

AcroT \E X.Net

On Tabbing Order

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The L \A T \E X source file for this [AeB Blog](#) is attached to this document. Click [settaborder.tex](#) to save the source file.

1. Introduction

In this document we review and illustrate the ways the tabbing order can be set up for a PDF document.

- Row Order
- Column Order
- Structure Order
- Widget Order
- Unspecified Order

Each type of tabbing order is illustrated with a working example.

We finish up with 'Tabbing Order: UI and AeB' on page 9, followed by a brief list of references.

2. Use Row Order

When tabbing using row order, annotations (form fields, links, comments) are visited in rows running horizontally, starting from the topmost row. When the end of the row is encountered, the first annotation in the next row is visited.

This is a [link](#) annotation.



As you tab through this page, can you anticipate the order the annotations are visited?

3. Use Column Order

When tabbing using column order, annotations (form fields, links, comments) are visited in columns running vertically. The annotation visited first is the one at the top of the first column. When the end of the column is encountered, the first annotation in the next column is visited.

This is a [link](#) annotation.



As you tab through this page, can you anticipate the order the annotations are visited?

4. Use Structure Order

When tabbing using structure order, annotations are visited in the order in which they appear in the structure tree (Section 10.6 of the *PDF Reference*, [1]).

This is a [link](#) annotation.



I've set the structure up so that the annotations are visited in the following order: text4, the note annotation, text1, text3, and text2. The link annotation was not included in this structure, so it will be visited last.

4.1. Use Structure Order–Continued

We demonstrate structure tabbing again, but in a different order.

This is a [link](#) annotation.



I've set the structure up so that the annotations are visited in the following order: `text3`, `text4`, the link annotation, `text2`, and `text1`. The note annotation was not included in this structure, so it will be visited last.

5. Use Widget Order

Beginning with ExtensionLevel 3 (essentially this means Version 9 of Acrobat/Adobe Reader), annotations can be visited in widget order; form fields are visited in the order they appear in the Annots array, then the other annotation types are visited in either structure order (if Tab Order is checked in the the Accessibility Preferences) or row order. For \LaTeX users, widget order means the order the form fields are created by the \TeX engine. See implementation note 77 of the *Acrobat Supplement to the ISO 32000* for a discussion of tab order under various conditions, see reference [2].

This is a [link](#) annotation.



6. Unspecified

When the tab order is unspecified, the order of tabbing varies depending on the version number, but generally, widget annotations (form fields) are visited in the order they appear in the Annots array, followed by other annotations types in row order.

See implementation note 77 of the *Acrobat Supplement to the ISO 32000* (see [2]) for all the dirty details.

This is a [link](#) annotation.



7. Tabbing Order: UI and AeB

Tabbing order can be set using the user interface of Acrobat, or, if you are a \LaTeX user, by using AeB.¹

For those using the user interface, which is most of you, try downloading the document *Creating Accessible PDF Forms with Acrobat 9 Pro* at the Adobe Acrobat Users Community web site.² This document includes a chapter on setting up the tabbing order,

For \LaTeX users, tabbing is a function of the page. AeB provides a command `\setTabOrder` to set the tab order on a page. The value of its argument can be R, C, S, W, and A.³ The meaning of these letters is Row, Column, Structure, Widget and Annotations, respectively. W is implemented in version 9, while A was documented for version 9, but not implemented. The command is page oriented, it sets the tab order on the current page. If no `\setTabOrder` is specified on a page, the tab order is *unspecified*.

If the tabbing order is not S (Structure), nothing further is needed to set the

¹The Acro \TeX eDucation Bundle, <http://www.math.uakron.edu/~dpstory/webeq.html>

²<http://www.acrobatusers.com/>

³The argument can be entered in lower case as well.

order. When *S* is specified, a structure needs to be defined to set the tabbing order, otherwise, tabbing may default to row order.

We present a simple example with structure using only two fields.

The verbatim listing of the above form fields is

```
\setTabOrder{s} % set tab order to structure

\textField[\V{text1}\objdef{otext1}]{text1}{1.25in}{11bp}
\textField[\V{text2}\objdef{otext2}]{text2}{1.25in}{11bp}

% Now set the order of tabbing, text field 2 first, then text field 1
\setStructTabOrder{%
  {otext2}
  {otext1}
}
```

In the optional argument of the two text fields, we specify an object name—using the `\objdef` key—for each. *These names must be unique throughout the whole document.* After all annotations have been created on a page, we use `\setStructTabOrder` to actually set the tab order; this is done by simply

listing the object names, in the desired order, of the annotations you want to include in the tabbing order. These annotations can be fields, links, and markup comments, like sticky notes.

That's all there is to it! Very swave!

References

- [1] *Adobe PDF Reference, Sixth Edition, version 1.7*, available at <http://www.adobe.com/devnet/pdf/> (**PDF Technology Center**).
- [2] *Adobe Supplement to ISO 32000, Base Version 1.7, Extension Level 3*, available at the **PDF Technology Center**, <http://www.adobe.com/devnet/pdf/>.
- [3] *Document management Portable document format–Part 1: PDF 1.7*, First Edition (July, 2008), available at http://www.adobe.com/devnet/pdf/pdf_reference.html (**Adobe PDF Technology Center**).