PDF Remediation: Complex Tables with Spanning Headers

What to do when the Table Editor is less than helpful

Sometimes when you are attempting to set row and column headers for cells spanning multiple rows and/or columns, the Table Editor tool in Adobe Acrobat Pro will not allow you to select the cells that you need to modify. This happens most frequently in tables where there are row header cells that span multiple rows.

The Problem

The table below has two rows containing row headers in the first five columns that each span six rows.

<table>
<thead>
<tr>
<th>Program</th>
<th>Service Type</th>
<th>Agency Budget Strategy</th>
<th>Summary Description</th>
<th>Strategic Plan</th>
<th>FY 2010 Expected</th>
<th>FY 2010 Budgeted</th>
<th>FY 2010 Appropriated</th>
<th>FY 2021 Appropriated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialty Courts</td>
<td>Substance Use Disorder Services - Intervention</td>
<td>B.1.1. Criminal Justice</td>
<td>Provides grant funding to specialty courts as described in Chapters 121-126, and 129 of the Texas Government Code.</td>
<td>1.1.1, 1.1.3, 2.2.2, 2.5.3, 4.2.2</td>
<td>$2,440,038</td>
<td>$985,789</td>
<td>$5,049,431</td>
<td>$8,000,000</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Juvenile Justice &amp; Delinquency Prevention</td>
<td>Mental Health Services - Other</td>
<td>B.1.1. Criminal Justice</td>
<td>Provides grant funding to units of local government and non-profit corporations to improve the juvenile justice system through increased access to mental health and substance abuse services.</td>
<td>1.1.1, 1.1.3, 2.2.2, 2.5.3, 4.2.2</td>
<td>$2,493,119</td>
<td>$1,350,537</td>
<td>$5,049,431</td>
<td>$8,000,000</td>
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</tbody>
</table>

When you open the Table Editor to inspect the table, the view is not what you would expect. The column headers from MS Word came in perfectly, but the row headers are not present, and the cells don’t appear to be outlined correctly. Making matters worse, you cannot select the row header cells to apply the correct header, scope, and rowSpan properties to them. This table cannot be made accessible using the Table Editor. To fix the problem, you will need to edit the properties in the tags of the header cells directly.
The Solution

When you look at the tags for the second row of the table, you will notice that selecting the `<TD>` tag in the first column selects the text for a header that spans all six rows.
Step 1: Select the tags for the header cells.
Hold down the Shift key and select all six of the row headers for that row. (Note: Most tables do not have six row headers, but this one is special.) The final row header only covers one row.

Step 2: Change the <TD> tags to <TH> tags.
With all of the cells in the row selected, change the <TD> tags to <TH> tags. Right-click on the tags to open the contextual menu and choose “Properties”. When the Object Properties dialog opens, select “Table Header Cell” from the Type dropdown and then click the “Close” button.
Step 3: Edit the Attribute Objects.

Right-click on the first `<TH>` tag and then choose “Properties”. When the Object Properties dialog opens, click on the “Edit Attribute Objects...” button.

The Attributes dialog window will open. Click on the “New Item” button.
A new attribute object appears.

Expand the object by clicking the "+" button.
Click on "/Layout" to select it, and then click the "Change Item" button.

The Change Value dialog window will open. Delete "Layout" and type in "Table" to change the object to a table type of object, and then click "OK".
Click on the attribute object to select it again, and then click on the “New Item” button.

The Add Key and Value Dialog window will open. Enter “Scope” in the Key field and “Row” in the Value field, and then click “OK”. This sets the <TH> tag as a row header.
Click on the attribute object to select it again, and then click the “New Item” button again.

The Add Key and Value Dialog window will open. Enter “RowSpan” in the Key field and “6” in the value field. In this example, the row header spans six rows.
Click the “OK” button to close the Attributes dialog window.

Click the “Close” button to close the Object Properties dialog window.

Repeat the steps above for each spanning header cell.
After completing the spanning header cells, set the scope for the remaining non-spanning header cells.

Verify that all the rows contain the proper number of cells. Rows containing spanning cells will have more cells than rows that do not contain the spanning cells. In this example, there are five cells that each span six rows. The row containing the spanning cells contains ten cells and the rows not containing spanning cells only have five cells.
**Note:** Even after correcting everything, the Table Editor will not display the table outline correctly. This appears to be a bug in the Adobe software.

### Further Troubleshooting

Sometimes, you will still get an error for “Regularity – Failed” in the Accessibility Checker even after performing the steps above. This usually caused by the absence of `<THead>` and `<TBody>` tags. In most cases when you see this error, only one of these two tags is present. There are two possible solutions.
Solution 1
Add the other missing tag.

In the following example, a `<TBody>` tag needs to be added as a peer to the already existing `<THead>` tag.

```html
<pre><table>
  <thead>
    <tr></tr>
  </thead>
</table></pre>
```

Click on the `<THead>` tag to bring up the contextual menu and click “New Tag...”.

The New Tag modal window appears. In the Type field, enter “THead”. (**Note:** The tag must be entered as “THead”. If it is incorrectly entered as “Thead” or “thead”, the Accessibility Checker will not pass it.) Click the “OK” button to complete adding the new tag.

![New Tag Window](image)

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The new `<TBody>` tag will be added to the tag tree just below the `<THead>` tag.

Since the first `<TR>` tag of the table is in the `<THead>` tag, move the remaining `<TR>` tags into the `<TBody>` tag.
Solution 2
Move the <TR> tag(s) out of the <THead> or <TBody> tag then delete the offending <THead> or <TBody> tag.