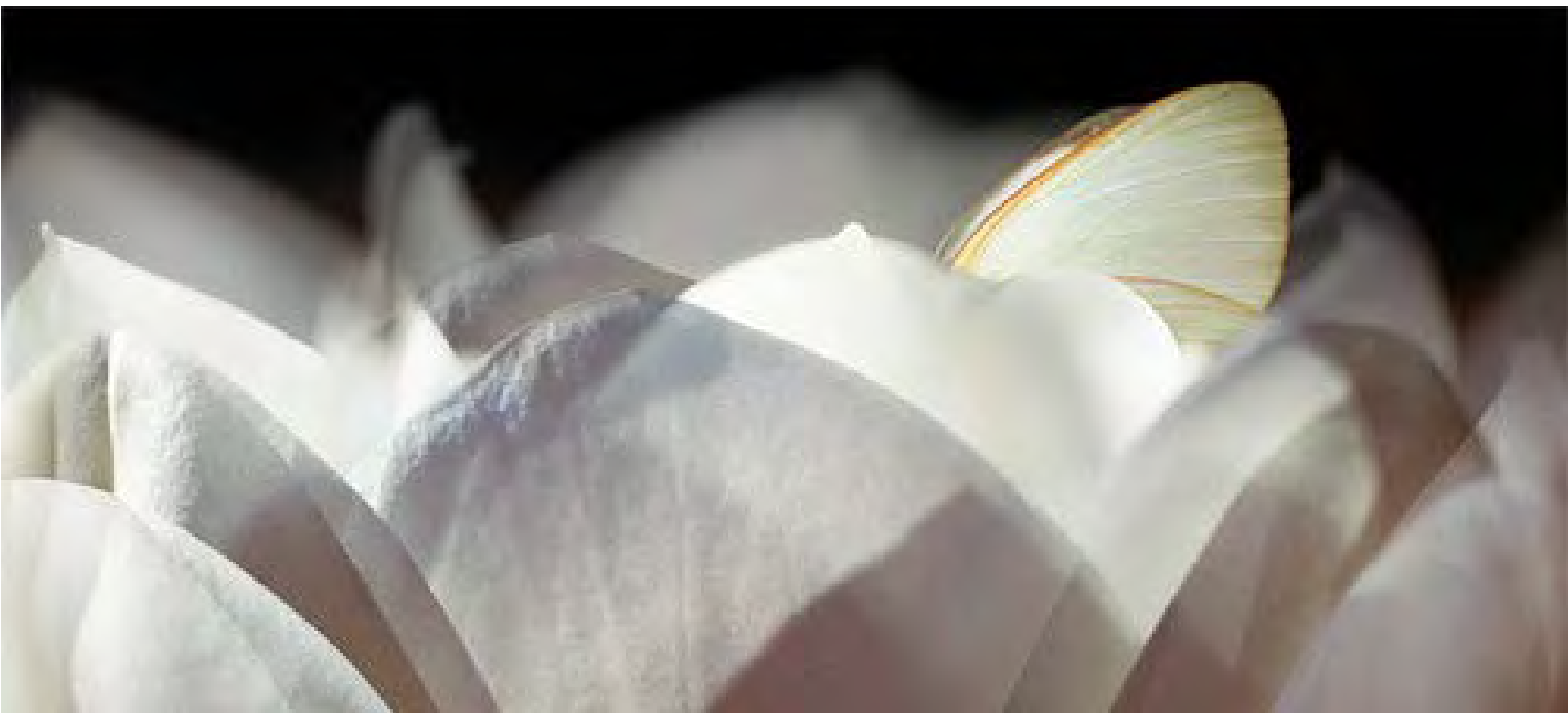




PDF and the Adobe Digital Enterprise Platform (ADEP)

Greg Pisocky | Sr. Business Development Manager for Accessibility



Agenda

- Where Do PDF Files Come From?
- The Adobe Digital Enterprise Platform (ADEP / formerly LiveCycle)
- ADEP Designer, Another Source for PDF Files
- Accessibility is NOT a Feature, It's a Result
- ADEP Designer Best Practices for Creating Accessible Forms
(Along the way, some of these will be demonstrated during the talk)
- Verify the PDF Accessibility with Acrobat X Pro
- Adobe's Accessibility Resource Center
- Questions

PDF Documents Always Begin as Some Other File Format

Many Products Now Generate Tagged PDF

- Adobe
 - Acrobat
 - InDesign
 - LiveCycle
 - ADEP Designer
 - FrameMaker®
- Microsoft
 - Word
 - Excel
 - PowerPoint
 - Publisher
 - Visio
- OpenOffice.org
 - Writer
 - Impress
 - Calc
 - Draw



Introducing The Adobe Digital Enterprise Platform

- Adobe Digital Enterprise Platform (ADEP) software (formerly Adobe LiveCycle® and Day® CRX) is a composite content application platform for rapidly deploying Adobe's Customer Experience Solutions and building custom applications.
- Included in every Adobe® Digital Enterprise Platform (ADEP) installation and working in conjunction with ADEP Document Services Workbench software, ADEP Document Services Designer software provides robust and intuitive tools for creating accessible interactive forms or personalized document templates.
- Designer includes a number of features and capabilities that enhance the usability of forms for users with a range of disabilities and that assist form authors in creating forms that are more accessible to people with disabilities. The templates created by Designer can be dynamically rendered as accessible interactive forms in PDF, and HTML using ADEP capabilities.

ADEP Designer -

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The Importance of Best Practices: Accessibility is NOT a Feature, It's a Result



- There is NO Accessibility Button – Accessible Content Creation is a Process NOT a Feature
- Achieving Accessibility Requires Human Testing in addition to Automated Checking
- Checking Can Only Detect for the Presence or Lack of Required Items
- Cannot Check if an Item is Correct or Appropriate
- Accessibility is a New Item for the Production Workflow – Like Authoring, Layout, Proofreading, etc.
- Note Also, Publishers Will Need to Employ a Variety of Techniques and Methods

ADEP Designer Best Practices for Creating Accessible Forms

- Keep Forms Simple and Easy to Use
- Configure Form Properties to Generate Accessibility Information
- Choose the Right Controls
- Provide Text Equivalents for Images
- Provide Proper Labels for Form Controls
- Ensure Reading Order and Tab Order are Correct
- Ensure Form Controls are Keyboard Accessible
- Use Color Responsibly
- Provide Heading Cells for Tables
- Provide a Navigable Form Structure
- Avoid Disruptive Scripting
- Ensure All Audio and Video Content is Accessible
- Identify Natural Language and Any Changes in Language

