Optimizing generated text display in the Edit window

Display of generated text is controlled by the commands discussed in **Generated content-related ACL** on page 236. When both gentext display and auto update are enabled, gentext in the Edit window is automatically updated as the user edits the document. A FOSI can be coded as follows to optimize the performance of gentext updates.

When gentext comes from counters and string variables that are used only within certain contexts, the counter and/or string variables should be reset at the beginning of the context element and again at the end of the context element, as illustrated in **Figure 83**.

Figure 83   Optimizing gentext display

FOSI fragment

```
<counter enumid="stepct" style="arabic" initial="0">
<stringdecl textid="stepct.txt" literal="">
...
<e-i-c gi="procedure">
<charlist inherit="1" charsubsetref="block">
<reset resetlist="stepct stepct.txt">
...
<att>
<specval attname="editor-only" attloc="SYSTEM-VAR" attval="#ANY">
<charsubset>
<usetext placemnt="after"
<subchars>
<reset resetlist="stepct stepct.txt">
</subchars>
</usetext>
...
<e-i-c gi="step" context="procedure">
<charlist inherit="1" charsusetref="block">
<enumerat enumid="stepct" increm="1">
<savetext textid="stepct.txt" conrule="stepct,\.\">
<usetext placemnt="before" source="stepct.txt,@1.5pi">
...
```

NOTE: The `specval` test for `editor-only` is optional. The `reset` could apply to print/PDF as well. The important thing is that the `reset` is processed at the end of the context element (in this case, <procedure>) with `placemnt="after"`.

Another example is shown in **Figure 281 Screen FOSI displays messages for users (Edit window view)** on page 508.

In addition, the preliminary index content and markup with final page numbers can be written to an external file as described in **Exporting generated sorted/merged/grouped content for external processing** on page 181.

Generated content-related ACL

The following set commands are related to generated content.

- Set gentext={on | off} specifies whether generated content is displayed in the Edit window. When set to on (the default), gentext is displayed; when set to off, it is not.

  NOTE: When gentext is displayed and changes are made to the document that affect what is generated, the display in the Edit window is updated according to the setting of the set gentextautoupdate command, which is described next.

- Set gentextautoupdate={full | partial | none} controls updating of generated content in the Edit window as follows:

  ▶ Full updates all generated text in the current document, including tables of contents, indexing and cross references. This setting is best suited to short documents without indexes.

  ▶ Partial (the default) updates the generated text such as bullets for lists, and numbers for numbered lists or numbered sections in the current document, but does not update FOSI time-independent string variables that output tables of contents, indexes, cross references, or other generated content.

  ▶ None specifies that gentext should not be automatically updated. In that case, gentext must be manually refreshed selecting the View→Generated Text→Update menu item in Arbortext Editor. This setting is useful for very long documents.

  NOTE: Gentextautoupdate can be changed when generated text is not displayed, but the change does not affect performance until generated text is displayed.

- Set gentextdisableautoupdate={default | small | medium | large | huge} specifies when to disable auto-updating of gentext, which can slow down the processing of a document. This option has document and session scope. Please refer to Arbortext Editor ACL documentation on the set command for additional information on specifying document and session scope.
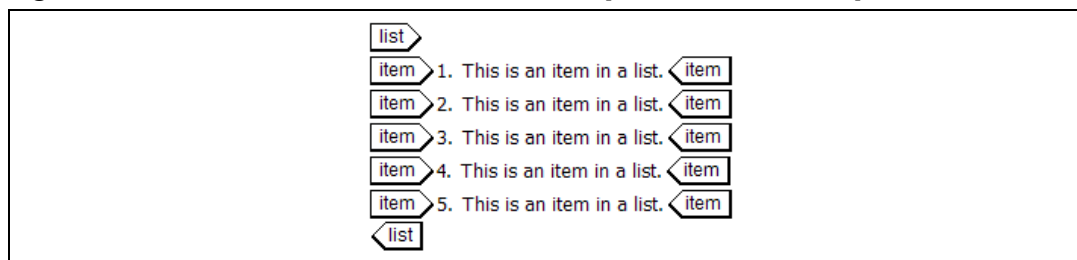
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Gentextdisableautoupdate can be set as follows to facilitate document processing times.

- ▶ Default sets the document scope value of gentextdisableautoupdate to use the session scope value of gentextdisableautoupdate. It also sets the session scope value to use the system default (huge).
- ▶ Small specifies that automatic updating of gentext is disabled for documents with 5,000 or more elements.
- ▶ Medium specifies that automatic updating of gentext is disabled for documents with 20,000 or more elements.
- ▶ Large specifies that automatic updating of gentext is disabled for documents with 50,000 or more elements.
- ▶ Huge (the default session scope value) specifies that automatic updating of gentext is disabled for documents with 100,000 or more elements.

