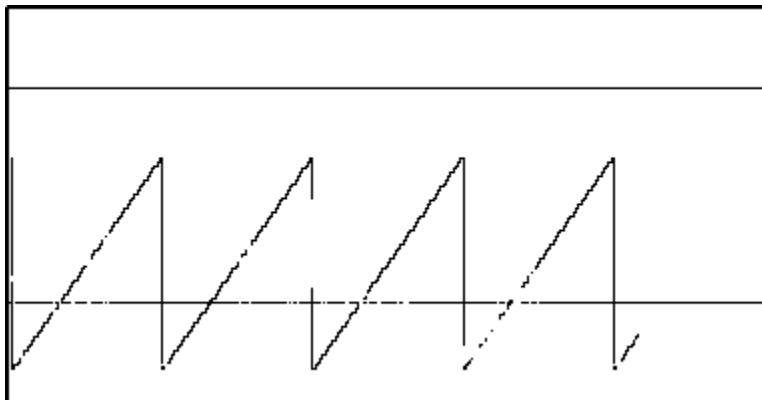# Trend

Trend displayer placed in a picture, allows to display the time flow of the values of objects. One trend is able to display values up to four objects.
The following figure shows an example of trend. Two red horizontal lines represents limits defined for the trend.
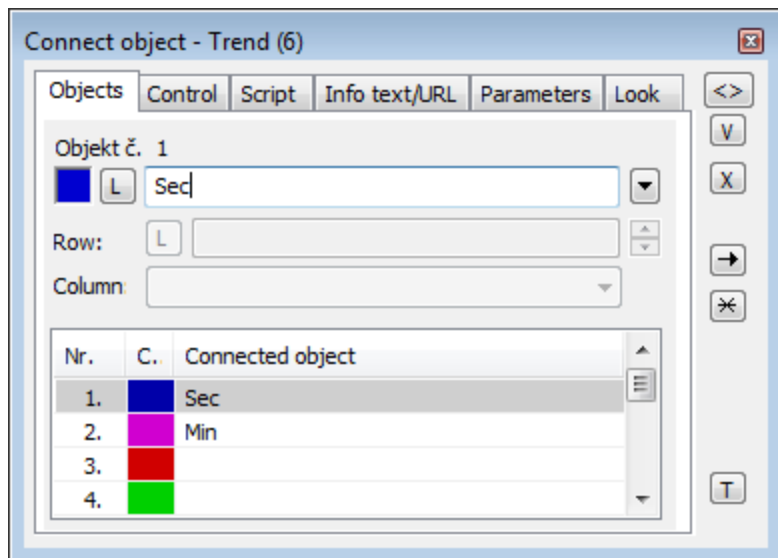

To create Trend displayer

1. In the Drawing toolbar, click the button **Trend** [icon].
2. Point the mouse cursor to the position of the first trend corner and click.
3. Point the mouse cursor to the position of the diagonal trend corner and click.

The parameters for connecting the displayer are being configured in the palette Connect object through the following tabs:

Objects

Object nr. 1 up to Object nr. 12

Each displayer of *Trend* type can display the values of as many as 12 objects. So the tab **Objects** contains input edit boxes allowing to define 12 objects. To define the objects to display in the displayer either enter its names or select them from a list opened by clicking the button placed right from the input box.

Color for displaying given object is defined by clicking the button placed left from the input box.

For object of Structured variable type, there must be defined column name (the parameter **Column**) and row number (the parameter **Row**). For object of Value array you must define a item (the button **L**), whose value will be displayed.

Control

The parameters placed on the tab are identical with the parameters on the tab Control of the **Connect object** palette.

Script

Reference variable

Specifies the name of the displayer in the form of reference variable for use in the picture script.

Metadata

Assignment of application data (metadata) to a graphic object. If the object contains some metadata, the name of the first record will be displayed in the button. Multiple records are indicated by ",...".

