

FSDL 3.0 Recap - Elements and Attributes

This document provides a summary of the elements and attributes defined in the Frogans Slide Description Language 3.0. The elements and attributes described here are subject to change; they will be fully specified in the final FSDL 3.0 specification.

Location

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Legend

<element>

Description of the element

attribute (*mandatory* | *optional* | *applicable and mandatory if <condition>*)

Description of the attribute, if necessary

- 'value' | description of a value (comment on the value, if necessary)

Unique identifiers

A unique identifier is a case-sensitive string containing between 1 and 16 characters (inclusive).

Each character in the string is in the range from 'A' to 'Z' inclusive, in the range from 'a' to 'z' inclusive, in the range from '0' to '9' inclusive), or is the '_' character.

The string does not contain the ' ' (space) character.

<frogans-fsdl>

The root element of the FSDL document

version (*mandatory*)

- '3.0'

<file>

A file (an image file or a Frogans slide) in the Frogans site root directory.

The content can optionally be the image file encoded in Base64 (depending on the value of the “nature” attribute).

fileid (*mandatory*)

- unique identifier

nature (*mandatory*)

- 'static'
- 'dynamic'
- 'embedded'

name (*applicable and mandatory if “nature”='static' or 'dynamic'*)

- complete name of the file in the Frogans root directory, starting with '/'.

The file name is a case-insensitive string that starts with '/' and contains between 2 and 1,024 characters. Each of the characters following the '/' is either in the range from 'A' to 'Z' inclusive, in the range from 'a' to 'z' inclusive, in the range from '0' to '9' inclusive, or is any of the following characters: the '.' character, the '-' character, the '_' character, or the '/' character.

The string cannot contain the '' (space) character or the '\' character.

The string cannot contain the following sequences: two successive '.' characters, two successive '/' characters, a '/' character followed by a '.' character, or a '.' character followed by a '/' character.

The string cannot end with a '/' character, or with a '.' character.

cache (*applicable and mandatory if “nature”='static'*)

- 'on'
- 'off'

<resimage>

resid (*mandatory*)

- unique identifier

size (*mandatory*)

- width, height; width from 1 to 640, height from 1 to 480

fileref (*mandatory*)

- fileid of the previously defined <file>

selection (*optional*)

- 'entire'
- 'extract'

bounds (*applicable and mandatory if "selection"=extract*)

- left,top,right,bottom; left,top from 0 to 1023, right,bottom from 1 to 1024

aspect (*optional*)

- 'base'
- 'spread'
- 'zoom'
- 'echo'
- 'tile'

adjust (*applicable and mandatory if "aspect"='base' or 'zoom' or 'echo'*)

- integer from -100 to 100; default value: 0

origin (*applicable and mandatory if "aspect"='tile'*)

- x, y; x from 0 to 1023, y from 0 to 1023; default value: 0,0

<respixels>

The content is a list of (columns*rows) comma-separated values in the following formats (depending on the value of the “pix” attribute):

- '#rrggbbaa'
- '#rrggbbb'
- '#aa'
- '#yy'
- '#yyaa'

resid (*mandatory*)

- unique identifier

size (*mandatory*)

- width, height; width from 1 to 640, height from 1 to 480

columns (*mandatory*)

- integer from 1 to 16

rows (*mandatory*)

- integer from 1 to 16

pix (*mandatory*)

- 'rgba'
- 'rgb'
- 'a'
- 'y'
- 'ya'

color (*applicable and mandatory if “pix”='a'*)

- hexadecimal - 3 bytes x 2 digits (default value: #0000ff)

alpha (*applicable and mandatory if “pix”='rgb' or 'y'*)

- hexadecimal - 1 byte x 2 digits (default value: #ff)

<resdraw>

resid (*mandatory*)

- unique identifier

size (*mandatory*)

- width, height; width from 1 to 640, height from 1 to 480

figure (*mandatory*)

- 'rect'
- 'roundrect'
- 'ellipse'

stroke (*mandatory*)

- 'on'
- 'off'

thick (*applicable and mandatory if "stroke"=on*)

- integer from 1 to 64; default value: 8

round (*applicable and mandatory if "figure"=roundrect*)

- width, height; width from 1 to 640, height from 1 to 480'; default value: 16,16

color (*optional*)

- hexadecimal - 3 bytes x 2 digits; default value: #0000ff

<respath>

The content is a list of between 2 and 512 semi-colon-separated values in any of the following formats, where each coordinate is between 0 and 2048

