

Digital Support for People with Disabilities: Actionable Steps



April 14, 2021

Introductions

Presenters



Dr. Zach Taylor
Institutional Support Consultant
Zach.Taylor@trelliscompany.org



Dr. Chelseaia Charran
Special Education Consultant
ccharran13@utexas.edu



Heather Vaughan
Creative Program Lead
heather.vaughan@trelliscompany.org

Training Overview

- C - Initial impact of COVID on SWD
- C - Overview of College Students' Rights
- C - COVID Impact on Student Transitions
- Z - Defining web accessibility, W3C, and Sections 504 & 508
- Z - Publishing web accessible websites
- Z - Examples of ADA noncompliance and web inaccessibility
- H - Resources for ADA remediation
- Questions and free resources

In the News

COVID-19 pandemic puts children with disabilities at significant risk

By Ellen Goldbaum

Low-income and students with learning disabilities disproportionately affected by COVID-19 learning loss, Peabody College experts say

by [Evan Curran](#) Feb. 18, 2021, 2:28 PM

People With Disabilities Bear Brunt Of Challenges Posed By COVID-19

By PAUL FLAHIVE • MAR 24, 2020

Is online school illegal? With schools closing from coronavirus, special education concerns give districts pause

[Erin Richards](#) USA TODAY

Published 5:00 a.m. ET Mar. 19, 2020 | Updated 1:00 p.m. ET Mar. 19, 2020

The coronavirus COVID-19 outbreak leaves people with disabilities among the most at risk

By [Nicolas Perpitch](#)

Updated 19 Mar 2020, 6:12pm

NEWS RELEASE 18-MAR-2021

For college students with disabilities, communication is key in online learning

UNIVERSITY OF CONNECTICUT

Education During COVID-19

You can click on the picture below for the full story.

- States must provide free, appropriate public K-12 education (FAPE), even during crisis times.
- The Department of Education did not address higher education in its [COVID-19 FAQs Document here:](#)
- Higher education?

Urging States to Continue Educating Students with Disabilities, Secretary DeVos Publishes New Resource on Accessibility and Distance Learning Options

New Fact Sheet Provides Additional Information on How Distance Learning Can be Used to Meet Students' Needs During COVID-19 National Emergency

MARCH 21, 2020

Contact: Press Office, (202) 401-1576, press@ed.gov

WASHINGTON — U.S. Secretary of Education Betsy DeVos announced today the Department has released [new information](#) clarifying that federal law should not be used to prevent schools from offering distance learning opportunities to all students, including students with disabilities. This new resource from the Office for Civil Rights (OCR) and the Office of Special Education and Rehabilitative Services (OSERS) explains that as a school district takes necessary steps to address the health, safety, and well-being of all its students and staff, educators can use distance learning opportunities to serve all students.

"It was extremely disappointing to hear that some school districts were using information from the Department of Education as an excuse not to educate kids," said Secretary DeVos. "This is a time for creativity and an opportunity to pursue as much flexibility as possible so that learning continues. It is a time for all of us to pull together to do what's right for our nation's students."

"Nothing issued by this Department should in any way prevent any school from offering educational programs through distance instruction," she continued. "We need schools to educate all students out of principle, rather than educate no students out of fear. These are challenging times, but we expect schools to rise to the occasion, and the Department stands ready to assist you in your efforts."

Singh (2019)

“Educational Rights of College Students with Disabilities”

- IDEA does not apply to higher education = faculty are not required to provide a ‘least restrictive environment.’
- No provision of wheelchairs/modified physical learning environment, hearing aids, learning tools, etc.
- No provision of specialized academic programs.
- College student rights:
 - Disclosing their disability = students are ‘self-deterministic.’
 - Cannot be denied admission or excluded from a program of study strictly due to their disability.
 - Accommodations if they do not change the nature of the program or pose an undue financial burden.
 - Universal access to institutional infrastructure, including physical structures and digital content.

AHEAD Report (2020)

- “COVID-19 Transitions: Higher Education Professionals’ Perspectives on Access Barriers, Services, and Solutions for Students with Disabilities”
- SWD faced difficulty transitioning to remote environment, more so than general student population.
 - Access to Internet/course materials/exams, faculty contact
- Documentation of disability and provision of testing accommodations has become more difficult.
- Community college students experienced the most difficult accessing remote education and services.
 - Poor test accommodations, no access to assistive technologies
- **Greatest reported difficulty = receiving technology support and communicating with faculty about inclusive course design.**

What is Web Accessibility?

- Websites and web tools properly designed and coded to be used by people with disabilities (future/current students/staff)
- Making the web “accessible.”
 - [Source: W3C – Web Accessibility Initiative](#)
- WCAG 2.0: **W**eb **C**ontent **A**ccessibility **G**uidelines
 - published by the Web Accessibility Initiative ([source](#))
- A wide range of recommendations to make websites more accessible for people with disabilities.
- [Adopted as standard of web accessibility by U.S. Congress.](#)
- All Title IV institutions held to WCAG 2.0 standards.

W3C.org and WCAG Standards

How to Meet WCAG (Quick Reference)

A customizable quick reference to Web Content Accessibility Guidelines (WCAG) 2 requirements (success criteria) and techniques. [Show About & How to Use](#)

W3C Web Accessibility Initiative WAI

Contents

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1.2.3 Audio Description or Media Alternative (Prerecorded)

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1.4.1 Use of Color

1.4.2 Audio Control

Selected Filters: WCAG 2.0: all success criteria and all techniques. [Clear filters](#) [Expand all sections](#) [Share](#)

Principle 1 – Perceivable

Information and user interface components must be presentable to users in ways they can perceive.

Guideline 1.1 – Text Alternatives

Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.

1.1.1 Non-text Content — Level A

All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below. [Show full description](#)

[Show techniques and failures for 1.1.1](#)

Understanding 1.1.1

SHARE

BACK TO TOP

Guideline 1.2 – Time-based Media

Provide alternatives for time based media.

1.2.1 Audio-only and Video-only (Prerecorded) — Level A

For prerecorded audio-only and prerecorded video-only media, the following are true, except when the audio or video is a media alternative for text and is clearly labeled as such: [Show full description](#)

Understanding 1.2.1

Renewed Emphasis on ADA

- Section 504 of the Rehabilitation Act of 1973: prohibits educational discrimination against people with disabilities.
 - Section 508 of the Rehabilitation Act of 1973:
 - **Amended on January 18th, 2018**
 - Requires all Title IV higher education institutions to publish level-AA WCAG 2.0 compliant websites, technology, and training resources ([source](#)).
 - Websites and digital communication must be web accessible for people with disabilities.
- Why now?

The Ethical and Legal Cost of ADA Noncompliance

College Websites Must Accommodate Disabled Students, Lawsuits Say



Hofstra University on Long Island is one of eight New York colleges named in lawsuits because, the suits say, their websites are inaccessible to the plaintiff, who is blind, and therefore in violation of the Americans With Disabilities Act. George Etheredge for The New York Times

Harvard Accessibility Lawsuit Moves Forward

By **Carl Straumsheim** // February 23, 2016

7 COMMENTS

A judge in a federal district court in Massachusetts has **allowed** an accessibility lawsuit against Harvard University to proceed. The National Association of the Deaf last year **sued** Harvard over online content rendered inaccessible for learners with disabilities due to a lack of closed captions. Harvard had sought to dismiss or stay the lawsuit until the U.S. Department of Justice issued new rules on how the Americans With Disabilities Act of 1990 applies to websites, but the court **dismissed** that motion, saying that such a decision could keep the plaintiffs waiting for years.

50 Colleges Hit With ADA Lawsuits

A blind man is taking 50 colleges to court, alleging their websites are inaccessible to people with disabilities.

By **Lindsay McKenzie**

// December 10, 2018

22 COMMENTS



ON CAMPUS

Provost: Syracuse University to remediate 'significant portion' of web presence to improve accessibility



Accessible Websites for People with Disabilities: Before You Click “Publish” or “Send”

- Big Issues:
 - Talk to your institution's website developer about web accessibility—are they aware? Professional development?
 - For example: is your institution's color scheme compliant?
 - Know who can edit your website—how many chefs are in the kitchen? How many are aware of web accessibility?
 - For example: One institution had over 1,000 accounts w/ access.
 - Trim the fat: are there old, dated webpages that could be removed from your website? How do you know?
 - For example: One institution's financial aid website had over 100 pages dating back between 2012-2015 (just the FA website).

