

Input and output structures

FOSI does not include an explicit transformation step, but categories such as `suppress`, `savetext`, and `usetext` as well as pseudo-elements can create an output tree structure that is different from the structure of the source document.

NOTE: The input structure determines context for `e-i-c` matching, but the output structure determines the ancestor/descendant relationships for inheritance in `e-i-cs`.

Processing instructions recognized by the formatter are not part of the structure of the input tree. However, any supported PI tag pair does contribute structure to the output tree, and its characteristic settings can be inherited by its descendants in the output tree. See XREF for an example (`gtlink`).

Examples

Figure 6 shows an XML fragment that includes a `<_font>` touchup processing instruction to change the font for part of the `<title>`.

Figure 6 Input structure

XML fragment

```
<chapter>
<title><?Pub _font?>2009<?Pub /_font?> Part List</title>
<partlist>
<part><partno>0123456</partno><partdesc>Hammer</partdesc>
<unit-price>1.00</unit-price></part>
<part><partno>789012A</partno><partdesc>Saw</partdesc>
<unit-price>22.00</unit-price></part>
<part><partno>345678X</partno><partdesc>Screwdriver</partdesc>
<unit-price>333.00</unit-price></part>
<part><partno>901234B</partno><partdesc>Wrench</partdesc>
<unit-price>4444.00</unit-price></part>
</partlist></chapter>
```

In **Figure 7**, the output stream is shown in a screen shot of the Edit window with `gentext` tag display enabled. Notice the formatting pseudo-element, `<underline.fmt>`. The FOSI has `e-i-cs` for the table markup, the formatting pseudo-element, and the `<_font >` Touchup PI.

Figure 7 Output structure

Number	Description	Unit Price*
*Contact your sales representative for volume pricing:		
0123456	Hammer	1.00
789012A	Saw	22.00
345678X	Screwdriver	333.00
901234B	Wrench	4444.00

FOSI fragment

```

<stringdecl textid="partdesc.txt">
<stringdecl textid="partno.txt">
<stringdecl textid="rows.app">
<stringdecl textid="unit-price.txt">

<e-i-c gi="font" gitype="pi">
<charlist inherit="1">
<font inherit="1" size="1.5em">
</charlist>
</e-i-c>

<e-i-c gi="entry" context="* tbody * table">
<charlist inherit="1" charsubsetref="inline"></charlist>
</e-i-c>

<e-i-c gi="entry" context="* thead * table">
<charlist inherit="1" charsubsetref="inline"></charlist>
</e-i-c>

<e-i-c gi="entry" context="* tfoot * table">

```

```

<charlist inherit="1" charsubsetref="inline">
<font inherit="1" size="8pt">
<leading inherit="1" lead="8pt">
</charlist>
</e-i-c>

<e-i-c gi="part" context="partlist">
<charlist inherit="1" charsubsetref="block">
<savetext textid="rows.app" placemnt="after" append="1"
conrule='!<row><entry align="left">!,partno.txt,!</entry>
<entry align="left">!,partdesc.txt,!</entry>
<entry align="char" char=".">!,unit-price.txt,!</entry></row>!'>
</charlist>
</e-i-c>

<e-i-c gi="partno" context="part">
<charlist inherit="1" charsubsetref="SUPPRESS">
<savetext textid="partno.txt" conrule="#CONTENT">
</charlist>
</e-i-c>

<e-i-c gi="partdesc" context="part">
<charlist inherit="1" charsubsetref="SUPPRESS">
<savetext textid="partdesc.txt" conrule="#CONTENT">
</charlist>
</e-i-c>

<e-i-c gi="partlist">
<charlist inherit="1">
<savetext textid="rows.app" placemnt="before" append="0" conrule="\">
<usetext placemnt="after" source='!<table frame="all">
<tgroup cols="3">
<colspec colname="col1" colwidth="54pt">
<colspec colname="col2" colwidth="68pt">
<colspec colname="col3" colwidth="68pt">
<thead><row>
<entry align="center"><?Pub _cellfont Shading="gray2"?>Number</entry>
<entry align="center"><?Pub _cellfont Shading="gray2"?>Description</entry>
<entry align="center"><?Pub _cellfont Shading="gray2"?>!,
,<underline.fmt>,\Unit\,</underline.fmt>,\ Price*!,
!</entry></row></thead>
<tfoot><row>
<entry namest="col1" nameend="col3" colsep="1">*Contact your sales
representative for volume pricing.
</entry></row></tfoot>
<tbody>!
,rows.app,
!</tbody></tgroup></table>!'></usetext>
</charlist>
</e-i-c>

```

```

<e-i-c gi="row" context="* table">
<charlist inherit="1" charsubsetref="block"></charlist>
</e-i-c>

<e-i-c gi="table">
<charlist inherit="1" charsubsetref="block prespace center">
<font inherit="1" famname="Franklin Gothic Book">
</charlist>
</e-i-c>

<e-i-c gi="tgroup tbody" context="* table">
<charlist inherit="1" charsubsetref="block"></charlist>
</e-i-c>

<e-i-c gi="thead" context="* table">
<charlist inherit="1" charsubsetref="block center bold"></charlist>
</e-i-c>

<e-i-c gi="unit-price" context="part">
<charlist inherit="1" charsubsetref="SUPPRESS">
<savetext textid="unit-price.txt" conrule="#CONTENT"></charlist>
</e-i-c>

<e-i-c gi="underline.fmt">
<charlist inherit="1" charsubsetref="inline">
<highlt inherit="1" scoring="1" scorespc="1">
</charlist>
</e-i-c>

```

Figure 8 shows the contents of the .exp file that is written when `userule="1"` is coded for

Figure 8 Gentable exported to external file

.exp file

```

<table frame="all">
<tgroup cols="3">
<colspec colname="col1" colwidth="54pt">
<colspec colname="col2" colwidth="68pt">
<colspec colname="col3" colwidth="68pt">
<thead>
<row>
<entry align="center">Number</entry>
<entry align="center">Description</entry>
<entry align="center"><underline.fmt>Unit</underline.fmt> Price*</entry>
</row>
</thead>
<tfoot>
<row>
<entry namest="col1" nameend="col3" colsep="1">*Contact your sales

```

```
representative for volume pricing.</entry>
</row>
</tfoot>
<tbody>
<row><entry align="left">0123456</entry><entry align="left">Hammer</entry>
<entry align="char" char=".">1.00</entry></row>
<row><entry align="left">789012A</entry><entry align="left">Saw</entry>
<entry align="char" char=".">22.00</entry></row>
<row><entry align="left">345678X</entry><entry align="left">Screwdriver
</entry>
<entry align="char" char=".">333.00</entry></row>
<row><entry align="left">901234B</entry><entry align="left">Wrench</entry>
<entry align="char" char=".">4444.00</entry></row>
</tbody>
</tfoot>
</table>
```