

# Ease of Access Centre Guide for **Windows 7**



**a step-by-step guide**

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## Windows 7 Ease of Access Centre

### Overview

Microsoft has included a range of accessibility features (Accessibility Options) in its operating systems since Windows 95. Windows 7 incorporates several improvements such as a change of name from 'Accessibility Options' to 'Ease of Access Centre'. These features provide a valuable but often overlooked method of supporting learners with additional support needs. The Ease of Access Centre, found in the Control Panel, brings together all the accessibility options and adds some new features.

### Main Features

The main features the Ease of Access Centre include:

- **Quick access to common tools** which is a range of built-in accessibility tools such as Narrator (text-to-speech), Magnifier (enlarge information on the screen), On-Screen Keyboard (a virtual keyboard), High Contrast (colour contrast which helps to define menu items, toolbars etc) and voice recognition.
- **Get recommendations to make your computer easier to use** is a 5 step-by step guide to help you set up a computer in a way that suits your personal preference.
- **Explore all settings** allows you to explore the settings by category, for example, Make the computer easier to see, Make the keyboard easier to use etc.



Figure 1: Get recommendations to make your computer easier to use.

## Getting Started

The quickest and easiest way to open the Ease of Access Centre is to use the keyboard shortcut:

- Windows logo key  + U

To open Ease of Access Centre with a mouse, go to Start, Control Panel and select the Ease of Access Centre menu icon.



## Ease of Access Centre

When the Ease of Access Centre opens you can start to customise your computer by selecting the various options, for example, Quick access to common tools, Get recommendations to make your computer easier to use and Explore all settings.

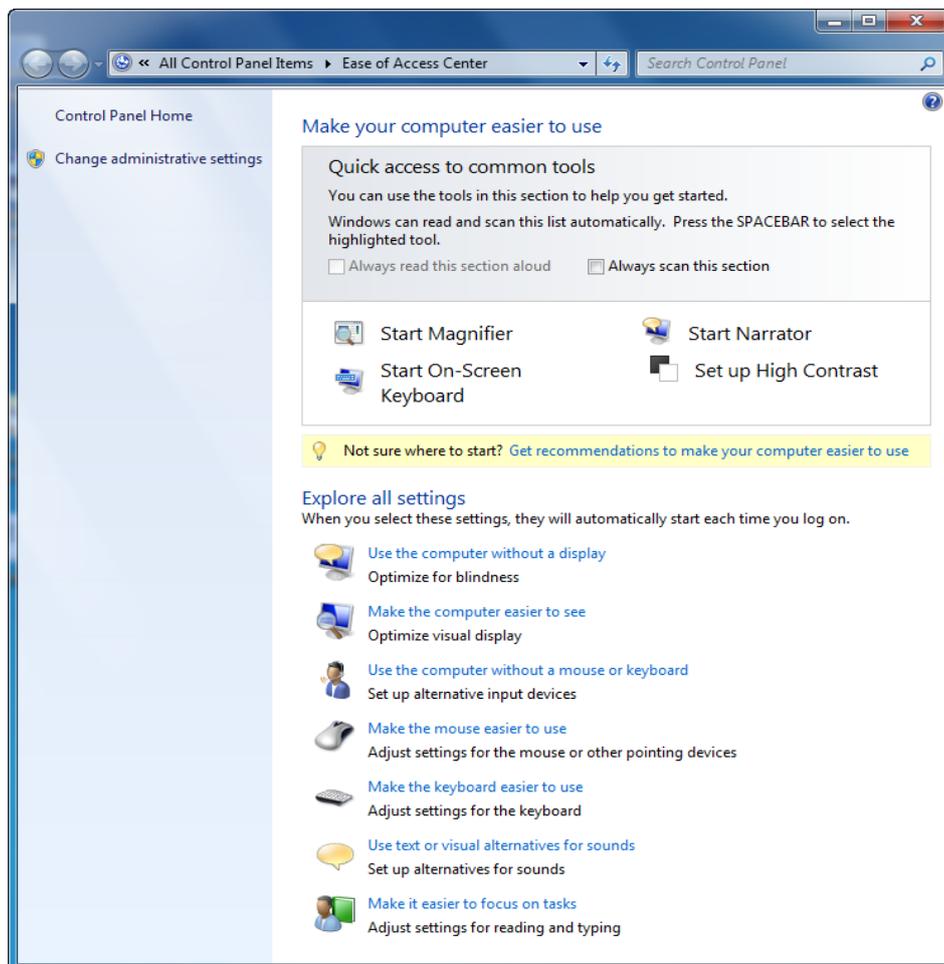


Figure 2: The Ease of Access Centre.

## Increase the size of text and icons

If you have difficulties seeing information on your computer screen it is possible to adjust the size of the fonts and icons to make information easier to read.

Modern laptops and monitors use a high resolution, for example, 1400×1050 (in some cases up to 1920×1080) allowing for more space on the desktop. However, this means that fonts and icons are smaller to see. Windows 7 uses a feature called DPI Scaling. This allows icons and text to be scaled so they are easier to see.

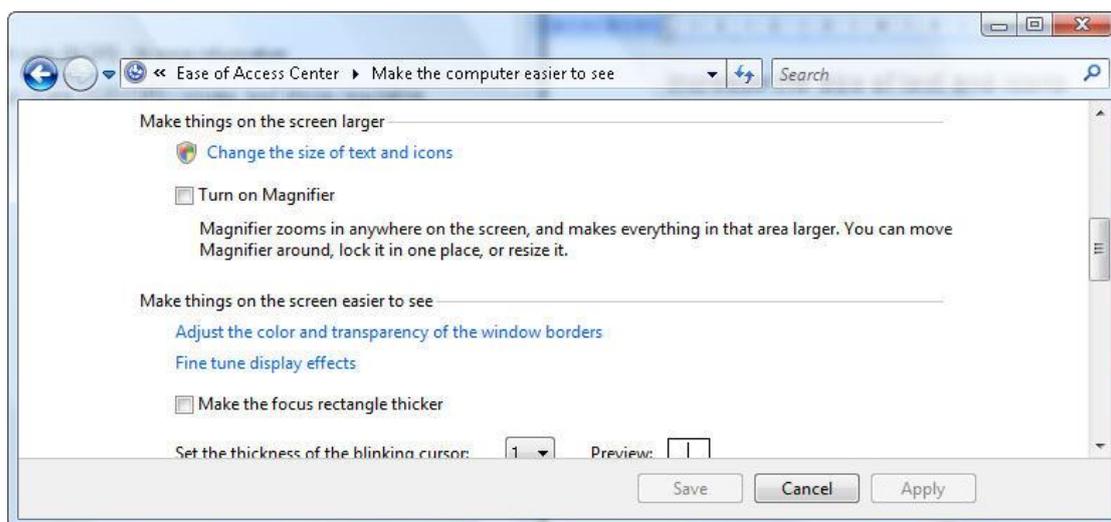


Figure 3: To change the size of text and icons select the Change the size of text and icons option.

## Keyboard Shortcuts

To increase the size of text and icons start the Ease of Access Centre:

- Windows logo key  + U

When the Quick access to common tools box start Magnifier by pressing:

- Press the Tab key until you come to the Make the computer easier to see option.
- Press the Enter key. When the Make the computer easier to see box appears press the Tab key until you come to Change the size of text and icons.
- When you select this option the DPI Scaling Control Panel dialogue box will appear. Select Continue by pressing the Enter key.
- The default size is 96 DPI. Choose 120 DPI to increase the font and icon size. Press the down arrow to select 120 DPI.
- Press the Tab key to select Apply.
- If you are prompted to restart your computer choose the Continue option.

## Mouse Actions

- To open Ease of Access Centre, go to Start, Control Panel and select the Ease of Access Centre icon. Explore all settings select Make the computer easier to see.
- Select the Change the size of text and icons option. When the DPI Scaling Control Panel dialogue box appears select Continue.
- Change the default size 96 DPI to 120 DPI. Select Apply and finally Okay.
- If you are prompted to restart your computer choose the Continue option.

## Additional Information

The DPI Scaling (dots per inch) Control dialogue panel provides a number of options to increase the size of fonts and icons. If the Larger Scale (120 DPI) option is not large enough choose the Custom DPI button to increase sizes up to 200%.

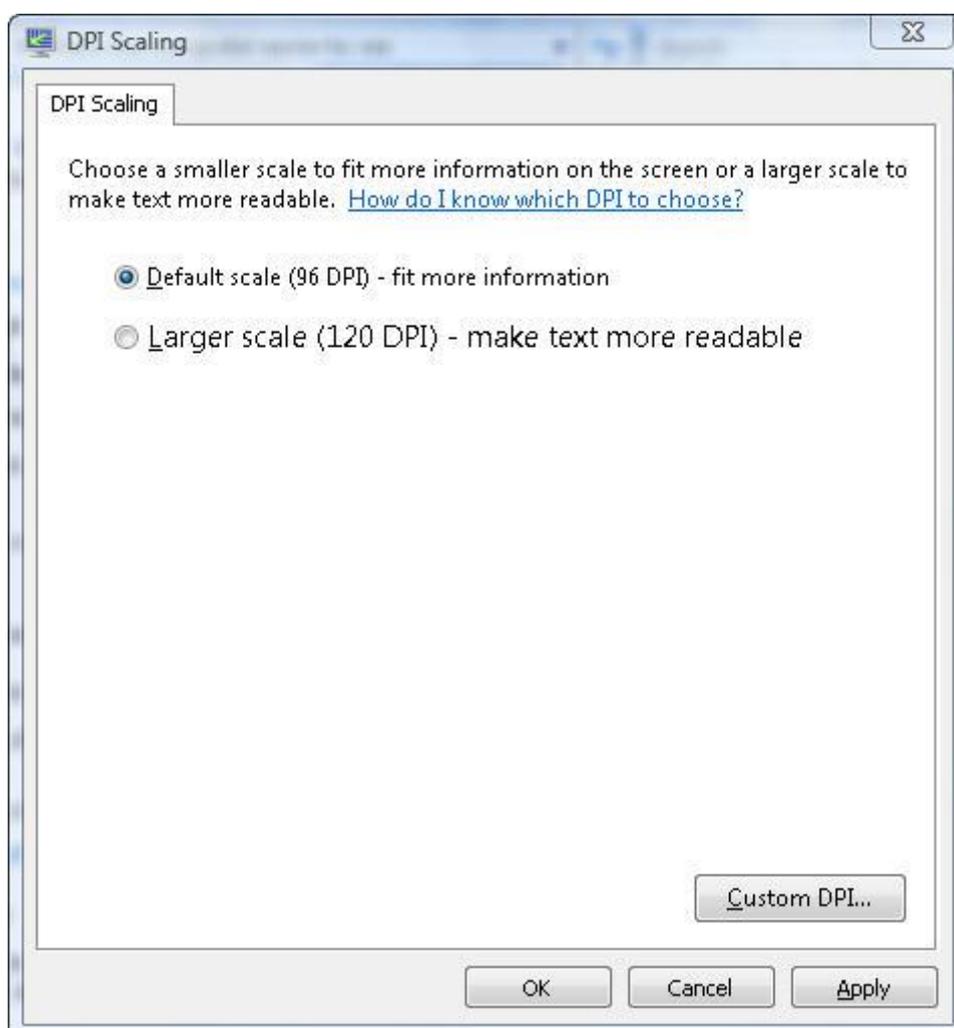


Figure 4: DPI Scaling - choose 120 DPI to increase the size of fonts and icons.