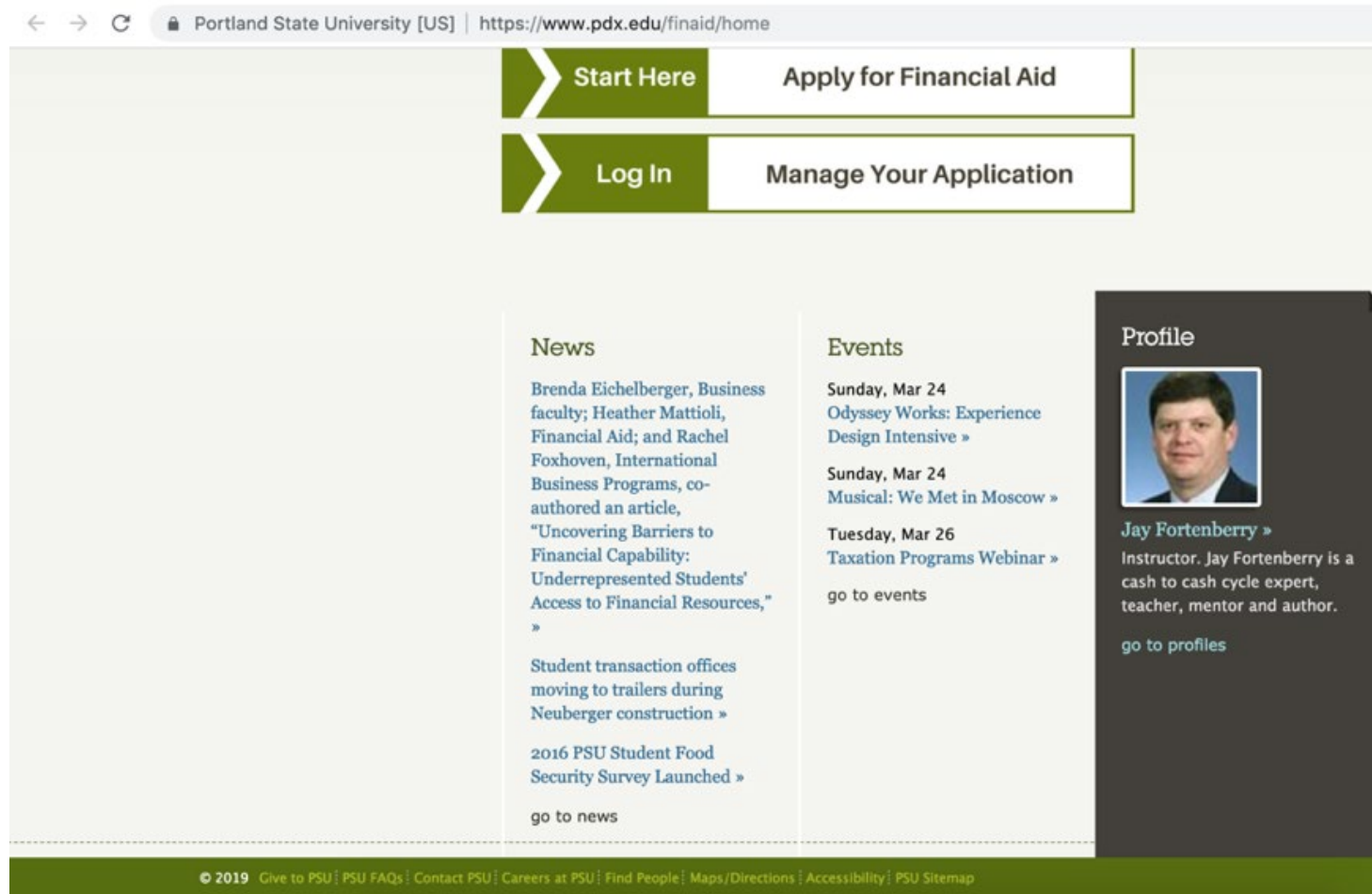
Accessible Websites for People with Disabilities: Before You Click “Publish” or “Send”

- The Day-to-Day (Immediately Actionable):
 - Be sure to define the website’s language (ex: en=English)
 - Use a simple, readable, common font (Verdana is most web accessible.)
 - Use strong color contrast—light on dark, dark on light.
 - Add alt text to pictures and closed-captions to videos.
 - Give hyperlinks informative titles (link text)—folks should know what happens when you “click” anywhere on your website.
 - Understand heading sizes and don’t skip heading sizes—all pages should have 1 heading at level 1—next heading = level 2.

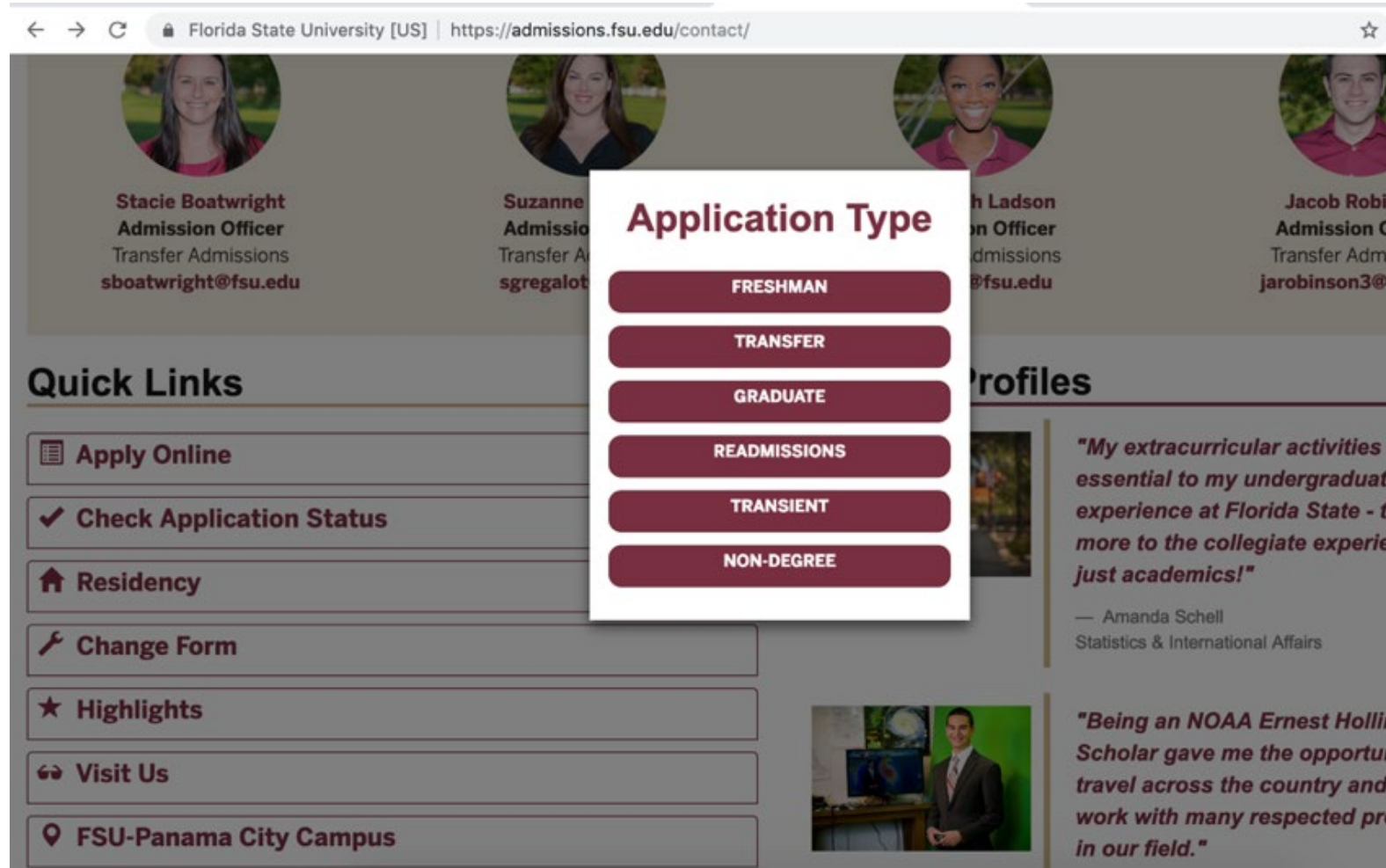
Examples: Fonts

- The font used in this presentation is Cambria.
- Verdana is a highly web accessible font and widely used (compatible with many different software programs).
- Verdana features serifs (feet) which makes the font very readable.
- For example, all size-28 font:
 - Illegal activity is frowned upon. (Verdana)
 - Illegal activity is frowned upon. (Cambria)
 - Illegal activity is frowned upon. (Arial)
 - **Illegal activity is frowned upon. (Haettenschweiler)**

Examples: Font Size and Color Contrast



Examples: Fillable Forms and Interactive Elements



Writing ADA Compliant Emails

- When writing emails:
 - Begin email in Word—then copy/paste into email field and send.
 - Prioritize text—screen readers/text recognition technologies work across many devices (phones, tablets, computers).
 - Use a simple, readable, common font.
 - Use strong color contrast.
 - Add alt text to pictures →
 - “A picture of two college students walking on campus. They are wearing backpacks and talking to each other.”
 - Add informative alt text to hyperlinks and format as informative titles.
 - [Trellis Company Research Website](https://www.trelliscompany.org/research/)
 - Hyperlink leads to <https://www.trelliscompany.org/research/>
 - The informative title tells the user what the link is.

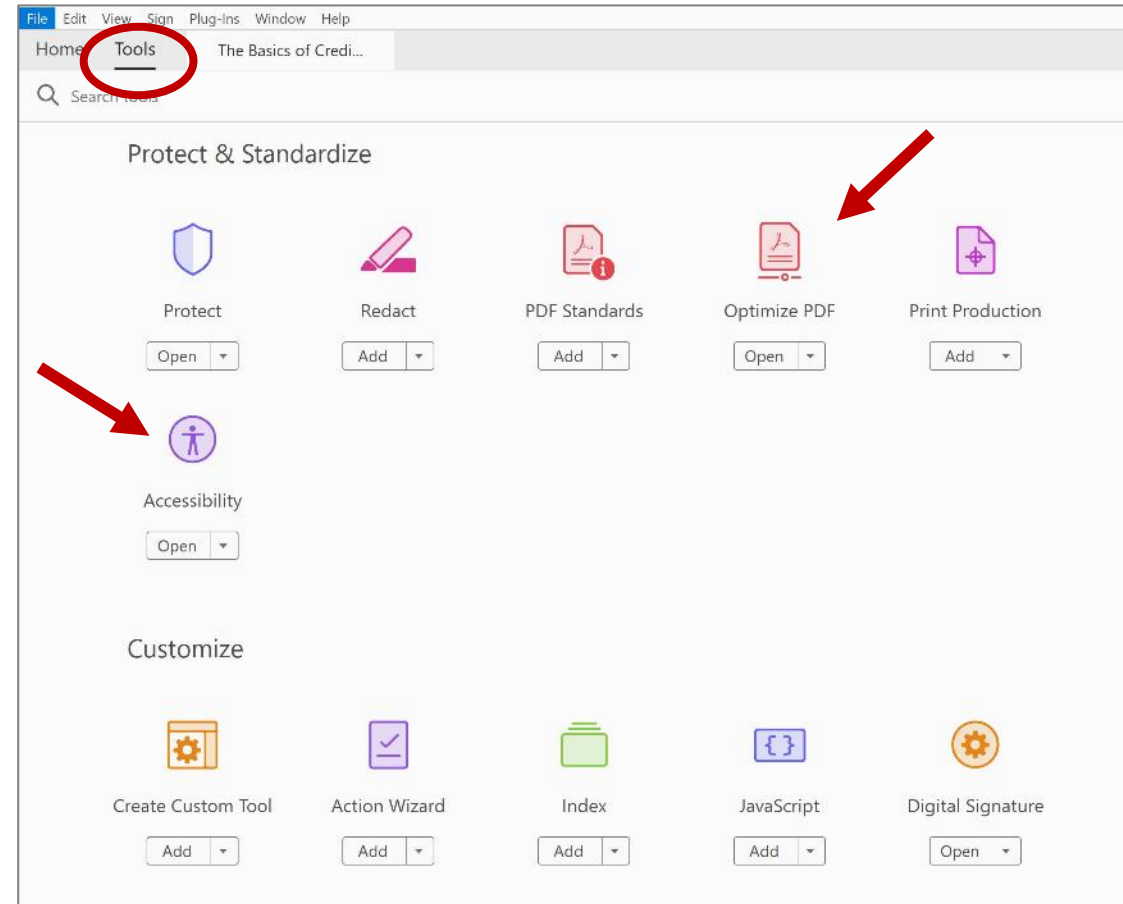
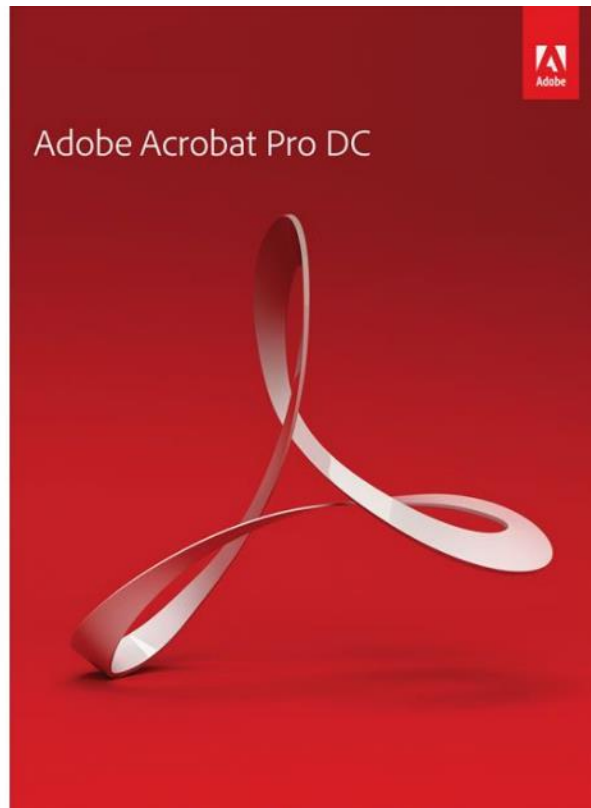


