

INX2FO User Documentation

Part III - Plug-In

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Overview

The part III of INX2FO documentation provides instructions for INX2FO Plug-In installation and for converting Adobe InDesign Interchange (INX) format documents to XSL-FO using INX2FO stylesheets. It includes information about implemented features, customization rules and limitations. It demonstrates how to render your own PDF or PostScript file using INX2FO Plug-In. The documentation also contains introduction to InDesign INX file format, INX2FO Plug-In, INX2FO stylesheets and glossary of basic terms.

Adobe InDesign Interchange (INX) overview

INX is an XML-based format used to serialize and deserialize the InDesign scripting DOM. This format is most useful with the backward compatibility feature of InDesign, which allows you to use an earlier version of InDesign to open a document that was created in a later version of InDesign. When an InDesign document is exported to an INX file, every object, its properties, and their values are translated into XML ("[Working with INX file format](#)" [http://partners.adobe.com/public/developer/en/indesign/sdk/working_with_inx_file_format.pdf]).

INX2FO Plug-In overview

INX2FO Plug-In designed to make transformation easy from Adobe InDesign Interchange (INX) format documents to XSL Formatting Objects (XSL-FO), PDF and Post Script (PS) using INX2FO stylesheets. RenderX encourages any developer's interested in providing suggestions or enhancements to subscribe to our [xep-support list](#) [<http://www.renderx.com/support/index.html>] and submit your comments.

INX2FO stylesheets overview

INX2FO is a collection of stylesheets to convert InDesign INX documents to XSL-FO. Refer to the part I of INX2FO documentation for more details about.

Installation

Software requirements

To work with INX2FO Plug-In and prepare INX documents Adobe InDesign has to be installed on your computer before installing INX2FO Plug-In. Also you need XSLT processor which supports EXSLT extensions (for example, Saxon XSLT processor, which is included in RenderX XEP). To render files from INX using INX2FO stylesheets you need to have [RenderX XEP formatter](http://www.renderx.com/tools/xep.html) [http://www.renderx.com/tools/xep.html] or [RenderX XEPWin Engine](http://www.renderx.com/tools/xepwin.html) [http://www.renderx.com/tools/xepwin.html] (hereinafter referred to as XEP formater) installed on your computer. For viewing resulting PDF files you need to have a PDF viewer (for example Adobe Acrobat Reader 5.x or later).

How to install INX2FO Plug-In

To install INX2FO Plug-In extract archive contents to your computer, execute the setup.exe and follow the wizard instructions. After successful installation INX2FO Plug-In and INX2FO stylesheets are ready to use. You can find INX2FO package with INX2FO stylesheets, documentation and templates at the "%ProgramFiles%\RenderX\INX2FO\" folder and examples at the "\Documents and Settings\All Users\Documents\INX2FO\examples\" folder.

Note: after successful installation INX2FO Plug-In the environment variable "INX2FO_HOME" is added. This variable specifies path to INX2FO main package and location of the license file - license.xml.

Inside INX2FO package

INX2FO package consists of stylesheets collection, documentation, example set, readme file and license agreement.

Stylesheets

The collection of stylesheets located in "stylesheets" folder contains XSLT files with templates to translate INX documents into XSL-FO format. See detailed description of stylesheets at the part I of INX2FO documentation.

Documentation

The documentation is located in "doc" folder and includes following:

INX2FOUserDocumentationPart1.pdf - INX2FO stylesheets user manual;

INX2FOUserDocumentationPart2.pdf - describes how to create INX documents with Data Merge and Barcodes;

INX2FOUserDocumentationPart3.pdf - INX2FO Plug-In user manual; it is the file you are reading now.

WhatsNew.txt - lists of improvements, fixed issues, features and limitations for each release of INX2FO Plug-In;

stylesheets - INX2FO stylesheets documentation folder which contains:

WhatsNew.txt - lists of improvements, fixed issues, features and limitations for each release of INX2FO stylesheets;

Readme.txt - contains short description of INX2FO stylesheets package.

License.txt - INX2FO stylesheets license agreement document.

Examples

The set of INX examples located in "examples" folder. You can get started with INX2FO Plug-In using these examples.

Readme.txt

Readme file Readme.txt contains short description of INX2FO Plug-In package.

