

Chapter 10

Screenreaders

Screenreaders allow you to access and use the computer, without the need to see the screen. There are many Universal Key Commands that will work on a computer whether you are using a screenreader or not. Key combinations such as Alt F4 to close a running program, Control “s” to save, Alt Tab to move between running programs, are all Universal Key commands. When you decide which screenreader or screenreaders you will use, you will know that each one of them can partially used with Universal Key Commands. For those key commands that are screenreader specific, there is a “Help” menu built into each screenreader, which contains how to and lists of key commands. You in later chapters will learn to do a web search with the Google search engine—you will be able to search for lists of key commands specific to the screenreader you are using, or the program you are using. Microsoft has a number of web pages filled with key commands for specific programs such as Microsoft Word, Microsoft Excel, Microsoft Outlook, and others.

There are commercial level screenreaders, or screenreaders that you pay money for. The major screenreaders in the United States are JAWS, WinEyes, and System Access. In the European countries there is a screenreader called Hal, which comes under a larger name of Dolphin.

Major free screenreaders are also available. There is a screenreader that can only be used if you are connected to the internet. Go to the www.satogo.com web site and follow the directions for starting this screenreader. As long as that web page is open, you can use this free screenreader to explore other web pages, do email, use your basic Windows, and Windows programs. Another free screenreader is NVDA. This screenreader is downloaded and installed onto your computer.

There are a number of screenreaders that now work from a USB memory stick. This means that the program is installed on the stick, and can be used on most Windows based computers. In the case of JAWS, a program from the USB memory stick will install onto the computer that you plug the stick into. After that, you have the use of JAWS on that computer, without installing the JAWS program on the computer. This is great for portability—there is one issue with the USB memory stick method for using a

screenreader: many places such as the local library will not allow you to insert a USB memory stick into their computer for security and safety reasons.

Note: Screenreaders are beginning to come in 32 bit and 64 bit form. Make sure you know if your computer is running the 32 bit version or the 64 bit version of Windows. Most computers before the year 2009 will be running the 32 bit version of Windows.

Note: When you install either the JAWS or the WinEyes screenreader you will be asked if you want this screenreader to automatically start after you turn on your computer. You want to answer “Yes” to this question unless you are more advanced and are using more than one screenreader.

Note: If you use the NVDA screenreader you can make a menu shortcut, or a Windows Desktop icon. If you use a Desktop icon, press and hold down the Windows/Start Key and tap the letter “m” one time. Tap the letter “n.” Tap the Enter Key one time. If you have more than one icon beginning with the letter “n,” you might have to experiment with the number of times you tap “n” before tapping the Enter Key—on method is to move to the Windows Desktop, press Control Home to make sure you are at the top left, and then begin tapping the letter “n.” You will probably want to make a hotkey over this NVDA icon so that in future uses you can press the hotkey combination to start NVDA. If you are using the default screen setup in Windows Vista or Windows 7, tap the Windows/Start Key one time. Type “NVDA” (without the quotes), and then tap the Enter Key one time to start NVDA.

Key Commands Taught in this Book

Most of the key commands taught in the chapters of this book prior to the chapters covering the internet and email, will be Universal Key Commands. These commands will work in most cases, no matter which screenreader you are using. In the Internet and Email chapters, specific screenreader key commands will be given.

The web sites where the screenreaders covered in this chapter are located are as follows:

JAWS www.freedomscientific.com

WinEyes www.gwmicro.com

System Access Stand-Alone (the paid, stand-alone version of SATOGO)

<http://serotek.com/system-access-standalone>

SATOGO www.satogo.com

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

Hal <http://www.yourdolphins.com/productdetail.asp?id=5>

There are other screenreaders and web readers, but the results are not as good as for the above screenreaders.

SATOGO Screenreader

If you are going to be using a computer that is connected to the internet and cannot afford a commercial level screenreader, you can press the Windows Key and tap the letter “r.” Release these keys. Type www.sagoto.com. Tap the Enter Key one time and wait a moment to hear the directions. Generally SATOGO will tell you to tap the Enter Key (one time). After a moment it will tell you to press Alt “r” (press and hold down the Alt Key and tap the letter “r” one time). After another moment SATAGO will tell you to press Alt “r” again. In another moment a dialogue box will come up that let’s you set up a free user account. In the beginning, assuming that you do not yet have an email account, tap the Tab Key until you hear something like “login without user settings.” Tap the spacebar one time on this button and SATOGO will be started. Press and hold down the Windows Key and tap the letter “m” to minimize the SATOGO web page. Now, you can use Windows, programs, internet and email with a fully operational screenreader.

