White Paper
Antenna House Formatter

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Content

1 Introduction

Antenna House Formatter is a powerful tool for fully automatic conversion of XML or HTML data into various output formats such as PDF, SVG and PostScript. The software offers extensive features and options for formatting and designing documents.

Configurations can be created for various XML standards such as DITA, DocBook, JATS and TEI. Antenna House Formatter allows customizing page layouts and using style sheets based on PrintCSS. This can be used to customize tables of contents, links, images, tables and much more.

Note: In the Multichannel Publishing Tool of Xpublisher on Fabasoft PROCECO, the CSS version of the Antenna House formatter is supported. The XSL-FO version, which is also available, is currently not part of the solution.

2 Setup for Administrators

Administrators are authorized to store individual configuration files for their multichannel publishing solution.

2.1 Create Production Service

To create a production service for the Antenna House Formatter proceed as follows:

1. Navigate from the publishing dashboard to the publishing configuration via the "Switch to Configuration" action.
2. Navigate to the "Production Services" list.
3. Create a new production service via the "Create Production Service" action.
4. Select "Antenna House 7.3 Print CSS Production Service" from the list of services.
5. In the next step, the name, fonts and ICC profiles for the Antenna House CSS production service can be defined. If required, different configurations can be created for multiple production services.
    o **Fonts**
      Click on Add entry to add fonts from your network environment. If you want to link fonts from the DAM, please select Search and add. The font will later be sent to the production service for processing.
    o **ICC Color Profiles**
      Click on Add entry to create new ICC color profiles (.icc). If you want to link color profiles from the DAM, please select Search and add. The profiles will be provided in a folder named `colorprofiles` upon publication. With your individual Fabasoft Cloud ID, the color profiles can be referenced in your XML with the path. `./colorprofiles/COOID.icc.` (see also XML configuration of the delivery format).

After confirming the configuration by clicking "Next", the newly created production service appears in the list of production services and is usable.

2.2 Create a Deployment Format

To configure Antenna House, one or more delivery formats must be created in addition to the production service. While the configuration of the production service defines settings that you want

to use for each production (like your company's house font), you control the concrete characteristic of a particular publication via the delivery format. To do this, proceed as follows:

1. Navigate from the publishing dashboard to the publishing configuration via the "Switch to configuration" action.
2. Navigate to the "Deployment Formats" list.
3. Create a new deployment format via the "Create deployment format" action.
4. Select "Antenna House 7.3 Print CSS deployment format" from the list of services.

In the following dialog, the name, XML configuration, CSS style sheets, transformations and other resources can be stored for the delivery format.
 You can freely choose the name of the delivery format. This is then offered to
the users of the multichannel publishing solution as an option for selection when creating a publication.

2.2.1 XML Configuration

For the configuration of the Antenna House Formatter deployment format, a settings file must be deposited. The file is uploaded under 'XML configuration'. To do so, proceed as follows:

1. Click on "Select file" in the dialog under "XML configuration / Content".
2. Choose a prepared Antenna House "Option Setting File" from your local system and upload it.

A detailed description of the options can be found in [Antenna House Formatter V7.3 - Option Setting File.](#)

Note: Xpublisher does not support all options described in the Option Setting File documentation. The uploaded XML file is therefore checked and cleaned up if necessary.

Here is a selection of elements that are currently supported in alphabetical order:

Font Settings	
`<font-settings>`	`default-font-family`

`<script-font>`	`script`
	`serif`
	`sans-serif`
	`monospace`
	`cursive`
	`fantasy`

`<font-alias>`	`src` `dst`
Formatter Settings	

`<formatter-settings>`	`border-medium-width`
	
	`border-thick-width`
	
	`border-thin-width`
	
	`default-CJK`
	
	`default-color`
	
	`default-font-size`

	default-long
	default-page-height
	default-page-width
	normal-line-height
	punctuation-spacing
	punctuation-trim
	pxpi
	text-autospace
	text-autospace-width
	vertical-underline-side
`<list-style-type>`	box
	check
	circle
	diamond
	disc
	hyphen
	square
`<quotemark>`	language
	code
	quotetype

PDF Settings

`<pdf-settings>`	color-compression
	color-jpeg-quality
	embed-all-fonts
	error-on-embed-fault
	no-adding-or-changing-comments
	no-changing
	no-content-copying
	owner-password
	rasterize-resolution
	text-and-lineart-compression
	use-launch-for-local-file
	user-password
	pdf version
	default-output-intent
	embed-std-output-intent
`<embed-font>`	font

Text Settings

`<text-settings>`	`Encoding` `eol-marker`
XSLT Settings	

`<xslt-settings>`	`msxml`
	
	`msxmlver`
	
	`command`
	
	`param option`

`<param>`	`name`
	
	`value`

`<stylesheet>`	`ns`
	
	`href`

`<msxml>`	`name`
	
	`value`

Note: To check the final XML, the administrator has the option to download the cleaned file again after the upload. To do this, simply click on "Download" in the dialog under XML configuration.