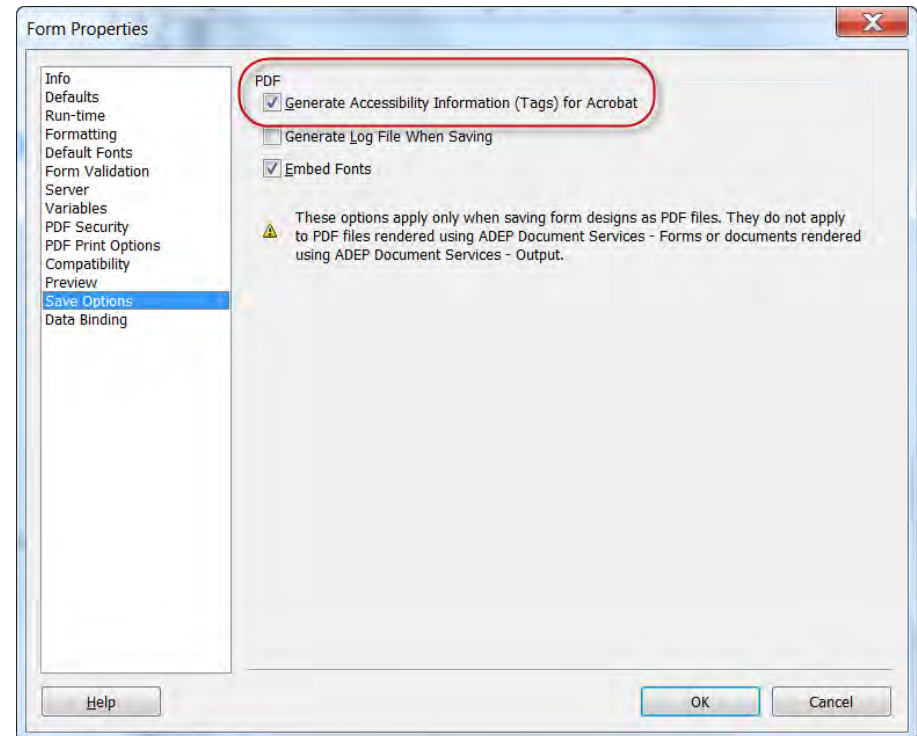
Keep Forms Simple and Easy to Use

- A simple layout of controls and fields with clear, meaningful captions and tool tips will make the form much easier for all users to use.



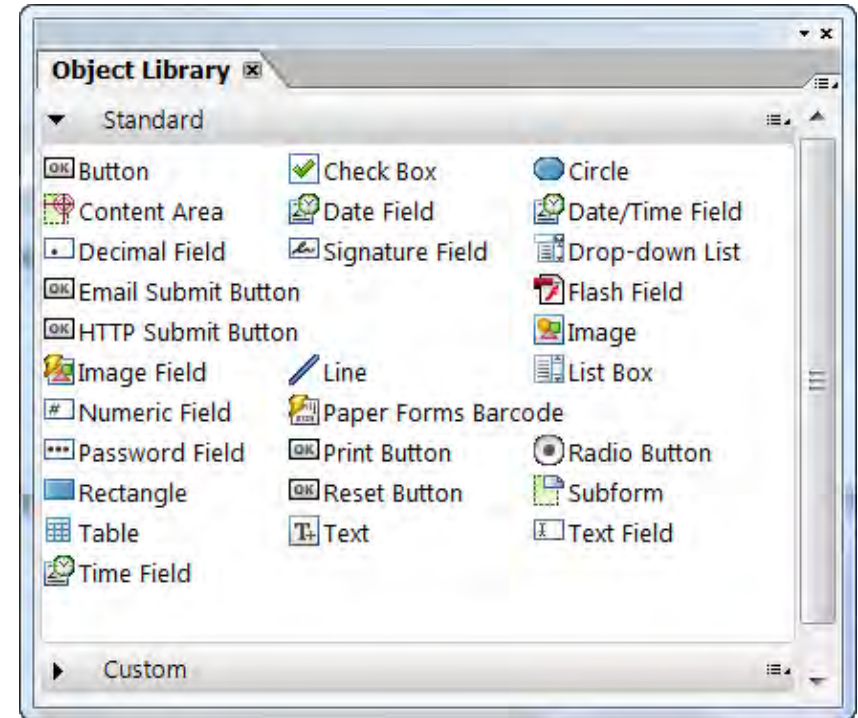
Configure Form Properties to Generate Accessibility Information

- To create an accessible form, you must configure form properties to have ADEP or LiveCycle Designer generate accessibility information when saving the form design as a PDF file
 - Choose File > Form Properties
 - Select the Save Options tab and, in the PDF area, ensure that Generate Accessibility Information (Tags) For Acrobat is selected
 - Select OK
- In ADEP Designer and LiveCycle Designer ES this option is selected by default



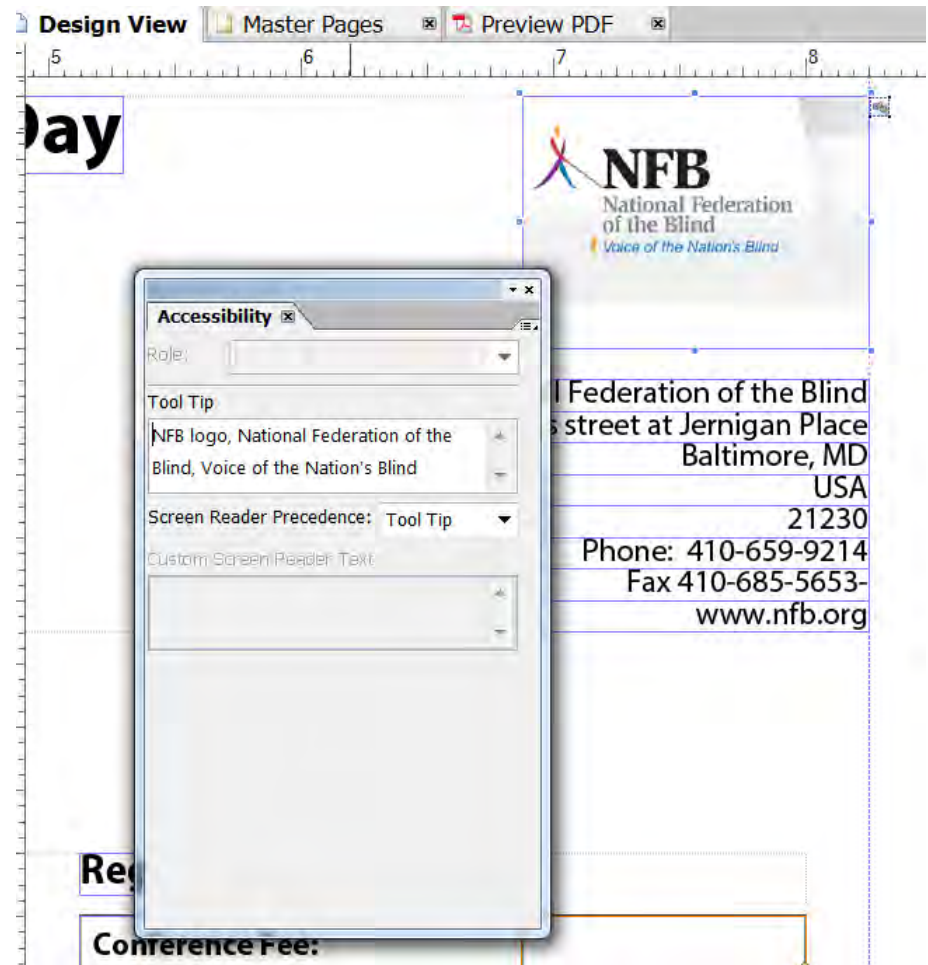
Choose the Right Controls

- Using standard objects saves you the additional effort of defining Accessibility properties for objects you have created yourself.
- If you do create and use custom objects, be sure to use the Accessibility palette to set accessibility properties such as Role, Tool Tip, Screen Reader Precedence, and Custom Screen Reader Text.