- 'Ju:xp,yp': jumps to the point p with coordinates xp, yp
- 'Li:xp,yp': draws a line from the current position to the point p with coordinates xp, yp
- 'Co:xp,yp,x1,y1': draws a Bezier curve from the current position to the point p using one control point with the coordinates x1, y1
- 'Ci:xp,yp,x1,y1,x2,y2': draws a Bezier curve from the current position to the point p using two control points with the coordinates x1, y1 and x2, y2

resid (*mandatory*)

- unique identifier

size (*mandatory*)

- width, height; width from 1 to 640, height from 1 to 480

stroke (*mandatory*)

- 'on'
- 'off'

thick (*applicable and mandatory if "stroke"='on'*)

- integer from 1 to 64; default value: 8

close (*applicable and mandatory if "stroke"='on'*)

- 'on'
- 'off'

alternate (*applicable and mandatory if "stroke"='off'*)

- 'on'
- 'off' (default value)

spread (*mandatory*)

- 'on'
- 'off'

adjust (*applicable and mandatory if "spread"='off'*)

- integer from -100 to 100; default value: 0

***color* (optional)**

- hexadecimal - 3 bytes x 2 digits; default value: #0000ff

<setfont>

fontid (*mandatory*)

- unique identifier

 (child of setfont)

scripts (*mandatory*)

- either 'default' or a comma-separated list of between 1 and 16 script names. For a list of available script names, see Appendix 2: "scripts" attribute of the element.

pfont (*mandatory*)

- name of the physical font. For a list of all available physical fonts, see Appendix 1: "pfont" attribute of the element.

height (*mandatory*)

- numeric with one optional digit after the decimal point, from 8.0 to 72.0

spacing (*optional*)

- integer from -100 to 100; default value: 0

stretching (*optional*)

- integer from -100 to 100; default value: 0

xbold (*optional*)

- integer from 0 to 100; default value: 0

xitalic (*optional*)

- integer from -100 to 100; default value: 0

underline (*optional*)

- 'on'
- 'off' (default value)

strikeout (*optional*)

- 'on'
- 'off' (default value)

opacity (*optional*)

- integer from 0 to 100; default value: 100

color (*optional*)

- hexadecimal - 3 bytes x 2 digits; default: #0000ff

<restext>

resid (*mandatory*)

- unique identifier

size (*mandatory*)

- width, height; width from 1 to 640, height from 1 to 480

orientation (*mandatory*)

- 'h-ttb-ltr'
- 'h-ttb-rtl'
- 'h-btt-ltr'
- 'h-btt-rtl'
- 'v-ltr-ttb'
- 'v-ltr-btt'
- 'v-rtl-ttb'
- 'v-rtl-btt'

fontref (*mandatory*)

- fontid of a previously defined <setfont>

talign (*optional*)

- 'begin'
- 'end'
- 'center'
- 'justify'

linespace (*optional*)

- integer from -100 to 100; default value: 0

vstyle (*applicable and mandatory if "orientation"='v-[...]'*)

- 'natural'
- 'opposite'
- 'upright'

<text> (child of <restext>)

Max. 16

fontref (*optional*)

- fontid of a previously defined <setfont>; default value: the “fontref” value of the parent

talign (*optional*)

- 'begin'
- 'end'
- 'center'
- 'justify'

default value: the “talign” value of the parent

linespace (*optional*)

integer from -100 to 100; default value: the 'linespace' value of the parent

vstyle (*applicable and mandatory if parent 'orientation' is v-[...]*)

- 'natural'
- 'opposite'
- 'upright'

default value: the 'vstyle' value of the parent

join (*optional*)

- 'none' (default value)
- 'space'
- 'nospace'

<setfilter>

filterid (*mandatory*)

- unique identifier

<filter> (child of <setfilter>)

Max. 16

effect (*mandatory*)

- 'light'
- 'contrast'
- 'saturation'
- 'hue'
- 'solarize'
- 'addcolor'
- 'mixcolor'
- 'negative'
- 'lumakey'
- 'chromakey'
- 'lumatoalpha'
- 'alphatoluma'

level (*applicable and mandatory if "effect"='light', 'contrast', 'saturation', 'addcolor', or 'mixcolor'*)

- integer from -100 to 100 (*positive values only for 'solarize' and 'mixcolor'*)

angle (*applicable and mandatory if "effect"='hue'*)

- integer from -180 to 180

tolerance (*applicable and mandatory if "effect"='lumakey' or 'chromakey'*)

- integer from 0 to 100

color (*applicable and mandatory if "effect"='addcolor', 'mixcolor', 'lumakey', or 'chromakey'*)

- hexadecimal - 3 bytes x 2 digits

<setrelief>

reliefid (*mandatory*)

- unique identifier

<relief> (child of <setrelief>)

Max. 4

rpos (*mandatory*)

- numeric pair (x,y) from -64,-64 to 64,64

color (*optional*)

