

ACCESSIBILITY FEATURES IN WINDOWS AND WEB BROWSERS



An ASCCA Training Manual

PREPARED FOR THE USE OF TRAINERS IN ASCCA
AFFILIATED CLUBS THROUGHOUT AUSTRALIA
Dr Scott Hollier 2009



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The creation and distribution of this manual is a joint project bringing together the Australian Seniors Computer Clubs Association and Media Access Australia.



ASCCA is the National Peak Body for Seniors and Technology. It is run by seniors for seniors.

ASCCA's services are provided by volunteers to assist older and disabled Australians to access computer technology. It is a Public Benevolent Institution and endorsed as a Deductible Gift Recipient by the Australian Taxation Office.

The Association will help start new clubs, advise and assist existing clubs; undertake research projects; liaise with the three spheres of Government and other organisations on behalf of the membership, organise seminars and like activities and seek out discounts for members. It provides a channel for communication between like-minded people, who want to share in the potential of the computer age to serve their individual and community goals.

ASCCA seeks to serve the Seniors of Australia by providing information, training, forums, seminars and workshops relevant to Information Communications Technology and other issues of importance to seniors or older people with a disability. Members with disabilities include those who have had strokes, are vision or hearing impaired, suffer from MS, Motor Neurone Disease, Parkinson's, etc. *ASCCA* also understands that many disabilities that affect their members are actually a normal process of ageing so they encourage them when possible to continue enjoying and benefiting from the use of their computer.



Media Access Australia (MAA) is a not-for-profit, public benevolent institution providing information about technological solutions to media access issues, and promoting increased usage of these solutions for people with disabilities. New media, including access to computers, computer software and the internet, is an area we are increasingly focusing on due to its importance as a media channel in our society.

The gradual onset of disabilities can be challenging, particularly with using computers or accessing other forms of media. Many seniors experience gradual loss of vision, hearing or mobility. There are many specialist solutions that have been developed to overcome these, but they tend to be complicated, expensive and provide limited value to somebody with a mild loss. MAA is pleased to join with ASCCA to provide everyday, simple, low-cost solutions to basic computer and internet problems encountered by people with onset of disabilities. In Australia the number of people with disabilities is growing as our population ages. This manual is part of the resources available to seniors to assist with accessing computers and other media. Other useful information and advice can be found at www.mediaaccess.org.au .

FOREWORD

When I think about the Internet, I realise that it's a pretty amazing piece of technology. If it were thought of as a single computer, it would be the only computer in history that has stayed online since its inception, never broken down, has always expanded and has a majority of the world's population interacting with it.

Yet for people with disabilities, the machine we know as the Internet offers more than the sum of its parts. As a person with a vision impairment, I've found that the Internet offers all the same benefits to me as it does to the general public: I can access e-mail, publish photos online and my family can see me through video phone calls. And while these things are important, the Internet's true benefit to a person with a disability is more about hope and independence. If I were to travel back in time 20 years ago, a simple task like reading a book would involve a lot of assistance: help to find the book, help to make the print larger, and even help just to get to the building in the first place. Today, with the right tools, I can access the world's libraries. I can see photos clearly on the computer with a magnifier, and I can chat online with other people in my situation. Best off all, I can do all this myself.

In most cases, all the tools needed by people with disabilities are already installed in Windows and web browser applications. This manual has been created by Media Access Australia as a companion for use in combination with other ASCCA courses. If you need any extra help after working through this manual, or want more information on additional accessibility products and services, please contact Media Access Australia. Further information can be found in the Additional Tools and Resources section.

Kind regards,

Dr Scott Hollier
Project Manager, New Media
Media Access Australia

2.0 WHAT IS ACCESSIBILITY?

Accessibility, in computing terms, generally refers to the provision of a tool or application that makes it easier for people with disabilities to use a piece of technology. In this case, the focus is on making a Windows-based computer and an Internet web browser easier to use.

Generally an accessibility tool or application is used in conjunction with an application to achieve a particular task. For example, a person who is vision impaired may use the Magnifier accessibility tool in conjunction with Microsoft Word to make it easier to see the text in a Word document. Another example would be a person with a mobility impairment using the On-Screen Keyboard with a web browser to type text into a search engine.

Legislation in the United States of America requires software developers and equipment providers to include accessibility features if they wish to sell their product to the United States Federal government. As a result, nearly all modern day computers contain a number of accessibility features.

3.0 PRODUCT VERSIONS ADDRESSED IN THIS MANUAL

This manual provides accessibility information for the following operating systems:

- Microsoft Windows XP with Service Pack 3
- Microsoft Windows Vista with Service Pack 1
- Windows 7 public beta release, build 7000 January 2009

The manual also provides accessibility information for the following web browsers:

- Microsoft Internet Explorer 7
- Microsoft Internet Explorer 8
- Mozilla Firefox 3

NOTE: At the time of writing, Microsoft Windows 7 and Microsoft Internet Explorer 8 had not been officially released and information provided in this manual is based on beta test releases. As such, features and commands discussed in this manual for these products may change in the final release.

4.0 WINDOWS AND WEB BROWSER ACCESSIBILITY FEATURES

4.1 What accessibility features are in Windows?

Current versions of Windows such as Windows XP, Windows Vista and Windows 7 contain many accessibility features which can make computers easier and more comfortable to use. Microsoft puts these features into the following categories:

- Display and readability
- Sounds and speech
- Keyboard and mouse

The features that relate to display and readability focus primarily on the needs of people with print disabilities or people who are vision impaired. The sounds and speech section caters primarily for people who are hearing impaired and people who are blind. The

keyboard and mouse features cater primarily for people with a mobility impairment, along with some assistance to people who are vision impaired.

The features relating to display and readability include:

- Adjustment of the font size on the desktop;
- Adjustment of the desktop icon size;
- Adjustment of the screen resolution;
- Adjustment of the colours, such as the use of a high contrast colour scheme;
- Adjustment of the cursor width and blink rate; and the
- Magnifier application.

The features relating to sound and speech include:

- Adjustment of the sound volume;
- The ShowSounds and SoundSentry features which present visual alerts in addition to audio alerts;
- Toggle Keys which provide audio effect when Toggle keys are enabled, such as CAPS LOCK; and
- Text-to-speech through the Narrator application.

The features relating to the keyboard and mouse include:

- Adjustment of the mouse double-click speed;
- Adjustment of mouse pointer movement speed;
- Adjustment of the mouse pointer size and trails;
- ClickLock, which allows icons to be dragged without holding down the mouse button;
- Mouse Keys, which allows the mouse pointer to be moved using the keyboard;
- Sticky Keys to use command keys such as SHIFT and ALT without having to keep it held down;
- Filter Keys to remove accidentally repeated keystrokes; and the
- On-Screen Keyboard application.

In addition, Windows Vista provides an ‘Ease of Access’ manager, a greater emphasis on speech recognition, improved ‘under the bonnet’ accessibility support and enhancements to existing utilities. Windows 7 builds on the Vista framework by including some of the additional accessibility features such as an enhanced full-screen version of Magnifier and a predictive text feature in the On-Screen Keyboard.

