Creating Dialog Elements on a Canvas Control

You can use a canvas control as a background to draw the following dialog elements on it: the rectangle, line and graphictext controls. These dialog elements "visualize" information. You can, for example, create three or four rectangle controls, fill them with color and change their size at runtime. This way, you can build your own bar chart.

Once you have created a canvas control in the dialog, you can go on to create the rectangle, line and graphictext controls in it.

Anmerkung:
Graphictext controls do not repaint the background of the rectangle in which they are located. The background of the rectangle is specified at creation time of the graphictext control. What they do repaint is only the text specified in the text attribute.

▶ **To create dialog elements on a canvas control**

- Use the `PROCESS GUI` statement action `ADD`.

The rectangle, line and graphictext controls are then displayed inside the borders of the canvas control; if they exceed the canvas borders, they are clipped.

The following attributes are useful for controlling the behavior of the canvas control and the dialog elements on it:

- `OFFSET-X` and `OFFSET-Y` determine the x and y axis offset of the canvas control's upper border against the upper border of the area by which the rectangle, line or graphictext control have exceeded the canvas control's borders.

- `RECTANGLE-X`, `RECTANGLE-Y`, `RECTANGLE-W` and `RECTANGLE-H` determine the size of a rectangle control and its position relative to the underlying canvas control.

- `P1-X`, `P1-Y`, `P2-X` and `P2-Y` determine the start position (P1xx) and the end position (P2xx) of a line control relative to the underlying canvas control.

The following example illustrates how to create a canvas control

```
/* In the dialog's local data area, the following must be defined:
01 #CNV1 HANDLE OF CANVAS
01 #XAX HANDLE OF LINE
01 #YAX HANDLE OF LINE
01 #H1 HANDLE OF RECTANGLE
01 #H2 HANDLE OF RECTANGLE
01 #H3 HANDLE OF RECTANGLE
01 #H4 HANDLE OF RECTANGLE
01 #RESPONSE (I4)
/* In the dialog's AFTER-OPEN event handler, the following must be defined:
PROCESS GUI ACTION ADD WITH
PARAMETERS
  PARENT = #DLG$WINDOW
  TYPE = CANVAS
  HANDLE-VARIABLE = #CNV1
  RECTANGLE-X = 20
```

```
   RECTANGLE-Y = 20
   RECTANGLE-W = 200
   RECTANGLE-H = 200
   STYLE = 'F'
END-PARAMETERS
GIVING RESPONSE
PROCESS GUI ACTION ADD WITH
PARAMETERS
   PARENT = #CNV1
   TYPE = LINE
   HANDLE-VARIABLE = #YAX
   STYLE = 'S'
   P1-X = 20
   P1-Y = 20
   P2-X = 20
   P2-Y = 180
END-PARAMETERS
GIVING RESPONSE
PROCESS GUI ACTION ADD WITH
PARAMETERS
   PARENT = #CNV1
   TYPE = LINE
   HANDLE-VARIABLE = #XAX
   P1-X = 180
   P1-Y = 180
   P2-X = 20
   P2-Y = 180
END-PARAMETERS
GIVING RESPONSE
PROCESS GUI ACTION ADD WITH
PARAMETERS
   PARENT = #CNV1
   TYPE = RECTANGLE
   HANDLE-VARIABLE = #H1
   RECTANGLE-X = 20
   RECTANGLE-Y = 180
   RECTANGLE-H = 20
   RECTANGLE-W = -60
   FOREGROUND-COLOUR-NAME = BLACK
   BACKGROUND-COLOUR-NAME = RED
END-PARAMETERS
GIVING RESPONSE
PROCESS GUI ACTION ADD WITH
PARAMETERS
   PARENT = #CNV1
   TYPE = RECTANGLE
   HANDLE-VARIABLE = #H2
   RECTANGLE-X = 40
   RECTANGLE-Y = 180
   RECTANGLE-H = 20
   RECTANGLE-W = -40
   FOREGROUND-COLOUR-NAME = BLACK
   BACKGROUND-COLOUR-NAME = BLUE
END-PARAMETERS
GIVING RESPONSE
PROCESS GUI ACTION ADD WITH PARAMETERS
   PARENT = #CNV1
   TYPE = RECTANGLE
   HANDLE-VARIABLE = #H3
   RECTANGLE-X = 60
   RECTANGLE-Y = 180
   RECTANGLE-H = 20
```

```
   RECTANGLE-W = -55
   FOREGROUND-COLOUR-NAME = BLACK
   BACKGROUND-COLOUR-NAME = GREEN
END-PARAMETERS
GIVING RESPONSE
PROCESS GUI ACTION ADD WITH
PARAMETERS
   PARENT = #CNV1
   TYPE = RECTANGLE
   HANDLE-VARIABLE = #H4
   RECTANGLE-X = 80
   RECTANGLE-Y = 180
   RECTANGLE-H = 20
   RECTANGLE-W = -80
   FOREGROUND-COLOUR-NAME = BLACK
   BACKGROUND-COLOUR-NAME = MAGENTA
END-PARAMETERS
GIVING RESPONSE
```