- hexadecimal - 3 bytes x 2 digits; default value: #ffffff

blur (*optional*)

- integer from 1 to 64; default value: 0

opacity (*optional*)

- integer from 0 to 100; default value: 100

<setshadow>

shadowid (*mandatory*)

- unique identifier

<shadow> (child of <setshadow>)

Max. 4

rpos (*mandatory*)

- numeric pair (x,y) from -64,-64 to 64,64

color (*optional*)

- hexadecimal - 3 bytes x 2 digits; default value: #000000

blur (*optional*)

- integer from 0 to 64; default value: 0

opacity (*optional*)

- integer from 0 to 100; default value: 100

<resmerge>

resid (*mandatory*)

- unique identifier

size (*mandatory*)

- width, height; width from 1 to 640, height from 1 to 480

<merge> (child of <resmerge>)

Max. 16

resref (*mandatory*)

- resid of the prepared resource

flip (*optional*)

- 'none' (default value)
- 'xdir'
- 'ydir'
- 'xydir'

filterref (*optional*)

- filterid of a previously defined <setfilter>

reliefref (*optional*)

- reliefid of a previously defined <setrelief>

blur (*optional*)

- integer from 0 to 64; default value: 0

opacity (*optional*)

- integer from 0 to 100; default value: 100

angle (*optional*)

- integer from -180 to 180; default value: 0

pos (*mandatory*)

- x,y coordinates; x from -640 to 1280, y from -480 to 960

align (*optional*)

- 'top,left'
- 'top,center'
- 'top,right'
- 'middle,left'
- 'middle,center' (default value)
- 'middle,right'
- 'bottom,left'
- 'bottom,center'
- 'bottom,right'

combine (*mandatory*)

- 'add'
- 'clip'
- 'cutout'
- 'inter'

shadowref (*optional*)

- shadowid of a previously defined <setshadow>

<layer> (child of <frogans-fsdl> or <button>)

Max. 128

layerid (*mandatory*)

- unique identifier

leapout (*mandatory*)

- 'all'
- 'lead' (*value required if child of <button>*)
- 'vignette'

resref (*mandatory*)

- resid of a previously prepared resource

flip (*optional*)

- 'none' (default value)
- 'xdir'
- 'ydir'
- 'xydir'

filterref (*optional*)

- filterid of a previously defined <setfilter>

reliefref (*optional*)

- reliefid of a previously defined <setrelief>

blur (*optional*)

- integer from 0 to 64; default value: 0

opacity (*optional*)

- integer from 0 to 100; default value: 100

angle (*optional*)

- integer from -180 to 180; default value: 0

pos (*mandatory*)

- x,y coordinates; x from -640 to 1280, y from -480 to 960

align (*optional*)

- 'top,left'
- 'top,center'
- 'top,right'
- 'middle,left'
- 'middle,center' (default value)
- 'middle,right'
- 'bottom,left'
- 'bottom,center'
- 'bottom,right'

combine (*mandatory*)

- 'add'
- 'clip' (*value required if child of <button>*)
- 'cutout'
- 'inter'

shadowref (*optional*)

- shadowid of a previously defined <setshadow>

visible (*applicable and mandatory if child of <button>*)

- 'always'
- 'nofocus'
- 'focus'

<button>

Max. 32

buttonid (*mandatory*)

- unique identifier

goto (*mandatory*)

- 'slide'
- 'frogans-site'
- 'web-site' (*future use*)
- 'email-message' (*future use*)

fileref (*applicable and mandatory if "goto"='slide'*)

- fileid of a previously defined <file>

address (*applicable and mandatory if "goto"='frogans-site'*)

- Frogans address of another Frogans site (e.g. network-name*site-name)

Appendix 1: “pfont” attribute of the element

“pfont” attribute value	Corresponding font name
101-1-serif-r	Abyssinica SIL, Regular
102-1-serif-r	Amiri Quran, Regular
102-2-serif-b	Amiri, Bold
102-3-serif-bi	Amiri, Bold Slanted
102-4-serif-r	Amiri, Regular
102-5-serif-i	Amiri, Slanted
103-1-sans-r	AnjaliOldLipi, Regular
104-1-serif-b	Annapurna SIL, Bold
104-2-serif-r	Annapurna SIL, Regular
105-1-serif-r	AR PL Ukai CN, Regular
105-2-serif-r	AR PL Ukai HK, Regular
105-3-serif-r	AR PL Ukai TW MBE, Regular
105-4-serif-r	AR PL Ukai TW, Regular
106-1-serif-r	Caslon, Roman
107-1-serif-r	Caudex, Regular
108-1-sans-r	Comic Relief, Regular
109-1-mono-r	Consola Mono, Book
110-1-mono-r	Courier Prime, Regular
111-1-sans-r	Cousine, Regular
112-1-mono-r	DejaVu Sans Mono, Book
112-2-sans-r	DejaVu Sans, Book
112-3-sans-r	DejaVu Sans, Condensed
112-4-sans-r	DejaVu Sans, ExtraLight
112-5-serif-b	DejaVu Serif, Bold
112-6-serif-bi	DejaVu Serif, Bold Italic
112-7-serif-i	DejaVu Serif, Italic
112-8-serif-r	DejaVu Serif, Book
112-9-serif-r	DejaVu Serif, Condensed
112-10-serif-b	DejaVu Serif, Condensed Bold
112-11-serif-bi	DejaVu Serif, Condensed Bold Italic

