# Using Duxbury with a Screen Reader

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## Installation and Configuration

This resource primarily focuses on using Duxbury for Windows. However, DBT is available for both Windows and Mac computers. This presentation will focus primarily on the Windows version of Duxbury; however, the Mac version is accessible with VoiceOver. See [DBT Installation using VoiceOver](https://www.duxburysystems.com/documentation/dbtmac12.3/Content/getting_setup_in_DBT/Installation/installing_with_voiceover.htm) for information and hints about installing DBT on Mac.

When installing DBT on Windows, an option to install JAWS scripts will be presented during the installation process. These scripts add a great deal of functionality when using Duxbury with JAWS and should be installed.

NVDA does not have any available scripts or add-ons for Duxbury. Therefore, when using NVDA with Duxbury, speech will announce any braille signs as ASCII characters. It is necessary to configure NVDA to display correct braille output when working with braille files. Follow the steps below to create a Duxbury application-specific file for NVDA that will display uncontracted braille whenever Duxbury gains focus:

1. With NVDA in focus, press NVDA + CONTROL + G to open the Settings dialog.
2. In the Categories list box, select Braille.
3. In the Braille Output combo box, select English North American Computer Braille Code.
4. Press Enter to save changes and close the Settings dialog.
5. Press NVDA + N to open the NVDA menu.
6. Select Configuration Profiles... to open the Configuration Profiles dialog.
7. Select the New button and in the dialog that appears, type in a name (such as Duxbury) and ensure that the Current application (dbtwin) is selected in the Use this profile for group box.
8. Press Enter to save and close the New Profile dialog.
9. Press ALT + C to close the Configuration Profiles dialog.

Once these steps are completed, NVDA will display braille files in Duxbury correctly whenever DBT receives focus and will revert to the default braille code (e.g., contracted UEB) when focus moves away from Duxbury. Note that everything in Duxbury, including print files and the user interface, will be displayed in computer braille. Other NVDA settings can also be saved to this application-specific configuration file, such as setting speech to mute when Duxbury has focus, or any other settings that are desired every time Duxbury is used.

## Getting Screen Reader Help

JAWS has several built-in help features that can be useful when getting started with Duxbury. Pressing Insert + H will bring up a list of JAWS keyboard commands specific to DBT. In addition, DBT’s Help system contains information on how to use the JAWS Scripts with DBT. To use the help system, do the following:

1. Press Alt + H to open the Help menu and press Enter to select Help Topics...
2. The Help system opens, which contains two panes: a navigation pane and a contents pane. Press F6 to move between these two panes.
3. The navigation pane has several tabs: Contents, Index, Search, and Favourites. Move between these tabs by pressing Control + Tab.
	1. The Contents tab consists of a tree view; use the up and down arrow to move between topics and sub-topics, and the left and right arrow to expand or collapse topics to review or hide sub-topics. Press Enter to activate a topic, and F6 to move to the contents pane to read the topic.
	2. The Index tab contains an edit field where a topic of interest can be typed in and a list box where a list of index entries can be navigated with the up and down arrows. Press Enter on a topic to activate it, and F6 to move to the contents pane to read the topic.
	3. The Search pane Search tab consists of an edit combo field where the entire help system can be searched for keywords. The last previous search will appear in this field and a list of recently searched terms can be viewed by pressing Alt + Down Arrow to open the combo box. Once a term is typed in or selected from the list, press Tab to move to the list view displaying topics (there will be several buttons between the edit combo and list view). Navigate the list view with the up and down arrows. Press Enter on a topic to activate it, and F6 to move to the contents pane to read the topic.
	4. The Favourites tab provides a place where a user can mark help topics for future reference. An edit field will display the current topic and can be edited if desired. An Add button allows this topic to be added to favourites, and a list view provides a list of topics that have previously been added. Navigate the list view with the up and down arrows. Press Enter on a topic to activate it, and F6 to move to the contents pane to read the topic.

## Using a Braille Display

 When using a braille display with a print file in Duxbury, the screen reader (JAWS or NVDA) back-translates any text typed on the braille display’s six-key input just as would occur in any other application. Duxbury supports six-key entry in braille files by using the F, D, S and J, K, L keys on the QWERTY keyboard. To use six-key input from a braille display in Duxbury, the Six-Key Entry option within Duxbury must be toggled off. To do this, either open the View menu and make sure that Six-Key Entry is unchecked. Alternatively, press F2 to toggle six-key entry on and off without having to go through the menus (if running JAWS, there will be an announcement that six-key entry is on or off). When using a braille display with NVDA for six-key entry into DBT braille files, NVDA must be set to a code that does not need back-translation. To do this, go into NVDA Settings, then Braille, and change the Input Table combo box to U.S. 6-dot computer braille. This setting can be saved to an application-specific configuration file (see steps 5 and onwards above under Installing and Configuring DBT for step-by-step instructions).

When using Duxbury with a braille display, it is best to tether the braille and system cursor to ensure that movement on the braille display is reflected in on-screen cursor movement, especially once the bottom of a page is reached when the screen needs to scroll to the next page. To tether the braille and system cursor together in JAWS, go into the Settings Centre and make sure that both Active cursor follows braille display and Braille cursor follows active cursor are checked.  In NVDA, go to Settings, then Braille, and make sure that Tether Braille combo box is set to focus.

##  Navigating DBT

The commands used to navigate print and braille files in Duxbury are the same as other Windows applications:

* To navigate by letter use the left and right arrows
* To navigate by word, use Control + Left Arrow or Control + Right Arrow
* To navigate by page, use Control + Page Up or Control + Page Down

Paragraph navigation with Control + Up Arrow or Control + Down Arrow sometimes works and sometimes doesn’t work, depending on the codes and styles used in the Duxbury file.

Duxbury’s Go To dialog allows navigation to a specific page, line, and column (character) within a document. This option is found under the Edit menu or can be activated by pressing Control + G. If working within a document that includes both braille and print page numbers, check the Use reference page number check box to jump to a specific print page. To find a specific word or phrase within a Duxbury print or braille, the Find feature can be used. This is also found under the Edit menu, or can be accessed with Control + F. Within braille files, braille must also be entered into the Find dialog.

## JAWS Commands for Duxbury

The JAWS scripts installed with Duxbury provide many commands that can be used to gather useful information or toggle settings. Pressing JAWS + H will bring up a list of these JAWS-specific commands. JAWS settings for Duxbury can also be adjusted through JAWS Quick Settings, which can be accessed in Duxbury by pressing JAWS + V.

Some examples of JAWS settings that can be adjusted are the ability to have lines not spoken at all, spoken as braille signs, or spoken as translated lines; the ability to have braille signs spoken as ASCII or braille; the ability to have style changes announced; and the ability to have blank lines spoken or skipped.

For technical support specific to JAWS, call 1-727-803-8000 or go to [www.freedomscientific.com](http://www.freedomscientific.com).

## Contact information for Duxbury systems Inc.

Web site: [www.duxburysystems.com](http://www.duxburysystems.com)

Phone: 1-978-692-3000

Mail: support@duxsys.com

[The following was taken from the Duxbury web site]

The Duxuser forum is an Internet email listserv that is open to Duxbury users, or others potentially interested in becoming Duxbury users, for sharing of ideas and to seek advice on matters beyond routine technical support. Duxbury posts notices of interest to Duxbury users, including the electronic edition of its newsletter (Duxuser) and prompt detailed information about all releases (even minor updates), to Duxuser.

To subscribe to duxuser, send a blank message to duxuser-request@freelists.org with "subscribe" (without the quotes) in the subject line.