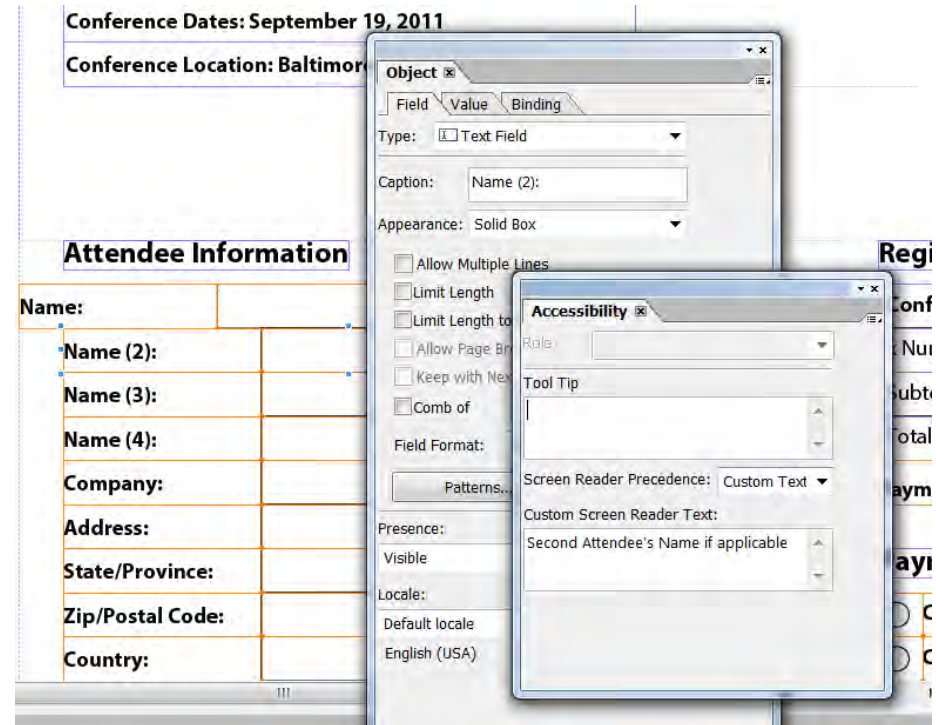
Provide Text Equivalents for Images

- If you choose to use images, provide text descriptions for all image and image field objects.
- Screen readers can only describe images for which a text alternative has been provided,
- For this reason, all images conveying information must always have a text alternative specified
- You provide text descriptions using the Tool Tip or Custom Screen Reader Text properties in the Designer Accessibility palette



Provide Proper Labels for Form Controls

- A form control's label or caption identifies what the form control is supposed to represent. For example, the text "First name" tells users that they have to enter their first name in a text field
- The label that is perceived by screen reader users does not necessarily have to be the same as the visual caption. In some cases you may want to be more specific about the control's purpose
- The Accessibility palette can be used to specify what the screen reader will announce to identify the specific form field.



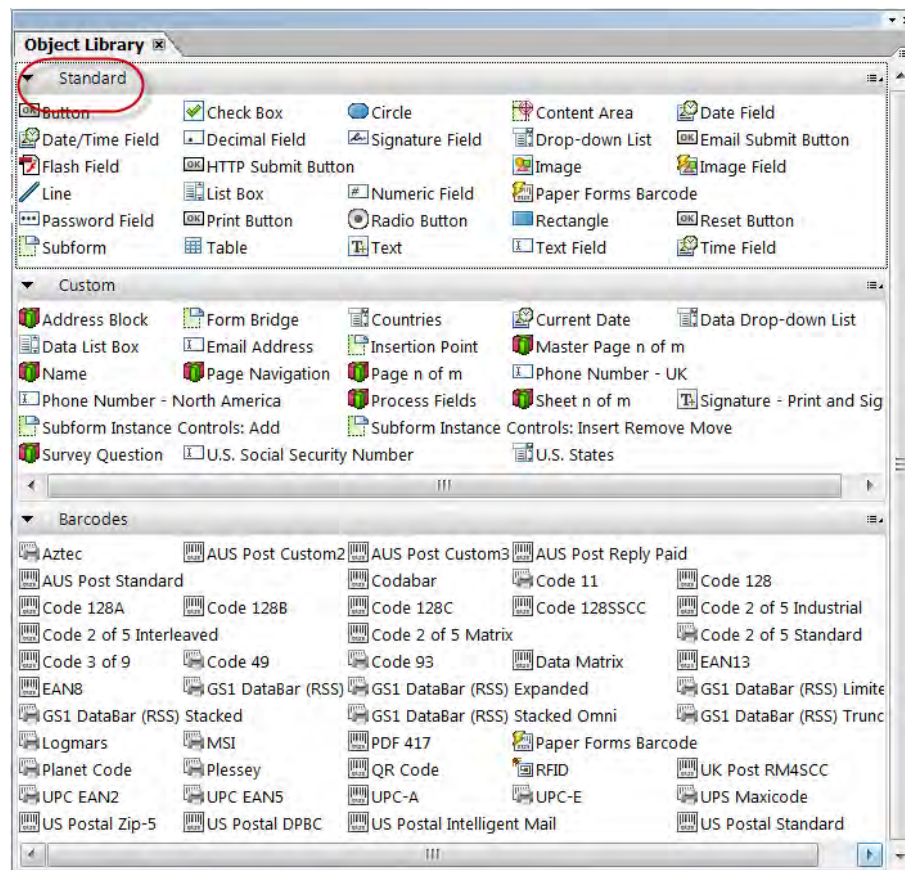
Ensure Reading Order and Tab Order are Correct

- Ensuring a meaningful reading order is very important when designing forms that are accessible to users with vision impairment or other disabilities
- The reading order determines the sequence used by screen reader users as they read through the form
- Tab order allows users to quickly move from one interactive form control to the next using the Tab or Shift+Tab keys. A logical tab order ensures users have access to all the fields on the form and that they can navigate the form in a way that is sensible and efficient

