

Creating Accessible PDF Forms in Acrobat Professional DC

This document covers techniques that can be used to make accessible PDF forms. In order to make your PDF documents accessible, you must use Adobe Acrobat *Professional*. Do not confuse Adobe Acrobat Professional with the free PDF reader known as Adobe *Reader* as they are not the same. Adobe Reader lacks many of the features that are used to make PDFs accessible. You may obtain Adobe Acrobat Professional DC from [Information Technology Services](#) or your local IT support.

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Step 1: Add Form Fields to an existing document

Many PDF forms are created in other programs such as Adobe InDesign or Microsoft Word. Form labels must be added to these fields within Acrobat Professional before they can be filled out electronically. With most files, the easiest way to add form fields is to have Acrobat detect and label these fields automatically. There are two main ways to do this:

1. Select View from the top menu and select **Tools > Prepare Form > Open**. A dialog will open. Select **From Existing Document > Current Document**, and Acrobat will automatically add form fields to the file.

OR

2. Access the option in the **Accessibility** tools called **Identify Form Fields**.

Adding and removing form fields

If a form field was not detected or if you want to manually create form fields, select the **Prepare Form Panel** to add a field manually. A menu of available form fields will appear on the top.



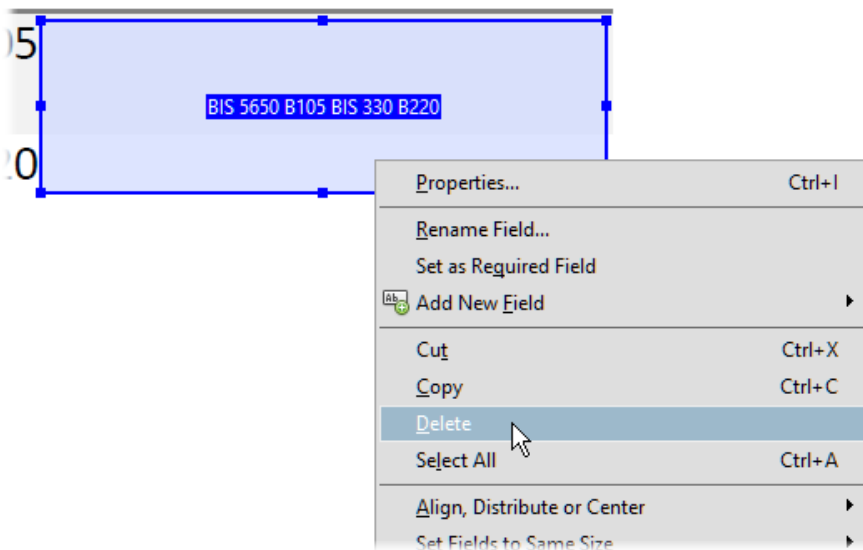
Select the desired form field type and drag it to the correct place on the page. Ensure the new form field covers the existing space in the file (e.g., a new radio button should cover the circle that already appears on the page).

Do you like radio buttons?

Yes

No

Items that are not true form fields can sometimes be incorrectly added to the PDF by Acrobat. This is especially common for cells within a data table or lines that are used to separate page sections. To remove incorrect form fields, **Right Click** on the unnecessary form field and select **Delete**.

