The formats of the expression templates and the expressions on variables

The document describes the format of Expressions configuration

UPDATES

Revision	Author	Action	Editing	Date	Distribution
1.0	JCW	Creation		06/27/2000	
2.0	JCW	Evolution	Enable, Enabling bit, Networking calculation & dynamic configuration distribution	08/23/2008	
2.1	JCW	Evolution	Updated	09/08/2008	
2.2a	JCW	Evolution	Updated	01/09/2011	
2.2	JCW	Evolution	Description length from 80 to 255	30/03/2017	From version 12.0 on

Location of the expression template configuration file

The expression template configuration file "EXPRM.DAT" is saved in the subfolder C – Ctemp – Ctemp\Bak of the project folder.

The format of the expression templates for the version 10.0 & later

N	Description	T	Size in bytes	Value
1	Type	C	18	EXPRESSIONTE MPLATE
2	Name – A free format mnemonic which will appear as an identifier in the list of defined expressions and is used to refer to an expression in an animation.	C	80	
3	Description	C	80 255 from version 12 on	
4	Object origin 0 = local Not 0 = 3rd party objects	N	2	
5	Object version number	N	2	
6	Server list name	C	40	
7	Client list name (reserved)	C	40	
8	Enable flag = 1 enabled, 0 disabled	C	1	
9	Enabling Bit - The name of a database bit which, if specified, must have a value of 1 to enable the calculation.	C	256	

N	Description	T	Size in bytes	Value
10	Expression – The expression to be defined. The expression may contain any number of characters but is limited to 20 symbols. (Variables, operators, functions and constants). An expression may be continued onto 2 or more lines.	C	32000	

The format of the expression templates for the version earlier than 9.0 (obsolete but read-only in version 10.0 & later)

N	Description	T	Size in bytes	Value
1	Type	C	5	EXPRM
2	Name	C	80	
3	Expression	C	32000	
4	Reserved	C	40	
5	Reserved	C	40	
6	Object origin	N	2	0 : LOCAL >0 : CUSTOM
7	Object version	N	2	
8	Comment	C	80	

Location of the expression on variable configuration file

The expression template configuration file "EXPRV.DAT" is saved in the subfolder C – Ctemp – Ctemp\Bak of the project folder.

The format of expressions on variables for the version 10.0 & later

N	Description	T	Size in bytes	Value
1	Type	C	15	EXPRESSIONON VAR
2	Name – A free format mnemonic which will appear as an identifier in the list of defined expressions.	C	80	
3	Description	C	80 255 from version 12 on	
4	Object origin 0 = local Not 0 = 3rd party objects	N	2	
5	Object version number	N	2	
6	Server list name	C	40	Not saved but got from the attribute of the result variable
7	Client list name (reserved)	C	40	
8	Enable flag = 1 enabled, 0 disabled	C	1	
9	Enabling Bit - The name of a database bit which, if specified, must have a value of 1 to enable the calculation.	C	256	

10	Result variable – The variable in which the result of the expression is placed. The variable does not need the control property set.	C	256	
11	Branch – The database branch is applied to all elements in the expression ant the result variable.	C	256	
12	Expression – The expression to be defined. The expression may contain any number of characters but is limited to 20 symbols. (Variables, operators, functions and constants). An expression may be continued onto 2 or more lines.	C	32000	

The format of expressions on variables for the version earlier than 10.0 (obsolete but read-only in version 10.0 & later)

Format 1:

N	Description	T	Size in bytes	Value
1	Type	C	5	EXPRV
2	Result variable	C	40	
3	Expression	C	32000	
4	Branch	C	40	
5	Reserved	C	40	
6	Object origin	N	2	0 : LOCAL >0 : CUSTOM
7	Object version	N	2	
8	Comment	C	80	