The screenshot displays the Adobe Acrobat Design View of a form titled "Ability Training Day". A "Tab Order" window is open on the left, showing a list of 45 fields with their corresponding tab order numbers. The form itself is a registration form for the National Federation of the Blind (NFB). It includes fields for personal information, contact details, and payment information. The form is divided into sections: "Ability Training Day", "Registration Fees", and "Payment". The "Registration Fees" section includes fields for "Conference Fee", "x Number of Attendees", "Subtotal", and "Total Due". The "Payment" section includes fields for "Check payable", "Credit Card", "Card Number", "Expiration Date", and "Cardholder Name". The "Tab Order" window lists the fields in the following order: 1. {Name[0]}, 2. {Name[1]}, 3. {Name[2]}, 4. {Name[3]}, 5. {CompanyName}, 6. {Address}, 7. {StateProv}, 8. {ZipCode}, 9. {Country}, 10. {MainContact}, 11. {ContactEmail}, 12. {ContactPhone}, 13. {SpecialNeeds}, 14. {ConferenceFee}, 15. {NumberOfAttendees}, 16. {Subtotal}, 17. {StaticTotalDue}, 18. {Total}, 19. {InvoiceDate}, 20. {Payment}, 21. {Payable}, 22. {CardType}, 23. {CardNumber}, 24. {ExpirationDate}, 25. {CardholderName}, 26. {StaticDataIsNotSecure}, 27. {StaticConferenceRegistration}, 28. {CompanyLogo}, 29. {StaticCompanyName}, 30. {StaticAddress}, 31. {ConferenceName}, 32. {StaticCityState}, 33. {StaticCountry}, 34. {Dates}, 35. {StaticZIPPostalCode}, 36. {StaticPhone}, 37. {Location}, 38. {StaticFax}, 39. {StaticWebSite}, 40. {StaticAttendeeInformation}, 41. {StaticRegistrationFees}, 42. {StaticConferenceFees}, 43. {StaticNumberOfAttendees}, 44. {StaticSubTotal}, 45. {StaticPayment}.

Ensure Form Controls are Keyboard Accessible

- Users must be able to fill the form completely using only the keyboard or an equivalent alternative input device. Users with reduced mobility or impaired vision may have no choice but to use the keyboard, and many users who can use a mouse simply prefer keyboard input
- The easiest way to ensure that controls are keyboard accessible is by using the controls listed under the Standard tab in the Object Library palette. These controls respond to both mouse and keyboard input by default



Use Color Responsibly

- Designers use colors to improve the appearance of forms by highlighting various form components. Improper use of color, however, may make information in your form difficult or impossible to read by people with disabilities
 - Do Not Use Color Alone to Convey Information (for example labelling required fields using red text)
 - Provide sufficient color contrast between background and foreground

Main Contact:

Email:

Phone:

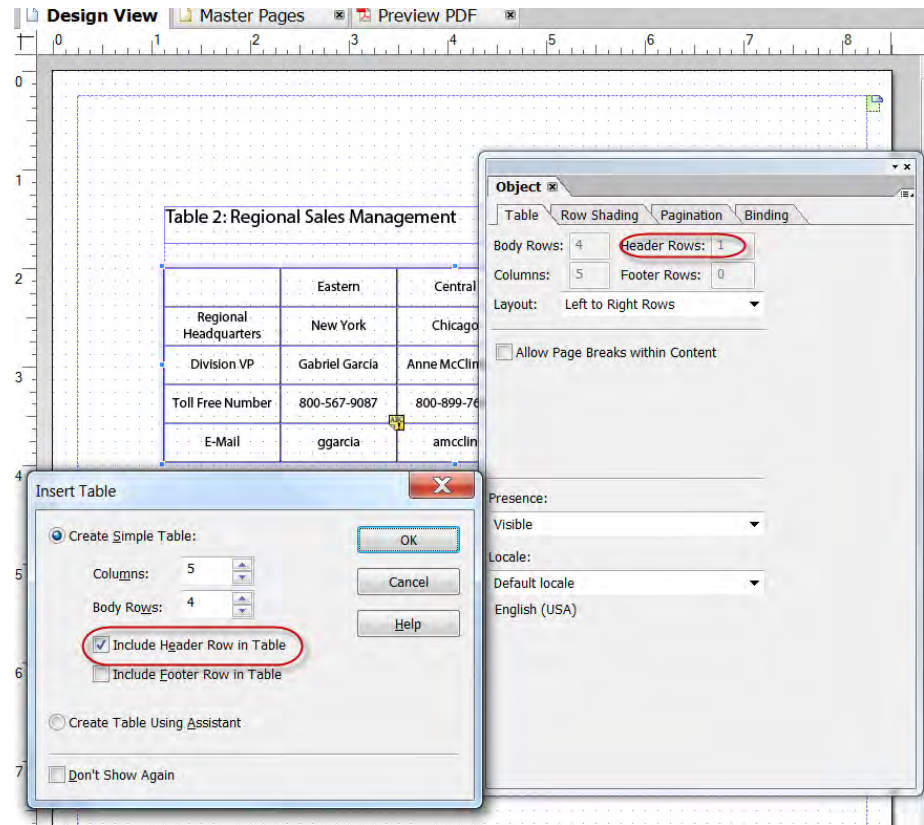
Special Needs:

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Provide Heading Cells for Tables

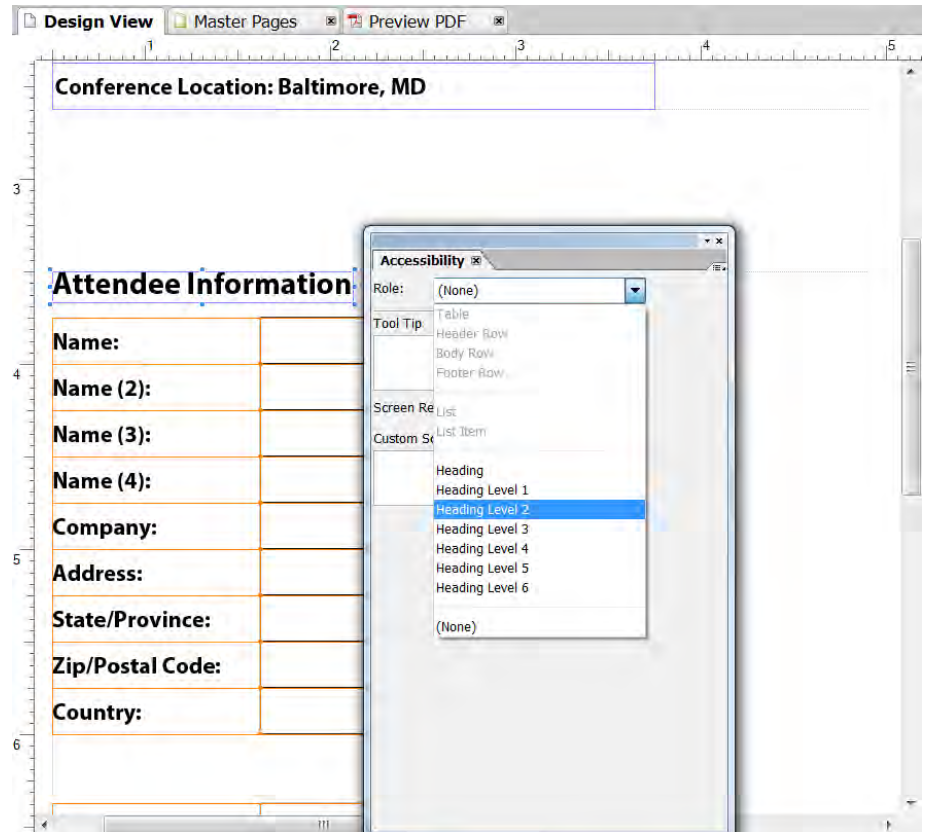
- Designer can specify the following roles for table elements as you construct tables. These roles allow screen readers to navigate the table structure using special shortcuts, and will convey to the user the relationship between table cells and corresponding header cells

