# XLIFF

*This document is published to the web in the public* [*Angular Design Docs*](https://drive.google.com/#folders/0BxgtL8yFJbacUnUxc3l5aTZrbVk)*/*[*i18n*](https://drive.google.com/folderview?id=0BxyFnbmFLIVxfkpVQzMtcjlTb00zM0xaS0dISXZ4RllnSmp4NGJ6WmNsS21SOFM5ckltZjQ) *folder*

*Chirayu Krishnappa <chirayu@google.com>  
Igor Minar <iminar@google.com>  
Status: Draft  
  
Last updated: Jan 15, 2014*

We will be supporting XLIFF 1.2. XLIFF 2.0 looks very different and I don't see lots of tools support as of now.

## References

* [iOS Developer: Handling Noun Plurals and Units of Measurement](https://developer.apple.com/library/ios/documentation/MacOSX/Conceptual/BPInternational/LocalizingYourApp/LocalizingYourApp.html#//apple_ref/doc/uid/10000171i-CH5-SW10)
* [rdar://18976374: Xcode 6 Export for Localization Fails to Include Plurals in XLIFF Document](http://openradar.appspot.com/radar?id=5803908559536128)
* [XLIFF Version 1.2](http://docs.oasis-open.org/xliff/xliff-core/xliff-core.html)
  + [<source>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#source)
    - [<g>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#g) generic placeholder that may be moved around.
    - [<bpt>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#bpt) begin placeholder
    - [<ept>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#ept) end placeholder
    - [<ph>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#ph) placeholder
  + [datatype](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#datatype)
    - e.g. html, plaintext, or a custom value.
  + [ctype (content type)](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#ctype)
    - e.g. link, bold, italic, etc.
  + [Top Level and Header](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#Specs_Elem_TopHeader) elements
    - [<xliff>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#xliff), [<file>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#file), [<header>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#header), [<skl>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#skl), [<external-file>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#external-file), [<internal-file>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#internal-file), [<glossary>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#glossary), [<reference>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#reference) , [<phase-group>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#phase-group), [<phase>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#phase),[<tool>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#tool_elem), [<note>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#note).,
  + [Named Group](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#Specs_Elem_NamedGroups) Elements
    - [<context-group>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#context-group), [<context>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#context), [<count-group>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#count-group) , [<count>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#count), [<prop-group>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#prop-group) , [<prop>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#prop).
  + [Structural](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#Specs_Elem_Struct) elements
    - [<body>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#body), [<group>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#group), [<trans-unit>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#trans-unit), [<source>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#source), [<target>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#target), [<bin-unit>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#bin-unit), [<bin-source>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#bin-source), [<bin-target>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#bin-target) , [<alt-trans>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#alt-trans) .
  + [Inline](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#Specs_Elem_Inline) elements
    - [<g>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#g), [<x/>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#x), [<bx/>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#bx), [<ex/>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#ex), [<bpt>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#bpt), [<ept>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#ept), [<sub>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#sub), [<it>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#it), [<ph>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#ph).
  + [Delimiter](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#Specs_Elem_Delim) element [<mrk>](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#mrk).
  + [Attributes](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#Specs_Attr)
    - [alttranstype](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#alttranstype), [annotates](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#annotates), [approved](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#approved), [assoc](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#assoc), [build-num](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#build-num), [ctype](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#ctype), [category](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#category), [charclass](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#charclass), [comment](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#comment), [company-name](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#company-name), [contact-email](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#contact-email) ,[contact-name](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#contact-name) , [contact-phone](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#contact-phone) , [context-type](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#context-type), [coord](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#coord), [count-type](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#count-type), [crc](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#crc), [css-style](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#css-style), [datatype](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#datatype), [date](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#date), [exstyle](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#exstyle), [equiv-text](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#equiv-text),[equiv-trans](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#equiv-trans), [extradata](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#extradata), [extype](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#extype), [font](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#font), [form](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#form), [from](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#from) , [help-id](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#help-id), [href](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#href), [id](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#id), [job-id](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#job-id) , [match-mandatory](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#match-mandatory), [match-quality](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#match-quality), [maxheight](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#maxheight),[maxbytes](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#maxbytes), [maxwidth](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#maxwidth), [menu](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#menu), [menu-name](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#menu-name), [menu-option](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#menu-option), [mid](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#mid), [merged-trans](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#merged-trans), [mime-type](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#mime-type), [minheight](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#minheight), [minbytes](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#minbytes), [minwidth](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#minwidth), [mtype](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#mtype),[name](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#name), [original](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#original), [phase-name](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#phase-name), [pos](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#pos), [priority](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#priority), [process-name](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#process-name), [product-name](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#product-name), [product-version](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#product-version), [prop-type](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#prop-type), [purpose](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#purpose), [reformat](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#reformat),[resname](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#resname), [restype](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#restype), [rid](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#rid) , [size-unit](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#size-unit), [source-language](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#source-language) , [state](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#state), [state-qualifier](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#state-qualifier), [style](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#style), [tool](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#tool), [tool-company](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#tool-company), [tool-id](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#tool-id),[tool-name](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#tool-name), [tool-version](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#tool-version), [target-language](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#target-language), [translate](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#translate), [ts](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#ts), [uid](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#uid), [unit](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#unit) , [version](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#version), [xid](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#xid).
    - [xml:lang](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#xml_lang), [xml:space](http://docs.oasis-open.org/xliff/v1.2/os/xliff-core.html#xml_space),