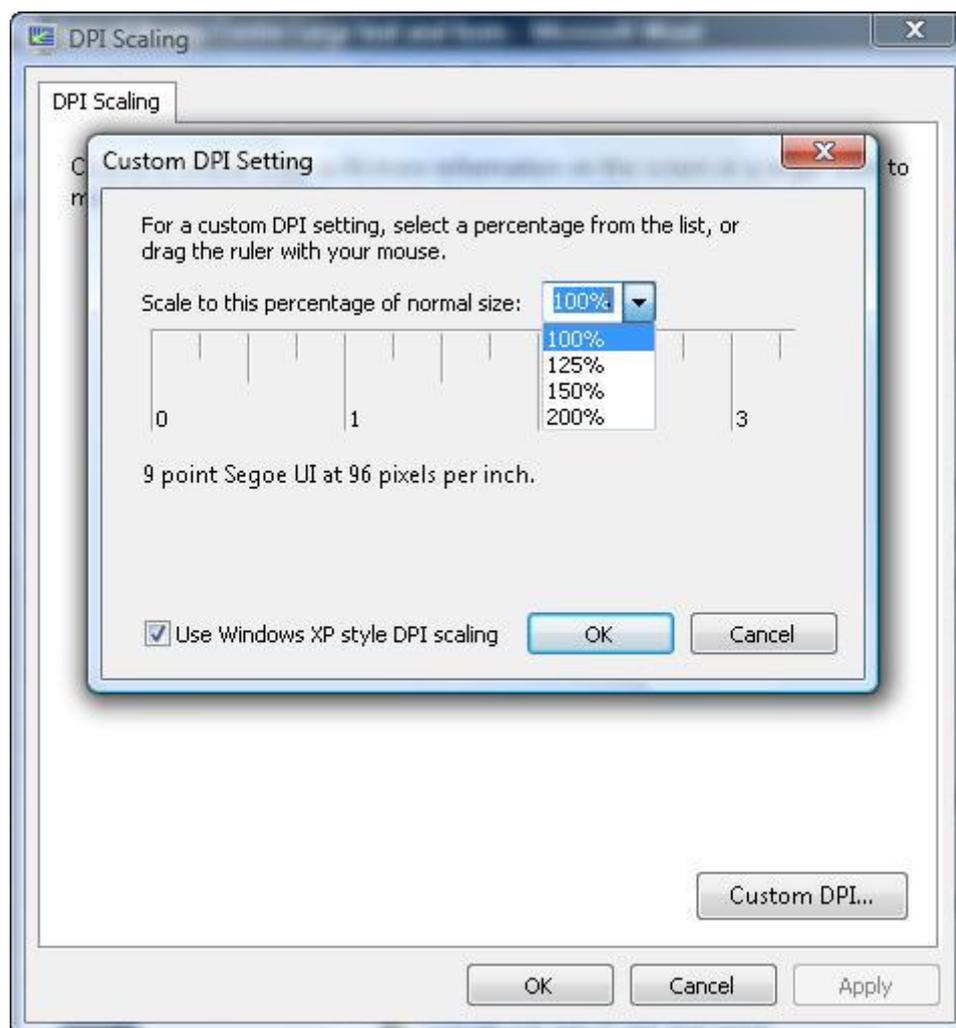


Figure 5: DPI Scaling - choose 120 DPI to increase the size of fonts and icons.

The Custom DPI option can increase text and icons to 200% larger than the default.

### **High Contrast**

High Contrast is a feature in Windows 7 which changes the size and colour of the desktop background as well as the font and menu items. High Contrast heightens the colour contrast making the desktop easier to see and read.

### **Main Features**

The main features of High Contrast include:

- A range of colour options to choose from.
- High contrast options which are quick and easy to set up.

- A shortcut key to activate High Contrast: Left Shift + Left Alt + Print Screen keys (when prompted select the Yes button. To return to the previous view repeat the key strokes).

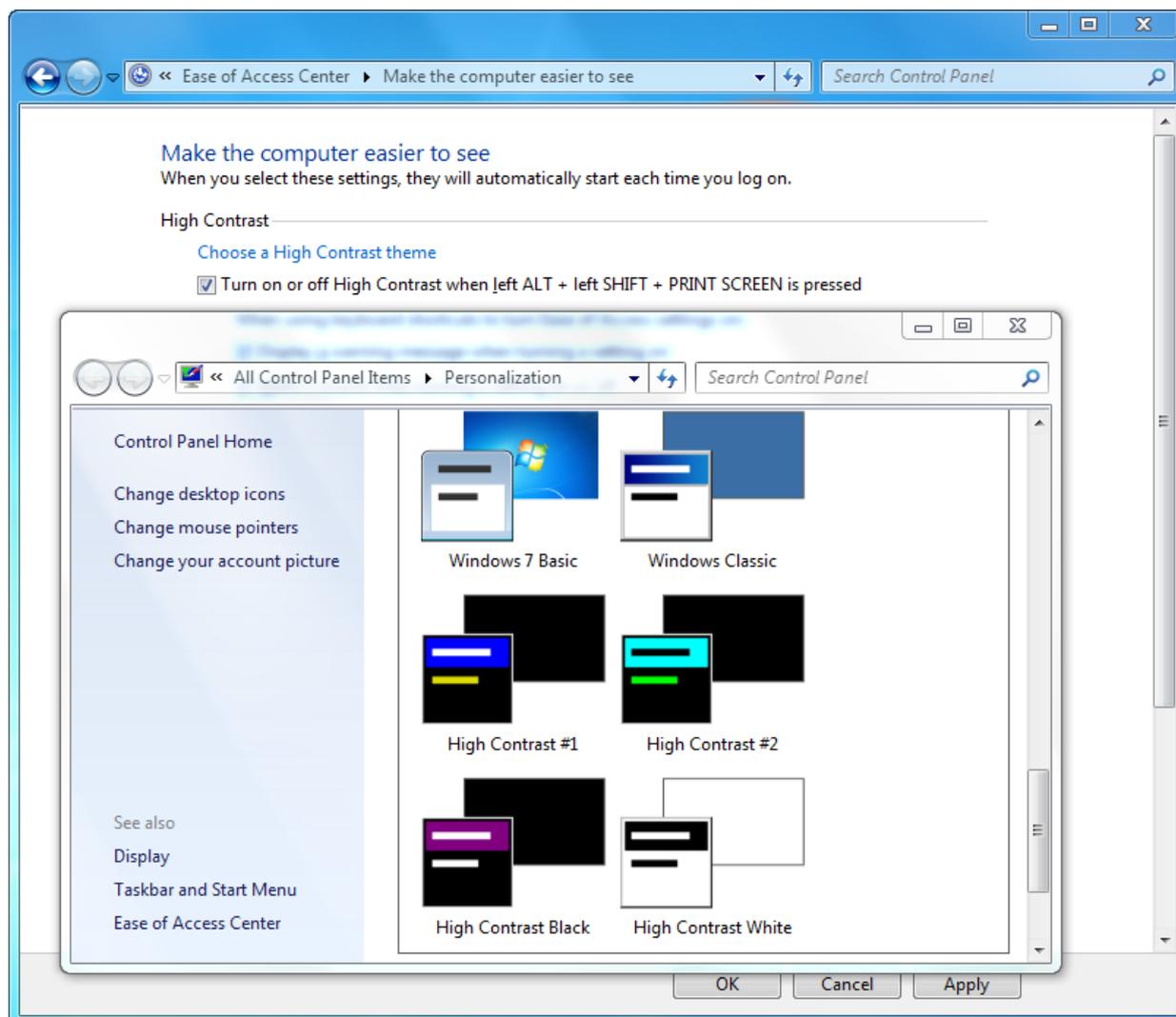


Figure 6: There are a number of contrast options to choose from.

## Keyboard Shortcuts

To start High Contrast you must first start the Ease of Access Centre:

- Windows logo key  + U

When the Quick access to common tools box start High Contrast by pressing:

- Alt + U

When the Make the computer easier to see option appears press:

- Alt + C to choose a colour contrast scheme.

## Mouse Actions

To open Ease of Access Centre, go to Start, Control Panel and select the Ease of Access Centre menu icon. Under Quick access to common tools select Set up High Contrast.

## Additional Information

High Contrast can also be activated by selecting the Explore all settings option.

