Using NVDA (NonVisual Desktop Assistant) With Microsoft Windows

By

Kenneth Lacho

Section 1: NVDA Basics

NonVisual Desktop Access (NVDA) is a free and open source screen reader for the Microsoft Windows operating system developed by NV Access, with contributions from the community. It can be downloaded at http://www.nvaccess.org/ download/.

This document only lists some of the most used keyboard short-cuts and commands, for a complete list See NVDA User Guide at http://community.nvda-project.org/wiki/Guides.

Getting the NVDA Program

To download NVDA: Go to http://www.nvaccess.org/download/ and select 'skip donation this time' to proceed with the download.

To install the program, go to the "Downloads" folder and then double-click on the file that you just downloaded. Then follow the prompts to install the program.

Starting the NVDA Program

Once the program has been installed onto your computer, it should start automatically when you turn on the computer. If several people use the computer, the NVDA program may have been set up so that you must start it manually after turning on the computer.

There are two ways to start the NVDA program. The easiest is to use the short cut key.

1. Press **Alt + Ctrl + the letter N** to start the NVDA program if it is not running.

The second way to start the NVDA program is to use the Start menu. Follow these steps to start the NVDA program from the Start menu.

1. Press the **Windows** key.

The Start menu with search box appears.

2. Type **NVDA** into the search box.

3. Press the **Enter** key to start the NVDA program.

You should notice the NVDA program icon in the Notification Area/System Tray in the lower right of the computer screen/Desktop.

Welcome to NVDA Dialog Box

When starting the NVDA you are presented with the Welcome to NVDA dialog box. There are checkboxes and a button within the box. The three checkboxes are the following options:

- Keyboard Layout (combo box).

- Use CapsLock as an NVDA modifier key (checkbox).

- Automatically start NVDA after I log onto Windows (checkbox).

- Show this dialog when NVDA starts (checkbox).

The Keyboard Layout may be changed from Desktop to Laptop. Each of the checkbox options can be either checked or unchecked. If the item is checked, the option is turned on. It is suggested that you check each of the options when beginning to use the NVDA program.

Follow these steps to move through the options in the box and close the box each time you start the NVDA program.

1. Press the **Up** and **Down Arrow** keys to change the Keyboard Layout.

2. Press the **Spacebar** to check or uncheck each of the check boxes.

3. Press the **Tab** key to move to the next option in the dialog box.

4. Press the **Spacebar** when you reach the OK button to close the dialog box.

Exit the NVDA Program

Follow these steps when you wish to exit the NVDA program

1. Press **NVDA + the letter Q**.

   A box will appear asking if you want to exit the program.

2. Press the **Enter** key to exit the program.

   The program will exit/close. A descending tone will announce that the program is closing.

   It is not necessary to exit the NVDA program when shutting down and turning off the computer.

Accessing the NVDA Preferences Menu to Change the Settings in NVDA

The Preferences Menu is where you make changes to the settings within the NVDA program. Here, you will be able to change the settings to your liking in NVDA. For example, you can adjust the speed of the voice that you are using, or change the voice to another one.

The user manual and quick reference guide are found under the help section. These two documents are useful when learning how to navigate with NVDA.

Follow these steps to get into the preferences menu (where you can make changes to the screen reader settings).

1. Press **NVDA + the letter N**.

The NVDA program menu will appear.

2. Press the **Down Arrow** key to move to the Preferences menu item.

3. Press the **Enter** key.

The preferences submenu will appear. The first menu item is General Settings.

4. Press the **Down Arrow** key to move through the rest of the NVDA settings.

5. Press the **Enter** key for the settings category that you wish to change.

   A dialog box will appear with the options for that category of settings.

6. Once you are in one of the settings (for example the voice settings), you can use the **Tab** key to move to the different settings in the box. If one of the settings you would like to use is unchecked, press the spacebar to check that box. If you would like to change any of the other settings with sliders, use your left or right arrow keys.

You may also access the NVDA preferences menu by using the mouse to click on the NVDA icon located in the Notification Area/System Tray located in the lower right corner of the screen/Desktop.