NVDA Screenreader

If you want to use a screenreader that is install on your computer or on a USB memory stick, that is free, NVDA will work. If you are connected to the internet and do not have a friend who is sighted to help obtain the NVDA program, use SATOGO to make your computer accessible, go to the <http://www.nvda-project.org/> web site, download and install the program. Now, you have a fully functioning screenreader, whether you have access to the internet or not. If you do not have access to the internet, you might ask a friend to download the NVDA program for you, and then help you to install it. We really cannot use the Windows “Narrator” screenreader for the preceding because it mainly reads menu items and icons, but not text (unless you are in Windows NotePad).

JAWS Screenreader

You can download a demo copy of the JAWS screenreader from the www.freedomscientific.com web site. Once installed on either your computer or a USB memory stick, the JAWS demo will run for forty-minutes and then you will need to restart your computer. If you have access to the internet and no one to help you, bring up the www.satogo.com screenreader, move to the www.freedomscientific.com web site, find the demo of the JAWS screenreader, download and install it. Each time you start JAWS, or reboot (restart) your computer and JAWS comes up, it will ask you to authorize it. Tap the Escape Key one time and you will be able to use JAWS for the next forty minutes—reboot your computer after the forty minutes are up and you will be able to use JAWS for forty more minutes. **Hint:** If you download a full copy of JAWS you will be able to use it as a demo without the worry of the demo ending after so many weeks.

WinEyes Screenreader

To download a demo of the WinEyes screenreader you will have to first fill out a form. You can find this form at the following web site: <http://www.gwmicro.com/Window-Eyes/Demo/> Answer the questions and then you can either download WinEyes or request that a free demo CD be sent to you. WinEyes will run in a forty minute mode, and then you will have to reboot (restart) your computer to use WinEyes for another forty minutes.

Hal Screenreader

Remember, HAL is a commercial level screenreader from Europe, and it will cost money to obtain the full version. You can go to the “Try It” or “Download a Demo” link on the <http://www.yourdolphin.com/productdetail.asp?id=5> web site. You will have to fill out a form before you can download this program.

Screenreader Help and Hot Keys

You can do a Google (www.google.com) web search by typing the name of your screenreader and words such as “hot keys,” or “short cut keys,” and then tap the Enter Key one time. There will be a page of links which might help you find what you want. You might try putting an opening quote (Shift Comma) before the text you write and a close quote (Shift Comma) after the text you write to narrow the search results.

You can also find the short cut keys for your screenreader in the “Help” menu of your screenreader. Press and hold down the Alt Key and tap the Tab Key until you hear your screenreader name. Release these keys and the main program of your screenreader is accessible to you. It is important to note that you have to register for a PIN number if you are using the free www.satogo.com screenreader, to access the help and short cut keys list. Try pressing and holding down the Alt Key and tapping the letter “h” to access the Help menu of your screenreader. If this does not work, tap the Alt Key one time to place you in the screenreader menus, and then use your right arrow key until you hear something like “Help.” When you find the menu you want, tap the down arrow key to open it, and then down arrow to see what kind of help is there.

The Help areas of both JAWS and WinEyes use a group of buttons or tabs at the top, a list of “Help” items on the left side, and a description of the Help item you have tapped the Enter Key on, on the right side. To move between the list of Help items and the text describing them, tap the F6 Key. Once you are on the text for the item you can selected it should begin to read. If reading does not automatically start, issue the “read-all” key command for your screenreader. The read-all key command for JAWS is Insert down arrow (press and hold the Insert Key, tap the down arrow key, and then release both keys). For the WinEyes screenreader, press and hold down the Control and Shift Keys, and tap the letter “r.” Release these keys and WinEyes will start reading.

If you are using the NVDA screenreader, press and hold down the Insert Key and tap the letter “n.” This will bring up the menu for NVDA. Down arrow to either “Help” or “Shortcut Keys,” and tap the Enter Key one time to go there. If you select “Shortcut Keys,” a notepad document will open. Either tap the Plus (+) Key on the Num Pad to read all of the document at one time, or use your down arrow key to read line-by-line.

Tutorials and Manuals for the JAWS and WinEyes Screenreaders

JAWS and WinEyes both have excellent documentation and tutorials. Each has the manual built-in, and audio tutorials which can be downloaded to your computer. If you have a dial-up connection (phone line), and not DSL, Cable, or some other high speed connection, this will take time.