4.2 Which features in Windows best support my disability?

The following table may help in identifying which accessibility features are most likely to assist with a particular type of disability.

FEATURE	VISION	HEARING	MOBILITY
DISPLAY AND READABILITY			
Desktop font size	Yes	No	No
Desktop icon size	Yes	No	No
Screen resolution size	Yes	No	Yes
Colour themes and schemes	Yes	No	No
Cursor width and blink rate	Yes	No	Yes
Magnifier	Yes	No	No

SOUND AND SPEECH			
Sound volume	No	Yes	No
ShowSounds and SoundSentry	No	Yes	No
Toggle Keys	Yes	No	No
Narrator (text-to-speech)	Yes	No	No
KEYBOARD MOUSE			
Mouse double-click speed	No	No	Yes
Mouse pointer movement speed	Yes	No	Yes
Mouse pointer size and trails	Yes	No	No
ClickLock	No	No	Yes
Mouse Keys	No	No	Yes
Sticky Keys	No	No	Yes
Filter Keys	No	No	Yes
On-Screen Keyboard	No	No	Yes

Figure 4.1 Table of Windows accessibility features and their relevance to specific disability groups

Please note that this table should be used as a guide only and tools not listed as being applicable to a particular type of disability may still prove beneficial.

4.3 What other accessibility features are in my web browser?

Web browsers such as Internet Explorer and Firefox contain additional accessibility features which can offer further assistance to people with disabilities who rely on the use of a keyboard or need to make a webpage easier to see. This manual provides information on how to magnify a webpage, adjust the colours and enable other built-in accessibility features.

5.0 USING WINDOWS ACCESSIBILITY FEATURES

5.1 Display and readability

5.1.1 Changing the font size, icon size and screen resolution

Changing the font size, icon size and screen size can all be achieved with one process. The easiest way to achieve this is by changing the screen resolution.

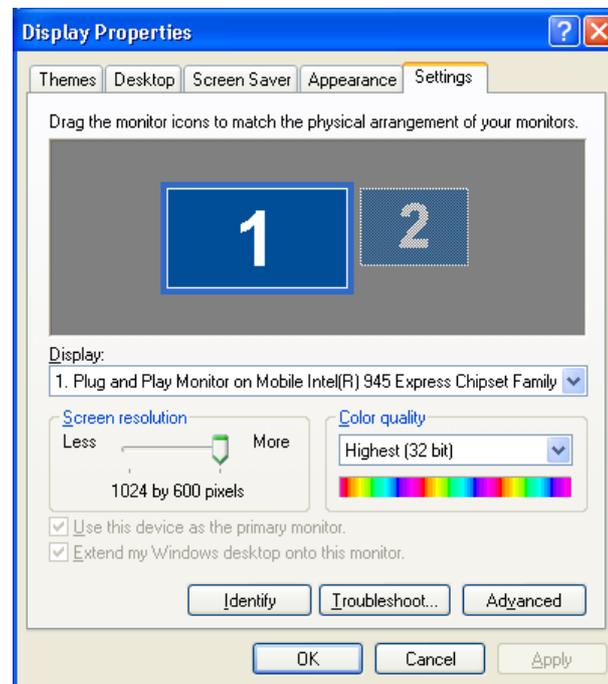


Figure 5.1 Changing the screen resolution in Windows XP

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel, select 'Display'. If there is no 'Display' icon you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side of the Control Panel.
- 4) In the Display window select the 'Settings' tab, located towards the top-right corner of the window.
- 5) Halfway down the window on the left side you will see a slider bar labelled 'Screen resolution'. Select and hold the slider bar. To make the text larger, move the slider bar to the left. To make the text smaller, move the slider bar to the right.
- 6) Select the 'OK' button.

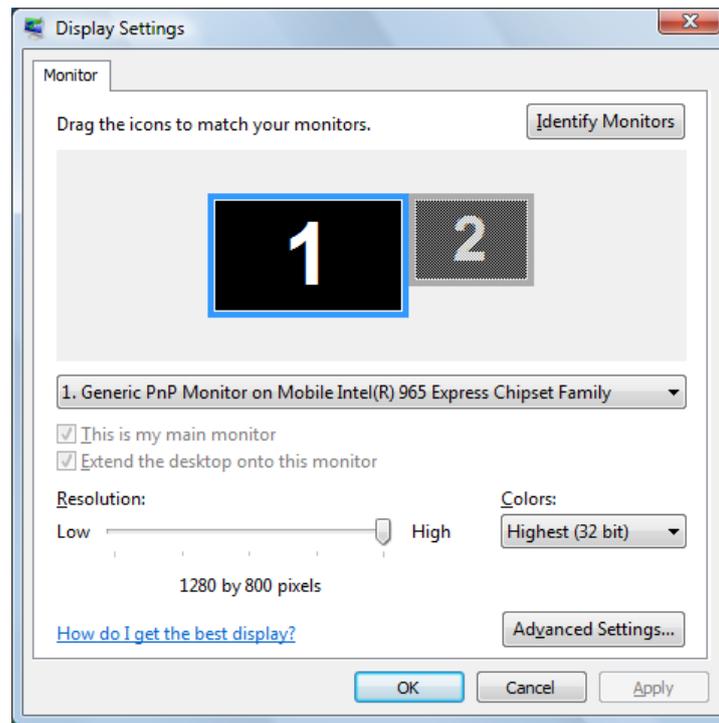


Figure 5.2 Changing the screen resolution in Windows Vista

Windows Vista:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Appearance and Personalization'.
- 4) Select 'Personalization'.
- 5) Select 'Display Settings' located towards the bottom of the window.
- 6) Halfway down the window you will see a section titled 'Resolution' with a slider bar. Select and hold the slider bar. To make the text larger move the slider bar to the left. To make the text smaller move the slider bar to the right.
- 7) Select the 'OK' button.



Figure 5.3 Changing the screen resolution in Windows 7

Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Appearance and Personalization'.
- 4) Select 'Display'.
- 5) Select the 'Change display settings' link towards the top of the window on the left-hand side.
- 6) In the 'Resolution' section select the pull-down bar, and a slider bar should appear. Move the slider bar down to make the text larger or move it up to make the text smaller.
- 7) Select the 'OK' button.

5.1.2 Changing the colours to high contrast

Changing the Windows colours to high contrast can help reduce glare or improve the clarity of the picture on the screen.

