

ISO 19444-1:2019 (E)

Document management — XML Forms Data Format — Part 1: Use of ISO 32000-2 (XFDF 3.0)

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Notation
5	Overview of XFDF
5.1	General
5.2	Forms data and annotations
5.3	How to use this specification
5.4	PDF, FDF and XFDF
5.4.1	General
5.4.2	Sample form in FDF and XFDF
5.4.3	Sample annotation in FDF and XFDF
5.5	Writing XFDF
5.5.1	General
5.5.2	Encoding and namespace
5.6	Understanding forms
5.6.1	General
5.6.2	Simple XFDF form
5.6.3	Hierarchical XFDF form
5.7	Understanding annotations
5.7.1	General
5.7.2	Simple XFDF annotation
5.7.3	Annotation with popup text
5.7.4	Annotation with comment
5.8	Implementation notes
5.8.1	General
5.8.2	String encoding conventions
5.8.3	Rich text strings
5.8.4	Stream encoding
5.8.5	XML content model syntax
5.8.5.1	Syntax overview
5.8.5.2	Example 1
5.8.5.3	Example 2
6	XFDF reference
6.1	General
6.2	XFDF elements
6.2.1	Elements
6.2.2	xfdf
6.2.2.1	Overview
6.2.2.2	Content model
6.2.2.3	Attributes
6.2.3	f
6.2.3.1	Overview
6.2.3.2	Content model

6.2.3.3	Attributes
6.2.4	ids
6.2.4.1	Overview
6.2.4.2	Content model
6.2.4.3	Attributes
6.3	Form field elements
6.3.1	Fields
6.3.1.1	Overview
6.3.1.2	Content model
6.3.1.3	Attributes
6.3.2	Field
6.3.2.1	Overview
6.3.2.2	Content model
6.3.2.3	Attributes
6.3.2.4	Details
6.3.3	value
6.3.3.1	Overview
6.3.3.2	Content model
6.3.3.3	Attributes
6.3.4	value-richtext
6.3.4.1	Overview
6.3.4.2	Content model
6.3.4.3	Attributes
6.4	Annotation elements
6.4.1	annots
6.4.1.1	Overview
6.4.1.2	Content model
6.4.1.3	Attributes
6.4.2	text
6.4.2.1	Overview
6.4.2.2	Content model
6.4.2.3	Attributes
6.4.3	highlight
6.4.3.1	Overview
6.4.3.2	Content model
6.4.3.3	Attributes
6.4.4	underline
6.4.4.1	Overview
6.4.4.2	Content model
6.4.4.3	Attributes
6.4.5	strikeout
6.4.5.1	Overview
6.4.5.2	Content model
6.4.5.3	Attributes
6.4.6	squiggly
6.4.6.1	Overview
6.4.6.2	Content model
6.4.6.3	Attributes
6.4.7	line
6.4.7.1	Overview
6.4.7.2	Content model
6.4.7.3	Attributes
6.4.8	circle
6.4.8.1	Overview
6.4.8.2	Content model
6.4.8.3	Attributes
6.4.9	square
6.4.9.1	Overview
6.4.9.2	Content model
6.4.9.3	Attributes
6.4.10	caret
6.4.10.1	Overview
6.4.10.2	Content model
6.4.10.3	Attributes

6.4.11	polygon
6.4.11.1	Overview
6.4.11.2	Content model
6.4.11.3	Attributes
6.4.12	polyline
6.4.12.1	Overview
6.4.12.2	Content model
6.4.12.3	Attributes
6.4.13	stamp
6.4.13.1	Overview
6.4.13.2	Content model
6.4.13.3	Attributes
6.4.14	ink
6.4.14.1	Overview
6.4.14.2	Content model
6.4.14.3	Attributes
6.4.15	freetext
6.4.15.1	Overview
6.4.15.2	Content model
6.4.15.3	Attributes
6.4.16	fileattachment
6.4.16.1	Overview
6.4.16.2	Content model
6.4.16.3	Attributes
6.4.17	sound
6.4.17.1	Overview
6.4.17.2	Content model
6.4.17.3	Attributes
6.4.18	link
6.4.18.1	Overview
6.4.18.2	Content model
6.4.18.3	Attributes
6.4.19	redact
6.4.19.1	Overview
6.4.19.2	Content model
6.4.19.3	Attributes
6.4.20	projection
6.4.20.1	Overview
6.4.20.2	Content model
6.4.20.3	Attributes
6.5	Annotation sub-elements
6.5.1	Action
6.5.1.1	Overview
6.5.1.2	Content model
6.5.1.3	Attributes
6.5.2	appearance
6.5.2.1	Overview
6.5.2.2	Content model
6.5.2.3	Attributes
6.5.3	BorderStyleAlt
6.5.3.1	Overview
6.5.3.2	Content model
6.5.3.3	Attributes
6.5.3.4	Details
6.5.4	contents
6.5.4.1	Overview
6.5.4.2	Content model
6.5.4.3	Attributes
6.5.4.4	Details
6.5.5	contents-richtext
6.5.5.1	Overview
6.5.5.2	Content model
6.5.5.3	Attributes
6.5.6	data