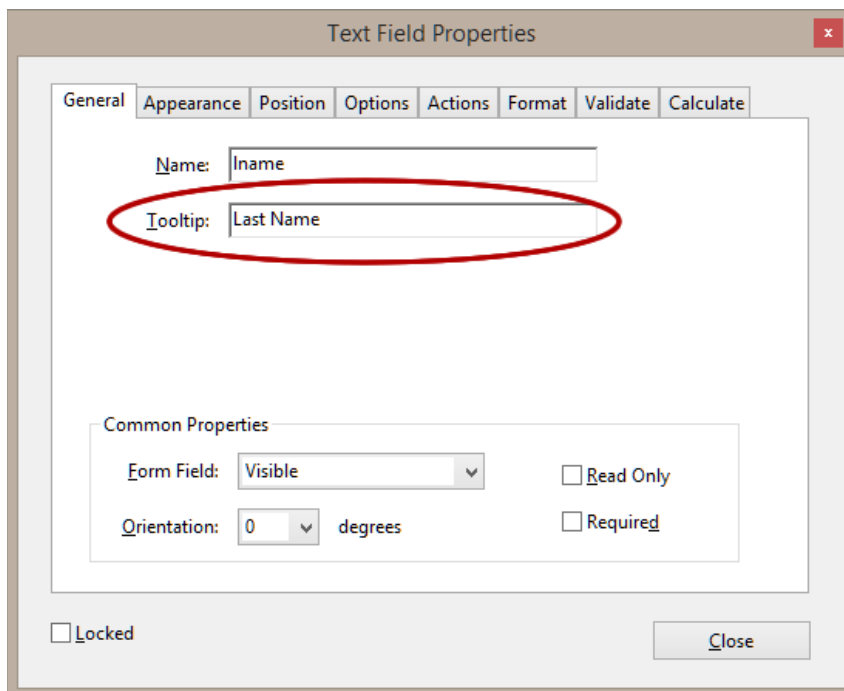


Step 2: Ensure Every Form Field Has a Descriptive Tooltip

Tooltips let screen readers and other assistive technology know the purpose of each form field and what information needs to be entered so that the form can be successfully completed by the user.

Editing the Tooltip

To check or edit the Tooltip of an existing form field, ensure you are in the **Prepare Form** panel. Then **right click** the field and select **Properties**. The Properties dialog will appear. Ensure the Tooltip conveys all the information that a screen reader user would need to correctly complete the field.



It is usually easiest to check all the Tooltip values at the same time by leaving this Properties window open in an empty part of the screen and clicking on each of the form fields.

Important: Fields that are marked "Required" within Acrobat are not identified by a screen reader. You should identify required fields in the Tooltip text.

Form field types

The following section provides additional details for specific types of form fields.

Text field

In most forms, the most common field type is a text field. There are options within Acrobat Pro to make this single or multi-line. Placeholder text (called **Default Value** in in the **Properties** window) will be read by a screen reader in addition to the Tooltip, but it should not be used in place of the Tooltip and should not include essential information. It is usually best to leave it blank.

Dropdown list

These menus can be navigated with the arrow keys or by selecting the first letter of the desired option. If an option is selected by default, it will be read by a screen reader in addition to the Tooltip.

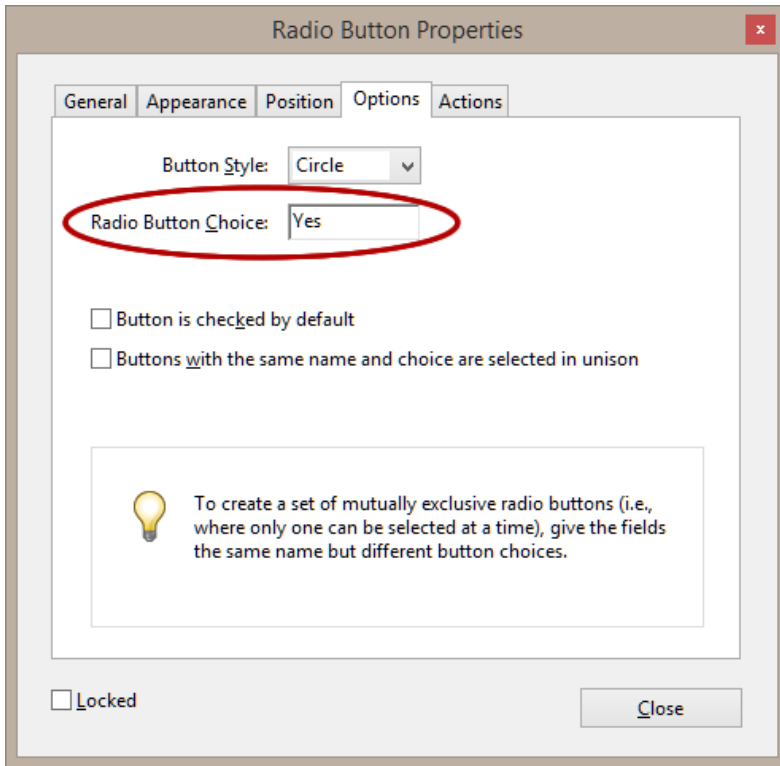
List box

A list box looks like an expanded dropdown list and allows the user to select multiple options by holding down the **Shift** or **Control** key while selecting an option with a mouse. List boxes introduce accessibility issues for keyboard users and usability issues for everyone. Use a group of checkboxes instead.

