

ULTRIX

Worksystem Software

digital

**Reference Pages,
Sections 1X and 8X**

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ULTRIX Worksystem Software

Reference Pages, Sections 1X and 8X

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About This Manual

Organization

The *ULTRIX Worksystem Software Sections 1X and 8X Reference Pages* provide descriptions of the X and DECwindows user commands and X window system maintenance commands that are supported in Worksystem Software. Similar to the reference pages in the *ULTRIX Reference Pages*, those provided in this manual are divided into separate sections:

Section 1: Commands

Describes the user commands that are available to all ULTRIX Worksystem Software users.

Section 8: Maintenance

Describes the maintenance commands that can be used specifically for the ULTRIX Worksystem Software.

Format

Each reference page has the following general format.

Each has a title header consisting of the subject name and the appropriate section number. For example, the title header for the `dxclock` command from Section 1 is `dxclock(1)`.

The remaining subsections provide the specific information that is relevant to the topic. In general, the following subsection titles are used where appropriate:

Name

Lists the topic name and a short description of the entry.

Syntax

Provides the command syntax. **Boldface** indicates characters typed literally. A minus sign (–) indicates a command option and is typed as part of the option. *Italics* indicate variable information that you must specify. An ellipsis (...) indicates that the preceding argument can be repeated. Square brackets [] enclose optional arguments.

Arguments

Describes the arguments you provide with the command.

Description

Describes the command function, usage, and syntax variations.

Options

Describes the use and effects of each option.

Menus

Describes the menus that may appear.

Diagnostics

Describes the diagnostic and error messages that may appear. In most cases, self-explanatory messages are not listed.

Restrictions

Describes all known command restrictions or limitations.

X Defaults

Describes the format for a resource specification in the `.Xdefaults` file.

Files

Lists the related files that are either part of the command or used during execution.

See Also

Lists references to related reference page entries and to other documents.

dxcalc (1X)

Name

dxcalc – DECwindows interface to the calculator

Syntax

dxcalc [*options*]

Description

The **dxcalc** command displays a 27-function calculator with one memory location that is always visible. The **dxcalc** calculator has a maximum display of 15 digits.

To press a button displayed in the **dxcalc** window, click on it with MB1 (the left mouse button, unless you have redefined it). In addition, you can enter numbers by typing them in from the keyboard. To perform a function from the keyboard, check the key binding listed in the application's on-line help or in this reference page.

Options

- | | |
|---------------------------------|---|
| -bd <i>color</i> | Specifies the color of the window's border (color displays only). The default is specified by means of the Session Manager's Customize Windows dialog box. |
| -bg <i>color</i> | Specifies the color of the window's background (color displays only). The default is specified by means of the Session Manager's Customize Windows dialog box. |
| -d <i>dispname</i> | Specifies the display screen on which dxcalc displays its window. If the display option is not specified, dxcalc uses the display screen specified by your DISPLAY environment variable. The display option has the format <i>hostname:number</i> . Using two colons (::) instead of one (:) indicates that DECnet is to be used for transport. The default is :0. For more information, see X(1X). |
| -display <i>dispname</i> | This option is the same as the -d option. |
| -fg <i>color</i> | Specifies the color of the text (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box. |

dxcalc (1X)

- fn font** Specifies the font for calculator menus. (Key fonts are automatically scaled to match the size of the calculator.) The default font is menu12. A font value specified in the .Xdefaults file overrides this option.
- geometry** Specifies the width, length, and location of the **dxcalc** window. If the geometry option is not specified, **dxcalc** uses default values. The geometry option has the format *[width][xlength][x][y]*. For more information about the screen coordinate system, see **x(1X)**.

Menus

The **dxcalc** application contains the following menus:

- File
- Edit
- Help
- Pop-up

File Menu

The File menu contains the following items:

- Save Geometry** Saves the calculator's size and position, to use the next time you run the calculator.
- Use System Defaults** Restores the use of the system default values for size and position.
- Quit** Closes the **dxcalc** window.

Edit Menu

The Edit menu contains the following items:

- Undo** Undoes the last keystroke or operation.
- Copy** Copies the selected text onto the clipboard.
- Paste** Pastes in text from the clipboard.

Help Menu

The Help menu displays information about **dxcalc**.

Pop-up Menu

To display the **dxcalc** pop-up menu, place the pointer at any position in the **dxcalc** window and click MB2. This menu contains the following items:

- Undo
- Copy
- Paste
- Quit

Key Bindings

The **dxcalc** application has a specific set of key bindings that allow you to use the keypad for all mathematical functions. The built-in key bindings are as follows:

numbers	The numbers on the keypad and the numbers in the number line map to themselves.
c	Clears both the display and the accumulator. Maps to the C key and the F1 key.
ce	Clears the display. Maps to the E key and the F2 key.
Square root	Returns the square root of the value in the display. Maps to the Q keyboard key and the PF2 numeric keypad key.
+	Adds the value in the display to the value in the accumulator. Maps to the plus symbol (+) in the number line and the comma key (,) in the keypad.
-	Subtracts the value in the display from the value in the accumulator. Maps to the minus sign (-) in the number line and the minus sign in the keypad.
Multiplication	Multiplies the value in the accumulator by the value in the display. Maps to the asterisk (*) and to the PF3 key.
Division	Divides the value in the accumulator by the value in the display. Maps to the slash (/) key on the keyboard and the PF1 key in the keypad.

dxcalc (1X)

Negation	Changes the value in the display from positive to negative or from negative to positive. Maps to the n key.
Percent	Maps to the percent (%) keyboard key and the PF4 keypad key.
Memory clear	Clears the contents of memory. Maps to the m key/c key sequence and to the F17 key.
Memory minus	Subtracts the value in the display from the value in memory. Maps to the m key/- key sequence and to the F18 key.
Memory plus	Adds the value in the display to the value in memory and stores the result. Maps to the m key/plus (+) key sequence and to the F19 keypad key.
Memory recall	Places the contents of the memory in the display. Maps to the m key/r key sequence and to the F20 key.
Equals	Displays the result of the last operation (or series of operations). Maps to the Enter, Do, and Return keys.
Decimal Point	Inserts a decimal point into the number in the display. Maps to the period keys on the keyboard and keypad.
PI	Places the value for PI in the display. Maps to the p keyboard key.
Inverse	Inverts the next operation. Maps to the i and F3 keys.
Sine	Returns the sine of the value in the display. (If the inverse setting is on, returns the arcsine.) The angle is in degrees, radians, or gradients, according to the state of the degrees key. Maps to the s and F4 keys.
Cosine	Returns the cosine of the value in the display. (If the inverse setting is on, returns the arccosine.) The angle is in degrees, radians, or gradients, according to the state of the degrees key. Maps to the o and F5 keys.
Tangent	Returns the tangent of the value in the display. (If the inverse setting is on, returns the arctangent.) The

dxcalc (1X)

	angle is in degrees, radians, or gradients, according to the state of the degrees key. Maps to the t and F6 keys.
Log based 10	Returns the log (base 10) of the value in the display. (If the inverse setting is on, returns 10 to x.) Maps to the l key/o key sequence and to the F7 key.
Natural log	Returns the natural log of the display. (If the inverse setting is on, returns e to x.) Maps to the l key/n key sequence and to the F8 key.
y to the x	Returns the value in the accumulator raised to the power of the value in the display. (If the inverse setting is on, returns y to the minus x.) Maps to the circumflex (^) and F10 keys.
Degrees	Switches the measurement unit for trig functions among degrees, radians, and gradients. Maps to the d and F11 keys.
Factorial	Returns the factorial of the display ($n*(n-1)*(n-2)*...*1$). Maps to the exclamation mark (!) and F12 keys.
1 over x	Returns the reciprocal of the display. Maps to the tilde (~) and F13 keys.
Random number	Returns a random number between 1 and the display. Maps to the r and F14 keys.

X Defaults

The **dxcalc** application reads the **.Xdefaults** file during startup and uses the appropriate resource specification to customize the appearance of the **dxcalc** window. The format for a resource specification in the **.Xdefaults** file is:

[name]resource: value*

name Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.

resource Specifies the resource.

value Specifies the value that is to be assigned to the resource.

dxcalc (1X)

Because each toolkit-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string by adding widget class and name identifiers to the string. For further information about adding class and name identifiers, see X(1X).

For **dxcalc**, the available class identifiers are:

Calc
MenuBar

For **dxcalc**, the available name identifiers are:

sqrtFontFamily
KeyFontFamily

The general resources listed in X(1X) apply to **dxcalc**.

The fonts used by **dxcalc** are specified by an asterisk (*). This is done so that a font family is chosen instead of a particular font. The asterisk (*) is a wildcard character that matches all font sizes.

Files

~/.Xdefaults
/usr/lib/X11/app-defaults/DXcalc

See Also

X(1X), dxwm(1X), *DECwindows Desktop Applications Guide*

dxcalendar (1X)

Name

dxcalendar – DECwindows calendar program

Syntax

dxcalendar [*options*]

Description

The **dxcalendar** command starts an on-line interactive calendar and appointment book. The calendar stores and organizes information about events, reminds you when the scheduled events are due to take place, and can automatically schedule events that repeat on a regular basis.

When it first starts, **dxcalendar** creates a binary database file named `.dxcalendar.dat` in your home directory.

The **dxcalendar** command displays calendar information by providing individual windows for a year, month, or day. By default, **dxcalendar** displays a window containing a month display with the current day enclosed in a box.

To select a month or day, click on the appropriate name or number. To move backwards and forwards within one display type, use the scroll bars provided. To change from one display type to another, double-click on the appropriate item. For example, to show a year display, double-click on the year.

For more information, see the *DECwindows Desktop Applications Guide*, click on the Help menu, or use the Help key.

Options

- | | |
|-------------------------|---|
| -bd <i>color</i> | Specifies the color of the window's border (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box. |
| -bg <i>color</i> | Specifies the color of the window's background (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box. |

dxcalendar (1X)

- d** *dispname* Specifies the display screen on which **dxcalendar** displays its window. If the display option is not specified, **dxcalendar** uses the display screen specified by your DISPLAY environment variable. The display option has the format *hostname:number*. Using two colons (::) instead of one (:) indicates that DECnet is to be used for transport. The default is :0. For more information, see X(1X).
- display** *dispname* This option is the same as the **-d** option.
- fg** *color* Specifies the color of the text (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box.
- fn** *font* Specifies the font. The default is 6x10.

Restrictions

Resource specifications in the .Xdefaults file have not yet been fully tested.

X Defaults

The **dxcalendar** application reads the .Xdefaults file during startup and uses the appropriate resource specification to customize the appearance or characteristics of its displayed **dxcalendar** window. The format for a resource specification in the .Xdefaults file is:

[name]resource: value*

name Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.

resource Specifies the resource.

value Specifies the value that is to be assigned to the resource.

The available class identifier is dxcalendar.

For more information, see X(1X).

dxcalendar (1X)

Files

- ~/.Xdefaults
- ~/.DXcalendar
- ~/.dxcalendar.dwc
- /usr/lib/X11/app-defaults/DXcalendar

See Also

X(1X), dxwm(1X), *DECwindows Desktop Applications Guide*

dxcardfiler (1X)

Name

dxcardfiler – DECwindows interface to the cardfiler

Syntax

dxcardfiler [*options*]

Description

The **dxcardfiler** command displays an Index window that provides access to an electronic version of a set of 3x5 index cards. You can add, delete, rename, duplicate, save, read, search, and print these cards. By organizing your index cards into sets, called card files, you can keep one group of cards separate from another group.

The cards, which can hold 4000 characters of text and 64K bits of DDIF image (for example **dxpaint** output), will appear on your screen to the right of the Index window.

In addition, the **dxcardfiler** Index window contains a Help menu that, when selected, displays an appropriate help message.

Options

- bd** *color* Specifies the color of the window's border (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box.
- bg** *color* Specifies the color of the window's background (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box.
- d** *dispname* Specifies the display screen on which **dxcardfiler** displays its window. If the display option is not specified, **dxcardfiler** uses the display screen specified by your DISPLAY environment variable. The display option has the format *hostname:number*. Using two colons (::) instead of one (:) indicates that DECnet is to be used for transport. The default is :0. For more information, see X(1X).

dxcardfiler (1X)

- display *dispname*** This option is the same as the **-d** option.
- fg *color*** Specifies the color of the text (color displays only). The default is black.
- fn *font*** Specifies the font for all windows except the index list box. The default font is menu12. The default is 6x10.
- geometry** Specifies the width, length, and location of the **dxcardfiler** window. If the geometry option is not specified, **dxcardfiler** uses default values. The geometry option has the format *[width][xlength][x][y]*. For more information about the screen coordinate system, see X(1X).

Index Window

The index window lists the names of the current cards (you can open new or previously selected cards by choosing Open... from the File menu). To select a card, place the pointer on the name of the card and click MB1 (the left button unless you have redefined it). You can also search for specific cards by selecting the card window and choosing the search menu. Once you select a card, you can manipulate it by using the items contained in the Card window menus.

The index window contains the following menus:

- File
- Search
- Card

File Menu

The File menu contains the following items:

- Open...** Opens an existing card file that you specify. If the specified card file does not exist, **dxcardfiler** asks if you want to open a new database. If you confirm, **dxcardfiler** opens a new Index window. You can begin adding cards. If you try to open a card file without first saving any changes to a previously opened file, a dialog box appears asking you whether you want to save your changes.

dxcardfiler (1X)

Merge...	Merges the contents of the current card file with another, resulting in a card file that combines and sorts the contents of both files. The card file whose contents are merged with the current card file remains unchanged.
Save	Saves the current card file. If a name has been specified previously, dxcardfiler uses that name. If a name has not been specified previously, dxcardfiler prompts for a new name.
Save As...	Saves the current card file under a name that you specify.
Print	Prints a representation of all cards in the index to the default printer. You can change the default printer by means of the Print... option.
Print...	Prints the current card file to a device you specify.
Save Geometry	Saves the cardfiler's size and position, to use the next time you run the cardfiler.
Use System Settings	Restores the use of system defaults for the cardfiler's size and position.
Quit	Closes the dxcardfiler window. If you have not saved any changes or additions to the current file, a dialog box appears asking whether you want to save your changes.

Search Menu

The Search menu contains the following items:

Search Index...	Searches the index topics for a text string. Because dxcardfiler treats spaces as text, you can search for two or more words. A dialog box appears that prompts for the text string. Then, dxcardfiler searches the topics of all index cards in the file and displays the first card in your file containing the text string.
Search Card...	Searches the contents of each card in the file for a text string. A dialog box appears that prompts for the text string. Then, dxcardfiler searches all index

dxcardfiler (1X)

cards in the file and displays the first card in your file containing the text string.

Find Next

Searches for the next occurrence of the searched for string.

Card Menu

The Card menu contains the following item:

Create Card...

Opens an empty card in a Card window and displays a dialog box that prompts for the card name. After you type the card name, type any information belonging on the index card in the Card window.

Card Window

A Card window contains a Text window in which the body of the card can be created and edited. The Card window also contains buttons that allow you to move to the next or the previous cards. For more information about the editing commands that can be used in the Text window, see X(1X). The name of the card displayed is listed in the title bar of the Card window. A Card window contains the following menus:

- File
- Edit
- Search
- Card
- Previous
- Next

File Menu

The File menu contains the following items:

Print

Prints a representation of a specified card in the index to a device or DDIF file. If a device has been specified previously, **dxcardfiler** uses that device. If a name has not been specified previously, **dxcardfiler** prompts for a name.

Print...

Prints the current card to a device you specify.

Include Image

Includes into a card an image from a DDIF image file, such as one created with **dxpaint(1X)** or **printscreen**.

dxcardfiler (1X)

Close Closes the Card window.

Edit Menu

The Edit menu contains the following items:

Undo Undoes the last cut, copy, paste, or undo operation.
Cut Cuts the selected text or image onto the clipboard.
Copy Copies the selected text or image from the clipboard.
Paste Pastes the contents of the clipboard at the cursor if it is text or into the image region if it is an image.
Clear Removes the selected text or image from the card.

Search Menu

The Search menu allows you to search the stack of cards for a text string.

Card Menu

The Card menu contains the following items:

Create Card... Opens an empty card in a Card window and displays a dialog box that prompts for the card name. After you type the card name, type any information belonging on the index card in the Card window.
Duplicate Duplicates the currently selected card.
Rename... Displays a dialog box that prompts for the new name under which to index the card.
Delete Deletes the current card.
Undelete Restores the last deleted card.
Next Displays the next card in the Card window.
Previous Displays the previous card in the Card window.
Restore Restores the card to its original unedited state.

Previous Button

The Previous button lets you view the previous card. Hold down the button to search quickly through the stack of cards.

dxcardfiler (1X)

Next Button

The Next button lets you view the next card. Hold down the button to search quickly through the stack of cards.

X Defaults

The **dxcardfiler** application reads the `.Xdefaults` file during startup and uses the appropriate resource specification to customize the appearance of the **dxcardfiler** window. The format for a resource specification in the `.Xdefaults` file is:

`[name*]resource: value`

name Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.

resource Specifies the resource.

value Specifies the value that is to be assigned to the resource.

Because each toolkit-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string by adding widget class and name identifiers to the string. For further information about adding class and name identifiers, see `X(1X)`.

For **dxcardfiler**, the available class identifiers are:

CardFiler
cardmainwindow
MenuBar
indexmainwindow
VList

The resources available for **dxcardfiler** are listed in `X(1X)`.

Each specification included in the `.Xdefaults` file for the translations resource modifies a key setting for the editor that **dxcardfiler** uses. For more information about key and mouse specifications in the `.Xdefaults` file, see `X(1X)`.

dxcardfiler (1X)

Files

~/.Xdefaults
/usr/lib/X11/app-defaults/DXcardfiler

See Also

X(1X), dypaint(1X), dxwm(1X), *DECwindows Desktop Applications Guide*

dxclock (1X)

Name

dxclock – DECwindows interface to the clock

Syntax

dxclock [*options*]

Description

The **dxclock** command displays a window that continuously displays the system date and time. The clock can display time values in military style (0 through 23 hours) or in 12-hour AM and PM format. The **dxclock** window has an alarm and the following components:

Analog region
Digital region
Date region

Options

- | | |
|---------------------------------|---|
| -bd <i>color</i> | Specifies the color of the window's border (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box. |
| -bg <i>color</i> | Specifies the color of the window's background (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box. |
| -d <i>dispname</i> | Specifies the display screen on which dxclock displays its window. If the display option is not specified, dxclock uses the display screen specified by your DISPLAY environment variable. The display option has the format <i>hostname:number</i> . Using two colons (::) instead of one (:) indicates that DECnet is to be used for transport. The default is :0. For more information, see X(1X). |
| -display <i>dispname</i> | This option is the same as the -d option. |
| -fg <i>color</i> | Specifies the color of the text (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box. |

dxclock (1X)

- fn *font*** Specifies the font for all of the clock menus. (The analog and digital fonts are automatically scaled to match the clock size.) The default font is menu12. This option is overridden by the .Xdefaults file.
- geometry** Specifies the width, length, and location of the **dxclock** window. If the geometry option is not specified, **dxclock** uses default values. The geometry option has the format [*width*][*xlength*][*x*][*y*]. For more information about the screen coordinate system, see X(1X)

The **dxclock** window has one pop-up menu. To display this pop-up menu, position the pointer anywhere within the **dxclock** window and click MB2 (the middle mouse button unless you have redefined it). This menu contains the following menu items:

- Settings...** Displays the Settings dialog box that lets you specify the clock regions to display, turn on or turn off the use of 24-hour digital time, set the alarm, and enter a message that appears when the alarm goes off. You can also display this dialog box by placing the pointer at any position within the **dxclock** window and double-clicking MB1.
- Save Settings** Saves the clock's settings and its size and position, to use the next time you run the clock.
- Use System Settings** Restores the use of system default values for the clock's settings, size, and position.
- Help** Displays information about using the **dxclock** command.
- Exit** Closes the **dxclock** window.

Restrictions

The system time cannot be changed while the clock is running. The **dxclock** window must be closed and reopened if the system time is changed.

X Defaults

The **dxclock** application reads the **.Xdefaults** file during startup and uses the appropriate resource specification to customize the appearance **dxclock** window. A resource specification in the **.Xdefaults** file has the following format:

[name]resource: value*

name Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.

resource Specifies the resource.

value Specifies the value that is to be assigned to the resource.