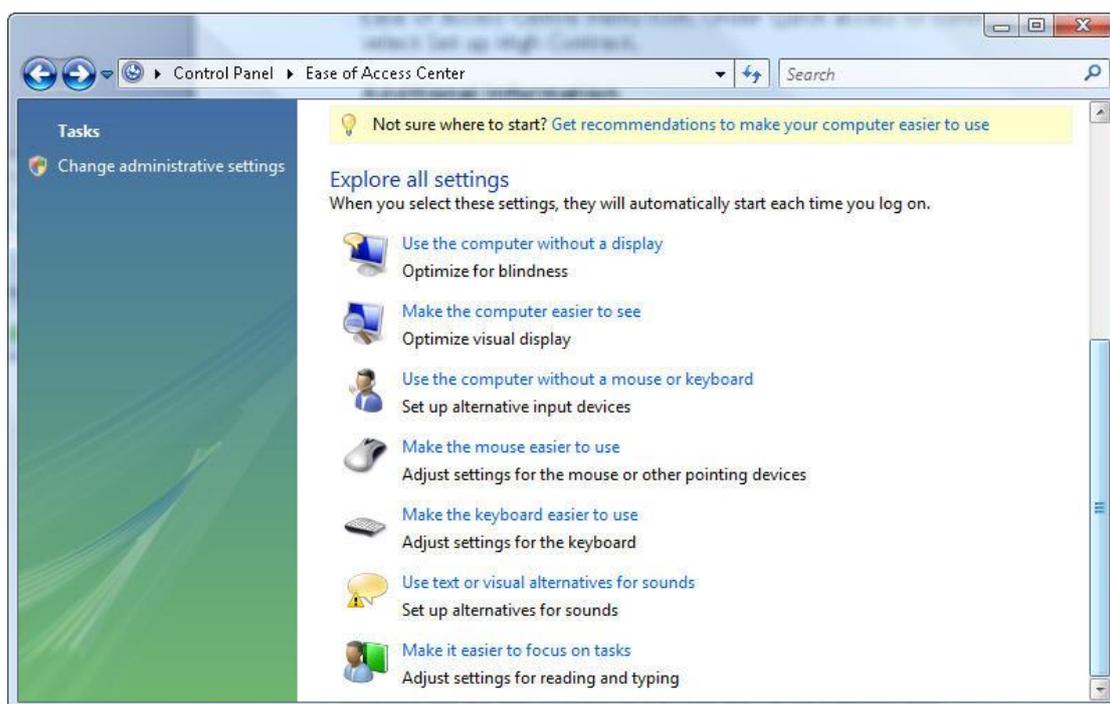


Figure 7: Explore all settings provides quick access to a range of options.

## Magnifier

Magnifier is a magnification program in Windows 7 that provides full screen magnification.

### Main Features

The main features of Magnifier include:

- A floating bar to control magnification levels and options.
- Full screen magnification up to 1600 magnification (becomes very pixelated above 200).
- A floating magnified window.
- A docking option which allows you to place the magnifier window at the left, top, right, or bottom of your screen.
- An option to track the focus so that it follows the movement of the mouse cursor, keyboard focus, or text editing.

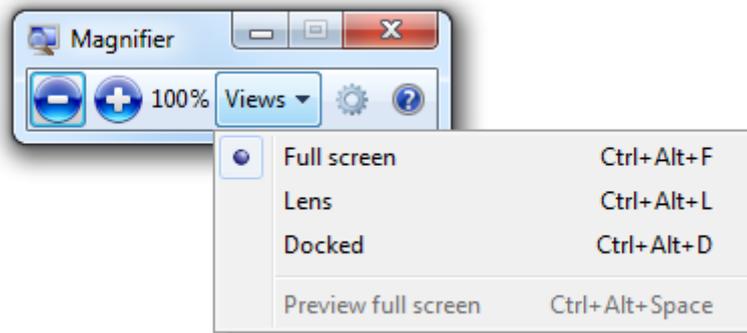


Figure 8: The Magnifier floating bar with View options.

## Magnifier Options

Windows 7 Magnifier also offers a range of options, such as changing the amount of magnification view when increasing and decreasing the magnification level. Other features include 'Follow the mouse pointer' which tracks the screen as you mouse pointer is moved, 'Follow the keyboard focus' which tracks keyboard strokes.

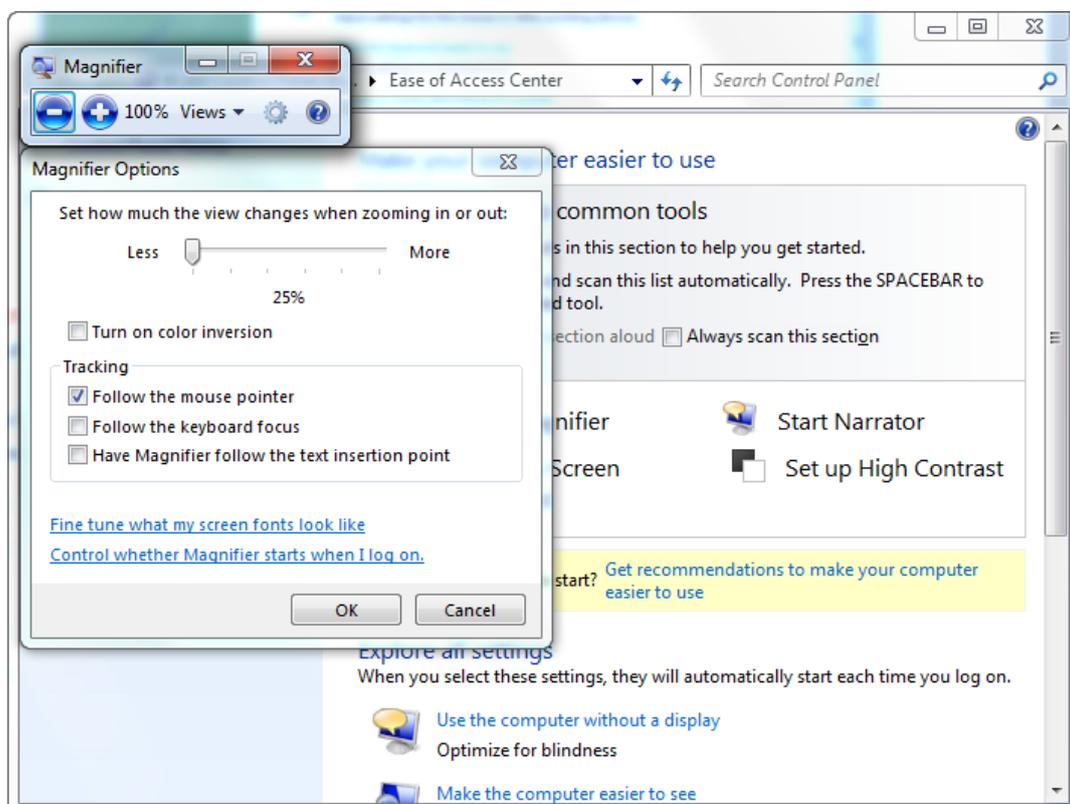


Figure 9: Magnifier features numerous customise to customise magnification.

## Keyboard Shortcuts

To start Magnifier you must first start the Ease of Access Centre:

- Windows logo key  + U

When the Quick access to common tools box start Magnifier by pressing:

- Alt + G

## Mouse Actions

To open Ease of Access Centre, go to Start, Control Panel and select the Ease of Access Centre icon. Under Quick access to common tools select Start Magnifier.

## Additional Information

Magnifier's default position is the top of the screen although the Magnifier can be locked in various screen locations. Additionally the Magnifier can be set to a square or rectangle by clicking and holding a corner of the magnification area with the mouse and placed anywhere on the screen.

Magnifier can enlarge information on the screen up to 1600 times the default size.

However, unlike some commercial magnification programs such as ZoomText and Lunar, the Windows magnifier does not feature 'font smoothing' which means text and images will have a 'jagged' edge appearance when magnified over 200 times.

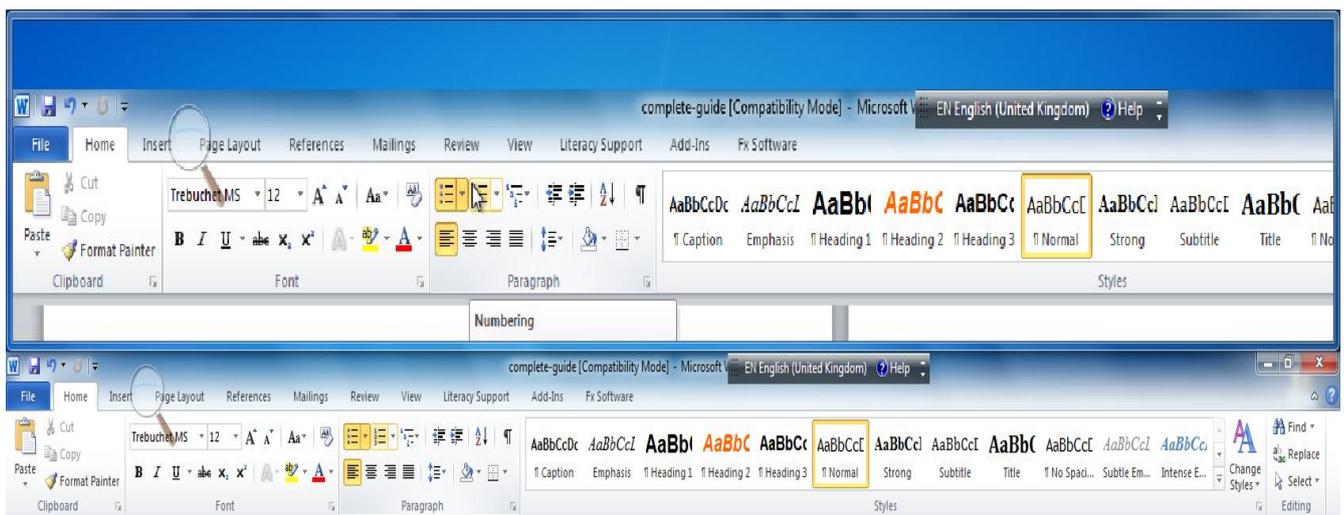


Figure10: Magnification at x 150%.

## **Narrator**

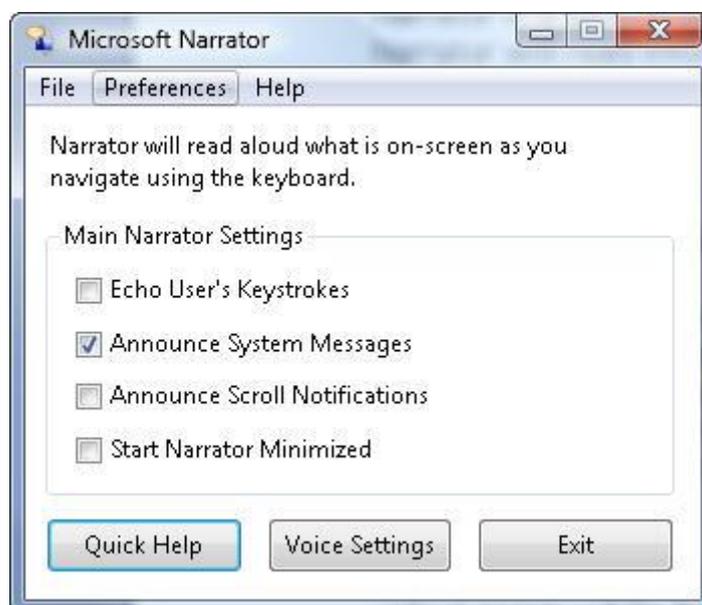
Narrator is a text-to-speech program in Windows 7. This means that Narrator will read information on the screen such as the Windows Start menu and other menu items.