JAWS On-Line Resources

You can download DAISY Book (audio and text combined) or MP3 audio training files for the JAWS screenreader from the following web site. Note: If you do not have a DAISY Player on install on your computer, or on a reading device that you will use, select the MP3 files for download. The site is:

<http://www.freedomscientific.com/Training/training-archives.asp>.

Another good training web page for the newer JAWS is

<http://www.freedomscientific.com/training/JAWS-training-hq.asp>.

FreedomScientific will add more training web pages as newer JAWS versions are released. Keep checking the www.freedomscientific.com/training/ web site to stay current with commands and uses for the JAWS screenreader.

“Surf’s Up” is a set of training web pages for JAWS and the internet. You can use these pages on-line, or download them to your computer. The link to the FreedomScientific “Surf’s Up” starting web page is: [http://www.freedomscientific.com/training/Surfs-Up/ Surfs Up Start Here.htm](http://www.freedomscientific.com/training/Surfs-Up/Surfs_Up_Start_Here.htm).

WinEyes On-Line Resources

The WinEyes manual can be found at the following web site:

<http://www.gwmicro.com/Window-Eyes/Manual/>. When you go to this page there are four options for obtaining the manual. If you select the HTML version, the manual will come up on your internet screen and you can read it as a web page. You can select the manual by chapters under “Text Sections,” or you can download the entire WinEyes manual by tapping the Enter Key on the “Text—Single File” selection. **Note:** The WinEyes manual is built into the Help menu of WinEyes.

WinEyes tutorials can be found at the following web site:

http://www.gwmicro.com/Audio_Video_Archive/Window-Eyes_Tutorials/. When this web page comes up it will be in a table. There will be a number of topics, follow by three graphical items. You can use the graphical “Audio” link for a sound file to download, the graphical audio link to play the audio file from the internet, or the graphical file link to display the text for the audio tutorial on the internet. If you pick the third graphical item, the text will instantly be displayed on the web page, and you can

save this text to your computer, or simply listen to it with your WinEyes screenreader by issuing the read-all key combination (Control Shift "r").

