

# **xtpxlib-container**

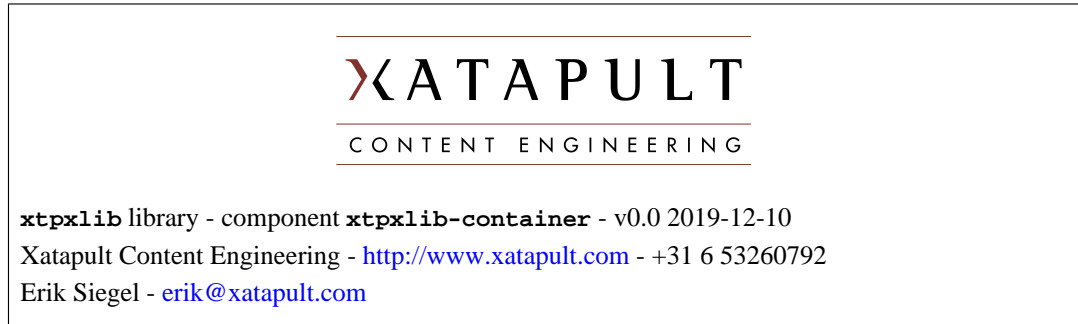
## **XML Container Handling**



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## 0 Xatapult XML Library - XML Container Handling



**xtpxlib-container** is part of the **xtpxlib** library. **xtpxlib** contains software for processing XML, using languages like XSLT and XProc. It consists of several separate components, all named **xtpxlib-\***. Everything can be found on GitHub (<https://github.com/xatapult>).

XML Containers provide support for working with multiple related files by wrapping them into a single one. Binary files are referenced instead of included.

The container structure is standardized. Once contents is in a container it's easy to analyze, change and/or write back. It can also be used to create a whole file structure, in a container, and then write it out to disk or zip file.

The **xtpxlib-container** component has XProc (1.0) pipelines for:

- Reading the contents of a zip file or directory structure into a container
- Writing a container out to a zip file or disk

Installation and usage information can be found on **xtpxlib**'s main website <https://www.xtpxlib.org>.

### **Technical information:**

Component documentation: <https://container.xtpxlib.org>

License: GNU GENERAL PUBLIC LICENSE - Version 3, 29 June 2007

Git URI: [git@github.com:xatapult/xtpxlib-container](https://github.com/xatapult/xtpxlib-container).git

Git site: <https://github.com/xatapult/xtpxlib-container>

This component depends on:

- **xtpxlib-common** (Common component: Shared libraries and IDE support)

# 1 Description

TBD

```
<xtlcon:document-container timestamp = xs:dateTime
  href-source-zip? = xs:string
  href-target-zip? = xs:string
  href-target-zip-result? = xs:string
  href-target-zip-tmpdir? = xs:string
  href-source-path? = xs:string
  href-target-path? = xs:string
  href-target-result-path? = xs:string
  (any)? >

( <xtlcon:document> |
  <xtlcon:external-document> |
  <(any)> )*
</xtlcon:document-container>
```

Attribute	#	Type	Description
timestamp	1	xs:dateTime	The timestamp when this container was initially created/generated.
href-source-zip	?	xs:string	When the container was read from a zip file (using xtlcon:zip-to-container), this attribute holds the href of this zip file.
href-target-zip	?	xs:string	Holds the name of the zip file for writing the container to (using xtlcon:container-to-zip).
href-target-zip-result	?	xs:string	After the container is written to a zip file using <b>[*** Referenced linkend id "2container.mod.xpl-xtlcon_container-to-zip" not found (phase: inline)]</b> , this attribute will hold the full canonical filename of the zip file.
href-target-zip-tmpdir	?	xs:string	After the container is written to a zip file using xtlcon:container-to-zip, this attribute will hold the full canonical name of the temporary directory used for this process (probably not very useful).
href-source-path	?	xs:string	When the container was read from a directory (using xtlcon:directory-to-container), this attribute holds the href of this directory.
href-target-path	?	xs:string	Holds the name of the directory for writing the container to (using xtlcon:container-to-disk).
href-target-result-path	?	xs:string	After the container is written to a directory file using xtlcon:container-to-disk, this attribute will hold the full canonical name of the directory.
(any)	?		Any other attributes are allowed, so additional information can be added for use during processing.