Radio buttons

Radio buttons (a group of options where only one option can be selected) require additional information to ensure accessibility. The following information must be provided:

- The **Name** must be the same for all of the radio buttons within the group. This groups the options together, just like the name attribute for HTML radio buttons. It also allows a keyboard user to select an option within the group using the arrow keys.
- The **Tooltip** value should also be the same for all radio buttons within the group. This provides a shared label for each of the options, like the <fieldset> and <legend> elements in HTML. Because this information will be read for each option in the group, it should be succinct.
- Under the **Options** tab, the **Radio Button Choice** value must match the text that appears next to each radio button.



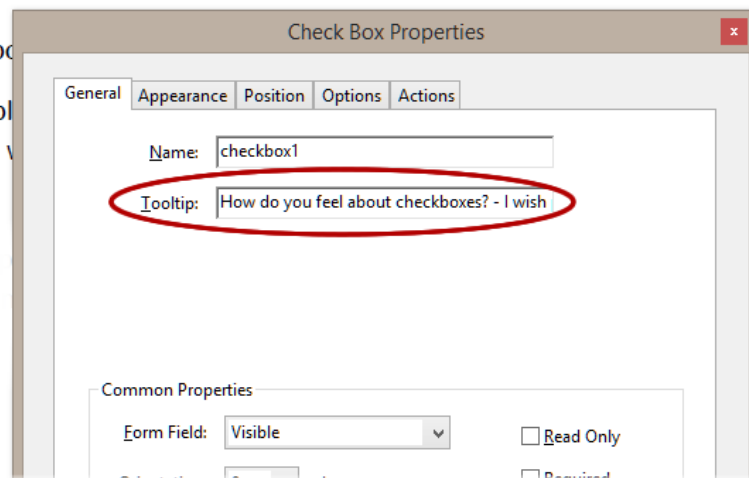
If these three fields contain the correct information, both the **Tooltip** and **Radio Button Choice** values will be read to a screen reader.

Checkbox

Unfortunately, checkboxes cannot be grouped together in the same way as radio buttons. This means that the description of the group of checkboxes *and* the individual checkbox should be presented in the **Tooltip**.

How do you feel about

- I wish people
- I wish sites v







Note: These principles for radio buttons and checkboxes must be balanced with the need for a succinct Tooltip. For example, descriptive text that is merely informative (e.g., "Check all that apply") should probably not be added to each Tooltip. A Tooltip that is extremely long could possibly be added to the

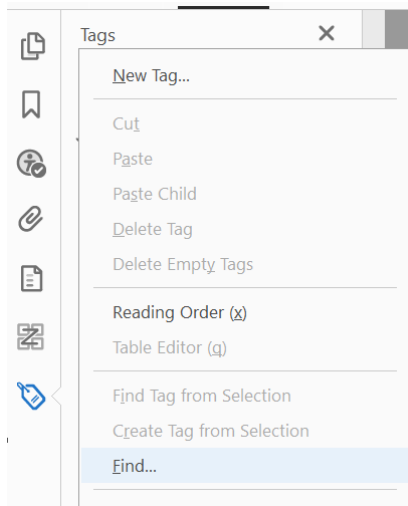
first checkbox or radio button with a more succinct Tooltip added to other options. Use your best judgment.