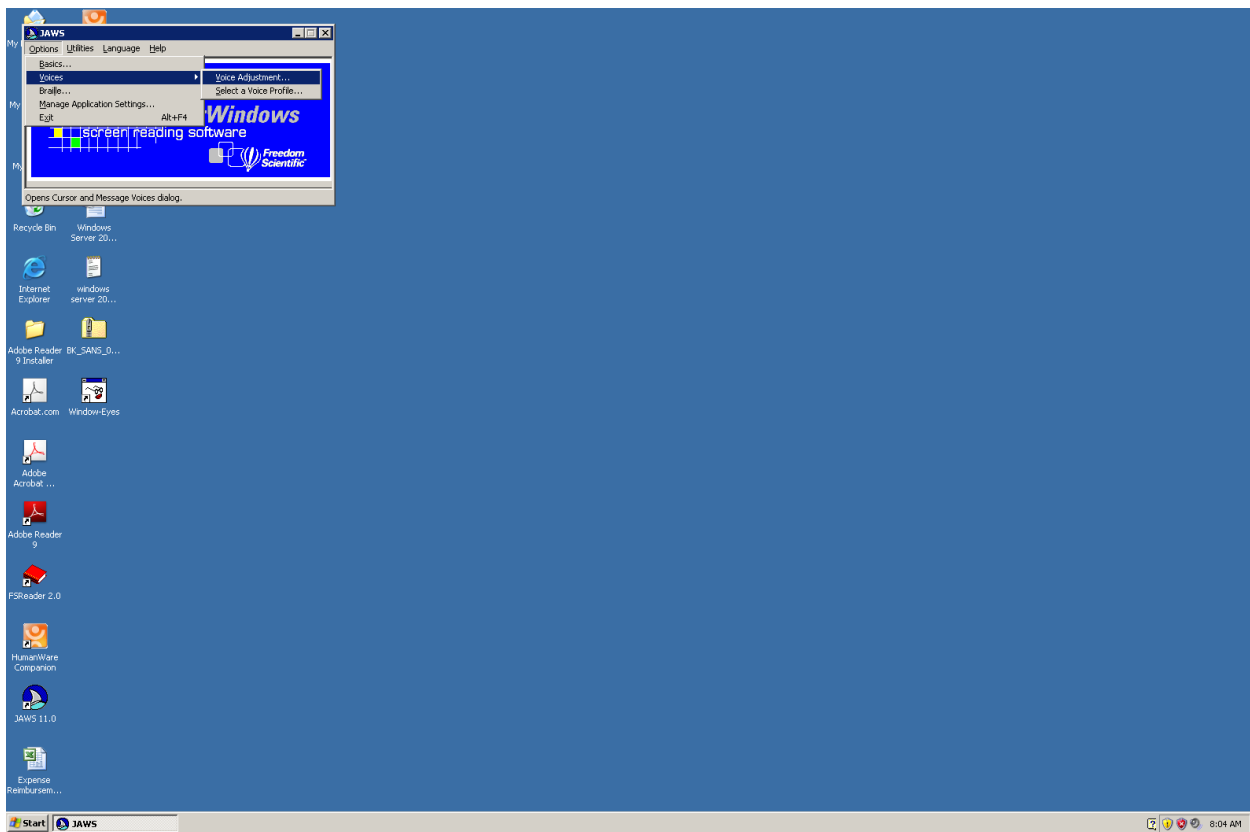
Voice Settings

Note: Screenreaders are constantly changing, therefore the menus and settings described for voice changes might differ in the version you use.

Voice Settings for the JAWS Screenreader

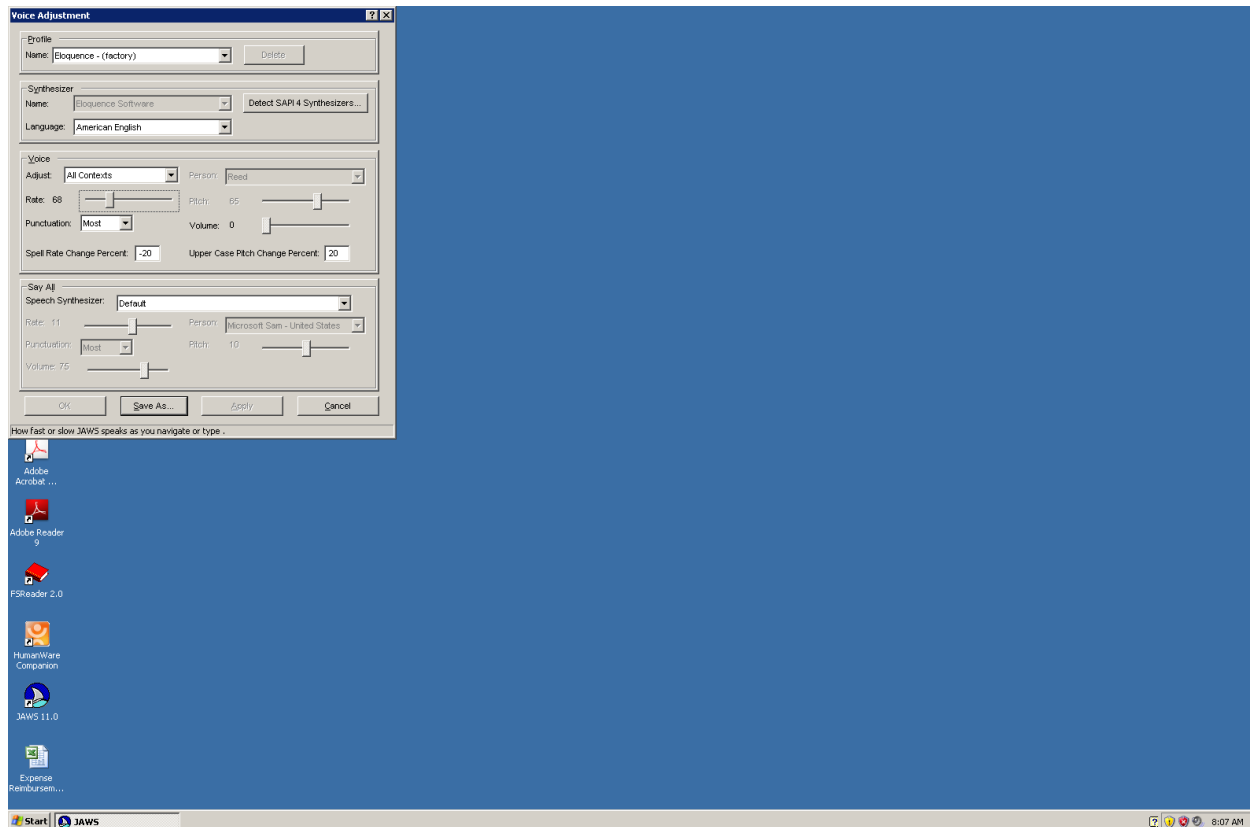
If you are using the JAWS screenreader press and hold down the Insert Key and tap the letter “j” one time—release these keys. Another way to move to the JAWS program is to press and hold down the Alt Key, tap the Tab Key until you hear the word “JAWS,” and then release both keys. Tap the Alt Key one time. Down arrow to “Voices.” Tap the right arrow key one time and you will hear “Voice Adjustment.”