Writing ADA Compliant Powerpoints, Word Docs, PDFs

- When creating files:
 - Use the web accessibility features built into Powerpoint, Word, and Adobe software
 - [Microsoft Powerpoint](#)
 - [Word](#)
 - [Adobe Software](#)
 - [PAC3 also a simple, powerful, and FREE software for auditing PDFs](#)
 - Use a simple, readable, common font.
 - Use strong color contrast.
 - Add alt text to pictures and format hyperlinks with informative titles.
 - A lot of learning materials are shared (e.g., PDFs, listserv materials)—who made the materials and are they web accessible?
 - Think syllabi, class handouts, campus flyers, etc.
 - Connect with faculty to ensure ADA awareness.
 - A lot of shared resources may be linked to other websites—are these websites accessible?

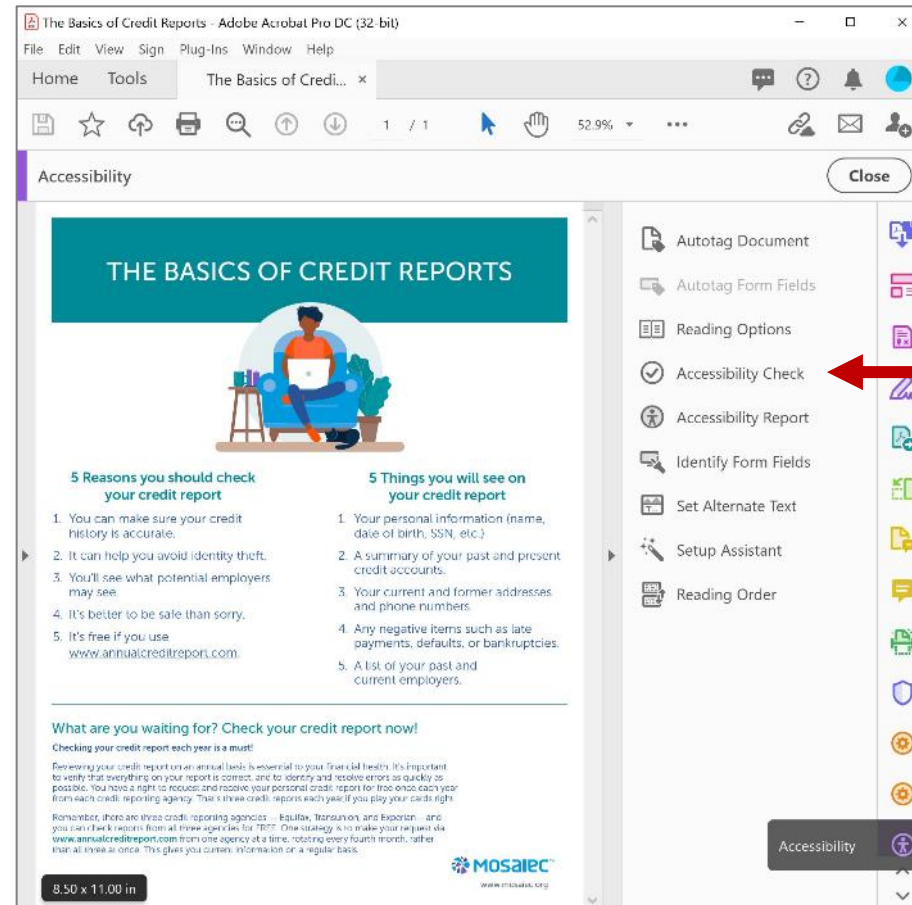
Adobe Acrobat Pro DC

Tools for ADA Remediation



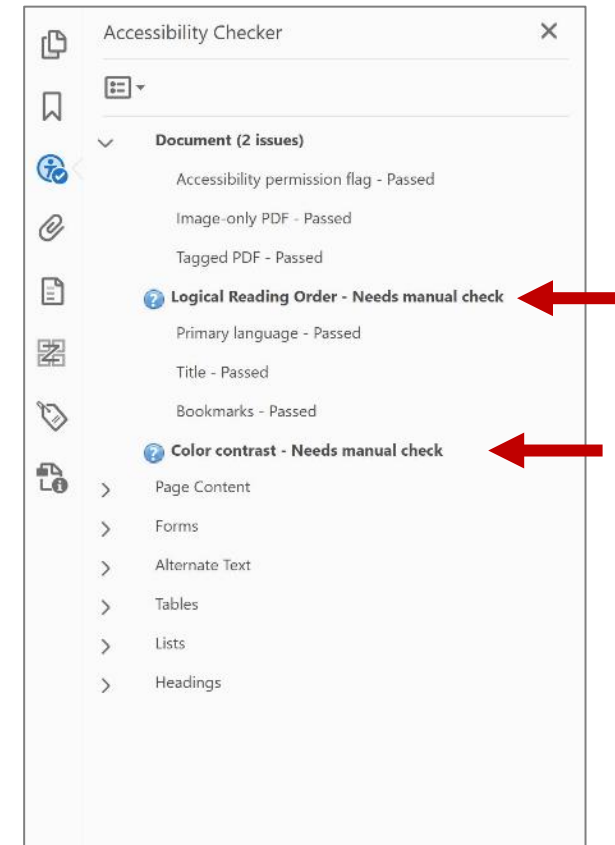
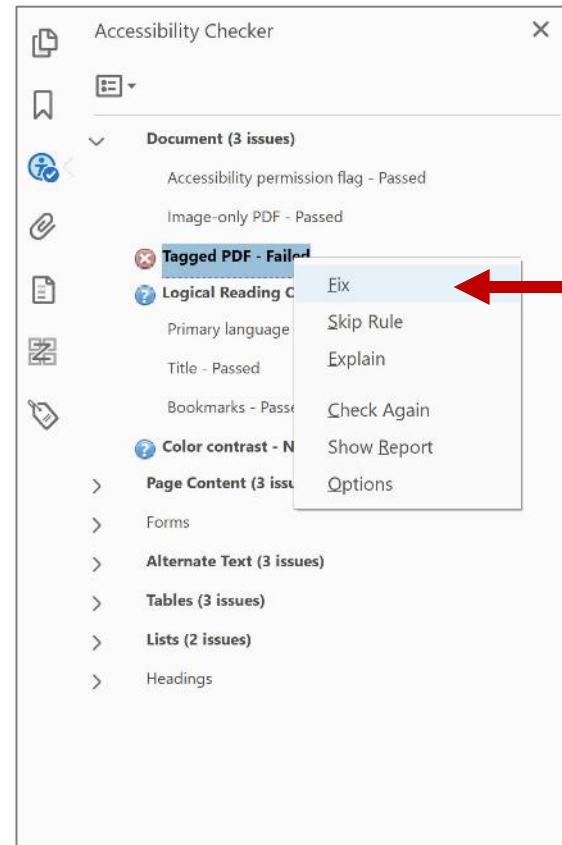
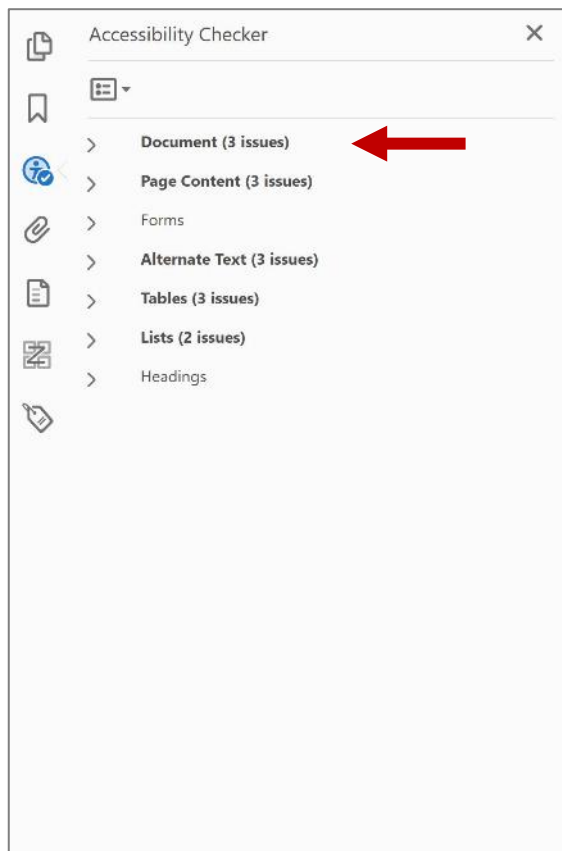
Adobe Acrobat Pro – Accessibility Tool

