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Guide to the dxdiff Visual Differences Program

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**ULTRIX Worksystem Software
Guide to the dxdiff Visual
Differences Program**

Order No. AA-MA89A-TE

ULTRIX Worksystem Software, Version 2.0

Digital Equipment Corporation


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About This Manual

The *Guide to the dxdiff Visual Differences Program* describes how to use the dxdiff differences program to compare files visually.

Audience

The audience for this manual is an ULTRIX end user or programmer who is familiar with DECwindows.

Organization

This manual discusses the basic tasks that you need to know to run dxdiff. The first tasks discussed are starting the dxdiff application, comparing files, and manipulating the way in which differences are displayed. The next sections describe how to compare new sets of files and how to exit from dxdiff when you have finished comparing files. At the end of the manual there is a section on customizing the appearance of dxdiff.

Related Documents

DECwindows User's Guide

Describes basic DECwindows techniques. You should read this manual if you are not familiar with the DECwindows user interface.

Conventions

The following conventions are used in this manual:

- | | |
|----------------|---|
| special | In text, each mention of a specific command, option, partition, pathname, directory, or file is presented in this typeface. |
| name(n) | References to ULTRIX commands, system calls, and subroutines include the section numbers in the <i>ULTRIX-32 Reference Pages</i> where they are documented. Commands that include the section number (1X) are documented in the <i>ULTRIX Worksystem Software Reference Pages</i> . |

Guide to the dxdiff Visual Differences Program

The dxdiff application is a visual differences program that gives you a graphical display of the differences between two files. You can use dxdiff to compare different versions of ASCII text files.

The dxdiff application uses the diff(1) program to compare two files line by line, and then it displays the differences between them as areas of highlighted text.

When the differences between the files are displayed, you can scroll through the files or use push buttons to move from one difference to another.

This manual is intended to be read as an overview of dxdiff, to show you how to do the following tasks:

- Start dxdiff
- Select files to compare
- Display the differences between files
- Move through the differences in a file
- Change the characteristics of the display
- Compare a new set of files
- Exit from dxdiff
- Customize dxdiff

Starting dxdiff

To start dxdiff, enter the following command in a terminal emulator window:

```
% dxdiff &
```

You do not need to supply any file names as you can select files from within dxdiff.

When dxdiff starts, it displays the window shown in Figure 1.

The title bar contains the application name, followed by the window number. The first window displayed is always labeled 0. The windows are numbered to save confusion if you have more than one dxdiff window running at the same time.

The push button region at the bottom of the window contains the Next Diff and Prev Diff buttons for each of the text regions.