Event

The listbox allows user to select active picture event for the displayer. The listbox contains the following active picture events:

- OnClick
- OnMouseDown
- OnMouseEnter
- OnMouseLeave
- OnUserInput

Event Handler

The button opens the active picture script to define the active picture event specified by the parameter **Event**.
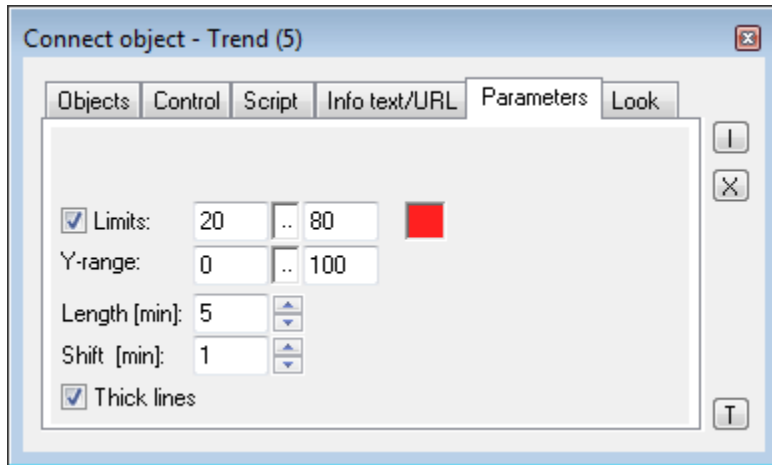
Info text/URL

Info text

Text to display as a tooltip when user points the mouse cursor to the displayer in the picture opened in process D2000 HI.
Possibility to use the Dictionary (to open press **CTRL+L**).

URL

Definition of URL address to open a web page from a picture. The address may be set also in the picture script by the function %HI_SetOBJURL.

Parameters

Limits

Definition of limits of the trend. To define limits, it is necessary to check the button placed left. Then you can enter values of the limits. Clicking the color sample placed right opens the color palette to select the colors of the limits.

Y-range

Definition of a range of y-axis (vertical axis).

Length

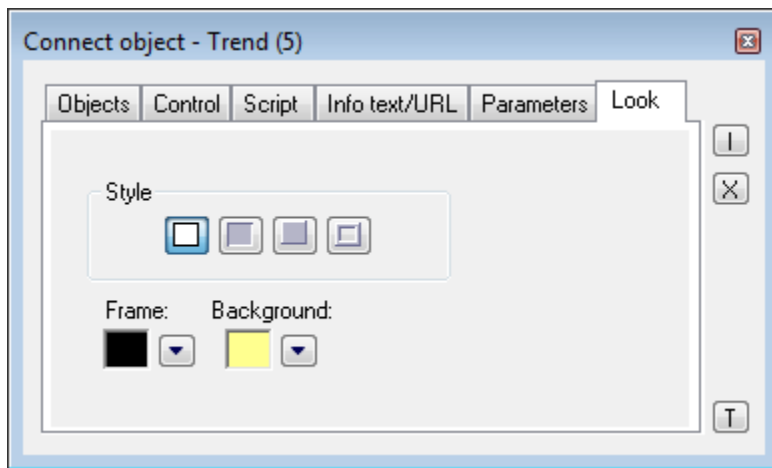The parameter defines the range of time axis (horizontal axis).

Shift

It defines a shift of time axis when drawing of flows reaches the right margin of time axis.

Thick lines

If the parameter is checked, flows displayed in the trend will be drawn by thick line.

Look

Appearance of the displayer is being configured in the tab **Look**.

Style

Definition of a style of the trend.

	Trend is drawn with the frame and background.
	3D effect - sunken trend.
	3D effect - raised trend.
	Trend is drawn with 3D frame.

Frame and Background

The parameters **Frame** and **Background** allows to define colors for the parts (frame and background) of the trend. Color is defined by selecting from the color palette opened by clicking the button placed right from the color sample of correspondent parameter.

Note relating to D2000 Thin Client

Trend displayer is not implemented in Thin Client.
For more rules see the page Drawing rules and object properties for D2000 Thin Client.

ⓘ **Related pages:**

Displayers
Graphic object manipulation functions