Techniques for Accessible PDF: An Introduction

Presented by Zak Kinsey, TargetStream Technologies

Co-Chair, PDF Accessibility Liaison Working Group
Chair, PDF/UA Marketing Working Group

Webinar Housekeeping

- Q&A

  - Use the Q&A pod to ask questions – the panelists will either respond directly or address your questions after Zak's presentation.

- Use Chat to message the host

  - If you have a problem with, or question about the webinar

- This Webinar will be recorded

  - You should get an email after the webinar is concluded. Please allow some time for Zoom to process the recording!

PDF association

Who am I?

I've been working with clients to implement on-demand enterprise-level digital accessible document remediation solutions, via PDF/UA, for almost 10 years

Contributing member of the PDF/UA Processor LWG and PDF Accessibility LWG

Chair of the PDF/UA Marketing Working Group

Co-chair of the PDF/UA Processor LWG and PDF Accessibility LWG

Zak Kinsey
TargetStream Technologies

Q&A panel (1600 CET)

- **Zak Kinsey**
  - Co-Chair, PDF Accessibility LWG | VP, TargetStream Technologies

- **Markus Erle**
  - Chair, PDF Accessibility LWG | CEO, axes4

- **Birgit Peböck**
  - Co-Chair, PDF Accessibility LWG | CEO, Barrierefrei PDF OG

- **Klaas Posselt**
  - Co-Chair, PDF/UA TWG | Head of Training & Consulting, axes4

- **Duff Johnson**
  - CEO, PDF Association, Project Leader for ISO 14289 (PDF/UA)

Q&A panel (2300 CET)

- **Zak Kinsey**
  - Co-Chair, PDF Accessibility LWG | VP, TargetStream Technologies

- **Paul Rayius**
  - Chair, PDF/UA Processor LWG | Vice President, Training, Allyant

- **William Kilian**
  - Software Architect, PDF/UA, TargetStream Technologies

- **Duff Johnson**
  - CEO, PDF Association, Project Leader for ISO 14289 (PDF/UA)

About the PDF Association and the PDF Accessibility LWG

- **What:** A member-supported vendor-neutral platform supporting the development of open specifications and standards for PDF technology.

- **Who:** We are over 150 member organizations and individuals collaborating in 20+ working groups. Together, we are driving the world's digital document format into the 21st century and beyond.

- **Commitment to Accessibility:** A major focus of development, the PDF Association operates 5 working groups dedicated to various aspects of PDF accessibility, including the PDF Accessibility Liaison Working Group (LWG).

- **Techniques for Accessible PDF:** The primary work-product of the PDF Accessibility LWG.

Who is the PDF Accessibility Liaison Working Group?

- Launched in 2019 to produce industry-supported example PDF files demonstrating techniques for achieving accessible PDF.

- Today the PDF Accessibility LWG meets weekly to review example "pass" and "fail" PDF files ("techniques"), and develop appropriate metadata.

- Participation is open to all PDF Association members, accessibility professionals and end users with a focus on the technology underlying accessible PDF.

- We strive to accommodate users with disabilities in all our communications, meetings, processes and deliverables.

- Contact community-manager@pdfa.org to learn more.

Techniques for Accessible PDF

What they <u>are</u>

- Example PDF files, each demonstrating a single aspect of …

    - accessibility (PASS cases), or

    - inaccessibility (FAIL cases).

- PASS cases *conform* to PDF/UA (ISO 14289), while FAIL cases intentionally do not.

- The example files are "atomic" in the sense that they contain <u>only</u> the content necessary to demonstrating the Technique.

- Test procedures for each Technique.

- The initial set of Techniques are just the start – hundreds more will follow!

PDF association

Techniques for Accessible PDF

What they are <u>NOT</u>

- These Techniques <u>do not</u> provide instructions for the use of a certain software.

- They <u>do not</u> explain how to make accessible PDF files or remediate (apply corrections to) existing PDF files.