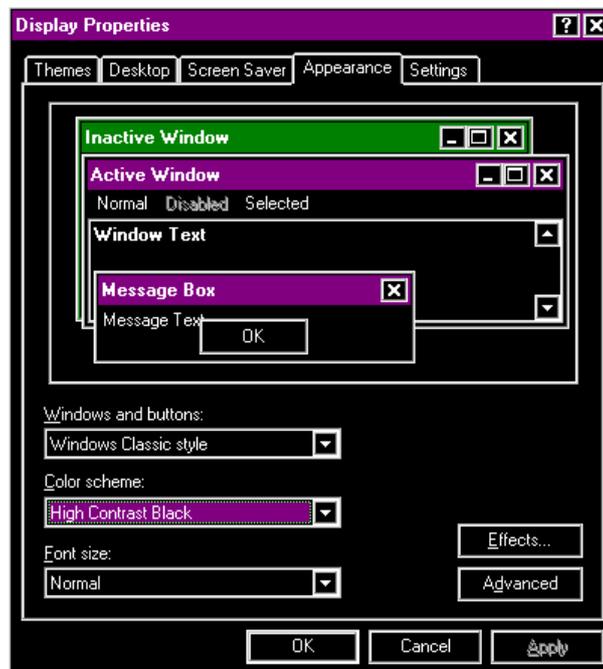


Figure 5.4 Changing the colours to High Contrast Black in Windows XP

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Display'. If there is no 'Display' icon, you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.
- 4) In the 'Display Properties' window select the 'Appearance' tab, located towards the right middle of the top of the window.
- 5) Halfway down the window, on the left side, you will see a pull-down bar labelled 'Windows and buttons'. Change this to 'Windows Classic Style'.
- 6) Underneath you will find another pull-down menu labelled 'Color Scheme'. Change this to a high contrast colour scheme, such as 'High Contrast Black'.
- 7) Select the 'OK' button.

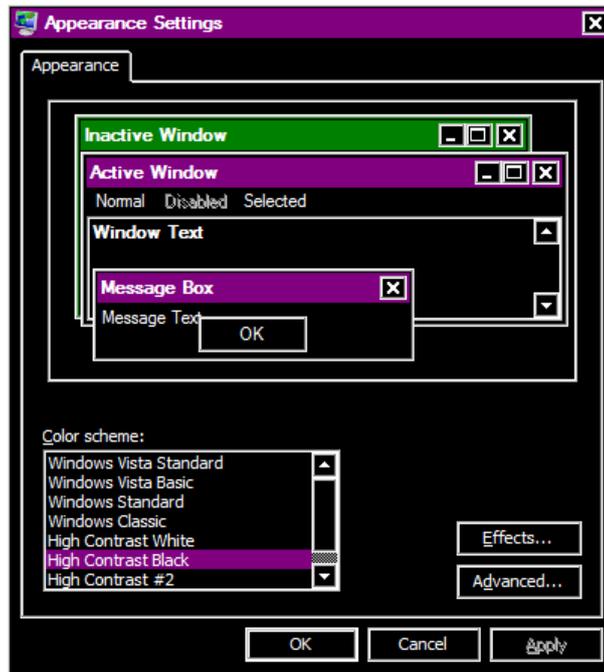


Figure 5.5 Changing the colours to High Contrast Black in Windows Vista

Windows Vista:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Appearance and Personalization'.
- 4) Select 'Personalization'.
- 5) Select 'Theme' located towards the bottom of the window.
- 6) In the 'Theme' pull-down bar choose 'Windows Classic'.
- 7) Select the 'OK' button.
- 8) You should now be back in the 'Personalization' window. Select 'Windows Color and Appearance'.
- 9) In the 'Color scheme' section select a high contrast colour scheme.
- 10) Select the 'OK' button.



Figure 5.6 Selecting a high contrast colour scheme in Windows 7

Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Appearance and Personalization'.
- 4) Select 'Personalization'.
- 5) Select the theme that you wish to use such as those in the 'Ease of Access Themes' section.

5.1.3 Cursor width and blink rate

Changing the cursor width and blink rate can make it easier to see the cursor and control the text.

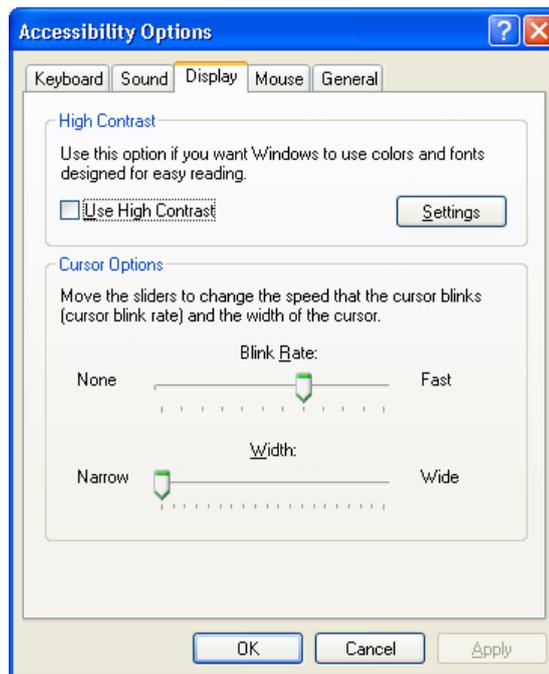


Figure 5.7 Cursor width and blink rate settings in Windows XP

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Accessibility Options'. If there is no 'Accessibility Options' icon you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.
- 4) The 'Accessibility Options' window should appear. Select the 'Display' tab located in the top-middle of the window.
- 5) In the 'Cursor Options' section located halfway down the screen a 'Blink Rate' slide bar can be selected. Select and hold the bar, moving it left to slow down or stop and right to speed it up.
- 6) Underneath is a second slide bar for the cursor width. Move it left to make the cursor more narrow and right to make it thicker.
- 7) Once the preferences have been set, select the 'OK' button.

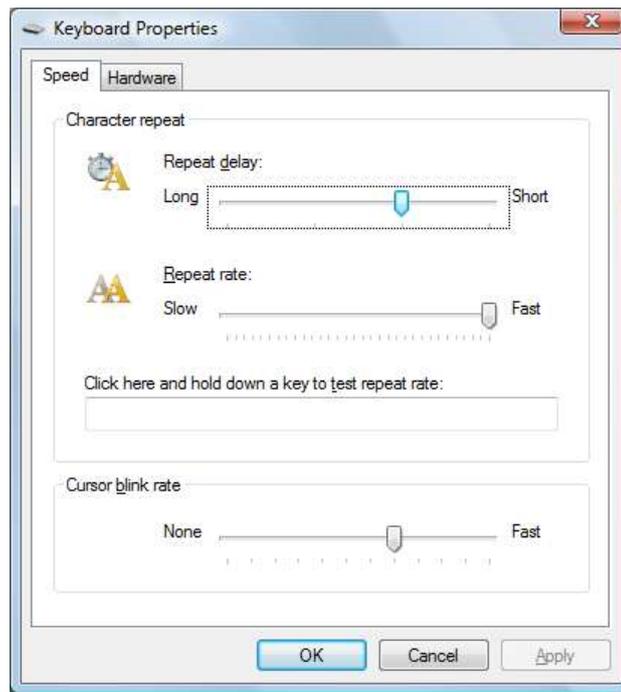


Figure 5.8 Cursor width and blink rate settings in Windows Vista

Windows Vista and Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'Make the keyboard easier to use'.
- 6) In the 'See also' section at the bottom of the window select 'Keyboard settings'.
- 7) To adjust the repeat delay select and hold the first slide bar. Moving the bar to the left will make the delay longer, moving it right will make it shorter.
- 8) To adjust the repeat rate select and hold the second slide bar. Moving to the left will slow down the repeat rate, moving it to the right will speed it up.
- 9) To adjust the cursor blink rate select and hold the third slide bar, located towards the bottom of the window. Move the bar left to slow down the blink rate and right to speed it up.
- 10) Select the 'OK' button.