Accessibility Check



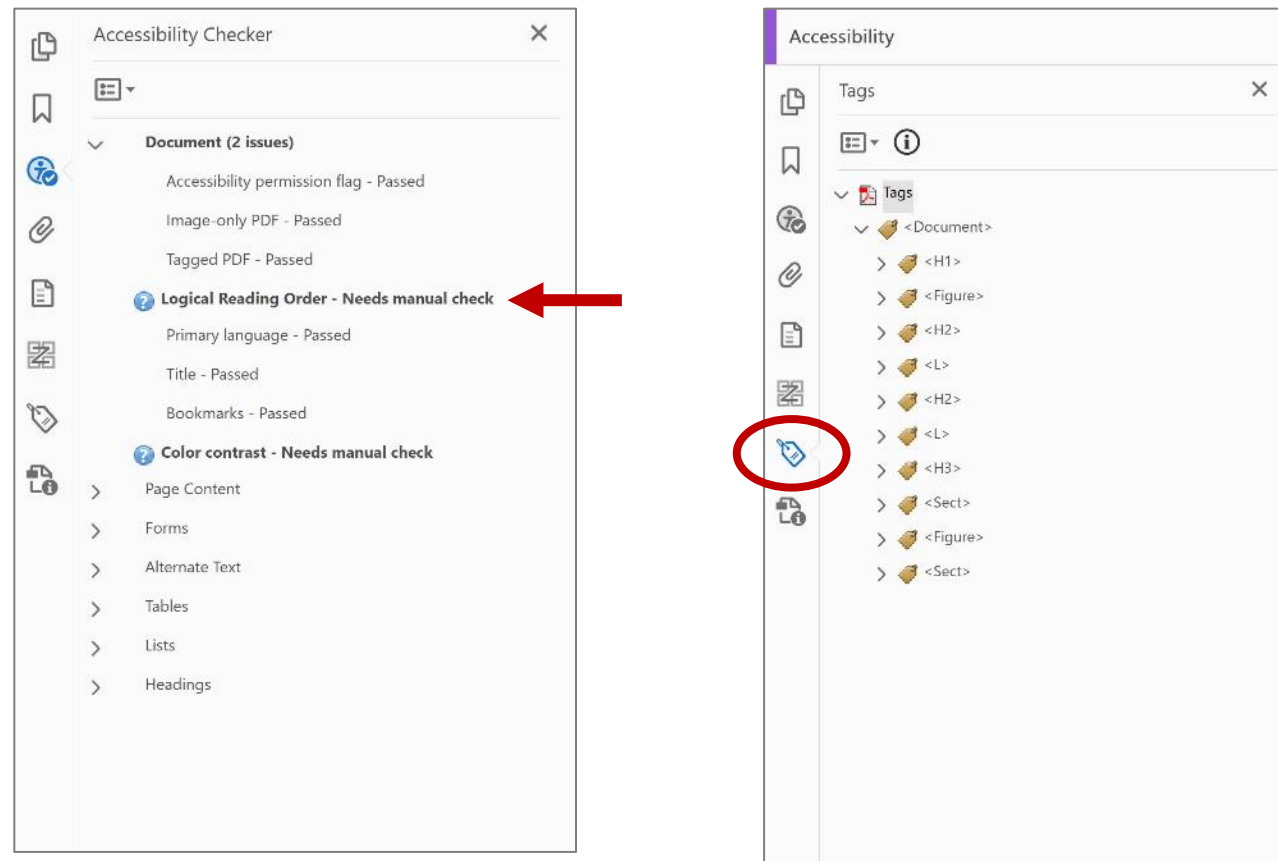
Adobe Acrobat Pro – Accessibility Checker

Accessibility Checker - Issues



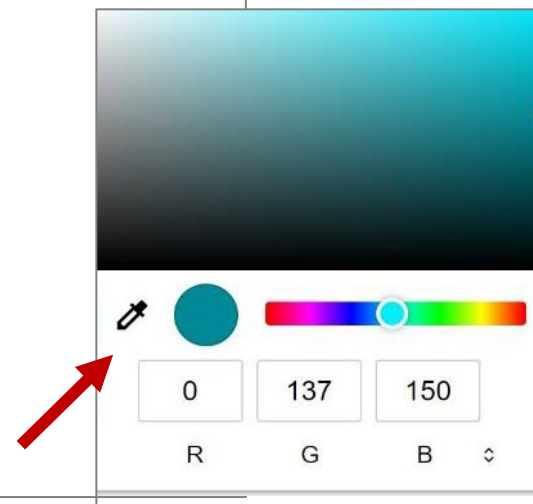
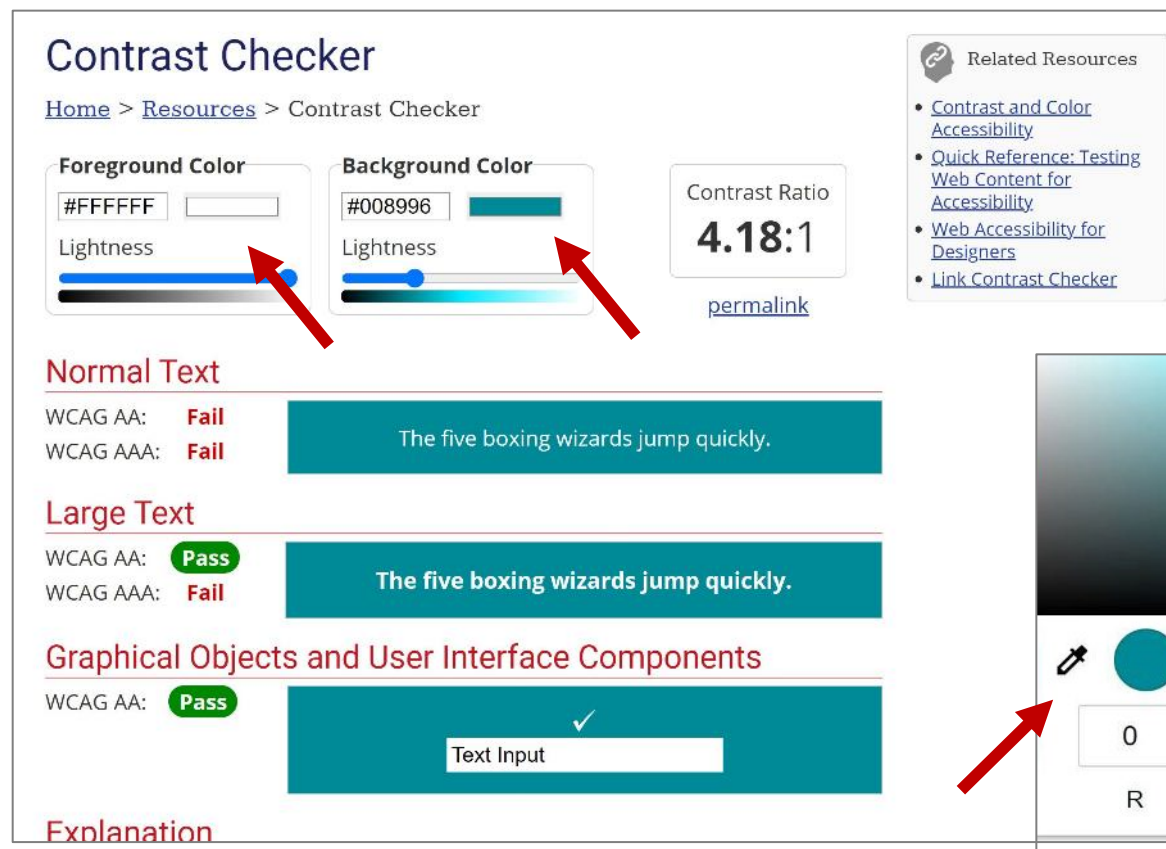
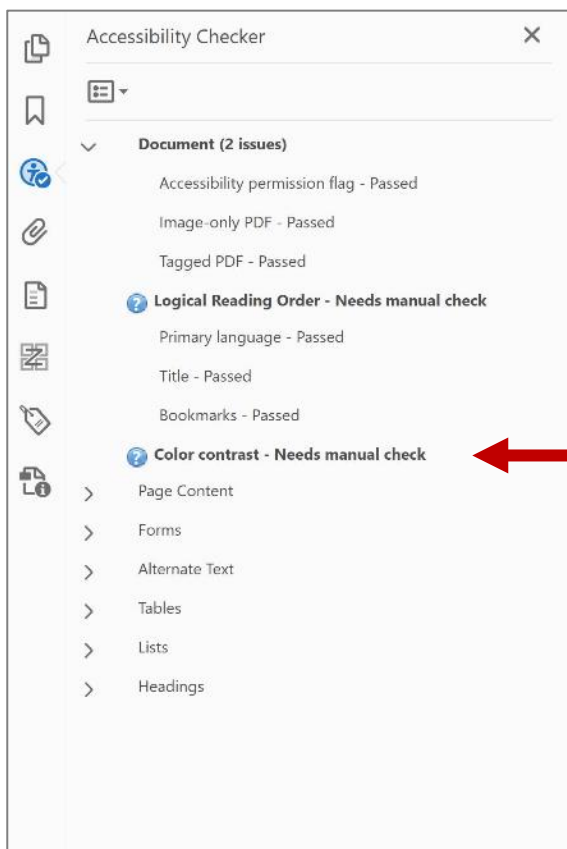
Adobe Acrobat Pro – Manual Check Reading Order

