Creating a Workbook

LiveView - Creating a workbook

To create a new workbook select the option **New** from the menu **File** and select the template *LiveView.xlt* placed in the tab **D2000**.

Workbook contents

Each workbook consists of three sheets:

- **Values** - the sheet is used for viewing values (presentation sheet)
- **Value source** - the sheet is used for configuration of current object values presentation
- **Settings** - the sheet allows to configure conditions of the values presentation

Workbook configuration

There are two modes for the workbook:

1. **Configuration mode**
2. **Browse mode**

Configuration mode is enabled after opening an existing (or after creating a new one) workbook. There are no values updated. The workbook status is shown in the cell *STATUS* (**B9**) on the *Setting* sheet. The text *Stopped* means that the workbook is in the configuration mode and the text *Running* means that it is in the browse mode. Switching between the modes is allowed by clicking the buttons **Start** and **Stop** placed on the *Settings* sheet.

When you switch between the *Configuration mode -> Browse modes*, there are executed the following actions:

1. Reading the contents of the cells **B4** up to **B8** and the data are to be used for logon to the D2000 system.
2. Reading the configuration defined on the sheet ***Value Source*** within defined active range (the parameter **Active range** (**B1** and **C1**) on the sheet ***Settings***) and opening the object required for browsing.
3. On the sheet **Values**, there are periodically written values of required objects (the period is defined by the parameter **Updating values**).

Switching into the *Configuration mode* terminates writing values.

Value Source

The sheet ***Value source*** contains an active range, that is read when you switch into the *browse mode*. Defined cells from the range must contains references to values (or value attributes) of D2000 system objects. Values get according to the references are to be automatically written into corresponding cells on the sheet ***Values*** and they are being updated with defined period. Corresponding cell is a cell with the same position (row and column).

Reference to value

References to values can be defined within the active range on the sheet ***Value source***. Reference defines the object name, value of which you want to browse. If you define a reference to an array index, the reference must contain the array name and the index and if you define a reference to a structure, the reference must contains the structure name and the item name.

Examples of the references to values:

Reference to value	Meaning
SysTime	Value of the object *SysTime.*
Sec	Value of the object *Sec.*
X.Array[1]	Value of the 1st item of the Array type object *X.Array.*
X.Arrray[3]	Value of the 3rd item of the Array type object *X.Array.*
SV.Struct[2]^Name	Value of the item *Name* in the 2nd row of the structure *SV.Struct.*

Value attribute is defined (analogous to defining an expression of an *Eval tag* type object) by extending the reference with the character "\" and three-character attribute name.

Attributes names and their meaning:

Attribute	Meaning
\LIM	Value limit

\TIM	Value time
\VLD	Value validity
\WEA	*WEAK* attribute
\TRA	*Transient* attribute
\DEF	*Default* attribute
\FLX	Value attributes (A...P)

Examples of the reference to value attributes:

Reference	Meaning
Sec\TIM	Value time on the object *Sec.*
X.Array[1]\VLD	Value validity attribute of the 1st item of the Array type object *X.Array.*
X.Array[3]\FLX	Value attributes of the 3rd item of the Array type object *X.Array.*
SV.Struct[2]^Name\VLD	Value validity attribute of the item *Name* in the 2nd row of the structure *SV.Struct.*

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