5.1.4 Magnifier

The Magnifier is a major accessibility feature in Windows. In Windows XP and Vista Magnifier puts a bar at the top of the screen which shows a magnified view of an area near the mouse pointer. In Windows 7 Magnifier has become a more powerful full-screen magnification tool.

Windows XP:

- 1) Hold down the 'Windows' key and press the letter 'R'. This will display the 'Run' command line.
- 2) Type in the word 'magnify' and press the 'Enter' key. Alternatively Magnifier can also be opened by selecting the 'All Programs' section, followed by the 'Accessories' section, followed by the 'Accessibility' section and selecting 'Magnifier'.

- 3) A message will appear on its first use. Select the 'OK' button.
- 4) A magnified bar should now appear at the top of the screen along with a settings panel. The magnified area will follow the mouse when you move it or jump to an area where something important is happening on the screen. To move the focus of the window move the mouse arrow.
- 5) The magnification level can be adjusted in the 'Magnifier Settings' window. At the top of the window is a 'Magnification level' option. Select the pull-down bar to increase or decrease the magnification.
- 6) The magnification window itself can also be adjusted and moved around. If you wish to move the window move your mouse arrow into the magnified area, select it and drag it to another part of the screen. The size of the window can also be adjusted by moving the mouse arrow to the edge of the magnified window, selecting the edge and dragging it to another part of the screen.

Windows Vista:

- 1) Hold down the 'Windows' key and press the letter 'U'.
- 2) Select the 'Start Magnifier' option. This can be done by either directly selecting the words 'Start Magnifier' or by using the 'Tab' key to have the menu options read out and pressing the 'Enter' key once the words 'Start Magnifier' are heard.
- 3) A magnified bar should now appear at the top of the screen along with a settings panel. The magnified area will follow the mouse when you move it or jump to an area where something important is happening on the screen. To move the focus of the window move the mouse arrow.
- 4) The magnification level can be adjusted in the 'Magnifier' window. About a third of the way down the window select the 'Scale factor' pull-down bar to increase or decrease the magnification.
- 5) The magnification window itself can also be adjusted and moved around. If you wish to move the window, move your mouse arrow into the magnified area, select it and drag it to another part of the screen. The size of the window can also be adjusted by moving the mouse arrow to the edge of the magnified window, selecting the edge and dragging it to another part of the screen.

Windows 7:

- 1) Hold down the 'Windows' key on the keyboard and press the '+' key. This will zoom in on the Windows desktop.
- 2) Repeat the above step until the zoom is large enough for your needs.
- 3) To reduce the magnification hold down the 'Windows' key on the keyboard and press the '-' key.
- 4) To scroll around the magnified desktop move the mouse to the area you wish to view.

NOTE: The full-screen magnifier switches back to the traditional Magnifier interface when a high contrast colour scheme is used. To switch back to the full-screen magnifier select a default theme or colour scheme.

Links to further information on the features and keyboard shortcuts of Magnifier can be found in the Additional Tools and Resources section of this manual.

5.2 Sound and speech

5.2.1 Adjusting the volume

The volume for Windows can be adjusted in Windows

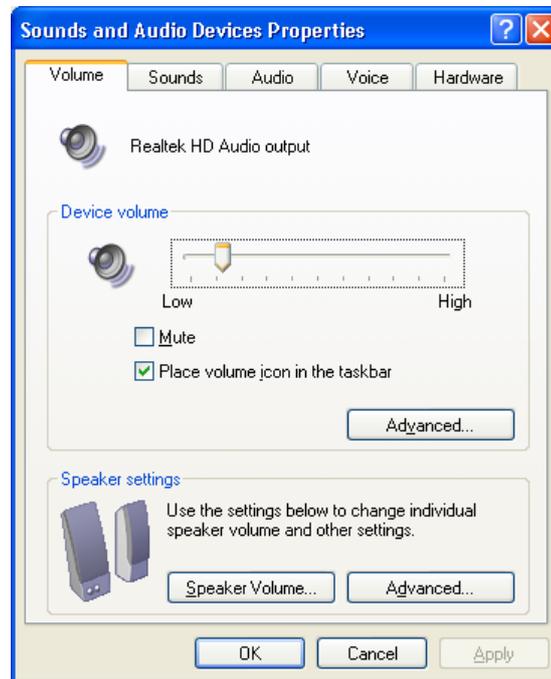


Figure 5.9 Sound preferences in Windows XP

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Sounds and Audio Devices'. If there is no 'Sounds and Audio Devices' icon you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.
- 4) The 'Sounds and Audio Devices Properties' window should appear. Towards the top of the screen is a section labelled 'Device volume' with a slide bar. Select and hold the bar and move it left to decrease the volume and right to increase the volume.
- 5) You may also wish to have the volume control as an icon on the taskbar. To do this, select the checkbox labelled 'Place volume icon in the taskbar' just below the 'Device volume' slide bar.
- 6) Select the 'OK' button.

Windows Vista and Windows 7:

- 1) Select the volume icon appearing as a little sound speaker located in the bottom-right of the desktop.
- 2) A slide bar should appear. Select and hold the slider and move it up to make the sound louder and down to make it softer. A sample noise at the desired volume should sound when the slider is released.

5.2.2 ShowSounds and SoundSentry

ShowSounds and SoundSentry both provide visual cues for audio sounds in Windows.



Figure 5.10 ShowSounds and SoundSentry preferences in Windows XP

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Accessibility Options'. If there is no 'Accessibility Options' icon you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.
- 4) The 'Accessibility Options' window should appear. Select the 'Sound' tab located in the top-middle of the window.
- 5) To enable SoundSentry select the SoundSentry checkbox located towards the top of the window.
- 6) To enable ShowSounds select the ShowSounds checkbox located towards the bottom of the window.
- 7) Select the 'OK' button.