License.txt

INX2FO Plug-In license agreement document. It is important that you read license agreement document License.txt before using INX2FO Plug-In. See also INX2FO stylesheets license agreement.

How does INX2FO work?

INX2FO Plug-In is a powerful and user friendly tool that can help you simplify transformation from Adobe InDesign Interchange (INX) documents format to XSL Formatting Objects (XSL-FO), PDF and Post Script (PS) using INX2FO stylesheets and XEP formatter. It hide's inside all operations with XSLT processor, INX2FO stylesheets, data source management and XEP formatter. So there is no need to make manual transformation from INX to result document - INX2FO Plug-In do it for you.

At the same time INX2FO Plug-In has a wide possibilities for configuration transformation process and resulting document layout (for example number of processing records from external data source).

Main plug-in settings are stored to the InDesign settings storage so it made easy INX2FO Plug-In configuration at next InDesign start.

Also INX2FO Plug-In can do transformations between different supported data source formats with "Data source converter" dialog. This can be useful for creating InDesign documents with data merge.

Implemented features

The INX2FO Plug-In supports processing of INX documents (including ones with external data sources). Rendering of documents supplied with RenderX XEP and INX2FO stylesheets with support of basic formatting objects such as text, paragraphs, graphical shapes, tables, text direction, hyperlinks, images etc (refer to the part I of INX2FO documentation for more details).

The INX2FO Plug-In offers following basic features:

- easy transformation from INX to XSL-FO, PDF and Post Script (PS);
- data merged documents support;
- external XML data source support;
- supports transformation for specified range of data source records;
- data source converter;
- storing main settings to InDesign storage;
- Java options support (both for Saxon and XEP formatter);
- logging transformation results;
- ability to turn on/off FO file generation during documents processing;
- fast preview of the resulting document.

How to set up INX2FO Plug-In

Getting started with INX2FO Plug-In

After INX2FO Plug-In correctly installed on your computer as described above, launch Adobe InDesign. You should see the main panel of INX2FO Plug-In (see Fig. 1). If you do not see this panel choose Window menu and check INX2FO menu item to make it available in Adobe InDesign (see Fig. 2).