6.5.6.1	Overview
6.5.6.2	Content model
6.5.6.3	Attributes
6.5.6.4	Details
6.5.7	defaultappearance
6.5.7.1	Overview
6.5.7.2	Content model
6.5.7.3	Attributes
6.5.8	defaultappearance
6.5.8.1	Overview
6.5.8.2	Content model
6.5.8.3	Attributes
6.5.9	defaultstyle
6.5.9.1	Overview
6.5.9.2	Content model
6.5.9.3	Attributes
6.5.10	Dest
6.5.10.1	Overview
6.5.10.2	Content model
6.5.10.3	Attributes
6.5.10.4	Details
6.5.11	File
6.5.11.1	Overview
6.5.11.2	Content model
6.5.11.3	Attributes
6.5.12	gesture
6.5.12.1	Overview
6.5.12.2	Content model
6.5.12.3	Attributes
6.5.12.4	Details
6.5.13	Fit
6.5.13.1	Overview
6.5.13.2	Content model
6.5.13.3	Attributes
6.5.13.4	Details
6.5.14	FitB
6.5.14.1	Overview
6.5.14.2	Content model
6.5.14.3	Attributes
6.5.14.4	Details
6.5.15	FitBH
6.5.15.1	Overview
6.5.15.2	Content model
6.5.15.3	Attributes
6.5.15.4	Details
6.5.16	FitBV
6.5.16.1	Overview
6.5.16.2	Content model
6.5.16.3	Attributes
6.5.16.4	Details
6.5.17	FitH
6.5.17.1	Overview
6.5.17.2	Content model
6.5.17.3	Attributes
6.5.17.4	Details
6.5.18	FitR
6.5.18.1	Overview
6.5.18.2	Content model
6.5.18.3	Attributes
6.5.18.4	Details
6.5.19	FitV
6.5.19.1	Overview
6.5.19.2	Content model
6.5.19.3	Attributes

6.5.19.4	Details
6.5.20	GoTo
6.5.20.1	Overview
6.5.20.2	Content model
6.5.20.3	Attributes
6.5.21	GoToR
6.5.21.1	Overview
6.5.21.2	Content model
6.5.21.3	Attributes
6.5.22	inklist
6.5.22.1	Overview
6.5.22.2	Content model
6.5.22.3	Attributes
6.5.22.4	Details
6.5.23	Launch
6.5.23.1	Overview
6.5.23.2	Content model
6.5.23.3	Attributes
6.5.24	Named
6.5.24.1	Overview
6.5.24.2	Attributes
6.5.25	Named
6.5.25.1	Overview
6.5.25.2	Attributes
6.5.26	OnActivation
6.5.26.1	Overview
6.5.26.2	Content model
6.5.26.3	Attributes
6.5.27	overlayappearance
6.5.27.1	Overview
6.5.27.2	Content model
6.5.27.3	Attributes
6.5.28	popup
6.5.28.1	Overview
6.5.28.2	Content model
6.5.28.3	Attributes
6.5.29	resource
6.5.29.1	Overview
6.5.29.2	Content model
6.5.29.3	Attributes
6.5.29.4	Details
6.5.30	URI
6.5.30.1	Overview
6.5.30.2	Content model
6.5.30.3	Attributes
6.5.31	vertices
6.5.31.1	Overview
6.5.31.2	Content model
6.5.31.3	Attributes
6.5.31.4	Details
6.5.32	XYZ
6.5.32.1	Overview
6.5.32.2	Content model
6.5.32.3	Attributes
6.6	Annotation attributes
6.7	Mapping tables
6.7.1	PDF to XFDF
6.7.2	XFDF to PDF

7 Reference for 3D and RichMedia annotations

7.1	General
7.2	Various scenarios of comments on a 3D annotation
7.2.1	General
7.2.2	Example of a comment on a 3D annotation

