

edikt

BinX 1.2

Installation Guide

edikt::BinX 1.2 Installation Guide

edikt::BinX 1.2 Installation Guide
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Introduction

BinX is an XML Schema-based language with which to describe the layout of binary data files. The BinX library is supplied as a free to download product that provides basic reading and writing operations for a BinX data source. A BinX data source is composed of a data file, usually a binary data file, and a separate text file describing the data schema using the BinX language. For a detailed introduction to BinX, see the *BinX v1.2 Developer's Guide*.

The library can be used as a general-purpose tool to extract, convert, and merge data from different files, and to create new data files in a user-defined layout. Examples of tasks facilitated by BinX include:

- using a subset of fields from a large dataset;
- using data stored as little-endian on big-endian machine;
- combining data produced by different collaborators, stored in different files.

The library can also be used as a data transportation device, as it can save the data in binary form and attach the metadata to a BinX document. This saves a lot of space by comparison with storing the data in pure XML.

Using this Guide

This guide is intended to be easy to follow and use. To aid reading, several icons are used to help you quickly identify key features of the documentation.



Information/downloads from the World Wide Web



Commands to type in at a Systems Prompt



Points to Note or Remember





Information contained on your file system


Getting the BinX library

Download and save the compressed archive to a directory. Version 1.2 of the BinX library is written in C++ and requires to be compiled using a C++ compiler.

Download and unpack BinX to a local directory

Downloads


Command


Check Directory


1. Download BinX from <http://www.edikt.org/binx/>.
2. You should have a file
binx1.2.tar.gz
saved to the directory you chose.
3. Unpack the file to a local directory; using
gunzip binx1.2.tar.gz
and
tar -xvf binx1.2.tar
4. You should now have a directory called
binx1.2
5. This should contain two directories,
binx1.2/src and **binx1.2/docs**

Installing Third-Party Software

In addition, BinX uses the Apache Xerces XML parser (version 2.6.0) to parse the XML document. Thus a Xerces C++ library must be installed separately and included in the appropriate path.

Important


- BinX 1.2 is **only supported** with Xerces C++ version 2.6.0
- You may encounter problems if Xerces and the BinX library are compiled with a **different version** of the C++ compiler

Download and unpack Xerces to a local directory

Downloads



1. Download Xerces from <http://xml.apache.org/xerces-c/>, saving to a local (possibly temporary) directory.

Command



2. Following the instructions that come with Xerces:
 - unpack the file to an appropriate local directory;
 - compile the source code if necessary.
3. You **must** set the following paths for the BinX library:

```
export LD_LIBRARY_PATH=<xerces location>/lib
export XERCES_HOME=<xerces location>
```

Compiling the BinX library

Compiling



To compile, use the **Makefile** provided:

```
cd binx1.2
```

```
make
```

The makefile creates a build directory where the library and the utilities will be built. The makefile then builds the library, utilities and samples.

BinX 1.2 Library

The BinX 1.2 library is built as a static Unix-like archive. It can be found in the following location in your BinX 1.2 distribution:

BinX Library



```
binx1.2/build/lib/libBinX.a
```

BinX 1.2 Utilities and Samples

Also included in your BinX 1.2 distribution are utilities (in the bin directory) and samples to help you use the BinX 1.2 Library. Full instructions for use can be found in the *BinX v1.2 Developer's Guide*.

BinX Extras



binx1.2/build/bin

binx1.2/src/samples

The following samples are provided:

- BinXConverter
- DataBinx
- DataBinxParser
- GenSchemaBinx
- MergeArray
- ParseBinx
- ReadHeader

Future Releases

News of future releases of BinX can be found on our website, <http://www.edikt.org/binx/>

Further Help

www



See <http://www.edikt.org/binx> for further help.

E-mail



support@edikt.org can be e-mailed with questions regarding supported BinX platforms.