Accessibility Checker – Tags



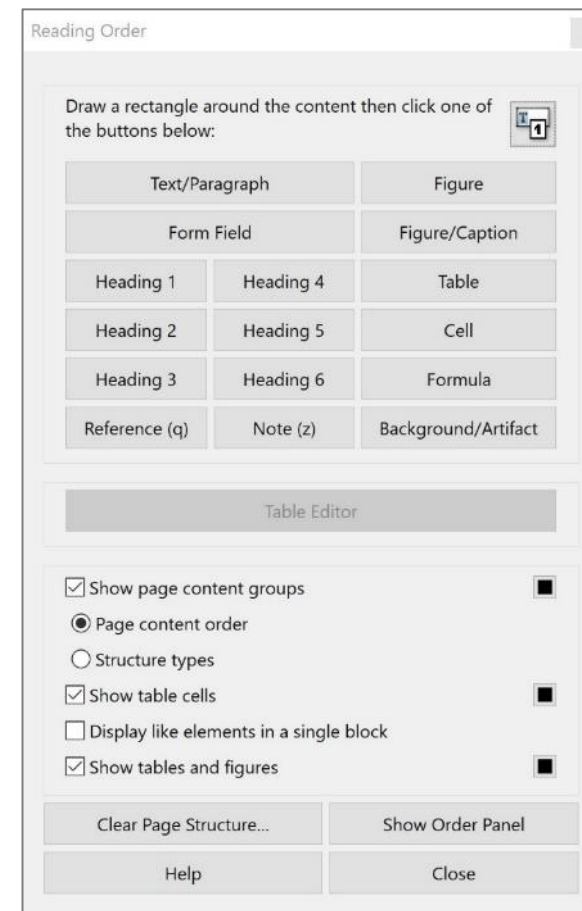
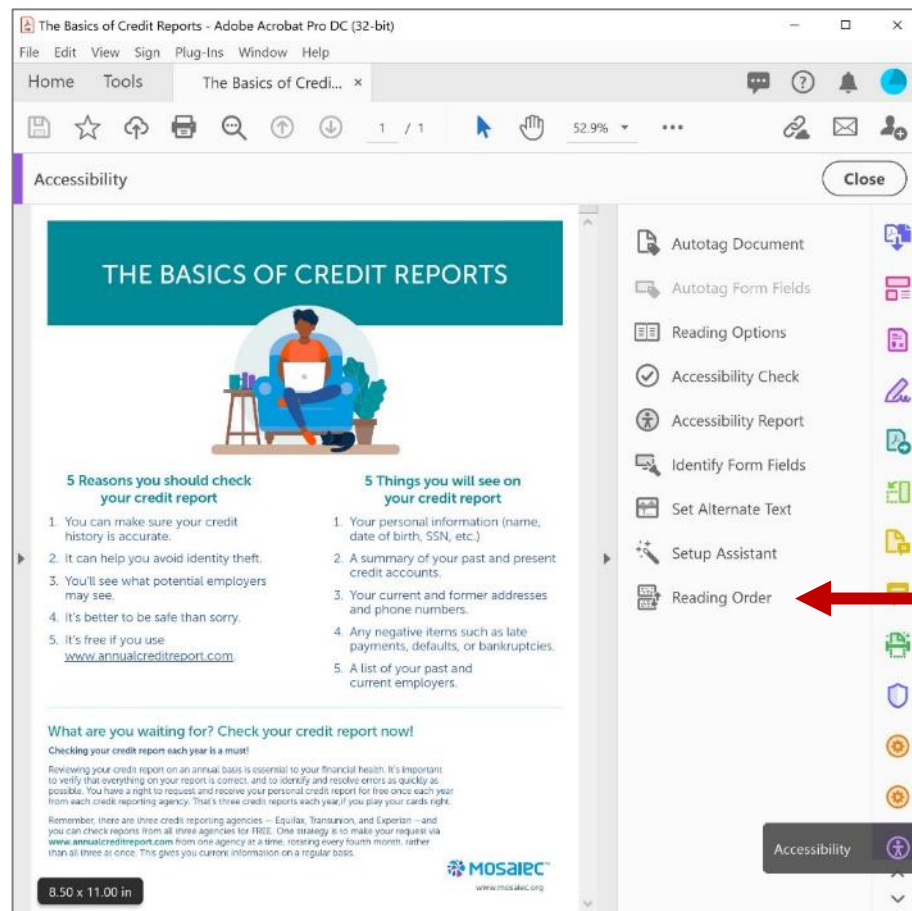
Adobe Acrobat Pro – Manual Check Color Contrast

Free tool at [WebAIM](https://webaim.org/resources/contrastchecker/) (<https://webaim.org/resources/contrastchecker/>)



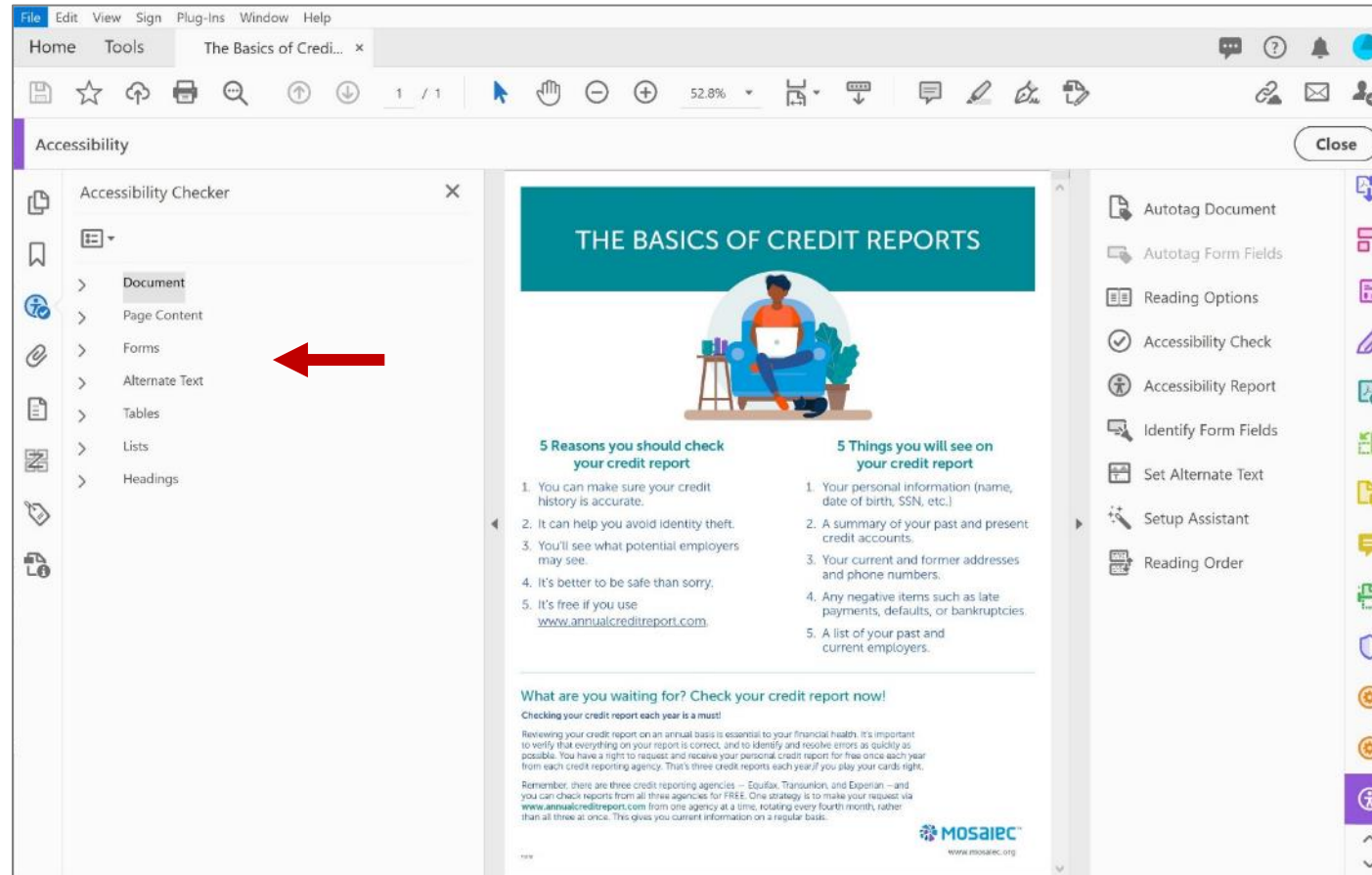
Adobe Acrobat Pro – Reading Order

Accessibility Checker – Correct Issues



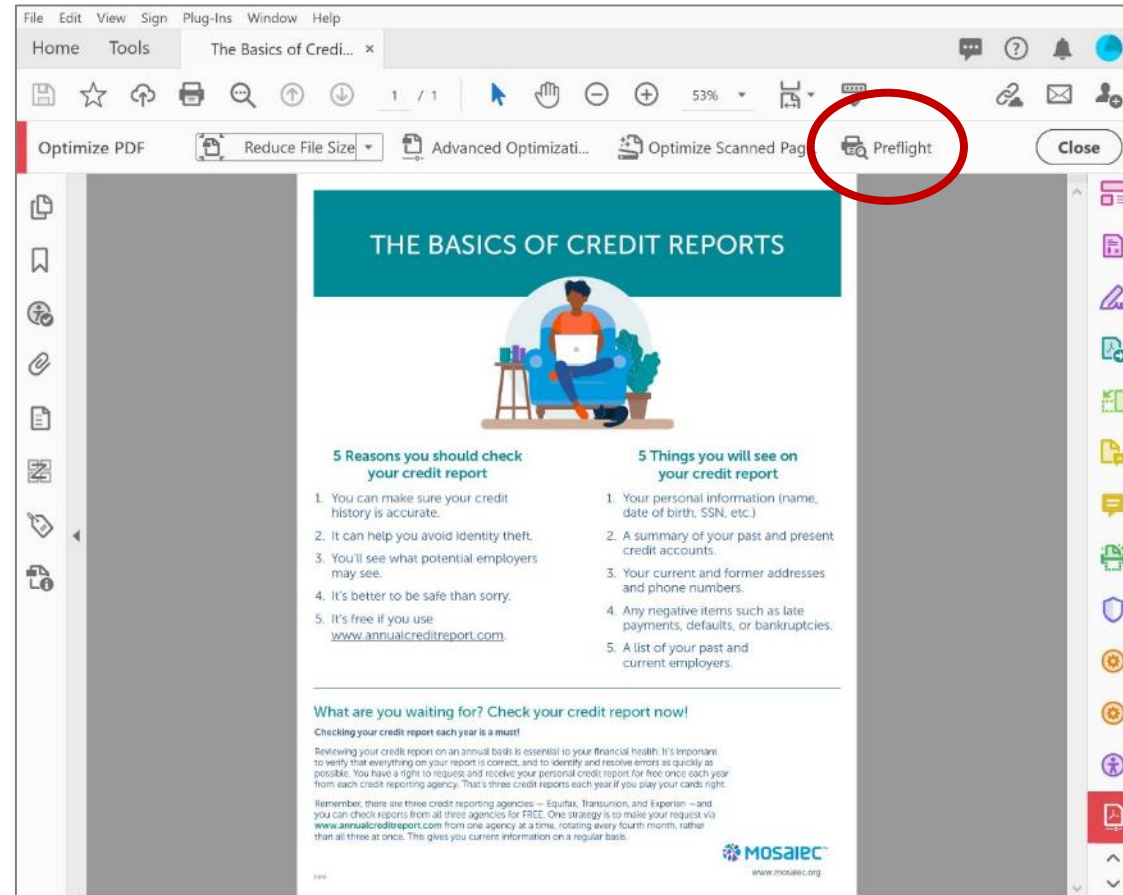
Adobe Acrobat Pro – Remediation Complete