“pfont” attribute value	Corresponding font name
112-12-serif-i	DejaVu Serif, Condensed Italic
113-1-serif-i	EB Garamond, 08 Italic
113-2-serif-r	EB Garamond, 08 Regular
114-1-sans-r	Ekushey Lohit, Normal
115-1-serif-r	Ethiopic Fantuwua, Regular
116-1-serif-r	Ethiopic Wookianos, Regular
117-1-serif-r	Ethiopic Yigezu Bisrat Gothic, Regular
118-1-serif-r	HanaMinA, Regular
119-1-serif-r	Jomolhari, Regular
120-1-serif-r	Kalpurush, Regular
121-1-sans-r	Lohit Devanagari, Regular
121-2-sans-r	Lohit Marathi, Regular
122-1-sans-b	Noto Kufi Arabic, Bold
122-2-sans-r	Noto Kufi Arabic, Regular
122-3-sans-b	Noto Naskh Arabic, Bold
122-4-sans-r	Noto Naskh Arabic, Regular
122-5-serif-r	Noto Nastaliq Urdu Draft, Regular
122-6-sans-r	Noto Sans CJK JP, DemiLight
122-7-sans-r	Noto Sans CJK KR, DemiLight
122-8-sans-r	Noto Sans CJK SC, DemiLight
122-9-sans-r	Noto Sans CJK TC, DemiLight
122-10-sans-r	Noto Sans Hebrew, Regular
122-11-sans-b	Noto Sans Kannada, Bold
122-12-sans-r	Noto Sans Kannada, Regular
122-13-sans-b	Noto Sans Malayalam, Bold
122-14-sans-r	Noto Sans Malayalam, Regular
122-15-sans-b	Noto Sans Myanmar, Bold
122-16-sans-r	Noto Sans Myanmar, Regular
122-17-sans-b	Noto Sans Oriya, Bold
122-18-sans-r	Noto Sans Oriya, Regular
122-19-sans-b	Noto Sans Tamil UI, Bold
122-20-sans-r	Noto Sans Tamil UI, Regular
122-21-sans-b	Noto Sans Telugu, Bold

“pfont” attribute value	Corresponding font name
122-22-sans-r	Noto Sans Telugu, Regular
122-23-sans-b	Noto Sans Thai, Bold
122-24-sans-r	Noto Sans Thai, Regular
122-25-sans-b	Noto Sans, Bold [Khmer]
122-26-sans-r	Noto Sans, Regular [Khmer]
122-27-serif-b	Noto Serif Thai, Bold
122-28-serif-r	Noto Serif Thai, Regular
123-1-sans-b	Padauk, Bold
123-2-sans-r	Padauk, Regular
124-1-sans-r	Rupali, Regular
125-1-serif-b	SeoulHangang, B
125-2-serif-r	SeoulHangang, M
126-1-serif-r	SolaimanLipi, Normal
127-1-sans-r	TharLon, Regular
128-1-serif-b	Tinos, Bold
128-2-serif-bi	Tinos, Bold Italic
128-3-serif-i	Tinos, Italic
128-4-serif-r	Tinos, Regular

Appendix 2: “scripts” attribute of the element

The following values can be used to compose the value of the “scripts” attribute of the element.

default (*to be used alone*)

common

latin

greek

cyrillic

cyrillic:macedonian

cyrillic:serbian

armenian

hebrew
arabic
arabic:kurdish
arabic:sindhi
arabic:urdu
syriac
thaana
devanagari
bengali
gurmukhi
gujarati
oriya
tamil
telugu
kannada
malayalam
thai
lao
tibetan
myanmar
georgian
hangul
ethiopic
cherokee
canadian_aboriginal
ogham
runic
khmer
mongolian
hiragana
katakana
bopomofo
han:chinese_simplified
han:chinese_traditional

han:japanese

han:korean

yi

buhid

limbu

braille

buginese

coptic

tifinagh

phags_pa

nko