
MAY 2021-1 CYBERSECURITY NEWSLETTER

from Drumlin Security

Accessibility and text-to-speech conversion

In the last 2-3 years speech recognition and text-to-speech (TTS) conversion has become part of everyday life for many people, whether visually impaired or not. The most familiar technology is provided as interactive audio services, including Amazon's Alexa, Google's Assistant, and Apple's Siri. Many devices, from mobile phones to desktop computers now support speech recognition and synthesis, with a wide range of selectable voices, languages and related settings. In addition, speech-to-text (STT) technologies are having a renewed level of interest and success, despite many earlier attempts to develop this area of technology. Amazon's Transcribe program (<https://aws.amazon.com/transcribe/>) is a good example of this, as is Google Speech-to-Text cloud service (<https://cloud.google.com/speech-to-text>).

To date there have been relatively few concerns about the security of speech enabled devices and associated software, although there are some obvious issues of privacy and biometrics that will arise as such systems become more widely used.

Offline services - Document and PDF readers (including all the latest Javelin3 PDF readers): A number of document and PDF readers provide read-aloud facilities, primarily on Windows and MacOS platforms. Most do not provide TTS support across all platforms.

On Windows PCs (versions 8 and 10) there is a built-in text-to-speech (TTS) facility called Narrator, which will read-aloud selected text for enabled applications, including Office programs such as MS Word and Outlook - if you are reading this email using Outlook on a PC, try the Read Aloud button in the message toolbar.

The latest version of our free Javelin3 for Windows secure PDF reader now supports the Narrator TTS facility - this software release is available on our downloads page:

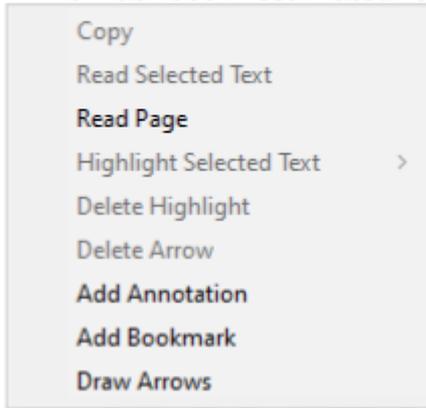
<https://www.drumlinsecurity.com/javelindownloads.html>

Read-aloud is enabled/disabled via a right click on any page or selected text - a drop-down menu is displayed, as illustrated below:

Epidemiology of skin disorders

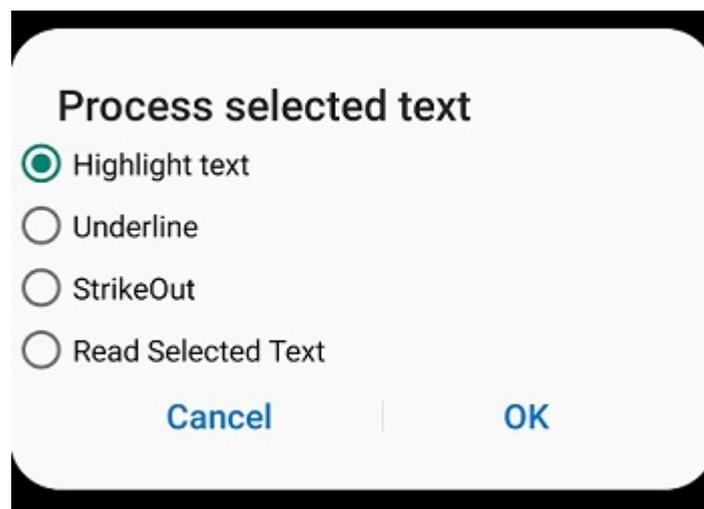
皮肤病的流行病学

It has been estimated that up to 25 percent of the countries may have a skin problem. Of those who do, eczema, psoriasis, fungal infections, and acne are the most common. The incidence of skin diseases is now more common in underdeveloped countries than in developed countries. On the other hand, industrialization has brought about an increase in the