Screenshot of the “Voice Adjustment” menu item highlighted on the JAWS program.



Tap the Enter Key one time on the “Voice Adjustment” menu item and a combo box will come up that you can Tab through to set the voice for JAWS. Tab to the “Rate” slider and then practice using Page Up, Page Down, or your left and right arrow keys to change the speed of the JAWS voice. Tab to the “Save As” button and tap the spacebar one time. A save type of box will appear with the word “Eloquence” highlighted. Tap the Enter Key one time and you will save the new JAWS voice speed. Tab to the “OK” button and tap the spacebar one time and this dialogue box will close. You will be back at the main JAWS program screen. There are many other items to select in the dialogue box we just closed. Voice engines are the default (what JAWS starts with after installed) “Eloquence,” and a “SAPI” voice engine that you can select. There is a combo box for different languages, amount of punctuation spoken, and so on. You will want to explore this box to determine how to set the JAWS voice for your needs. Also, in some of the “Help” and in a tutorial, this area is covered in detail.

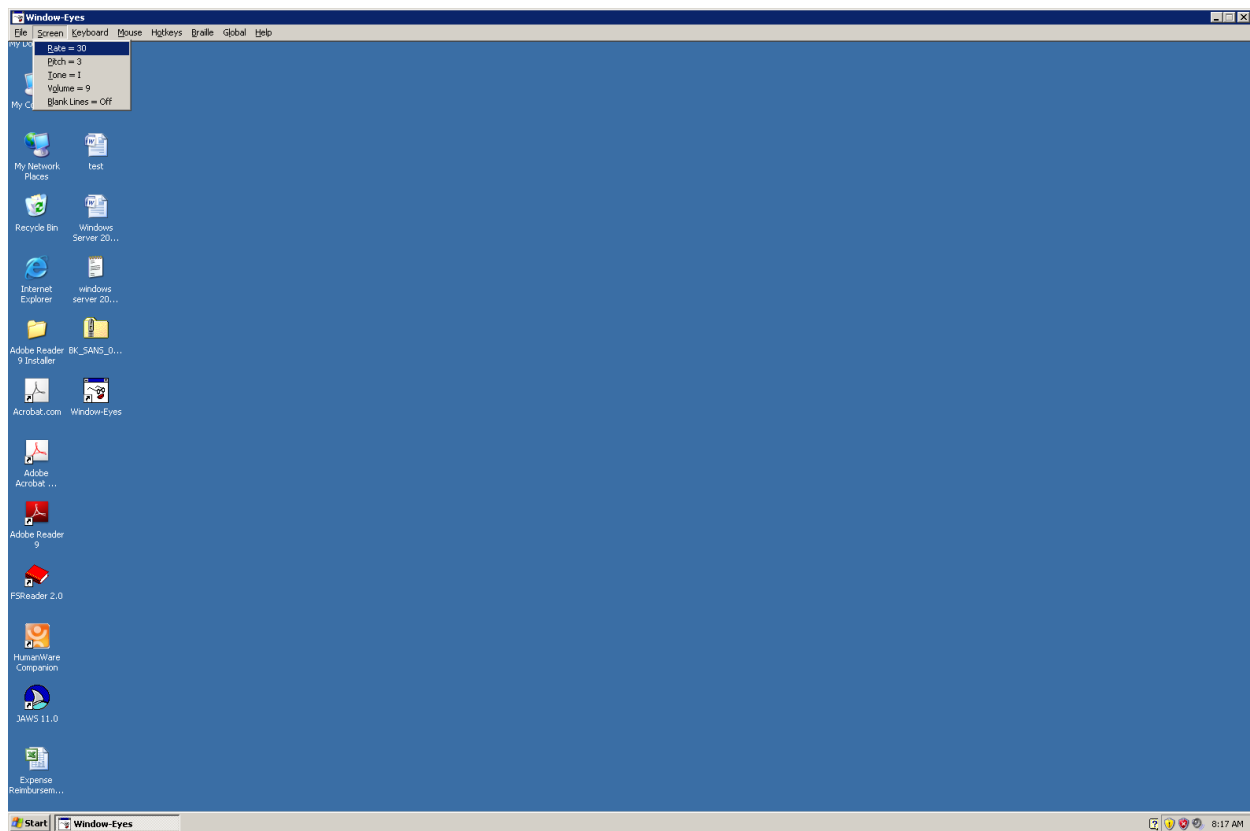
Screenshot of JAWS “Rate” slider highlighted.