- Table
- Header Row
- Body Row
- Footer Row



Provide a Navigable Form Structure

- Just as a book becomes easier to understand when it is divided into chapters and sections, a form becomes easier to use when it is divided into headings and subheadings
- You can add a heading structure to your form using the Accessibility palette in Designer



Avoid Disruptive Scripting

- As part of the form design process, form developers can use scripts to provide a richer user experience. You can add scripts to most form fields and objects. For example, you can create simple scripts to dynamically update values on an interactive form in response to user input.
- Keep the form content free of visual interruptions
- Ensure that pop-up windows appear only as a result of user-initiated actions
- Do not allow the current focus of the form (the user's current view) to change or content to redisplay unless initiated by the user
- Do not specify time-based responses for input fields

Ensure All Audio and Video Content is Accessible

- Specifically, make sure that video clips incorporated into forms contain captions (sometimes called subtitles) for deaf and hard of hearing users and video descriptions for blind users
- For audio files that are not synchronized with video content, a simple transcript is sufficient
- Unlike forms without videos, you will need to embed the video in a PDF file using Acrobat first and then import that file into Designer using the Create an Interactive Form with Fixed Pages option

Work Order Ticket for FRU Procedure

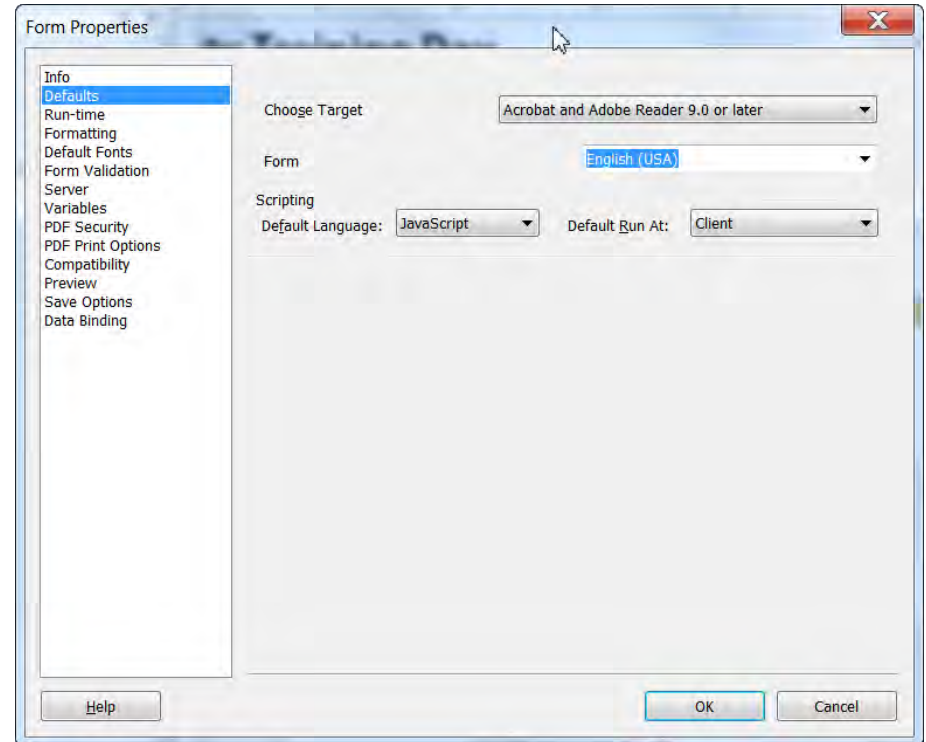
Video Instruction:

Adobe Systems	
7930 Jones Branch Road	
McLean	VA



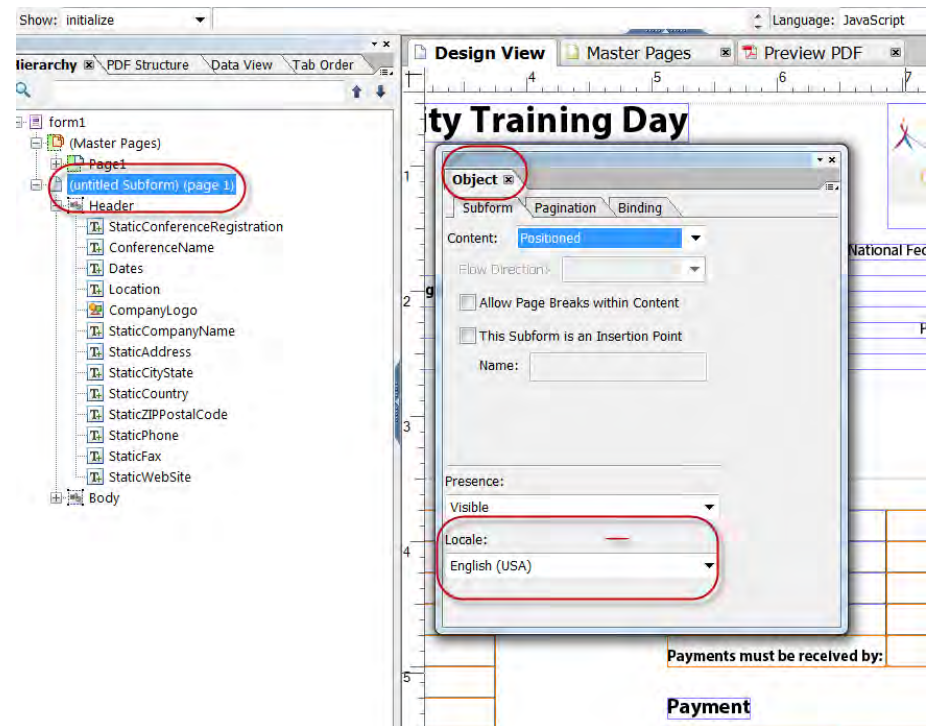
Identify Natural Language and Any Changes in Language

- It is important to correctly identify the primary language of the form to ensure that forms are read in the intended language
- Adobe's documented procedure for doing (File > Form Properties > Defaults and then specifying the form language) this does not work for PDF – the form will fail the accessibility check for language
- Don't worry, the next slide shows how to work around this issue
- If the text (or alternative text) in your forms is presented in more than one language, you must identify the areas of your form in which a switch is made from one language to another using the locale setting in the Object properties palette