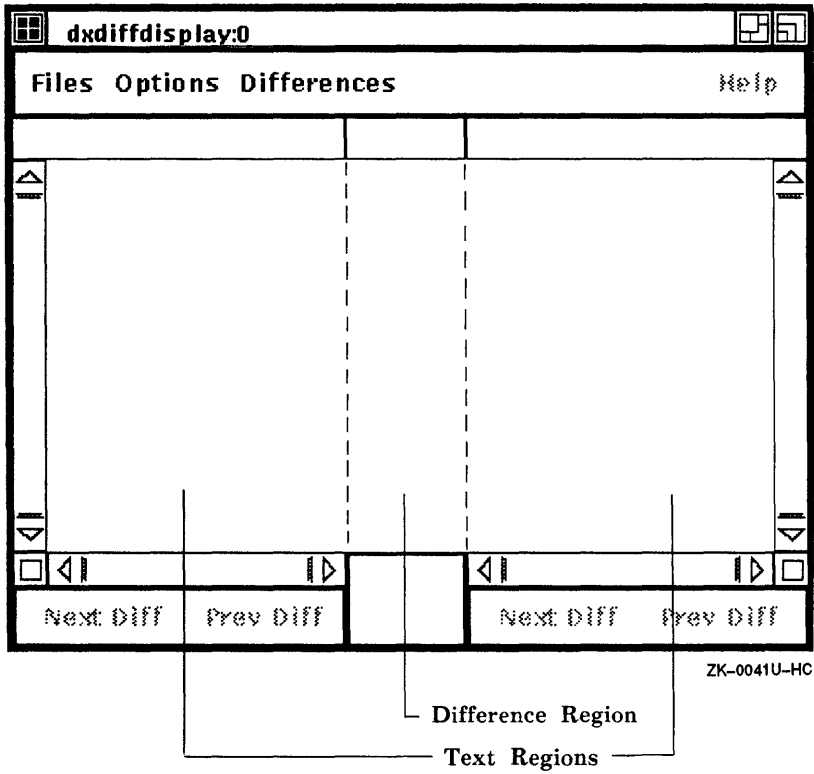


Figure 1: The Main dxdiff Window

Selecting Files to Compare

To select two files to compare, choose the Open Files... item from the File menu. Two file selection dialog boxes are displayed: `leftfileselector:0` and `rightfileselector:0`. Each dialog box lists the files in the current directory.

To change directory, type the pathname of the directory in the File Filter box and then click on the Apply button. The file selection box recognizes the tilde (`~`) character, which represents your home directory.

To select a file, either click on the file name and then click on the OK button, or double-click on the file name. You can also type the file name in the Selection box.

You must select one file from each of the dialog boxes.

Displaying the Differences

To display the differences between the two files that you have selected, choose the Do Differences item from the Differences menu.

The time taken for `dxdiff` to display the differences will depend on the length of the files and the number of differences between them.

Note that trailing blanks (spaces and tabs) are not included as differences, and are ignored. Any other strings of blanks are also treated as equal and do not appear as differences.

If there are no differences between the two selected files, if either of the files is a non-ASCII file, or if you have selected a directory instead of a file, an appropriate message dialog box is displayed.

Figure 2 shows the display of differences between two text files.

The files are displayed in two text windows that appear to the left and right of a central difference region. Each text region displays the name of its currently selected file.

The differences between the files are connected by lines running across the central difference box. These lines show the relationships between the differences in the files, and where the differences are located in the files.

The differences in the files are shown as areas of highlighted text; common text is not highlighted.

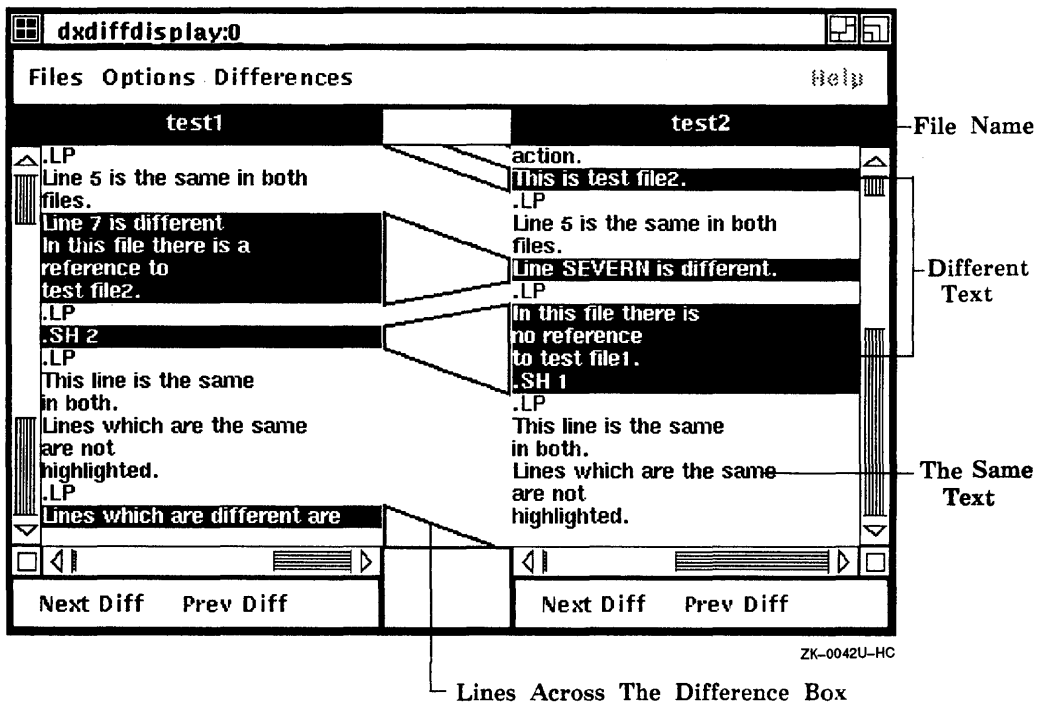


Figure 2: The Difference Display

When you start dxdiff, the display is set up to give you linked vertical scrolling, and lines connecting the areas of different text.