Voice Settings and the WinEyes Screenreader

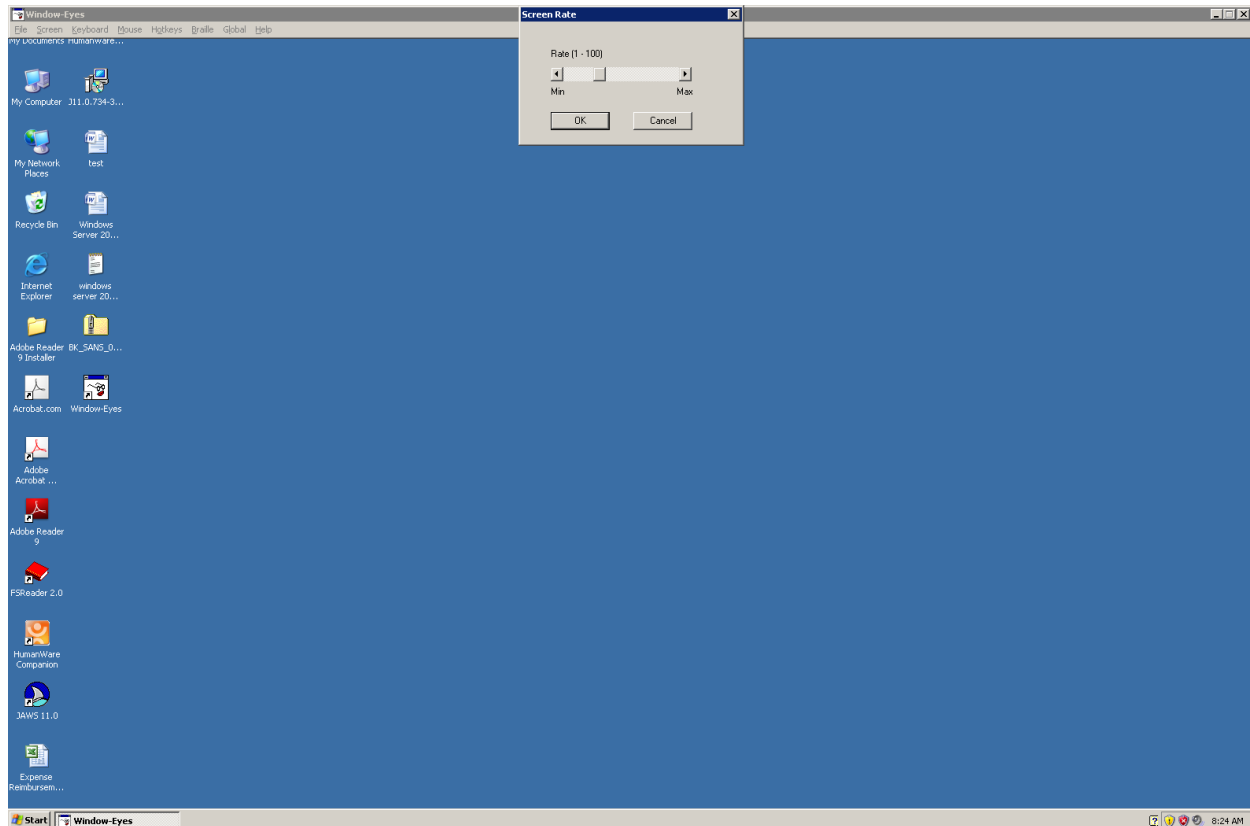
If you are using WinEyes screenreader, you will be working with a menu system that has many individual menus for setting the way WinEyes works. Tap the Alt Key one time. Use your right arrow key to move from left-to-right across the many WinEyes menus. Three menus that you need to focus on in the beginning are “Screen, Keyboard and Mouse.” Each of these three menus allow you to set the voice characteristics for the screen, the keyboard, and the mouse. Right arrow to the “Screen” menu and tap the down arrow key one time. Down arrow through this menu and you will hear “Rate, Pitch, Tone, Volume and Blank Lines.”