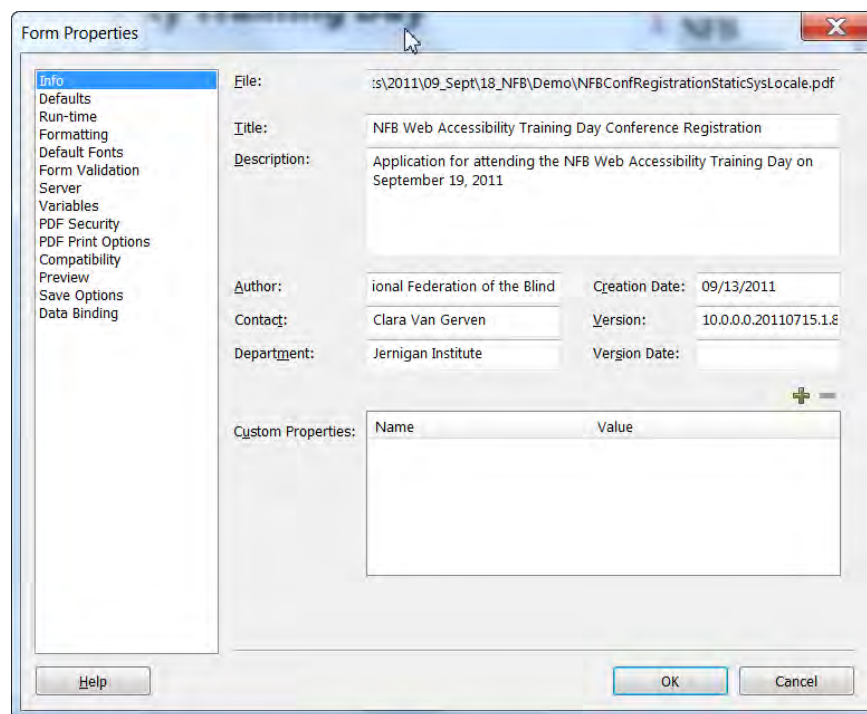
Natural Language Workaround for PDF

- PDF forms will fail the Acrobat accessibility checker for language if you set the form property language setting
- In the Hierarchy tab, select the first unnamed subform in the document
- Bring up the Object Properties palette for the subform
- Specify the language in the locale section
- The resulting PDF will pass Acrobat's accessibility language check



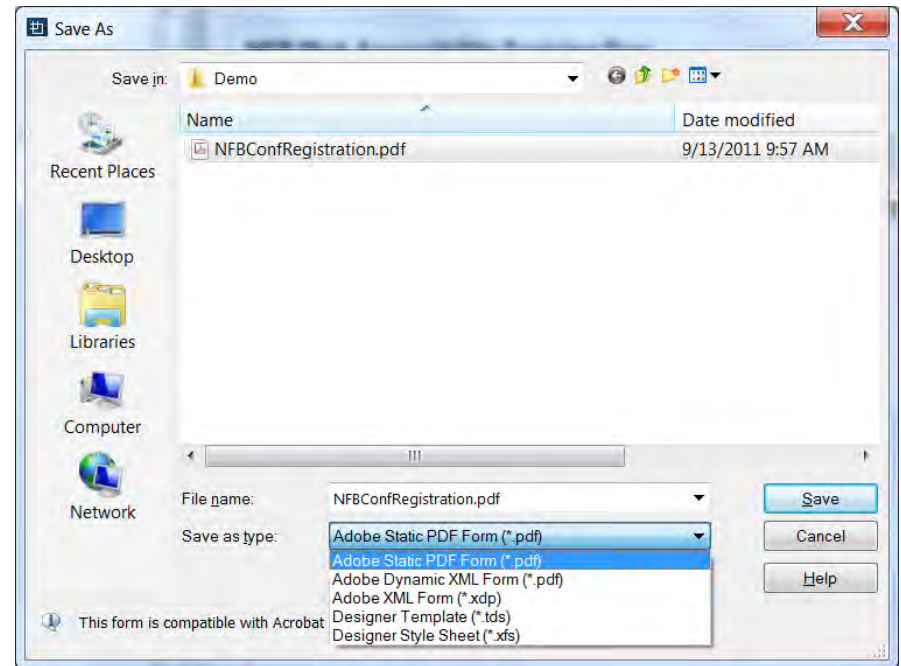
Adding Document Information and Meta Data

- Add a title, description, keywords and other important information about the document which can also be used by search engines on the Web
- File > Form Properties > Info
- Cannot be modified in the resulting PDF for either static or dynamic PDF files



Save the Form as PDF

- Two Options for Saving as PDF
- File > Save As
 - Adobe Static PDF Form
 - Adobe Dynamic XML Form



Verify PDF Accessibility With Acrobat Pro

- You've published a PDF document, and now need to verify the accessibility.
- For this task you will need a tool that provides a view of the accessibility information.
- Adobe Acrobat X provides the most comprehensive set of tools for examining and repairing the accessibility of PDF documents.



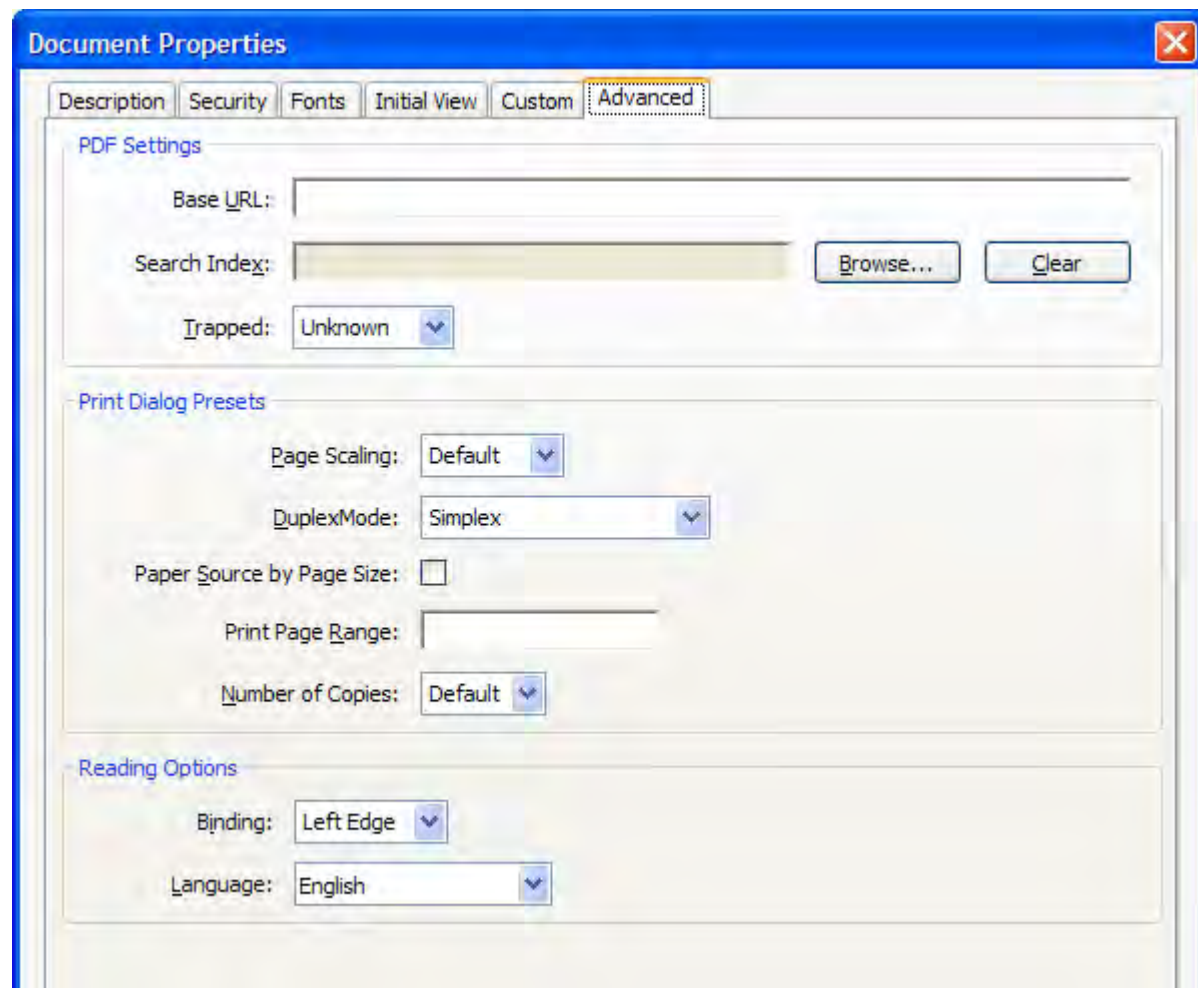
Verify Accessibility: What Are You Looking For?