The default synthetic voice in Windows 7 is 'Anna'. However if you have other voices installed on your computer such as Danielle, Emily or Heather, Narrator will read aloud using your preferred option. Narrator can read text in Wordpad and Notepad.

## **Main Features**

The main features of Narrator include:

- The ability to read menus such as 7's Start menu.
- An option to change the speed, rate and volume of the voice.
- The ability to read active windows.
- An option to change synthetic voices.
- The ability to read words and sentences in Wordpad and Notepad.



**Figure 11: Narrator will read menu items.**

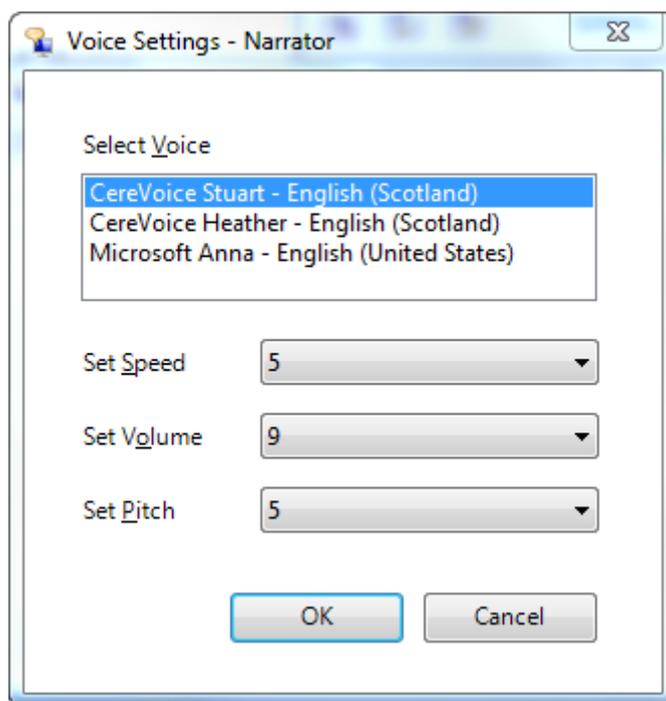


Figure 12: The default voice is Anna but other voices can be used.

## Keyboard Shortcuts

To start Narrator you must first start the Ease of Access Centre:

- Windows logo key  + U

When the Quick access to common tools box start Narrator by pressing:

- Alt + N

## Mouse Actions

To open Ease of Access Centre, go to Start, Control Panel and select the Ease of Access Centre menu icon. Under Quick access to common tools select Start Narrator.

## Additional Information

Although Anna will read text in Notepad and Wordpad, it won't read typed characters in Microsoft Word. It is also worth noting that the Anna synthetic voice is not British but American. Narrator is compatible with any SAPI-compliant voice for users who have other voices installed on their computer.

## Change background colours and font styles and sizes

The background colour, size of font and font style can be changed to suit your individual preference in Windows 7. You can also change the appearance of Windows 7, for example, the window border colour, title bar colour, and many other elements.

**To change the colour scheme of your desktop follow the steps below:**

- Select Start on the Windows menu.
- Select the Control Panel option.
- Select the Personalization Icon.
- When the Personalization panel opens select the Window Colour icon - towards the bottom of the Personalization panel.
- The Window Colour and Appearance panel provides a number of colour schemes to choose from, such as Blue, Red, Orange etc.
- You can activate any one of these options by selecting your preferred choice.

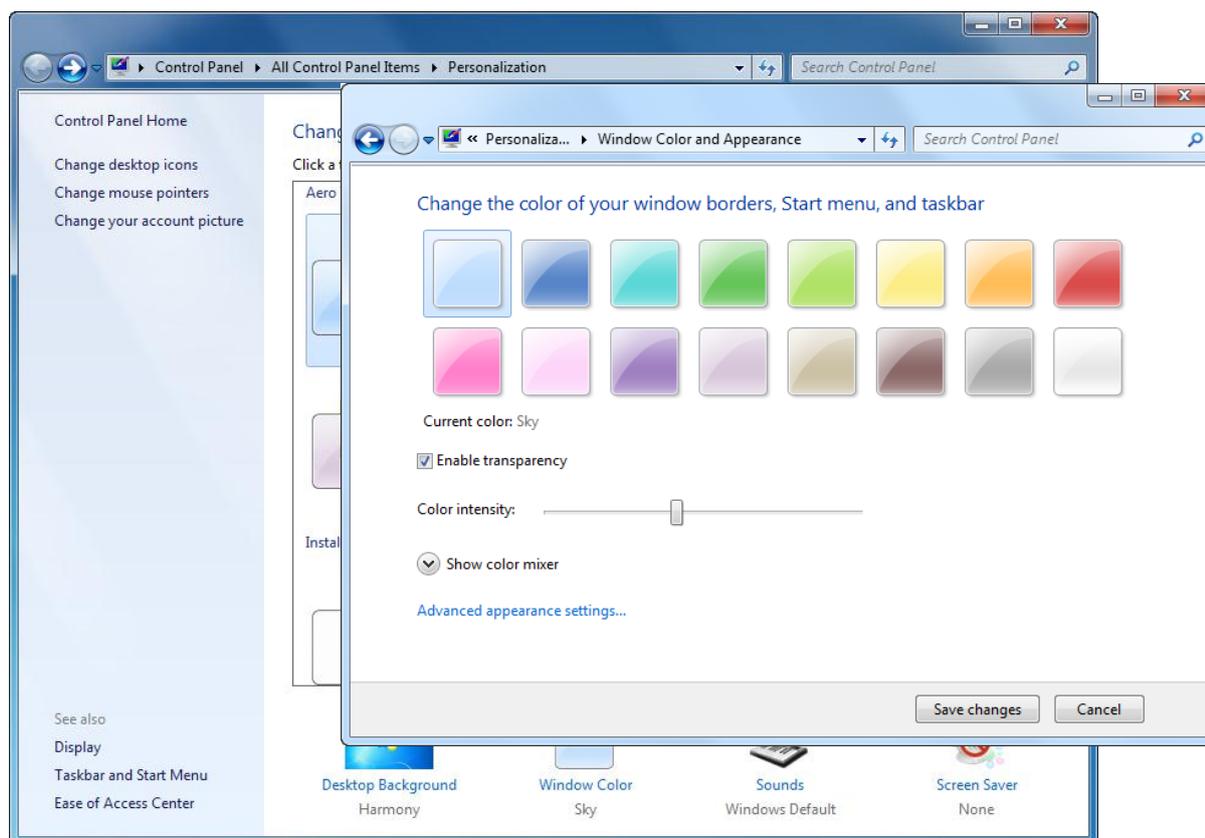


Figure 13: Change the colour of the desktop.

Remember to select 'Save changes' after choosing your colour option.

As you can see from the Window Colour and Appearance panel (Figure 13 & Figure 14) you can choose from a range of colours (16 in total). However, you can also change the 'Colour intensity' by using the slider bar.

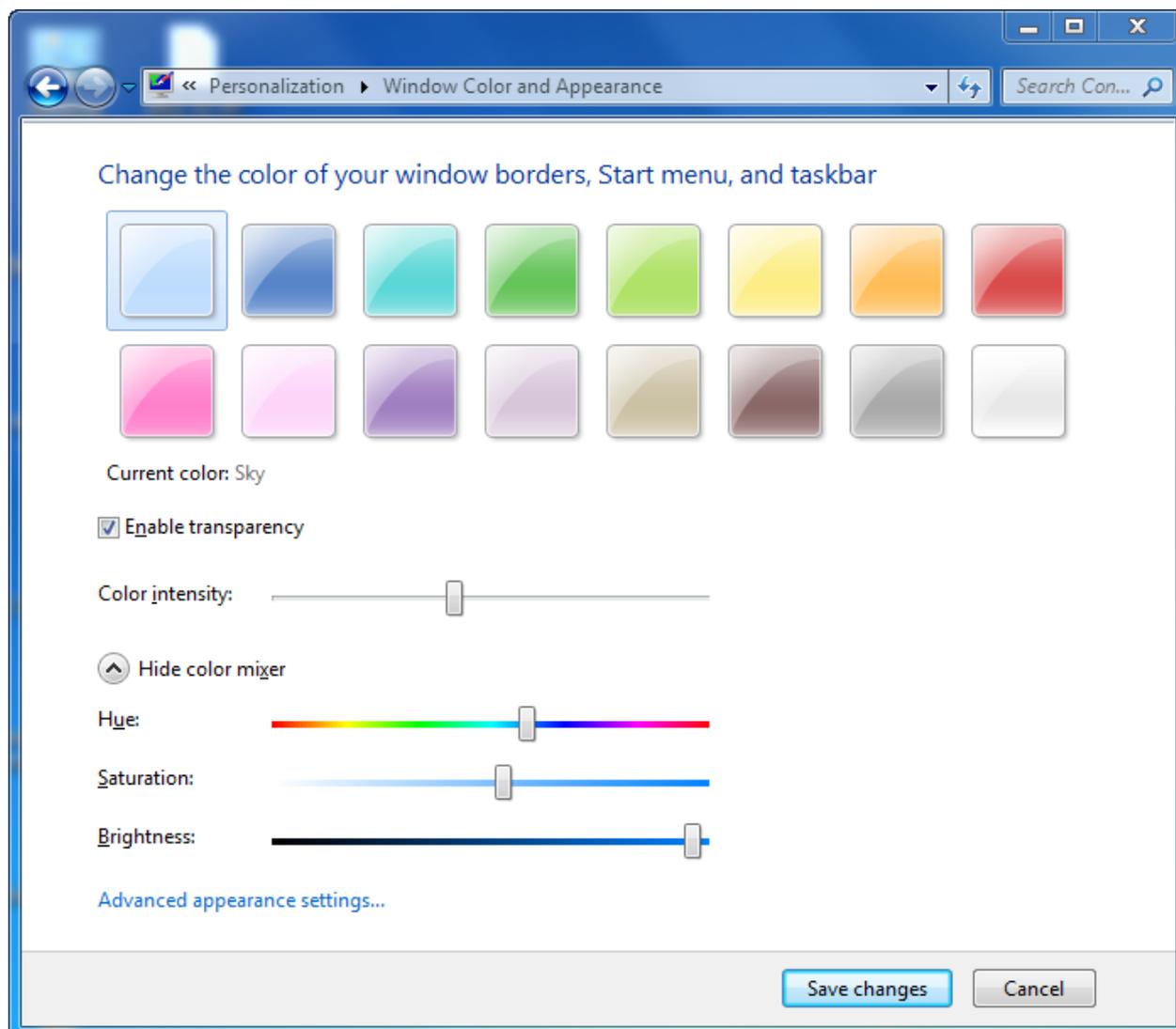


Figure 14: Window Colour and Appearance - Colour Mixer.