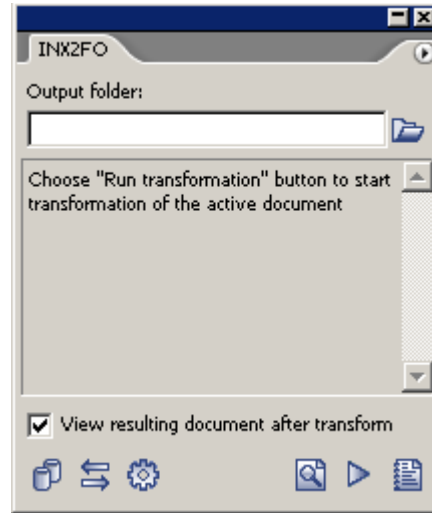


Fig. 1 INX2FO Plug-In main panel

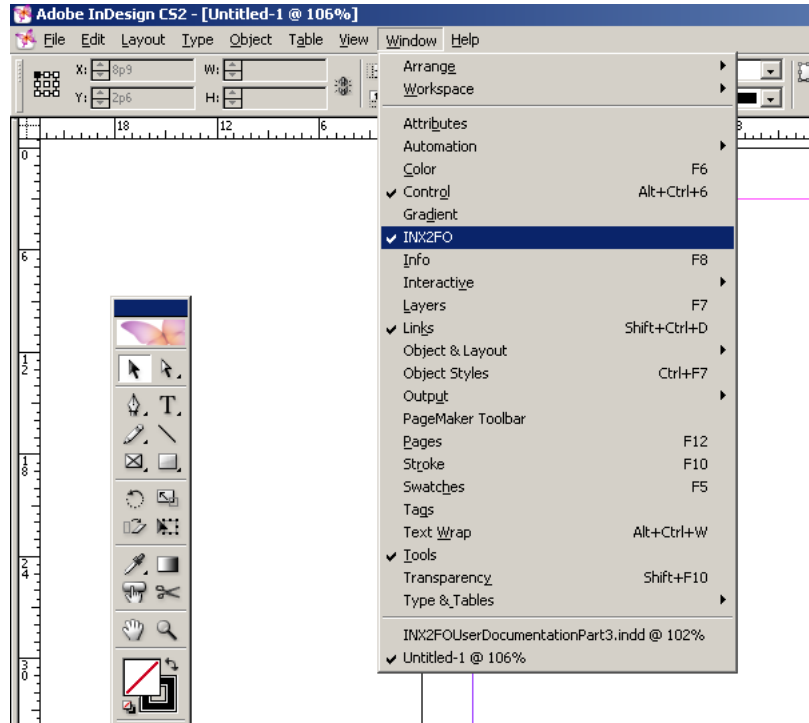


Fig. 2 Choosing INX2FO Plug-In menu item

INX2FO Plug-In main panel

Main panel of INX2FO Plug-In (see Fig. 1) contains some controls affect current INX2FO Plug-In run only:

Output folder

This is a folder to store output files during INX to XSL-FO transformation. This field value overrides output folder value from Settings dialog. If it is not specified then corresponding field from Settings dialog will be used.

View resulting document after transform

If this check box is checked then after successful transformation resulting document file will be opened with associated program.

Main panel also contains buttons to change Data binding and global Plug-In settings and buttons to start data source converter, preview resulting document, run transformation process and show resulting log.

Settings dialog

If you click "Open Settings dialog..." button on INX2FO Plug-In main panel Settings dialog will be opened (see Fig. 3). On this dialog you can set various parameters which will affect current and next INX2FO Plug-In run. All settings from this dialog will be stored in InDesign settings storage.

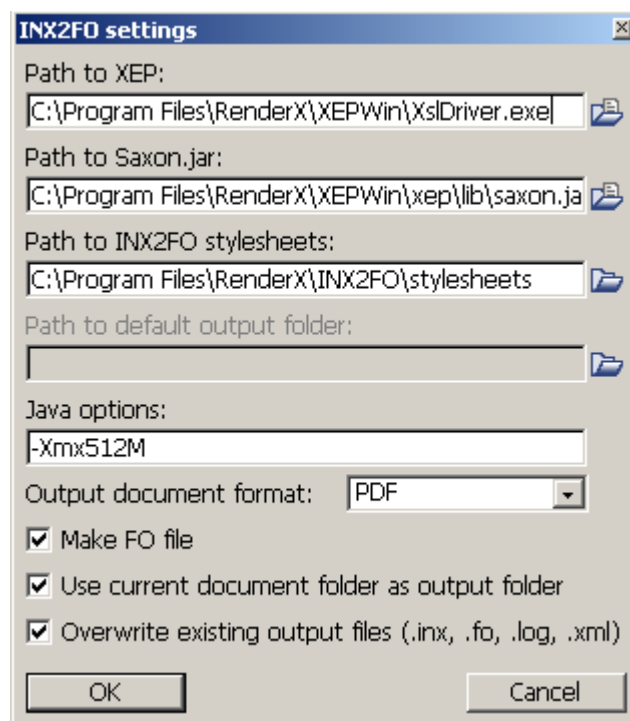


Fig. 3 INX2FO Plug-In Settings dialog

Path to XEP

At this field you have to specify full path to xep.bat batch file from RenderX XEP package or to XslDriver.exe file from RenderX XEPWin package.

Also the full path to Saxon.jar will be automatically set to default value relatively to xep.bat path root folder (if Path to Saxon.jar is empty).

Path to Saxon.jar

At this field you have to specify full path to Saxon.jar file.

Path to INX2FO stylesheets

At this field you have to specify path to folder where INX2FO stylesheets are installed.

Path to default output folder

At this field you have to specify path to folder to store all resulting files during INX2FO transformation process. This folder must exist before starting conversion process. This folder will contain INX file, resulting XSL-FO, generated document and LOG file with transformation results. If you specify path at field "Output folder" on INX2FO Plug-Ins main panel then that path will be used as output folder path for current INX2FO Plug-In run.

Java options

At this field you can specify some additional options for Java (for Saxon XSLT processor and for XEP formater).

Output document format

This combobox allows you to select type of resulting document. By default output format is PDF.

Make FO file

If this check box is checked then FO file will be also created during INX2FO process (through individual Saxon XSLT processor call). Otherwise all required transformation from INX to resulting document will be made without additional creation of FO file. In this case transformation process will be finished more quickly.

