

**NAME**

**xo** - emit formatted output based on format string and arguments

**SYNOPSIS**

**xo** [**-options**] [*argument...*]

**DESCRIPTION**

The **xo** utility allows command line access to the functionality of the **libxo** library. Using **xo**, shell scripts can emit *XML*, *JSON*, or *HTML* using the same commands that emit text output.

**--close** *path*

Close tags for the given path

**-C** | **--continuation**

Indicates this output is a continuation of the previous output data and should appear on the same line. This allows HTML output to be constructed correctly.

**--depth** *num*

Set the depth for pretty printing

**--help** Display help text**-H** | **--html**

Generate HTML output

**-J** | **--json**

Generate JSON output

**--leading-xpath** *path*

Add a prefix to generated XPath(s) (HTML)

**--not-first**

Indicate that this content is not the first in a series of sibling objects, which is vital information for "JSON" output, which requires a comma between such objects.

**--open** *path*

Open tags for the given path

**-p** | **--pretty**

Make 'pretty' output (add indent, newlines)

**--style *style***

Generate given style (xml, json, text, html)

**-T | --text**

Generate text output (the default style)

**--top-warp**

Indicates the entire object should be placed inside a top-level object wrapper, specifically when generating JSON output.

**--version**

Display version information

**-W | --warn**

Display warnings in text on stderr

**--warn-xml**

Display warnings in xml on stdout

**--wrap *path***

Wrap output in a set of containers

**-X | --xml**

Generate XML output

**--xpath**

Add XPath data to HTML output

The **xo** utility accepts a format string suitable for `xo_emit(3)` and a set of zero or more arguments used to supply data for that string.

In addition, **xo** accepts any of the **libxo** options listed in `xo_options(7)`.

**EXAMPLES**

In this example, **xo** is used to emit the same data encoded in text and then in XML by adding the "-p" (pretty) and "-X" (XML output) flags:

```
% xo 'The { :product } is { :status }\n' stereo "in route"
The stereo is in route
% xo -p -X 'The { :product } is { :status }\n' stereo "in route"
```

```
<product>stereo</product>
<status>in route</status>
```

In this example, the output from a **xo** command is shown in several styles:

```
xo "The {k:name} weighs {:weight/%d} pounds.\n" fish 6
```

TEXT:

```
The fish weighs 6 pounds.
```

XML:

```
<name>fish</name>
<weight>6</weight>
```

JSON:

```
"name": "fish",
"weight": 6
```

HTML:

```
<div class="line">
  <div class="text">The </div>
  <div class="data" data-tag="name">fish</div>
  <div class="text"> weighs </div>
  <div class="data" data-tag="weight">6</div>
  <div class="text"> pounds.</div>
</div>
```

The **--wrap <path>** option can be used to wrap emitted content in a specific hierarchy. The path is a set of hierarchical names separated by the `'/'` character.

```
xo --wrap top/a/b/c '{:tag}' value
```

XML:

```
<top>
  <a>
    <b>
      <c>
        <tag>value</tag>
      </c>
    </b>
  </a>
</top>
```

JSON:

```

"top": {
  "a": {
    "b": {
      "c": {
        "tag": "value"
      }
    }
  }
}

```

The **--open <path>** and **--close <path>** can be used to emit hierarchical information without the matching close and open tag. This allows a shell script to emit open tags, data, and then close tags. The **--depth** option may be used to set the depth for indentation. The **--leading-xpath** may be used to prepend data to the XPath values used for HTML output style.

```

#!/bin/sh
xo --open top/data
xo --depth 2 '{:tag}' value
xo --close top/data

```

XML:

```

<top>
  <data>
    <tag>value</tag>
  </data>
</top>

```

JSON:

```

"top": {
  "data": {
    "tag": "value"
  }
}

```

## SEE ALSO

libxo(3), xo\_emit(3), xo\_options(7)

## HISTORY

The **libxo** library first appeared in FreeBSD 11.0.

## AUTHORS

**libxo** was written by Phil Shafer <*phil@freebsd.org*>.