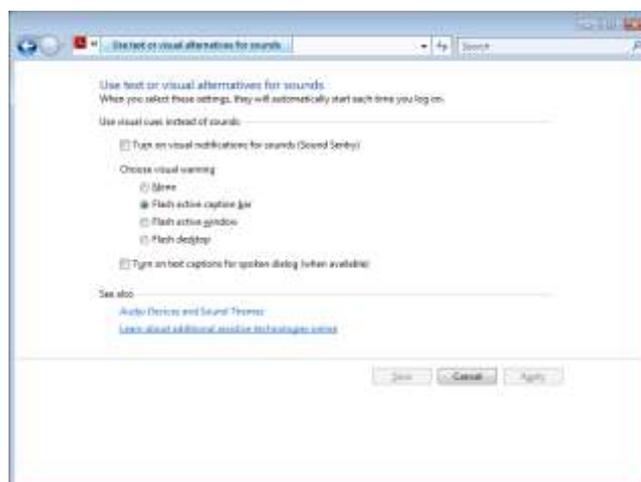


Figure 5.11 ShowSounds and SoundSentry preferences in Windows Vista

Windows Vista and Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'Use text or visual alternatives for sounds'.
- 6) Select the 'Turn on visual notifications for sounds' checkbox.
- 7) Select the 'Save' button.

5.2.3 Toggle Keys

Toggle Keys will allow Windows to make audio noises when toggle keys are enabled such as CAPS LOCK.

Windows XP:

- 1) Hold down the 'NUM LOCK' key for five seconds to turn on Toggle Keys.
- 2) Repeat the step above if you wish to turn off Toggle Keys.

NOTE: For a screenshot of Toggle Keys please refer to Figure 5.18 for Windows XP and Figure 5.19 for Windows Vista below.

Windows Vista and Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'Make the keyboard easier to use'.
- 6) Select the 'Turn on Toggle Keys' checkbox.
- 7) Select the 'Save' button.

5.2.4 Narrator

Narrator is a text-to-speech application that allows certain elements in Windows to be read out.

Windows XP:

- 1) Hold down the 'Windows' key and press the letter 'R'. This will display the 'Run' command line.
- 2) Type in the word 'narrator' and press the 'Enter' key. Alternatively Narrator can also be opened by selecting the 'All Programs' section, followed by the 'Accessories' section, followed by the 'Accessibility' section and selecting 'Narrator'.
- 3) A message will appear the first time Narrator is used. Select the 'OK' button.
- 4) Narrator will start reading information to you about the Windows environment. To have Narrator read out any window again hold down the 'CTRL' key and the 'SHIFT' key followed by pressing the space bar.

Windows Vista and Windows 7:

- 1) Hold down the 'Windows' key and press the letter 'U'.
- 2) Select the 'Start Narrator' option. This can be done by either directly selecting the words 'Start Narrator' or by using the 'Tab' key to have the menu options read out and pressing the 'Enter' key once the words 'Start Narrator' are heard.
- 3) Narrator will start reading information to you about the Windows environment. To have Narrator read out any window again hold down the 'CTRL' key and the 'SHIFT' key, then press the space bar.

Links to further information on the features and keyboard shortcuts of Narrator can be found in the Additional Tools and Resources section of this manual.

5.3 Keyboard and mouse

5.3.1 Adjusting the mouse properties

The mouse properties allow for the adjustment of the mouse double-click speed, the pointer movement speed, the pointer size, the use of mouse pointer trails and the ClickLock function.

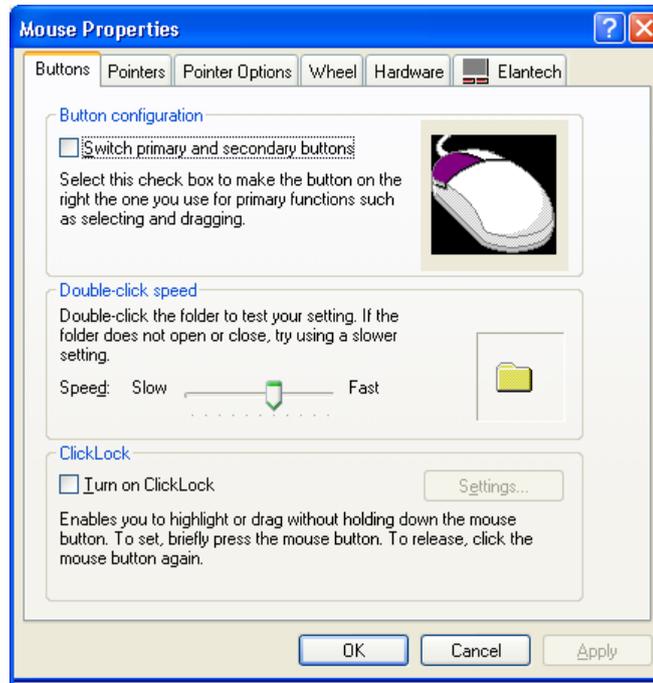


Figure 5.12 Mouse settings in Windows XP (i)

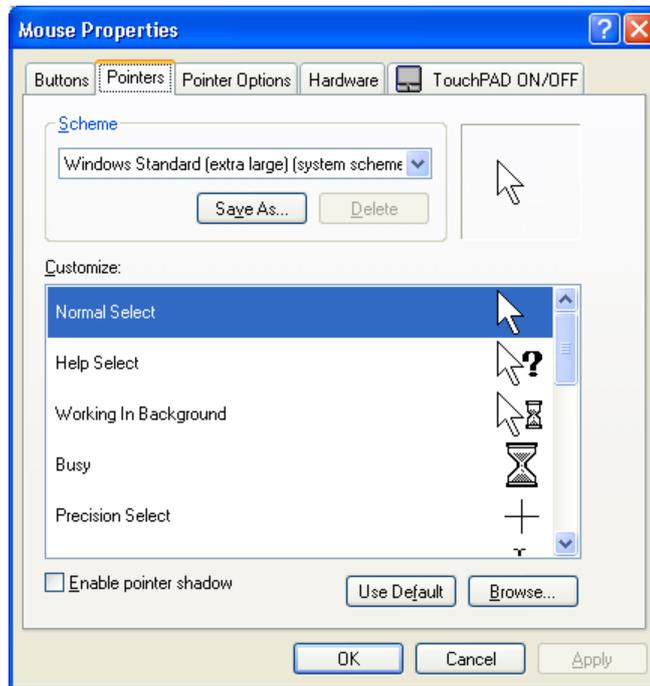


Figure 5.13 Mouse settings in Windows XP (ii)

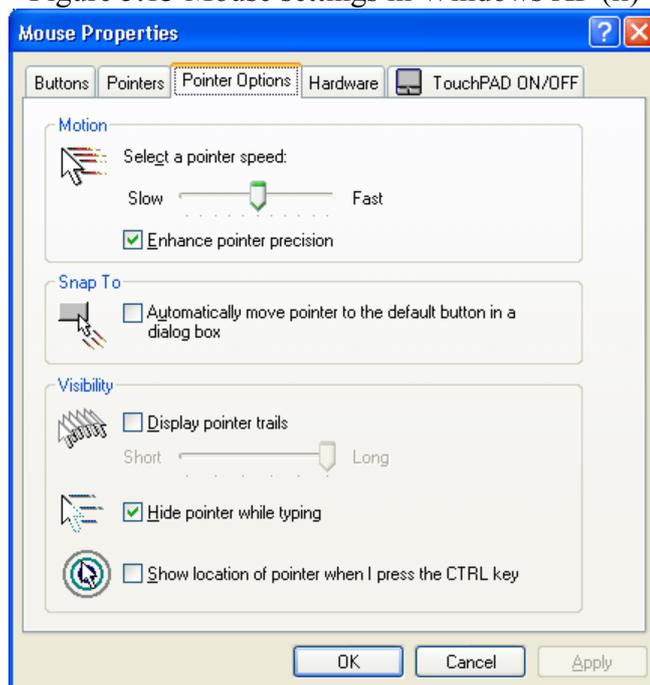


Figure 5.14 Mouse settings in Windows XP (iii)

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Mouse'. If there is no 'Mouse' icon, you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.
- 4) To adjust the double-click speed select and hold the slide bar located in the 'Double-click speed' section, located about half way down the screen. Move the slide bar left to slow down the speed or right to speed it up.