NVDA Modifier Keys, and Changing the Keyboard Layout

A modifier key is held down while pressing another key to perform a command that has been assigned to the key combination. NVDA can use any, or all, of the following as its modifier keys: the Insert key, the extended Insert key or the Caps Lock key. These are referred to as the NVDA key.

Follow these steps to select one (or all) of the NVDA modifier keys, you wish to use.

1. Press the **Ctrl + NVDA + the letter K**.

   The Keyboard Settings dialogue box should appear.

2. Press the **Tab** key to move down to one of the following settings that you would like to use as a modifier key:

   - Use Caps Lock as an NVDA modifier key.

- Use Numpad Insert as an NVDA modifier key.

- Use Extended Insert as an NVDA modifier key.

3. Press the **Spacebar** to check the options with checkboxes. If the option is already checked, pressing the Spacebar will uncheck the option.

4. Press the **Enter** key to exit the dialog box.

If you check the option to use the Caps Lock key as an NVDA modifier key, you will have to tap the Caps Lock twice quickly to turn on or off the Caps Lock key.

Here also, if you have a desktop or laptop, you can change your settings for your particular keyboard layout under keyboard layout in the Keyboard Layout combo box.

1. Press the **Tab** key to move to the Keyboard Layout combo box (if necessary).

2. Press the **Up** and **Down arrow** keys to change the keyboard layout.

3. Press the **Enter** key to exit the dialog box.

Make sure you **Tab** down to the Ok button to save your changes every time. Pressing the **Enter** key should also work to save the settings.

These materials will only cover the desktop version keyboard commands.

Checking the time and date with NVDA

The NVDA program has commands available for reading aloud the current time and date.

- Press the **NVDA + F12** key to hear the time.

- Press the **NVDA + F12** key twice quickly to hear the date.

Commonly Used Keys when Using the Computer

The main keys commonly used with a screen reader to do different tasks (both with NVDA and in Windows) are listed below. Please note the Ctrl and Shift keys are at the bottom left and right of the main keyboard block.

Escape key is usually located at the upper left corner of the keyboard. Pressing this key will typically exit from a dialog box when in the middle of performing a command.

F1 to F12 keys (usually at the top of the keyboard going from left to right) perform various commands in application programs.

Tab key (usually on the left hand side of a keyboard above the Caps Lock key) inserts a tab within word processing documents or moves around parts of a program, such as when in a dialog box..

Caps Lock key (usually located to the left of the letter A key) is used to capitalize letters, or as a modifier key with NVDA).

Shift key (two are available and located at the left and right edges of bottom row of letters on the keyboard) capitalize one letter or will be used with other NVDA or Windows commands.

Ctrl key (found on the bottom left and right of the keyboard typing keys) used in some Windows commands as well as shortcut keys for commands.

Windows key (found on the bottom row of the area of the keyboard with the typing keys) used with some Windows shortcuts and when pressed brings up the Start menu.

Alt key (found to the left and right of the Spacebar) is used to bring up a file menu found in most programs.

Spacebar (found at the bottom row of the typing keys) used to check and uncheck boxes, and put spaces between words.

Numeric keypad (located at the far right side of the keyboard) used with the NVDA key to do different tasks.

Insert key (found at the bottom of the Number pad or within the group of six keys between the typing keys and the number pad) can be used as a modifier key for NVDA.

Delete key (found at the bottom of the Number pad or within the group of six keys between the typing keys and the number pad) can be used to delete letters and other items.

Home and End keys (located in the group of six keys between the typing keys and the number pad) used with Ctrl to get you to the top of the page/document, and also to the bottom of the page/document.

Left, Right, Up and Down arrow keys (located between the typing keys and the number pad) used to move you around Windows and other applications.

Enter key (located at the right edge of the typing keys or the bottom right on the number pad) will start a new line when in a word processing document , choose a command when in the menu for a program, or choose a link from the Internet when on a webpage.

