



Using Pop-up Windows

Rev D, January 1996

Hewlett-Packard

There are occasions where the use of a pop-up window would be advantageous while testing boards on the Agilent 3070. This article is meant to highlight one method that can be used to obtain that end. This particular method has been found to add about .8 seconds to the overall board test time.

The technique uses a file from the '/usr/hp3070/contrib' directory called 'xwindowop' which was added with software revision B:2:50 (in order to copy xwindowop between directories, it must be "shar"ed first). The standard unix command 'xdialog', found under the directory '/usr/bin/X11', is also employed.

Note that the pop-up window, or dialog box, will use the font selection designated in the VUE window. To change the size, click on the Style Manager VUE icon (it shows an artist pallet, three T's, a keyboard, and another strange symbol). Then click on the 'Font' selection. Finally select the desired size. The size needed depends on the monitor size. For example on an A4033A, I'd recommend selecting 18.5, the largest Font, at least to start. On an A2287A a Font of 14.5 works better.

Dialog boxes can be set to almost any size. A convenient choice is a size that can be placed along side the normal testhead window without blocking any text in that window. Again the choice depends on monitor size; for an A4033A try 450 x 400, while on an A2287A try 350 x 300.

The dialog text is created, and then stored in an ordinary text file. If an A4033A display is used with an 18.5 font selected in the VUE window, and a dialog size of 450 by 400 is used, then the text used in the dialog box must approximate the following width;

```
|12345678901234567|76543210987654321|
|<-----width----->|
```

You can have 11 lines of text, FOLLOWING an initial blank line. Remember to beware of trailing blank lines.

Unfortunately this will only give you a starting place. The spacing is NOT regular and the output depends on the display size, font selected, and dialog size chosen. For example the following text was created for an A4033A display. If you wish to run this example, save the text given below between the two "CUT-HERE" lines in a text file. The file should be called 'no_touch', because that is the name used by the xdialog command in the BT_Basic program below.

-----CUT-HERE-----

TESTING IN PROGRESS

IN-CIRCUIT DONE WITH VACUUM ON
FUNCTIONAL DONE WITH VACUUM OFF

%%%%%%%%%%
%%
%% PLEASE DO NOT TOUCH %%
%%
%%%%%%%%%

-----CUT-HERE-----

The resulting dialog window looked as follows (with the addition of a 'Close Window' button in the bottom left corner).

```

+-----+
|                                     |
|           TESTING IN PROGRESS       |
|                                     |
| IN-CIRCUIT DONE WITH VACUUM ON     |
| FUNCTIONAL DONE WITH VACUUM OFF    |
|                                     |
| %%%%%%%%%%                         |
| %%                                  %% |
| %% PLEASE DO NOT TOUCH              %% |
| %%                                  %% |
| %%%%%%%%%%                         |
|                                     |
+-----+

```

The example BT-Basic program below also uses a text file called 'change_it'. If you wish to run this example, save the text given below between the two "CUT-HERE" lines in a text file. The file must be called 'change_it', because that is the name used by the xdialog command in the given BT_Basic program.

-----CUT-HERE-----

TESTING IS COMPLETE
PASS OR FAIL STATUS IS SHOWN
IN THE OTHER WINDOW

%%%%%%%%%
%%
%% PLEASE CHANGE THE BOARD %%

%%
%% %% %% %% %% %% %% %% %% %%

%%

-----CUT-----

```

|*****
! ** The rest of this article consists of lines from an actual BT-Basic program ! ** used
to
illustrate the operation. The program includes comments giving ! ** suggested
locations
for the basic commands within an Agilent3070 testplan. ! ** ! ** If you 'load basic
"Pop_
Up_Window_Operation"', the text will be commented ! ** and the demo will run,
providing
you have already created the two text ! ** files mentioned above and the xwindowop
file
exists. Syntax errors will ! ** occur of course, but these are to be expected as the
textual lines are ! ** automatically commented. ! ** ! ** Unfortunately two lines actually
exceed the screen width and thus are shown ! ** as four lines below. You need to
modify
them both before the program will ! ** operate properly. See ! **** THIS IS JUST ONE
LINE ****! in two places. !

```

```

*****
! ** Insert the following section into 'sub Initialize_Constants'; ! ** Create dialogs and
place
them in the upper right corner of the screen. ! ** Note that the 815,-20 used works for
an
A4033A display. ! ** For an A2287A display replace the 815,-20 with 660,-20 in two
places.
! **** THIS IS JUST ONE LINE ****! execute "xdialog -O ""Close Window"" -bg red -fg
yellow -t no_touch -geometry 450x400 -f ""no_touch""&","Error wait .65 ! ** wait time
may
need optimizing on your system. execute "xwindowop -move 'no_touch' 815,-
20","Error
;nowait ! **** THIS IS JUST ONE LINE ****! execute "xdialog -O ""Close Window"" -
bg
green -fg blue -t change_it -geometry 450x400 -f ""change_it""&","Error wait .40 ! **
wait
time may need optimizing on your system.
!-----end of section-----!

```

```

!***** The following line is for Demo purposes only *****!
Wait: | Loop = Loop + 1 | if Loop > 5 then goto End !*****!
|*****

```

! ** Insert the following two lines just after 'Eject_Ticket : image 13/' in the ! ** testplan.

This will put the 'change_it' dialog on top of the other dialog. ! ** Tell Operator to change

the board using the "change_it" text. execute "xwindowop -raise 'change_it",Error;nowait

!***** The following line is for Demo purposes only*****!

for B=1 to 10 | print B | next B | wait 2 !*****!

!*****!

! ** Insert the following two lines just after 'wait for start' in the testplan. ! ** This will put the 'no_touch' dialog on top of the other dialog. ! ** Tell Operator "Please do not touch, testing in progress." execute "xwindowop -raise 'no_touch",Error;nowait

!***** The following two lines are for Demo purposes only**** *****!

for C=10 to 20 | print C | next C | wait 2 | goto Wait !*****! End: !*****!

!*****! !

** Insert the following lines just after 'Break_Trap:', 'Error_Trap:', and ! ** 'Abort:' in the testplan. This will clear the dialogs upon exiting. ! ** Remove the dialog windows upon exiting. execute "xwindowop -kill 'change_it",Error; nowait execute "xwindowop -kill 'no_touch" ,Error; nowait

!%%%%%%%%%%
%%%%%%%%%%