

FOSI-based generation of PDF bookmarks

NOTE: These techniques apply only to the direct PDF method.

Refer to **Document bookmarks and metadata for PDF** on page 684 and **Figure 378 Atidmd DTD** on page 684.

Atidmd PDF example

The graphics in **Figure 298** and **Figure 299** show closed and open bookmarks, respectively.

Notice the nested <atidmd:Bookmark> elements.

Figure 298 Document and closed chapter PDF bookmarks



XML fragment

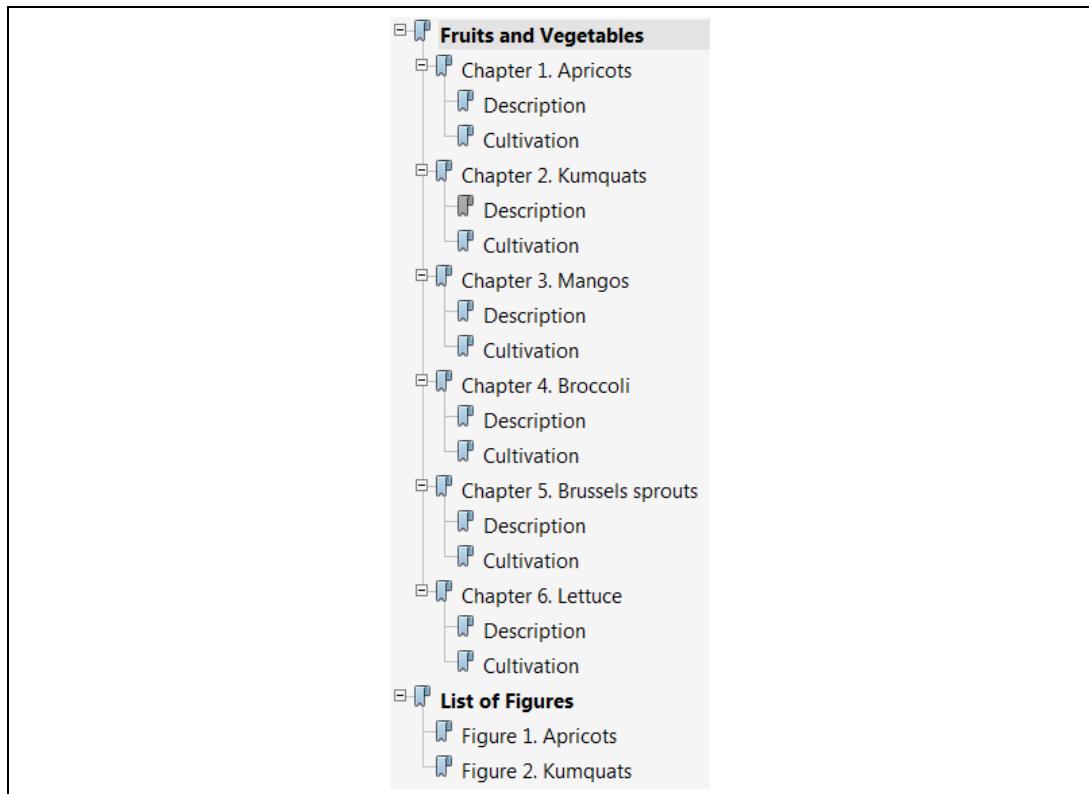
```
<document><front>...</front>
<body>
<chapter id="openingpage"><title>Apricots</title>
<section><title>Description</title>...</section>
<section><title>Cultivation</title>...</section>
</chapter>
<chapter><title>Kumquats</title>
<section><title>Description</title>...</section>
<section><title>Cultivation</title>...</section>
</chapter>
<chapter><title>Mangos</title>
<section><title>Description</title>...</section>
<section><title>Cultivation</title>...</section>
</chapter>
<chapter><title>Broccoli</title>
<section><title>Description</title>...</section>
<section><title>Cultivation</title>...</section>
</chapter>
<chapter><title>Brussels sprouts</title>
<section><title>Description</title>...</section>
<section><title>Cultivation</title>...</section>
</chapter>
<chapter><title>Lettuce</title>
<section><title>Description</title>...</section>
<section><title>Cultivation</title>...</section>
</chapter>
<chapter><title>Spinach</title>
```

```
<section><title>Description</title>...</section>
<section><title>Cultivation</title>...</section>
</chapter></body></document>
```