- <u>They are not tagged examples of real-world files</u>. Although the files are valid PDF files, they are merely atomic examples.

- These Techniques <u>do not</u> address WCAG Success Criteria directly.

Why do we talk about "conformance"?

- It is common to refer to "conforming" or "non-conforming" PDF files.

- This terminology is commonly used to indicate how digital content can meet, or fall short of, industry standards (e.g. WCAG and PDF/UA).

- Using standards to define the accessibility characteristics of digital content makes it possible to establish a common understanding and enable accountability for vendors, authors and remediators and regulators.

- "Conforming" is often used to imply "accessible" because most of the characteristics that make PDF content accessible depend on very specific *structures* within the PDF file.

  - Those structures are either present, or not, valid or not, and representative of the content, or not. A "conforming" file follows the requirements of applicable standards.

Components of a Technique

- A plain language description of the concept or tagging structure

- Test procedures on how to check for compliance

- At least one "atomic" demonstration PDF file

  - For a given technique there may be multiple pass and fail example files

- Matterhorn Protocol Checks

- Applicable WCAG Success Criteria

- A WCAG-conforming identity, e.g. PDF107 or PDF-F12 (for fail cases)

- A Technique Finder Code, e.g., UA1_Tpdf-G3_01

Components of a Technique – Description

Description

The objective of this technique is to show how to mark similar real content in a semantically appropriate manner. In this example, two paragraphs are tagged as two separate **P** tags.

■ Descriptions provide necessary context for understanding the example.

Components of a Technique – Test Procedures

Test(s)

Expected Results

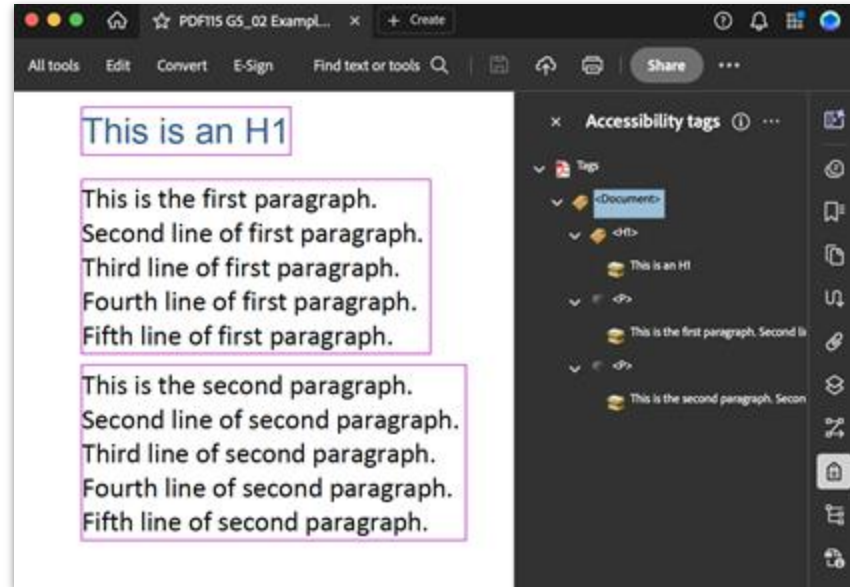Checks #1, #2 and #3 are true.

Procedures

1. Check that the role of all real content is reflected by its tag.
2. Check that each tag contains all the content that corresponds to the tag.
3. Check that each tag contains only the content that corresponds to the tag.

■ A set of test procedures to follow to check for conformance, or in the case for failures, which steps are expected to be false.

PDF association

Components of a Technique – Atomic PDF Example File

- Each Technique includes a fully-functional PDF file.
- These are "minimal" examples designed to focus precisely on the objective of the Technique.
- <u>Not</u> real-world files (!)