Child element	#	Description
xtlcon:document	*	A document inside the container structure.
xtlcon:external-document	*	An external document, referenced from the container structure.
(any)	*	Any other elements are allowed, so additional information can be added for use during processing.

## 2 XProc Libraries

The xtpxlib-container component contains the following XProc (1.0) library module:

Module	Description
container.mod.xpl	XProc library with steps for handling xtpxlib containers.

Table 2-1 - Module overview

### 2.1 XProc (1.0) library: container.mod.xpl

File: xplmod/container.mod/container.mod.xpl

XProc library with steps for handling xtpxlib containers.

Prefix	Namespace URI
xtlcon	http://www.xtpxlib.nl/ns/container

Step	Description
xtlcon:container-to-disk	Writes the contents of a container to disk.
xtlcon:container-to-zip	Writes the contents of a container to a zip file.
xtlcon:directory-to-container	Reads a directory into a container. All XML files will be read into the container, all other files will be included/referenced as external contents.
xtlcon:zip-to-container	Reads a zip file into a container. All XML files will be read into the container, all other files will be included/referenced as external contents.

#### 2.1.1 Step: xtlcon:container-to-disk

Writes the contents of a container to disk.

Port	Type	Primary?	Description
source	in	yes	The container to process.
result	out	yes	The input container, but with changes that reflect the writing process.

Option	Rq?	Default	Description
href-fop-config		resolve-uri('../..../xtpxlib-common/data/fop-default-config.xml', static-base-uri())	Optional reference to an Apache FOP configuration file. Must be absolute! When not present a default file will be used.
href-target		' '	Base path where to write the container. When you specify this it will have precedence over a /*/@href-target-path.
indent-xml		false()	Whether to indent the XML we create or not.
remove-target		true()	Whether to attempt to remove the target directory before writing.

#### 2.1.2 Step: xtlcon:container-to-zip

Writes the contents of a container to a zip file.

Port	Type	Primary?	Description
source	in	yes	The container to process.
result	out	yes	The input container, but with all the changes in links, paths, etc.

Option	Rq?	Default	Description
href-fop-config		' '	Optional reference to an Apache FOP configuration file. Must be absolute! When not present a default file will be used.
href-target-zip			Base path where to write the container. When you specify this it will have precedence over /*/@href-target-zip.
indent-xml		false()	Whether to indent the XML we create or not.

### 2.1.3 Step: xtlcon:directory-to-container

Reads a directory into a container. All XML files will be read into the container, all other files will be included/referenced as external contents.

Port	Type	Primary?	Description
result	out	yes	The output container.

Option	Rq?	Default	Description
add-document-target-paths		true( )	Adds (relative) source paths as the target paths to the individual documents.
href-source-directory	yes		Reference to the directory to read.
href-target-path		' '	Optional target path to record on the container.

### 2.1.4 Step: xtlcon:zip-to-container

Reads a zip file into a container. All XML files will be read into the container, all other files will be included/referenced as external contents.

Port	Type	Primary?	Description
result	out	yes	The output container.

Option	Rq?	Default	Description
add-document-target-paths		true( )	Adds source paths as the target paths to the individual documents.
href-source-zip	yes		Reference to the zip file to read.
href-target-path		' '	Optional target path to record on the container.

## 3 XML Schemas

The xtpplib-container component contains the following XML Schemas:

Module	Description
container.xsd	Schema for an XML container.

*Table 3-1 - Module overview*

### 3.1 XML Schema: container.xsd

File: xsd/container.xsd

Target namespace: <http://www.xtpplib.nl/ns/container>

Schema for an XML container.

Element	Description
document-container	Root element for a document container.