## Some tl;dr

It is strongly recommended that content within the <file> element be uniformly bilingual. In other words, each <source> and <target> element that is a child of <trans-unit> is of the same language as the source-language and target-language attributes of the <file> element, respectively.

The xml:lang attribute **should not be used in those elements.** The exception is that <source> and <target> elements that are children of <alt-trans> may contain an xml:lang attribute of a different language than that of the source-language and target-language attributes of the <file> element.

# Examples

## "Hello, world" example

**<xliff** version="1.2"**>**  
 **<file** original="foo.html"  
 source-language="en-US"  
 datatype="html"  
 target-language="ja-JP"**>**  
 **<body>**  
 **<trans-unit** id="1"**>**  
 **<source>**Hello**</source>**  
 **<target>**こんにちは**</target>**  
 **<note>**The word, "Hello", used as a greeting**</note>**  
 **</trans-unit>**  
 **</body>**  
 **</file>**  
**</xliff>**

## "Wikipedia" example

Ref: [Wikipedia](http://en.wikipedia.org/wiki/XLIFF#Description_.28XLIFF_1.2.29)

**<xliff** version="1.2"**>**  
 **<file** original="Graphic Example.psd"  
 source-language="en-US" target-language="ja-JP"  
 tool="Rainbow" datatype="photoshop"**>**  
 **<header>**  
 **<skl>**  
 **<external-file** uid="3BB236513BB24732" href="Graphic Example.psd.skl"**/>**  
 **</skl>**  
 **<phase-group>**  
 **<phase** phase-name="extract" process-name="extraction"  
 tool="Rainbow" date="20010926T152258Z"  
 company-name="NeverLand Inc." job-id="123"  
 contact-name="Peter Pan" contact-email="ppan@example.com"**>**  
 **<note>**Make sure to use the glossary I sent you yesterday.  
 Thanks.**</note>**  
 **</phase>**  
 **</phase-group>**  
 **</header>**  
 **<body>**  
 **<trans-unit** id="1" maxbytes="14"**>**  
 **<source** xml:lang="en-US"**>**Quetzal**</source>**  
 **<target** xml:lang="ja-JP"**>**Quetzal**</target>**  
 **</trans-unit>**  
 **<trans-unit** id="3" maxbytes="114"**>**  
 **<source** xml:lang="en-US"**>**An application to manipulate and   
 process XLIFF documents**</source>**  
 **<target** xml:lang="ja-JP"**>**XLIFF 文書を編集、または処理  
 するアプリケーションです。**</target>**  
 **</trans-unit>**  
 **<trans-unit** id="4" maxbytes="36"**>**  
 **<source** xml:lang="en-US"**>**XLIFF Data Manager**</source>**  
 **<target** xml:lang="ja-JP"**>**XLIFF データ・マネージャ**</target>**  
 **</trans-unit>**  
 **</body>**  
 **</file>**  
**</xliff>**

## Example 2

Ref: [iOS-Localizing-Plurals-Demo/en.xliff](https://github.com/foo4u/iOS-Localizing-Plurals-Demo/blob/master/SwiftDemo/GeeseStringsExported/en.xliff)