Windows Application key (located between the Alt and Ctrl keys on the right of the Space Bar) will display the selected item's shortcut menu. This is the same menu that is displayed by right-clicking with the mouse.

Tab key (located above the Caps Lock key on the left side of the keyboard) will move the cursor over on-half an inch in a word processing document, when in a dialog box will move you to the next option within the box, when in forms or in the Internet will take you from one field to the next. If the shift key is used together along with the tab key, this will take you back up through the fields, you have just tabbed down from.

Using Input Help to Locate Keys/Commands on the Keyboard

You may wish to explore the keyboard to learn the location of keys and NVDA commands. Follow these steps to turn the Input Help feature on and off.

1. Press **NVDA + 1** (on the number row above the typing keys).

The Input help mode is turned on.

2. Press **any Key** or **combination of keys** on the keyboard.

The name of the key or a description of the command is spoken.

3. Press **NVDA + 1** (a second time).

The Input help mode is turned off.

After turning on the Input help mode, most of the keys on the keyboard will not perform any commands. You will need to exit the Input help mode to return to the normal operation of the computer.

Silencing Speech with the Ctrl Key when Using the NVDA Program

When the NVDA program is speaking, you may wish to silence the voice. Pressing any key will actually silence the voice. The best key to press when silencing the voice is the **Ctrl** key as is does not perform any action when you press the key.

Reading the contents of an Active Window

You may want to see what is in an active window, such as a dialog box or a program such as Word.

1. Press **Insert +the letter B**.

This will read out what is in the dialog box or the current program window.

You can press the **Ctrl** key to stop the speech as the NVDA program may have a lot to read.

Reading the Title of the Active Window/Program

You may want to verify the name of the currently active window/program.

1. Press **NVDA + the letter T**.

This will read out the name of the current window/program.

Using NVDA with Self-voicing Applications

In some cases, you might want to go into an application (such as Talking Typer) which has its own speech output. If you do not want to hear the two voices at the same time, you have two options.

The first method is to turn off the speech in NVDA. Follow these steps to turn off the speech:

1. Press **NVDA + S** until the NVDA voice is turned off.

Each time you press **NVDA + S** NVDA will go between speech mode off, speech mode beeps and speech mode talk. While in speech mode off, you will only hear the other speech output from the other application's voice.

2. Press **NVDA + S** again to turn the speech back on.

Toggling the speech on and off is handy if someone else wants to use your pc and you don't want to turn NVDA off completely. Once the person has finished with the computer, simply press Insert + S until you hear the speech come back on again.

The second method of using NVDA with other programs with speech output is to put NVDA to sleep turning on application sleep mode. Follow these steps to put NVDA to sleep:

1. Press **NVDA + Shift + S** to turn on Application Sleep Mode.

2. The application Sleep mode is turned on and all NVDA commands and speech/braille output for the current application are disabled. This is most useful in applications that provide their own speech or screen reading features.

3. Press **NVDA + Shift + S** a second time to turn off Application Sleep Mode.

Changing the Way Text is Spoken While Typing

As you type up a document, you may choose to hear it spoken letter by letter, word by word, or both. The speaking of Command keys can also be turned on or off (so you know which command keys you have pressed). You can also adjust the amount of punctuation that is spoken.

When issuing these commands, please use the numbers in the number row above the typing keys. The following NVDA commands will adjust these settings:

- **NVDA + 2** will turn speak typed characters on and off.

- **NVDA + 3** will turn speak typed words on and off.

- **NVDA + 4** will turn speak command keys on and off.

- **NVDA + P** will cycle you through the various punctuation symbol levels. These are: none, some, most and all. The variation in levels of punctuation you hear, will depend on the punctuation level you set it to.

Section 2: Changing the Voice Settings

The Voice Settings dialog, found in the Preferences menu, contains options that let you change the sound of the speech. This is where you want to go if you want to change the speed of the voice or have the word cap spoken before a capital letter or a word that is capitalized.

