How screen readers access PDF

PDF was originally designed for printing. The arrangement and sequence of objects encoded in PDF does not necessarily match the order in which a person would read the same content from the printed page.

Making accessible PDF, however, adds new requirements. In order to make headings, lists, tables and so on accessible in PDF it is necessary to ensure the file is correctly "tagged". In addition to the printable content a "tagged" PDF includes a structure that logically orders and semantically characterizes the content to enable accessibility.

Without tags, assistive technology software can't reliably access the words or paragraphs – not to mention tables, lists or section headings – that make up the PDF's content.

Other uses of accessible PDF

Tagged PDF isn't only useful for accessibility purposes. PDF/UA conforming readers for the desktop, mobile devices or search engines will be able to offer high quality re-flowing, reliable text restyling, better support for full text search, rich navigation options and more.

IT accessibility expert René Jaun from the Swiss non-profit foundation "Access for All" demonstrating screen reader software at the PDF Association's Technical Conference 2012.

Help us now – whether 10 or 10,000

Every donation counts. 100,000 CHF are needed before the end of 2012 to provide the funding necessary to make NVDA conform to PDF/UA.

What next?

Go to the "Access for All" website – **www.access-for-all.ch** – and look for the "**NVDA goes PDF/UA**" project. Access for all collects all donations. Donations over 1,000 CHF will be recognized on the Access for All website; larger donations may earn a link and logo placement.

Learn more!

Members and non-members alike will always find the PDF Association website a good place to start. The organization has made available video recordings and slides of technical presentations regarding PDF/UA from the PDF Association's 2012 Technical Conference. Members of the PDF Association benefit from a network of renowned experts, extensive internal resources and active collaboration in the PDF/UA Competence Center.

Members of the PDF Association benefit from a network of renowned experts, extensive internal resources and active collaboration in the PDF/UA Competence Center. If you are interested in getting involved in the PDF/UA Competence Center of the PDF Association please get in touch:

NVDA goes PDF/UA

Popular, free screen reader to provide full access to PDF for blind and vision-impaired users

- **Accessible PDF for Everyone**
- **ISO Standard meets Open Source Project**
- **Your Support Will Make a Difference**

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The Global Community of Information Professionals

PDF association

www.aiim.org

www.pdfa.org

About NVDA

In 2006 two blind programmers started working on a screen reader that provides accessibility to programs and content on computers free of charge to everyone.

Six years later their project – NVDA, for Non Visual Desktop Access – is one of the most advanced screen readers in the market. 43% of screen reader users responding to a recent major survey said they commonly used NVDA. *Source: "2012 WebAIM Screen Reader User Survey #4"; http://webaim.org.*

If only NVDA supported PDF/UA...

Historically, PDF accessibility support has been weak in screen readers and other assistive technology. As a result, many screen reader users have learned to dislike PDF as the amount of information they receive is often zero.

PDF/UA is the new International Standard for accessible PDF. It provides clear rules for PDF creation programs so that more people will produce accessible PDF documents and forms every day.

It may take time for PDF/UA-enabled versions of screen reader programs to become available in the market. To help lead the way, and to encourage other assistive technology developers to support PDF accessibility, the NV Access team is willing to update NVDA to full compliance with the new standard.

To help make this objective a reality, in June 2012 the PDF Association partnered with the Swiss non-profit foundation "Access for All" to launch the "NVDA goes PDF/UA" campaign. The goal is to help NV Access make NVDA fully PDF/UA conforming by the end of 2012, and to continue adding PDF-related improvements thereafter.

NVDA is open source software; the developers are sustained by tax-deductible donations alone. Michael and Jamie need your help to drive the next generation of standards-based electronic content accessibility.

How PDF/UA leads to more accessible PDF

PDF/UA sets unambiguous rules for developers and authors of tagged PDF documents and forms that clearly identify considerations relevant to accessibility. It provides normative instructions on the proper handling of real and artifact content in PDF files. PDF/UA applies to PDF documents, PDF creation and reading programs and assistive technology:

- PDF/UA conforming document creation software will help authors create accessible documents.
- PDF/UA conformance claims in software are a promise from the software developer to the user that if used according to instructions, output PDF files (or the reading experience of conforming files) will meet specific, rigorous standards for accessibility.
- PDF/UA conforming files are a promise from the author to the reader of a high-quality reading experience (assuming PDF/UA conforming and near-conforming reader and assistive technology software).

How NVDA makes access possible

Through complying with the rules for assistive technology in ISO 14289 (PDF/UA), NVDA provides the final connection between a PDF/UA conforming file and end users with visual impairments.

"We're going to show the world that PDF/UA conforming files and PDF viewers together with standards-based assistive technology such as NVDA can offer a superb experience of documents in the PDF format. If two blind guys from Australia can do this what excuse do others have? PDF is a great format for many purposes, but we believe that improved equal access to PDF content means PDF/UA." *Michael Curran, creator of NVDA*

NonVisual Desktop Access (NVDA) is a free and open source screen reader for Microsoft Windows. Providing feedback via synthetic speech and Braille, it enables blind or vision impaired people to access computers running Windows for no more cost than a sighted person. NVDA supports over 35 languages and can run entirely from a USB drive with no installation. Get your copy now: www.nvda-project.org.

NVDA is free

NV Access does not charge for use of NVDA; the software is distributed free of charge with no obligation, no advertising and no nagging. NVDA is a service to the visually impaired community. NV Access is dedicated to driving the assistive technology community towards standards-based assistive technology, including PDF/UA and ISO 32000.

NV Access needs funding for PDF/UA support!

By supporting NVDA you are helping to drive a real-world, near-term improvement in the experience of PDF electronic documents and forms by visually disabled users worldwide.

Michael Curran (left) and co-developer James Teh have spent the past four years building the open source screen reader Non Visual Desktop Access (NVDA) for the Windows operating system. The reader has been downloaded more than 45,000 times between November 2011 and March 2012.