FOSI fragment

```
<counter initial="0" style="arabic" enumid="chapterct">
<counter style="arabic" enumid="figurect">
<stringdecl textid="chapter-bookmarks.app" hotlink="1">
<stringdecl textid="chapter-title.txt" hotlink="1">
<stringdecl textid="document-title.txt" hotlink="1">
<stringdecl textid="figure-bookmarks.app" hotlink="1">
<stringdecl textid="figurect.txt" hotlink="1">
<stringdecl textid="figure-title.txt" hotlink="1">
<stringdecl textid="section-bookmarks.app" hotlink="1">
<stringdecl textid="section-title.txt" hotlink="1">
...
<e-i-c gi="chapter">
<charlist inherit="1">
<enumerat increm="1" enumid="chapterct">
<savetext textid="chapterct.txt" conrule="chapterct">
<savetext textid="chapter-title.txt" conrule="\\\">
<savetext textid="section-bookmarks.app" conrule="\\\">
<savetext textid="chapter-bookmarks.app" placemnt="after" append="1"
conrule='!<atidmd:Bookmark state="closed"><atidmd>Title>!,\Chapter \
chapterct.txt,\.\_,chapter-title.txt,!</atidmd>Title>!,section-bookmarks.app,
!</atidmd:Bookmark>!'
...
<e-i-c gi="document">
<charlist inherit="1" charsubsetref="block">
<textbrk startpg="next" pageid="document.page" newpgmdl="global">
<usetext source='!<atidmd:DocumentMetaData bookmarks="stylesheet" source="atend"
xmlns:atidmd="http://www.arbortext.com/namespace/DocumentMetaData">
</atidmd:DocumentMetaData>! '></usetext>
<usetext placemnt="after" source='!<atidmd:DocumentMetaData bookmarks="stylesheet"
source="atend"><atidmd:Outline><atidmd:Bookmark state="closed"><atidmd>Title
font="bold">!,document-title.txt,!</atidmd>Title>!,chapter-bookmarks.app,
!</atidmd:Bookmark><atidmd:Bookmark state="closed"><atidmd>Title font="bold">
List of Figures</atidmd>Title><atidmd:Bookmark>!,figure-bookmarks.app,
!</atidmd:Bookmark></atidmd:Bookmark></atidmd:Outline></atidmd:DocumentMetaData>! '>
...
<e-i-c gi="figure">
<charlist inherit="1">
<enumerat increm="1" enumid="figurect">
<savetext textid="figurect.txt" conrule="figurect">
<savetext textid="figure-bookmarks.app" placemnt="after" append="1"
conrule='!<atidmd:Bookmark state="open"><atidmd>Title>!,\Figure \
figurect.txt,\.\_,figure-title.txt,!</atidmd>Title></atidmd:Bookmark>! '
...
<e-i-c gi="section">
<charlist inherit="1">
<savetext textid="section-title.txt" conrule="\\\">
```

