the same structure.

Example

```
RECORD (SD.ArchData) _src
RECORD (SD.ArchData) _dst
INT _idx

BEGIN
; fill source variable with values from 1 to 10
REDIM _src[10]
_idx := 1

DO_LOOP
EXIT_LOOP _idx > _src\DIM
_src[_idx]^value := _idx
_idx := _idx + 1
END_LOOP

; set the size of destination variable
REDIM _dst[11]


; copy one row from structure _src to 4th row of structure _dst
; _dst[4] <-- _src[5]

COPYSTRUCT _dst, 4, _src[5]


; copy two rows from structure _src to structure _dst (from 3rd row down)
; _dst[3] <-- _src[5]
; _dst[4] <-- _src[6]

COPYSTRUCT _dst, 3, _src[5], _src[6]


; copy all rows from structure _src to structure _dst (from 2nd row below)
; _dst[2] <-- _src[1]
; _dst[3] <-- _src[2]
; _dst[4] <-- _src[3]
; ...

COPYSTRUCT _dst, 2, _src

END
```

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