Example of an Antenna House "Option Setting File":

Option Setting File

```
<?xml version="1.0" encoding="UTF-8"?>
<formatter-config>
  <formatter-settings border-medium-width="3pt" border-thick-width="5pt"
    border-thin-width="1pt" default-CJK="ja" default-color="#000000"
    default-font-size="10pt" default-lang="" default-page-height="297mm"
    default-page-width="210mm" normal-line-height="1.2"
    punctuation-spacing="0.5" punctuation-trim="true" pxpi="96"
    text-autospace="true" text-autospace-width="0.25"
    vertical-underline-side="auto" />
  <pdf-settings color-compression="auto" color-jpeg-quality="100"
    embed-all-fonts="false" error-on-embed-fault="false"
    no-adding-or-changing-comments="false" no-changing="false"
    no-content-copying="false" rasterize-resolution="108"
    text-and-lineart-compression="true"
    use-launch-for-local-file="true" user-password=""
    default-output-intent="./colorprofiles/COO.1.506.2.18658.icc"
    embed-std-output-intent="./colorprofiles/COO.1.506.2.18658.icc" />
</formatter-config>
```

2.2.2 CSS Styles

The layout of a publication created via the Antenna House Formatter is defined by one or more style sheets (.css). To deposit these at the deployment format, proceed as follows:

1. In the deployment format dialog, in the list of "CSS style sheets", select the "Add entry" option.

2. In the following dialog you can choose the option "Upload" to upload a prepared .css file from your system or to search and link an existing .css file in the system. To do this, select the "Search" option.

3. Repeat the process until you have created all the required .css files for your deployment format in the list.

Example of .css file for Antenna House Formatter:

CSS

```
### CSS
@font-face {
  font-family: "Roboto-Black";
  src: local("Roboto-Black"), local("Roboto Black"), url("./fonts/COO.1.506.3.18657.ttf");
}
@font-face {
  font-family: "Roboto-Bold";
  src: local("Roboto-Bold"), local("Roboto Bold"), url("./fonts/COO.1.506.4.18657.ttf");
}
*{
  font-family: 'Roboto-Black' !important;
}

heading{
  font-family: 'Roboto-Black';
  display: block;
  margin-bottom: 5px;
}
xpubimagedata{
  margin: 5px;
  height: 300px;
  width: 300px;
  display: block;
  background-image: attr('href');
}
p{
  font-family: 'Roboto-Bold';
  display: block;
  margin-bottom: 5px;
}
@page {
  margin-bottom: 40px;
  counter-increment: page;
  @bottom-right {
    border-top: 1px solid #000000;
    padding-right:20px;
    font-size: 12px !important;
    font-family: 'Roboto-Black';
    content: "Page " counter(page) " of " counter(pages);
  }
  @bottom-left {
    content: " ";
    display: block;
    width: 50px;
    height: 50px;
    background-repeat: no-repeat;
    border-top: 1px solid #000000;
    background-image: url("./resources/COO.1.506.3.18658.jpg");
    background-size: contain;
  }
}
```

Notes:

- Images must be stored in an `xpubimagedata` container. See also example under 2.2.3 "Transformations".
- Fonts and resources are referenced via your unique Fabasoft Cloud ID + file extension.

2.2.3 Transformations

Optionally, XSL transformations can also be uploaded in the delivery format dialog. These are applied to the XML to be published before processing by the Antenna House Formatter. To do this, proceed as follows:

1. In the dialog of the deployment format, in the list of "Transformations", select the "Add entry" option.

2. In the following dialog you can choose the option "Upload" to upload a prepared .xsl file from your system or to search and link an existing .xsl file in the system. To do this, select the "Search" option.

3. Repeat the process until you have created all the required .xsl files for your deployment format in the list.

Notes:

- All images that are referenced in the XML and are to be output must be transformed in the transformation into an `<xpubimagedata>` element with `href` attribute.
  This is necessary to send the images with the correct file extension to the Antenna House Formatter.

- The list of XSL transformations is processed sequentially. The transformations cannot call or include each other. Likewise, calls from external sources via e.g. a URL are not supported.

