Picture Settings

Picture settings

For each picture, it is possible to define a group of parameters such as description, size, background color, bitmap, etc. These parameters are defined in the dialog box opened by clicking the item **Picture settings** from the menu **Settings**. This item is included in the popup menu opened by pressing the right-mouse button on the picture when no graphic object is selected.

The name of picture, parameters of which are being defined, is displayed in the title bar. But, if the default parameters are defined, the picture name is not displayed in the title bar.

Description

Description of the picture.

Possibility to use the Dictionary (to open press **CTRL+L**).

Help

The parameter allows to define a page of application help to be opened after pressing the F1 key while the picture is active. If the parameter is not defined, there will be opened the title page of D2000 help.

Basic parameters

The following parameters define a size and background color of the picture.

Parameter	Meaning
Size - Width	Width of the picture (in pixels). Minimum: 10 pixels. The picture dimensions in the HI process can only be changed from the picture script, it is not possible to determine a cut in the picture. In case of change of picture dimensions, the position and dimensions of the picture elements remain unchanged. This type in the new schemes can be achieved by using the same values for the min and max dimensions of picture.
Size - Height	Height of the picture (in pixels). The picture dimensions in the HI process can only be changed from the picture script, it is not possible to determine a cut in the picture. In case of change of picture dimensions, the position and dimensions of the picture elements remain unchanged. This type in the new schemes can be achieved by using the same values for the min and max dimensions of picture.
Minimal size - Width	Minimal width of the picture (in pixels). If the picture is main, the user cannot change its size out of the range. If the picture is opened as a sub-picture with enabled Min. size for subpicture parameter, then when its size is changed under this value, a zoom change stops at this point and a scrollbar is added. This behaviour does not apply if in that sub-picture set the user zoom. If min and max size of picture is set to the same value, it has a special behaviour. A picture margin does not allow to change width and height. The minimum dimensions are not accepted and the picture reduced from the script does not get scrollbars.
Minimal size - Height	Minimal height of the picture (in pixels). If the picture is main, the user cannot change its size out of the range. If the picture is opened as a sub-picture with enabled Min. size for subpicture parameter, then when its size is changed under this value, a zoom change stops at this point and a scrollbar is added. This behaviour does not apply if in that sub-picture set the user zoom. If min and max size of picture is set to the same value, it has a special behaviour. A picture margin does not allow to change width and height. The minimum dimensions are not accepted and the picture reduced from the script does not get scrollbars.
Maximal size - Width	The maximum width of the graphical picture in points (x-dimension). If the picture is opened as a master picture, the user can not change its size beyond this dimension. If the value is 0, the maximum dimension of the picture is given by the monitor size, but at least to the value of 1920.
Maximal size - Height	The maximum height of the graphical picture in points (y-dimension). If the picture is opened as a master picture, the user can not change its size beyond this dimension. If the value is 0, the maximum dimension of the picture is given by the monitor size, but at least to the value of 1200.
Background - Color	Selection of a background color and color gradient of the picture. Clicking the color sample placed right opens the window to select a color and color gradient (more ...).
Background - Pattern	Selection of a color for the picture background. Bitmap is being selected from a list of bitmaps (the directory BigBMP). Restrictions of the operating system are applied to this bitmap.

* Exception for pictures with titlebar - minimum size is 100 pixels (a feature of the Windows operating system).

The process D2000 GrEditor also allows the user to resize the picture in other way than in the dialog box above mentioned. This way is described in the topic Resize a picture.

Bitmaps

The configuration dialog box allows to define two bitmaps - a picture background and a logo placed in the picture foreground.

Parameter	Meaning
Background - bitmap	Selection of a bitmap for the picture background (see the topic Selection of a background bitmap).
Background - position	Selection of a background bitmap position (stretch, centre, up, down, left up, left down, right up, right down).
Logo - bitmap	Selection of a bitmap (logo) for the picture. The logo is drawn over the other graphic objects in the picture.
Logo - position	Selection of a position for the logo bitmap (centre, left up, left down, right up, right down).
Use zoom	When drawing a background, use zoom from the windows.

A list for the second bitmap (logo) contains all bitmaps placed in the directory **BITMAPS** (a subdirectory of the application directory).

Warning: The bitmap to be used, must be placed in the directory **BIGBMP** and the bitmap (logo) in the directory **BITMAPS** (subdirectories of the application directory). Those files must be BMP files.

Window type

The parameters define a type of the window containing the picture contents and its behaviour. The default setting is MDI window on the desktop of the process D2000 HI.