Accessibility Checker – No Issues



Adobe Acrobat Pro – Optimize Tool

Preflight

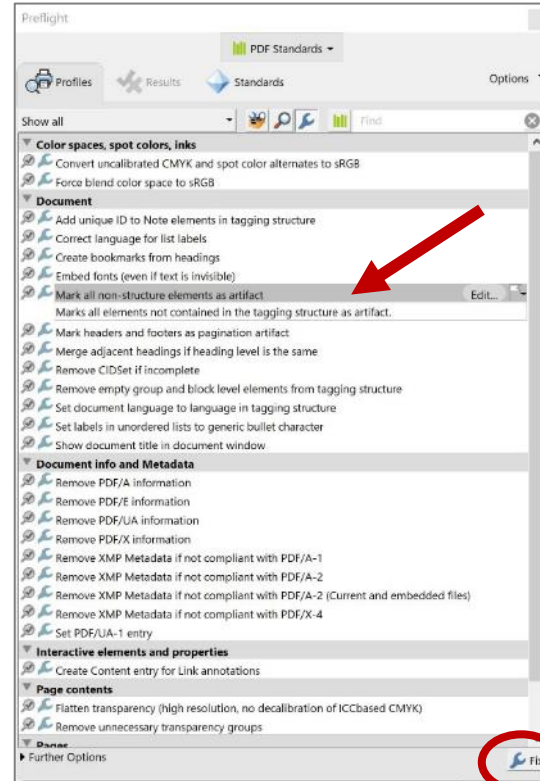


Adobe Acrobat Pro – Preflight Options

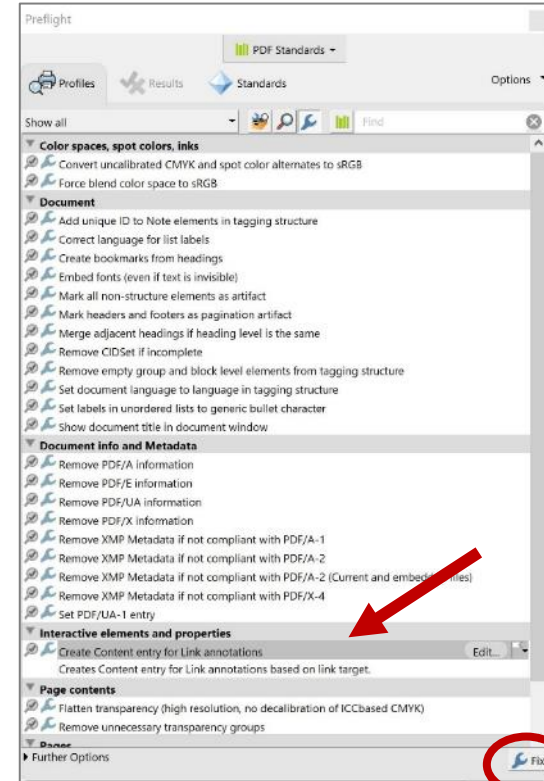
Preflight



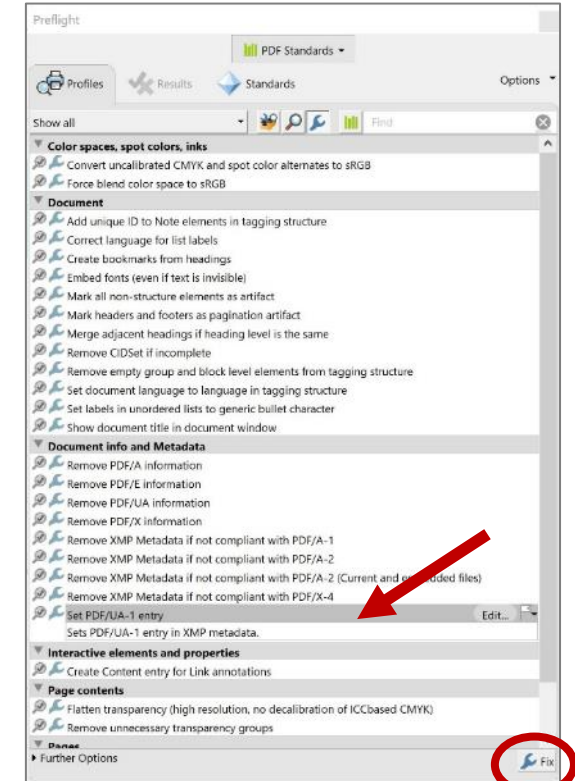
Embed Fonts



Mark Artifacts



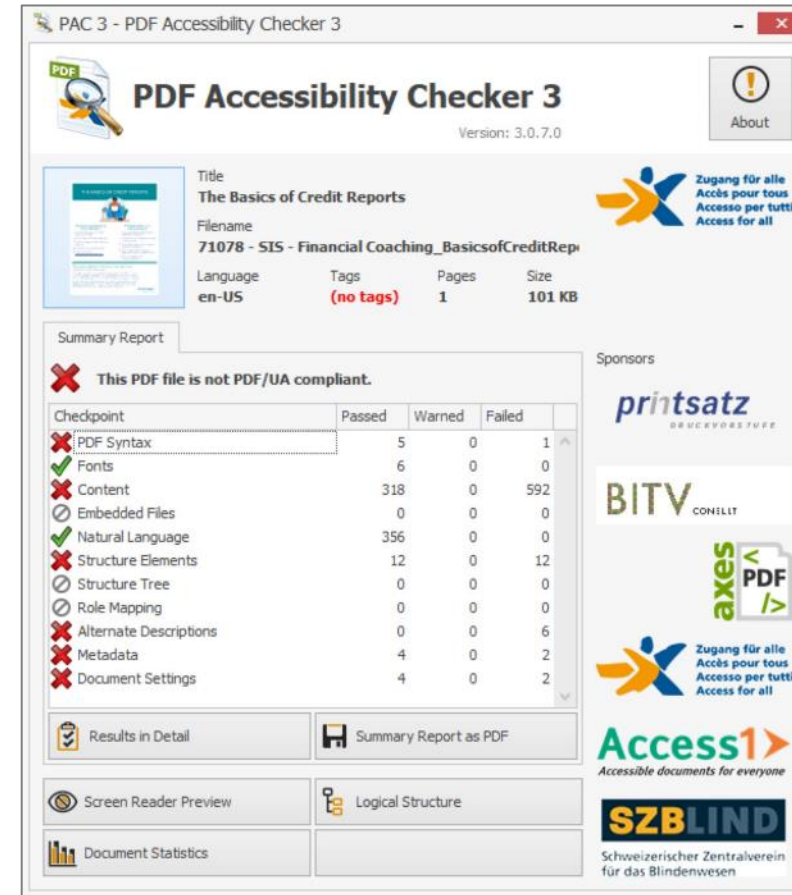
Create Content/Link



Set PDF/UA

PAC3 – Free Remediation Tool

<https://www.access-for-all.ch/en/pdf-accessibility-checker.html>



PAC3 – Results in Detail

Identifies exactly where issues are in the document

PAC 3 - PDF Accessibility Checker 3

PDF Accessibility Checker 3
Version: 3.0.7.0

Title
The Basics of Credit Reports

Filename
71078 - SIS - Financial Coaching_BasicsofCreditRep

Language
en-US

Tags
(no tags)

Pages
1

Size
101 KB

Summary Report

✗ This PDF file is not PDF/UA compliant.

Checkpoint	Passed	Warned	Failed
✗ PDF Syntax	5	0	1
✓ Fonts	6	0	0
✗ Content	318	0	592
✗ Embedded Files	0	0	0
✓ Natural Language	356	0	0
✗ Structure Elements	12	0	12
✗ Structure Tree	0	0	0
✗ Role Mapping	0	0	0
✗ Alternate Descriptions	0	0	6
✗ Metadata	4	0	2
✗ Document Settings	4	0	2

Results in Detail

Screen Reader Preview

Document Statistics

Sponsors

printsatz
BITV
axes
Access1
SZBLIND

Report

Title	Count
✗ PDF/UA	305
✗ Basic requirements	297
✗ ISO 32000-1	1
✓ Fonts	0
✗ Content	296
✓ Embedded Files	0
✓ Natural language	0
✗ Logical Structure	6
✗ Structure Elements	3
✓ Headings	0
✓ Notes	0
✗ Annotations	3
✓ "TrapNet" annotations	0
✓ Nesting of "Widget" annotations inside a "..."	0
✗ Nesting of "Link" annotations inside "Link" ...	3
✗ "Link" annotation is not nested inside ...	1
✗ "Link" annotation is not nested inside ...	1
✗ "Link" annotation is not nested inside ...	1
✓ Nesting of annotations in Annot structure ...	0
✓ "PrinterMark" annotations	0
✓ Figures	0
✓ Tables	0
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✓ Role mapping	0
✗ Alternative Descriptions	3
✗ Metadata and Settings	2
✗ Metadata	1
✗ Document settings	1