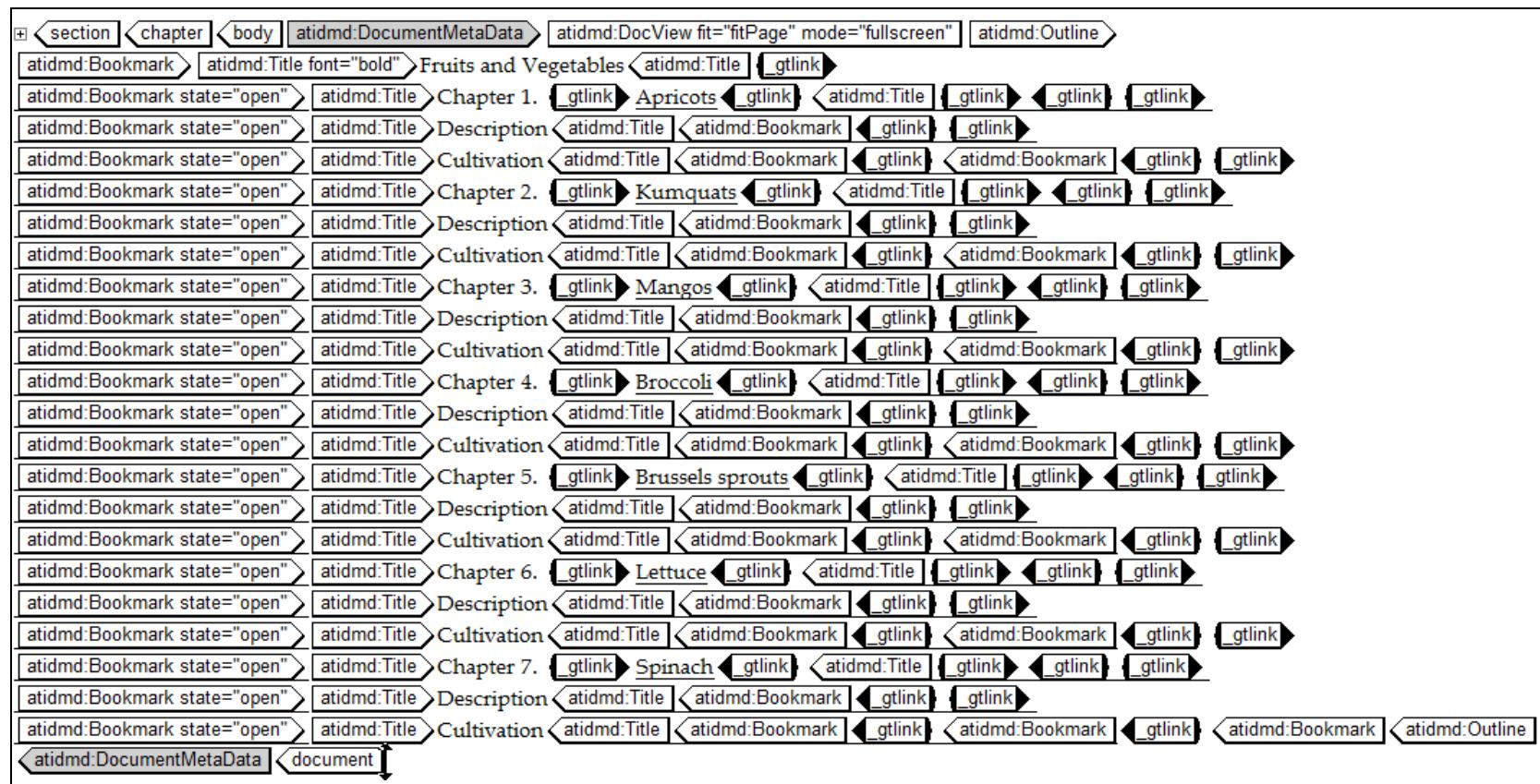
```
<savetext' placement="after" append="1" textid="section-bookmarks.app"
conrule='!<atidmd:Bookmark state="open"><atidmd:Title>!,section-title.txt,
!</atidmd:Title></atidmd:Bookmark>!>
...
<e-i-c gi="title" context="chapter">
<charlist inherit="1" charsubsetref="title">
<savetext textid="chapter-title.txt" conrule="#CONTENT">
<usetext source="\Chapter \,chapterct.txt,\. \">
...
<e-i-c gi="title" context="document">
<charlist inherit="1" charsubsetref="title center">
<savetext textid="document-title.txt" conrule="#CONTENT">
...
<e-i-c gi="title" context="figure">
<charlist inherit="1" charsubsetref="title">
<savetext textid="figure-title.txt" conrule="#CONTENT">
...
<e-i-c gi="title" context="section">
<charlist inherit="1" charsubsetref="title italic">
<savetext textid="section-title.txt" conrule="#CONTENT">
...
```

Figure 299 Document, chapter, and section open PDF bookmarks**FOSI fragment**

```
<e-i-c gi="chapter">
...
<savetext textid="chapter-bookmarks.app" placemnt="after" append="1"
conrule='!<atidmd:Bookmark state="open"><atidmd:Title>!,\Chapter \,chapterct.txt,
\.\,chapter-title.txt,!</atidmd:Title>,section-bookmarks.app,!</atidmd:Bookmark>!'
...

