AbilityNet Factsheet – February 2019

# An introduction to screen readers

A screen reader allows people who are blind or visually impaired to use their computer. This factsheet provides an overview of the main screen readers available for people to use with their computer or mobile devices. It has been written to help people determine which is the most appropriate for their needs and includes summary information about the screen readers built into the operating system alongside other free or commercial products. As with all assistive technologies no one size fits all, and people may find it useful to try more than one before settling on their preferred tool.

In the UK there are almost 2 million people living with sight loss. According to the RNIB only one in four people registered blind or partially sighted is in employment, and this number is falling. As such, the promotion of awareness about screen reader technology plays a vital part in the continued welfare, education, and employability of people with visual impairments.

## Table of Contents

*AbilityNet Factsheet – February 2019* ..... *1*

**An introduction to screen readers** ..... **1**

**1. What is a screen reader?** ..... **3**

*How do they work?* ..... *3*

*Are they easy to use?* ..... *3*

*What screen readers are available?* ..... *3*

**2. The main screen readers** ..... **3**

*JAWS for Windows users* ..... *3*

*NVDA for Windows users* ..... *4*

*Narrator for Windows users* ..... *4*

*VoiceOver for Apple devices* ..... *4*

*Talkback for Android devices* ..... *4*

**3. Other screen readers** ..... **5**

**4. Useful contacts and links** ..... **6**

**5. How can AbilityNet help you?** ..... **6**

*Free advice and home visits* ..... *6*

*My Computer My Way* ..... *7*

*Workplace Assessment Service* ..... *7*

*Consultancy services* ..... *7*

*DSA / Student assessments* ..... *7*

**6. About AbilityNet** ..... **8**

*Support us* ..... *8*

*Contact us* ..... *8*

**7. Copyright information** ..... **8**

## 1. What is a screen reader?

A screen reader is a technology that helps people who have difficulties seeing to access and interact with digital content, like websites or applications via audio or touch. The main users of screen readers are people who are blind or have very limited vision.

### How do they work?

The technology reads out loud what is on the screen and users can adapt them to their needs, for example you can decrease the speed of speech or change the language. Screen readers allow people to navigate through websites and applications via the speech output. Some screen readers can also be used with a braille display.

### Are they easy to use?

When starting out with a screen reader, you need to learn some shortcut keys or touch gestures. While it is possible to master the basic interaction after learning just a few commands becoming an advanced user able to interact confidently does require a bit of time and effort to get familiar with their advanced features. Training can help.

### What screen readers are available?

There are different screen readers available. Nearly all computers, tablets and SmartPhones have a screen reader function built in. The most popular programs are JAWS and NVDA for Windows computer and VoiceOver for Mac and iPhone. The best choice for you depends on:

- The type of computer and or mobile phone that you have.
- The browser you prefer; some combinations of browser and screen reader works better than others.
- The apps you use; while all screen reader users work with common office apps, email and web browsers, if you need a screen reader to work with specific applications you may be limited to one that can be scripted to work it.

## 2. The main screen readers

### JAWS for Windows users

**JAWS (**Job Access With Speech) is a desktop screen reader for Windows and works better with Internet Explorer or FireFox browsers. This was first main screen reader application and was launched for Windows 1.0 in 1995. Jaws is still the most widely used and, as it can be scripted to work with applications, is

used widely in the workplace. This is a paid for screen reader but you can download a JAWS trial which will run for 40 minutes.

### NVDA for Windows users

**NVDA** (Non Visual Desktop Access) is a free, open source screen reader for Windows computers. It is the second most used screen reader for desktop and works best with the FireFox browser. NVDA works very quickly with web pages and has becoming increasingly popular as apps move on to the web. Download NVDA

### Narrator for Windows users

**Narrator** is the screen reader built into Windows. This works well with Microsoft Office and the Edge Browser. Press the windows Logo key + Control + Enter to turn Narrator on and off. The Microsoft training guide for narrator can be found on their website. While Narrator historically has a low up-take there has been considerable development effort going into the product over recent years.

### VoiceOver for Apple devices

**VoiceOver** is the screen reader for Apple devices, like Mac computers, iPad tablets or iPhone mobiles. It is particularly popular on iPhones and works with Safari browser. You don't need to do anything to install it, it is already in built on your Apple device. Just go to settings and click on Accessibility: you will find VoiceOver together with the other accessibility settings.

### Talkback for Android devices

**TalkBack,** while not as widely used, is the screen reader for Android devices and works best with the Chrome browser. No download is required as it is built into all Android devices. To enable **TalkBack** go to settings and click on Accessibility. Depending on the model of your phone it will be called either **TalkBack** or **VoiceAssistant.** Performance of **TalkBack** can vary between manufacturers with best performance on phones from Google and Samsung. For some Samsung models, or the new and more generic name **Google Accessibility Suite**.

