

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 since 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 row. 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 $\text{fo:table-body} \geq \text{fo:table-row}$. 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 since the fo:table-body has value “2”, $\text{fo:table-body} < \text{fo:table-row}$. 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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label-2 list-item-sample-2
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