### Advanced Appearance Settings

The 'Advanced appearance settings' allows you to make additional colour changes to the Windows environment allowing you to finely tune the desktop and other features exactly as you want it. For example, in Figure 15, you can change the Window Text colour, the the Active Window, the Message Box by simply clicking or selecting each item you want to change.

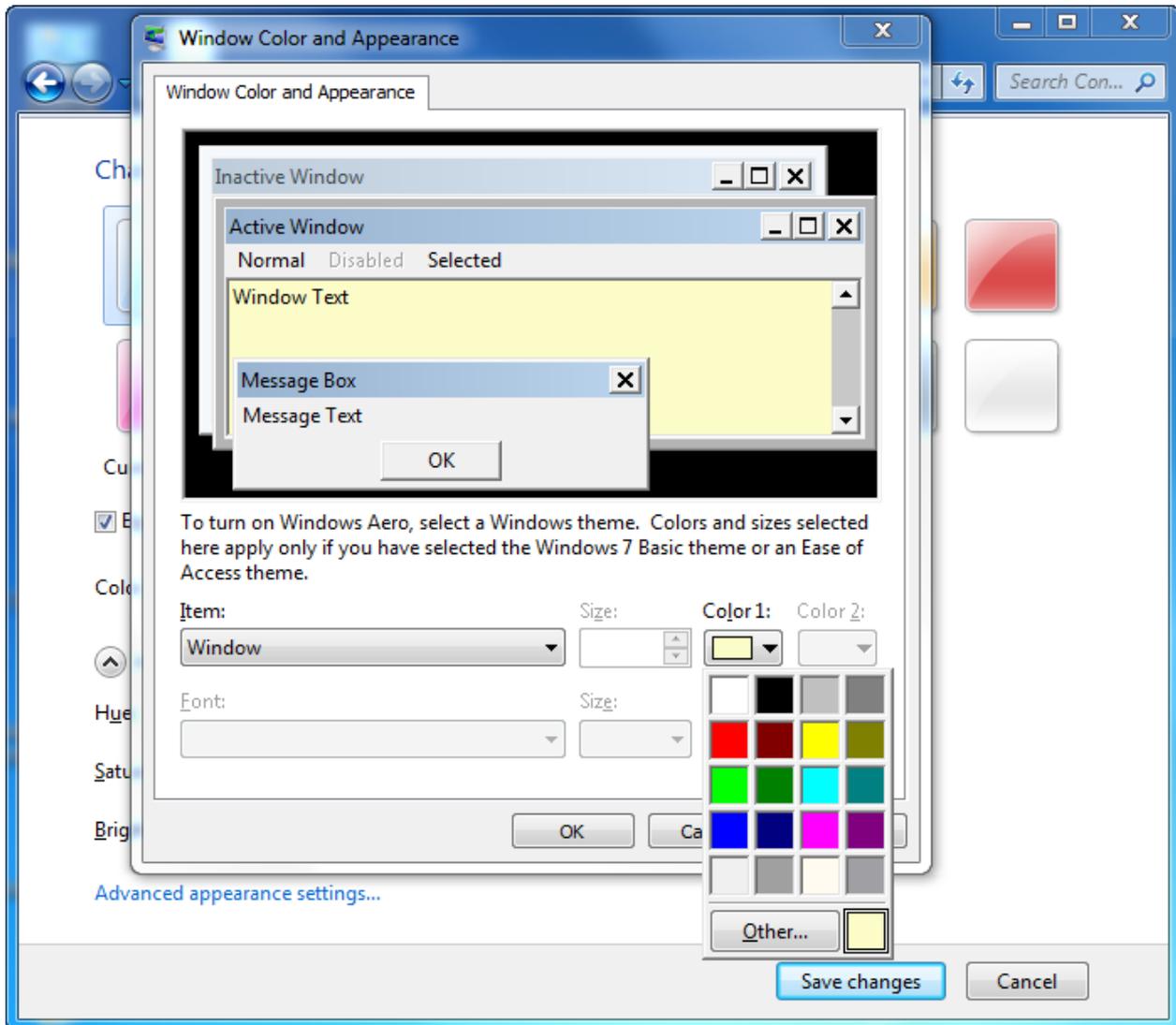


Figure 15: The Advanced Appearance Settings.

In the drop down 'Colour 1' box you can choose from a range of default colours. By selecting 'Other' it is possible to mix and select the colour that best suits your needs.

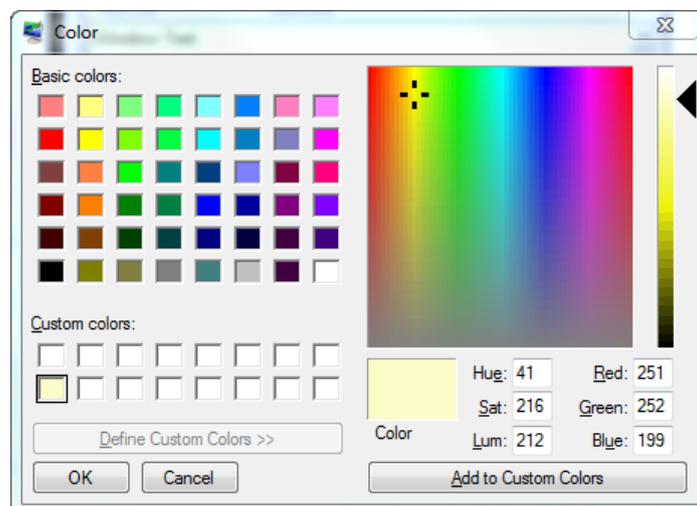


Figure 16: Select the colour that best suits your needs.

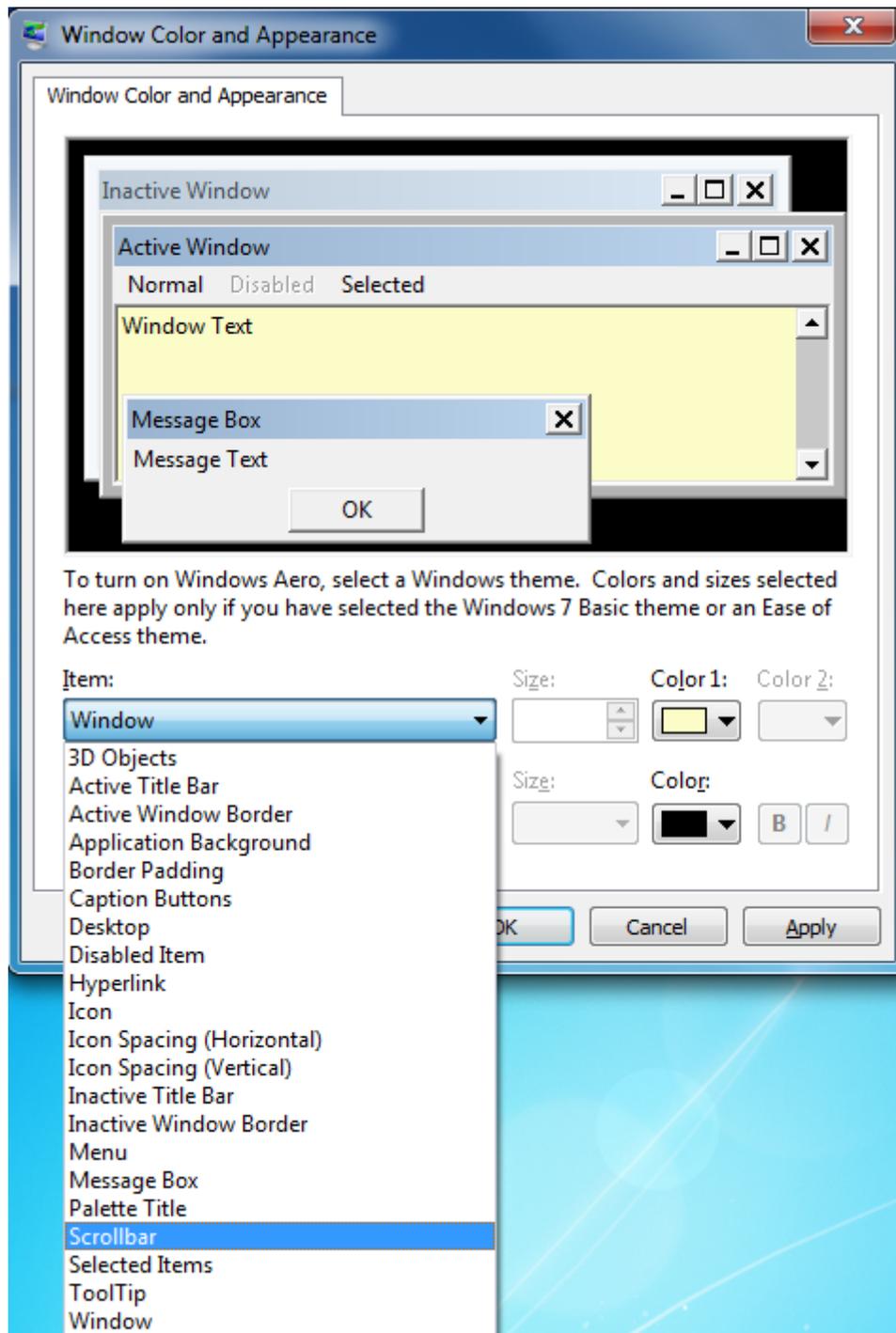


Figure 16: Customise a range of Items in Windows 7.