Additional items that need to be verified include:

- Headings – structure and content
- Accessible images
- Columns (reading order)
- Table heading cells
- Document language

Identify Document Language in Acrobat

- The document language can be verified in Adobe Acrobat.
- The “Document Properties” dialog is available from the File menu.
- The “Advanced” tab contains a “Language” drop down where the language can be set.

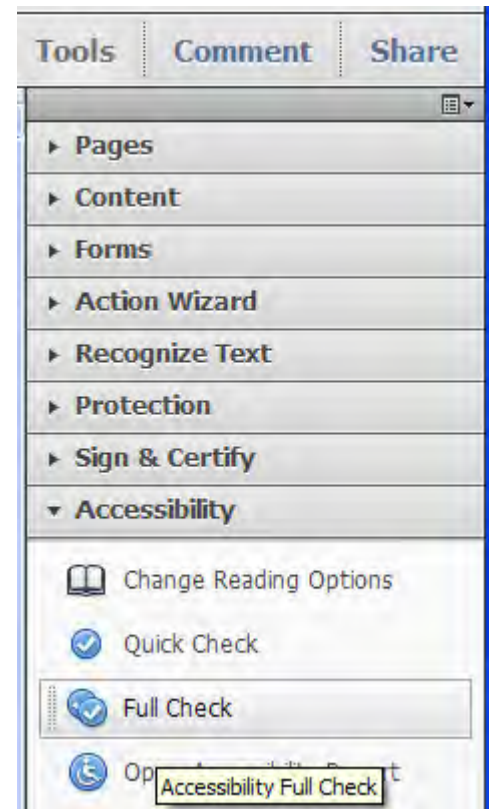


Verify PDF Accessibility: Acrobat Pro Accessibility Checker

- Adobe Acrobat includes an accessibility checking tool which provides useful information for authors interested in accessibility
- The Tools panel includes an option titled “Full Check” which runs a series of tests on the document

Note:

Acrobat Accessibility Checker only works on ADEP forms that were saved as Adobe Static PDF forms



Verify PDF Accessibility: Acrobat Pro Accessibility Checker

Accessibility Full Check

Report and Comment Options

☒ Create Accessibility Report Folder: C:\Documents and Settings\akirkpat\My Document Choose...

☒ Include repair hints in Accessibility Report

☐ Create comments in document

Page Range

☒ All pages in document ☐ Pages from 1 to 1

Checking Options

Name: Adobe PDF

☒ Alternative descriptions are provided

☒ Text language is specified

☒ Reliable character encoding is provided

☒ All content is contained in the document structure

☒ All form fields have descriptions

☒ Tab order is consistent with the structure order

☒ List and table structure is correct

Select All Clear All

Disclaimer

Hide Disclaimer

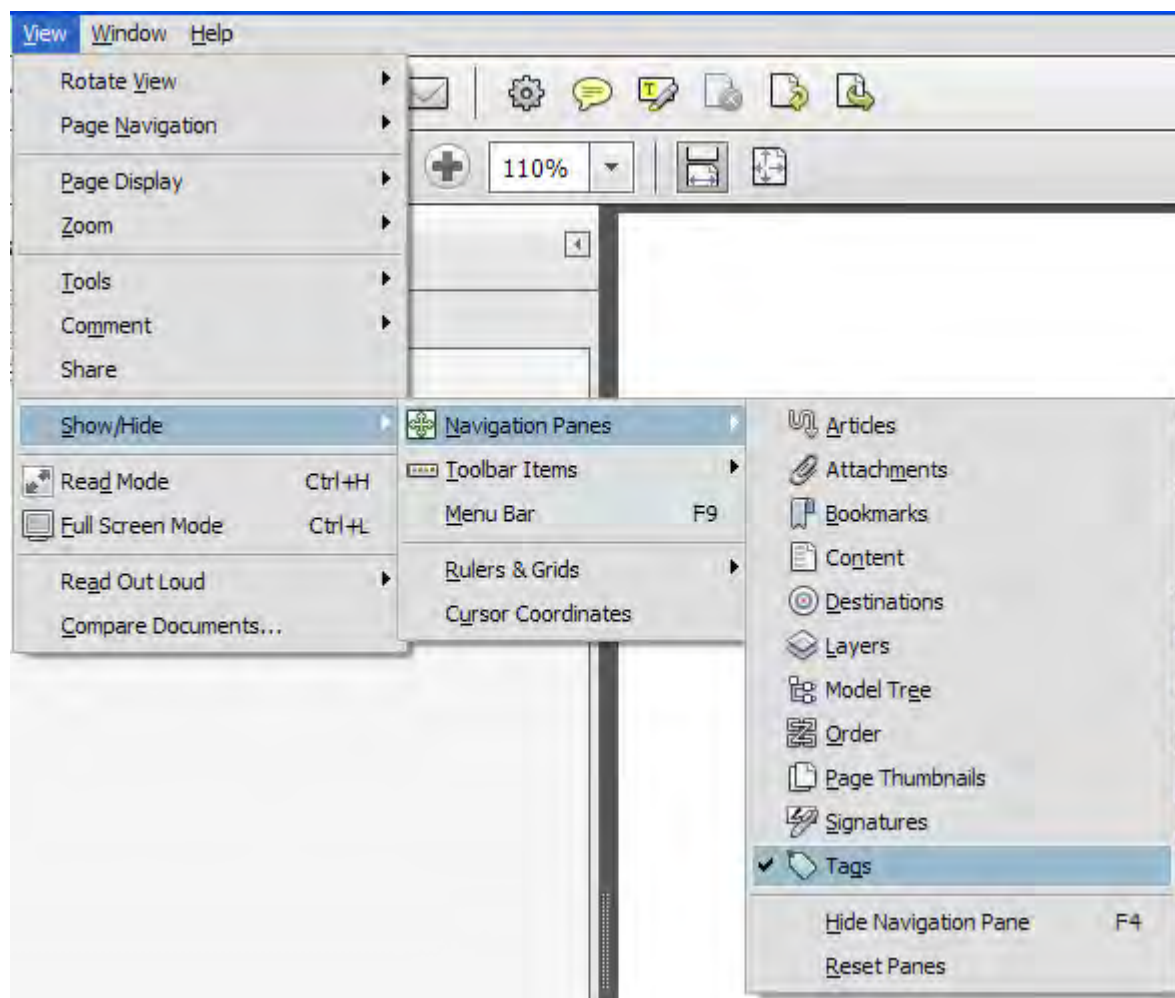
The Accessibility Checker can help you identify areas of your documents that may be in conflict with Adobe's interpretations of the referenced guidelines. However, the Accessibility Checker does not check all accessibility guidelines and criteria, including those in such referenced guidelines, and Adobe does not warrant that your documents will comply with any specific guidelines or regulations.