- 5) To enable the ClickLock function select the checkbox labelled 'Turn on ClickLock', located towards the bottom of the window.
- 6) To adjust the pointer size select the 'Pointers' tab at the top of the window, then select the 'Scheme' pull-down bar located at the top of the window. Select an appropriately large pointer.
- 7) To adjust the pointer speed and trails options select the 'Pointer Options' tab at the top-middle of the window. To adjust the pointer speed select and hold the first slide bar. Moving the bar left will slow down the speed moving the bar right will speed it up. To add mouse trails select the checkbox labelled 'Display pointer trails' located towards the bottom of the window under the 'Visibility' section.
- 8) Select the 'OK' button.

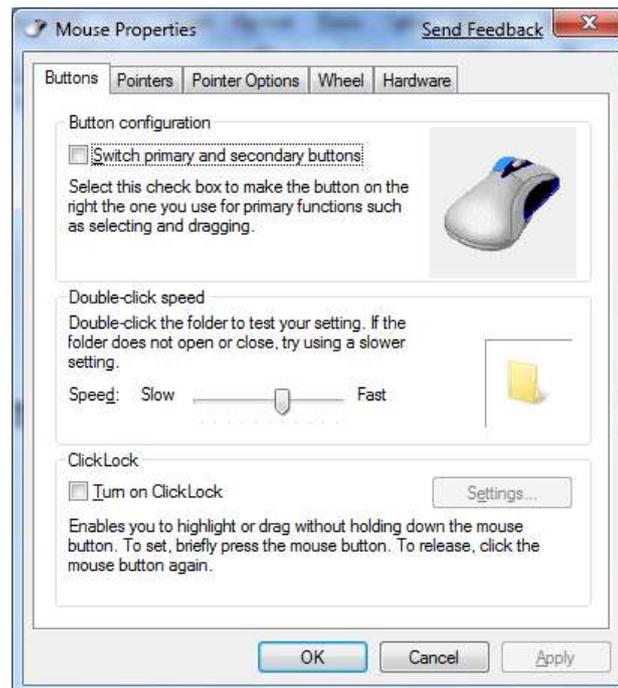


Figure 5.15 Mouse settings in Windows Vista and Windows 7 (i)

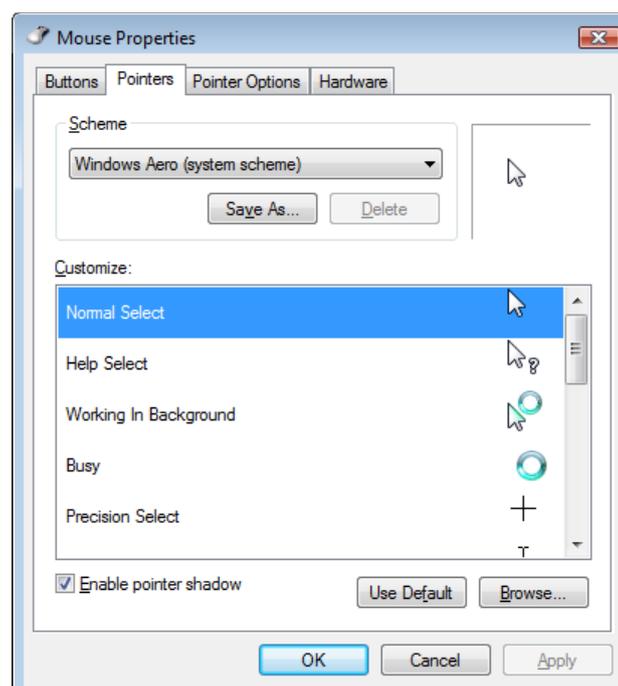


Figure 5.16 Mouse settings in Windows Vista and Windows 7 (ii)

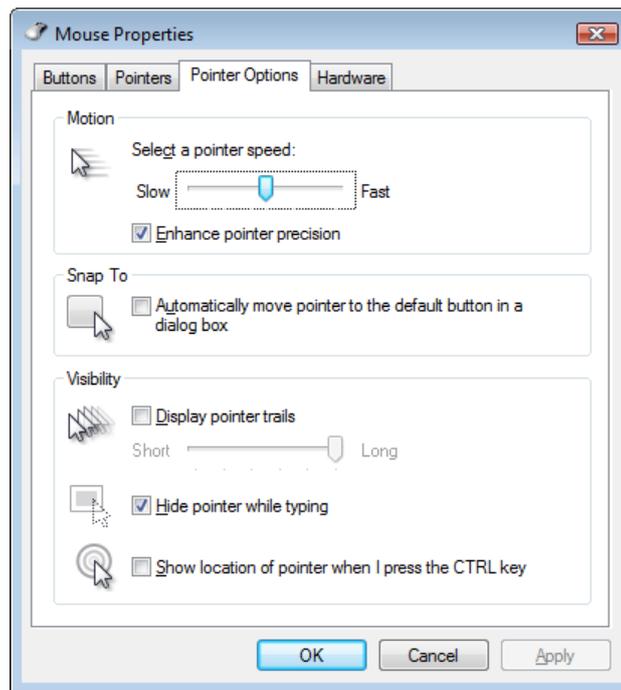


Figure 5.17 Mouse settings in Windows Vista and Windows 7 (iii)

Windows Vista:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Hardware and sound'.
- 4) Select 'Mouse'.
- 5) To adjust the double-click speed select and hold the slide bar located in the 'Double-click speed' section, located about half way down the screen. Move the slide bar left to slow down the speed or right to speed it up.
- 6) To enable the ClickLock function select the checkbox labelled 'Turn on ClickLock', located towards the bottom of the window.
- 7) To adjust the pointer size select the 'Pointers' tab at the top of the window, then select the 'Scheme' pull-down bar located at the top of the window. Select an appropriately large pointer.
- 8) To adjust the pointer speed and trails options select the 'Pointer Options' tab at the top-middle of the window. To adjust the pointer speed select and hold the first slide bar. Moving the bar left will slow down the speed, moving the bar right will speed it up. To add mouse trails select the checkbox labelled 'Display pointer trails' located towards the bottom of the window under the 'Visibility' section.
- 9) Select the 'OK' button.

Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Type the word 'mouse' and press the 'Enter' key.
- 3) The mouse window should appear. To adjust the double-click speed, select and hold the slide bar located in the 'Double-click speed' section, located about half way down the screen. Move the slide bar left to slow down the speed or right to speed it up.
- 4) To enable the ClickLock function select the checkbox labelled 'Turn on ClickLock', located towards the bottom of the window.

- 5) To adjust the pointer size select the 'Pointers' tab at the top of the window, then select the 'Scheme' pull-down bar located at the top of the window. Select an appropriately large pointer.
- 6) To adjust the pointer speed and trails options select the 'Pointer Options' tab at the top-middle of the window. To adjust the pointer speed select and hold the first slide bar. Moving the bar left will slow down the speed, moving the bar right will speed it up. To add mouse trails select the checkbox labelled 'Display pointer trails' located towards the bottom of the window under the 'Visibility' section.
- 7) Select the 'OK' button.

5.3.2 Mouse Keys

The Mouse Keys function enables the keyboard to be used to move the mouse pointer around instead of a mouse.

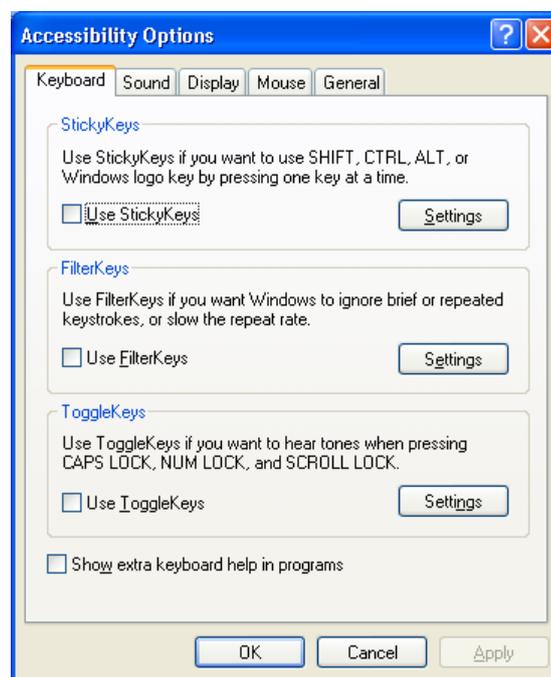


Figure 5.18 Mouse accessibility settings in Windows XP

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Accessibility Options'. If there is no 'Accessibility Options' icon you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.
- 4) The 'Accessibility Options' window should appear. Select the 'Mouse' tab, located in the top-middle of the window.
- 5) Select the 'Use MouseKeys' checkbox.
- 6) Select the 'OK' button. The keys on the numeric keypad can now be used to move the mouse pointer.

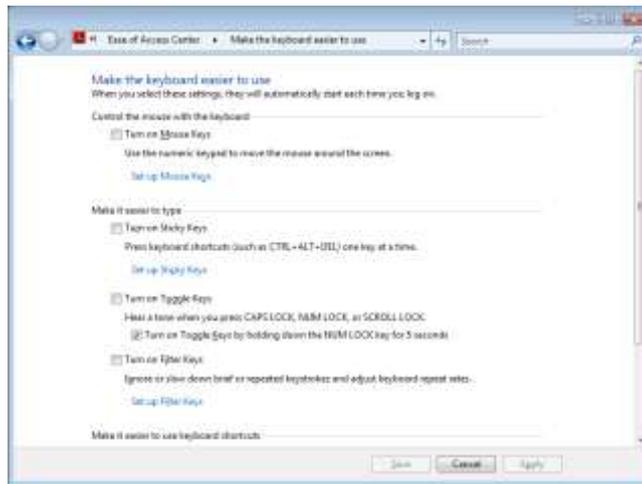


Figure 5.19 Mouse accessibility settings in Windows Vista

Windows Vista and Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'Make the keyboard easier to use'.
- 6) Select the 'Turn on Mouse Keys' checkbox.
- 7) Select the 'Save' button.

5.3.3 Sticky Keys

The Sticky Keys function allows the command keys such as the SHIFT and ALT keys to be used without having to keep the relevant key held down.

Windows XP, Windows Vista and Windows 7:

- 1) Press the 'SHIFT' key five times.
- 2) Select the 'Yes' button.
- 3) To turn off Sticky Keys repeat the first step, then select the 'No' button.

5.3.4 Filter Keys

Filter keys can help prevent mistyping through a tremor or sudden movement on the keyboard.

NOTE: For a screenshot of Filter Keys, please refer to Figure 5.18 above.

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Accessibility Options'. If there is no 'Accessibility Options' icon you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.

- 4) The 'Accessibility Options' window should appear. Select the 'Keyboard' tab, located in the top-left of the window.
- 5) Select the 'Use FilterKeys' checkbox.
- 6) Select the 'OK' button.

NOTE: For a screenshot of Filter Keys, please refer to Figure 5.19 above.

Windows Vista and Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'Make the keyboard easier to use'.
- 6) Select the 'Turn on Filter Keys' checkbox.
- 7) Select the 'Save' button.

5.3.5 On-Screen Keyboard

The On-Screen Keyboard is designed to assist people who use a pointing device such as a mouse, joystick or head-mounted device to type.

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'All Programs'.
- 3) Select 'Accessories'.
- 4) Select 'Accessibility'.
- 5) Select 'On-Screen Keyboard'.
- 6) Load the application in which you wish to type.
- 7) Select letters on the On-Screen Keyboard. The text should appear in your chosen application.

Windows Vista:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'Start On-Screen Keyboard'.
- 6) Load the application in which you wish to type.
- 7) Select letters on the On-Screen Keyboard. The text should appear in your application.

Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'On-Screen Keyboard'.
- 6) Load the application in which you wish to type.
- 7) Select letters on the On-Screen Keyboard. The text should appear in your application.

Links to further information on the features of the On-Screen Keyboard, including the new predictive text feature in Windows 7, can be found in the Additional Tools and Resources section of this manual.

6.0 USING WEB BROWSER ACCESSIBILITY FEATURES

6.1 Web page magnifier

This feature will zoom into a webpage making the content larger.

Internet Explorer and Firefox:

- 1) Hold down the CTRL key on your keyboard.
- 2) Press the '+' key to make the text bigger or the '-' key to make the text smaller.
- 3) Keep repeating step 2 until the text is at a suitable size.

6.2 Adjusting the text and background colours

This feature will change the background and text colours of webpages to make them easier to see.



Figure 6.1 Changing the colours in Internet Explorer

Internet Explorer:

- 1) Go to the 'Tools' pull-down menu.
- 2) Select 'Internet Options'.
- 3) In the bottom-left hand corner you will see a 'Colors' button. Select this button.
- 4) Make sure the 'Use Windows Colors' checkbox is not selected.
- 5) Select the colours that you want by selecting the current colour and then select a new colour.
- 6) Select OK on the 'Colors' screen.
- 7) Select OK on the 'Internet Options' screen.