Because each toolkit-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string by adding widget class and name identifiers to the string. For further information about adding class and name identifiers, see **X(1X)**.

For **dxclock**, the available class identifiers is:

Clock

For **dxclock**, the available name identifiers are:

Digital
FontFamily

In addition to the general resources listed in **X(1X)**, the resources available for **dxclock** are:

AlarmOn Specifies that the alarm be turned on. If set to zero, the alarm is not turned on. If set to 1, the alarm is turned on. The default is zero.

AlarmHour Specifies the hour the alarm is to go off (0 to 23). The default is 12.

AlarmMessage Specifies the message to be displayed when the alarm goes off. The default is the string Alarm Message.

AlarmMinute Specifies the minute the alarm is to go off (00 to 59). The default is 00.

dxclock (1X)

AlarmPM	Specifies that the alarm is set for PM. If set to zero, the alarm is set for AM. If set to 1, the alarm is set for PM. The default is zero.
AnalogOn	Specifies whether the analog portion of the dxclock window is displayed. If set to zero, the analog portion is not displayed. If set to 1, the analog portion is displayed. The default is 1.
DateOn	Specifies whether the date portion of the dxclock window is displayed. If set to zero, the date portion is not displayed. If set to 1, the date portion is displayed. The default is 1.
DigitalOn	Specifies whether the digital portion of the dxclock window is displayed. If set to zero, the digital portion is not displayed. If set to 1, the digital portion is displayed. The default is 1.
militaryOn	Specifies whether the digital portion of the dxclock window displays the date in 12-hour format or 24-hour format. If set to zero, 12-hour format is used. If set to 1, 24-hour format is used. The default is zero.

The fonts used by **dxclock** are specified by an asterisk (*). This is done so that a font family is chosen instead of a particular font. The asterisk (*) is a wildcard character that matches all font sizes.

Files

~/.Xdefaults
~/.DXclock
/usr/lib/X11/app-defaults/DXclock
~/.DXclock

See Also

X(1X), dxwm(1X), *DECwindows Desktop Applications Guide*

dxdb (1X)

Name

dxdb – DECwindows debugger

Syntax

dxdb [*options*] *file* [*coredump*]

Description

The **dxdb** debugger is a DECwindows utility that lets you debug a C program, view its source code, and fix bugs found in the code. It uses many of the same methods as the **dbx(1)** debugger.

Options

<i>file</i>	A C object file compiled with the -g option of the cc(1) command. The -g option produces the appropriate symbol information in the object file.
<i>coredump</i>	A core file that you can access through dxdb to examine the state of a program that crashed.
-I dir	Adds <i>dir</i> to the list of directories that dxdb searches when looking for source files. Normally, dxdb searches only in the current directory.

Menus

When you invoke the debugger, **dxdb** displays the Control window. The menu bar of the Control window contains the following menus:

- File
- Control
- Options
- Windows
- Functions

File Menu

The File menu lets you perform global actions affecting the entire debugging session. It contains the following items:

Open... Reads in a new source file.

dxdb(1X)

Make/Restart	Builds a new executable and restarts the debugger.
Edit	Edits a source file.
Quit	Terminates the dxdb session.

Control Menu

The Control menu controls program execution. It contains the following items:

Run	Runs the program.
Step	Runs the program in single- or multiple-line increments. You set the step count using the Step window (see Options Menu).
Skip	Runs the program in single- or multiple-line increments but views all code of a subroutine as a single step. You set the skip count using the Skip window (see Options Menu).
Continue	Restarts a program after a Stop command, a breakpoint, or a Skip or Step function.
Stop	Stops execution of the program.
Return	Continues execution until the current procedure returns.

Options Menu

The Options menu items create the following windows:

Run... Lets you supply arguments to a program. The Run window consists of an input area and the following control buttons:

- Run with Argument
- Run
- Close

To supply an argument to a program, enter it in the input area and click on the Run with Arguments button. To run a program without specifying an argument, click on the Run button. Clicking on the Close button quits the window.

Step... Specifies the line increment (step count) in which **dxdb** runs a program. The Step window consists of an input area, plus (+) and minus (-) accelerator buttons, and the following command buttons:

dxdb (1X)

- Step Count
- Step Once
- Close

To set a step count, either click on the appropriate accelerator button until you reach the desired count or enter the count in the input area. Click on the Step Count button, and then return to the Control window and click on the Step button. The debugger executes the specified number of lines of code each time you click on the Step button.

To return to single-step increments, use the Step Once button.

Skip...

Sets the number of lines (skip count) that **dxdb** skips when running a program. The Skip window consists of an input area, plus (+) and minus (–) accelerator buttons, and the following command buttons:

- Skip Count
- Skip Once
- Close

You set the skip count as you set the step count. However, if **dxdb** encounters a subroutine call when executing a skip, it executes the entire routine as a single skip and resumes the skip count when it returns from the call.

Windows Menu

The Windows menu items create the following windows:

Assign...

Assigns a value to a specified variable. The Assign window consists of the following input areas:

- Variable prompt
- Value prompt
- Assign button
- Close button

To assign a value to a variable, enter a variable in the Variable text field, enter a value in the Value text field, and click on the Assign button.

dxdb (1X)

- Breakpoints...** Displays the current breakpoints and tracepoints. To delete a breakpoint or tracepoint, select it in the text and click on the Delete button.
- Dump...** Displays the values of all currently active local variables. The debugger updates the contents of this window each time you stop execution of the program (using the Step, Skip, or Stop function, or by setting a breakpoint).
- Examine...** Displays the values of specified variables. This window consists of the following areas:
- Text area
 - Examine prompt
 - Add button
 - Delete button
 - Close button
- To examine a variable, enter its name in the Examine text field and click on the Add button. The debugger displays the variable's current value in the window's text area.
- To delete a variable from the Examine window, click on its name in the window's text area and then click on the Delete button.
- Stack** Lets you view elements of the program execution stack. The program that **dxdb** is running places an entry on this stack each time program control executes one of its routines. Each element on the stack contains the routine name and the parameters passed to that routine. The debugger updates this window each time you stop the execution of the program.
- Make...** Displays the output of the Make/Restart command. The Restart Command field is executed when the Make/Restart command is executed and can be edited to suit the program being debugged.

Functions Menu

The Functions menu contains the following items:

- Whatis** Returns the data type of a variable. Select a variable currently displayed in the Source window and then choose

What is from the Functions menu. What is returns the variable's data type in the following format:

variable – routine.datatype variable;

Whereis Returns a list of routines from which you can locate a variable. Select a variable from the Source window and then choose Whereis from the Functions menu. Whereis returns the variable's location in the following format:

routine.variable routine.variable ...

Which Returns the scope of the variable (local or global) that is currently active. Select a variable from the Source window and then choose Which from the Functions menu. Which returns the variable's scope in the following format:

variable – routine.function...variable

In addition to those pulldown menus, there are several pop-up menus:

Control Pop-up Menu

The Control pop-up menu duplicates the Control pull-down menu; it controls program execution. To invoke this menu, press MB2 on the Source Area.

Examine Pop-up Menu

The Examine pop-up menu lets you examine the value of variables, and set and delete breakpoints and tracepoints. To invoke this menu, press the Shift key and click MB2 in the Source Area. The menu items operate on text in the Source area. If you position the pointer over some text before invoking the menu, the menu options refer to that text. If there is no text under the pointer, **dxdb** uses text that is highlighted. The menu items are as follows:

Print	Prints the value of a variable in the text area.
Print *	Prints the value of a variable treated as a pointer.
Examine	Enters a variable in the Examine window.
Examine *	Enters a variable in the Examine window treated as a pointer.
Delete Examine	Removes a variable from the Examine window.
Stop in Func	Sets a breakpoint in the selected function.
Trace in Func	Sets a tracepoint in the selected function.

dxdb (1X)

The Examine and Print options have submenus that let you view the values in hexadecimal notation.

Breakpoints Pop-up Menu

This menu lets you set and delete breakpoints. To invoke the menu, press MB2 in the Margin Area. All options operate on the text indicated by the pointer when you invoke the menu. The menu options are as follows:

- Set at Line** Sets a breakpoint at the specified line.
- Set in Func** Sets a breakpoint in the specified function.
- Global** Sets a global breakpoint.
- Random Func** Sets a breakpoint in any function in the program.
- Random Line** Sets a breakpoint at any line in the program.
- Delete BP** Deletes a breakpoint whose symbol is under the cursor.

The Set at Line and Set in Func options have submenus that let you set conditional breakpoints.

Tracepoints Pop-up Menu

This menu lets you set and delete tracepoints. To invoke the menu, press Shift/MB2 on the Margin Area. All options operate on the text indicated by the pointer when you invoke the menu. The Tracepoint pop-up menu has the following items:

- Trace Global** Sets a global tracepoint.
- Trace at Line** Sets a tracepoint at the specified line.
- Trace in Func** Sets a tracepoint in the specified function.
- Delete Trace** Deletes a tracepoint whose symbol is under the cursor.

X Defaults

The **dxdb** debugger reads the **.Xdefaults** file during startup and uses the appropriate resource specification to customize the appearance or characteristics of its windows. The format for a resource specification in the **.Xdefaults** file is as follows:

[name]resource: value*

name Specifies the application name or, in the case of toolkit-based applications, the name string that restricts the

dxdb(1X)

resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.

resource Specifies the X resource.

value Specifies the value that is to be assigned to the resource.

Because each X-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string by adding widget class and name identifiers to the string. For additional information about adding class and name identifiers, see `X(1X)`.

Files

`/usr/lib/X11/app-defaults/Db`
`~.Xdefaults`
`core`

See Also

`X(1X)`, `dbx(1)`, `dxterm(1X)`

dxdiff (1X)

Name

`dxdiff` – DECwindows visual differences program

Syntax

`dxdiff` [*options*] [*file1 file2*]

Arguments

file Specifies the two files that are to be opened at startup. If you do not specify any file names, **dxdiff** lets you specify files after it has started up.

Description

The **dxdiff** application does a line-by-line comparison of two files and displays the differences between them. The contents of the two files are displayed in two text regions on either side of a central difference region. The differences between the files are displayed as highlighted text. The differences are connected by lines or filled polygons across the central difference region. Line numbers are optionally displayed at each end of the difference lines, to show where the differences occur within the files. The files must be ASCII text files.

Options

- bd** *color* Specifies the color of the window's border (color displays only). The default is black.
- bg** *color* Specifies the color of the window's background (color displays only). The default is white.
- d** *dispname* Specifies the display screen on which **dxdiff** displays its window. If the display option is not specified, **dxdiff** uses the display screen specified by your DISPLAY environment variable. The display option has the format *hostname:number*. Using two colons (::) instead of one (:) indicates that DECnet is to be used for transport. The default is :0. For more information, see X(1X).
- display** *dispname* This option is the same as the **-d** option.

dxdiff(1X)

-fg <i>color</i>	Specifies the color of the text (color displays only). The default is black.
-fn <i>font</i>	Specifies the font used as the output font. The default font is <code>times_bold12</code> .
-geometry	Specifies the width, length, and location of the dxdiff window. If the geometry option is not specified, dxdiff uses default values. The geometry option has the format <code>=[width][xlength][x][y]</code> . For more information about the screen coordinate system, see <code>X(1X)</code> .
-sv	Disables slave vertical scrolling.
+sv	Enables slave vertical scrolling. This is the default.
-sh	Disables slave horizontal scrolling.
+sh	Enables slave horizontal scrolling. This is the default.
-dl	Enables the display of filled polygons to connect areas of different text.
+dl	Enables the display of lines to connect areas of different text. This is the default.
-ln	Disables the display of line numbers in the difference region. This is the default.
+ln	Enables the display of line numbers in the difference region.
-lnfg <i>color</i>	Specifies the foreground color for the line numbers in the difference box. The default is black.

Menus

The **dxdiff** window contains the following menus:

- Files
- Options
- Differences
- Help

dxdiff(1X)

Files Menu

The `dxdiff` **Files** menu contains the following menu items:

- | | |
|----------------------|--|
| Open Files... | Calls up two Open... dialog boxes, to allow you to specify the two files that you want to compare. The Dialog boxes are labelled <code>leftfileselector:0</code> and <code>rightfileselector:0</code> . You must select one file from each dialog box. |
| Print | Not implemented. |
| Quit | Exits the current <code>dxdiff</code> session. If the session is the original one, all other <code>dxdiff</code> sessions and windows are closed. |

Options Menu

The Options menu contains the following menu items:

- | | |
|--|---|
| Linked Vertical Scrolling On/Off | The default is linked vertical scrolling. When linked vertical scrolling is on and you scroll one of the files, the other file is scrolled with it line for line. When linked vertical scrolling is off, one file can be scrolled independently of the other one. |
| Linked Horizontal Scrolling On/Off | The default is linked horizontal scrolling. |
| Render Diffs As Lines/Render Diffs As Filled Polygons | Displays either lines or filled polygons to connect the differences across the difference box. The default on startup is for lines to be displayed. |
| Display Diff Line Numbers/No Diff Line Numbers | Displays line numbers at each end of the lines that connect the differences. The default is off. If <code>dxdiff</code> cannot find a suitable font size for displaying the line numbers, this item is disabled. |

Differences Menu

The Differences menu contains the following items:

- | | |
|-----------------------|--|
| Do Differences | Displays the differences between the two currently selected files. |
|-----------------------|--|

dxdiff (1X)

Do Differences In New Opens a new **dxdiff** window to display the differences between the two currently selected files. The existing **dxdiff** window remains on the screen for reference.

Help Menu

The Help Menu is not implemented.

Restrictions

Printing is not supported.

Help is not implemented.

X Defaults

The **dxdiff** application reads the **.Xdefaults** file during startup and uses the appropriate resource specification to customize the appearance or characteristics of its displayed **dxdiff** window. The format for a resource specification in the **.Xdefaults** file is:

[name]resource: value*

name Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.

resource Specifies the resource.

value Specifies the value that is to be assigned to the resource.

For more information, see X(1X).

Because each toolkit-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string by adding widget class and name identifiers to the string. For further information about adding class and name identifiers, see X(1X).

For **dxdiff**, the available class identifiers are:

MenuBar
Label
Menu
PushButton

dxdiff (1X)

Text
Scrollbar

For **dxdiff**, the available name identifiers are:

DxDiff	The application class name
dxdiff	The application name
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
drawdiff	The Display Diffs 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
dodifferencesinnew	The Do Differences In New button on the Differences menu
textregiondisplay	The text region display, which includes both the left and the right text display regions, each of which include 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

dxdiff(1X)

filenamebar	The file name bars at the top of each text region
vscroll	The vertical scroll bars
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

Examples

To change the background color of the **dxdiff** text regions, add the following entry to your **.Xdefaults** file:

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

To change the background color of the push button region at the bottom of the window, add the following entry to your **.Xdefaults** file:

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

Files

~/.Xdefaults, /usr/lib/X11/app-defaults

See Also

diff(1), dxwm(1X), X(1X), *Guide to the dxdiff Visual Differences Program*

dxfc (1X)

Name

dxfc – BDF to PCF font compiler for X11

Syntax

dxfc [*options*] [*file*]

Description

The **dxfc** font compiler reads a Bitmap Distribution Format (BDF) font from the specified .bdf file (or from standard input if no file is specified) and writes an X11 portable compiled font (PCF) to standard output.

Options

- p#** Force the glyph padding to a specific number. The legal values are 1, 2, 4, and 8.
- s#** Force the scanline unit padding to a specific number. The legal values are 1, 2, and 4.
- m** Force the bit order to most significant bit first.
- l** Force the bit order to least significant bit first.
- M** Force the byte order to most significant bit first.
- L** Force the byte order to least significant bit first.
- w** Print warnings if the character bitmaps have bits set to one outside of their defined widths.
- W** Print warnings for characters with an encoding of -1; the default is to silently ignore such characters.
- t** Expand glyphs in "terminal-emulator" fonts to fill the bounding box.
- i** Don't compute correct ink metrics for "terminal-emulator" fonts.

See Also

X(1X), dxmkfontdir (1X)
"Bitmap Distribution Format 2.1"

Name

dxmail – DECwindows mail program

Syntax

dxmail [*options*]

Description

The **dxmail** command provides a window-oriented interface to the mh Mail Handler. The mh program must be installed on your system before you can use **dxmail**.

When **dxmail** starts, it checks in your home directory for the file `.mh_profile`. If the file is there, **dxmail** reads and uses the configuration information that the file contains. If the file is not there, **dxmail** creates it and includes the minimum required default values.

At startup, **dxmail** displays a window that consists of seven areas:

Title Bar Displays window manager icons that allow you to move and resize the **dxmail** window and to shrink it to an icon. For more information, see `dxwm(1X)`.

Menu Bar Lists the available **dxmail** menus (for example, File or Edit).

Folder Index Pane Lists your current folders. By default, **dxmail** puts your incoming mail in the inbox folder. When you receive new mail, **dxmail** draws a border around the inbox folder. Drafts of messages can be saved in the drafts folder and messages to be deleted can be placed in the wastebasket folder. To select a folder, click on the appropriate folder button. When a folder button is selected, **dxmail** highlights that button. To view the contents of a folder, double-click on the appropriate folder button.

Global Commands Pane Lists the general **dxmail** commands (for example, Read new mail or Create-Send).

Folder Title Bar Lists the name of the currently opened folder.

Message Index Pane Lists the messages in the currently opened folder. Initially, this window lists the messages contained in the inbox folder.

dxmail(1X)

Message Commands Pane

Lists those commonly used commands that affect the messages listed in the Message Index Pane. Dimmed commands are disabled.

Options

- bd** *color* Specifies the color of the window's border (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box.
- bg** *color* Specifies the color of the window's background (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box.
- bw** *pixels* Specifies the width (in pixels) of the window's border.
- d** *dispname* Specifies the display screen on which **dxmail** displays its window. If the display option is not specified, **dxmail** uses the display screen specified by your DISPLAY environment variable. The display option has the format *hostname:number*. Using two colons (::) instead of one (:) indicates that DECnet is to be used for transport. The default is :0. For more information, see X(1X).
- display** *dispname* Is the same as the **-d** option.
- fg** *color* Specifies the color of the text in digital mode and the color of the tick marks in analog mode (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box.
- fn** *font* Specifies the font used as the output font in digital mode. Any fixed-width font can be used. The default is 6x13.
- n** *name* Specifies the name that is to replace the program name.
- rv** Reverses the default color values (for example, black becomes white and white becomes black). The default is On.

dxmail (1X)

-t title Specifies the title to be listed in the main window's title bar.

Main Window

Global commands displayed in the **dxmail** window are:

Read new mail Checks to see if any new mail has arrived. If new mail has arrived, **dxmail** adds the new mail to the inbox folder and displays the first message in the default Read window. If the default Read window does not exist, **dxmail** creates one automatically. If no new mail has arrived, **dxmail** displays a dialog box that says "No new mail." The **dxmail** program beeps only if you have selected the "Beep instead of putting up a No New Mail Dialog Box" option in the Customize window. The default is no beep.

Create-Send Displays a Create-Send window that allows you to compose a new message.

To specify the specific message or messages to be affected by commands in the Message Index Pane or in one of the several **dxmail** menus, first select the message or messages.

To select a single message, click MB1 (the left mouse button, unless you have redefined it) on the message. To highlight a range of messages, you can follow one of two procedures:

1. Place the pointer on the first message to be selected.
2. Press MB1.
3. Drag the pointer to the last message to be selected.
4. Release MB1.

Or:

1. Place the pointer on the first message to be selected.
2. Click MB1.
3. Place the pointer on the last message to be selected.
4. Hold down the Shift key and click MB1.

To add a message to the current selection, follow this procedure:

1. Place the pointer on the icon of the message to be included.
2. Hold the Shift key and click MB1.

dxmail(1X)

To remove a message from the current selection, follow this procedure:

1. Place the pointer on the icon of the message to be removed.
2. Hold the Shift key and click MB1.

To view the contents of a message, place the pointer on the icon of the message and double-click MB1. The contents of the message are displayed in a Read window.

The selected messages are the same as the highlighted messages, if any. The current message is marked with a plus sign (+), except when it is open in a Read menu (when it is marked with an open envelope). The current message is the last message viewed in the default Read window within the current folder.