When you have linked vertical scrolling, and you scroll one of the files, the other file is scrolled with it line by line. When scrolling is unlinked, you can scroll the files independently of each other, viewing different parts of each file at the same time.

To find out how and in what ways you can change the difference display, see the section Changing the Characteristics of the Display.

Moving Between Differences

You can use the scroll bars to browse through the displayed files. You can also use the Next Diff and Prev Diff buttons, at the bottom of each text region, to move forward or backward between the differences in either file.

When you select the Next Diff button, dxdiff searches forward from the current difference (in the center of the difference display) to the next difference in that file. The application then moves that difference to the center of the display.

When you select the Prev Diff button, dxdiff searches backward from the current difference to find the previous difference in the file. The application then moves that difference to the center of the display.

These buttons are useful for quickly moving between the differences in a long file, especially where there are only a few differences.

Changing the Characteristics of the Display

To change the characteristics of the display, use the items on the Options menu.

You can control the following characteristics:

- Linked or unlinked vertical and horizontal scrolling
- Displaying lines or filled polygons in the difference region
- Displaying line numbers in the difference region

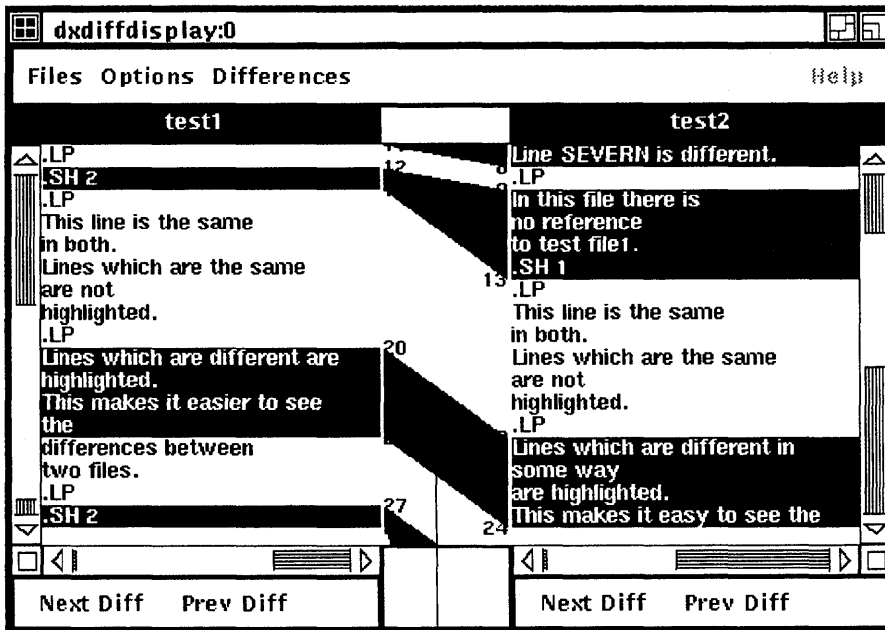
The default for the scrolling is linked scrolling. To scroll one file independently of the other, choose the Linked Scrolling Off item. To return to linked scrolling, choose the Linked Scrolling On item.

When you start dxdiff, the differences between the files are connected by lines across the difference region. Filled polygons can be used instead of lines to emphasize the relationship between the differences in the two files. Differences connected by filled polygons are illustrated in Figure 3.

To display filled polygons, choose the Render Diffs As Filled Polygons item. To display lines again, choose the Render Diffs As Lines item.