7.3	The ex_data annotation subelement
7.3.1	ex_data
7.3.1.1	Overview
7.3.1.2	Content model
7.3.1.3	Attributes
7.4	ex_data3d related elements
7.4.1	exdata3d
7.4.1.1	Overview
7.4.1.2	Content model
7.4.1.3	Attributes
7.4.2	anno3dname
7.4.2.1	Overview
7.4.2.2	Content model
7.4.2.3	Attributes
7.4.3	md5checksum
7.4.3.1	Overview
7.4.3.2	Content model
7.4.3.3	Attributes
7.4.4	measurename
7.4.4.1	Overview
7.4.4.2	Content model
7.4.4.3	Attributes
7.5	The view3d related elements
7.5.1	General
7.5.2	view3d
7.5.2.1	Overview
7.5.2.2	Content model
7.5.2.3	Attributes
7.5.3	externalname
7.5.3.1	Overview
7.5.3.2	Content model
7.5.3.3	Attributes
7.6	Camera related elements
7.6.1	General
7.6.2	cameraxform
7.6.2.1	Overview
7.6.2.2	Content model
7.6.2.3	Attributes
7.6.3	u3dmatrixsource
7.6.3.1	Overview
7.6.3.2	Content model
7.6.3.3	Attributes
7.6.4	targetdistance
7.6.4.1	Overview
7.6.4.2	Content model
7.6.4.3	Attributes
7.7	View projection related elements
7.7.1	projection
7.7.1.1	Overview
7.7.1.2	Content model
7.7.1.3	Attributes
7.7.2	fieldofview
7.7.2.1	Overview
7.7.2.2	Content model
7.7.2.3	Attributes
7.7.3	viewplanesize
7.7.3.1	Overview
7.7.3.2	Content model
7.7.3.3	Attributes
7.7.4	scalevalue
7.7.4.1	Overview
7.7.4.2	Content model
7.7.4.3	Attributes
7.7.5	scaletype

7.7.5.1	Overview
7.7.5.2	Content model
7.7.5.3	Attributes
7.7.6	clip
7.7.6.1	Overview
7.7.6.2	Content model
7.7.6.3	Attributes
7.8	View background related elements
7.8.1	background
7.8.1.1	Overview
7.8.1.2	Content model
7.8.1.3	Attributes
7.8.2	color
7.8.2.1	Overview
7.8.2.2	Content model
7.8.2.3	Attributes
7.9	Model rendering related elements
7.9.1	renderinginfo
7.9.1.1	Overview
7.9.1.2	Content model
7.9.1.3	Attributes
7.9.2	auxcolor
7.9.2.1	Overview
7.9.2.2	Content model
7.9.2.3	Attributes
7.9.3	facecolor
7.9.3.1	Overview
7.9.3.2	Content model
7.9.3.3	Attributes
7.9.4	opacity
7.9.4.1	Overview
7.9.4.2	Content model
7.9.4.3	Attributes
7.9.5	creasevalue
7.9.5.1	Overview
7.9.5.2	Content model
7.9.5.3	Attributes
7.10	Lighting related elements
7.10.1	lighting
7.10.1.1	Overview
7.10.1.2	Content model
7.10.1.3	Attributes
7.11	Cross section related elements
7.11.1	General
7.11.2	crosssection
7.11.2.1	Overview
7.11.2.2	Content model
7.11.2.3	Attributes
7.11.3	centerofrotation
7.11.3.1	Overview
7.11.3.2	Content model
7.11.3.3	Attributes
7.11.4	planetilt1, planetilt2
7.11.4.1	Overview
7.11.4.2	Content model
7.11.4.3	Attributes
7.11.5	alignment
7.11.5.1	Overview
7.11.5.2	Content model
7.11.5.3	Attributes
7.11.6	planevisible
7.11.6.1	Overview
7.11.6.2	Content model
7.11.6.3	Attributes