Here are some of the more useful options/settings found in the Voice Settings dialog box:

- **Voice**: The first option in this dialog is a combo box listing all the voices of the current synthesizer that you have installed. Press the arrow keys to listen to all the various choices.

- **Variant**: If you are using the Espeak synthesizer that is packaged with NVDA, this is a combo box that lets you select the Variant the synthesizer should speak with. ESpeak's Variants are rather like voices, as they provide slightly different attributes to the eSpeak voice.

- **Rate**: This option allows you to change the rate of the computer voice. This is a slider that goes from 0 to 100, (0 being the slowest, 100 being the fastest).

- **Pitch**: This option allows you to change the pitch of the current voice. It is a slider that goes from 0 to 100, (0 being the lowest pitch and 100 being the highest).

- **Volume**: This option is a slider which goes from 0 to 100, (0 being the lowest volume and 100 being the highest).

- **Inflection**: This option is a slider that lets you choose how much inflection (rise and fall in pitch) the synthesizer should use to speak with.

- **Say Cap before capitals**: This option is a checkbox which turns on or off the speaking of the word Cap when encountering a capital letter or word.

- **Beep for capitals**: This option is a checkbox which turns on or off beeping when encountering a capital letter or word.

- **Punctuation Symbol Level:** This option is a combo box which sets the level of punctuation that is spoken when reading.

Follow these steps to change the Voice settings within the NVDA program.

1. Press **Insert +** the letter **N**.

The NVDA menu appears.

2. Press **Down Arrow** to move to the Preferences Menu item.

3. Press the **Enter** key.

The Preferences sub-menu appears.

4. Press **Down Arrow** to move to Voice Settings.

5. Press the **Enter** key.

The Voice Settings dialog box appears.

6. Use the **Tab** key to move to the setting that you want to change.

7. Use the **Arrow keys** or **Space bar** to change the setting.

8. Press the **Tab** key to move to the Ok button.

9. Press the **Spacebar** to choose the button and exit the dialog box.

Using the Synth Ring Command to Change the Voice Settings

You can quickly change speech settings without going to the Voice settings dialog box. The following are the voice setting options that can be changed with the Synth Ring Command:

- Volume

- Voice

- Variant (of voice)

- Rate

- Pitch

- Inflection

The following NVDA key commands allow you to move through the most common speech settings from anywhere while running NVDA.

- Press **NVDA + Ctrl + Right Arrow** to move to the next available speech setting.

- Press **NVDA + Ctrl + Left Arrow** to move to the previous available speech setting.

- Press **NVDA + Ctrl + Up Arrow** to increase the current speech setting you are on. For example, increases the rate, chooses the next voice, or increases the volume.

- Press **NVDA + Ctrl + Down Arrow** to decrease the current speech setting you are on. For example, decreases the rate, chooses the previous voice, or decreases the volume.

Section 3: Navigating with NVDA

In this section, we will look at navigating within programs, including the documents being displayed within the program. You might be editing a document in the Microsoft Word program or reading a web page on the internet in a web browser.

Navigating with the System Focus

The system focus, also known simply as the focus. It is the object that receives keys typed on the keyboard. For example, if you are typing into an editable text field, the editable text field has the focus.

The Most common way of navigating around Windows with NVDA is to simply move the system focus using standard Windows keyboard commands, such as **Tab** and **Shift + Tab** to move forward and back between controls. You can also press **Alt** to get to the menu bar and then use the arrows to navigate menus.

As you perform standard Windows keyboard commands, NVDA will read aloud information about the object with focus, such as its name, type, value, state, description, keyboard shortcut, etc.

Here are some commands that are useful when moving with the System focus:

- **NVDA + Tab**: announces the current object or control that has the System focus. Pressing twice will spell the information.

- **NVDA + t**: Reads the title of the currently active window. Pressing twice will spell the information.

- **NVDA + b**: Reads all the controls in the currently active window (useful for dialog boxes).

- **NVDA + End**: Reports the Status Bar if NVDA finds one. (It also moves the navigator object to this location. Pressing twice will spell the information.)