Message commands displayed in the **dxmail** window are:

Deliver mail	Incorporates new mail into your inbox folder.
Reply	Creates a Create-Send window in reply to the first selected message.
Forward	Creates a Create-Send window whose body is initialized to be the contents of the selected messages.
Print	Prints the selected messages.
Move	Moves the message to the selected folder. However, dxmail does not remove the message from the original folder until you close and reopen the folder, select the Commit Changes menu item, or double-click on the open folder name. For example, you can remove a message moved out of inbox by closing and reopening inbox, selecting Commit Changes, or by double-clicking on inbox. If the selected folder is the same as the viewed folder, this command just beeps. You can move the messages back to the current folder by selecting the Undo move/delete menu item.
Delete	Places the selected messages in the wastebasket folder for deletion. However, dxmail does not remove the selected messages from the current folder until you close and reopen the original folder, select the Commit Changes menu item, or double-click on the folder name. You can move the messages back to their original folder by selecting the Undo

move/delete menu item.

Menus

Less commonly used functions are available only through the Menu bar. The Menu bar contains the following menus:

- File
- Edit
- Pick
- Create-Send
- Read
- Maintenance
- Customize

File Menu

Move	Moves the message to the selected folder. However, dxmail does not remove the message from the original folder until you close and reopen the folder, select the Commit Changes menu item or double-click on the folder name. If the selected folder is the same as the viewed folder, this command just beeps.
Copy...	Copies the selected messages to the selected folder.
Extract...	Creates a file from the selected message.
Print	Prints the selected messages.
Open folder	Opens the currently selected folder.
Open folder in new	Opens the currently selected folder in a new main window.
Deliver mail	Incorporates new mail into your inbox folder.
Exit	Closes the main dxmail window. If the main window being closed is the only main dxmail window on the screen, then invoking this menu item exits dxmail .

Edit Menu

Delete	Places the selected messages in the wastebasket folder for deletion; if no messages are currently selected, this item is disabled. However, dxmail
---------------	---

dxmail (1X)

does not remove the messages from the current folder until you close and reopen the original folder, select the Commit Changes menu item, or double-click on the folder name. You can move the messages back to their original folder by selecting the "Undo move/delete" menu item.

Undo move/delete

Undoes any move or delete operations for the selected messages; if no messages are currently selected, this item is disabled. Once you commit changes to messages by reopening the folder, selecting the Commit Changes menu item, or double-clicking on the folder name, you cannot undo the changes.

Select all

Selects all messages from the Message Index pane.

Pick Menu

The Pick menu lets you select, define, and manipulate groups of messages. Groups of messages, called sequences, further organize messages within a folder. For example, you can create sequences that consist of all of the messages that meet some common criterion (such as those to or from a certain person, received on a certain date, pertaining to a certain subject, or containing a specific word).

Message sequences and their names are specific to folders; therefore, the same sequence name can exist in multiple folders. In each folder, all messages belong to a predefined sequence called all. Only one sequence can be displayed at a time; its name is next to the folder name in the title bar above the message list. When you view messages, the next and previous messages are defined in relation to the current sequence.

The Pick menu contains the following items:

Pick from selected folder ...

Displays the Pick dialog box, which lets you specify criteria for selecting messages from any folder and creating a new sequence.

Pick from opened folder ...

Displays the Pick dialog box, which lets you specify criteria for selecting messages from the current folder and creating a new sequence.

Create new sequence...

dxmail (1X)

Lets you specify the name of a new sequence. The sequence does not contain messages until you explicitly add some. The sequence name must begin with an alphabetic character and should not contain any non-alphanumeric characters (such as punctuation marks).

- Open sequence** Displays the last specified sequence or one that you select from the submenu. This item is disabled until the folder contains sequences other than all.
- Add to sequence** Adds selected messages to a sequence that you select from the submenu. This item is disabled until the folder contains sequences other than all.
- Remove from sequence** Removes selected messages from a sequence that you select from the submenu. This item is disabled until the folder contains sequences other than all.
- Delete sequence** Removes a sequence that you select from the submenu. The messages themselves are not deleted; they are still part of the folder's all sequence,

Create-send Menu

The Create-Send menu contains the following items:

- New message** Displays a Create-Send window that allows you to compose a new message.
- File** Displays the File Selection dialog box, which lets you send an existing file as a mail message. Once the File Selection dialog box is dismissed, **dxmail** displays a Create-Send window whose body is the specified file.
- Reply** Creates a Create-Send window in reply to the first selected message.
- Forward** Creates a Create-Send window that contains the contents of the selected message or messages.
- Use as comp** Creates a Create-Send window that contains the contents of the selected message. This menu item is often used to compose a new message with the contents of a message previously saved in the drafts folder.

dxmail (1X)

Read Menu

The Read menu contains the following items:

- | | |
|------------------------|---|
| In new | Displays the selected message in a new Read window, regardless of whether a default Read window is already displayed. |
| In default | Displays the selected message in the default Read window. If a Read window is not displayed, dxmail creates a new Read window automatically. You can also invoke this command by double-clicking on the envelope icon for the appropriate message. |
| In window # | Displays a submenu that lets you display the selected message in one of several already displayed Read windows. |
| New mail | Checks to see if any new mail has arrived. If new mail has arrived, dxmail incorporates the new mail and displays the first message in the automatically created default Read window. If no new mail has arrived, dxmail displays a dialog box that says "No new mail." The dxmail program beeps only if you have selected the "Beep instead of putting up a No New Mail dialog box" option in the Customize Window. The default is no beep. |
| New mail in new | Checks to see if any new mail has arrived. If new mail has arrived, dxmail incorporates the new mail and displays the first message in a new Read window that is created automatically. If no new mail has arrived, dxmail displays a dialog box that says "No new mail." The dxmail program beeps only if you have selected the "Beep instead of putting up a No New Mail dialog box" option in the Customize Window. The default is no beep. |

Maintenance Menu

The Maintenance menu contains the following items:

- | | |
|--------------------------|--|
| Create folder... | Creates a new folder and displays a dialog box that prompts for the new folder name. |
| Empty wastebasket | Deletes the messages previously placed in the |

dxmail (1X)

	wastebasket folder with the Delete command.
Delete folder...	Deletes the selected folder and displays a Caution dialog box that prompts for verification.
Commit changes	Removes from the message list of the current folder any message that you previously marked to delete or move. When you close and reopen a folder or double-click on a folder name, dxmail invokes this command automatically.
Renumber messages	Re numbers the messages in the viewed folder starting from 1 and incrementing by 1 for each following message.
Sort by date	Sorts the messages in the folder into increasing order by date.
Rescan folder	Causes dxmail to check and make sure its information about the folder is correct. This command can be useful if you have invoked mh commands directly from the command line while dxmail is running.

Customize Menu

The Customize menu contains the following items:

Modify mail profile	Displays the Customize dialog box, which lets you modify characteristics of dxmail . The customize options are: <ul style="list-style-type: none">Skip to next message upon deleting current one.Skip to next message upon moving current one.Commit changes in a folder upon closing it.Renumber messages in a folder after every commit.Put deleted messages into wastebasket instead of deleting immediately.Incorporate new messages when invoking Show Unopened ButtonsAffect the current message if no messages are selected.
----------------------------	--

dxmail (1X)

Beep instead of putting up a No New Mail dialog box.

Read Windows

Most Read window commands are the same as the message commands by the same name. However, the Read window commands affect the viewed message instead of the selected message, and there are three additional commands:

- | | |
|-----------------|--|
| Next | Displays the message after the message displayed currently. |
| Previous | Displays the message before the message displayed currently. |
| Close | Closes the read window. |

Less commonly used functions are available only through the menu bar. The menu bar contains the following menus:

- File
- Edit
- Sequences
- Create-Send
- Read

File Menu

File menu items unique to the Read window are as follows:

- | | |
|----------------------------|--|
| Make default window | Specifies that the current Read window is the default Read window. |
| Close | Closes the Read window. |

Edit Menu

Edit menu items unique to the Read window are as follows:

- | | |
|---------------------|---|
| Select all | Selects all text displayed in the Read window. |
| Edit message | Specifies that the message in the Read window can be modified. |
| Save changes | Saves any changes made to the message displayed in the Read window after invoking the Edit message menu item. |

Read Menu

Next selected	Displays the next message selected from the main dxmail window in the current Read window.
Previous selected	Displays the previous message selected from the main dxmail window in the current Read window.
Next in folder	Displays the next message listed in the main dxmail window in the current Read window.
Previous in folder	Displays the previous message listed in the main dxmail window in the current Read window.

Create-send Windows

The buttons associated with Create-Send windows are:

Close	Closes the Create-Send window without taking any further action. If changes have been made, dxmail displays a Caution dialog box prompting for confirmation or cancellation.
Reset	Clears the Create-Send window.
Save	Saves the message contained in the Create-Send window in the drafts folder. You can later view, edit, and send the message with the Use as comp command.
Send	Sends the message contained in the Create-Send window. If any errors appear in the message header, dxmail displays a mail message containing this composition and a description of the error. The Send command does not close the Create-Send window.

The menu bar in a Create-Send window contains the following menus:

File
Edit

File Menu

Send	Performs the same function as the Send button.
Save	Performs the same function as the Save button.
Extract...	Copies a message to a file.

dxmail (1X)

Include file...	Inserts a file into the message.
Reset	Performs the same function as the Reset button.
Invoke dxvdoc	Executes the CDA Viewer on the current message. This item is no longer available, because the dxmail application can display DDIF messages in the Read window.
Quit	Performs the same function as the Close button.

Edit Menu

Select Selects all text displayed in the Create-Send window.

Converting Old Mail Folders

If you have been using the **mail (1)** program to read your mail, you can convert your existing folders into **dxmail** folders with the following command:

inc *+foldername* **-file** *filename*

foldername Specifies the name that is to be used for the **dxmail** folder.

filename Specifies the name of the existing mail folder.

Note that you must run **inc** to access mail if you have been using the Berkeley mail handler. For more information, see **inc(1mh)**.

Mail Aliases

The **dxmail** command does not use your **.mailrc** file in your home directory. Therefore, **dxmail** does not use the user mail aliases that you have defined in that file. However, **dxmail** does make use of the global alias files that **sendmail** uses.

To define an alias file to be used with **dxmail**, follow this procedure:

1. Create the Mail directory and a skeleton **.mh_profile** file by invoking **dxmail**. This skeletal **.mh_profile** will contain the following line:

Path: Mail

2. Edit the **.mh_profile** file to add the following three lines:

ali: **-alias** *aliases*

send: **-alias** *aliases*

whom: **-alias** *aliases*

dxmail (1X)

3. Create an alias file in your Mail directory with the name specified in these lines.
4. In your alias file, add lines in the following format:
alias: person1, person2,....

The person to whom you assigned an alias can have another alias, and you can mix previously defined aliases and people on the same line. However, because the file is read from top to bottom, you must make sure that aliases used in other aliases have already been defined in the file.

X Defaults

The **dxmail** application reads the **.Xdefaults** file during startup and uses the appropriate resource specification to customize the appearance or characteristics of its displayed **dxmail** window. The format for a resource specification in the **.Xdefaults** file is:

[name]resource: value*

name Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If you do not specify this argument, the resource assignment is globally available to all X applications.

resource Specifies the resource.

value Specifies the value that is to be assigned to the resource.

For more information, see X(1X).

Because each toolkit-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string by adding widget class and name identifiers to the string. For further information about adding class and name identifiers, see X(1X).

For **dxmail**, the available class identifiers are:

AttachedDialogBox

CautionBox

Command

Dialog

Form

Label

MainWindow

Menu

dxmail (1X)

Menubar
Message
Pane
Pulldown
Pushbutton
Scroll
ScrollWindow
Text
Toggle

For **dxmail**, the available name identifiers are:

compButtons
confirm
createSend
customize
ddifHeaders
dxmail
folderArea
folderCommandBar
folders
innerFolderArea
innerMsgArea
messageArea
messageButtonsArea
messageCommandBar
messagePaneLabel
messageText
pick
prompt
read
titlebar
toc
tocButtons
tocform
viewButtons
workArea

In addition to the general resources listed in X(1X), the resources available for **dxmail** are:

send.geometry Specifies the initial geometry (window size and screen location) for the Create-Send window. For more information about the geometry specification

dxmail (1X)

	and screen coordinate system, see X(1X).
main.geometry	Specifies the initial geometry (window size and screen location) for the main dxmail window.
read.geometry	Specifies the initial geometry (window size and screen location) for the Read window.
pick.geometry	Specifies the initial geometry (window size and screen location) for the Pick window.
PrintCommand	Specifies the command to be executed to print a message. (Standard out and standard error must be redirected explicitly.) The default is <pre>lpr > /dev/null 2 > /dev/null.</pre>

Each specification included in the `.Xdefaults` file for the translations resource modifies a key setting for the editor that **dxmail** uses. For more information about key and mouse specifications in the `.Xdefaults` file, see X(1X).

Restrictions

The **dxmail** application requires Version 6 of **mh**. If a line in the `.mh_profile` starts with *Current-Folder*, you have been using Version 4 or earlier. To convert to Version 6, remove that line. For more information, refer to `mh(1mh)`.

Printing support is minimal.

Sequence names and message lists together cannot exceed 1024 characters. In practice, this means that sequences can have a maximum of 200 messages.

Files

- `~/Mail`
- `~/mh_profile`
- `~/Xdefaults`
- `~/Mail/*`

See Also

X(1X), `dxwm(1X)`, `mh(1mh)`, `inc(1mh)`, *DECwindows Desktop Applications Guide*

dxmfontdir (1X)

Name

dxmfontdir – Create a list of fonts for the X server.

Syntax

dxmfontdir [*directory-names*]

Description

The **dxmfontdir** command creates files that list font names and the font files to which the names correspond, for use when the X server starts up. In each directory specified as a command argument, **dxmfontdir** creates the directory's list of fonts and places it in a file called fonts.dir. If you omit arguments, **dxmfontdir** creates a fonts.dir file for the current directory.

The fonts.dir file lists each font file and gives the name of the font in that file. To obtain font names, **dxmfontdir** searches the files in the directory for a property named FONT. If the FONT property is absent, **dxmfontdir** uses the names of PCF (.pcf), BDF (.bdf), and compressed BDF (.bdf.Z) files, omitting their suffixes. If a font exists in multiple formats, the PCF format is used.

When the X server starts up, it looks for a fonts.dir file in each font directory in the font path. It also looks for a fonts.alias file in each directory.

Font Aliases

You can create or edit the fonts.alias file to assign new names to existing fonts. X clients can then use the alias names to request fonts from the server. A font alias file can be in one or any number of directories in the font path. It consists of two columns, separated by white space. The first column lists aliases; the second column contains font name patterns. Aliases can reference fonts in directories other than the one in which the alias file exists.

To embed white space in the alias name or the font name, enclose the name in quotation marks (""). To embed quotation marks (or any other characters), precede them with a backslash (). The following are sample entries from a fonts.alias file:

```
courier10                                fixed  
/udir/sally/fonts/courier/10.pcf        "-adobe-helvetica-bold-o-norma  
                                         24-240-15-75-p-104-1508859-1"
```

dxmkfontdir (1X)

If the fonts.alias file contains the string `FILE_NAMES_ALIASES` alone on a line, each file name in the directory (without its .pcf suffix) is automatically translated as a font name alias. For example, a file named `courier10.pcf` would have the font name alias `courier10`.

See Also

`X(1X)`, `dxfc(1X)`

dxnotepad(1X)

Name

dxnotepad – DECwindows text editor

Syntax

dxnotepad [*options*] [*file*]

Arguments

file Specifies a file to open at startup. If you omit the file name, you can open or create a file from within **dxnotepad**.

Description

The **dxnotepad** command displays a window in which you can edit a file or a text buffer that you can later save as a file. At startup, the **dxnotepad** window consists of the following three areas:

Title Bar	Displays the name of the window, the name of the file currently being edited, and window manager buttons that move and resize the window and shrink the window to an icon. For more information, see dxwm(1X) .
Menu Bar	Lists the available dxnotepad menus.
Edit Window	Displays the text that you are editing or creating.

Options

-bd <i>color</i>	Specifies the color of the window's border (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box.
-bg <i>color</i>	Specifies the color of the window's background (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box.
-d <i>dispname</i>	Specifies the display screen on which dxnotepad displays its window. If the display option is not specified, dxnotepad uses the display screen specified by your DISPLAY environment variable.

dxnotepad (1X)

The display option has the format *hostname:number*. Using two colons (::) instead of one (:) indicates that DECnet is to be used for transport. The default is :0. For more information, see X(1X).

- display** *dispname* s the same as the **-d** option.
- fg** *color* Specifies the color of the text in digital mode and the color of the tick marks in analog mode (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box.
- fn** *font* Specifies the font used as the output font in digital mode. Any fixed-width font can be used. The default is 6x10.
- geometry** Specifies the width, length, and location of the **dxnotepad** window. If the geometry argument is not specified, **dxnotepad** uses default values. The geometry option has the format *[width][xlength][x][y]*. For more information about the screen coordinate system, see X(1X).

Menus

The **dxnotepad** window contains the following menus:

- File
- Edit
- Search
- Navigate
- Customize

File Menu

The File menu contains the following items:

- New** Creates a new **dxnotepad** window.
- Open...** Displays a dialog box that lets you specify the file to open.
- Open Selected** Opens the file whose name has been selected in any application window on the screen.
- Include...** Displays a dialog box that lets you specify a file to write into the current buffer. The

dxnotepad (1X)

	included file appears at the cursor's current position.
Save	Saves the contents of the Edit window in a file. If the file is untitled when Save is selected, dxnotepad displays a dialog box that prompts for the file name.
Save As...	Automatically displays a dialog box that prompts for the file name under which to save the contents of the buffer.
Revert	Cancels all edits made since the last time dxnotepad saved edits. Edits are saved when you choose the Save menu item from the File menu and when you exit from an editing session.
Quit	Ends the current editing session without saving changes and closes the dxnotepad window.
Exit	Ends the current editing session, saving the modified text in the output file.

Edit Menu

The Edit menu contains the following items:

Undo	Undoes the last edit. Each time you select this menu item, each previous edit is undone.
Redo	Redoes the last edit. Each time you select this menu item, each edit that has been undone is redone.
Undo...	Displays the Undo dialog box that allows you to undo and redo sequences of edits.
Cut	Removes text selected in the Edit window and moves it to the clipboard. This text can be retrieved with the Paste menu item.
Copy	Copies text selected from the Edit window to the text buffer. You can retrieve this text with the Paste menu item.
Paste	Inserts text previously cut or copied to the clipboard.

dxnotepad (1X)

Clear	Deletes selected text without copying it to the clipboard.
Select All	Marks the entire buffer as the current selection, as if you had selected it with the mouse and pointer.
Filter Selection...	Displays a dialog box in which you can specify an ULTRIX command through which to process text selected from your dxnotepad buffer. The command operates on the text and writes the output to the original location in the buffer.
Fill	Reorganizes selected text so that the maximum number of whole words fits within an 80 character line width, inserting carriage return characters at the end of each 80-character line. If your dxnotepad window width is less than 80 characters, the fill operation can leave some lines broken, where the carriage return occurs.
Sort	Sorts the selected text in ascending alphanumeric order, as if by executing the ULTRIX sort command.
Indent+4	Moves the left margin for a selected block of text four columns to the right.
Indent-4	Moves the left margin for a selected block of text four columns to the left.