As well as changing the colour settings in Windows the colour settings will also follow through into other programs such as Microsoft Office, particularly the background in Microsoft Word and in some cases, it can even be set to work in Internet Explorer, although this will depend on the how each web page has been designed.

## Changing the font size on menus and other Window items.

Changing the colour settings can be particularly useful for those learners who find it difficult to read black text on a white background and prefer different settings, such as a yellow background and a black font. However, it is also possible to modify the 'Advanced appearance settings' so that it also benefits users who have visual difficulties and find fonts within Windows menus or Microsoft Word menus (e.g., on the Ribbon) difficult to see or read. For example by selecting the 'Menu' item or 'Active Window' from the Window Colour and Appearance (Advanced appearance settings) you can customise or increase the size and style of the font to suit a range of learning needs.

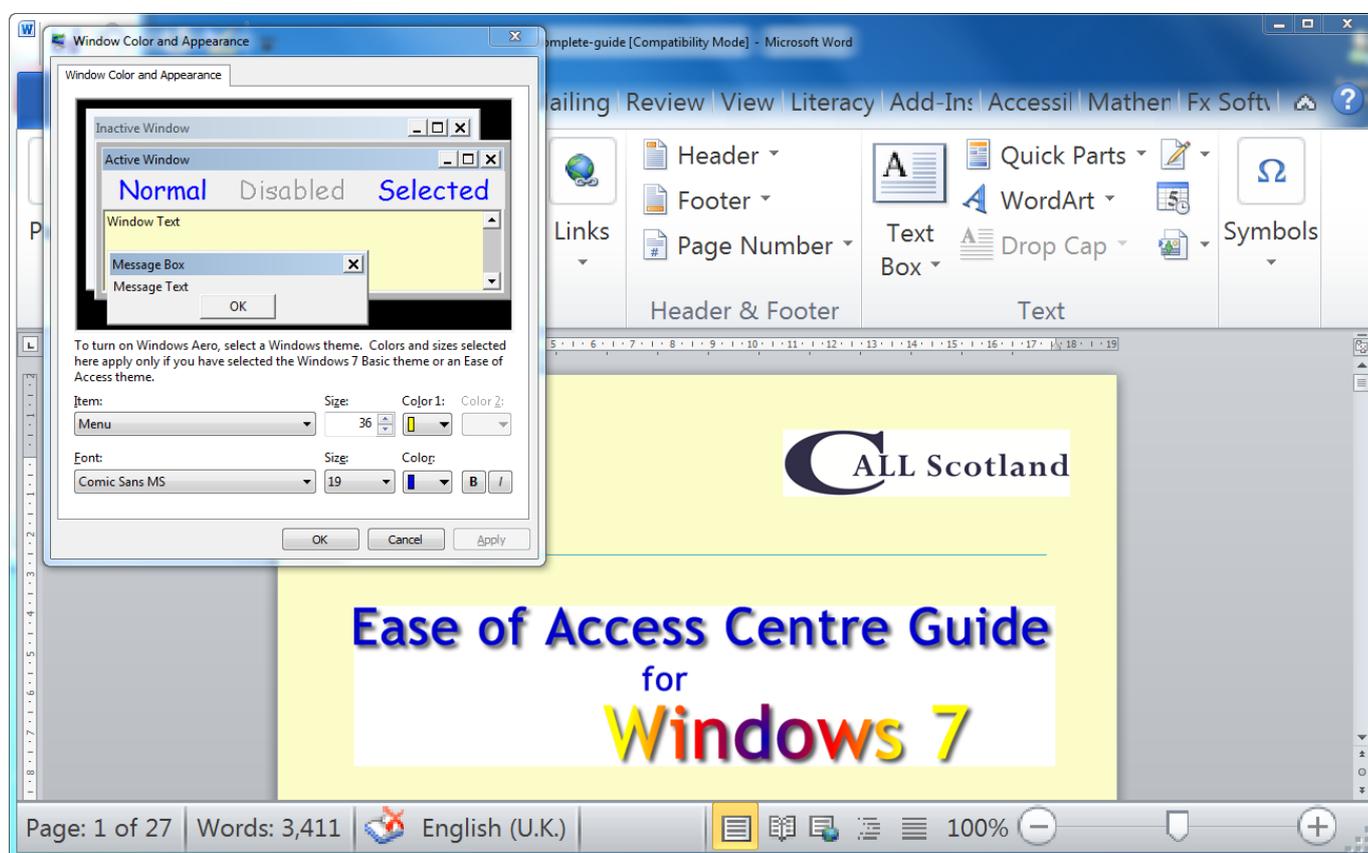


Figure17: Word's Ribbon can be customised to suit a range of learning needs.

As you can see from the illustration above (Figure 18) the font size on menus, toolbars and other items have been increased up to 36pt font.

To return to the Windows default settings, select the Personalization icon in the Control Panel and select the Windows 7 theme.

## Display

As well as using the options in the the 'Advanced appearance settings' the Display option also allows the screen settings to be magnified, up to 150% larger. This includes the size of icons, text and other desktop items making the screen easier to read.

**To finely tune the Display settings of your desktop follow the steps below:**

- Start the Ease of Access Centre.
- Select Make the Computer easier to see.
- Scroll down to Make things on the screen easier to see.
- Select Fine tune display effects.
- Select from Smaller 100%, Medium 125% and Larger 150%.
- Follow the instructions to log off if prompted.

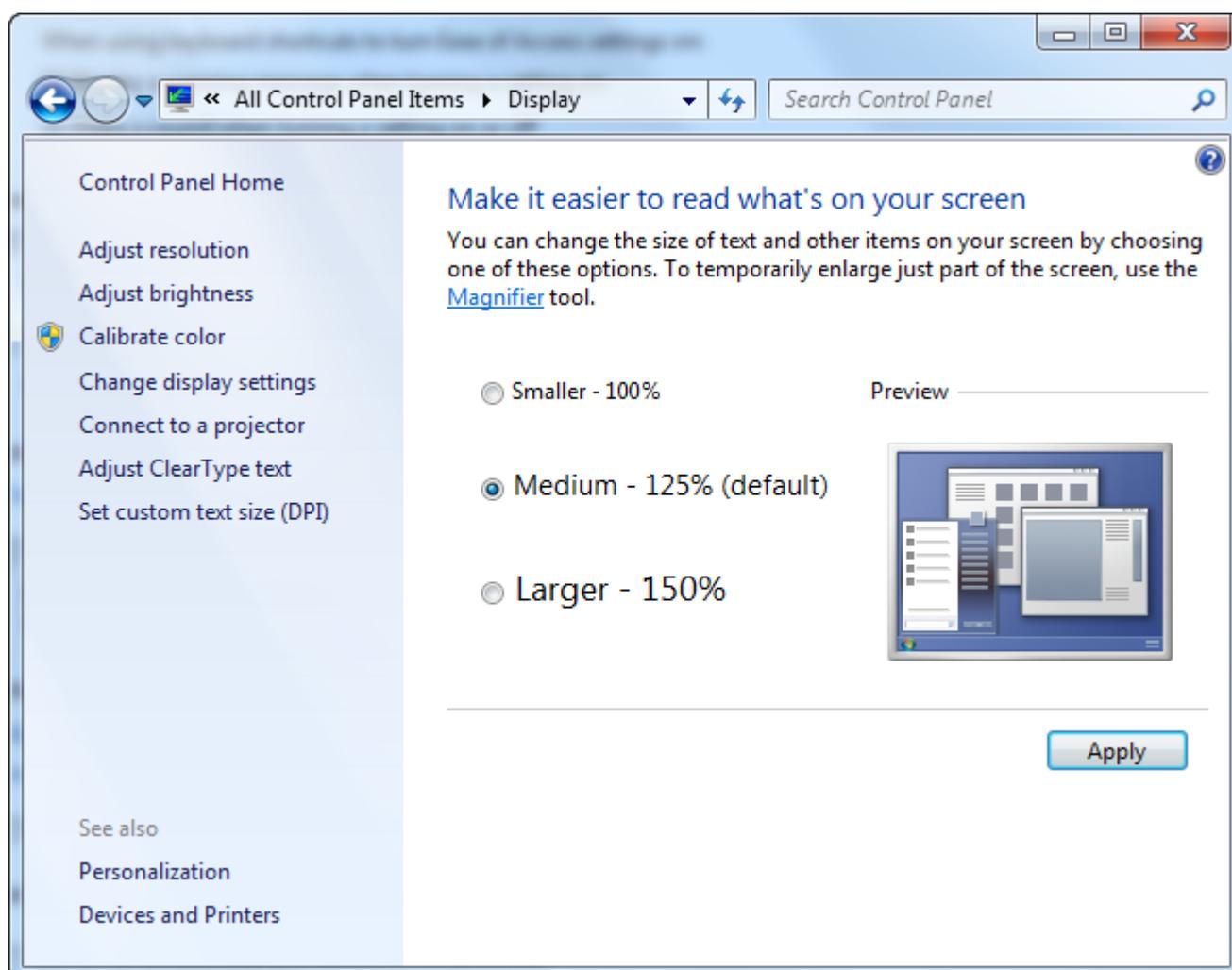


Figure 18: Display settings

## Voice Recognition

Voice recognition allows a user to speak to their computer using software which converts voice into text. Voice recognition in Windows 7 is very powerful and can provide complete computer control by using a range of voice commands. It is particularly useful for those users who have dexterity or mobility difficulties and find a keyboard and/or mouse difficult or impossible to use.

### Main Features

The main features of Voice Recognition include:

- A helpful guide to ensure microphone and voice levels are accurately set up.
- A comprehensive tutorial which is easy to follow.
- Correct spelling options.
- Hands free control.