```

Figure 300 illustrates how <atidmd> markup can be formatted for Edit window display.

Figure 300 Formatted atidmd markup in Edit window**FOSI fragment**

```

<e-i-c gi="atidmd:Bookmark">
<charlist inherit="1" charsubsetref="startline"></charlist>
</e-i-c>
<<e-i-c gi="atidmd:DocumentMetaData">
<charlist inherit="1">
<highlt inherit="1" bckclr="gray3"></charlist>
</e-i-c>

```

Specifying PDF metadata with atidmd

<atidmd:DocInfo> is used to specify PDF document properties. It can be coded in a usetext for output anywhere in a document, either with other child elements of <atidmd:DocumentMetaData> or separately, as shown in **Figure 301**.

In this example, <atidmd> markup specifies the document name, author, and date properties of the PDF file that is created.

Figure 301 <Atidmd> specifies PDF document properties

```

<stringdecl textid="author.txt" hotlink="1">
<stringdecl textid="date.txt" hotlink="1">
<stringdecl textid="document-title.txt" hotlink="1">
...
<e-i-c gi="author" context="front">
<charlist inherit="1">
<savetext textid="author.txt" conrule="#CONTENT">
...
<e-i-c gi="date" context="front">
<charlist inherit="1">
<savetext textid="author.txt" conrule="#CONTENT">
...
<e-i-c gi="front">
<charlist inherit="1">
<usetext placemnt="after" source='!<atidmd:DocumentMetaData bookmarks="stylesheet"
source="atend"><atidmd:DocInfo><atidmd:Entry><atidmd:Key>Title</atidmd:Key>
<atidmd:Value>!,<document-title.txt,</atidmd:Value></atidmd:Entry><atidmd:Entry>
<atidmd:Key>Author</atidmd:Key><atidmd:Value>!,<author.txt,</atidmd:Value>
</atidmd:Entry><atidmd:Entry><atidmd:Key>Date</atidmd:Key><atidmd:Value>!
,date.txt,</atidmd:Value></atidmd:Entry></atidmd:DocInfo></atidmd:DocumentMetaData>
...
<e-i-c gi="title" context="document">
<charlist inherit="1" charsubsetref="title center">
<savetext textid="document-title.txt" conrule="#CONTENT">
...

```

Specifying PDF window properties with atidmd

<atidmd:DocView> is used to specify PDF document properties. It can be coded in a usetext for output anywhere in a document, separately, as shown in **Figure 301**, or with other child elements of <atidmd:DocumentMetaData>.

Figure 302 <Atidmd> specifies PDF window properties

```

<usetext source='!<atidmd:DocumentMetaData bookmarks="stylesheet"
source="atend"><atidmd:DocView fit="fitWidth" destination="openpage"/>
</atidmd:DocumentMetaData>!>
```

Document bookmarks and metadata for PDF

Document metadata markup is provided to enable customization of PDF output, including:

- bookmarks
- PDF properties
- PDF viewer window settings

Document metadata markup is in the namespace defined by the URL
<http://www.arbortext.com/namespace/DocumentMetaData/>

The DTD fragment at

<http://www.arbortext.com/namespace/DocumentMetaData/atidmd-dtd.txt>
is reproduced here.