7.11.7	planecolor
7.11.7.1	Overview
7.11.7.2	Content model
7.11.7.3	Attributes
7.11.8	planeopacity
7.11.8.1	Overview
7.11.8.2	Content model
7.11.8.3	Attributes
7.11.9	intersectionsvisible
7.11.9.1	Overview
7.11.9.2	Content model
7.11.9.3	Attributes
7.11.10	intersectioncolor
7.11.10.1	Overview
7.11.10.2	Content model
7.11.10.3	Attributes
7.12	View specific node control related elements
7.12.1	nodeparameter
7.12.1.1	Overview
7.12.1.2	Content model
7.12.1.3	Attributes
7.12.2	nodeid
7.12.2.1	Overview
7.12.2.2	Content model
7.12.2.3	Attributes
7.12.3	nodexform
7.12.3.1	Overview
7.12.3.2	Content model
7.12.3.3	Attributes
7.12.4	opacity
7.12.4.1	Overview
7.12.4.2	Content model
7.12.4.3	Attributes
7.12.5	noderendermode
7.12.5.1	Overview
7.12.5.2	Content model
7.12.5.3	Attributes
7.13	Rich Media related elements
7.13.1	stateinfo
7.13.1.1	Overview
7.13.1.2	Content model
7.13.1.3	Attributes
7.13.2	snapshot
7.13.2.1	Overview
7.13.2.2	Content model
7.13.2.3	Attributes
7.14	Measurement related elements
7.14.1	measure
7.14.1.1	Overview
7.14.1.2	Content model
7.14.1.3	Attributes
7.14.2	measurename
7.14.2.1	Overview
7.14.2.2	Content model
7.14.2.3	Attributes
7.15	Linear dimension related elements
7.15.1	General
7.15.2	Linearmarkup
7.15.2.1	Overview
7.15.2.2	Content model
7.15.2.3	Attributes
7.15.3	annoplane
7.15.3.1	Overview
7.15.3.2	Content model

- 7.15.3.3 Attributes
- 7.15.4 anchor1
 - 7.15.4.1 Overview
 - 7.15.4.2 Content model
 - 7.15.4.3 Attributes
- 7.15.5 anchor1partname
 - 7.15.5.1 Overview
 - 7.15.5.2 Content model
 - 7.15.5.3 Attributes
- 7.15.6 anchor2
 - 7.15.6.1 Overview
 - 7.15.6.2 Content model
 - 7.15.6.3 Attributes
- 7.15.7 anchor2partname
 - 7.15.7.1 Overview
 - 7.15.7.2 Content model
 - 7.15.7.3 Attributes
- 7.15.8 textposition
 - 7.15.8.1 Overview
 - 7.15.8.2 Content model
 - 7.15.8.3 Attributes
- 7.15.9 textydirection
 - 7.15.9.1 Overview
 - 7.15.9.2 Content model
 - 7.15.9.3 Attributes
- 7.15.10 textsize
 - 7.15.10.1 Overview
 - 7.15.10.2 Content model
 - 7.15.10.3 Attributes
- 7.15.11 markupcolor
 - 7.15.11.1 Overview
 - 7.15.11.2 Content model
 - 7.15.11.3 Attributes
- 7.15.12 value
 - 7.15.12.1 Overview
 - 7.15.12.2 Content model
 - 7.15.12.3 Attributes
- 7.15.13 units
 - 7.15.13.1 Overview
 - 7.15.13.2 Content model
 - 7.15.13.3 Attributes
- 7.15.14 precision
 - 7.15.14.1 Overview
 - 7.15.14.2 Content model
 - 7.15.14.3 Attributes
- 7.15.15 usertext
 - 7.15.15.1 Overview
 - 7.15.15.2 Content model
 - 7.15.15.3 Attributes
- 7.16 Perpendicular dimension related elements
 - 7.16.1 General
 - 7.16.2 perpendicularmarkup
 - 7.16.2.1 Overview
 - 7.16.2.2 Content model
 - 7.16.2.3 Attributes
 - 7.16.3 annoplane
 - 7.16.3.1 Overview
 - 7.16.3.2 Content model
 - 7.16.3.3 Attributes
 - 7.16.4 anchor1
 - 7.16.4.1 Overview
 - 7.16.4.2 Content model
 - 7.16.4.3 Attributes
 - 7.16.5 anchor1partname