Search Menu

The Search menu contains the following items:

Next Selected	Searches from the current insertion point to the end of the file for the next occurrence of a string selected from any window on the screen.
Previous Selected	Searches from the current insertion point to the beginning of the file for the next occurrence of a string selected from any window on the screen.
Next...	Displays a dialog box that prompts for a search string. The Next button finds the next

dxnotepad (1X)

- occurrence of the string (moving forward); the Previous button finds the previous occurrence of the string (moving backward). The default direction is forward.
- Previous...** Displays a dialog box that prompts for a search string. The Next button finds the next occurrence of the string (moving forward); the Previous button finds the previous occurrence of the string (moving backward). The default direction is backward.
- Next Incremental...** Searches from the initial search position to the bottom of the buffer for a string of characters. You can change the search string during the operation; each time you add or delete a character, **dxnotepad** returns to the initial position and highlights the next occurrence of the pattern now specified.
- Previous Incremental...** Searches from the initial search position to the top of the buffer for a string of characters. You can change the search string during the operation; each time you add or delete a character, **dxnotepad** returns to the initial position and highlights the next occurrence of the pattern now specified.
- Replace Once...** Displays a dialog box in which you enter an existing string and the string that you want to substitute. Searching from the insertion point forward, **dxnotepad** finds the next occurrence of the existing string. Click on the Yes button to replace the string and move to the next occurrence; click on the No button to skip to the next occurrence without making the replacement.
- Replace Within Selected Area** Displays a dialog box in which you enter an existing string and the string that you want to substitute. The operation replaces all occurrences of the string within a selected block of text.
- Replace All...** Displays a dialog box in which you enter an

dxnotepad (1X)

existing string and the string that you want to substitute. The operation replaces all occurrences of the string in the buffer.

Navigate Menu

The Navigate menu contains the following items:

- | | |
|-----------------------------------|---|
| Go to Top | Moves the cursor to the top of the buffer. |
| Go to Bottom | Moves the cursor to the bottom of the buffer. |
| Go to Selected Line Number | Moves the cursor to the line whose number has been selected somewhere on the screen. |
| Split View | Divides the current view of the file into two views of that file. The first time you use this option, it splits the window into two views. Each view has its own scroll bars, so that you can work with two sections of the file at once. Further splits affect the view in which the cursor is active. |
| Delete View | Removes the view in which the cursor is active. |

Customize Menu

The Customize menu contains the following items:

- | | |
|--------------------------------|--|
| Case Sensitive Searches | Specifies whether dxnotepad distinguishes between uppercase and lowercase occurrences of text characters when searching for a string. When the button is set to On, a search finds all occurrences of a character. When the button is set to Off, a search finds only occurrences whose case matches the case in which you enter the search string. |
| Word Wrap | Specifies whether dxnotepad automatically starts a new line when you reach the right margin. When the button is set to On, word wrapping is automatic. When the button is set to Off, you must press the Return key at the end of each line. Note that dxnotepad does not insert carriage return characters as it wraps |

dxnotepad (1X)

the line; with word wrapping on, you can create a line that looks like a paragraph in your **dxnotepad** edit window, but that a printer interprets as a single long line.

Font

Displays a dialog box in which you choose font attributes and see a sample of the resulting font; the **Apply** button applies the font you select to your buffer.

Save Attributes

Saves the values that you specified for options on the **Customize** menu. These values are stored in the file `.notepad.dat` in your home directory; they will be used the next time you invoke **dxnotepad**.

Restore Attributes

Restores the last saved values for options on the **Customize** menu.

Journals

The **dxnotepad** editor records your edits in a journal file. When you save the file you are editing, the journal file is deleted. If an editing session terminates unexpectedly (due to a system crash, for example), the edits recorded in the journal file can be restored.

When you attempt to edit a file whose journal file still exists, the **Recover** dialog box asks whether to apply the previous edits to the input file. Click on the **OK** button to restore the edits; click on the **No** button to forego applying the edits and delete the journal file.

If an editing session is interrupted before you have saved the editing buffer as a file and assigned it a file name, **dxnotepad** assigns the journal file under a name based on your process number, with the suffix `JNL` (unless you have changed the default name, using a **dxnotepad** resource).

To recover, first locate the journal file. You can recognize it in your directory because it has the form of `AAAXXXXXXCCC`, where `AAA` is your `journalNamePrefix`, `XXXXXX` is a unique number for this session (derived from your process ID), and `CCC` is your `journalNameSuffix`. Invoke **dxnotepad**, specifying an input file whose name is the number portion of the default journal file name. A dialog box asks whether to recover the crashed session. To restore the edits, answer **yes**.

For information about specifying the `journalNamePrefix` and the `journalNameSuffix`, see the **X DEFAULTS** section.

Restrictions

Large numbers of certain edit functions tend to degrade performance over time. If there is a noticeable decrease in response time, save the file; saving a file resets **dxnotepad**'s internal state.

X Defaults

The **dxnotepad** application reads the `.Xdefaults` file during startup and uses the appropriate resource specification to customize the appearance or characteristics of its displayed **dxnotepad** window. The format for a resource specification in the `.Xdefaults` file is:

`[name*]resource: value`

name Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.

resource Specifies the resource.

value Specifies the value that is to be assigned to the resource.

Because each toolkit-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string by adding widget class and name identifiers to the string. For further information about adding class and name identifiers, see X(1X).

For **dxnotepad**, the available class identifiers are:

Label
MainWindow
Menu
MenuBar
Notepad
PushButton
Scrollbar
Text

For **dxnotepad**, the available name identifiers are:

notepad The name of the application.
textwindow View of the edit window. Each edit window can have one or more views into a text buffer or file.

dxnotepad (1X)

In addition to the general resources listed in X(1X), the resources available for **dxnotepad** are:

EnableBackups	Specifies that the original file is saved as the backup file. The name of the backup file is constructed by prepending the original file name with the string contained within the backupNamePrefix , and appended with the backupNameSuffix . The default is On.
BackupNamePrefix	Specifies the prefix of the backup file name.
BackupNameSuffix	Specifies the suffix of the backup file name.
Geometry	Specifies the geometry (window size and location) to be used as the default for the dxnotepad window. For more information about the geometry specification and screen coordinate system, see X(1X). If Geometry is not specified, a default built-in geometry is used.
filter	Specifies a text filter to add as an option to the Edit menu. The resource value has two parts, separated by one or more space or tab characters: the option name to add to the menu and the ULTRIX command to execute when that option is selected.
journalNamePrefix	Specifies the prefix of the journal file name.
journalNameSuffix	Specifies the suffix of the journal file name.

Each specification included for the translations resource in the **.Xdefaults** file modifies a key setting for the editor that **dxnotepad** uses. For more information about key and mouse specifications in the **.Xdefaults** file, see X(1X).

Files

~/.Xdefaults

See Also

X(1X), dxwm(1X), *DECwindows Desktop Applications Guide*

dypaint(1X)

Name

dypaint – DECwindows bitmap editor

Syntax

dypaint [*options*]

Description

The **dypaint** application allows you to create and edit bitmap images (for example, simple sketches or pictures). These images are treated as a collection of pixels. By using different drawing tools, you can edit pixels to create lines, shapes, and text. The resulting bitmap image can then be saved as a file, printed, or copied to another application.

For the bitmap image, the standard file format is Digital Document Interchange Format (DDIF). Therefore, you can also project these images on your display with the DDIF Viewer.

The **dypaint** window offers a variety of art tools and basic shapes. For example, you can work with a pencil, a paintbrush, a can of spray paint, or a paint bucket. The current tool is highlighted. To make a tool current, click on it. Only one tool on the tool palette can be active at a time and that tool remains active until you make another selection.

Options

- | | |
|---------------------------|---|
| -bd <i>color</i> | Specifies the color of the window's border (color displays only). The default is the window border color specified by Session Manager. |
| -bg <i>color</i> | Specifies the color of the window's background (color displays only). The default is the window background color specified by Session Manager. |
| -d <i>dispname</i> | Specifies the display screen on which dypaint displays its window. If the display option is not specified, dypaint uses the display screen specified by your DISPLAY environment variable. The display option has the format <i>hostname:number</i> . Using two colons (::) instead of one (:) indicates that DECnet is to be used for transport. The default is :0. For more information, see X(1X). |

dxpaint (1X)

- | | |
|---------------------------------|--|
| -display <i>dispname</i> | This option is the same as the -d option. |
| -fg <i>color</i> | Specifies the color of the window's foreground (color displays only). The default is the window foreground color specified by Session Manager. |
| -fn <i>font</i> | Specifies the font used as the output font in digital mode. Any fixed-width font can be used. The default is 6x10. |

Menus

The **dxpaint** application contains the following menus:

File
Edit
Options
Font
Customize

File Menu

The **File** menu contains the following items:

- | | |
|-------------------|--|
| Open... | Displays a dialog box in which you specify the file to open. The dialog box displays the names of the graphics files in the current directory. To specify a graphics file not listed, type the file name. |
| Save | Saves the picture in the current file. If no file exists, dxpaint displays a dialog box that prompts for the file name. |
| Save As... | Saves the picture in a file whose name you specify. |
| Print | Prints the picture using the values previously set in the print dialog box. If this is the first print request, the Print dialog box is displayed. |
| Print ... | Displays the Print dialog box (which allows you to specify a printer, output format, and so forth) and prints the picture using these settings. The output format can be ANSI2 (sixel) or PostScript. If you are using an LA50 printer, you must specify an aspect ratio of 2:1. |
| Quit | Quits the current dxpaint session and closes the dxpaint window. If no changes were saved, |

dypaint (1X)

dypaint displays a Caution dialog box.

Edit Menu

The **Edit** menu contains the following menu items:

Undo/Redo	Undoes or redoes the last paint operation.
Cut	Clears the selection from the drawing window and copies it to the clipboard.
Copy	Copies the image selected from the drawing window onto the clipboard.
Paste	Pastes an image from the clipboard into the drawing window.
Clear	Erases any area previously selected with the selection box or scissors tool.
Invert	Creates a negative image of the selection by displaying it in reverse video.
Crop	Repositions the selection in the upper left corner of the window and discards the rest of the painting.
Scale...	Displays a dialog box that lets you scale a selection. Enter a number less than 100 to shrink the selection or a number greater than 100 to expand the selection.
Select All	Selects the entire contents of the drawing window.
Scale Picture...	Displays a dialog box that lets you scale the entire picture. Enter a number less than 100 to shrink the picture or a number greater than 100 to expand the picture.

Options Menu

The **Options** menu contains the following menu items:

Brushes...	Displays a dialog box that lets you choose the size and shape of the paintbrush.
Line Width...	Displays a dialog box that lets you choose the line thickness for the shape to be drawn with the selected tool. This affects lines, arcs, ellipses, circles, rectangles, squares, strokes, and polygons.

dypaint (1X)

- Patterns...** Displays a dialog box that provides a selection of designs that you can use as border and fill patterns. The foreground, background, and "none" patterns are always available. Click on the button at the top left of the dialog box to signal a change in the border pattern; click on the button at the top right to signal a change in the fill pattern. Next, click on any of the patterns (including foreground, background, and "none") to select it as the border or fill pattern.
- Edit Pattern...** Displays a dialog box that lets you modify an existing pattern. Before choosing this menu item, you must indicate whether you are customizing a border or a fill pattern by clicking on the appropriate button in the Patterns dialog box. Next, choose the pattern to edit. The dialog box contains a magnified version of the pattern you chose (16 pixels by 16 pixels).
- Opaque** Prevents background shapes from showing through the clear areas of patterned objects in the foreground. Opaque is the default.
- Transparent** Allows background shapes to show through the clear areas of patterned objects in the foreground.
- Grid On/Off** Turns a fixed snap grid on and off. This is used in alignment.
- Zoom On/Off** Magnifies a portion of the picture. Displays a magnifying frame and a Zoom window. Drag the frame to the portion of the picture to be magnified and release MB1. The framed image appears in the Zoom window and is magnified eight times. To close the Zoom window, display the Options menu and choose Zoom Off.
- Full View...** Displays a dialog box that shows the entire picture in smaller scale. Using this dialog box, you can select a portion of the picture to edit or you can crop the picture.

Font Menu

The **Font** menu contains the following items:

Family	Allows you to choose from Courier, Times, and Helvetica fonts.
Size	Specifies the point size. Choose from 10, 12, 14, 18, and 24 points.
Style	Specifies normal, italic, or bold typeface.

Customize Menu

The **Customize** menu contains the following items:

Picture Size...	Displays a dialog box that lets you change the size and output resolution of the picture. The maximum picture size is 2550 x 3300 pixels, which is 8 1/2 x 11 inches at 300 dots per inch. The minimum picture size is 10 x 10 pixels. You can choose a predefined size or select Non-Standard and supply the width and height of the picture in pixels, inches, or centimeters. You can choose a predefined resolution or select Non-Standard and supply the resolution in dots per inch.
------------------------	--

X Defaults

The **dypaint** application reads the **.Xdefaults** file during startup and uses the appropriate resource specification to customize the appearance or characteristics of its displayed **dypaint** window. The format for a resource specification in the **.Xdefaults** file is:

[name]resource: value*

<i>name</i>	Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.
<i>resource</i>	Specifies the resource.
<i>value</i>	Specifies the value that is to be assigned to the resource.

dxpaint (1X)

For more information, see `X(1X)`.

Because each toolkit-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string by adding widget class and name identifiers to the string. For further information about adding class and name identifiers, see `X(1X)`.

For **dxpaint**, the available class identifiers are:

```
paint
main_menu_bar
paint_v_scroll_bar
paint_h_scroll_bar
```

For **dxpaint**, the available name identifiers are:

```
dxpaint
```

The general resources available for **dxpaint** can be found in `X(1X)`.

Each specification included in the `.Xdefaults` file for the translations resource modifies a key setting for the editor that **dxpaint** uses. For more information about key and mouse specifications in the file, see `X(1)`

Files

```
~/Xdefaults
/usr/lib/X11/app-defaults/DXpaint
```

See Also

`X(1X)`, `dxwm(1X)`, *DECwindows Desktop Applications Guide*

dxpsview (1X)

Name

dxpsview – DECwindows PostScript previewer

Syntax

dxpsview [*options*] [*file*]

Arguments

file Specifies the file to open at startup. If you omit a file name, you can open a file from within **dxpsview**.

Description

The **dxpsview** PostScript viewer displays files coded in the PostScript page description language. The **dxpsview** window consists of the following four areas:

Title Bar	Displays the name of the window, the name of the file currently being viewed, and window manager icons that allow you to move and resize the dxpsview window and shrink the window to an icon. For more information, see dxwm(1X) .
Menu bar	Lists the available dxpsview menus.
Work area	Contains the image of a page generated by the PostScript document (or some of that image if the page is larger than the work area). This window does not accept input focus and does not support text selection.
Status area	Specifies the current page status and provides buttons for viewing the next or previous page.

Options

-bd <i>color</i>	Specifies the color of the window's border (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box.
-bg <i>color</i>	Specifies the color of the window's background (color displays only). The default is specified by means of the Session Manager's Customize Window

dxpsview (1X)

dialog box. When a file is open, the work area has its own color, which cannot be customized.

-d *dispname*

Specifies the display screen on which **dxpsview** displays its window. If the display option is not specified, **dxpsview** uses the display screen specified by your DISPLAY environment variable. The display option has the format *hostname:number*. Using two colons (::) instead of one (:) indicates that DECnet is to be used for transport. The default is :0. For more information, see X(1X).

-display *dispname*

This option is the same as the **-d** option.

-geometry

Specifies the width, length, and location of the **dxpsview** window. If this option is not specified, **dxpsview** uses default values. The geometry option has the format [*width*][*xlength*][*x*][*y*]. For more information about the screen coordinate system, see X(1X).

Menus

The **dxpsview** application contains the following menus:

- File
- Page
- Options

File Menu

The **File** menu contains the following items:

- Open Selected** Opens a file that you selected using the pointer in another application window on the screen.
- Open...** Displays a File Selection dialog box that lets you specify the file to open. To view a file in another directory or one that does not have the *.ps* extension, change the pattern in the File Filter text input field and click on the Filter button. When a file is opened, the title bar displays its file name.
- Revisit** Reopens the current file. This is useful for displaying modifications you have made to the source file.

dxpsview (1X)

Exit Closes the **dxpsview** window and exits from the application.

Page Menu

The **Page** menu contains the following items:

Display *number* Displays the page that precedes the current page. If the current page is the first page, this menu item is disabled.

Display ... Displays a dialog box that prompts for the number of the page to display.

Display *number* Displays the page that follows the current page. If the current page is the last page, this menu item is disabled.

Options Menu

The **Options** menu contains the following items:

Sheet Selection Displays a dialog box that lets you specify how **dxpsview** displays the file image on a screen "sheet."

The Sheet Sizes option lets you select the screen sheet size. Each PostScript file is designed for a particular page size; this option lets you match the screen sheet size to the page size in the file. If the screen sheet size is smaller than the file's, some of the file image is lost. If the screen sheet size is larger than the file's, white space appears around the file image. The choices are Letter, Legal, Ledger, Executive, A3, A4, A5, B4, and B5. The default is Letter.

The sheet can be at one of four angles, in portrait or landscape orientation. Click on the button next to the layout you prefer. The default is upright (0 degrees), in portrait layout.

The scale factor specifies how much to shrink or magnify the images in the file, in comparison to their sizes when printed on paper. The scale factor range is from .1 to 4.0; the default value is 1.0 (screen images are the same size as printer images).

dxpsview (1X)

When you change the scale factor from the default value, the new scale factor appears in the status area.

Use Comments

Turns comment mode on or off. In comment mode, **dxpsview** attempts to interpret comments in the file as hints that allow moving from page to page more quickly. By default, comment mode is on. If you have trouble viewing a file, you may be able to correct the problem by turning off comment mode.

Use Bitmap Widths

Specifies whether to use the bitmap widths or scalable widths of the predefined fonts. Using bitmap widths, characters are spaced more evenly and legibly, but the right edge of paragraphs is jagged. Using scalable widths, the right edge lines up but character spacing is uneven. Scalable widths help to show font placement when you are viewing a document for form rather than content. A change in this setting applies to the next file that you open; to apply the change to the current file, choose Revisit from the File menu. This option is turned off by default.

Use Fake Trays

Allows files containing tray size directives to be displayed. Some PostScript files for the LPS40 include tray size directives. Tray size directives are PostScript programming language instructions that tell the printer which tray size to use. For example, a file might contain tray size directives that instruct the printer to switch from the letter tray (8 1/2 x 11) to the ledger tray (11 x 17) while printing the file. The viewer does not, however, permit the addition of tray size directives to PostScript files in this way.

If you try to display a file that contains PostScript tray size directives, **dxpsview** displays an error message. To display the file, acknowledge the error, choose the Use Fake Trays menu item, and redisplay the file by choosing the Revisit menu item from the File menu. By default, this option is turned off.

Watch Progress

The Watch Progress menu item lets you specify how **dxpsview** draws images onto the screen. Usually, **dxpsview** prepares and stores an entire page in its cache before drawing it. With the Watch Progress

dxpsview (1X)

option on, **dxpsview** displays images immediately as it prepares them. This option is turned off by default.

The command box of the **dxpsview** window contains the following labels and buttons:

Page	Specifies the number of the page currently being displayed. In most cases, the label specifies the total number of pages that can be displayed in the file.
Next Page	Displays the next page. If the current page is the last page, this command is disabled.
Previous Page	Displays the previous page. If the current page is the first page, this command is disabled.
Cancel	Cancels a display operation. The Cancel command is enabled only while dxpsview is in the process of displaying a file or page. When dxpsview stops displaying the file, it leaves the screen sheet with whatever was completed at the time you cancelled the operation.
Scale Factor	Displays the current scale factor, in the format <i>nnX</i> , when the scale factor is other than 1.0.

X Defaults

The **dxpsview** application reads the *.Xdefaults* file during startup and uses the appropriate resource specification to customize the appearance or characteristics of its displayed **dxpsview** window. The format for a resource specification in the *.Xdefaults* file is:

[name]resource: value*

<i>name</i>	Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.
<i>resource</i>	Specifies the resource.
<i>value</i>	Specifies the value that is to be assigned to the resource.

dxpsview (1X)

For more information, see X(1X).

Because each toolkit-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string by adding widget class and name identifiers to the string. For further information about adding class and name identifiers, see X(1X).

For **dxpsview**, the available class identifiers are:

DPSViewer
Label
MainWindow
Menu
PullDown
PushButton
Scroll
Scrollw
Separator
Window

The class **DPSViewer** must be specified in the **.Xdefaults** file when the resource applies to **dxpsview** only. The class **DPSViewer** must be the first element in the specification.

