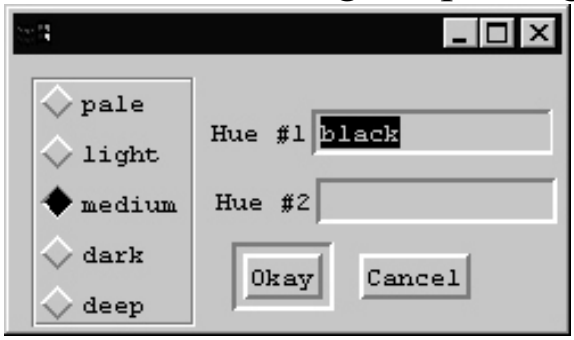
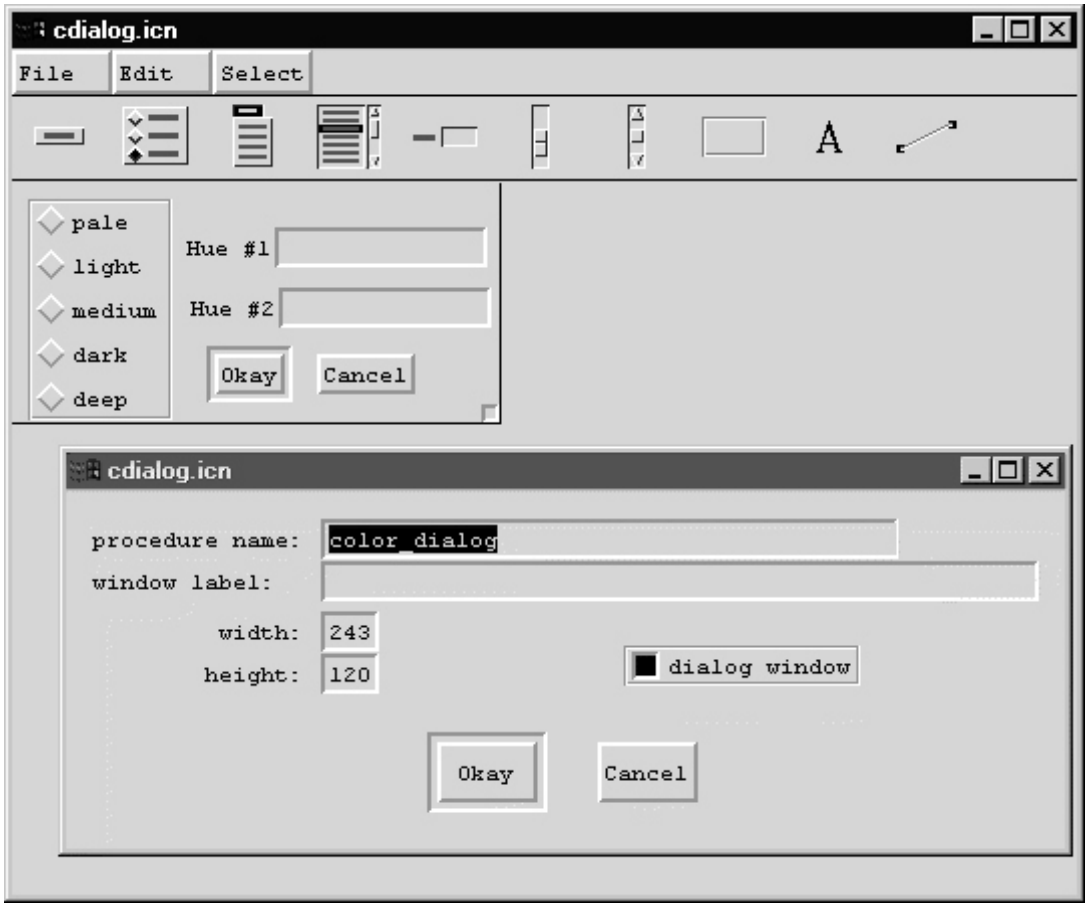
VIB dialogs

In addition to creating program interfaces, VIB can create dialog boxes. Here is a dialog for picking a color:

