

AcroTeX.Net

Toggling visibility of layers and fields in tandem with AeB Pro

D. P. Story

The L^AT_EX source file for this [AeB Blog](#) is attached to this document. Click [toggle_layer_field.tex](#) to save the source file. Package requirements for this source file are the `aeb_pro` Package ([AeB Pro](#)) and [AeB](#).

1. Introduction

This article deals with the problem of showing and hiding layers and form fields in tandem. Form fields lay on top of all content; they can be placed in a layer but are visible even when the layer is hidden.

This form field Press the button to make the layer visible, press it again to make it hidden. Even though the button is in the layer, it is visible; that's because form fields are placed on top of a content.

To have the form field and layer toggle together requires a bit more JavaScript.

2. Toggling a Layer and a Field

Suppose we wanted to create a survey, one question might be, "What is your occupation?" You want to list some occupations but what include an "Other" field where the user can enter his (or her) own occupation.

What is your occupation?

Doctor:

Lawyer:

Indian Chief:

Other:

Each radio button calls the following JavaScript:

```
1 function processOther() {
2     var f=this.getField("describeOther");
3     if (event.target.value=="Other") {
4         toggleSetThisLayer("Other",true);
5         f.display=display.visible;
6         f.setFocus();
7     } else{
8         f.display=display.hidden;
9         toggleSetThisLayer("Other",false);
10    }
11 }
```

[Click to toggle on two page view](#). When the value of the radio button field is "Other", we make the layer named "Other" visible, (which makes the text visible), and we make the text field visible, lines (3)–(5); we also set the focus of the text field, line (6). When the value of the field is not "Other", we make the layer and the text field hidden again, lines (8) and (9).

The JavaScript function `toggleSetThisLayer(name, bState)` is defined in the AeB Pro Package. It is a simple function for making a layer visible or hidden, it can also simply toggle the visibility of a layer as well. The first parameter is the name of the layer; the second optional argument is desired state of the layer, `true` for visible, `false` for hidden. If the second parameter is not present, the function `toggleSetThisLayer` toggles the state visible to hidden, or hidden to visible.

In the case of this example, the name of the layer "Other" (the text that appears when the "Other" is checked). We make the layer visible (pass `true` as the second argument, when "Other" is selected; otherwise, the layer is made hidden.

Another feature that I've incorporated into this example, is a solution to the problem of resetting the form fields. On reset, the radio button fields are cleared, but the layer and the text field, if visible, remain visible. We don't want that. On reset, we want the layer and text field to become hidden. To solve this problem, I've added the following code as Custom Format script to the text field:

```
1  if ( this.getField("occupation").value=="Off") {
2    event.target.display=display.hidden;
3    toggleSetThisLayer("Other",false);
```

The format script is executed when the field is reset, refer to [AcroTeX Blog #22](#) for a detailed discussion on format scripting.¹ In the above script, we see if the radio button field (named "occupation" has a value of "Off". (See [AcroTeX Blog #16](#) for a discussion of radio button fields.) If the fields are all off, we hid the text field, line (2), and hide the layer, line (3). The object `event.target` is the Doc object of the text field. See [AcroTeX Blog #20](#) for a discussion of events. Try resetting using the reset button . Does it work?

¹Placing this script as Calculate script would work too, but would slow down the performance of form processing.

Links are a problem. If you put a link in a layer, the text that is enclosed by the bounding rectangle of the link can be made visible or hidden, but the link itself is still “alive.” Avoid placing links in layers, you can use transparent buttons to simulate a link. The buttons can be made hidden or visible using these techniques.

Problem. How can you create a general system for coordinating layers and fields? Suppose you want several fields to be toggled hidden and visible along with one or more layers. How would you do that? Write a general document JavaScript.

Well, that’s pretty much it for now, I simply must get back to my retirement.
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