For **dxpsview**, the available name identifiers are:

commandBar	Applies the resource to the command bar located at the bottom of the dxpsview window. The named items on the command bar are odometer, next, prev, abortBtn, and scale.
scrollw	Applies the resource to all dxpsview scroll bars.
vbar	Applies the resource to the vertical scroll bar. To specify a resource for either the up or down stepping arrows, you can add the name ScrollButton1 or ScrollButton2.
hbar	Applies the resource to the horizontal scroll bar. To specify a resource for either the left or right stepping arrows, you can add the name ScrollButton1 or ScrollButton2.
menuBar	Applies the resource to the menu bar.
file	Applies the resource to the File menu. To specify a resource for one of the items displayed in the file menu, you can specify openSel, openDialog, revisit, or quit.
page	Applies the resource to the Page menu. To specify a

dxpsview (1X)

resource for one of the items displayed in the file menu, you can specify `displayPrev`, `displayChoose`, or `displayNext`.

options Applies the resource to the Options menu. To specify a resource for one of the items displayed in the File menu, you can specify `trays`, `comments`, `bwidths`, `faketrays`, or `windowDrawMode`.

Help Applies the resource to the Help menu. To specify a resource for one of the items on the Help menu, you can specify `Help` or `About`.

In addition to the general resources listed in `X(1X)`, the resources available for `dxpsview` are:

pixmapCacheSize Specifies the number of pages that `dxpsview` stores in its cache. If the value is greater than 0, `dxpsview` can display previously viewed pages more quickly. However, the greater the number, the more memory used in the server. The default is 0.

fileNameSuffix Specifies the file name extension used by the `Open...` menu item in the File menu. The default is `ps`.

fileNamePrefix Specifies the directory used by the `Open...` menu item in the File menu when searching for a file. The default is the directory from which the previewer was invoked.

Files

`~/.Xdefaults`
`/usr/lib/X11/app-defaults/DPSViewer`

See Also

`X(1X)`, `dxwm(1X)`, *DECwindows Desktop Applications Guide*

dxpuzzle (1X)

Name

dxpuzzle – DECwindows interface to a puzzle game

Syntax

dxpuzzle [*options*]

Description

The **dxpuzzle** command displays a window that contains a puzzle. The puzzle is a video version of a number puzzle with slidable squares. The goal is to arrange the squares in ascending order in the fewest possible moves. To move a square, click on it.

Options

- | | |
|---------------------------------|---|
| -bd <i>color</i> | Specifies the color of the window's border (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box. |
| -bg <i>color</i> | Specifies the color of the window's background (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box. |
| -d <i>dispname</i> | Specifies the display screen on which dxpuzzle displays its window. If the display option is not specified, dxpuzzle uses the display screen specified by your DISPLAY environment variable. The display option has the format <i>hostname:number</i> . Using two colons (::) instead of one (:) indicates that DECnet is to be used for transport. The default is :0. For more information, see X(1X). |
| -display <i>dispname</i> | This option is the same as the -d option. |
| -fg <i>color</i> | Specifies the color of the text (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box. |
| -fn <i>font</i> | Specifies the font for all parts of the puzzle other than the numbers. Use the defaults file to change the font of numbers. The default is menu12. |

dxpuzzle (1X)

-geometry Specifies the width, length, and location of the **dxpuzzle** window. If the geometry option is not specified, **dxpuzzle** uses default values. The geometry option has the format *[width][xlength][x][y]*. For more information about the screen coordinate system, see X(1X)

The **dxpuzzle** application contains the following menus:

File
Customize
Help
Pop-Up

File Menu

The File menu contains the following items:

New Game Specifies that **dxpuzzle** scramble the squares and start a new game.

Quit Closes the **dxpuzzle** window.

Customize Menu

The Customize menu contains the following items:

Settings... Displays the Settings dialog box that lets you specify the number of squares displayed in the puzzle.

Save Current Settings Saves the number of squares and the puzzle's size and position. These values will be used the next time you run the puzzle.

Use System Defaults Restores the use of system default values for number of squares and puzzle size and position.

Help Menu

The Help menu contains the following items:

Overview Displays an overview of the **dxpuzzle** command

About Provides specific information about **dxpuzzle**.

dxpuzzle (1X)

Pop-up Menu

The **dxpuzzle** window has one pop-up menu. To display this pop-up menu, place the pointer at any position within the **dxclock** window and click MB2 (the middle mouse button, unless you have redefined it). This menu contains the following items:

New Game
Settings...
Quit

X Defaults

The **dxpuzzle** application reads the **.Xdefaults** file during startup and uses the appropriate resource specification to customize the appearance **dxpuzzle** window. The format for a resource specification in the **.Xdefaults** file is:

[name]resource: value*

name Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.

resource Specifies the resource.

value Specifies the value that is to be assigned to the resource.

Because each toolkit-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string by adding widget class and name identifiers to the string. For further information about adding class and name identifiers, see X(1X).

For **dxpuzzle**, the available class identifiers are:

Puzzle
WorkArea

For **dxpuzzle**, the available name identifiers are:

Puzzle*workarea Changes such as font and colors for the work area only.

game_level Initial number of squares in the puzzle.

dxpuzzle(1X)

The general resources listed in **X(1X)** apply to **dxpuzzle**.

Files

~/.Xdefaults
/usr/lib/X11/app-defaults/DXpuzzle

See Also

X(1X), **dxwm(1X)**, *DECwindows Desktop Applications Guide*

dxsession (1X)

Name

dxsession, Xprompter – DECwindows session manager and login window

Syntax

dxsession

Description

The **dxsession** program provides a window-oriented interface that gives you access to a workstation. In addition, you can use **dxsession** to invoke high-level applications and customize the workstation environment.

By default, **dxsession** is automatically executed from the `/etc/tty` file. A sample command line in the `/etc/tty` file for a color workstation is as follows:

```
:0 "/usr/bin/login -P /usr/bin/Xprompter -C
/usr/bin/dxsession" none on secure window=
"/usr/bin/Xqdsq -fd 75 -bp #000080 c 70"
```

For a monochrome workstation the command line is as follows:

```
:0 "/usr/bin/login -P /usr/bin/Xprompter -C
/usr/bin/dxsession" none on secure window=
"/usr/bin/Xqvsm -fd 75 c 70"
```

In these command lines, **login** has two flags. The first flag, `-P`, specifies the prompting program (in this case, **Xprompter**). The **Xprompter** command displays the dialog box through which you log into a session. The second flag, `-C`, specifies the command that **login** runs through your shell (in this case, it runs **dxsession**). The last command starts the X Server.

A DECwindows session begins when you log into the workstation through the Start Session dialog box. Once you complete logging in, **dxsession** reads your `.Xdefaults` file and incorporates any values that it contains into the X Server. Next, **dxsession** sets the `DISPLAY` variable to `:0` and starts the window manager. The default window manager is **dxwm**. (You can use another window manager by specifying it in the `.Xdefaults` file or by entering it in the Customize Window dialog box.)

The session manager window appears, and **dxsession** starts up the applications contained in the AutoStartup list. If you have an `.X11Startup` file in your home directory, **dxsession** reads that as well. The `.X11Startup` file is a shell script that you can use to execute commands at startup. It is usually unnecessary, unless you execute commands that use environment variables,

dxsession (1X)

because you can use the AutoStartup list to specify which applications should start automatically.

Use the Customize menu to tailor **dxsession**. Whenever you save the attributes you have specified by means of the Customize dialog boxes, **dxsession** writes resource specifications into your .Xdefaults file (from which it again reads them at subsequent startups).

Start Session Dialog Box

The start session dialog box gives you initial access to the workstation by displaying text input fields that accept a login name and a password. The Login field has input focus when the dialog box appears. After entering your login name, press the Return key to move to the password field. You can also set the insertion point at a text field by positioning the pointer there and clicking MB1 (the left button, unless you have redefined it).

If your login name is longer than its text field, the text in the field scrolls one character to the left each time you type a new character. Password characters are not echoed on the screen. To confirm your login name and password, click on the OK button or press the Return key after typing your password. To cancel the operation, click on the Cancel button.

After the login name and password are confirmed, **dxsession** starts the window manager and displays the session manager window.

Session Manager Window

The session manager window consists of the following areas:

- | | |
|-----------------------|---|
| Title Bar | Displays window manager icons that let you move, and resize the session manager window and shrink the window to an icon. For more information, see <code>dxwm(1X)</code> . |
| Menu Bar | Lists the available dxsession menus (such as Applications and Customize). |
| Message Region | Displays system status messages. By default, the message region is a scrollable text region that displays seven lines of text. If system status messages are received while the session manager window is in icon form, the appearance of the icon changes. |

dxsession (1X)

Menus

The session manager window contains the following menus:

- Session
- Applications
- Customize
- Print Screen

Session Menu

The Session menu contains the following items:

- Pause** Places a blank screen over the workstation screen and displays the Continue Session dialog box, which prompts for the password of the person whose session was paused. When you enter the correct password, **dxsession** removes the blank screen and resumes the session.

- Quit** Ends the current session and exits from all applications.

Applications Menu

The Applications menu contains a list of applications that you can start. By default it includes all of the standard DECwindows applications (Notepad, Mail, Cardfiler, DECterm, User Executive, and so forth). Choose one of the applications to start it up. You can add applications as items on the menu or remove those currently listed by choosing the Applications Menu item from the Customize menu.

Customize

The Customize menu contains the following items:

- Application Definitions...** Displays a dialog box that lets you provide or change application definitions. An application definition consists of the name to use in Session Manager menus and the associated command that is executed when **dxsession** starts the application. Applications must be defined before you can add them to the Applications menu or Autostartup list.

- Applications Menu...** Displays a dialog box that lets you specify the applications that appear on the Applications

dxsession (1X)

- menu. You must define an application by means of the Customize Applications Definitions menu before you add it to the Applications menu.
- AutoStartup...** Displays a dialog box that lets you specify the applications that **dxsession** automatically starts each time a session starts. You must define an application by means of the Customize Applications Definitions menu before you add it to the Applications menu.
- Keyboard...** Displays a dialog box that lets you specify characteristics of your keyboard (such as bell and keyclick volume).
- Language...** Displays a dialog box that lets you specify the language in which you prefer to work.
- Pointer...** Displays a dialog box that lets you specify characteristics of your pointer (such as its shape and color).
- Print Screen...** Displays the Customize Print Screen dialog box, which lets you customize the following attributes:
- Output Format** Selects the image's output format. Output can be prepared for printing on a PostScript, sixel, or DDIF printer. A bitmap can also be placed directly in a file. The options are PostScript, standard sixel file format, or DDIF image format for bitmap files. The default format is PostScript.
 - Output Color** Specifies that the image is black and white, that black and white should be combined to produce gray shades, or that the image should be prepared for a color printer. The default is black and white.
 - Aspect ratio** Specifies how many printer pixels represent each screen pixel. Some devices have square pixels and

dxsession (1X)

some have rectangular pixels. The aspect ratio 2 to 1 uses twice as many device pixels as screen pixels in one direction to make the image shape come out correctly on devices with rectangular pixels. The default is 1 to 1.

Ribbon or Toner Saver

Specifies that ribbon or toner should be saved by reversing the image. When **dxsession** is printing color or gray shades, this option is ignored. The default is a positive image.

Rotate Picture to Fit Paper

Specifies that a picture's orientation is automatically rotated or its size reduced so that it fits on a single sheet of paper.

Prompt for File Name

Specifies that each Capture Screen operation displays a dialog box asking for the name of the output file. When the toggle is on, the dialog box appears; when the toggle is off, the output file is the one whose name appears in the Output File Name text field.

Output File Name

Lets you specify the name of the Capture Screen output file. The default destination for captured screen images is `printscreen.ps`. If the output file name starts with a vertical bar (`|`), the destination is interpreted as a command to which the output is piped (for example, `llpr`).

Security...

Displays a dialog box that lets you specify the hosts that can display applications on this

dxsession (1X)

	workstation.
Session Manager...	Displays a dialog box that lets you customize attributes of dxsession . These include its start-up state (as an icon or opened window), the text that appears when your workstation is paused, and the message region's size and header.
Window...	Displays a dialog box that lets you specify screen and window characteristics. These include colors, size of your icons, and on some systems, the screen background pattern. In addition, if you want to use a window manager other than the default DECwindows one, you can specify it here.
Use Last Saved Settings	Restores the settings you last saved.
Use System Defaults	Restores the system default settings.
Save Current Settings	Saves the current settings.

Print Screen Menu

The Print Screen menu lets you print screen images or capture them to a file. You can print or capture the entire screen or a portion of it.

The Print menu consists of the following items:

Print Entire Screen	Takes a snapshot of the screen, displays the Print Options dialog box so that you can specify print attributes, and sends the snapshot to the printer.
Print Portion of Screen	Lets you delineate the portion to print, takes a snapshot of the area you delineated, displays the Print Options dialog box so that you can specify print attributes, and sends the snapshot to the printer. To delineate the portion to save, use the following technique: Position the pointer at one corner of the area you want to mark off. Press and hold MB1 to display a box outline, and then adjust the size and location of the box outline by dragging the pointer. Release MB1.

dxsession (1X)

Capture Entire Screen

Saves an image of the entire screen in a file. The file name is specified in the Customize Print Screen dialog box; if the toggle button for Prompt for File Name is on in that dialog box, you are prompted to confirm or specify the file name.

Capture Portion Of Screen

Saves a portion of the screen in a file. The file name is specified in the Customize Print Screen dialog box; if the toggle button for Prompt for File Name is on in that dialog box, you are prompted to confirm or specify the file name.

To delineate the portion to save, use the following technique: Position the pointer at one corner of the area you want to mark off. Press and hold MB1 to display a box outline, and then adjust the size and location of the box outline by dragging the pointer. Release MB1.

X Defaults

The **dxsession** application reads the **.Xdefaults** file during startup and uses the appropriate resource specification to customize the appearance or characteristics of its displayed **dxsession** window. The format for a resource specification in the **.Xdefaults** file is:

[name*]resource: value

name Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.

resource Specifies the resource.

value Specifies the value that is to be assigned to the resource.

For more information, see X(1X).

dxsession (1X)

Because each toolkit-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string by adding widget class and name identifiers to the string. For further information about adding class and name identifiers, see X(1X).

Note that the first name for lines that apply only to the session manager should be labeled "sm".

For **dxsession**, the available classes are:

- AttachedDialogBox
- Dialog
- Label
- MainWindow
- Menu
- Menubar
- Message
- Pulldown
- Pushbutton
- SText
- Toggle

For **dxsession**, the available names are:

- ConfirmFilename
- ConfirmPrint
- CreatePulldown
- CusotmizeAutoStart
- CustomizeAppDef
- CustomizeAppMenu
- CustomizeKeyboard
- CustomizePrinter
- CustomizePulldown
- CustomizeSecurity
- CustomizeSession
- CustomizeWindow
- MainWindow
- Menubar
- Messages
- PrintPulldown
- SessionPulldown
- SETLANGUAGE_BOX
- WorkAreaDialog

dxsession (1X)

In addition to the general resources listed in X(1X), and those that the Customize dialog boxes specify, **dxsession** uses the following resources:

terminalEmulatorName	Specifies the name of the terminal emulator to run at dxsession startup. The default is dxterm .
create_vue	Specifies the number of User Executive windows to create at startup. The default is 0.
create_terminal	Specifies the number of terminal emulator windows to create at startup. The default is 1.
rootPasswd	Specifies whether the root password can be used to resume a paused session. True means that the root password or the user's password is accepted; false means that only the user's password is accepted. The default is False.
pointer_shape	Specifies the design of the pointer character. DECwindows pointers are specified by negative numbers; choose the pointer by using the Customize Pointer dialog box. MIT pointers can be specified by positive numbers that correspond to values in <code>/usr/include/X11/cursorfont.h</code> .

Files

- `~/login`
- `~/cshrc`
- `~/X11Startup`
- `~/Xdefaults`
- `/usr/lib/X11/app-defaults/SessionManager`
- `/usr/lib/X11/app-defaults/XSessionManager`
- `/usr/lib/X11/getcons`

See Also

X(1X), `dxwm(1X)`, `init(8)`, `ttys(5)`, *DECwindows User's Guide*

dxterm(1X)

Name

dxterm – DECwindows terminal emulator

Syntax

dxterm [*options*]

Description

The **dxterm** command displays a window that provides Digital VT320 terminal emulation and a standard terminal type for programs not aware of the X Window System directly. The terminal emulator also supports the ReGIS and sixel graphics protocols.

Options

- customization *string*** Specifies a value for a **dxterm** resource that overrides a default setting. The *string* has the form *resource:value*. You can specify this option multiple times to change multiple resources. See X DEFAULTS for a list of resources that can be changed. You can specify both **dxterm** and shell resources as **resource*.
- d *dispname*** Specifies the display screen on which **dxterm** displays its window. If the display option is not specified, **dxterm** uses the display screen specified by your DISPLAY environment variable. The display option has the format *hostname.number*. Using two colons (::) instead of one (:) indicates that DECnet is to be used for transport. The default is :0. For more information, see X(1X).
- display *dispname*** Is the same as the **-d** option.
- e *command* [*options*]** Specifies that the named command, and any of its specified options, be executed in the **dxterm** window when the window is first created. This option must appear last on the **dxterm** command line.
- geometry** Specifies the width, length, and location of the **dxterm** window, in pixels. If this option is not specified, **dxterm** positions the window at a default location and sizes the window according to the

dxterm (1X)

number of rows and columns and the size of the characters. To specify the window size in rows and columns, use the `-size` option, which does not require knowledge of character size. The geometry option has the format `[width][xlength][x][y]`. For more information about the screen coordinate system, see `X(1X)`.

- `-ls` Specifies that `dxterm` create a login shell rather than a subshell.
- `-setup file` Specifies the setup file or files that provide parameters that control the terminal's initial settings. This must be a file saved by the Customize/Save function in `dxterm`. The default is `~/default.DECterm`. Specify `-setup ""` to prevent `default.DECterm` from being read.
- `-size CxR` Specifies the size of the `dxterm` window in columns (C) and rows (R).
- `-xrm string` Is the same as the `-customization` option.

Menus

The menu bar contains the following items:

- Commands
- Edit
- Customize

Commands Menu

The Commands menu contains the following items:

- Clear Lines Off Top** Erases data recorded by `dxterm` from the top of the scrolling area.
- Clear display** Clears the display and positions the cursor at the first column and first line of the display.
- Resize window** Changes the size of the window to match the display so that all characters in the display are visible.
- Clear Comm** Clears the communication buffers.
- Reset Terminal** Resets the emulator to the original settings; for example, sets the keyboard action mode to

dxterm (1X)

	unlocked and the keypad mode to numeric.
Clear Communications	Clears the communication buffers.
Quit	Shuts down the terminal emulator application (removes all its windows, stops the process running the emulator, and ends any applications).

Edit Menu

The Edit menu contains the following items:

Copy	Copies the text selected from the dxterm window onto the clipboard.
Paste	Pastes text selected from the clipboard into the dxterm window, as if it had been typed.
Select All	Selects all displayed text.

Customize Menu

The **dxterm** setup features are grouped into a number of related categories. The Customize menu lets you access the dialog box for each of these categories (these correspond to VT320 Set-Up screens).

The Customize menu contains the following items:

Window...	Displays the Window Customize dialog box, which contains controls that affect the window features.
Display...	Displays the Display Customize dialog box, which contains controls that affect the format of the user's current window.
General...	Displays the General Customize dialog box, which contains controls for commonly changed Customize features.
Keyboard...	Displays the Keyboard Customize dialog box, which contains controls for keyboard operating features.
7-Bit NRCS Selection...	Allows you to specify a 7-bit National Replacement Character Set (NRCS).
Graphics...	Displays the Graphics Customize dialog box that contains controls for ReGIS and sixel

dxterm (1X)

	graphics.
Use Last Saved Settings	Restores the setup configuration from the most recently read or written saved setup file (corresponds to NVR recall on a VT320 terminal).
Use System Defaults	Reinitializes the terminal emulator with the system default characteristics defined by your system.
Use Saved Settings From...	Opens a different saved setup configuration. The standard DECwindows file selection dialog box appears, showing a list of saved setup files in the current directory. Selecting one of these files and clicking on OK (or double-clicking on the file) reinitializes the terminal emulator with the configuration stored in that file.
Save Current Settings	Saves the current setting. If you do not specify a file, dxterm writes to the file <code>~/default.DECterm</code> .
Save Current Settings As...	Saves the current settings in the file you specify.