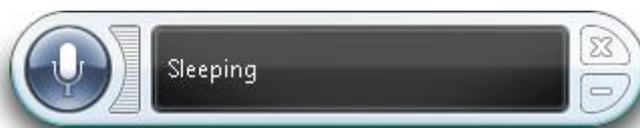


Figure 16: Voice recognition bar in Windows 7

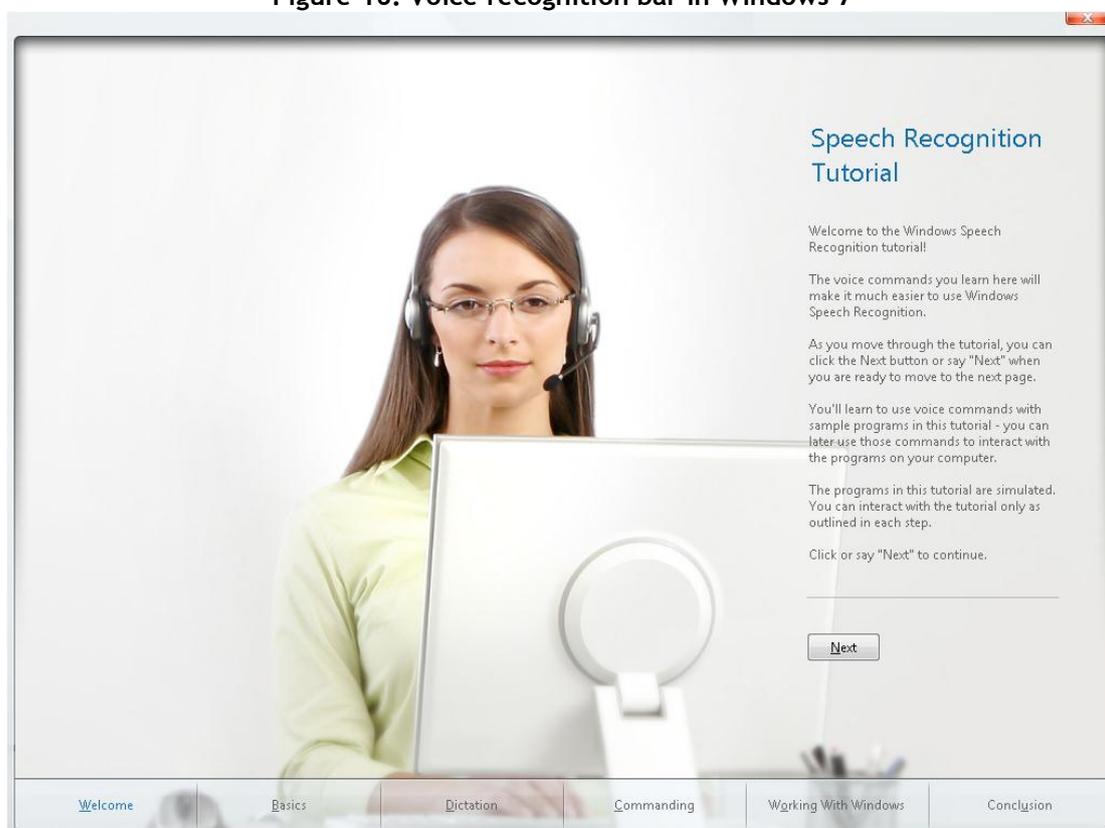


Figure 19: 7's Voice Recognition provides a comprehensive tutorial

## Configure Speech Recognition

The first step is to start Voice Recognition. Go to the Start menu, select Settings, Control Panel and then select the Speech Recognition menu icon. This will activate the Configure your Speech Recognition dialogue box.



It is recommended that you work through each of the items, for example, start with Start Speech Recognition and work through the tutorials in chronological order.



Figure 20: For best results complete all the tutorials

## Overview

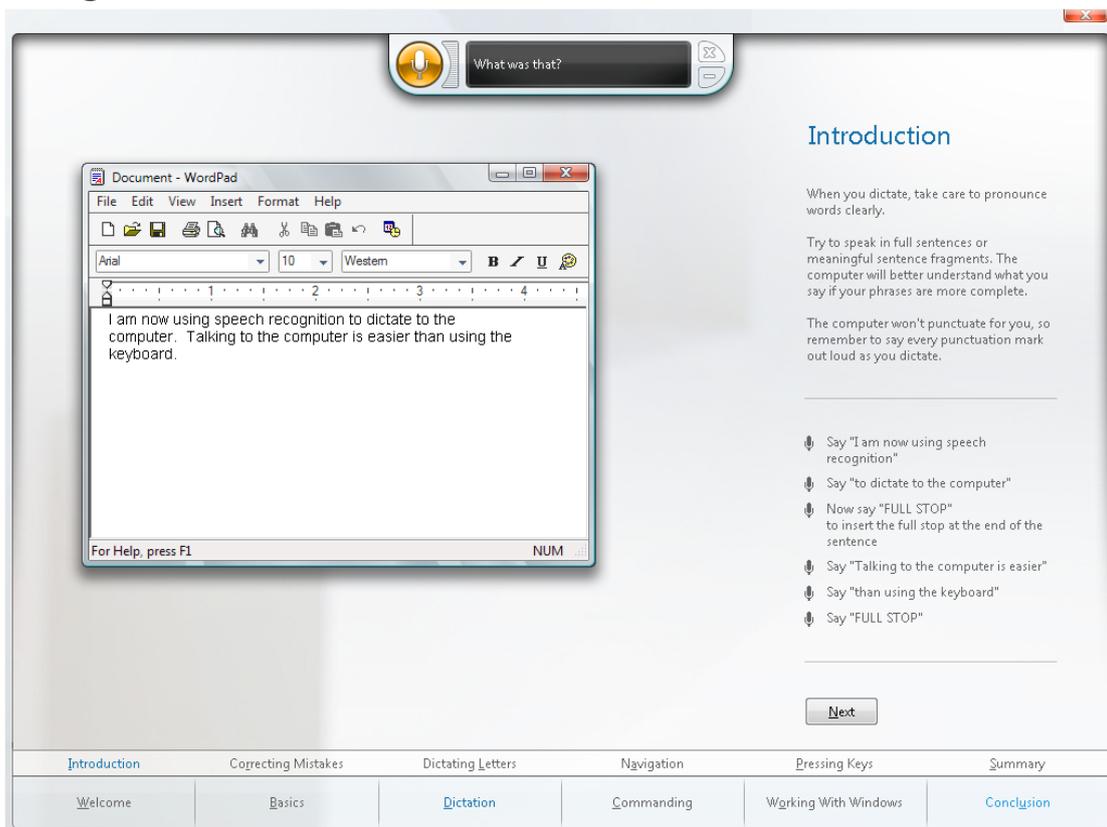
Speech recognition in Windows 7 is a vast improvement on the previous version of XP and is comparable to some of the off-the-shelf programs such as Dragon NaturallySpeaking.

It's worth plugging a microphone into your computer and trying it out.

You will need to work through the tutorials (and practice as much as you can) to benefit from Voice Recognition. However, having done this (which will only take about 5 minutes) it works extremely well.

As part of the training process you'll need to become acquainted with some voice commands such as 'Start Listening', or 'Open Internet Explorer' to maximise the potential of 7's Voice Recognition.

## Voice Recognition tutorials



**Figure 21: The tutorial encourages you to start speaking to your computer**

The tutorial is a 5 stage process, Welcome, Basics, Dictation, Commanding, Working with Windows and Conclusion.

The Basics process will show you how to correct dictation mistakes using voice commands such as ‘spell that’. Dictation provides simple example sentences and phrases to get you used to speaking to your computer.

Navigation introduces you to voice commands such as Start Notepad, Start Internet Explorer etc. You can also use Voice Recognition to simulate key presses, such as Shift + Tab for moving between active programs.

The Conclusion process provides additional training and help.

## On-Screen Keyboard

On-Screen Keyboard allows users to select letters and navigate around a computer using a 'virtual' on-screen keyboard. It is particularly helpful for those who can't use a standard or external keyboard. In Windows 7 the On-Screen keyboard has received a complete revamp from earlier versions. The latest On-Screen keyboard in Windows 7 can be resized and features word prediction.

### Main Features

The main features of On-Screen Keyboard include:

- The ability to control a range of Windows functionality using keystrokes.
- An option to use a mouse or a trackball to input text.
- An option to use alternative devices such as a switch by scanning rows and columns.
- The ability to use automated keystrokes via the dwell feature.

The on-screen keyboard offers word pred|



Figure 22: On Screen Keyboard lets you type, predicts words and interact with your computer.

## On-Screen Keyboard Options

To open the On-Screen Keyboard options select the 'Options' key on the on-screen keyboard. Options features such as Scan through keys (for a switch access user), Hover over keys for auto click typing which can be used in combination with a tracker ball or for users who find mouse clicking difficult.