Note that when you scroll a display which contains filled polygons, the filled polygons change to thin lines during the scrolling. When you stop scrolling, the lines revert back to filled polygons.

To display line numbers at the beginning and end of the difference lines or filled polygons, choose the Display Diff Line Numbers item. To turn the line numbers off, choose the No Diff Line Numbers item. The default is for line numbers not to be displayed. Line numbers are shown in Figure 3.



Filled Polygons

Figure 3: Display Showing Filled Polygons

Comparing a New Set of Files

You can compare a new set of files and display the differences either in the current dxdiff window, or in a new dxdiff window. If you display the differences in the current window, the contents of that window are overwritten. If you display the differences in a new window, the current window is preserved, and you can still refer to it.

In either case, you must first select two new files by choosing the Open Files... item from the Files menu. When you have selected two new files, you must choose an item from the Differences menu in order to display the differences between them.

To overwrite the contents of the current dxdiff window, choose the Do Differences item from the Differences menu.

To open a new dxdiff window and preserve the current dxdiff display, choose the Do Differences In New item from the Differences menu. The title of the new window is maindxdiffdisplay:1.

Exiting from dxdiff

To end the current dxdiff session, choose the Quit item from the File menu. If you are running several dxdiff windows in the same session, choose the Quit item in the original dxdiff window to close all of the dxdiff windows.

Customizing dxdiff

You can customize the components of dxdiff by modifying the appropriate entries in the .Xdefaults file in your home directory. An entry in your .Xdefaults file must specify the application name, in this case dxdiff, the resource name, for example textdisplay, for the text display regions, and the value that you want the resource to be. All the name identifiers (or specific resource names) for dxdiff are listed in the table later in this section.

For example, to change the background color of the text regions to blue, add the following entry:

```
dxdiff*textdisplay*background:      blue
```

To change the background color of the push button region at the bottom of the dxdiff window, add the following entry:

```
dxdiff*displaymenu*background:      red
```


For further details on customization, refer to `dxdiff(1X)` and `X(1X)`. The following table lists the application name identifiers for all the customizable components of the `dxdiff` window.

Name Identifier	Description
dxdiffmaindisplay	The entire display, which includes all of the components of the window
mainmenu	The main menu bar, which includes the pull-down menus
leftfileselector	The file selection dialog box for selecting a file to be displayed in the left text display region
rightfileselector	The file selection dialog box for selecting a file to be displayed in the right text display region
filespulldown	The Files pull-down menu
openfiles	The Open Files button on the Files menu
print	The Print button on the Files menu
quit	The Quit button on the Files menu
optionspulldown	The Options pull-down menu
slavevertical	The Slave Vertical Scrolling On/Off button on the Options menu
drawdiffs	The Display Diff As Lines/Filled Polygons button on the Options menu
drawlinenumbers	The Display Line Numbers button on the Options menu
differencespulldown	The Differences pull-down menu
dodifferences	The Do Differences button on the Differences menu

Name Identifier	Description
dodifferencesinnew	The Do Differences In New button on the Differences menu
textregiondisplay	The region that includes both the left and the right text display regions, each of which includes the file name bars, the vertical scroll bars, the push button region, and the text panes
diffregion	The region where the lines connecting the differences are displayed
filenamebar	The file name bars at the top of each text region
vscroll	The vertical scrollbars
textdisplay	The region where the file contents are displayed
displaymenu	The push button region at the bottom of each text display region
nextdiff	The Next Diff push button
prevdiff	The Prev Diff push button

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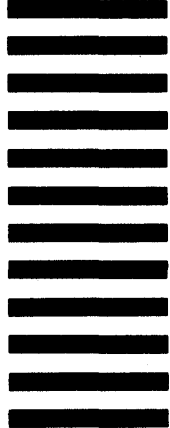
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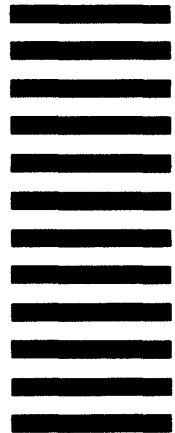
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