Example of an XSL transformation:

XSL Transformation

```
<?XML version="1.0"?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

  <xsl:output indent="no" method="xml" encoding="utf-8" omit-xml-declaration="yes"/>

  <xsl:variable name="newline" select="'&#10;'" />

  <xsl:template match="med_image">
    <xsl:element name="{local-name()}">
      <xsl:apply-templates select="@* | node()"/>
      <xpubimagedata>
        <xsl:attribute name="href">
          <xsl:value-of select="@dbref"/>
        </xsl:attribute>
      </xpubimagedata>
    </xsl:element>
  </xsl:template>

  <!-- template to copy elements -->
  <xsl:template match="*">
    <xsl:element name="{local-name()}">
      <xsl:apply-templates select="@* | node()"/>
    </xsl:element>
  </xsl:template>

  <!-- template to copy attributes -->
  <xsl:template match="@*">
    <xsl:attribute name="{local-name()}">
      <xsl:value-of select="."/>
    </xsl:attribute>
  </xsl:template>

  <!-- template to copy the text -->
  <xsl:template match="text()">
    <xsl:choose>
      <xsl:when test="./../@space = 'preserve' or ./../@xml:space = 'preserve' or
        ./@space = 'preserve' or ./@xml:space = 'preserve'">
        <xsl:value-of select="translate(., '', $newline)"/>
      </xsl:when>
      <xsl:otherwise>
        <xsl:value-of select="translate(normalize-space(.), '', '')"/>
      </xsl:otherwise>
    </xsl:choose>
  </xsl:template>

  <!-- ignore -->
  <xsl:template match="processing-instruction()|comment()"/>
</xsl:stylesheet>
```

2.2.4 Resources

Under "Resources" further content, logos or similar can be uploaded in order to use this data independently of the XML content. This can be e.g. a company logo or a graphic for a cover page. To do this, proceed as follows:

1. In the dialog of the deployment format, select the option "Add entry" in the list of "Resources".
2. In the following dialog you can select the option "Upload" to upload a prepared file from your system or to search and link an existing file in the system. To do this, select the "Search" option.
3. Repeat the process until you have created all the required files for your deployment format in the list.

Note: The elements can be referenced and formatted within the CSS style sheet using the `./resources/<COOID>.<file extension>` path. See also example under 2.2.2 "CSS Styles".

2.3 Share Deployment Format

Before the delivery formats are available to the user, they must be approved. A list of the delivery formats can be found in the detailed view of the Xpublisher configuration. Proceed as follows for the release:

1. Navigate to the list of "Deployment formats". An overview of all formats opens. All new formats that are not released are marked with a warning triangle symbol. Changed formats that are not yet released are marked with a circle symbol with three dots.
2. Right-click the deployment format you want to share.
3. Select the "Release for Usage" or "Re-release" option.
   Note: Alternatively, you can use the actions from the Actions menu on the left side of the user interface.

2.4 Assign Deployment Format

Deployment formats can be selected when publishing defined products. Since not every delivery format makes sense for any product, these are not available across the board, but are restricted via the product type. The relationship between project type, product type and delivery format can be found in the Multichannel Publishing user help (User help).

3 User Perspective

The dashboard offers a practical overview of the existing projects and products with the tiles. Clicking on "View" takes you to the detail view, where you can find various editing options as well as further information about the areas of application and intended uses.

Products can be published in different formats via different services. For this purpose, production services are stored in the respective product type by the administrator. Each of these services allows publication in a specific format.

To create a publication using the Antenna House formatter, proceed as follows:

1. Navigate to the list of products on the Publishing Dashboard.
2. Select the desired product and click on it to switch to the detailed view of the product.
   Note: The product type of the product must have an Antenna House deployment format assigned to it.

3. In this view, the structure of the product is displayed to the right of the action menu. Select the product at the very top of the structure tree.

4. Select the "Add XML Content" action from the action menu.

5. In the following search dialog, select one or more Xeditor documents from the Digital Asset Management and add them to the product.
   Note: XML content can be assigned directly below the product at the top level or, if the schema supports it, below existing XML content.

6. When you have assigned all XML files associated with this product to the structure tree, select the top node of the tree again, the product.

7. In the action menu on the left click on the "Publish" entry.

8. In the following dialog, select the desired Antenna House deployment format and confirm with "Next".

9. Finally, assign a name for the new publication to be created and confirm with "Next".
   In the list of "Publications" on the dashboard, you will now see a new entry with a gear icon. Once the production service has successfully processed the content, the gear icon disappears and the result is ready for download.

10. Open the context menu by right-clicking on your publication and select the "Download" entry.

The result of a successful Antenna House Formatter publication is a .zip file that includes the following folder structure:

- `input`
  Contains the list of XML and media files sent to the publication service.

- `output`
  Contains the actual result of the publication.
  Note: For each Xeditor document at the first level of the structure tree, you will get a numbered folder in the result that contains the result. For example, you can get all articles of a publication as single PDF documents by adding the respective XML below the product node in the structure tree.

- `report.log`
  Contains the log outputs of the Antenna House Formatter.

- `source.zip`
  Contains the source files as zip.

4 Reference Documentation of the Manufacturer

For the manufacturer's complete documentation, visit https://www.antenna.co.jp/AHF/help/en/.