Navigating with the System Caret

When an object that allows navigation and/or editing of text, is in focus, you can move through the text using the system caret, also known as the Insertion point. The document area in the Word program would be an example of an object where you would move through and edit text with the System Caret.

When the focus is on an object that has the system caret, you can use the arrow keys, page up, page down, home, end, etc. to move through the text. NVDA will announce as you move by character, word and line, and will also announce as you select and unselect text.

NVDA provides the following key commands to read text located at the system caret:

- **NVDA + Down Arrow** (Say All): Starts reading from the current position of the system caret, moving it along as it goes

- **NVDA + Up Arrow** (Read line): Reads the line where the system caret is currently situated. Pressing twice spells the line.

- **NVDA + Shift + Up Arrow** (Read selected text): Reads any currently selected text

- **Alt + Down Arrow**: Moves the caret to the next sentence and announces it. (only supported in Microsoft Word and Outlook)

- **Alt + Up Arrow**: Moves the caret to the previous sentence and announces it. (only supported in Microsoft Word and Outlook)

Common Keys to Move around and Read a Document

After typing text into a document, you may need to move around the text to review and correct what has been typed. **You should use the separate Arrow keys and not the Arrow keys on the numeric keypad**. When using the separate Arrow keys, the insertion point/cursor is moved within the

document. This is different from the NVDA Review cursor which does not move the insertion point/cursor.

The following is a list of keystroke combinations that you can use to read the text in a document.

- **Right Arrow** moves to and reads the next letter.

- **Left Arrow** moves to and reads the previous letter.

- **Down Arrow** moves to and reads the next line.

- **Up Arrow** moves to and reads the previous line.

- **Home** moves to the beginning of the line and reads the first character.

- **Control + Right Arrow** moves to and reads the next word

- **Control + Left Arrow** to moves to and reads the previous word.

Table Reading commands

In the Microsoft Word program, you may come across documents which contain tables. Table consist of rectangular cells laid out in columns and rows. Websites can also contain tables and these commands are useful there as well.

When within a table, the following key commands can be used:

- **Tab** – Moves the system caret to the next cell in the table.

- **CONTROL + ALT + LEFT ARROW** - Moves the system caret to the previous column (staying in the same row)

- **CONTROL + ALT + RIGHT ARROW** - Moves the system caret to the next column (staying in the same row)

- **CONTROL + ALT + UP ARROW** - Moves the system caret to the previous row (staying in the same column)

- **CONTROL + ALT + DOWN ARROW** - Moves the system caret to the next row (staying in the same column)

Reviewing Text

NVDA allows you to read the contents of the screen, current document or current object by character, word or line. This is mostly useful in places where there is no system caret. For example, you might use it to review the text of a long information message in a dialog.

When moving the review cursor, the System caret does not follow along, so you can review text without losing your editing position. However, by default, when the System caret moves, the review cursor follows along. This can be turned on and off.

Note that braille follows the focus and caret by default, rather than object navigation and text review. If you want it to follow object navigation and text review instead, you need to configure braille to be tethered to review. The following commands are available for reviewing text:

- **Shift + Numpad 7**: Moves the review cursor to the top line of the text
- **Numpad 7**: Moves the review cursor to the previous line of text
- **Numpad 8**: Announces the current line of text where the review cursor is positioned. Pressing twice spells the line. Pressing three times spells the line using character descriptions.
- **Numpad 9**: Move the review cursor to the next line of text
- **Shift + Numpad 9**: Moves the review cursor to the bottom line of text
- **Numpad 4**: Moves the review cursor to the previous word in the text
- **Numpad 5**: Announces the current word in the text where the review cursor is positioned. Pressing twice spells the word. Pressing three times spells the word using character descriptions.
- **Numpad 6**: Move the review cursor to the next word in the text
- **Shift + Numpad 1**: Moves the review cursor to the start of the current line in the text
- **Numpad 1**: Moves the review cursor to the previous character on the current line in the text

- **Numpad 2**: Announces the current character on the line of text where the review cursor is positioned. Pressing twice reports a description or example of that character. Pressing three times reports the numeric value of the character in decimal and hexadecimal.