Button

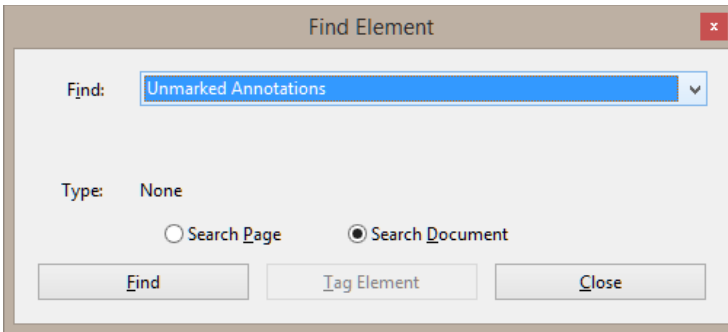
To add text to a button, open the **Properties** dialog for the button, select the **Options** tab, and then enter the appropriate text in the **Label** option. If a button does not have a Tooltip, the text that appears on the button will be read by a screen reader, but if a Tooltip is provided it will override the button text. While adding a Tooltip to a button does not appear to be necessary, the accessibility checker will flag a button without a Tooltip as an error, so it may be best to provide a Tooltip for the button that is identical to the button text.

Step 3: Add Tags to Form Fields

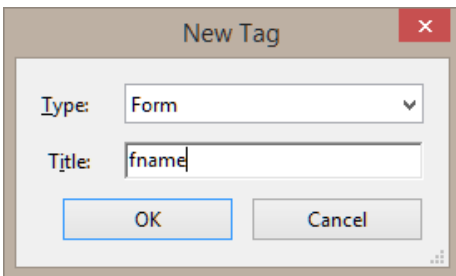
1. If you are still editing forms, select **Close** () in the upper-right corner of the screen.
2. Open the **Accessibility** panel. Select the **Add Tags to Form Fields** option ( Autotag Form Fields). This should add the necessary tags to the PDF, but it does not behave correctly, so additional steps are required to add the correct tags. If this option is disabled ( Autotag Form Fields), skip this step.
3. Open the **Tags pane** on the left side of the window, select the **Options** menu (), and then select **Find**.



In the Find Element dialog, select **Unmarked Annotations** from the dropdown menu, select the **Search Document** radio button, and then select the **Find** button.

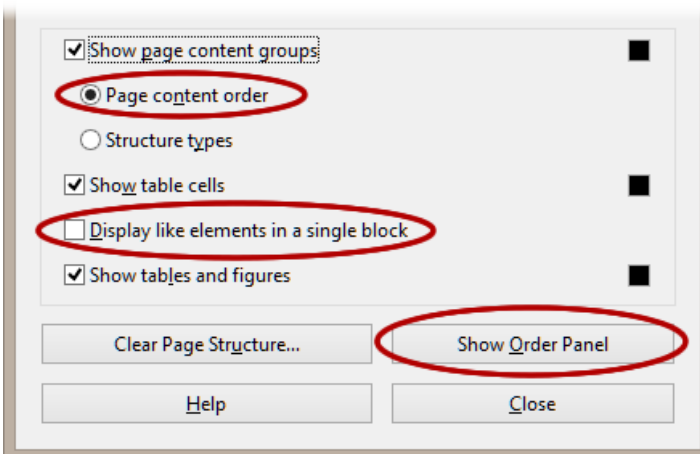


This should highlight the first untagged form field on the page. Select the **Tag Element** button to open a new dialog. In this new dialog, choose **Form** from the dropdown list (a **Title** is optional), and **OK**.



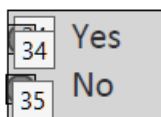
Keep adding tags to form fields until Acrobat indicates that the search is complete.

- Return to the **Accessibility** panel and open the **Touch Up Reading Order (TURO)** tool. Ensure the **Page content order** radio button is selected, uncheck **Display like elements in a single block**, and select **Show Order Panel**.