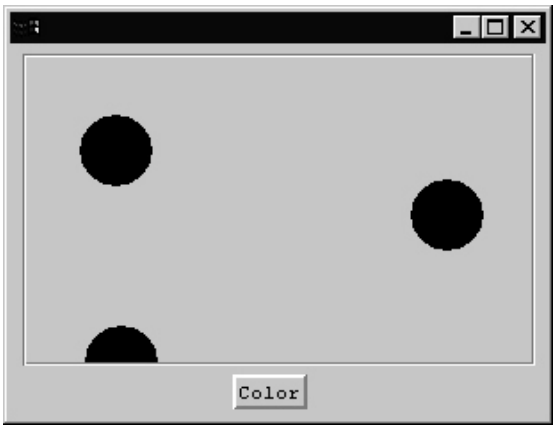


Use VIB as usual to create the interface and then click on the lower right corner to bring up the interface properties. Set the procedure name (`color_dialog`) and select "dialog window".



VIB dialogs, continued

Here is a simple program to exercise the dialog: (`dlg1`)



By default, a black circle is drawn in response to a click in the region. Pressing the `Color` button brings up the color selection dialog to specify the color of subsequent circles.

VIB dialogs, continued

The color dialog is handled entirely in the callback for the `Color` button:

```
procedure color_cb(vidget, value)
    attribs := table()
    attribs["lightness"] := "medium"
    attribs["hue1"] := "black"

    if color_dialog(&window, attribs) == "Okay"
    then
        Fg(dwin, attribs["lightness"] || " " ||
            attribs["hue1"] || " " ||
            attribs["hue2"])
    return
end
```

The dialog is brought up by calling `color_dialog`, the procedure name specified in the interface properties, as shown on slide 95.

Two arguments are passed to `color_dialog`: the window to associate the dialog with, and a table specifying initial values for the vidgets in the dialog.

When the dialog is dismissed, `color_dialog` returns the label of the button used to dismiss it.

In the above example, if the user pressed the `Okay` button, the color for `dwin` (a cloned window for the region) is set based on values in `attribs`, which in turn were set to the vidget values present when the dialog was dismissed.

VIB dialogs, continued

There can only be one VIB-generated interface in a source file, so each dialog must be in its own source file.

The color dialog was created with '`vib cdialog.icn`'. Here is `cdialog.icn`, minus comments:

```
link dsetup
#===<<vib:begin>>=== modify using vib;
procedure color_dialog(win, deftbl)
static dstate
initial dstate := dsetup(win,
   ["color_dialog:Sizer::1:0,0,243,120:",],

["button1:Button:regular:-1:101,86,35,20:Okay",],

["button2:Button:regular::152,86,49,20:Cancel",],
   ["hue1:Text::14:87,23,150,20:Hue #1\\=",],
   ["hue2:Text::14:89,53,150,20:Hue #2\\=",],
   ["lightness:Choice::5:8,9,72,110:",,
      ["pale","light","medium","dark","deep"]],
   )
return dpopup(win, deftbl, dstate)
end
#===<<vib:end>>===
```

The program was built with the command

```
icont dlg1.icn cdialog.icn
```

Note that VIB assumes that non-toggling buttons dismiss the dialog. If a button is specified (via VIB) as "dialog default", then hitting <Enter> will simulate a button press on it.

Utility dialogs

There are several other utility dialogs, such as `Notice()`. One is `TextDialog`, which presents a set of labeled text vidgets. This program:

```
global dialog_value
procedure main() # dlg2
    rslt := TextDialog("What is your birthday?",
        ["Month", "Day", "Year"],
        [1,1,2000],
        [2,2,4],  # field widths
        ["Done","Cancel"])

    write(Image([rslt, dialog_value],3))
end
```

Produces this dialog:

When dismissed, the global `dialog_value` is set to the values of the fields and the label of the button pressed is returned.

The above `Image` might produce this:

```
["Done",["7","4","1976"]]
```

Utility dialogs, continued

Other utility dialogs are:

`SelectDialog`—displays a set of radio buttons

`ToggleDialog`—displays a set of toggle buttons

`ColorDialog`—allows selection of a color using the RGB or HSV color models

`OpenDialog`, `SaveDialog`—simple front-ends to `TextDialog` to prompt for file names

Chapter 14 in the graphics text describes the utility dialogs in detail.