Use current document folder as output folder

If this check box is checked then all temporary and resulting files (.inx, .pdf, .ps, .fo and .log) will be stored in the same folder with source document. Activating this option will replace value and disable "Path to output folder" field. If you specify path at field "Output folder" on INX2FO Plug-In's main panel then that path will be used as output folder path for current INX2FO Plug-In run.

Overwrite existing output files

If this check box is checked then all resulting output files will replace existing once without additional prompt. Otherwise before overwriting existing file user will be prompted about it. If user cancels overwriting then INX2FO transformation process will be terminated at once.

Data binding dialog

If you click "Open Data binding params dialog..." button on INX2FO Plug-In main panel then Data binding dialog will be opened (see Fig. 4). Controls on this dialog will be enabled only if active document has external data source bound to it.

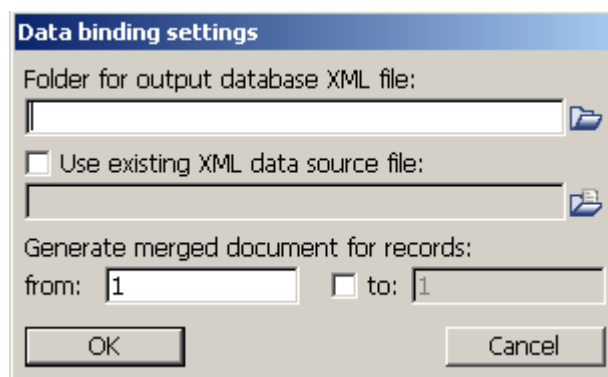


Fig. 4 INX2FO Plug-In Data binding dialog

Folder for output database XML file

INX2FO Plug-In can correctly process InDesign documents with external comma-separated (CSV) and TAB-separated (TXT) data source files. It is needed to convert source CSV/TXT file to XML since INX2FO stylesheets can only work with XML data. In this field you can specify path to folder where resulting XML data source will be stored. If this field is not specified then Settings dialog's or main panel's output folder value will be used instead.

Use existing XML data source file check box

If you already have XML file with correct data for active document then you can check this check box and specify path to existing XML file. This file will be used instead of original data source bound to the active document. See also "Data source converter" section of this document.

Generate merged document for records

This section is used to specify range of records to generate output document. Field "from" is used to specify start record number. If you wish to define end record too you have to check "to" check box and specify last record number. Otherwise the last record of generated document equals to last record of data source. Only positive numbers are supported for both "from" and "to" fields.

Data source converter

If you click a button with "Open Data source converter dialog..." tooltip on INX2FO Plug-In main panel, Data source converter dialog will be opened (see Fig. 5). Using this dialog you can convert existing data source files to another supported by InDesign and Plug-In formats. Also you can specify range of source data file records which need to be converted. To do that you can make short version of the large data source file.

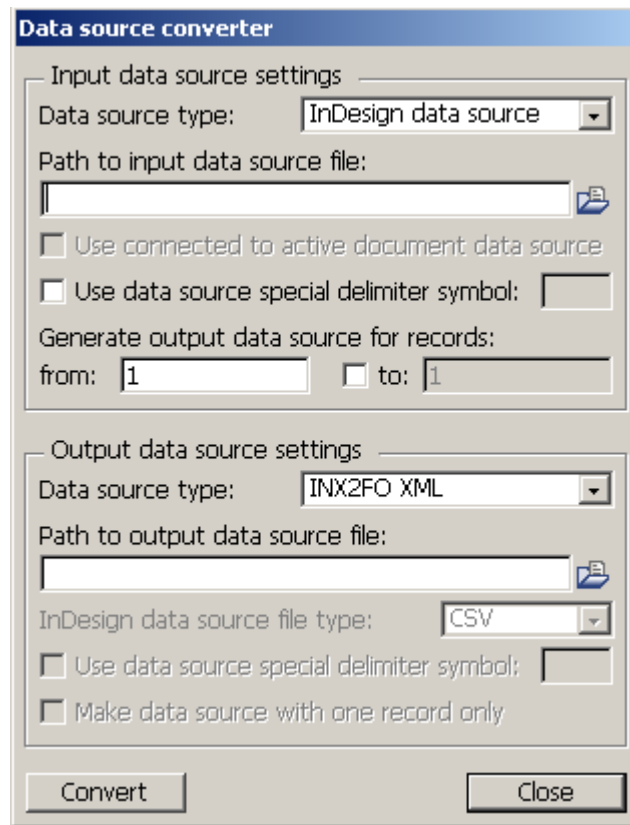


Fig. 5 INX2FO Plug-In Data source converter dialog

Input data source settings

Using this group of controls you can specify input data source and its parameters.