Customize Dialog Boxes

The Customize dialog boxes represent the state of the terminal. At application startup, the previously saved state of most terminal features is read from a saved set-up file (which corresponds to VT320 NVR); these feature settings remain constant until you explicitly change them. You can change terminal operating features directly by means of the Customize dialog boxes. You can also change some of these features indirectly by means of control functions from the host.

There are a few terminal features whose state is not stored in a saved setup file. These features are restored to their factory default values at application startup, or when you reset the terminal (with Reset Terminal or DECSTR).

Window Customize Dialog Box

The Window Customize dialog box lets you change the following display attributes:

Auto Resize Terminal	Changes the terminal size to match the
-----------------------------	--

dxterm (1X)

	window size automatically whenever the window size changes.
Auto Resize Window	Changes the window size to match the terminal size automatically whenever the terminal size changes.
Terminal Driver Resize	Changes the terminal size to match the size known to the terminal driver whenever the size changes in the terminal driver, and vice versa.
Big Font	Displays an 18-point font.
Little Font	Displays a 14-point font.
Normal Font (80 Columns)	Sets a font to a column width of 80 characters.
Condensed Font (132 Columns)	Sets a font to a column width of 132 characters.
Normal/80, Condensed/132	Adjusts the font to match the width of the terminal automatically.
Window Title	Changes the title displayed in the title bar.
Icon Name	Changes the title displayed in the icon box.
Terminal Size	Sets the number of rows and columns that are displayed. You can select 24, 48, or 72 rows and 80 or 132 columns, or enter a custom size in the numeric entry fields.

Display Customize Dialog Box

The Display Customize dialog box lets you change the following display attributes:

Record Lines Off Top	Saves lines that are scrolled off the top of the display. When you choose Record Lines Off Top, a filled-in button appears to the left of the menu selection.
Vertical Scroll Bar	Displays a vertical scroll bar along the right side of the dxterm window.
Horizontal Scroll Bar	Displays a horizontal scroll bar along the bottom of the dxterm window.
Vertical Cursor Coupling	Specifies that the window scrolls vertically

dxterm (1X)

	so that the cursor is visible.
Horizontal Cursor Coupling	Specifies that the window scrolls horizontally so that the cursor is visible.
Auto Wrap	Specifies that when the cursor reaches the right margin, new characters are displayed on the next line. If you do not automatically wrap text, when the cursor reaches the right margin each new character deletes the previous character.
Display Cursor	Specifies whether the cursor is displayed. The default is to display the cursor.
Cursor Blink	Specifies whether the cursor blinks. The default is to have the cursor blink.
Batch Scroll nnn Lines	Specifies how many lines scroll at the same time. Increasing the Batch Scroll count improves performance but makes it harder to read text while it is scrolling.
Record nnn Lines Off Top	Specifies how many lines to save when they scroll off the top of the display (when the Record Lines Off Top item is enabled).
Dark Text, Light Background	Sets dark text on a light background display.
Light Text, Dark Background	Sets light text on a dark background display.
No Status Display	Suppresses the status line at the bottom of the window.
Host Status Display	Specifies that a host-writable status line appears at the bottom of the window.
Block Cursor	Specifies that the text cursor is a block that covers the character cell.
Underline Cursor	Specifies that the text cursor is an underline at the bottom of the character cell.

General Customize Dialog Box

The General Customize dialog box lets you change the following general attributes:

Newline	Turns on new line mode (NLM), which causes the Return key to send a line feed as well as a carriage return. A line feed character moves the cursor to the start of the line as well as advancing it to the next line.
Lock UDKs	Locks the user-defined keys so that the host system cannot change these definitions.
Lock User Features	Stops the host from changing your customized settings for the Auto Repeat key and the Foreground and Background display.
Normal Cursor Keys	Specifies that the arrow keys are set to the characters labeled on the keycaps. The keys are not mapped to any other functions.
Appl Cursor Keys	Specifies that the arrow keys are mapped to application-specific functions.
Terminal ID	Specifies the device attributes response (Terminal ID). The device attributes response lets the host system know specific operating attributes of the terminal. The Terminal ID can be one of the following: VT100 VT101 VT102 VT125 VT220 VT240 VT 320 VT 330 VT 340 DECterm ID The default is DECterm ID.

dxterm (1X)

Numeric Keypad	Specifies that the numeric keypad is set to the characters labeled on the keycaps.
Application Keypad	Specifies that the application keypad is set to function as user-defined keys.
UPSS DEC Supplemental	Specifies that dxterm use the DEC Multinational Character Set. To use this character set, set the Character Set mode menu item to 8-bit Characters. The default is the DEC Multinational Character Set.
UPSS ISO Latin-1	Specifies that dxterm use the International Standards Organization (ISO) Character Set. To use this character set, set the Character Set mode menu item to 8-bit Characters.
8-bit Multinational Characters	Specifies the character set mode to be 8 bits for use with the DEC Supplemental or ISO Latin-1 Character Set. The default is 8-bit character mode.
7-bit NRCS Characters	Specifies the character set mode to be 7 bits for use with the National Replacement Character Sets. The default is 8-bit character mode.
VT300 Mode, 8-bit Controls	Specifies that the terminal operates in VT300 mode and transmits 8-bit control characters.
VT300 Mode, 7-bit Controls	Specifies that the terminal operates in VT300 mode and transmits 7-bit control characters.
VT100 Mode	Specifies that the terminal operates in VT100 mode, using 7-bit characters for both input and output.
VT52 Mode	Specifies that the terminal operates in VT52 mode, using 7-bit characters for both input and output.

Keyboard Customize Dialog Box

The Keyboard Customize dialog box lets you change the following display attributes:

- | | |
|------------------------------|--|
| Warning bell | Specifies whether the warning bell sounds when dxterm receives a BEL character (ASCII 7). The default is that the bell sounds. |
| Margin Bell | Specifies whether the warning bell sounds when the cursor reaches the right margin. The default is that the bell does not sound. |
| Auto Repeat | Specifies whether a character repeats or does not repeat when you hold the key down. If you set the Lock User Feature menu item, the host system cannot change this setting. |
| Ctrl-Q, Ctrl-S = Hold | Specifies that the Ctrl-S and Ctrl-Q keys freeze and unfreeze the display. If this is not specified, the Ctrl-S and Ctrl-Q keys are transmitted to the host as data characters. |
| <X] Delete | Specifies that the back arrow key sends a delete (ASCII 127) character. Depending on your terminal settings, this usually deletes the previous character. The default back arrow operation sends a delete character. |
| <X] Backspace | Specifies that the back arrow key sends a backspace (ASCII 8, Ctrl/H). The effect of this character depends on your terminal settings. The default back arrow operation sends a delete character. |
| Comma Key Sends ,, | Specifies that a comma is displayed when you press the Shift key and comma key on a keyboard using the North American or Dutch keyboard dialect. This is the default. |
| Comma Key Sends ,< | Specifies that a comma is displayed when you press the Shift key and comma key, |

dxterm (1X)

and that a left angle bracket (<) is displayed when you press just the comma key on a keyboard using the North American or Dutch keyboard dialect. The default is to display a comma.

Tilde Key Sends ‘~

Specifies that a left single quotation mark (‘) is displayed when you press the ‘~ key and that a tilde (~) is displayed when you press the Shift key and ‘~ key on a keyboard using the North American or Dutch keyboard dialect. This is the default.

Tilde Key Sends ESC

Specifies that the ‘~ key functions as an escape character (ESC) on a keyboard using the North American or Dutch keyboard dialect. The default is to display the characters as labeled on the keyboard.

Angle Brackets Key Sends (<>) Specifies that a left angle bracket (<) is displayed when you press the angle bracket key, and that a right angle bracket (>) is displayed when you press the Shift key and angle bracket key. This is the default.

Angle Brackets Key Sends ‘~ Specifies that a left single quotation mark (‘) is displayed when you press the angle brackets key and that a tilde (~) is displayed when you press the Shift key and angle brackets key. The default is to display the characters as labeled on the keyboard.

7-bit Nrcs Selection Dialog Box

The 7-bit NRCS Selection dialog box lets you select a National Replacement Character Set (NRCS) for use when the terminal is in 7-bit mode. This selection affects output to the terminal, but not keyboard input. To select the keyboard dialect, which does affect input, use the Keyboard dialog box from the Session Manager’s Customize menu. For example, to use the Spanish NRCS, select the keyboard in the Session Manager and also select the Spanish NRCS in DECterm.

dxterm (1X)

To select a character set, click MB1 on the desired entry. The choices are:

North American
Flemish
Canadian (French)
British
Danish
Finnish
Austrian/German
Dutch
Italian
Swiss (French)
Swiss (German)
Swedish
Norwegian
Belgian/French
Spanish
Portugese

The default character set is North American. The Dutch NRCS is no longer supported; selecting Dutch is equivalent to selecting North American.

Graphics Dialog Box

Share Color Map Entries	Controls whether dxterm uses shared, read-only colors for graphics. The default is Off, but the option is forced to On if the hardware color map is read-only.
Enable Backing Store	Specifies whether dxterm creates a pixmap to allow graphics to be redrawn when the window is exposed. The default is On.
Report Macrograph Contents	Enables the ReGIS macrograph report command. The default is Off.
NN Bit Planes	Controls the number of bit planes used for graphics. VT240 emulation requires 2 planes; VT340 emulation requires 4 planes. On systems with fewer than 8 hardware planes, the default is 2 planes; on systems with 8 or more hardware planes, the default is 4 planes.

dxterm (1X)

X Defaults

The **dxterm** application reads the **.Xdefaults** file during startup and uses the appropriate resource specification to customize the appearance or characteristics of its displayed **dxterm** window. The format for a resource specification in the **.Xdefaults** file is:

[name.]resource: value

name Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.

resource Specifies the X resource.

value Specifies the value that is to be assigned to the resource.

In most cases, the period (.) delimiter should be replaced by an asterisk (*). For more information, see **X(1X)**.

Because each toolkit-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string by adding widget class and name identifiers to the string.

For **dxterm**, the application class is **DXterm** and the application name is the name that was specified on the command line (usually **dxterm**).

For **dxterm**, the available name identifier is **terminal**. This name identifier specifies the work area of the **dxterm** window.

In addition to the general resources listed in **X(1X)**, the resources available for the **dxterm** work area are:

adjustFontSizes Specifies that **dxterm** selects the normal or condensed font based on the number of columns selected. The default is **On**.

allowShellResize If **On**, the program can change the size of the **dxterm** window. If **Off**, you can specify a fixed size with the geometry specification. However, **DECTerm** always turns on this resource even if you have turned it off, because **DECTerm** resizes its window according to the font, the number of rows, and the number of columns.

angleBracketsKey Specifies the mapping of the angle brackets

dxterm (1X)

	(<>) key. Zero maps the key to AngleBrackets (0); 1 maps it to OpenQuoteTilde (1). The default is 0.
applicationKeypadMode	Specifies that the application running in the window take control of the keypad. The default is false.
autoRepeatEnable	Specifies that autorepeat be enabled. The default is On.
autoResizeTerminal	Specifies that dxterm changes the logical display size to match the window size when the user changes the window size. The default is Off.
autoResizeWindow	Specifies that the dxterm window automatically resize itself to match the logical display size whenever the logical display size changes. Note that this may interfere with other windows on the display.
autoWrapEnable	Specifies that autowrap mode be enabled. The default is Off.
backArrowKey	Specifies the back arrow key code. This code can be delete (0) or backspace (1). The default is 0.
backingStoreEnable	Specifies whether dxterm should create a pixmap to allow graphics to be redrawn when the window is exposed. The default is On.
batchScrollCount	Specifies how many lines can be scrolled at once. The dxterm application never scrolls more than the total number of lines on the screen at once. The default is 1000.
bigFontSetName	Specifies the font used for the "big" font set. The default is <code>-*-Terminal-*-18-*-* *_*_*_*_*</code> .
bitPlanes	Controls the number of bit planes used for graphics; 2 planes are needed for VT240 emulation and 4 planes for VT340 emulation. The default is 0, which means to use 2 planes on systems with fewer than 8 hardware planes, and 4 planes on systems with 8 or

dxterm (1X)

	more hardware planes.
columns	Specifies the width of the logical display in columns. The default is 80.
condensedFont	Specifies that the condensed font should be used. The default is to display the normal font (Off).
controlQSHold	Specifies that the Ctrl-S and the Ctrl-Q keys hold and release the display. The default is On.
couplingHorizontal	Specifies whether the window moves horizontally to follow the text cursor when the cursor moves outside the window. In this way, the cursor is always contained in the window. The default is Off.
couplingVertical	Specifies whether the window moves vertically to follow the text cursor when the cursor moves outside the window. In this way, the cursor is always contained in the window.
cursorBlinkEnable	Specifies whether the cursor blinks. Specify on for a blinking cursor or off for one that does not blink. The default is On.
cursorStyle	Specifies the cursor style. Specify 0 for a block cursor or 1 for an underline cursor. The default is 0.
eightBitCharacters	Specifies that 8-bit characters are used in the VT300 terminal modes. If not selected, 7-bit NRCS characters are used. The default is On.
fontSetSelection	Specifies which font is used. Specify 1 for little and 0 for big. The default is 1.
geometry	Specifies the width,length, and location of the dxterm window. This is the same as the --geometry command line option.
iconName	Specifies the name in the icon box.
iconNameWidth	Specifies the width of the name in the icon box.

dxterm (1X)

iconic	Specifies whether the dxterm window is initialized as an icon.
keyboardDialect	Selects the 7-bit national replacement character set (NRCS). The choices are: North American (0), Flemish (1), French Canadian (2), British (3), Danish (4), Finnish (5), Austrian/German (6), Dutch (7), Italian (8), Swiss French (9), Swiss German(10), Swedish (11), Norwegian (12), Belgian/French (13), Spanish (14), Portuguese (15). The default is 0.
littleFontSetName	Specifies the font used for the "little" font set. The default is <code>-*-Terminal-*. *- *-14-*. * *_*_*_*_*_*</code>
lockUDK	Specifies that changes to UDK definitions are prevented. The default is Off.
lockUserFeatures	Specifies that changes to user features are prevented. The default is Off.
macrographReportEnable	Specifies that the ReGIS macrograph report command is enabled. The default is Off.
marginBellEnable	Specifies that the margin bell is turned on. The default is Off.
newLineMode	Specifies whether line-feed or newline mode is turned on. The default is line-feed mode.
openQuoteTildeKey	Specifies the mapping of the tilde key (<code>~</code>). This mapping can be either ApostropheTilde (0) or Escape (1). The default is 0.
periodCommaKeys	Specifies the mapping of the period and comma keys. This mapping can be either PeriodComma (0) or GreaterLessThan (1). The default is 0.
responseDA	Specifies the response to a Device Attributes (terminal ID) request. The terminal ID can be VT100 (0), VT101 (1), VT102 (2), VT125 (3), VT220 (4), VT240 (5), VT320 (6), VT330 (9), VT340 (7), or DECterm (8). The default is 8.
reverseVideo	Specifies that dxterm reverse the color

dxterm (1X)

	values for foreground and background. The default is Off.
rows	Specifies the height of the logical display in rows. The default is 24.
saveErasedLines	Specifies whether dxterm should scroll lines into the transcript instead of erasing them. The default is On.
saveLinesOffTop	Specifies that a transcript of lines be saved off the top of a scrolled display. The default is On.
screenMode	Specifies the screen mode. The screen mode can be dark on light or light on dark. The default is light on dark.
scrollHorizontal	Specifies that a horizontal scroll bar be displayed in the dxterm window.
scrollVertical	Specifies that a vertical scroll bar be displayed in the dxterm window.
shareColorMapEntries	Controls whether DECterm uses shared, read-only color map entries for graphics. The default is Off, but the option is forced on if the hardware color map is read-only.
statusDisplayEnable	Specifies that the status line be displayed. The default is false.
terminalDriverResize	Specifies whether changing the size of the logical display changes the size known to the terminal driver, and vice versa. The default is On.
terminalMode	Specifies the terminal operating mode. The terminal operating mode can be VT52 (0), VT100 (1), VT300_7bit (2), VT300_8bit (3)
textCursorEnable	Specifies that the text cursor be enabled.
title	Specifies the name in the title bar.
transcriptSize	Specifies the maximum number of lines that can be recorded off the top of the display. The default is 500.
userPreferenceSet	Specifies the user preference set to DEC (0)

dxterm (1X)

or ISO (1). The default is 0.

warningBellEnable

Specifies that the warning bell be turned on.
The default is On.

Files

~/.Xdefaults
~/default.DECterm
/usr/lib/X11/app-defaults/DXterm
~/DXterm

See Also

X(1X), dxwm(1X), *DECwindows Desktop Applications Guide*

For descriptions of VT320, ReGIS and sixel commands, refer to the DECterm Text and Graphics Programming manuals. These are not part of the UWS documentation set; they must be ordered separately.

dxue (1X)

Name

dxue – DECwindows user executive

Syntax

dxue [*options*]

Description

The **dxue** command provides a window that lets you access the ULTRIX programming environment and DECwindows applications. In addition, you can expand the selection of commands by modifying existing or adding new **dxue** menus.

When started, **dxue** creates a text file in your home directory named `.ue_profile`. When you make modifications to the **dxue** interface, **dxue** records those changes in this file.

Options

- | | |
|---------------------------------|---|
| -bd <i>color</i> | Specifies the color of the window's border (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box. |
| -bg <i>color</i> | Specifies the color of the window's background (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box. |
| -d <i>dispname</i> | Specifies the display screen on which dxue displays its window. If the display option is not specified, dxue uses the display screen specified by your DISPLAY environment variable. The display option has the format <i>hostname:number</i> . Using two colons (::) instead of one (:) indicates that DECnet is to be used for transport. The default is :0. For more information, see X(1X). |
| -display <i>dispname</i> | This option is the same as the -d option. |
| -fg <i>color</i> | Specifies the color of the window's foreground (color displays only). The default is specified by means of the Session Manager's Customize Window dialog box. |

dxue(1X)

-fn <i>font</i>	Specifies the font used when displaying text.
-geometry	Specifies the width, length, and location of the dxue window. If the geometry option is not specified, dxue uses default values. The geometry option has the format [<i>width</i>][<i>xlength</i>][<i>x</i>][<i>y</i>]. For more information about the screen coordinate system, see x(1X) .

Main Window

In the **dxue** window, the Full Directory Path field displays the name of your current default directory. The current directory appears in italics in the Directories list box. You can change directories by selecting a directory name from the Directories list box. The Filter field contains the file name pattern to which the files shown in the Files subwindow conform. An empty Filter field indicates that all files in the current directory are displayed. The current directory and its displayed files are called the current view.

There are three methods for performing file operations. You can select one or more files and then choose one of the items from the Files menu to apply to those files. You can also position the pointer on a file name and press MB2 (the middle mouse button, unless you have redefined it); you then choose a file operation from the pop-up menu that appears. The **dxue** application also defines default operations for various types of files; you perform the default operation by positioning the pointer on a file name and double-clicking MB1 (the left mouse button, unless you have redefined it). To view or change the default file operations, choose the Double Click Actions... menu item from the Customize menu.

Menus

The **dxue** window contains the following menus:

- Control
- Customize
- Views
- Files
- Applications

Control Menu

The control menu contains the following items:

Update	Updates the current dxue window.
Select All	Selects all the files in the current file view. The files

dxue (1X)

	will be displayed in reverse video to indicate that all files have been selected.
Select None	Cancels the Select All command.
Processes...	Displays a window containing all current processes. Kill, Suspend, Continue, and OK buttons are also displayed that allow you to kill suspend or continue a current process.
New View	Creates an additional dxue main window.
Save View...	Saves your current file view and format. Displays a dialog box that prompts for the name of the view. In addition, you can select which settings (file strings, defaults directories, window sizes, window positions, fields, and orders) are saved.
Delete View...	Displays a dialog box that lets you delete previously saved views.
Save as Startup View	Saves your current file view and format as your startup view.
Exit	Closes the dxue main window.