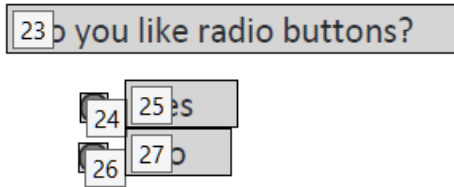


- Use the TURO tool and Order panel together to ensure the reading order of every form field and label is correct. For example, the reading order of this group of radio buttons is incorrect and the text labels are grouped into a single tag:

23 Do you like radio buttons?

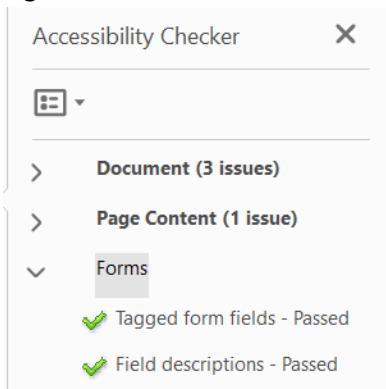


Using the TURO tool to create paragraph containers and the Order Panel reorder content, the final result would look something like this:



Note: The bullets from the original MS Word document were moved to the background to further simplify this view. This can be accomplished by selecting the desired container and either pressing **Delete** in the Order Panel or the **Background** button in the TURO tool.

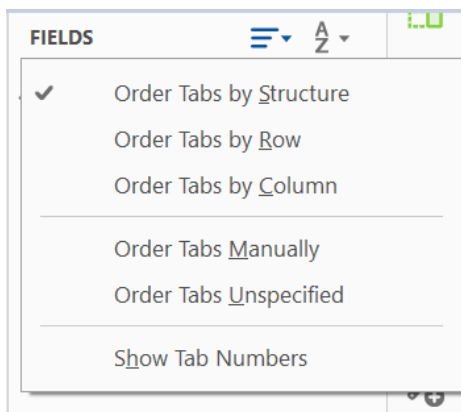
6. Once the reading order of the entire document is correct, select **Full Check** from the **Accessibility** panel and ensure there are no issues related to forms. This would probably be a good time to do a final check for other accessibility issues as well.



If **Tagged form fields - Failed** appears, that means there are still untagged fields. You will need to repeat the above process. If **Field descriptions - Failed** appears, return to the Forms panel and ensure all fields have an appropriate Tooltip.

Step 4: Check and Repair the Tab Order

Once the form fields are labeled correctly, and the reading order has been corrected, the tab order of the form fields should be reviewed. To review the tab order, select the **Forms Panel > Edit**. The bottom half of this sidebar will now display a list of all the form fields in the file. Within this **Fields** section, select the **Tab Order** menu. Ensure **Order Tabs by Structure** and **Show Tab Numbers** are checked.



Numbers will appear within each form field outlining the tab order.

First Name: 2

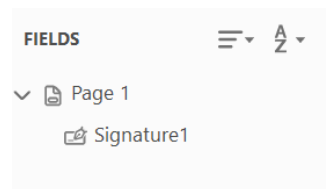
Last Name: 1

Do you like radio buttons?

- 3 Yes
- 3 No

If these numbers do not match the visual reading order, return to the **Order Panel** and **TURO tool** as outlined in the previous section and ensure the reading order is logical. This is always preferable to changing the tab order manually. If this does not work for some reason, return to the **Edit Fields** menu and select **Tab Order >** and check **Order Tabs Manually** option.

Then drag and drop the options in the **Fields** panel to change the tab order.



Manually reordering the tab order can delete the tag information for the reordered form. If you reorder forms, recheck the accessibility and repeat the steps in the previous section if necessary.

Other considerations

- It might be helpful to read the accessible PDF form with a screen reader so you can get a sense of what a person with a visual disability experiences.
- When a screen reader enters a form, it usually switches to a different reading mode, often called "forms mode." While in forms mode, the screen reader skips over content that is not a form control or link. For this reason, it is best to place important information or instructions before the form begins and not between form fields.
- Form error messages (e.g., an email field does not include an email address) are presented in a popup dialog. This dialog is accessible to screen reader users. If these are being used, ensure the error message provides the information that a user needs to find and fix the error.

Additional Resources

- [Accessible PDF forms](#) by WebAIM
- [Accessible Acrobat forms](#) by Adobe
- [Creating Accessible PDFs](#) by Lynda.com