Components of a Technique – WCAG SC and Matterhorn Protocol

Application to WCAG 2.x

This Technique addresses the following WCAG 2.x Success Critieria:

- 1.3.1 Info and Relationships ↗

Matterhorn Protocol

The Matterhorn Protocol 1.1 provides an algorithm for conformance with PDF/UA-1. Matterhorn checkpoint(s) (human or machine) relevant to this use-case:

- 01-006
- 09-003

- References to applicable standards help to associate Techniques with specific requirements.

PDF association

Components of a Technique – Technique Finder Code

The technique finder for this Technique is: **UA1_Tpdf-G5_02**

- A string of characters that uniquely identifies the Technique to search engines.

- Each Technique will be posted on an individual page on pdfa.org.

- Users can simply search for the vendor or product name and a specific Accessibility Technique Finder code in order to locate web pages documenting the vendor's approach to that specific technique.

PDF association

Why provide fail examples?

- To provide clear contrast between conforming and non-conforming files.

    - In regards to PDF/UA conformance

- FAIL cases can be used to confirm improper tagging structures.

- To clearly demonstrate some of the most common ways in which content is improperly tagged.

Who are these techniques for?

- Authors

- Remediators

- Vendors

- Educators

- Procurement teams

- Software developers

  - Authoring tools

  - Remediation tools

  - Validation tools

  - AT software

Users, Developers, Vendors, and Educators

- Users (during procurement and everyday)
  - Qualify vendors based on their claims regarding these Techniques
  - Validate software output and service-providers' deliverables
- Developers
  - The example files and test procedures are a key reference when creating or consuming tagged PDF
- Vendors
  - Promote your support for industry-formalized Techniques
  - Leverage the Technique Support Finder for visibility to users seeking vendors who support a specific Technique
- Educators
  - Leverage Techniques in training materials, services and classrooms

PDF association

Authors and Remediators

- Example PDF files clearly demonstrate what does and what does not conform to accessibility standards, allowing authors and remediators to interact with an example PDF/UA file using their preferred software.

- Individual Technique pages are useful as a reference for use in education and for comparisons with real-world files.

- Plain language descriptions provide context and explanatory information helpful to understanding the Technique.

- Some techniques provide guidance for authors when creating documents. For example, a PASS and a FAIL technique advise authors regarding use of headings.

  - G5_01 H1 heading appropriately tagged

  - G5_F01 H1 heading inappropriately tagged

Initial release: 5 fundamentals for *all* accessible PDF

The 5 Fundamentals

1. Basic Technical Rules
2. Text
3. Content
4. Logical Content Order
5. Appropriate Semantics

Fundamentals

Concepts that apply to all accessible PDFs.

Use Cases

Specific situations in content, e.g.:

- Headings
- Lists
- Tables
- Figures

(coming in 2025 and 2026)

PDF association

Techniques for Accessible PDF: Roadmap

- January 7, 2025: the BETA release of "fundamental" techniques.

- The Accessibility LWG plans to release additional Techniques on a quarterly basis.

- New Techniques in 2025 will include (at a minimum):

    - Headings (coming in April!)

    - Lists

    - Table of Contents

- (Many) more Techniques to follow in 2026!

How to participate in developing the Techniques

- Provide feedback on Techniques by commenting on the Accessibility LWG's <u>GitHub repository</u>.

    - Suggest additional Techniques you would like to see!

    - Report errors

    - Propose improvements to tests or descriptions

- Provide feedback on the PDF Association's <u>glossary</u> of accessibility terminology specific to PDF.

    - Suggest new terms to add

    - Provide feedback on current definitions

PDF association

Where to find the Techniques

Techniques Home Page: https://pdfa.org/techniques-for-accessible-pdf/

GitHub: https://github.com/pdf-association/techniques-for-accessible-pdf

Zip archive of "atomic" example files: https://github.com/pdf-association/techniques-for-accessible-pdf/archive/refs/heads/main.zip

Glossary of accessibility terminology in PDF: https://pdfa.org/glossary-of-accessibility-terminology-in-pdf/

Questions?

Thank you for attending our presentation.
Please ask questions at this time!

Got a question after the webinar?
Contact:
info@pdfa.org