Screenshot of WinEyes “Screen” menu opened, and the “Rate” item highlighted.



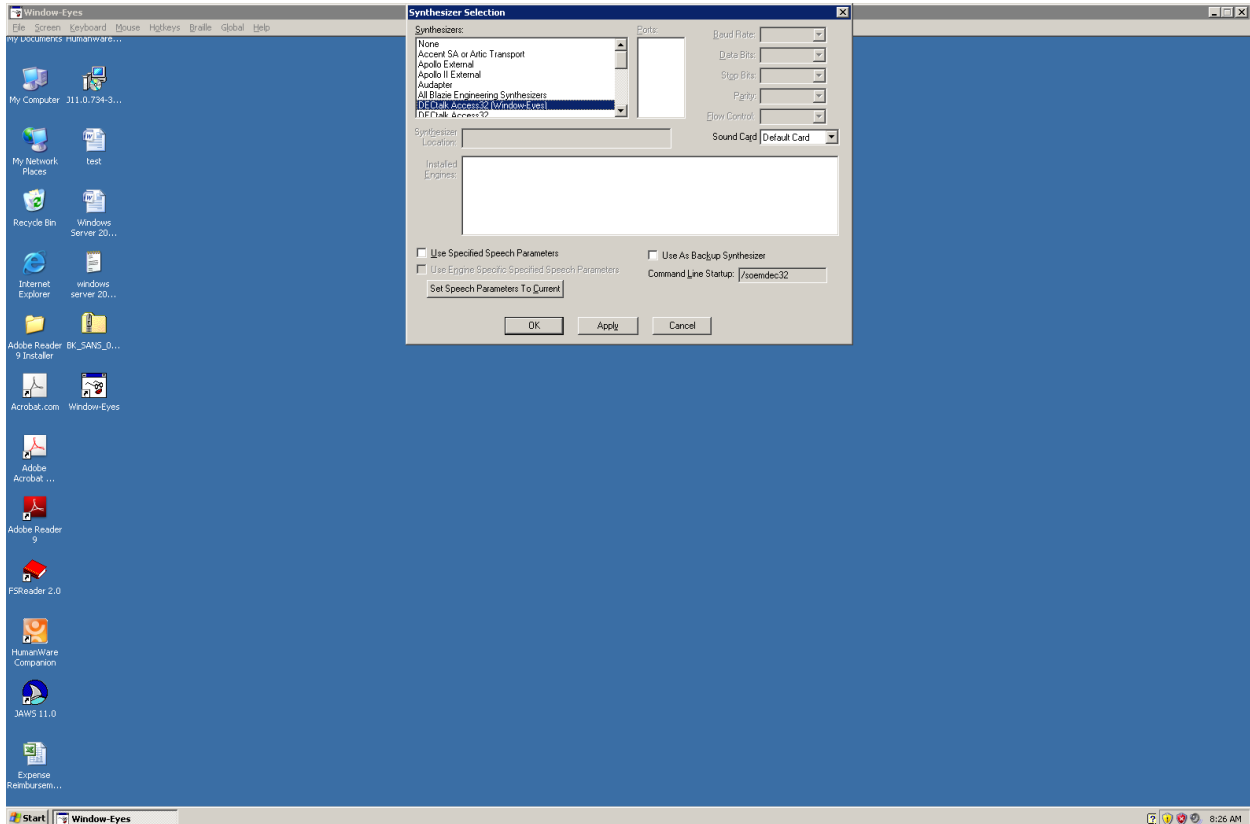
Arrow to the “Rate” menu item and tap the Enter Key one time. A box with a slider will appear. Experiment with the Page Up, Page Down, left and right arrow keys to find the voice speed you want. Tap the Enter Key one time. This will change the rate of speed for the WinEyes “Screen” voice, but not that of the keyboard or mouse. The “Keyboard” and “Mouse” menus are identical to the “Screen” menu, for the “Rate, Pitch, Tone and Volume” items.

Screenshot of the pop up “Rate” box with slider.



If you want to change the voice synthesizer in WinEyes, tap the Alt Key one time, down arrow to the “Select Synthesizer” item in the WinEyes “File” menu, and tap the Enter Key one time. You will be in a dialogue box, on a list of speech engines to pick from. Be very careful here because tapping Enter on a number of these will result in no speech at all, and you will need to get help to select a synthesizer that does speak.