Figure 378 Atidmd DTD

```
<!----->
<!--
    Arbortext DocumentMetaData DTD
    Copyright (C) 2003, 2004 Arbortext, Inc.

    DocumentMetaData doctype.
    Represents Document Meta Data
    for inclusion in document as pseudo tags.

This DTD defines the vocabulary specified by the namespace name:

http://www.arbortext.com/namespace/DocumentMetaData

----->

<!ELEMENT DocumentMetaData ( DocView?, DocInfo?, Outline? ) >
<!-- The source attribute provides a mechanism for placing a
    DocumentMetaData tag at the top of the document which will
    serve to disable automatic bookmarks. The DMD block at the
    top of the document would have source="atend", and then the
    one at the end would have source="local" (the default).
    Alternatively, the DMD block can simply be placed at the
    beginning of the document with source="local".

The bookmarks attribute provides a mechanism for including
DocView or DocInfo data while still using the automatic bookmark
method. bookmarks="auto" will cause the TeX write to output
the old-style automatic bookmark specials. If the stylesheet
adds bookmarks as well, the results could be unpredictable. -->
<!ATTLIST DocumentMetaData
```

```
source ( atend | local ) "local"
bookmarks ( none | auto | stylesheet ) "stylesheet" >

<!--
-->
<!-- DocView: controls how the document appears when opened. -->
<!--
-->
<!-- mode:
-->
<!--     none:      No tabs selected -->
<!--     bookmarks: Bookmarks visible -->
<!--     thumbs:    Thumbnails visible -->
<!--     fullScreen: Full screen mode -->
<!--
-->
<!-- fit:
-->
<!--     actualSize: Zoom=100% -->
<!--     fitPage:    Entire page within window -->
<!--     fitWidth:   Fit width to window -->
<!--
-->
<!-- destination: FOSI: Epic will generate -->
<!--           XSL-FO: Use internal-destination -->
<!--           Default: Page 1 -->

<!ELEMENT DocView EMPTY >
<!ATTLIST DocView
    mode ( none | bookmarks | thumbs | fullScreen ) "none"
    fit   ( actualSize | fitPage | fitWidth ) "fitWidth"
    destination CDATA #IMPLIED >

<!--
-->
<!--
-->
<!-- DocInfo: Sets Document Properties parameters. -->
<!--
-->
<!ELEMENT DocInfo ( Entry* ) >

<!ELEMENT Entry ( Key, Value ) >

<!-- key ( e.g., title, author, subject, keywords ) -->
<!--
-->
<!ELEMENT Key (#PCDATA) >

<!ELEMENT Value (#PCDATA) >

<!--
-->
<!--
-->
<!-- Outline: Defines bookmark structure -->
<!--
-->
<!ELEMENT Outline ( Bookmark* ) >
```

```

<!-- Bookmark -->
<!--
<!-- destination: FOSI: Epic will generate -->
<!-- XSL-FO: stylesheet must supply -->
<!-- If this starts with '#', it will be -->
<!-- interpreted as an internal destination; -->
<!-- otherwise, it is an external file. -->
<!--
<!-- state: -->
<!-- open: children are shown -->
<!-- closed: children are not shown -->
<!-- hidden: will not appear as a bookmark; -->
<!-- will be open (children show) -->
<!--
<!-- format: font style for title -->
<!--
<!-- color: Epic color name or RGB value in Hex (#hhhhhh) -->
<!-- Default: black (#000000) -->
<!--
<!-- No Title element: treat bookmark as hidden -->
<!--
<!ELEMENT Bookmark ( Title?, Bookmark* ) >
<!ATTLIST Bookmark
destination CDATA      #IMPLIED
state    ( open | closed | hidden ) "open" >

<!ELEMENT Title (#PCDATA) >
<!ATTLIST Title
font      ( regular | bold | italic | bolditalic ) "regular"
color     CDATA          #IMPLIED >

<!----->

```

The *font* and *color* attributes on `<atidmd:Title>` format the PDF bookmarks. However, `<atidmd:Bookmark>`'s *format* and *color* attributes (highlighted in **Figure 378**) are not supported at this writing.

The `atend` setting avoids the need for a time-independent variable. Like titles for a table of contents, titles for bookmarks are not available at the beginning of a document during the first formatting pass.

See **Atidmd PDF example** on page 541.

Atidmd-related ACL

Atidmd markup displays in the Edit window when set `gentexttagdisplay=full`. The tags can be formatted with

e-i-cs, if desired, as shown in **Figure 298**. This formatting does not affect PDF bookmarks or pages or on printed output.

The environmental variable APTNOPDFLINKS controls whether links are created in PDF files. Yes disables links, although bookmarks for a table of contents and a list of tables are still created. The default is no.

NOTE: This environment variable has no effect on HTML output.