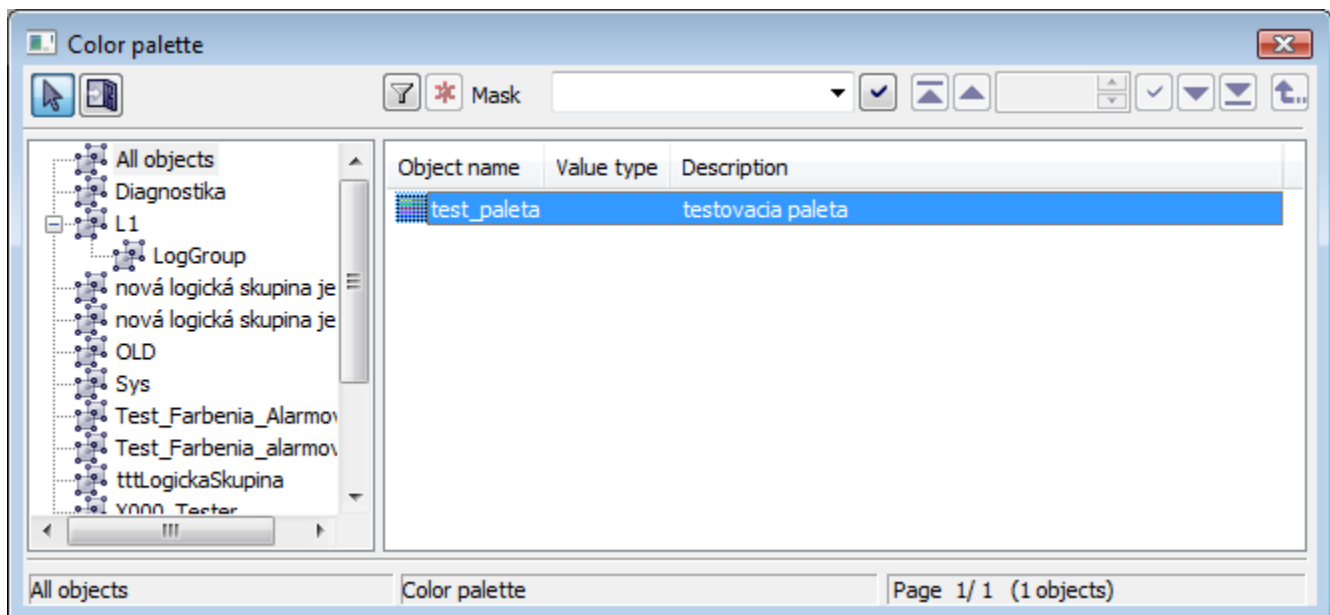| Parameter	Meaning
MDI window	The picture window is placed on the HI desktop as a common window (so-called MDI window).
Dialog	*Dialog window* type. In the process D2000 HI, an opened picture of this type is placed above all opened graphic information windows (graphs, reports, pictures – non-dialog). When the radio button is selected, there will appear the checkbox **Modal** - picture is *Dialog-modal window* type. If this picture is opened in HI process, it is possible to control only this picture, not the other objects of HI process.
Dock	The radio button allows user in the process D2000 HI to dock the picture to given margin of the **D2000 HI** desktop. When you click on the radio button, other four radio buttons appear to the right from this parameter. They represent the margins of the HI desktop.

Color palette

This parameter enables to select a color palette that will be used for a given picture. To select the required palette, click the button next to the entry field.

The dialog window for selection of required palette opens:

Attributes

They define the special features of the picture.

Parameter	Meaning
Application-modal	The picture can be opened only once in the system. The feature can be used in application with several HI consoles (processes).
Proportional	Keeps aspect ratio of picture in the window
Min. size for subpicture	Specifies whether to apply the minimum size even when the picture is opened as a subpicture.
Historic coordinate system	Enables / disables the original (historical) coordinate system - the 0, 0 point is placed at the corner left bottom. The new coordinate system has the 0, 0 point placed at the upper left corner. **Note:** The parameter can be edited only by the user with the administrator rights.
Server Script	Enables / disables the remote ESL script.
Invisible	The picture will be invisible after opening. It can be used as a user's control script carrier.
Hide in HI lists	The picture will be visible only for the users with the administrator rights. For the others it will be hidden.
Refresh in HI	If the picture is opened in the process D2000 HI, it will be automatically reopened after saving any changes in the process D2000 GrEditor.