## 3. Other screen readers

Other screen readers include SuperNova, Guide and Window Eyes. There is also a screen reader built into Chromebooks called ChromeVox. The table below provides a quick comparison between the main screen readers currently available at the time of producing this factsheet.

| | JAWS | NVDA | VoiceOver | TalkBack* |
|---|---|---|---|---|
| **Platform** | Windows | Windows | iOS and OS X | Android for mobiles and tablets |
| **Best browser combination** | Internet Explorer | Chrome | iOS and OS X | Android for mobiles and tablets |
| **Price** | In the UK JAWS costs £200 for a 90 day trial or £699 for JAWS home and £945 for JAWS professional. All prices exclusive of VAT. | Free | Free | Free |
| **How to get them** | Download from their website<br><br>https://support.freedomscientific.com/Downloads/JAWS | Download from their website<br><br>https://www.nvaccess.org/download/ | Find it in Accessibility Settings on Apple devices | Find it in Accessibility Settings on Android devices |
| **In constant development since…** | 1995 | 2006 | 2005 | 2009 |

*__TalkBack__ is part of the __Google Accessibility Suite__ (from 2018 onwards).
**Source: UK assistive technology survey, 2016. More info clicking in this link: accessibility.blog.gov.uk/2016/11/01/results-of-the-2016-gov-uk-assistive-technology-survey/

## 4. Useful contacts and links

**RNIB (Royal National Institute of Blind People)**

www.rnib.org.uk

**My Computer My Way**

mcmw.abilitynet.org.uk

This *AbilityNet* produced resource has a series of detailed articles explaining how to use many of the different screen readers described in this factsheet: mcmw.abilitynet.org.uk/impairment/make-your-device-talk-to-you

## 5. How can AbilityNet help you?

AbilityNet is a leading authority on accessibility and assistive technologies. We can assist individuals, charities and employers by providing:

- free advice and information
- free home visits
- workplace assessments
- consultancy services

### Free advice and home visits

Our free helpline offers trustworthy, independent one-to-one advice about technology for anyone with any disability of any age. We take calls every day from disabled people, their friends, employers, teachers, colleagues and anyone else who wants to know how technology can help people achieve their goals.
We also have a network of friendly disclosure checked ITCanHelp volunteers who can offer free computer support to older people and people with disabilities.
You may have a problem with viruses, need some help installing software or be confused about updates or error messages. Our friendly, trustworthy volunteers have relevant IT skills and can help with computer systems, laptops, tablets and smartphones.
Our volunteers can help in all sorts of ways, including:

- choosing equipment to meet your particular needs, with suggestions on computer, adaptations, software or broadband
- helping install and set up new software, arranging settings and adjusting accessibility options
- diagnosing problems, malfunctions, viruses or software updates
- helping you get more form your computer, such as online shopping, video calls to friends, playing music or games....

To find out more about our IT support at home visit our website at www.abilitynet.org.uk/at-home or call our free helpline on 0800 269 545.

## My Computer My Way

*My Computer My Way* is a free, interactive tool developed by AbilityNet that makes any computer, tablet and smartphone easier to use.
It can help you ensure that your equipment is set up the best way possible to suit your particular needs. It covers all the accessibility features built into your computer, laptop, Chromebook, tablet or smartphone, and all the major operating systems – Windows, MacOS, iOS, Chrome OS and Android.
*My Computer My Way* shows you how to adjust your computer to assist with:

- vision – help seeing your screen
- hearing – help with sounds and audio
- motor – help with your keyboard and mouse
- cognitive – help with reading, spelling and understanding

You can use it for free at www.mycomputermyway.com

## Workplace Assessment Service

When it comes to computing solutions, one size does not fit all. We believe that each case is unique and that individual attention is vital. Our Workplace Assessment Service integrates personal, technical and organisational considerations to arrive at sound and realistic suggestions, documented in a report.
To find out more about AbilityNet's Workplace Assessment Service, please visit www.abilitynet.org.uk/workplace or call 01926 465 247.

## Consultancy services

Our expert consultants are also available to assist employers who wish to take a broad, longer-term view in designing computer systems and associated work processes. Our experience and expertise can help you to achieve safe, healthy and productive working procedures.
To find out more about AbilityNet's consultancy services, call 01962 465 247 or email sales@abilitynet.org.uk

## DSA / Student assessments

If you have a disability and are in higher or further education, you may qualify for a Disabled Students Allowance (DSA). If you are eligible you will receive a free assessment and may qualify for a grant towards any adjustments that you might require. This could help with the costs of buying a new computer or any other specialist equipment you might need.
For information, please visit www.abilitynet.org.uk/dsa or call 01926 464 095.

## 6. About AbilityNet

AbilityNet is the national charity that supports people with any disability, of any age. Our specialist services help disabled people to use computers and the internet to improve their lives, whether at work, at home or in education. We offer:

- free advice and information
- accessibility services
- DSA/student assessments
- workplace assessments
- IT help at home
- IT volunteers.

### Support us

Visit www.abilitynet.org.uk/donate to learn how you can support our work.

### Contact us

- Telephone 0800 269 545
- Email enquiries@abilitynet.org.uk
- Web: www.abilitynet.org.uk

We are always keen to help share knowledge about accessibility and assistive technology. If you have any questions about how you may use the contents of this factsheet, please contact us at AbilityNet and we will do all we can to help.

## 7. Copyright information

This factsheet is licensed by AbilityNet under the Creative Commons Attribution-Non Commercial-ShareAlike 3.0 Unported License. View a copy of this license at creativecommons.org/licenses/by-nc-sa/3.0/