- **Numpad 3**: Move the review cursor to the next character on the current line of text

- **Shift + Numpad 3**: Moves the review cursor to the end of the current line of text

- **Numpad Plus**: Reads from the current position of the review cursor, moving it as it goes

- **NVDA + Numpad Minus** to route the review cursor back to focus cursor.

Reading the Format of Text in a Document

Often times you will come across text in a document that has been formatted. Follow these steps to have the NVDA program read aloud the formatting of the text at the cursor.

1. Move the cursor/insertion point to the text in the document that you want to determine the formatting.

2. Press **Insert + the letter F**.

The format of the text/character at the cursor will be read aloud.

You may wish to have formatting read aloud as you move the cursor around a Word document. Follow these steps to change the document formatting settings:

1. Press **NVDA + Control + the letter D**.

The Document Formatting dialog box will appear.

2. Press the **Tab** key to move to the setting that you wish to change.

3. Press the **Spacebar** to check or uncheck the option.

4. Press the **Tab** key to move to the Ok button.

5. Press the **Spacebar** to choose the button and exit the box.

Press the **Arrow keys** to move around the current document and listen for the formatting changes to be read aloud.

The following formatting settings are available within the Document Formatting dialog box:

- Font name
- Font size
- Font attributes
- Text alignment
- Colors
- Editor revisions
- Emphasis
- Text style
- Spelling errors
- Page numbers
- Line numbers
- Line indentation
- Paragraph indentation (e.g. hanging indent, first line indent)
- Tables
- Table row/column headers
- Table cell coordinates
- Links
- Headings
- Lists
- Block quotes
- Landmarks
- Frames
- When something is clickable

To turn off the reading of any of the formatting features, go back into the Document Formatting dialog box and uncheck the formatting options that you do not wish to have read aloud.

Section 4: Browsing the internet

NVDA supports Internet Explorer and Mozilla Firefox, which is recommended.   There may be other browsers as well that work with NVDA. The browser is used to browse web pages on the internet. In most cases, you could be viewing a website or pages within that site.

Refreshing the Webpage

In some cases, you may be surfing the web and a page may not load correctly. Only part of the webpage may actually be displayed on the screen. If you are unsure if the page has been downloaded correctly, you can refresh the page. This tells the web browser program to go and fetch another copy of the page.

1. Press the **F5** key to refresh the page.

Refreshing the buffer in NVDA

In some cases, you may be surfing the web and a page may load correctly; however, the NVDA program does not "see" it correctly. You can refresh the buffer in NVDA so that it sees the information correctly.

1. Press the **F5** key to refresh the page.

This will reload the buffer in NVDA so that all of the information shows correctly.

Using the navigation/address toolbar

The navigation bar or address bar is where you type the address for the webpage that you wish to visit or do a search.

To move to the navigation toolbar in either the Internet Explorer or Firefox web browsers perform on of the following commands:

- Press **Ctrl + letter L**.

- Press **ALT + the letter D**.

Navigating and Reading a Webpage

Once you have gone to a website/page, you can navigate the information of the page using some of the standard keyboard commands that you would use to navigate a document in the Word program. Here is a list of such commands:

- Press **Down Arrow** to move down the webpage.

- Press **Up Arrow** to move up the webpage.

- Press **Right Arrow** to move to the next character.

- Press **Left Arrow** to move to the previous character.

- Press **Ctrl + Right Arrow** to move to the next word.

- Press **Ctrl + Left Arrow** to move to the previous word.

- Press **Ctrl + Home** to move to the top of the webpage.

- Press **Ctrl + End** to move to the end of the webpage.

- Press **Insert + Down Arrow** to continue reading the webpage to the end.

Changing the Browse Mode Settings to Use Screen Layout

You may want to change the Browse Mode Settings so that content such as links and other fields are placed on their own line instead of keeping them in the flow of text as it is visually shown.

