

Terms

Terms used to describe actions

Expression

Expression is a sequence of characters, which form a correct [mathematic expression](#). If it is required, that an expression should get a value of particular type, then this value type will be identified as follows:

- **Boolean** - Bo
- **Integer** - Int
- **Real** - Re
- **Absolute time** - AbsTime
- **Time interval (relative time)** - RelTime
- **Text** - Txt
- **HBJ** - Hbj

Identifier of value

Identifier of value (see also [Identifiers](#)) is:

- object name
- local variable name
- directly written variable. There are 3 admissible types
 - **text constant** (e.g.: "This is a text constant")
 - **integer constant** (standard declaration of an integer number)
 - **real constant** (declaration of a real number. e.g.: 3.14159)
 - **system constant** (@TRUE, @Run, ...)

In case that the name of an object identifies an object of [Structured variable](#), then an access to item (optionally an index) must follow the name. For example:

```
SV.Structure^Int  
SV.Structure[2]^Int
```

Similarly, if a local variable is of RECORD type, or type ALIAS, an access to item (optionally an index) must necessarily follow the name. For example:

```
RECORD (SD.RecordDef) _locRecord  
ALIAS (SD.RecordDef) _aliasRecord  
INT _index
```

```
_locRecord[_index]^Int  
_aliasRecord^Int
```

As we can see from the examples, index (row number) is enclosed in square brackets []. Index, in declaration, is evaluated as an expression, which has to get a value of *Int* type.

According to the [identifier](#) definition, the following types belong into this category::

IC_C, IC_O, IC_O_R_RIA, IC_O_R_RIN, IC_L, IC_L_CONST, IC_L_AN, IC_L_AT_RIA, IC_L_AT_RIN, IC_L_RNA_RIA, IC_L_RNA_RIN, IC_L_R_RIA, IC_L_R_RIN.

Identifier of structure row

Identifier of a structure row is:

- indexed name of an object of [Structured variable](#) type
- indexed name of a local variable of **RECORD** type or type ALIAS

An example for objects:

```
INT _index  
  
SV.Structure[_index+1]  
SV.Structure[1]
```

An example for local variable:

RECORD (SD.RecordDef) _locRecord
ALIAS (SD.RecordDef) _aliasRecord
INT _index

_locRecord[3]
_locRecord[_index]

_aliasRecord[_index]
_aliasRecord[6]

According to the [identifier](#)'s definition, the following types belong to this category:

IC_O_R_R, **IC_L_AT_R**, **IC_L_RNA_R**, **IC_L_R_R**, and the index placed after identifier must be <> 0.

Identifier of structure column

Row is identified by its name. Therefore structure row identifier can be defined in two ways:

- SV.StructureName[...]^ColumnName - in case of object of [Structured variable](#) type
- _locRecord[...]^ColumnName - in case of local variable of **RECORD** type

Structure row index is not important.

Identifier of structure item

Row is identified by its name. Therefore structure row identifier can be defined in two ways:

- SV.StructureName[RowIndex]^ColumnName - in case of an object of [Structured variable](#) type
- _locRecord[RowIndex]^ColumnName - in case of a local variable of **RECORD** type
- SV.MenoStruktury[RowIndex]^_colNr - for ESL only (see also the topic [Admissible operands in expressions](#))
- _locRecord[RowIndex]^_colNr - for ESL only (see also the topic [Admissible operands in expressions](#))

Identifier of entire structure

Identifier of entire structure is:

- name of an object of [Structured variable](#) type
- name of a local variable of **RECORD** type or types ALIAS

An example for objects:

INT _index

SV.Structure

An example for local variable:

RECORD (SD.RecordDef) _locRecord
ALIAS (SD.RecordDef) _aliasRecord
INT _index

_locRecord
_aliasRecord

According to the [identifier](#)'s definition, the following types belong to this category:

IC_O_R, **IC_O_R_R***, **IC_L_AT_R***, **IC_L_RNA**, **IC_L_RNA_R***, **IC_L_R**, **IC_L_R_R***

* index behind an identifier must be = 0.

Reference to object

Reference to object is a special case of [value identifier](#), where its value must be the reference to an object or the identifier is directly the object itself.

For example:

; object itself is a reference
Sec
SysTime
U.Int

; Structure item
SV.Struktura[_index]^Object
RECORD (SD.RecordDef) _rec
_rec[_index]^Object

; Alias is the reference to object
ALIAS _a
_a

According to the [identifier](#)'s definition, the following types belong to this category:
IC_O, IC_O_R, IC_O_R_RIA, IC_L_AN, IC_L_AT, IC_L_AT_RIA, IC_L_R_RIA.



Related pages:

[Identifiers](#)