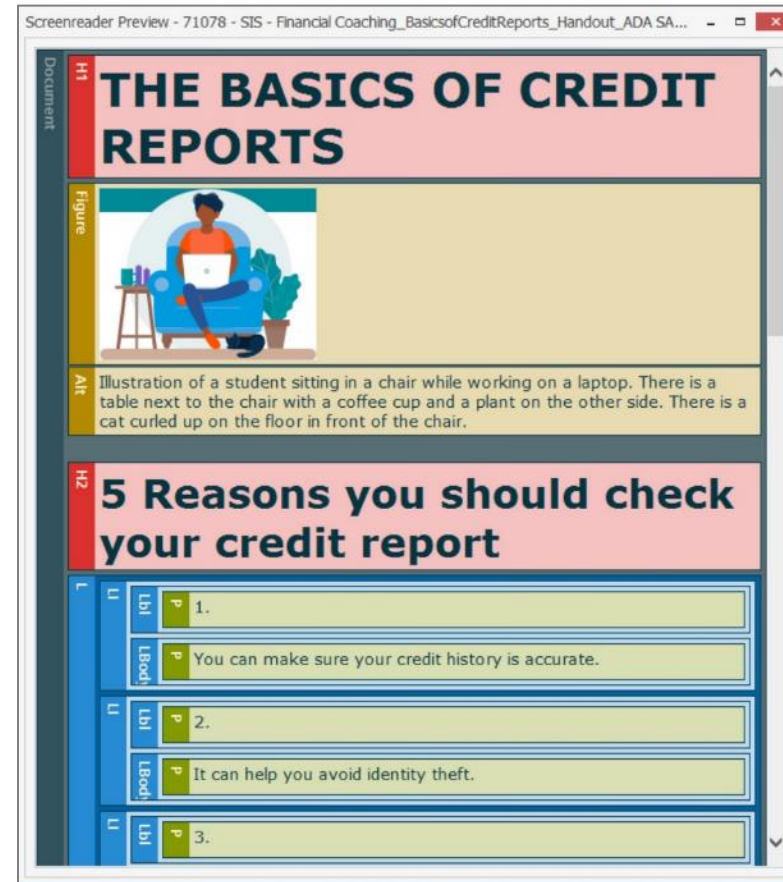
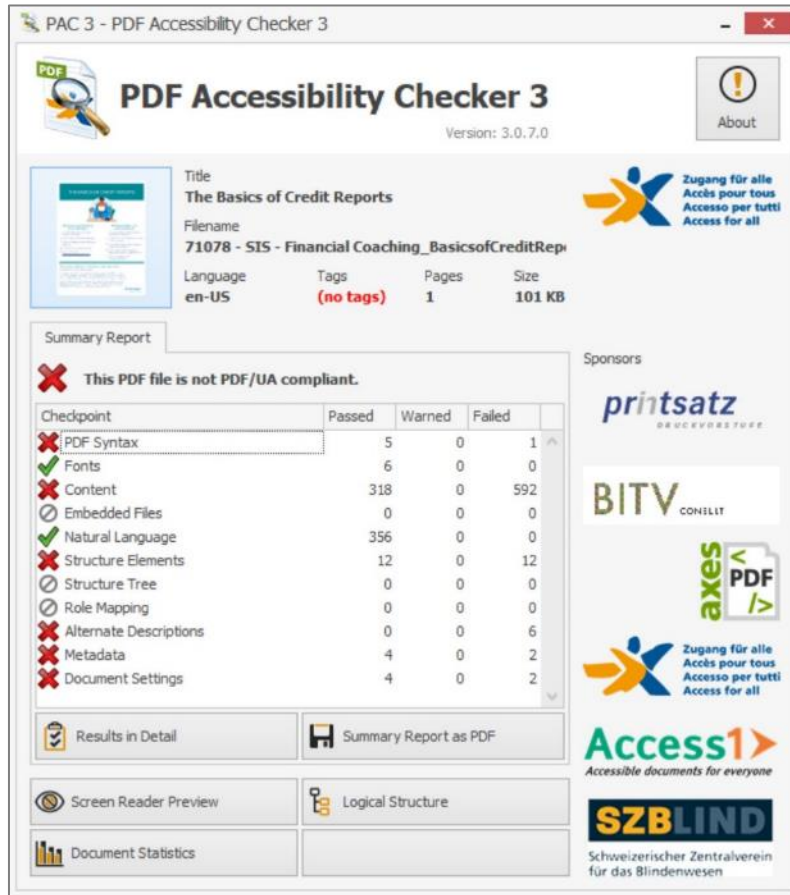
"Link" annotation is not nested inside a "Link" structure element

Page 1

hat are you waiting for? Ch

PAC3 – Screen Reader Preview

Provides a preview of your document



PAC3 – PDF/UA

Goal is to meet PDF/UA requirements.



PAC 3 - PDF Accessibility Checker 3

PDF Accessibility Checker 3
Version: 3.0.7.0

PDF icon

! About

Title: The Basics of Credit Reports
Filename: 71078 - SIS - Financial Coaching_BasicofofCreditRep
Language: en-US Tags: 78 Pages: 1 Size: 109 KB

Summary Report

✓ The PDF/UA requirements checked by PAC are fulfilled.

Checkpoint	Passed	Warned	Failed
✓ PDF Syntax	86	0	0
✓ Fonts	6	0	0
✓ Content	990	0	0
⊗ Embedded Files	0	0	0
✓ Natural Language	370	0	0
✓ Structure Elements	56	0	0
✓ Structure Tree	150	0	0
✓ Role Mapping	180	0	0
✓ Alternate Descriptions	312	0	0
✓ Metadata	6	0	0
✓ Document Settings	8	0	0

Results in Detail Summary Report as PDF

Screen Reader Preview Logical Structure

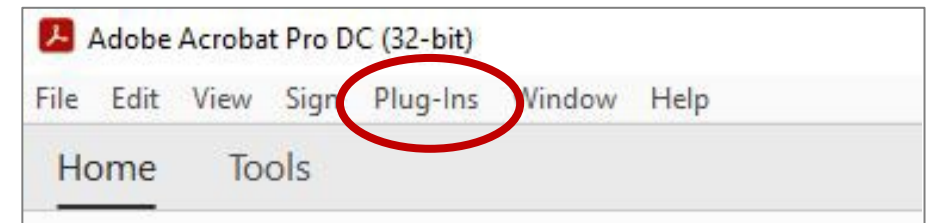
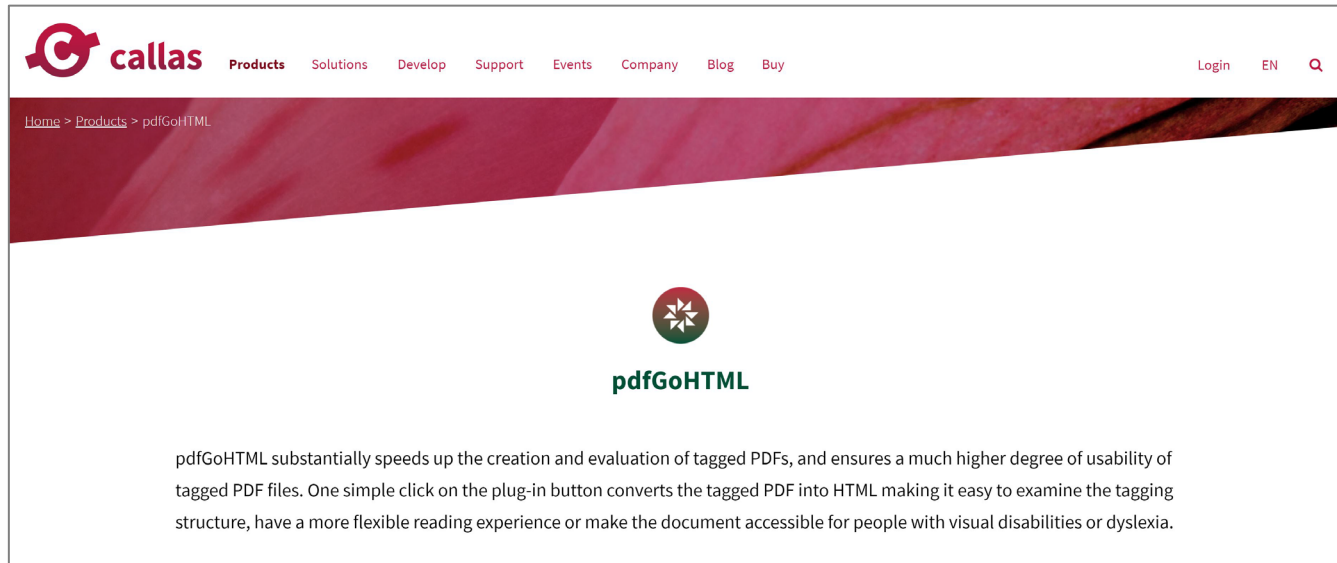
Document Statistics

Sponsors:

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- BITV CONILIT
- axes PDF
- Zugang für alle / Accès pour tous / Accesso per tutti / Access for all
- Access1
- SZBLIND