<?xml version="1.0" encoding="UTF-8" standalone="no"?>  
**<xliff** xmlns="urn:oasis:names:tc:xliff:document:1.2" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" version="1.2" xsi:schemaLocation="urn:oasis:names:tc:xliff:document:1.2 http://docs.oasis-open.org/xliff/v1.2/os/xliff-core-1.2-strict.xsd"**>**  
 **<file** original="Geese/Base.lproj/LaunchScreen.xib" source-language="en" datatype="plaintext"**>**  
 **<header>**  
 **<tool** tool-id="com.apple.dt.xcode" tool-name="Xcode" tool-version="6.1" build-num="6A1052d"**/>**  
 **</header>**  
 **<body>**  
 **<trans-unit** id="8ie-xW-0ye.text"**>**  
 **<source>** Copyright (c) 2014**</source>**  
 **<note>**Class = "IBUILabel"; text = " Copyright (c) 2014"; ObjectID = "8ie-xW-0ye";**</note>**  
 **</trans-unit>**  
 **<trans-unit** id="kId-c2-rCX.text"**>**  
 **<source>**Geese**</source>**  
 **<note>**Class = "IBUILabel"; text = "Geese"; ObjectID = "kId-c2-rCX";**</note>**  
 **</trans-unit>**  
 **</body>**  
 **</file>**  
 **<file** original="Geese/Base.lproj/Main.storyboard" source-language="en" datatype="plaintext"**>**  
 **<header>**  
 **<tool** tool-id="com.apple.dt.xcode" tool-name="Xcode" tool-version="6.1" build-num="6A1052d"**/>**  
 **</header>**  
 **<body>**  
 **<trans-unit** id="TJ8-ZD-iVP.text"**>**  
 **<source>**Num geese label**</source>**  
 **<note>**Class = "IBUILabel"; text = "Num geese label"; ObjectID = "TJ8-ZD-iVP";**</note>**  
 **</trans-unit>**  
 **<trans-unit** id="xBY-if-1li.text"**>**  
 **<source>**Number of Geese:**</source>**  
 **<note>**Class = "IBUILabel"; text = "Number of Geese:"; ObjectID = "xBY-if-1li";**</note>**  
 **</trans-unit>**  
 **</body>**  
 **</file>**  
 **<file** original="Geese/Info.plist" source-language="en" datatype="plaintext"**>**  
 **<header>**  
 **<tool** tool-id="com.apple.dt.xcode" tool-name="Xcode" tool-version="6.1" build-num="6A1052d"**/>**  
 **</header>**  
 **<body>**  
 **<trans-unit** id="CFBundleName"**>**  
 **<source>**$(PRODUCT\_NAME)**</source>**  
 **</trans-unit>**  
 **<trans-unit** id="CFBundleShortVersionString"**>**  
 **<source>**1.0**</source>**  
 **</trans-unit>**  
 **</body>**  
 **</file>**  
 **<file** original="Geese/en.lproj/Localizable.strings" source-language="en" datatype="plaintext"**>**  
 **<header>**  
 **<tool** tool-id="com.apple.dt.xcode" tool-name="Xcode" tool-version="6.1" build-num="6A1052d"**/>**  
 **</header>**  
 **<body>**  
 **<trans-unit** id="%d geese landed"**>**  
 **<source>**%d geese landed**</source>**  
 **</trans-unit>**  
 **<trans-unit** id="net.rossillo.error"**>**  
 **<source>**An error message**</source>**  
 **</trans-unit>**  
 **</body>**  
 **</file>**  
 **<file** original="Geese/en.lproj/Localizable.stringsdict" source-language="en" datatype="plaintext"**>**  
 **<header>**  
 **<tool** tool-id="com.apple.dt.xcode" tool-name="Xcode" tool-version="6.1" build-num="6A1052d"**/>**  
 **</header>**  
 **<body>**  
 **<trans-unit** id="version"**>**  
 **<source>**1.0**</source>**  
 **</trans-unit>**  
 **</body>**  
 **</file>**  
 **<file** original="GeeseTests/Info.plist" source-language="en" datatype="plaintext"**>**  
 **<header>**  
 **<tool** tool-id="com.apple.dt.xcode" tool-name="Xcode" tool-version="6.1" build-num="6A1052d"**/>**  
 **</header>**  
 **<body>**  
 **<trans-unit** id="CFBundleName"**>**  
 **<source>**$(PRODUCT\_NAME)**</source>**  
 **</trans-unit>**  
 **<trans-unit** id="CFBundleShortVersionString"**>**  
 **<source>**1.0**</source>**  
 **</trans-unit>**  
 **</body>**  
 **</file>**  
**</xliff>**