Reopen in RD	Parameter may be used only for the application in redundant system. If the picture is opened in the process D2000 HI, it will be reopen after changing the HOT server.
Scrollbars when zoom	Displays the scrollbars in the window when the picture is zoomed. If the shift in zoom is disabled, the shift is possible through SHIFT+left mouse button+ movement.
Minimize box*	Enables / disables the minimize button in the title bar of the picture.
Maximize box*	Enables / disables the maximize button in the title bar of the picture. For the fixed size pictures, the button is always disabled.
Close*	Disables the close button in the title bar of the picture.
Close on user change	The picture will be closed when the user is changed or logged off.
Java thread	**SWT 1)** - the user code of the picture will be executed in SWT thread, i.e. all pictures with this setting share this thread. SWT library requires to execute any callings from this thread. **Own** - each picture has own thread to execute the user code. **SWING 1)** - the user code of the picture will be executed in AWT/SWING thread (Event Dispatch Thread), i.e. all pictures with this setting share this thread. SWING library requires to execute any callings from this thread. **POOL** - recommended - thread, on which a picture code will be executed, is allocated automatically from pool of threads
Scrip functions	Parameter was created to ensure backward compatibility of behavior of positional functions (%HI_SetPos*, %HI_GetPos*, %HI_SetSize*, %HI_GetSize*) in the existing ESL/Java scripts. **Zoom** - functions behave compatibly with the pictures that were in previous versions of D2000 - the types *Resize with zoom* and *Resize with layers*. **Layout** - functions behave compatibly with the pictures that were of type *Resize with layout manager*. **StdLayout** - standard behavior, explained in the descriptions of each function.

* If both minimize and maximize checkboxes are not checked off, the picture does not contain these buttons. If one of them is checked off, both are visible but disabled button is inactive.
(Note: Above mentioned is not applied to the pictures opened in other picture - because these pictures do not have a title bar).
If picture is opened in D2000 HI, the minimize, maximize and close buttons are placed in the upper right corner.

1) WARNING: If SWT or SWING thread is set on a picture, the functions that require the communication with **D2000 Server** cannot be called from this picture. Moreover, the synchronous requests on D2000 HI cannot be called. An attempt for calling these functions causes the exception RuntimeException ("WrongThread"). It relates to these functions:

- all functions %HI_GetXXX,
- getObjectByHOBJ
- getObjectByNAME
- openObjectByHOBJ
- openObjectByNAME
- callESLSync
- callJavaSync
- setConnectedObj
- openPictureDirectSyncXXX
- getArchArr
- getArchiveValues

Layers

A picture may have from one to ten layers. If the number is greater than 1 then there are entered the parameters of the layers (number and ratio of reduction (as in the scale maps)), the range, from which the layer is visible, e.g. 5 means a drawing ratio of 1: 5). The basic first layer has a resolution for zoom 1: 1 - e.g. picture resolution 8000:6000, in which the picture is drawn.

Transformation

The parameters define a behaviour of picture in the process D2000 HI.

If the picture size is greater than the maximum size of the monitor, then the size of the picture that is being opened in the process D2000 HI will be automatically adjusted to permitted maximum size in this process.

The exception is the monitors with a size of less than 1920x1200. For such monitors, the maximum is set to 1920x1200.

Picture position in HI

The parameter defines the position of the picture on the desktop after opening in the process D2000 HI and its behaviour when it is resized. There are several positions on the HI desktop.

The first position places the picture, opened in HI, in the centre of the desktop in original picture size. Other positions change the picture size to fill selected part of the HI desktop. The position and relative size of the picture is represented by the red rectangle.

Assign to groups

The assigning of the picture to groups allows to specify the groups to which the picture will belong. Select a group in the list and click the buttons to assign / remove the picture to / from the group.

	Includes picture in the selected logical group.
	Excludes picture from the selected logical group.

Navigator

For the picture, opened in HI, it is possible to define a main, previous and next picture/composition, which are being opened by means of the navigation toolbar.

Parameter	Meaning
Main	Starting picture/composition.
Previous	Previous picture/composition.
Next	Next picture/composition.

Export subdirectory
Setting the export subdirectory that can be done in two ways:

1. Direct entering to the edit field.

2. Clicking the button , which opens the window to search the required directory with CVS.
   Click the **OK** button to confirm your selection. If CVS subdirectory with *Repository file* is not placed in that directory, the user can cancel the action or use the selected path but without the path to XML Repository folder at the beginning. This path will occurs in the edit field.

ⓘ **Related pages:**

Default picture settings
Selection of a background bitmap
Picture layers