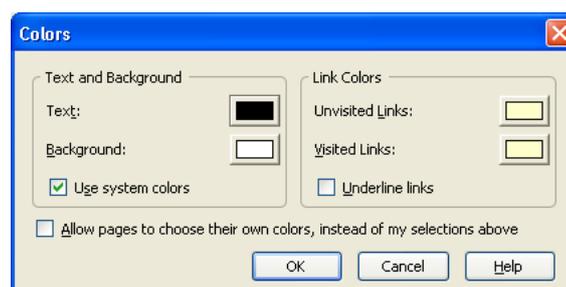


Figure 6.2 Changing the colours in Firefox

Firefox:

- 1) Go to the 'Tools' pull-down menu.
- 2) Select 'Options'.
- 3) In the top-middle of the box you will see a 'Content' box. Select this box.
- 4) In the middle right-hand side of the box you will see a 'Colours' button. Select this button.
- 5) Select the colours that you want by selecting the current colour and then select a new colour.
- 6) Select OK on the 'Colours' screen.
- 7) Select OK on the 'Options' screen.

6.3 Additional accessibility features:

Additional accessibility features are available in this area of the browser settings.

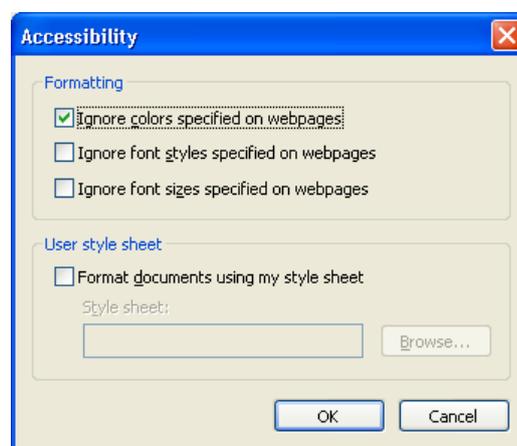


Figure 6.3 Accessibility features in Internet Explorer

Internet Explorer:

- 1) Go to the 'Tools' pull-down menu.
- 2) Select 'Internet Options'.
- 3) Select the 'Accessibility' button.

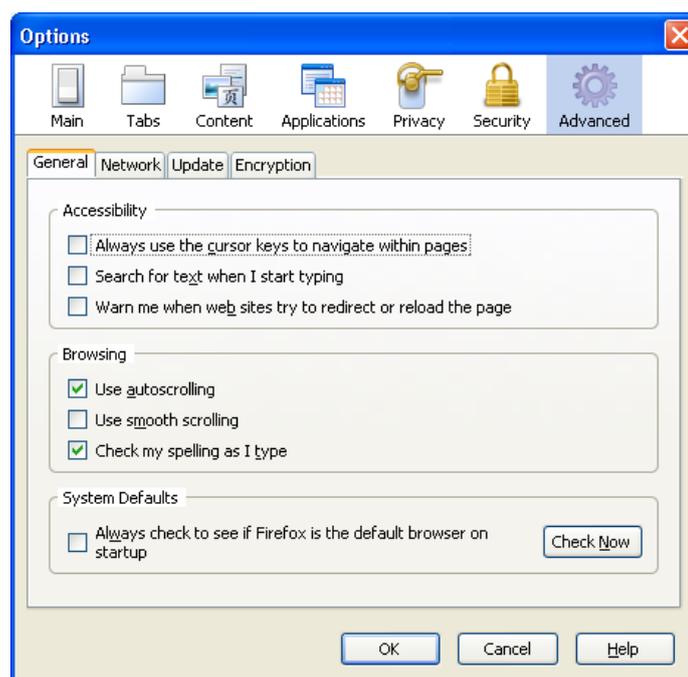


Figure 6.4 Accessibility features in Firefox

Firefox:

- 1) Go to the 'Tools' pull-down menu.
- 2) Select 'Options'.
- 3) In the top-right of the box you will see an 'Advanced' box. Select this box. Make sure the 'General' tab is selected.

7.0 ADDITIONAL TOOLS AND RESOURCES

7.1 Additional tools for people who are blind or vision impaired

Some people with disabilities need additional tools to help make a computer easier to use. For people who are blind or vision impaired a more advanced text-to-speech program is available called NVDA. This program operates a little bit like the built-in tool Narrator, but is able to read information from web pages more effectively in Firefox. NVDA is free and can be downloaded from:

<http://www.nvda-project.org/>

The Firefox web browser will also need to be downloaded and is available from:

<http://www.mozilla.com/en-US/firefox/>

For people that need to use a computer in a public place or in areas where software cannot be installed an application called WebAnywhere can help. WebAnywhere operates as a text-to-speech tool that integrates into the web browser, providing basic voice access to the Internet. The voice software can work on almost any computer with sound and will start almost immediately by going to the website

<http://wa.cs.washington.edu>.

The current version of Adobe Acrobat Reader has a feature which lets most documents be read out loud. The feature can be used as follows:

- 1) Open the document you wish to have read out.
- 2) Go to the 'View' pull-down menu.
- 3) Go to the 'Read Out Loud' menu option.
- 4) Another menu will appear. Select the reading option that you wish to use.

NOTE: This feature will only work if the original PDF file is created in an accessible manner.

Further information on downloading Adobe Acrobat Reader can be found at

<http://get.adobe.com/reader/> .

Information on PDF accessibility can be found on the Adobe Accessibility Resource Center at

<http://www.adobe.com/accessibility/> .

Additional products are also commercially available. Contact your local disability organisation or Media Access Australia for more information.

7.2 Online resources

For further information on the features discussed in this manual, including Narrator keyboard shortcuts and the predictive text features of the Windows 7 On-Screen Keyboard, please visit the following official websites:

Windows XP accessibility resources:

<http://www.microsoft.com/enable/products/windowsxp/default.aspx>

Windows Vista accessibility resources:

<http://www.microsoft.com/enable/products/windowsvista/>

Engineering Windows 7: Microsoft Development blog

<http://blogs.msdn.com/e7/archive/2008/11/30/accessibility-in-windows-7.aspx>

Internet Explorer 7 accessibility:

<http://www.microsoft.com/enable/products/ie7/>

Firefox accessibility:

http://kb.mozillazine.org/Accessibility_features_of_Firefox

7.3 Further information

If you require any further information please contact Media Access Australia

Suite 4.08

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T TY: (02) 9212 6242

Fax: (02) 9212 6289

Email: info@mediaaccess.org.au

Website: <http://www.mediaaccess.org.au/>

Or

Australian Seniors Computer Clubs Association

Level 4, 280 Pitt Street

SYDNEY NSW 2000

Phone: (02) 9286 3871

Fax: (02) 9286 3876

Email: office@ascca.org.au

Website: <http://ascca.org.au/barrierfreeaccess/access.htm>