When reading through a web page you may find that NVDA is reading several links or lists at the same time. This is due to the Browse mode setting of "Use Screen Layout" being checked. As a result of this option being set, NVDA reads the web page as it is visually shown.

Disabling this option may be preferred, as each press of the Down Arrow key will read content such as links and fields as separate items. Do the following to enable or disable the screen layout option.

1. Press **Insert + the letter** V to turn on or off the screen layout option.

If you wish to permanently change the Screen Layout setting, press **Insert + Ctrl + the letter B** for the Browse Mode dialog box. Then check the Use Screen layout option.

Switching Between Browse Mode and Focus Mode

There are two modes that NVDA uses. One is the **Browse mode** where you can use the quick navigation keys to browse around a site. The other is **Focus mode** where you can focus your attention on entering your details into an online form.

When in Browse mode, by default, NVDA will automatically switch to focus mode if you Tab to or click on a particular control that requires it. If you tab to or click on a control that does not require focus mode, NVDA will switch back to browse mode.

You can also press **Enter** or **Space** to switch to Focus mode on controls that require it.

Pressing **Escape** will switch back to browse mode.

In addition, you can manually force focus mode, after which it will remain in effect until you choose to disable it.

It is important to know that you must be in Focus mode in order to type in an edit box on a web page.

Single letter navigation

NVDA uses single letter navigation keys (also known as quick navigation keys) to move around a website quickly. To quickly jump to certain areas

within a document (while in browse mode), press the appropriate letter to get to that field.

To go back one, press the Shift key at the same time as that letter. For example, pressing the letter h will take you to the next available heading, and pressing Shift + h will take you back to the previous heading.

The single letter navigation keys are listed below:

- h: heading
- l: list
- i: list item
- t: table
- k: link
- n: non-Linked text
- f: form field
- u: unvisited link
- v: visited link
- e: edit field
- b: button
- x: checkbox
- c: combo box
- r: radio button
- q: block quote
- s: separator
- m: frame
- g: graphic
- d: ARIA landmark

Pressing e and Shift + e in browse mode, allows you to navigate to edit fields. These now include editable combo boxes (for example the search box in the latest version of Google Search).

Bringing up the elements list so you can quickly find a Link on a webpage

When you are on a webpage, you may want to quickly find a certain link located on the page. You can use the Elements List dialog box within the NVDA program to display a list of all the links on a webpage. Follow these steps to find and choose a link on a webpage using the Elements list box.

1. Press **NVDA + F7**.

The elements list dialog box appears. The elements list will default to the links list. There might be a large number of links in the list.

2. Optionally, you may quickly **type** in the first couple of letters of a link to find it.
   This will narrow down the list very quickly until it finds the link you are looking for.

3. Otherwise, press the **Up** or **Down Arrow keys** to find the link you are looking for.

4. Press the **Enter** key activate the link once you have found it.

Reviewing text on a Webpage with NVDA

Most webpages will have contact details somewhere on their site. Once you have located the details you require, you can arrow up and down the page to hear the information relayed to you. Generally, it will read the information out a line at a time.

If you would like your system focus to stay at your last location (and not move), you could use the review cursor to go up and down the page. The review cursor only reviews the text. It is not like the system focus that can interact with the items on the page.

To use the review cursor, you must use the numeric keypad and the numlock key must be turned off. Basically, the review cursor allows you to review the information on the screen without losing your place. Whereas, the system focus will speak only what the system is currently focused on.

The number keys on the number pad are used to review text on a webpage. These text review commands are organized in a grid of three by three. The top three numbers (7, 8, 9) are used to read by line. The middle three numbers (4, 5, 6) are used to read by word. The bottom three numbers (1, 2, 3) are used to read by character. The numbers from left to right read previous, current and next.

The layout is illustrated as follows:

- Previous line = numeric 7

- Current line = numeric 8

- Next line = numeric 9

- Previous word = numeric 4

- Current word = numeric 5

- Next word = numeric 6

- Previous character = numeric 1

- Current character = numeric 2

- Next character = numeric 3