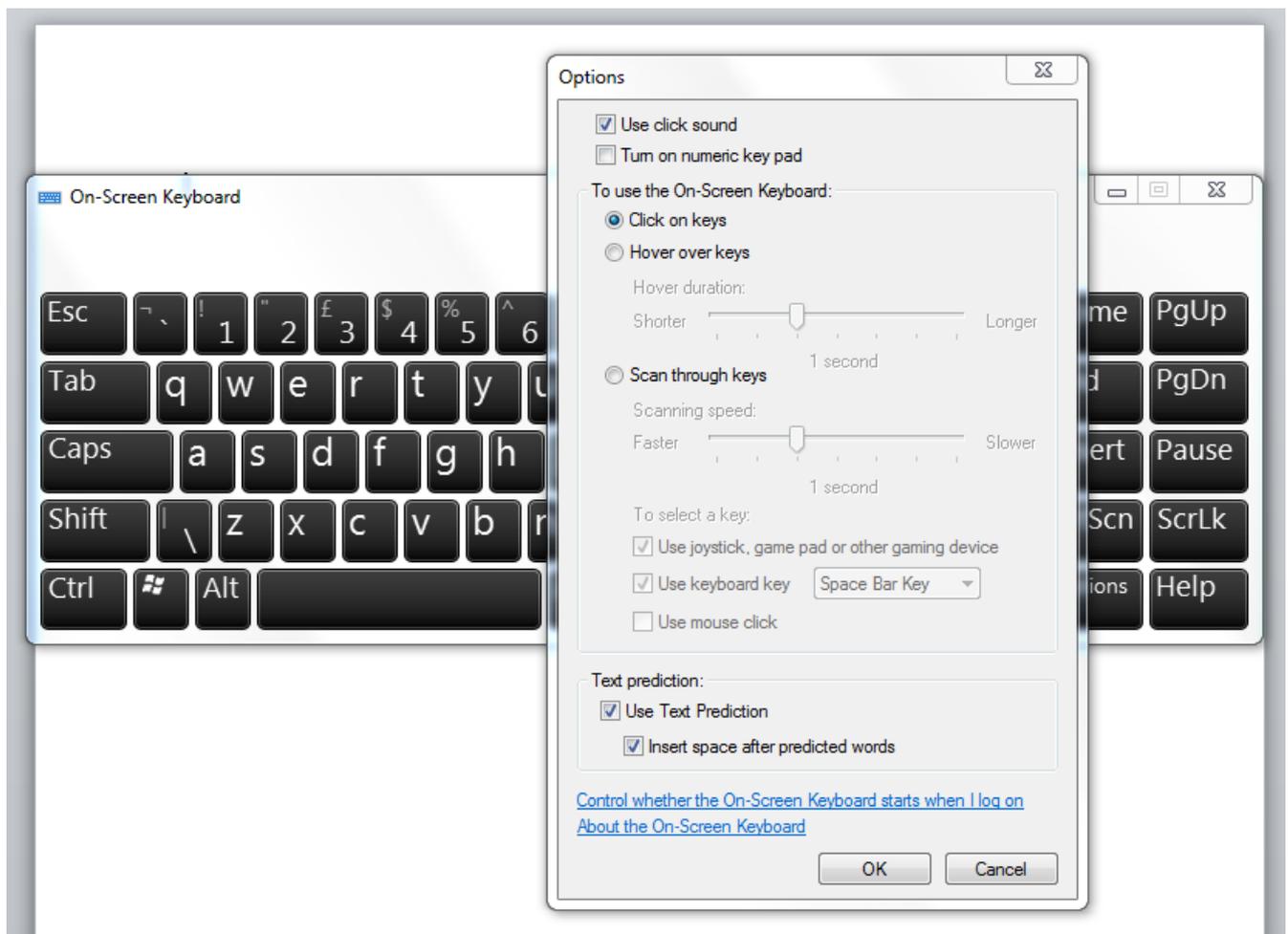


Figure 23: Select the options key on the On-Screen keyboard.

## Keyboard Shortcuts

To start On-Screen Keyboard you must first start the Ease of Access Centre:

- Windows logo key  + U

When the Quick access to common tools box start On-Screen Keyboard by pressing:

- Alt + K

## Mouse Actions

To open Ease of Access Centre, go to Start, Control Panel and select the Ease of Access Centre menu icon. Under Quick access to common tools select Start On-Screen Keyboard.

## Additional Information

On-Screen Keyboard can also be activated by selecting the Explore all settings then by selecting Use the computer without a mouse or keyboard.

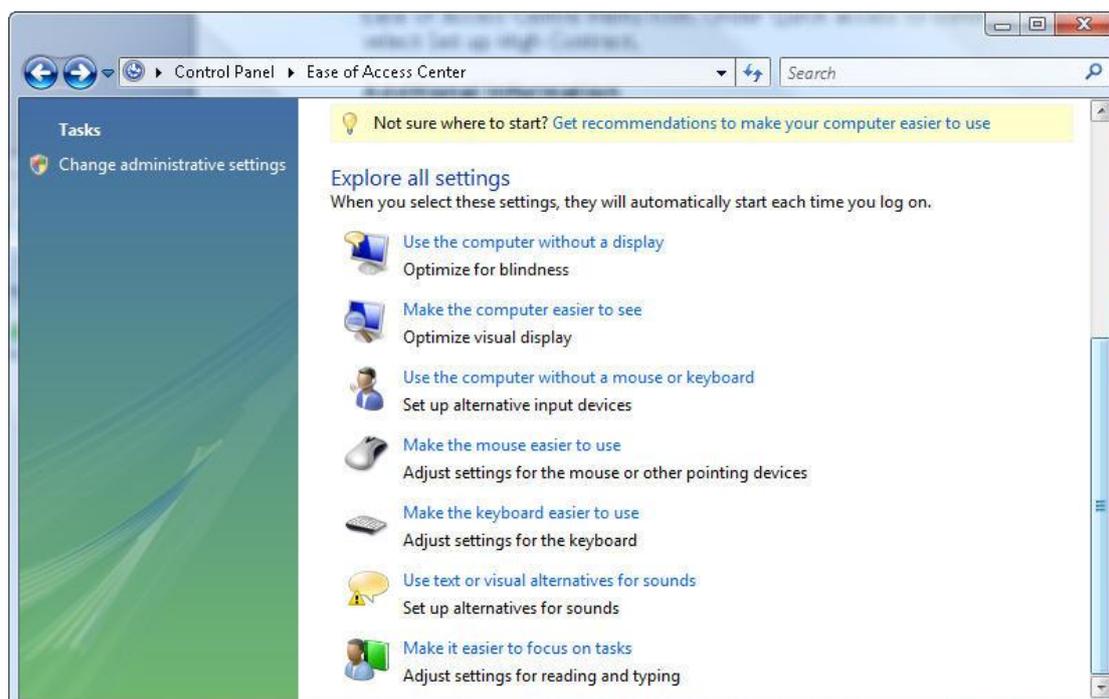


Figure 24: Explore all settings provides quick access to a range of Windows 7 features.

## Mouse Keys

Mouse Keys allows you to use the arrow keys on your keyboard's numeric keypad to move the mouse. The numeric keypad is situated to the right hand side of the keyboard. Mouse Keys can also be used with an external numeric keypad.

### Main Features

The main features of Mouse Keys include:

- The ability to control all aspects of the desktop with the numeric keypad.
- An option to simulate mouse click and drag /drop actions.
- Adjustable mouse speeds.

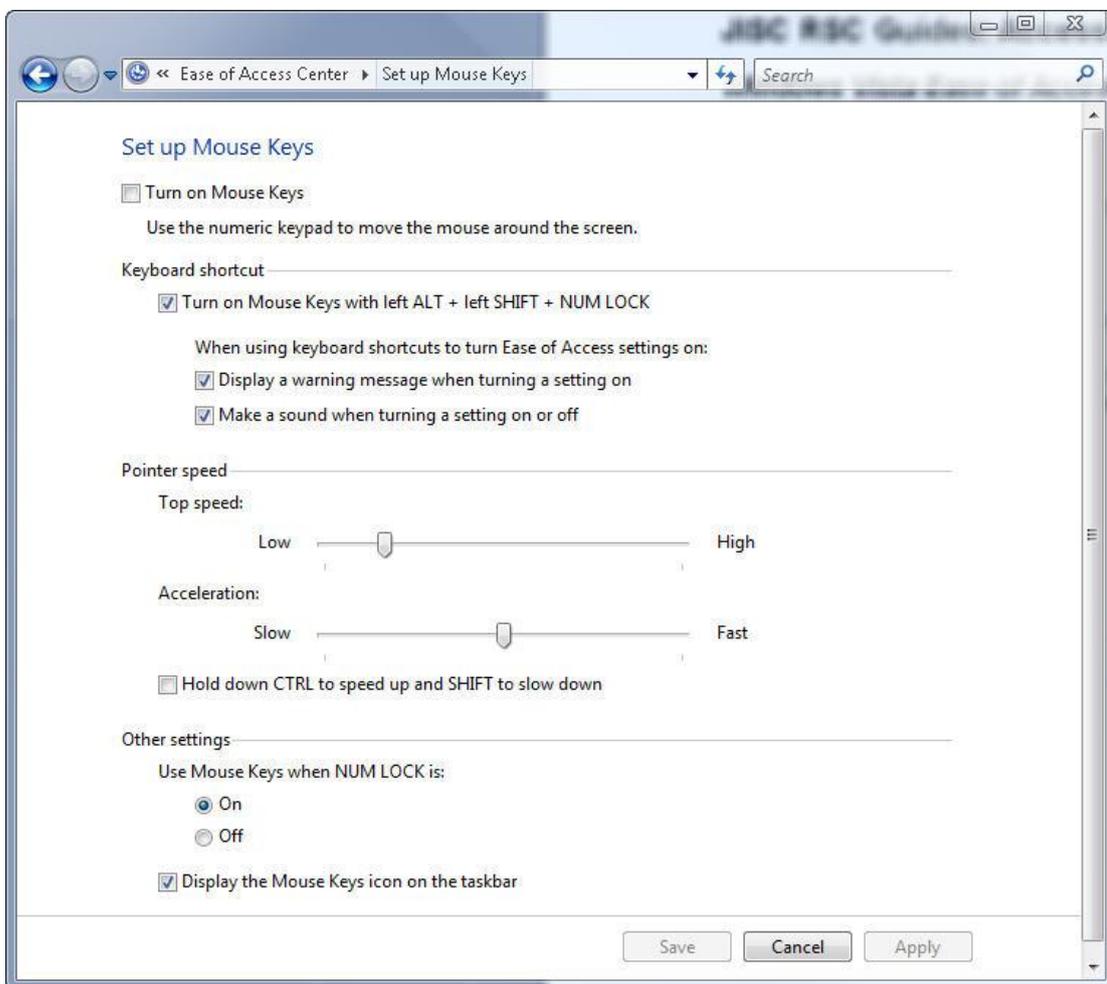


Figure 25: Set up mouse keys allows you to control the pointer speed.

## Keyboard Shortcuts

To start On-Screen Keyboard you must first start the Ease of Access Centre:

- Windows logo key  + U

Under Explore all settings select:

- Press the tab key until you come to the Make the mouse easier to use item. Press the Enter key to activate the Mouse Keys dialogue box.

Under Control the mouse with the keyboard select:

- Turn on Mouse Keys by pressing Alt + M.

## Mouse Actions

To open Ease of Access Centre, go to Start, Control Panel and select the Ease of Access Centre menu icon. Under Explore all settings, select Make the mouse easier to use. Finally, under Control the mouse with the keyboard, select Turn on Mouse Keys.

## Additional Information

- To move the mouse pointer right press the number 6 key on the keypad.
- To move the mouse pointer left press the number 4 key on the keypad.
- To move the mouse pointer up press the number 8 key on the keypad.
- To move the mouse pointer down press the number 2 key on the keypad.
- To select an item (mouse click) press the number 5 key on the keypad.
- To click and drag press the Ins (Insert key).
- You can also move the mouse pointer diagonal up left diagonal down left, etc by pressing the corresponding keys 7, 1, 9 and 3.



## ***Call Scotland***

### **Innovative inclusive learning resources**

#### **Contact**

CALL (Communication, Access, Literacy and Learning) Scotland is a small unit within the Moray House School of Education, The University of Edinburgh. CALL is both a Service and a Research Unit. Service activity is limited by the amount of staff time available, but is open to anyone in Scotland concerned with communication difficulties, particularly in a learning context.

If you'd like to find out more please contact CALL on: 0131 651 6235/6236 or visit the website: [www.callscotland.org.uk/Home/](http://www.callscotland.org.uk/Home/)