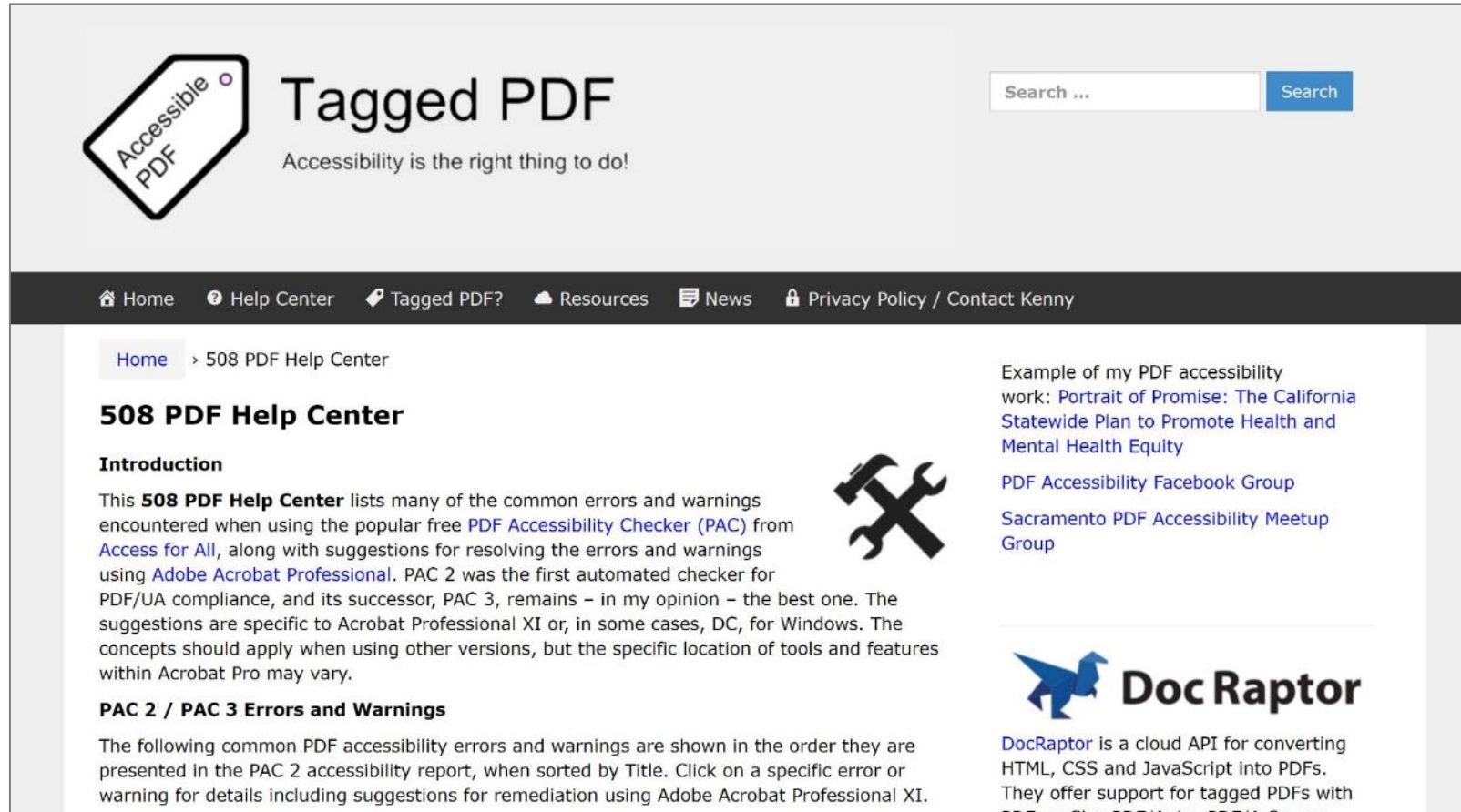
Adobe Acrobat Pro – Free Plug-in

[Callas pdfGoHTML](https://www.callassoftware.com/en/products/pdfgohtml0) (<https://www.callassoftware.com/en/products/pdfgohtml0>)



Free Online Resource – Tagged PDF

<https://taggedpdf.com/508-pdf-help-center/>



The screenshot shows the Tagged PDF website. The header features the Tagged PDF logo (a tag with 'Accessible PDF' text) and the tagline 'Accessibility is the right thing to do!'. A search bar is located in the top right. The navigation menu includes links for Home, Help Center, Tagged PDF?, Resources, News, and Privacy Policy / Contact Kenny. The main content area is titled '508 PDF Help Center' and includes a breadcrumb trail 'Home > 508 PDF Help Center'. The 'Introduction' section explains that the help center lists common errors and warnings from the PDF Accessibility Checker (PAC) and provides suggestions for resolution. A wrench and hammer icon is placed next to this text. The 'PAC 2 / PAC 3 Errors and Warnings' section states that common errors are listed in the order they appear in the PAC 2 report. On the right side, there are links to 'Example of my PDF accessibility work: Portrait of Promise: The California Statewide Plan to Promote Health and Mental Health Equity', 'PDF Accessibility Facebook Group', and 'Sacramento PDF Accessibility Meetup Group'. At the bottom right, there is a section for 'Doc Raptor', featuring a blue raptor logo and text describing it as a cloud API for converting HTML, CSS, and JavaScript into PDFs.

Tagged PDF
Accessibility is the right thing to do!

Search ... Search

Home Help Center Tagged PDF? Resources News Privacy Policy / Contact Kenny

Home > 508 PDF Help Center

508 PDF Help Center

Introduction

This **508 PDF Help Center** lists many of the common errors and warnings encountered when using the popular free [PDF Accessibility Checker \(PAC\)](#) from [Access for All](#), along with suggestions for resolving the errors and warnings using [Adobe Acrobat Professional](#). PAC 2 was the first automated checker for PDF/UA compliance, and its successor, PAC 3, remains – in my opinion – the best one. The suggestions are specific to Acrobat Professional XI or, in some cases, DC, for Windows. The concepts should apply when using other versions, but the specific location of tools and features within Acrobat Pro may vary.


PAC 2 / PAC 3 Errors and Warnings

The following common PDF accessibility errors and warnings are shown in the order they are presented in the PAC 2 accessibility report, when sorted by Title. Click on a specific error or warning for details including suggestions for remediation using Adobe Acrobat Professional XI.

Example of my PDF accessibility work: [Portrait of Promise: The California Statewide Plan to Promote Health and Mental Health Equity](#)

[PDF Accessibility Facebook Group](#)

[Sacramento PDF Accessibility Meetup Group](#)

 **Doc Raptor**

[DocRaptor](#) is a cloud API for converting HTML, CSS and JavaScript into PDFs. They offer support for tagged PDFs with PDF/A-1a, PDF/A-1b, PDF/A-2a, PDF/A-2b, PDF/A-3a, PDF/A-3b and PDF/A-3u.

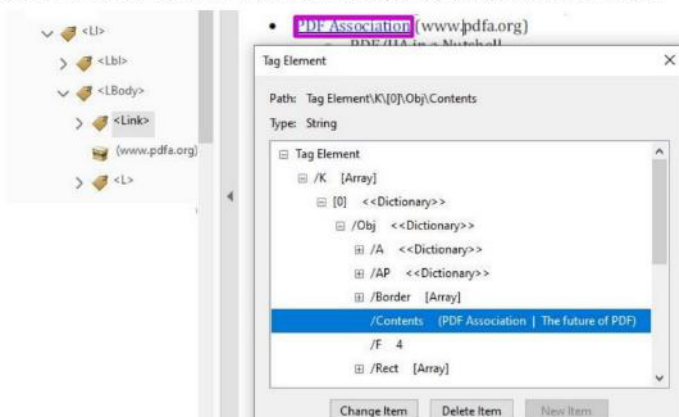
Tagged PDF – Written and Visual Help

<https://taggedpdf.com/508-pdf-help-center/>

Suggestion

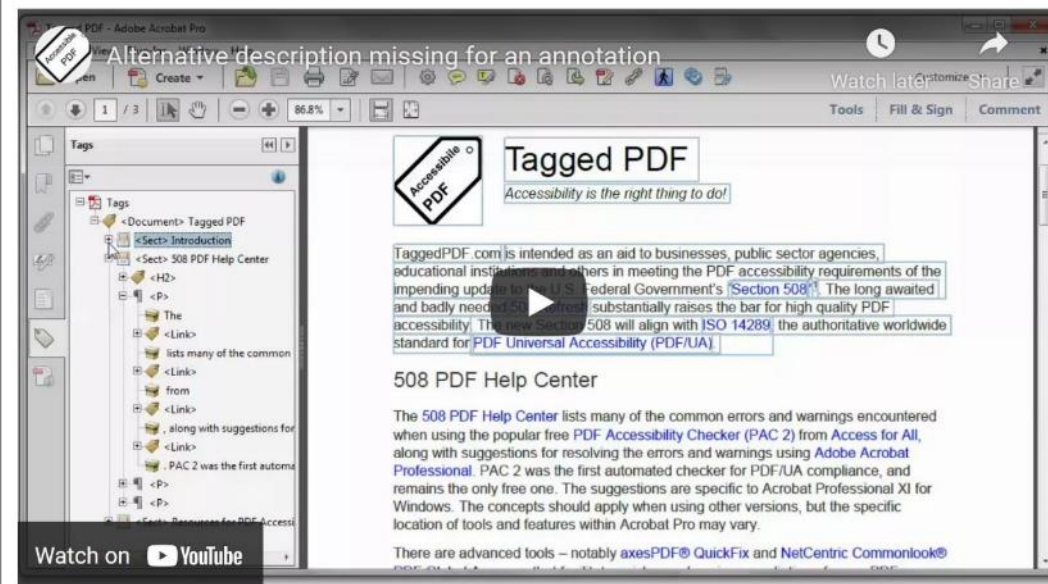
For older versions of Acrobat Pro, or to apply a specific alternate Description ...

In the PAC 2 test report, click the error to see the location of the link in the document. In the Tags pane in Acrobat Pro, right-click the Link tag and select Properties. On the Tag tab of the Object Properties dialog, click the Edit Tag button. In the Tag Element dialog, expand items and drill down to the "/Obj <<Dictionary>>" item (I usually find it under "/K [Array]"; then "[0] <<Dictionary>>". Select "/Obj <<Dictionary>>" then click the New Item button. In the Add Key and Value dialog, enter Contents in the Key field, change the Value Type to String, and enter a meaningful alternate description in the Value field. For external links, a good practice is to use a description that matches the Title property of the target page. For internal links such as those in a Table of Contents, it may make sense to simply use the text of the link itself.



Example PDF with this error

Video version of this suggestion:



Accessibility Courses – LinkedIn Learning

<https://www.linkedin.com/learning/>

The screenshot displays the LinkedIn Learning interface for the course "Creating Accessible PDFs" by Chad Chelius. The top navigation bar includes the LinkedIn Learning logo, a search bar, and links for Home, My Learning, Notifications, Me, and EN. The left sidebar shows the course contents, including an Introduction and six numbered sections on understanding and creating accessible PDFs from various sources like Word, PowerPoint, and Adobe InDesign. The main video player shows the course title and instructor's name over a video of Chad Chelius. Below the video, there are tabs for Overview, Notebook, and Transcript. The Overview tab is active, showing the instructor's profile (Chad Chelius, Adobe Certified Instructor, Conference Speaker, Published Author) and a link to view his LinkedIn profile. To the right, there are links for Exercise Files and Certificates, both with "Show all" options. A "Give feedback" button is located at the bottom right of the Overview section.

LinkedIn LEARNING Browse Search for skills, subjects or software Home My Learning Notifications Me EN

Contents × **Creating Accessible PDFs** Welcome 6,056 + ↗

- Introduction >
- 1. Understanding Accessibility >
- 2. Accessibility in PDF Files >
- 3. Make an Existing PDF File Accessible >
- 4. Create an Accessible PDF File from Word >
- 5. Create an Accessible PDF File from Powerpoint and Excel >
- 6. Create an Accessible PDF File from Adobe InDesign >
- Conclusion >

Creating Accessible PDFs
with **Chad Chelius**

0:01 / 1:04 1x CC ⚙️ 🔊 🗑️

Overview Notebook Transcript

INSTRUCTOR

Chad Chelius
Adobe Certified Instructor, Conference Speaker,
Published Author
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