Customize

The Customize menu contains the following items:

File Properties...	Displays a window for selecting the file properties to display in the Files window. The choices are file name, protection, link count, owner, size, and creation time. As you choose a file property by clicking on its toggle button, the Sample field displays that property for one of your files. You can select the field by which the files are sorted and specify the sort order: ascending or descending. To immediately apply these changes to the files currently displayed in the Files subwindow, click on the Apply button. To cancel any changes, click on the Cancel button. To save the changes, click on the OK button.
Edit Menus...	Displays a window containing a Menu and Menu Items list boxes. The Menu list box contains the names of all defined menus. The Menu Items list box contains the names of all the defined menu

dxue (1X)

items in the menu selected in Menu list box. You can create additional menus by entering the name of the menu in the New Menu Name field and clicking on the Insert button. You can remove menus by selecting the name from the list and clicking on the Remove button. You can add menu items in the same manner.

To associate a shell string with a menu item, select the menu item and type the string in the Associated Command or Script field. If you want the file names that are selected in the files list to be appended to the command when it is executed, click on the Append Files to Command selection. Click on the Add to Menu Item button to associate the string to the menu item.

To cancel the changes you have made, click on the cancel button. To save the changes you have made, click on the OK button.

Double Click Actions...

Displays a dialog box that lets you specify what action **dxue** takes when you double click on a particular type of file, such as a directory or a file containing C code. Through this dialog box you can also define new file types.

Views Menu

The Views menu contains the following item:

Startup Displays your startup file view and format. In addition, if you saved any views with a different file name, these appear as separate menu item in the Views menu.

Files Menu

The Files menu contains the following items:

Copy... Displays a window asking for the files you want to copy and the destination of each of the selected files. Each file is copied to the specified destination.

Display... Displays a window containing a Files list box. Enter the name of the files you want to display and click

dxue (1X)

	on the OK button.
Search...	Displays a window asking for the files you want to search and the string you want to search for. When you enter the file and the string to search for, dxue searches for the specified string.
Create Directory...	Displays a window containing a Name list box. Enter the name of the directory you want to create.
Move...	Displays a window asking for the files you want to move and the destination of each of the selected files. Enter the two file names and click on the OK button.
Remove...	Removes each of the selected files from the current directory.
Show Print Jobs...	Displays a dialog box that lets you specify a printer queue, and then displays the items on that queue.
Print File...	Prints a file.

Applications Menu

The Applications menu contains the following items:

Calculator	Starts a dxcalc application. See dxcalc(1X) for more information about the dxcalc application.
Clock	Starts a dxclock application. See dxclock(1X) for more information about the dxclock application.
Mail	Starts a dxmail application. See dxmail(1X) for more information about the dxmail application.
Notepad	Starts a dxnotepad application. See dxnotepad(1X) for more information about the dxnotepad application.
CDA Viewer	Starts a dxvdoc application. See dxvdoc(1X) for more information about the dxvdoc application.

Restrictions

Help is not implemented.

X Defaults

The **dxue** application reads the **.Xdefaults** file during startup and uses the appropriate resource specification to customize the appearance or characteristics of its displayed **dxue** window. The format for a resource specification in the **.Xdefaults** file is:

[name]resource: value*

name Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.

resource Specifies the resource.

value Specifies the value that is to be assigned to the resource.

For more information, see **X(1X)**.

Because each toolkit-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string by adding widget class and name identifiers to the string. For further information about adding class and name identifiers, see **X(1X)**.

Files

~/.Xdefaults

/usr/lib/X11/app-defaults/Executive

~/.ue_profile

See Also

X(1X), **dxwm(1X)**, **dxsession(1X)**

DECwindows User's Guide

dxuil (1X)

Name

dxuil – user interface language compiler for X window system

Syntax

dxuil [*options*] *file*

Arguments

file Specifies the file to be compiled through the UIL compiler.

Description

The **dxuil** command invokes the UIL compiler. The XUI User Interface Language (UIL) is a specification language for describing the initial state of a user interface for an XUI application. The specification describes the objects (menus, dialog boxes, labels, push buttons, and so on) used in the interface and specifies the routines to be called when the interface changes state as a result of user interaction.

For more information about the UIL compiler, see the *Guide to the XUI User Interface Language Compiler*.

Options

- I***pathname* Specify this option followed by a pathname, with no intervening spaces, to locate include files when the include directive is used. This option causes the compiler to look for include files in the directory specified if the include files have not been found in the paths that have already been searched.
- m** Machine code is listed. This directs the compiler to place in the listing file a description of the records that it added to the UID database. This helps you isolate errors. The default is no machine code.
- o** *file* Directs the compiler to produce a user interface database (UID). By default, UIL creates a UID with the name *a.uid*. The file specifies the filename for the UID. No UID will be produced if the compiler issues any diagnostics categorized as error or severe.
- v** *file* Directs the compiler to generate a listing. The file

dxuil (1X)

specifies the filename for the listing. If the `-v` option is not present, no listing is generated by the compiler. The default is no listing.

`-w`

Specifies that the compiler suppress all warning and informational messages. If this option is not present, all messages will be generated, regardless of the severity.

See Also

X(1X)

Guide to the XUI User Interface Language Compiler

dxvdoc (1X)

Name

dxvdoc – Compound document viewer

Syntax

```
dxvdoc [-f format] [-O options_file] [-r] [-w paper_width] [-h  
paper_height] inputfile
```

Description

The `dxvdoc` command invokes the CDA Viewer, which enables you to view the input file on a workstation running DECwindows. If *inputfile* is not specified, `dxvdoc` reads from standard input. The `dxvdoc` window contains a menu bar with menu items that allow you to view additional documents, change processing options, close open documents, or exit. If you invoke `dxvdoc` with no input file argument, you can specify the first document using the file selection box.

Options

- f *format*** Specifies the format of *inputfile* and invokes an appropriate input converter as part of CDA. The DDIF, DTIF, and text converters are provided in the base system kit. Additional converters can be added by the CDA Converter Library and other layered products. Contact your system manager for a complete list of input formats supported on your system. The default format is DDIF.
- O *options_file*** Names the file passed to the input converter to control specific processing options in that converter. Refer to your documentation set for a description of converter options.
- The options file has a default file type of `.cda_options`. Each line of the options file specifies a format name that can optionally be followed by `_input` or `_output` to restrict the option to either input or output. The second word is a valid option preceded by one or more spaces, tabs, or a slash (/) and can contain upper- and lowercase letters, numbers, dollar signs, and underlines. The case of letters is not significant. If an option requires a

dxvdoc (1X)

value, then spaces, tabs, or an equal sign can separate the option from the value.

Each line can optionally be preceded by spaces and tabs and can be terminated by any character other than those that can be used to specify the format names and options. The syntax and interpretation of the text that follows the format name is specified by the supplier of the front and back ends for the specified format.

To specify several options for the same input or output format, specify one option on a line. If an invalid option for an input or output format or an invalid value for an option is specified, the option may be ignored or an error message may be returned. Each input or output format that supports processing options specifies any restrictions or special formats required when specifying options.

Any messages that occur during processing of the options file are written to the system *standard error location*.

- r** Specifies that the CDA Viewer is to override the format of the document. If the **-r** qualifier is not specified, the CDA Viewer retains the formatting information stored in the document.
- w *paper_width*** Specifies the paper width in units of characters. Each character unit translates to 720 centipoints (7200 centipoints per inch or 10 characters per inch horizontally). The **-w** qualifier always specifies the fallback formatted document page width to be used when the **-r** (override format) qualifier is specified or when the document has no inherent format. If the **-w** qualifier is not specified and if the document has no inherent format, the default width is 85 characters, which is equivalent to the default page width of 8.5 inches.
- h *paper_height*** Specifies the paper height in units of characters. Each character unit translates to 1200 centipoints (7200 centipoints per inch or 6 characters per inch vertically). The **-h** qualifier always specifies the fallback formatted document page height to be used

dxvdoc(1X)

when the `-r` (override format) qualifier is specified or when the document has no inherent format. If the `-h` qualifier is not specified and if the document has no inherent format, the default height is 66 lines, which is equivalent to the default page height of 11 inches.

Command line parameters pertaining to `XtInitialize()` are also supported by `dxvdoc` (for example, `-d node::0`).

See Also

`cdoc(1)`, `vdoc(1)`

Name

dxwm – DECwindows window manager

Syntax

dxwm [*options*]

Description

The **dxwm** window manager manages the location and size of application windows on the screen. Using **dxwm**, you can move windows, resize windows, change the order of windows in the window stack, shrink windows to icons, and expand icons into windows. The window manager also works with applications to assign input focus to windows.

Appearance

When it starts up, **dxwm** displays an icon box. The icons in the box represent application windows. A dim icon represents a window that is displayed on the screen. A bright icon represents a window that is not displayed.

The window manager also places a banner on each application window. The banner consists of buttons that perform window management functions. If an application does not support certain window management functions, its banner does not have the buttons that perform those functions.

From left to right, the banner buttons are:

- | | |
|------------------------------|---|
| Shrink-to-icon button | Shrinks the window into a brightened icon in the icon box. |
| Title bar | Displays the application name or other application-specific information and moves the window around the screen. |
| Push-to-back button | Changes the window's order in a stack of overlapping windows. |
| Resize button | Changes the size of the window. |

One window's title bar might be highlighted, to indicate that the window has input focus. (The window with input focus is the window to which keyboard input is sent).

dxwm (1X)

If sticky windows have been specified (see the following sections Sticky Windows and X Defaults), shading appears on the stacking button of the sticky windows. By default, no windows are sticky.

Functionality

Mouse button 1 (MB1), the left button for most users, controls all window manager functions. To use **dxwm**, you must know how to use MB1 to click on an object, double click on an object, and drag the pointer.

To click on an object (such as one of the buttons previously described under Appearance), position the pointer over the object, and then press and immediately release MB1. Try not to move the mouse when MB1 is down.

To double click on an object, click on the object twice in quick succession without moving the mouse.

To drag the pointer, press and hold MB1, move the mouse until the pointer is at the desired location, and then release MB1.

Moving Windows

To move a window, position the pointer on the title bar. Press and hold down MB1. A window outline appears. Move the mouse while continuing to hold down MB1, dragging the outline to the new location. When you release MB1, the window shifts to the new position.

The move operation affects an unsticky window more than a sticky window by changing its stack position and input focus. An unsticky window moves to the top of the window stack (so that it is unobscured by other windows at the new location); a sticky window's position does not change. An unsticky window also acquires input focus (if it is one that ever takes input); a sticky window does not acquire focus.

To cancel the move operation while you are dragging the window outline, click any other mouse button before releasing MB1.

Shrinking Windows Into Icons

To shrink a window to its icon, click on the shrink-to-icon button; **dxwm** removes the window and brightens the associated icon in the icon box. (For another way to shrink a window to its icon, see the section Icon Box Operations.)

To cancel the shrink-to-icon operation, click any other mouse button before releasing MB1.

Expanding Icons Into Windows

To expand an icon into a window, click (or double click) on the icon. The window opens at its previous screen location and at the top of the window stack, while the icon dims. If the window ever takes keyboard input, it now acquires input focus, unless the user specified otherwise (see the section X Defaults).

To cancel the expand operation, click any other mouse button before releasing MB1.

Resizing Windows

To adjust the size of one side of a window, point to the resize button. Press and hold MB1. Drag the pointer toward the side you want to adjust. When the pointer touches the border on that side, **dxwm** clamps the border; the border's outline now follows the pointer as you move it around the screen. When the border outline is in the desired new location, release MB1. The window adjusts to the newly sized border.

While dragging the pointer to resize the border, you can change your mind and resize the opposite side instead. Drag the pointer past the opposite border. The original border outline snaps back and **dxwm** clamps the more recently crossed border.

To adjust two sides of a window, as if by manipulating the corner, drag the pointer to touch each adjacent border in turn.

The resize operation affects unsticky windows more than it affects sticky ones, by changing their stack position and input focus. During the resize operation, an unsticky window moves to the top of the window stack. If the unsticky window ever accepts keyboard input, it acquires input focus. A sticky window retains its position in the window stack and does not acquire input focus.

To cancel the resizing operation, click any other mouse button before releasing MB1.

Changing A Window's Stack Position

Windows are unsticky by default. To raise an unsticky window to the top of the window stack, where it is not obscured by other windows, click almost anywhere in the window (except on the shrink-to-icon button or the push-to-back button). To lower an unsticky window to the bottom of the stack, where it is obscured by windows with which it shares a portion of the screen, click on its push-to-back button.

dxwm (1X)

To change a sticky window's position in the window stack, you must use the push-to-back button, since a sticky window retains its position in the window stack when you click elsewhere. To raise a partially obscured sticky window to the top of the window stack or to lower an unobscured sticky window to the bottom of the stack, click on the window's push-to-back button.

Making Windows Sticky

To make an unsticky window sticky, press and hold down the Shift keyboard key and click in the push-to-back button of the window. The window moves to the bottom of the window stack and becomes sticky. Partial shading appears in the push-to-back button to indicate the window's stickiness.

Making Windows Unsticky

To make a sticky window unsticky, hold down the Shift keyboard key and click on the push-to-back button. The stacking operation for the sticky window is performed (the window is raised or lowered in the window stack, depending on whether or not it was obscured), but the window then becomes unsticky and henceforth has unsticky behavior. The push-to-back button's partial shading, which indicated stickiness, now disappears.

Assigning Input Focus

The window manager cooperates with applications to assign input focus, in a way that varies according to the user action, the situation, and the application. You can give an application input focus by clicking on its title bar, clicking into its window, or expanding its icon. Unsticky windows also acquire input focus when you move or resize them.

When you click on the title bar to assign input focus to a window, clicking leaves the insertion point for input where it was before you clicked. This lets you give a window input focus without disturbing its contents. In contrast, if you click into the window on a field where input is possible, clicking places the insertion point for input wherever you clicked. This lets you give input focus and reset the insertion point in one action.

Icon Box Operations

The icon box is the window manager's application window. Like other application windows, it has a banner, whose buttons allow the icon box to be moved, resized, lowered, or raised. But unlike other application windows, the icon box cannot be shrunk to an icon: where would its icon go? Instead, the icon box has a tidy button, described in a later paragraph.

dxwm (1X)

The icon box contains icons for application windows. Most (but not all) application windows store icons in the icon box. Icons can be large or small, according to user preference (see the section X Defaults); they are small by default. Each icon contains a picture and some text. The picture for an icon looks like the picture in the shrink-to-icon button of its application window. Dim icons represent application windows that are currently displayed; bright icons represent those that are not displayed, but are stored in the icon box.

Icons provide quick access to application windows. Clicking in a bright icon expands it into an application window; clicking in a dim icon removes the window, so that just the brightened icon is displayed. Double-clicking in any icon, bright or dim, brings its application window to the top of the window stack. If the window accepts input, this action also gives it input focus.

You can move icons around within the icon box to position them conveniently (but you cannot move them out of the icon box). To move an icon, position the pointer over the icon and drag the outline that appears to the new location, as if moving a window by its title bar. Icons can overlap: icons on the right overlap icons on the left. Icon pictures, however, cannot overlap.

When adding new icons to the icon box, **dxwm** places them in left-to-right and top-to-bottom order. When the icons do not fit in the icon box, **dxwm** creates horizontal or vertical scroll bars, or both. You can then scroll the icon box to view all of the icons. When adding a new icon, **dxwm** attempts to place it at the first position that is visible in the icon box and that has enough space to accommodate the icon without obscuring others. If no such position is available, **dxwm** places the icon at the first position with enough space and scrolls the icon box to make the position visible.

The tidy button of the icon box is in the position usually occupied by a window's shrink-to-icon button. The tidy button rearranges the icons so that they are arranged one next to another.

X Defaults

Read X(1X) for a general description of the format and function of the `.Xdefaults` file. The following list describes some **dxwm** resources you can set; the description does not attempt to be complete, or to provide a general discussion about resources or the format of resource files.

Wm*default.sticky

Specifies whether windows are sticky at startup. A value of true causes application windows to be sticky at startup. The default value is false.

dxwm (1X)

Wm*default.initialState

Specifies whether application windows start up open or as icons. The value 1 specifies that windows start up open; the value 3 specifies that they start up as icons. The default value is 1.

Wm*default.deiconifyFocus

Specifies whether windows that accept keyboard input automatically acquire input focus when expanded from icons. The value true means that windows acquire focus when expanded; false means that they do not. The default value is true.

Wm*default.startupFocus

Specifies whether new windows have input focus when they first appear on the screen. The value true means that new windows have focus; false means they do not. The default value is false.

Wm*default.autoFocus

Specifies whether the window manager tries to assign focus to a window when the window with focus goes away (because it is shrunk to an icon, for example). The value true means that the window manager tries to assign focus to another window; false means that it does not automatically assign focus in that situation. The default value is true.

Wm*default.spaceout

Specifies a limit on mouse movement during a click, to distinguish a user's intention to click on an object from the intention to drag the object. This helps prevent the window manager from mistaking mouse movement due to slight unintentional hand movement for intentional mouse motion. The units are pixels; the default value is 3 pixels.

Wm*default.doubleClickTimeout

Specifies how much time can elapse between the two clicks of a double mouse click. If the timeout value elapses after one click, the next click is considered a separate action. The units are milliseconds; the default value is 500 milliseconds.

Wm*default.titleTimeout

Specifies how long MB1 can be pressed in the title bar (with no mouse motion) before **dxwm** treats the action as the start of a drag rather than as a click. This timeout distinguishes a title bar click (which gives input focus) from the start of a title drag (which repositions the window). Once the time-out value elapses, any mouse motion while MB1 is down adjusts the position of

dxwm(1X)

the window (even if the motion is less than the value of `Wm*default.spaceout`). The units are milliseconds; the default value is 500 milliseconds.

Wm*default.flash

Specifies whether to display a flashing outline as a visual cue when shrinking a window to an icon or expanding an icon to a window. The flashing outline shows boxes of decreasing size (leading from a window to its icon) or increasing size (leading from an icon to its window). The value `true` causes flashing outlines to appear; `false` suppresses them. The default is `false`.

Wm*default.titleFont

Specifies the font for the title bar text. The DECwindows default font is the default value for this resource.

Wm*default.iconFont

Specifies the font for the icon text. The DECwindows default font is the default value for this resource.

Wm*default.geometry

Specifies the size and location of the icon box. The format of the geometry string is described in `X(1X)`. The default placement of the icon box is at screen coordinates 0,0; its height is 46, and its width is approximately the width of the screen.

Wm*ScrollW.forceBars

Specifies whether scroll bars are always displayed in the icon box. The value `true` means that scroll bars are always displayed in the icon box; `false` means that they are displayed only when needed. The default value is `false`.

Wm*ScrollW.scrollTopSide

Specifies where the horizontal scroll bar appears in the icon box. The value `true` places the horizontal scroll bar at the top of the icon box; `false` places it at the bottom. The default value is `false`.

Wm*ScrollW.scrollLeftSide

Specifies where the vertical scroll bar appears in the icon box. The value `true` places the vertical scroll bar on the left side of the icon box; `false` places it on the right side. The default value is `false`.

Wm*WmForm.borderColor

Specifies the color of the thin outer border of each managed window. The default value is white.

dxwm (1X)

Wm*WmForm.foreground

Specifies the color of the thick inner border of each managed window and the borders between buttons. The default value is black.

Wm*WmIconForm.iconStyle

Specifies whether icons are small or large by default. The value 0 specifies small icons; the value 1 specifies large ones. The default value is 0.

You can specify that the default values for `WmForm` and `WmIconForm` apply to windows of only a specific class, and not to all application windows. To do this, substitute the class of the application for `WmForm` or `WmIconForm` when specifying the resource. For example, the following lines specify that icons are small by default, but that the icon for the Notepad application is large:

```
Wm*WmForm.iconStyle: 0
```

```
Wm*Notepad.iconStyle: 1
```

Resource settings can be overridden by command line options; see *Guide to the XUI Toolkit Intrinsic: C Language Binding* for a description of how to do this. Resources standard to all applications, including `dxwm`, are described in `X(1X)`.

Files

```
/usr/lib/X11/app-defaults/Wm
```

See Also

`X(1X)`, *DECwindows User's Guide*, *Guide to the XUI Toolkit Intrinsic: C Language Binding*

resize (1X)

Name

resize – reset TERM and TERMCAP with the current window size

Syntax

resize [options]

Description

The **resize** command prints on its standard output the TERM and TERMCAP commands for the current window. When executed, the **resize** command resets the environment of the current shell.

However, the **resize** command should never be executed directly, but should be aliased in the **.cshrc** file to cause the C shell to execute the commands (see EXAMPLES).

