

Avoiding fo:table-row overflow due to keep-together.within-*= "always"

Specifying `keep-together.within-page="always"` on a `<fo:table-row>` in a table ensures that the `<fo:table-row>` is not split and remains on one page. However, if the `<fo:table-row>` that was not split is too long to fit on the page, it overflows past the bottom of that page. This is because the value ‘always’ does not allow splitting of tables on a page. This example shows how to avoid overflows when using ‘keep-together’.

In the samples below, in order to demonstrate each ‘keep-together’ sample as one page, the ‘keep-together.within-page’ is replaced by a column and ‘keep-together.within-column’. Please consider each column as representing a page.

Page 2 shows an example with no ‘keep-together’. The `<fo:table-row>` containing “No.2” is split over two columns. In the next example on page 3, each `<fo:table-row>` has ‘keep-together’ with the value ‘always’. The `<fo:table-row>` containing “No.2” is not split across columns but makes a single area, and the `<fo:table-row>` overflows past the bottom of the page because it does not fit its target area in the second column.

No 'keep-together'

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'always' 'keep-together' value

keep-together.within-column="always" on <fo:table-row>.

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Integer (numeric) ‘keep-together’ values -1- (Avoiding Overflows)

By specifying ‘always’ with ‘keep-together’, as in the example on page 3, the <fo:table-row> may overflow when making a single area. This overflow can be avoided by using an integer value for [7.20.3 "keep-together"](#) with AH Formatter. As shown on page 5, overflow is prevented by specifying `keep-together.within-column="1"` on <fo:table-row> as shown in the following code:

```
<fo:table-body>
  <fo:table-row keep-together.within-column="1"><fo:table-cell>...</fo:table-cell></fo:table-row>
  <fo:table-row keep-together.within-column="1"><fo:table-cell>...</fo:table-cell></fo:table-row>
  ...
</fo:table-body>
```

The ‘keep-together’ value represents its strength; the stronger it is, the more likely that its areas are kept within one page, column, or line. Specifying ‘auto’ or specifying nothing at all specifies no ‘keep-together’, whereas specifying ‘always’ is the strongest value.

AH Formatter supports numeric values for ‘keep-together’, and when the content generated by the FO does not fit within a given area (for example, a page), a break occurs because of the ‘keep-together’. However, if the content does not fit on the page of the next chosen area, the content on that page is split regardless of the ‘keep-together’. The example on page 5 shows that, if the <fo:table-row> containing “No.2” with `keep-together.within-column="1"` does not fit in the first column, it is reformatted because of the ‘keep-together’. When the second <fo:table-row> in the second column doesn’t fit on the page, it splits onto the next column and does not overflow.

Numeric 'keep-together' value

keep-together.within-column="1" on
<fo:table-row>

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Integer (numeric) ‘keep-together’ values -2-

The following code shows several values for ‘keep-together’:

```
<fo:table-body keep-together.within-column="2">
  <fo:table-row keep-together.within-column="1"><fo:table-cell>...</fo:table-cell></fo:table-row>
  <fo:table-row keep-together.within-column="2"><fo:table-cell>...</fo:table-cell></fo:table-row>
  <fo:table-row keep-together.within-column="3"><fo:table-cell>...</fo:table-cell></fo:table-row>
</fo:table-body>
```

When the value “N” is specified for ‘keep-together’ for an FO and the value “M” is specified for ‘keep-together’ for a child FO, if we assume that the second (or later child) does not fit into the same given area of the page as its preceding child, then the following results can occur:

- $N \geq M$: the value N applies and the second child FO starts on the same page as the preceding FO and then splits.
- $N < M$: the value N does not apply and a page break occurs before the second child FO.

The example on page 8, as shown in the code above, has `keep-together.within-column="2"` on the `<fo:table-body>` and ‘keep-together.within-column’ values of “1”, “2”, and “3” for the three `<fo:table-row>` containing “No.1”, “No.2”, and “No.3”, respectively.

The second `<fo:table-row>` containing “No.2” does not fit in the first column. The `<fo:table-body>` has a ‘keep-together’ value of “2” and the `<fo:table-row>` has a value of “1” such that `<fo:table-body> ≥ <fo:table-row>`. The ‘keep-together’ of the `<fo:table-body>` applies, the `<fo:table-row>` for “No.1” and “No.2” both start in the same column, and the `<fo:table-row>` for “No.2” splits over two columns.

For the third column, the `<fo:table-row>` containing “No.3” has a ‘keep-together’ value of “3”, and because the `<fo:table-body>` has value “2”, `<fo:table-body> < <fo:table-row>`. The ‘keep-together’ of the `<fo:table-body>` does

not apply and the <fo:table-row> containing “No.3” is reformatted. In addition, the content that does not fit in the reformatted area is split over two columns and does not overflow.

Numeric 'keep-together' values

keep-together.within-column="numeric" on <fo:table-body> and <fo:table-row>.

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Integer (numeric) ‘keep-together’ values with <fo:list-item>

A numeric ‘keep-together’ value can avoid overflow on <fo:list-item> as well as on <fo:table-row>. The <fo:list-item> is shown in the following code.

```
<fo:list-block>
  <fo:list-item keep-together.within-page="1">
    <fo:list-item-label>...</fo:list-item-label>
    <fo:list-item-body>...</fo:list-item-body>
  </fo:list-item>
  <fo:list-item keep-together.within-page="1">
    <fo:list-item-label>...</fo:list-item-label>
    <fo:list-item-body>...</fo:list-item-body>
  </fo:list-item>
</fo:list-block>
```

Examples of ‘keep-together’ are: no ‘keep-together’ specification on page 11; keep-together="always" on page 12; and numeric ‘keep-together’ values on page 13.

Numeric 'keep-together' value

keep-together.within-column="1" on
<fo:list-item>.

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