Data source type

At this combo box you can choose input data source type: InDesign (CSV or TXT) or INX2FO XML format. For more details about INX2FO XML format refer to the part II of INX2FO documentation.

Path to input data source file

In this text box you can specify path to the input data source file. This path string will be used only if "Use connected to active document data source" check box is unchecked or disabled.

Use connected to active document data source

If this check box is checked and enabled then bound to the active document data source file will be used as input data source file. In this case "Path to input data source file" text box will be disabled and its value will not be used during transformation process.

Use data source special delimiter symbol

If this check box is enabled and checked then you can specify columns delimiter symbol used in data source file. Only one symbol can be set in delimiter symbol text box.

Generate output data source for records

This section is used to specify range of records to generate output data source. Field "from" (if enabled) is used to specify start record number. If you wish to define end record too you have to check "to" check box (if it is enabled) and specify last record number. Otherwise the last record of output data source equals to a last record of input data source. Only positive numbers are supported for both "from" and "to" fields.

Input data source settings

Using this group of controls you can specify output data source and its parameters.

Data source type

At this combo box you can choose type for output data source file: InDesign (CSV or TXT) or INX2FO XML data source.

Path to output data source file

In this text box you can specify path for storing output data source file.

InDesign data source file type

At this combo box you can choose type of output InDesign data source file: CSV or TXT. Value of this combo box will be used for determining columns delimiter symbol for output data source file.

Note: this combo box will be disabled if "data source type" combo is set to "INX2FO XML" value. In this case value of this combo box will be ignored.

Use data source special delimiter symbol

If this check box is enabled and checked then you can specify columns delimiter symbol for output data source file. Only one symbol can be set in delimiter symbol text box.

Make data source with one record only

If this check box is enabled and checked then output data source will be generated with only first record from the input data source. This is useful if you want to do CSV template file by input INX2FO XML data source. Later you can use this template for creating InDesign document and full XML data source for INX2FO transformation process.

Note: if this check box is checked then "Generate output data source for records" section controls will be disabled.

Working with data source converter

Data source converter can be helpful for converting one supported data source format to another. To do that you have to specify input data source and its parameters in upper part of the dialog, output data source settings in bottom part and then click to "Convert" button. If all parameters was set correctly then transformation process starts and at finishes you can get output data source file.

How to work with INX2FO Plug-In

Prepare document for INX2FO transformation

At first you have to open INDD or INX document which you want to convert. If this document merged with external data source check whether this data base file exists and correctly bound to this document. For additional information about data merge see Adobe InDesign documentation and INX2FO data binding usage guide (see part II of INX2FO documentation). Also check Data binding dialog settings for data merged document - here you can specify output folder or path to existing data source file and set a range of records for generate.

Preview resulting document

Using "Preview" button on the main panel of INX2FO Plug-In you can generate and see a data merged document with first three records only from input data source. This makes possible a one click fast preview of the resulting document even with a large data source bound to it.

Start INX2FO transformation process

Check whether the source document is opened and all required fields on Settings and Data binding dialogs are specified correctly. Now you are ready to start converting the active document. Click "Run transformation" button on the INX2FO Plug-In's main panel and wait until transformation finished. Current converting status will be displayed at INX2FO Plug-In's main panel field during transformation process.

Analyze transformation results

After transformation finished you can see at INX2FO Plug-In's main panel results field either success message or short error description depends on converting results. If some errors are occurred you can review the transformation details in log file. To open log file click "Open log file" button on the Plug-In's main panel.

Transformation troubleshooting

Java OutOfMemory error

While processing the large document or document with external data source you can get an error message: "Exception in thread "main" java.lang.OutOfMemoryError: Java heap space". To solve this problem you have to increase the value of memory available to Java. You can do it by adding an -Xmx switch to Java options field on Settings dialog and to the using xep.bat file (see also description of "Java options" section of this document). Recommended value of -Xmx is about 80% of physical RAM available on the computer that runs INX2FO Plug-In. Example: -Xmx512M.

