FOSI
Quickstart Tutorials
for Arbortext Editor™

Part 1: Formatting for Screen and Print FOSIs

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The FOSI Quickstart tutorials take a learn-by-doing approach to teaching the necessities of the FOSI formatting language for Arbortext Editor, while creating useful code you can refer to and reuse later. The tutorials also teach you how to make the most of Arbortext’s interfaces for FOSI development and maintenance.

**Audience**

The tutorials are intended for: those who want to learn the fastest, simplest way to develop a FOSI that is as easy as possible to maintain; those who want to learn how to utilize the style panels interface; and those who would like to refresh their knowledge of FOSI. The tutorials are also useful for those who are interested in learning what FOSI can contribute to an Arbortext Editor application.

**Prerequisites**

A working knowledge of structured markup, Arbortext Editor, and DTDs is a prerequisite for learning FOSI formatting. Programming experience, however,
is not required. The most useful background is desktop publishing, typesetting, or other document preparation experience.

**What’s in this workbook**

This workbook contains Part 1 of the FOSI Quickstart Tutorials, which covers the FOSI formatting capabilities that apply to the Arbortext Edit window display. This formatting is a subset of the formatting that applies to print/PDF output with Arbortext Print Composer or Arbortext Publishing Engine. Formatting just for print/PDF output is covered in the Part 2 tutorials. For more information on Part 2 tutorials, please refer to *What’s not in this workbook* below.

An overview of FOSI formatting precedes the tutorials. A chapter with useful information for FOSI development follows the tutorials. The last chapter outlines the author’s methodology and best practices for FOSI development. The first appendix contains the OutSpec DTD supported by Arbortext with annotations indicating what is supported for Edit window display. The second appendix is a short list of other resources related to FOSI.

In addition, this workbook is studded with margin notes containing tips and tricks related to FOSI development and Arbortext applications.

**What’s not in this workbook**

This workbook does not contain Part 2 tutorials for FOSI formatting that applies only to print/PDF output (and has no effect on the Edit window display). Part 2 tutorials will be available separately.

**Conventions used in this workbook**

Everything in these tutorials applies to both Arbortext Print Composer and Arbortext Publishing Engine. For brevity, this workbook uses “formatter” or “formatting engine.”

FOSI categories and characteristics are shown with initial caps to highlight them. SGML/XML element names have start (<) and end (> tags. Attributes referred to in text are formatted in italic.
FOSI Quickstart Tutorials Part 1

The Quickstart tutorials in this workbook cover formatting that applies to the Arbortext Edit window display and to print/PDF output. Those who need a FOSI for print/PDF output also need to take the tutorials in Part 2, which will be available separately. Part 2 tutorials cover FOSI components related just to print/PDF output, so if you just need to develop a screen FOSI, you do not need to take Part 2.

These tutorials demonstrate how to code as little as possible to achieve the desired formatting while making the FOSI as easy as possible to revise in the future. The idea is to specify formatting once so a single change will affect all relevant elements. This means maximizing “global” formatting and minimizing “local” formatting.

Arbortext Editor has two interfaces for FOSI development and maintenance: the style panels interface and the tagged editor. Each has its strengths and weaknesses, so it makes sense to use both. The style panel interface uses more familiar formatting terms than the tagged editor. The tagged editor displays the FOSI as a linear document, while the style panels interface lets you be
in more than one place in the FOSI at the same time. All but the last three tutorials in Part 1 use the style panels interface. In Part 2, both interfaces are used.

All tutorials use the same DTD. DTD elements and attributes are named for their purpose and are spelled out whenever feasible rather than abbreviated in order to make their meaning clear. Not all elements and attributes, however, are used in Part 1 tutorials. Note that this DTD is for training purposes only and is not intended as a production DTD.

Each tutorial has its own XML (.xml) file and associated FOSI (.fos) file. A copy of each FOSI with all the coding from that tutorial is also included, so you can compare results. To use the completed FOSI, in the Arbortext Edit window, select Format→Select Stylesheets…

NOTE: Be sure to take the tutorials in order. Each tutorial builds on things you learned in previous tutorials. Some tutorials are followed by a short Q and A section to provide some food for thought and things to try.

NOTE: Some tutorials deliberately create common error conditions so you can learn how to fix them. Consequently, it is important that you perform each step exactly as stated and in the designated order. There’s a check box at the end of each step so you can keep track of which steps you’ve completed. After successfully completing a tutorial, go ahead and experiment on your own before closing the document.
The next tutorial introduces character fills, further explores FOSI text variables, and creates a table of contents.

**Tutorial 1-11: Code a Table of Contents**

*New: character fill, time-independent variable, FOSI-generated file*

1. Open tutorial1-11.xml.
2. Start the All Character Fills panel.
3. Click on “All Character Fills.” Then select **Edit→Add**, or use the right mouse button to select **Add charfill**, or use the **Ctrl+a** keymapping.
4. With the cursor in the field after “Character Fill,” enter **dotfill**, then **TAB** to the field after “String to Repeat” and enter a period: .
5. Close the All Character Fills panel and open the style panel for <chapter>. Locate the Save Text category, click in the field for its Append characteristic, then click the right mouse button to see Append can be set to **yes** or **no** (the default). Close the panel.
6. Start the All Text Variables panel to add a new text variable for storing the contents of <title>s for the table of contents.
7. Add a text variable named **toc.app** with **Forward Ref. Status=yes**, **Scope Is Local to Element=document**, and **Link Use and Save Locations=yes** for output from a Use Text Source in the e-i-c for <toc>.

**NOTE:** Setting **Forward reference status=yes** tells the formatter that **toc.app** is empty when it is first encountered in the document because its contents come from elements later on in the document. The formatter makes at least one more formatting pass through the document in order to output the contents of the variable. **Scope Is Local To Element=document** tells the formatter the elements that save something to the variable are all children of the <document> element. In other words, the table of contents applies to the entire document. For a Table of Contents for each <chapter>, for example, code **Scope Is Local to Element=chapter**.

*continued...*