Help Start Checking Cancel

Verify PDF Accessibility: Acrobat Pro Accessibility Checker

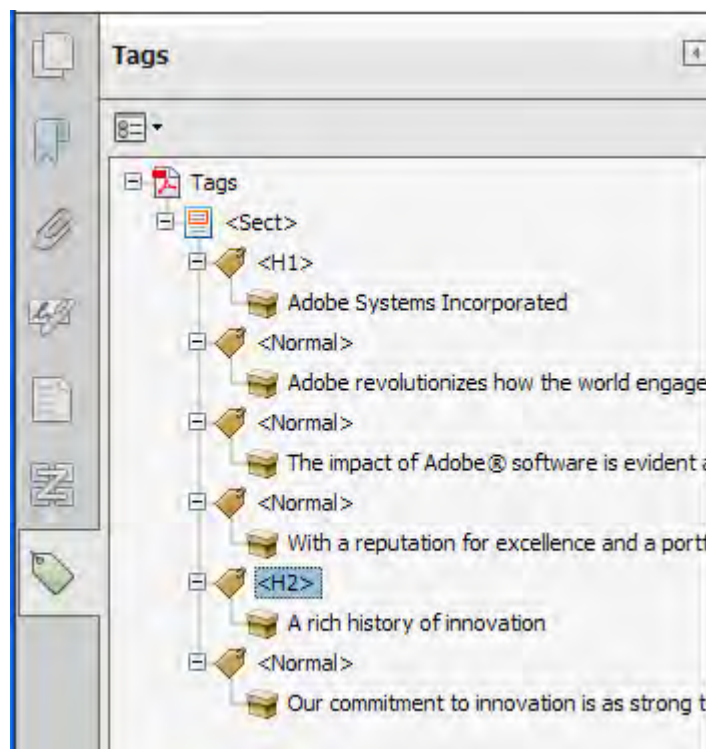
- The “Adobe PDF” set of tests will check several important items including
 - Equivalents for images
 - Document Language
 - Correct list and table structure
- No accessibility checking tool can verify that information is accurate, only that it is provided. For example, the Full Check will indicate when images are missing equivalents but a human is needed to verify that any text provided is appropriate for the image.
- When issues are identified, an accessibility report is provided which includes hints to address issues.
- Further verification is needed after the report is performed.

Verify Accessibility: View Tags in Acrobat



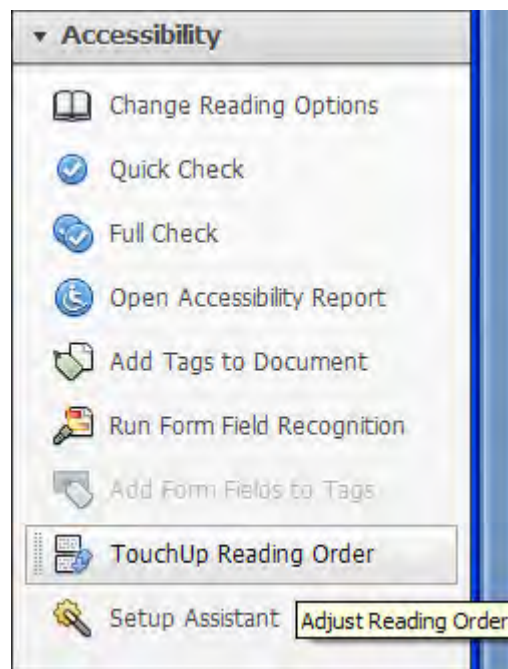
Verify Accessibility: The Tags Tree

- Examination of the tags will allow authors to verify that headings are used appropriately.
- Headings may be written as <H1> or <Heading 1>.



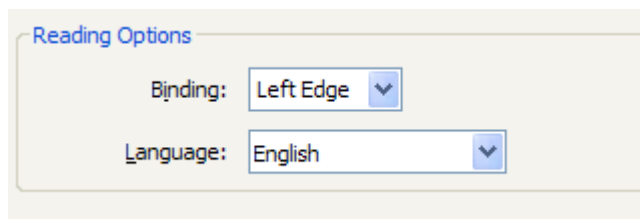
Verify Accessibility: The TouchUp Reading Order Tool

- The Accessibility pane of the Tools panel in Adobe Acrobat X includes a button for the TouchUp Reading Order Tool.
- The TouchUp Reading Order Tool provides a visual view of the structural elements in the PDF.



Verify Accessibility: Default Language

- Verifying the language of a PDF document is simple – when the document is open (in Adobe Acrobat X), choose “Properties” from the file menu and select the “Advanced” tab.
- The language option should be set to the default language. Select the language if it is not accurate. This only needs to be done once per document.



Verify Accessibility: Other PDF Accessibility Checkers

- Other tools are available for checking PDF accessibility that may be of interest.
 - Netcentric Commonlook (http://www.netcentric.com/products/cl_s508_adobe.aspx)
 - PAC – PDF Accessibility Checker
(<http://www.access-for-all.ch/en/pdf-werkstatt/pac-pdf-accessibility-checker.html>)

Accessibility Resources from Adobe

- Adobe's Accessibility Website
<http://adobe.com/accessibility>
- Adobe Accessibility Blog
<http://blogs.adobe.com/accessibility>
- Adobe's Acrobat Accessibility Guides
<http://adobe.com/accessibility/products/acrobat/training.html>
- Adobe Acrobat Accessibility Information
<http://www.adobe.com/accessibility/products/acrobat/>
- Adobe LiveCycle Accessibility Information
<http://www.adobe.com/accessibility/products/lifecycle/>
- Adobe Designer Accessibility Best Practices
http://www.adobe.com/accessibility/products/lifecycle/pdf/LiveCycle8_2AccessibilityGuidelines.pdf
- Adobe's Accessibility Compliance Documentation (VPATs)
<http://www.adobe.com/accessibility/products/compliance/>

Q&A



Adobe