Java EOF exception

If during INX2FO transformation with XEPWin XslDriver you receive an error message "java.io.EOFException: no more input" in result log, please check license for XEPWin - it may be incorrect.

See also "Limitations" section for more details.

Limitations (on April 12th 2007)

Settings dialog

Saving settings to InDesign storage

INX2FO Plug-In supports saving parameters from settings dialog to InDesign storage. But sometimes settings are not saved correctly. Most often it may happen if one or more InDesign documents are opened. To save settings parameters correctly close all opened documents before saving settings.

Data Binding dialog

Data source files supported formats

When using external data source (data merge mode) it is necessary to convert InDesign data source file (CSV or TXT) to XML representation. Now INX2FO Plug-In supports comma-separated (CSV) and TAB-separated (TXT) files in ASCII, UTF-8 and UTF16-LE formats only.

In addition to INX2FO Plug-In limitations, see also "Limitations" section in INX2FO stylesheets user manual (see part I of INX2FO documentation).

References and links

1. [W3C XSL Transformation 1.0 Recommendation](#)
2. [Download trial version of Adobe™ InDesign®](#)
3. [Adobe™ Acrobat® Reader®](#)
4. [RenderX XEP On-line Reference](#)
5. Part I of INX2FO documentation - "INX2FO User Documentation Part I - Stylesheets"
(INX2FOUserDocumentationPart1.pdf)
6. Part II of INX2FO documentation - "INX2FO User Documentation Part II - Data Binding Usage and Barcodes" (INX2FOUserDocumentationPart2.pdf)
7. Part III of INX2FO documentation - "INX2FO User Documentation Part III - Plug-In"
(INX2FOUserDocumentationPart3.pdf)

Glossary

INX2FO Stylesheets

Collection of XSL stylesheets designed by RenderX to transform INX documents to XSL FO.

INX2FO Plug-In

InDesign Plug-In designed by RenderX to transform INX documents to PDF.

XEP

[RenderX XEP](http://www.renderx.com/tools/xep.html) [http://www.renderx.com/tools/xep.html] is an XML to PDF (XSL FO) formatter. It takes input in XML, applies an XSL transformation to build XSL Formatting Objects representation, and then formats the Formatting Objects into PDF or PostScript. XEP supports multiple raster and vector graphic formats. Among them, Scalable Vector Graphics (SVG) is an XML-based vector graphics representation, widely used in business applications and for fine typesetting.

XEPWin Engine

[RenderX XEPWin Engine](http://www.renderx.com/tools/xepwin.html) [http://www.renderx.com/tools/xepwin.html] is a .NET wrapper for XEP Engine. Its installation package includes several applications for increasing your productivity on Windows platform.

XSL-FO

[XSL-FO \(XSL Formatting Objects\)](http://www.w3.org/Style/XSL/) [http://www.w3.org/Style/XSL/] is an XML vocabulary for the formatting of documents. Being part of XSL, the normal way is to produce XSL-FO documents by transforming XML documents using XSLT. Even though the principles behind XSL and CSS (the other Style Sheet Language created by W3C) are quite different, it is planned to align the formatting model between XSL-FO and CSS, so that formatting engines can be based on the same code, both languages can be used to achieve the same results, and formatted results will look identical.

XSL

[XSL \(Extensible Style Language\)](http://www.w3.org/Style/XSL/) [http://www.w3.org/Style/XSL/] is a Style Sheet Language that can be used for displaying XML documents. Using XSL is two-step process, the first step being a transformation of the XML document using XSLT, and the second step being the rendering of the result of the transformation, which is done using XSL-FO. While XSL covers the same application area than CSS, it is much more powerful, because the transformation step (using XSLT) can perform arbitrarily complex transformations of the XML document, while CSS is not able to make any structural changes to the XML document.

XSLT

[XSLT \(XSL Transformations\)](http://www.w3.org/Style/XSL/) [http://www.w3.org/Style/XSL/] is a specialized Programming Language for transforming XML documents. Even though it is part of XSL and as such intended to be used for transforming XML documents into XSL-FO for presentation purposes, it is not limited to this application area. XSLT uses XML syntax (i.e., it is a Programming Language in XML syntax), even though it is based on DSSSL (which uses a Lisp-like syntax). XSLT is particularly interesting in B2B scenarios, where XML documents must be transformed.