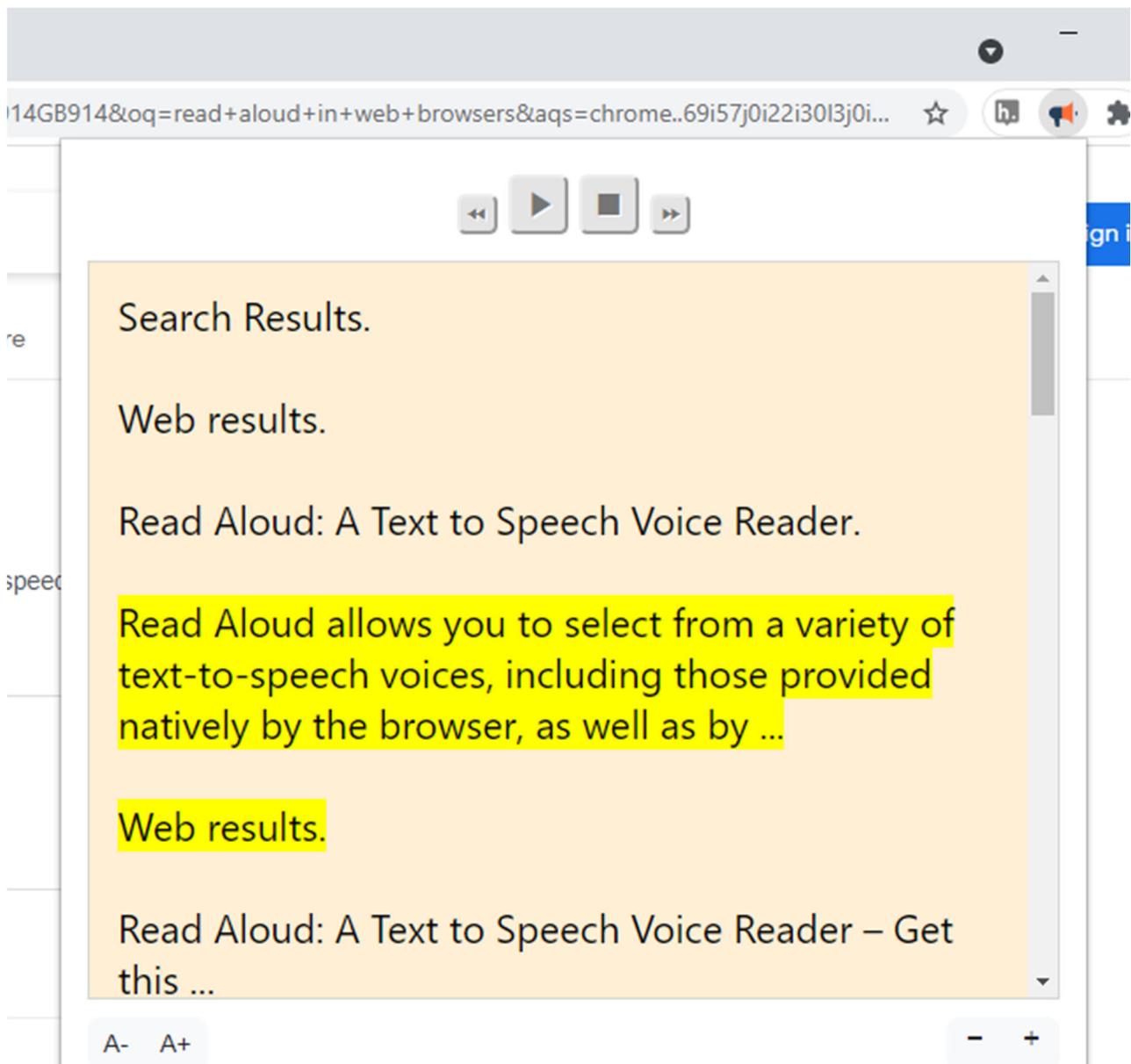


- Geographical factors (e.g., hot climates; exposure to sunlight; sweating; heat); exposure to humidity; and regional differences in individual susceptibility.
- Racial factors: reactions to certain allergens are more common in dark-skinned people than in light-skinned people. Allergic reactions are similar in all races.
- Age and sex factors: certain skin diseases are more common in certain age groups and in certain sexes.

Selected text mode is recommended for PDF files, thereby ensuring only the text highlighted is read-aloud in the sequence that makes sense to the end user. Similar facilities are available on MacOS systems, via the "Dictation and Speech" option. This has been enabled in Javelin3 for MacOS for some time. And read-aloud functionality is now available in the latest update to our Javelin3 for Android reader - for example when the text selector/highlighter is used the pop-up now displays a new option, Read Selected Text:



Online services - web browsers: Familiar to many will be the read-aloud facilities provided in several web browsers, for example using the free Chrome read-aloud extension. The text on the web page or selected block is displayed in large format in a new window and read-aloud acts on the text block-by-block, as illustrated below:



Other web browsers, including Microsoft Edge, Firefox and Safari, provide similar functionality, in some cases as part of the standard browser rather than requiring an add-in. This kind of facility can be enabled for our webdoxx.com web services that provide online secure PDF distribution.

New Releases

Javelin3 for Android has a new release (for most users updating will be automatic). The app now always operates in Disable Screen Capture mode for secured PDFs, i.e. irrespective of the capture settings for secured PDFs (drmz files). Standard PDF viewing is unaffected. In addition, Text-to-Speech support has been added, selectable on a page-by-page basis via the three-dot icon on the toolbar when a document is viewed, or for selected text when the text selector/highlighter icon is used as illustrated above.

Javelin3 for Windows also has new updates, notably for the Text-to-speech conversion support described above. Advice of the update is automatically provided to recent users and the update can be manually installed for all Javelin3 end users by going to:

<https://www.drumlinsecurity.com/javelindownloads.html>

In addition, a beta version of Javelin3 for Windows with a further update is available with support for more extensive dynamic watermarking (selectable, size, color, and opacity) with diagonal (45° display), as illustrated below:

COURIER: PDF TEST FONTS DOCUMENT -
20pt
ARIAL: Abcdefg1234567890-="£\$%^&*()_+©
® ~}{@
TNR: Abcdefg1234567890-="£\$%^&*()_+© ®
~}{@
TREBUCHET: Abcdefg1234567890-
="£\$%^&*()_+© ® -}{@
Old English: Abcdefg1234567890-
="£\$%^&*()_+© ® ~}{@
SYMBOL: Αβγδεϕγ1234567890-="≤∃%_!&*()_
+♥ → ~}{≡
Helvetica: Abcdefg1234567890-
="£\$%^&*()_+© ® ~}{@
Agency FB: Abcdefg1234567890-="£\$%^&*()_+© ® ~}{@
Lucida: Abcdefg1234567890-
="£\$%^&*()_+© ® ~}{@

If you would like to test this beta version, please let us know. After testing and feedback, if all is OK, this version will be made available in the next production release.

Further developments of our security software and services are ongoing. Please let us know if you have any questions or requests. Thank you!

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