- ■ Set gentexttagdisplay={none | default | full} specifies whether gentext markup (pseudo-elements, processing instructions, spacing specifications, and FOSI markup) are displayed in the Edit window.
  - ▶ None (the default) means generated text markup tags are not displayed in the Edit window.
  - ▶ Default specifies that generated text markup use the same setting as the Edit window document tag display.
  - ▶ Full displays generated text markup, whether other tags are displayed in full or not.

  NOTE: Gentext pseudo-elements, processing instructions, spacing specifications, and FOSI markup can be formatted for the Edit window. For example, see **Figure 382 TOC gentext with links in Edit window** on page 701.

The APTNOIDLEGT environment variable also affects generated content. In Arbortext Editor, generated text that is not visible in the Edit window s automatically updated while user is not typing or moving the mouse. Setting APTNOIDLEGT to any value disables this idle time update behavior.

Also see **Generated sorted/merged/grouped content–related ACL** on page 206 and **Usetext–related ACL** on page 507.

Figure 280   Numbered <item>s in a <list> (Edit window view)

FOSI fragment

```
<e-i-c gi="item" context="list">
<charlist inherit="1" charsubsetref="block prespace">
<indent inherit="1" leftind="1.5pi" firstln="*-1.5pi">
<enumerat increm="1" enumid="itemct">
<usetext source="itemct,\.\,@1.5pi"></usetext>
...
<e-i-c gi="list">
<charlist inherit="1" charsubsetref="block">
<reset resetlist="itemct">
...
```
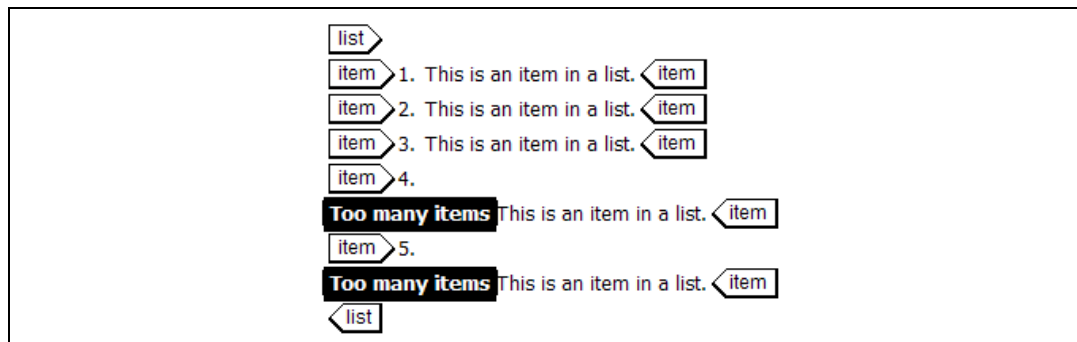
The next example displays a message to the user that shows only in the Edit window, not in print/PDF output. As soon as the extra <item> elements are removed from the <list>, the message disappears.

NOTE: The <list> `e-i-c` resets `itemct` before the list and after it in order to optimize gentext display, as described in **Optimizing generated text display in the Edit window** on page 144.

Figure 281   Screen FOSI displays messages for users (Edit window view)

FOSI fragment

```
<charsubset charsubsetid="screen-message" charsubsetref="block prespace">
<highlt inherit="1" bckclr="#000000" fontclr="#FFFFFF">
</charsubset>
...
<e-i-c gi="item" context="list">
<charlist inherit="1" charsubsetref="block prespace">
<indent inherit="1" leftind="1.5pi" firstln="*-1.5pi">
<enumerat increm="1" enumid="itemct">
<usetext source="itemct,\.\,@1.5pi"></usetext>
</charlist>
<att logic="and">
<specval attname="editor-only" attloc="SYSTEM-VAR" attval="#ANY">
<specval attname="itemct" attloc="#FOSI" attval="#GE#3">
<charsubset>
<usetext source="\ Too many items \" placemnt="before">
<subchars charsubsetref="screen-message"></subchars>
...
<e-i-c gi="list">
<charlist inherit="1" charsubsetref="block">
<reset resetlist="itemct">
...
<att>
<specval attname="editor-only" attloc="SYSTEM-VAR" attval="#ANY">
<charsubset>
<usetext placemnt="after">
<subchars>
<reset resetlist="itemct">
...
```

The next example consists of two figures. The XML fragment in **Figure 282**
shows a footnote in a <chapter> <title>. The FOSI fragment shows the content
of <chapter> <title> is saved and output in the page header and in the table of
contents. The first graphic shows the footnotes in the page header and table of
contents. Notice the out-of-order footnote numbering on the page.

The second graphic in **Figure 282** shows the Edit window with full gentext tags
displayed (set gentexttagdisplay=full). Notice the <footnote> element in
the table of contents. Page headers do not appear in the Edit window, but the
formatted output reveals the <footnote> is also included in the header.

NOTE: When the document is formatted, the following error message is
issued because the <footnote> in chapter-title.txt is incremented in the
pagedesc:
[A12531] ERROR: Styldesc counter variable "footnotect" is modified in the
pagedesc.