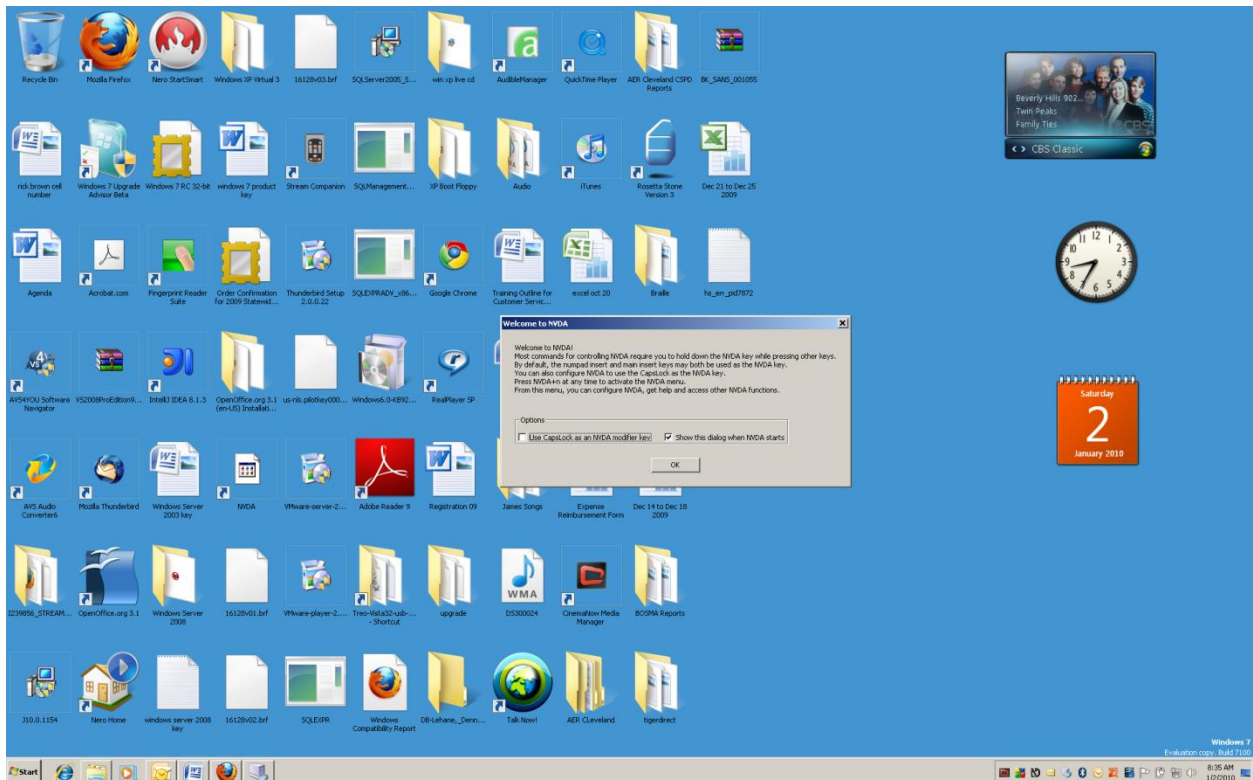
Screenshot of the WinEyes synthesizer dialogue box, with the DecTalk synthesizer highlighted.



NVDA Voice Settings

Start the NVDA screenreader and a box will come up. It will ask if you want to use the Caps Lock Key as the NVDA modifier key. If you are using a laptop computer tap the spacebar on this item—the Caps Lock will then replace the default NVDA modifier key which is the Insert Key. If you are using a standard keyboard do not mark this unless you want to. Tap the Enter Key one time and NVDA will be started.

Screenshot of opening box of the NVDA screenreader showing the checkbox for “Use the Caps Lock Key” highlight, but not marked.



To move to the voice settings menu of NVDA press and hold down the Insert Key (or Caps Lock Key if you selected it at the beginning of the NVDA startup), and tap the letter “n.” A menu will appear on which has “Preference, Tools, Help, Revert to Saved Configuration, Save Configuration and Exit (means close the NVDA program). Under the “Preferences” menu item is a sub menu containing items where you can adjust the voice, change the synthesizer, keyboard settings, mouse settings, and so on. Move to any of these settings and tap the Enter key one time, and then tap through the dialogue box for that item and make changes that you want. Remember, if you change an setting, press the Insert “n” again, down arrow to “Save Configuration” and tap the Enter Key one time to save the new setting(s).

Screenshot of NVDA Preferences sub menu opened.