Options

- s** Specifies that Sun terminal escape sequences are used. Using Sun terminal sequences resizes a window appropriately when a new row and column size are specified.
- u** Specifies that the commands be formed appropriately for the Bourne shell rather than the C shell.

Restrictions

The **-u** option must appear before the **-s** option if both are specified.

Examples

```
alias xs `set noglob; eval `resize`;unset noglob`  
alias xrs `set noglob; eval `resize -s \\!*`;unset noglob`
```

Each alias, when executed as a command, resets the environment of the current shell.

Files

/etc/termcap
~/.cshrc

resize (1X)

See Also

`xterm(1X)`

Name

X - A network-transparent window system

Description

The X Window System, which consists of an X Server and a variety of X client applications, is network transparent, runs on workstations, and provides the capabilities to design a variety of user interface styles. Within the X Window System, the X Server distributes user input to and accepts output requests from the various X client programs, which can be located either on the same machine or elsewhere on the network.

The X Window System supports overlapping windows, fully recursive subwindows, and text and graphics operations within windows. One of the X window managers can be used to manipulate existing windows.

The command that executes the X Server usually is specified in the `/etc/ttyS` file and, therefore, is automatically running when your system is in multiuser mode.

By default when you log in, only programs running on your local machine or those machines listed in a trusted-hosts database file are allowed to interact with the X Server that is connected to your display. To allow programs running remotely to interact with your display, use the `xhost(1X)` command.

See the `Xfmb(8X)` and `XqVsm(8X)` reference pages for more detailed information on starting and running the X servers.

The Display Option

Many X-based applications take a display option. The display option has one of the following formats:

`-d[isplay] hostname`

The display option specifies the display screen on which the X Server is to accept requests from X clients. If the display option is not specified, X uses the display screen specified by your `DISPLAY` environment variable. The display option has the format `hostname:number`. Using two colons (`::`) instead of one (`:`) indicates that DECnet is to be used for transport.

<i>hostname</i>	Specifies the name of the host machine on which the display is connected. You can specify the name unix or leave the field blank to use UNIX IPC, or the name of your host machine to use TCP.
-----------------	---

X(1X)

number Specifies the number of the display on that host machine.
The default is :0.

Window Geometry

Most X client applications let you specify the size and position of the application window with the geometry option. The geometry option has the following format:

[width][xlength][x][y]

width Specifies the number of pixels the window spans horizontally.

length Specifies the number of pixels the window spans vertically.

x Specifies the x screen coordinate (pixel value) for the starting corner of the window.

y Specifies the y screen coordinate (pixel value) for the starting corner of the window.

Depending on the corner of the screen from which each coordinate value is an offset, the x and y coordinates must be preceded by a plus (+) or a minus (-). The following lists the four screen corners and the required positive or negative state for the x and y coordinates when you create a window with respect to that corner.

Upper left corner	+x	+y
Lower left corner	+x	-y
Upper right corner	-x	+y
Lower right corner	-x	-y

If the geometry option is not specified, you can position the window with the mouse pointer and size it with one of the mouse buttons. For sizing information specific to an application, see the reference page for that application.

Most X client applications read options (such as font and border width) to control the sizing of their initial window. For information about options specific to an application, see the reference page for that application.

Colors And Fonts

Many X client applications let you specify colors for background, border, text, and so on. A color specification can be given either as an English name (see `/usr/lib/rgb.txt` for defined names), or three hexadecimal values for the red, green, and blue components, in the format `#RRGGBB`.

Many X client applications also let you specify the font in which text is displayed. By default, the available fonts can be found in subdirectories of the `/usr/lib/X11/fonts` directory.

X Defaults

Most X-based applications read the `.Xdefaults` file during startup and use the appropriate resource specifications to customize the appearance or characteristics of their windows. The format for a resource specification in the `.Xdefaults` file is:

```
[name*]resource: value
```

name Specifies the application name or the name string that restricts the resource assignment to that application or to a component of an application. If this argument is not specified, the resource assignment is globally available to all X applications.

resource Specifies the X resource.

value Specifies the value that is to be assigned to the resource.

Because each toolkit-based application can consist of a combination of widgets (for example, push buttons and a scroll bar), you can form the name string, in addition to the application name, by adding widget class and name identifiers to the string.

In most cases, an asterisk (*) should be used as a delimiter. An asterisk is similar to a wildcard character because it specifies that the definition applies even if any additional names and classes are omitted. A period delimiter (.) indicates an absolute widget pathname. When using a period, if you do not specify all widgets in the path, the specification will not work.

When you add a widget class identifier to the name string, you make the resource available to every occurrence of that widget in the application. For example, the following assigns the background color of every push button in the `dxmail` window to green:

```
dxmail*PushButton*background: green
```

X(1X)

When you add a widget name identifier to the name string, you make the resource available to the specific widget (component) with that name in the application. For example, the following assigns the background color of the Exit push button in the `dxmail` window to green:

```
dxmail*Exit*background:      green
```

This example adds a name identifier (Exit) to the string.

The application name does not have to be part of the string. For example, the next two specifications assign the background color of button boxes. The first assigns all button boxes with the same class identifier in all toolkit-based applications to blue. The second assigns all button boxes with the name `tocButtons` in all toolkit-based applications to red:

```
*ButtonBox*background:      blue
*ButtonBox*tocButtons*background:  red
```

For a complete description of the general widget classes, the core attributes for each widget, and the widget-specific attributes see the *Intro to the UWS Environment*.

NOTE

Default values may be modified by specific applications.

For information about the resources that can be specified for each X client application, see the reference page for that application.

The following is a sample `.Xdefaults` file that can be used as a template.

```
#####
#
#       general defaults
#
#####

*Font:                helvetica_bold12
*Text*Font:           helvetica12
*Pushbutton.Font:    helvetica_bold12
*titlebar.Font:      helvetica_bold12

*ButtonBox.borderWidth: 1
*ButtonBox.hSpace:    8

*ButtonBox.Command.borderWidth: 0
*ButtonBox.Command.internalWidth: 1
*ButtonBox.Command.internalHeight: 1

#
```

```
# dxmail
#

dxmail*debug: on
dxmail*tocGeometry: 510x284+0+19
dxmail*viewGeometry: 510x460+0+323
dxmail*folders.Pushbutton.MarginWidth: 2
dxmail*folders.Pushbutton.MarginHeight: 2
dxmail*PrintCommand: enscript >2 /dev/null > /dev/null

dxmail*ButtonBox*Font:          helvetica_bold12

Dxterm*fontSetName: 6x13
Dxterm*saveLinesOffTop: on
Dxterm*screenMode: true
Dxterm*autoWrapEnable: on
Dxterm*autoRepeatEnable: on
Dxterm*autoResize: on
Dxterm*scrollVertical: on

#
# Session Manager
#

sm.create_terminal: 1
sm.startup_state:  iconified

#
# wm
#

wm*sticky:      true
wm*border:      #00ffff
```

Key Bindings

Many X-based applications let you specify key-actions bindings for text input and editing operations. The DECwindows user interface provides basic text editing operations. In these text editing operations, a word is considered to be any contiguous string of characters that does not contain a word break character. Word break characters are as follows: space, tab, and line terminators. In addition, any contiguous string of identical word break characters (such as three spaces) is considered to be a word. The default text editing operations for all text windows are as follows:

Right arrow Moves the cursor one character to the right. In a single-line field, the cursor does not move when positioned at the end of the line. In a

X(1X)

	multi-line field, the cursor moves to the first position of the next line.
Left arrow	Moves the cursor one character to the left. In a single-line field, the cursor does not move when positioned at the beginning of the line. In a multi-line field, the cursor moves to the last position of the previous line.
Up arrow	In a multi-line field, moves the cursor up one line.
Down arrow	In a multi-line field, moves the cursor down one line.
F11, F14	Reserved.
F12	Positions the cursor at the beginning of the line.
SHIFT/F12	Positions the cursor at the end of the line.
F13	Deletes the characters to the left of the cursor up to and including the beginning of the word, and shifts to the left all text to the right of the deleted character.
SHIFT/F13	Deletes the characters to the right of the cursor up to and including the beginning of the word, and shifts to the right all text to the right of the deleted character.
DELETE	Deletes the character before the cursor, and moves all text to the right of the deleted character one space to the left. DELETE works the same way in both insert and overstrike mode. When there is a selection, DELETE removes the selection but does not place it in the clipboard.
SHIFT/DELETE	Deletes the character after the cursor, and moves all text to the right of the deleted character one space to the left. In overstrike mode, SHIFT/DELETE deletes the character under the block cursor.

A dialog box has one text insertion cursor, even if it has multiple text windows. Keys in a dialog box with multiple text windows take on the following additional actions:

TAB	Moves the cursor from the current field to the next field. If any text exists in the new field, it is automatically selected for pending delete.
SHIFT/TAB	Moves the cursor from the current field to the previous field. If any text exists in the new field, it is automatically selected for pending delete.
RETURN	Activates the default push button (if there is one) in the dialog box.
ENTER	Activates the default push button (if there is one) in the dialog box.
SHIFT/RETURN	Activates the Cancel push button (if there is one) in the dialog box.

You can customize the basic text editing functions for text windows with the translations resource specified in the This resource should be specified as:

***Text.translations:** *key specification*

Each key specification listed with the translations resource assigns an editor command to a named key or mouse combination and has the format:

key: function

key Specifies the key or mouse button that is used to invoke the named function.

function Specifies the function to be invoked when the named key is pressed.

You can specify any of the following control keys (their abbreviations are in parentheses):

Ctrl (c)

Lock (l)

Meta (Compose Character) (m)

Shift (s)

You can specify the following mouse buttons:

Btn1 (by default, the left mouse button)

Btn2 (by default, the middle mouse button)

Btn3 (by default, the right mouse button)

X(1X)

You can assign the following actions to mouse buttons:

Down	Action is invoked when the button is pressed.
Up	Action is invoked when the button is released.
PtrMoved	Action is invoked when the mouse button is down and the pointer is moved.

You can specify the following functions:

backward-character	Moves backward one character.
backward-kill-word	Kills the word before the insertion point. This text can be recovered with the unkill function.
backward-paragraph	Moves backward one paragraph.
backward-word	Moves backward one word.
beginning-of-file	Moves to the beginning of the text.
beginning-of-line	Moves to the beginning of the current line.
delete-next-character	Deletes the character after the insertion point.
delete-next-word	Deletes the word after the insertion point.
delete-previous-character	Deletes the character before the insertion point.
delete-previous-word	Deletes the word before the insertion point.
delete-selection	Deletes the selection.
end-of-file	Moves to the end of the text.
end-of-line	Moves to the end of the current line.
extend-adjust	Adjusts the extension of the selected text.
extend-end	Ends the extension of the selected text.
extend-start	Begins the extension of the selected text.
forward-character	Moves forward one character.
forward-paragraph	Moves forward one paragraph.
forward-word	Moves forward one word.
insert-file	Inserts a file into the text.
kill-selection	Kills the selection. This text can be recovered with the unkill function.
kill-to-end-of-line	Kills from the insertion point to the end of the line.

This text can be recovered with the **unkill** function.

kill-to-end-of-paragraph

Kills from the insertion point to the end of the paragraph. This text can be recovered with the **unkill** function.

kill-word

Kills the word after the insertion point. This text can be recovered with the **unkill** function.

newline-and-backup

Creates a new paragraph, leaving the insertion point on the previous one.

newline-and-indent

Creates a new paragraph with the same indentation as the current one.

newline

Creates a new paragraph.

next-line

Moves down one line.

next-page

Moves to the next screen of text.

previous-line

Moves up one line.

previous-page

Moves to the previous screen of text.

redraw-display

Repaints the window.

scroll-one-line-down

Scrolls the text down one line.

scroll-one-line-up

Scrolls the text up one line.

select-adjust

Adjusts the selection.

select-all

Selects all the text.

select-end

Ends the selection.

select-start

Begins the selection.

select-word

Selects the word the insertion point is in.

stuff

Inserts the text that was last selected from any window.

unkill

Inserts the text that was last killed. (There is no way to get back text that was deleted.)

A function specification can also include a character in single quotation marks or a string in double quotation marks. A string in quotation marks instructs the application to insert the specified string into the file. For example, the following function instructs the application to insert the string "abcdef" into the text, insert the current selection into the text, and then insert the letter q when CTRL/Q is pressed.

X(1X)

```
cq: "abcdef" stuff 'q'
```

A sample set of key bindings in the `.Xdefaults` file is as follows:

```
#
# toolkit text bindings
#
set-insertion-point() select-start()
*Text.translations:Ctrl<Key>f:forward-character()
Ctrl<Key>b: backward-character()
Meta<Key>f: forward-word()
Meta<Key>b: backward-word()
Meta<Key>]: forward-paragraph()
Ctrl<Key>[: backward-paragraph()
Ctrl<Key>a: beginning-of-line()
Ctrl<Key>e: end-of-line()
Ctrl<Key>n: next-line()
Ctrl<Key>p: previous-line()
Ctrl<Key>v: next-page()
Meta<Key>v: previous-page()
Meta<Key>\<: beginning-of-file()
Meta<Key>\>: end-of-file()
Ctrl<Key>z: scroll-one-line-up()
Meta<Key>z: scroll-one-line-down()
Ctrl<Key>d: delete-next-character()
Ctrl<Key>h: delete-previous-character()
~Shift Meta<Key>d:delete-next-word()
~Shift Meta<Key>h:delete-previous-word()
Ctrl<Key>w: kill-selection()
Meta<Key>y: stuff()
Ctrl<Key>m: newline()
Ctrl<Key>l: redraw-display()
Any<Key>: self-insert()
Meta<Btn1Down>: extend-start()
Meta Button1<PtrMoved>:extend-adjust()
Meta<Btn1Up>: extend-end()
Meta<Btn2Down>: stuff()
```

Restrictions

If options not listed in appropriate X server reference page are used, the server may fail. Using invalid options for the X server in the `/etc/ttys` may cause the workstation to behave as if the X server is hung.

Files

~/.Xdefaults

See Also

bitmap(1X), dxcalendar(1X), dxcalc(1X), dxcardfiler(1X) dxclock(1X),
dxmail(1X), dxnotepad(1X), dxterm(1X), dxwm(1X), uwm(1X), xedit(1X),
xfd(1X), xhost(1X), xload(1X), xmh(1X), xset(1X), xsetroot(1X),
xwininfo(1X) Xmbf(8X) Xqvs(8X)

Xmfb (8X)

Name

Xmfb, Xcfb – X servers for RISC machines

Syntax

Xmfb [*options*]

Xcfb [*options*]

Description

The **Xmfb** command starts the monochrome DECstation server. The **Xcfb** command starts the color DECstation server.

The command that executes the X Server is usually specified in the `/etc/ttyS` file and, therefore, is automatically running when your system is in multiuser mode. Use the `xset -q` command to query the server for the options that are currently set.

Options

-a <i>num</i>	Sets the mouse acceleration value to the specified number of pixels. The default is 4.
-c	Turns off key clicking.
c <i>num</i>	Sets the key click volume to the specified number (0-100). The default is 20.
-f <i>num</i>	Sets the bell volume to the specified number (0-7). The default is 3.
-fc <i>string</i>	Sets the default cursor font. The default is cursor.
-fn <i>string</i>	Sets the default text font. The default is fixed.
-fp <i>string</i>	Sets the default font path. The default is <code>/usr/lib/dwf</code>
-help	Displays the X Server usage message.
-r	Turns off automatic repetition of keyboard key characters.
r	Turns on automatic repetition of keyboard key characters. The default is on.
-s <i>num</i>	Sets the screen-saver timeout value to the specified number of minutes. The default is 10.

Xmfb(8X)

-t <i>num</i>	Sets the mouse threshold in pixels. The mouse will accelerate only if the threshold is exceeded. The default threshold is 4.
v	Specifies that a blank screen is used for the screen-saver. The default is on.
-v	Specifies that a pattern (noblack) screen is used for the screen-saver.
-p <i>num</i>	Determines the period to change the background pattern of the screen-saver to avoid burn-in. The default is 10 seconds.
-wp <i>color</i>	Sets the color of white pixels as a named color or a number followed by six hexadecimal digits (color displays only).
:num	On a multi-head system, specifies the head on which the server is run (0 or 1). The default is 0.
Device dependent, vendor specific options.	
-bp <i>color</i>	Sets the color of black pixels for the screen.
-wp <i>color</i>	Sets the color of white pixels for the screen.
-dpi <i>num</i>	Sets the dots per inch for the x and y coordinates.
-dpix <i>num</i>	Sets the dots per inch for the x coordinates.
-dpiy <i>num</i>	Sets the dots per inch for the y coordinates.

Restrictions

If options not listed in this reference page are used, the server may fail. Using invalid options for the X server in the /etc/ttys may cause the workstation to behave as if the X server is hung.

Files

~/.Xdefaults

See Also

bitmap(1X), dxcalc(1X), dxcalendar(1X), dxcardfiler(1X) dxclock(1X), dxmail(1X), dxnotepad(1X), dxterm(1X), dxwm(1X), uwm(1X), xedit(1X), xfd(1X), xhost(1X), xload(1X), xmh(1X), xset(1X), xsetroot(1X), xwininfo(1X) X(1X)

Xqvsm (8X)

Name

Xqvsm, Xqdsq, Xgb – X servers for VAX machines

Syntax

Xqvsm [*options*]

Xqdsq [*options*]

Xgb [*options*]

Description

The **Xqvsm** command starts the monochrome VAXstation 2000, the monochrome VAXstation 3100, and the VAXstation II servers. The **Xqdsq** command starts the color VAXstation 2000 server, the color VAXstation 3100, and the GPX. The **Xgb** command starts the VAXstation 3520 server.

The command that executes the X Server is usually specified in the `/etc/ttys` file and, therefore, is automatically running when your system is in multiuser mode.

Options

- | | |
|--------------------------|---|
| -a <i>num</i> | Sets the mouse acceleration value to the specified number of pixels. The default is 4. |
| -bp <i>color</i> | Sets the color of black pixels as a named color or a number followed by six hexadecimal digits (color displays only). |
| -c | Turns off key clicking. |
| c <i>num</i> | Sets the key click volume to the specified number (0-100). The default is 20. |
| -f <i>num</i> | Sets the bell volume to the specified number (0-7). The default is 3. |
| -fc <i>string</i> | Sets the default cursor font. The default is cursor. |
| -fd <i>num</i> | Specifies a screen density number of 75 or 100 dpi. The default is 75. |
| -fn <i>string</i> | Sets the default text font. The default is fixed. |
| -fp <i>string</i> | Sets the default font path. The default is <code>/usr/lib/dwf</code> |
| -help | Displays the X Server usage message. |

Xqvsm (8X)

-r	Turns off automatic repetition of keyboard key characters.
r	Turns on automatic repetition of keyboard key characters. The default is on.
-s <i>num</i>	Sets the screen-saver timeout value to the specified number of minutes. The default is 10.
-t <i>num</i>	Sets the mouse threshold in pixels. The mouse will accelerate only if the threshold is exceeded. The default threshold is 4.
v	Specifies that a blank screen is used for the screen-saver. The default is on.
-v	Specifies that a pattern (noblank) screen is used for the screen-saver.
-p <i>num</i>	Determines the period to change the background pattern of the screen-saver to avoid burn-in. The default is 10 seconds.
-wp <i>color</i>	Sets the color of white pixels as a named color or a number followed by six hexadecimal digits (color displays only).
:<i>num</i>	On a multi-head system, specifies the head on which the server is run (0 or 1). The default is 0.

Restrictions

If options not listed in this reference page are used, the server may fail. Using invalid options for the X server in the */etc/ttys* may cause the workstation to behave as if the X server is hung.

Files

~/.Xdefaults

See Also

bitmap(1X), dxcalc(1X), dxcalendar(1X), dxcardfiler(1X) dxclock(1X), dxmail(1X), dxnotepad(1X), dxterm(1X), dxwm(1X), uwm(1X), xedit(1X), xfd(1X), xhost(1X), xload(1X), xmh(1X), xset(1X), xsetroot(1X), xwininfo(1X), X(1X)

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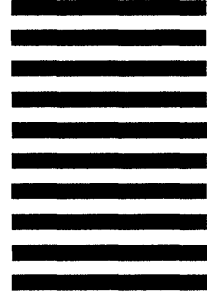


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