- 7.16.5.1 Overview
- 7.16.5.2 Content model
- 7.16.5.3 Attributes
- 7.16.6 anchor2
- 7.16.6.1 Overview
- 7.16.6.2 Content model
- 7.16.6.3 Attributes
- 7.16.7 anchor2partname
- 7.16.7.1 Overview
- 7.16.7.2 Content model
- 7.16.7.3 Attributes
- 7.16.8 leaderdirection
- 7.16.8.1 Overview
- 7.16.8.2 Content model
- 7.16.8.3 Attributes
- 7.16.9 textposition
- 7.16.9.1 Overview
- 7.16.9.2 Content model
- 7.16.9.3 Attributes
- 7.16.10 textydirection
- 7.16.10.1 Overview
- 7.16.10.2 Content model
- 7.16.10.3 Attributes
- 7.16.11 textsize
- 7.16.11.1 Overview
- 7.16.11.2 Content model
- 7.16.11.3 Attributes
- 7.16.12 markupcolor
- 7.16.12.1 Overview
- 7.16.12.2 Content model
- 7.16.12.3 Attributes
- 7.16.13 value
- 7.16.13.1 Overview
- 7.16.13.2 Content model
- 7.16.13.3 Attributes
- 7.16.14 units
- 7.16.14.1 Overview
- 7.16.14.2 Content model
- 7.16.14.3 Attributes
- 7.16.15 precision
- 7.16.15.1 Overview
- 7.16.15.2 Content model
- 7.16.15.3 Attributes
- 7.16.16 usertext
- 7.16.16.1 Overview
- 7.16.16.2 Content model
- 7.16.16.3 Attributes
- 7.17 Angular dimension related elements
- 7.17.1 General
- 7.17.2 angularmarkup
- 7.17.2.1 Overview
- 7.17.2.2 Content model
- 7.17.2.3 Attributes
- 7.17.3 annoplane
- 7.17.3.1 Overview
- 7.17.3.2 Content model
- 7.17.3.3 Attributes
- 7.17.4 anchor1
- 7.17.4.1 Overview
- 7.17.4.2 Content model
- 7.17.4.3 Attributes
- 7.17.5 anchor1partname
- 7.17.5.1 Overview
- 7.17.5.2 Content model

- 7.17.5.3 Attributes
- 7.17.6 leaderdirection1
 - 7.17.6.1 Overview
 - 7.17.6.2 Content model
 - 7.17.6.3 Attributes
- 7.17.7 anchor2
 - 7.17.7.1 Overview
 - 7.17.7.2 Content model
 - 7.17.7.3 Attributes
- 7.17.8 anchor2partname
 - 7.17.8.1 Overview
 - 7.17.8.2 Content model
 - 7.17.8.3 Attributes
- 7.17.9 leaderdirection2
 - 7.17.9.1 Overview
 - 7.17.9.2 Content model
 - 7.17.9.3 Attributes
- 7.17.10 textposition
 - 7.17.10.1 Overview
 - 7.17.10.2 Content model
 - 7.17.10.3 Attributes
- 7.17.11 textdirection
 - 7.17.11.1 Overview
 - 7.17.11.2 Content model
 - 7.17.11.3 Attributes
- 7.17.12 textydirection
 - 7.17.12.1 Overview
 - 7.17.12.2 Content model
 - 7.17.12.3 Attributes
- 7.17.13 textsize
 - 7.17.13.1 Overview
 - 7.17.13.2 Content model
 - 7.17.13.3 Attributes
- 7.17.14 markupcolor
 - 7.17.14.1 Overview
 - 7.17.14.2 Content model
 - 7.17.14.3 Attributes
- 7.17.15 value
 - 7.17.15.1 Overview
 - 7.17.15.2 Content model
 - 7.17.15.3 Attributes
- 7.17.16 units
 - 7.17.16.1 Overview
 - 7.17.16.2 Content model
 - 7.17.16.3 Attributes
- 7.17.17 precision
 - 7.17.17.1 Overview
 - 7.17.17.2 Content model
 - 7.17.17.3 Attributes
- 7.17.18 usertext
 - 7.17.18.1 Overview
 - 7.17.18.2 Content model
 - 7.17.18.3 Attributes
- 7.18 Radial dimension related elements
 - 7.18.1 General
 - 7.18.2 radialmarkup
 - 7.18.2.1 Overview
 - 7.18.2.2 Content model
 - 7.18.2.3 Attributes
 - 7.18.3 annoplane
 - 7.18.3.1 Overview
 - 7.18.3.2 Content model
 - 7.18.3.3 Attributes
 - 7.18.4 circlecenter

7.18.4.1	Overview
7.18.4.2	Content model
7.18.4.3	Attributes
7.18.5	pointoncircle
7.18.5.1	Overview
7.18.5.2	Content model
7.18.5.3	Attributes
7.18.6	arcstart
7.18.6.1	Overview
7.18.6.2	Content model
7.18.6.3	Attributes
7.18.7	arcend
7.18.7.1	Overview
7.18.7.2	Content model
7.18.7.3	Attributes
7.18.8	anchorpartname
7.18.8.1	Overview
7.18.8.2	Content model
7.18.8.3	Attributes
7.18.9	textposition
7.18.9.1	Overview
7.18.9.2	Content model
7.18.9.3	Attributes
7.18.10	textxdirection
7.18.10.1	Overview
7.18.10.2	Content model
7.18.10.3	Attributes
7.18.11	textydirection
7.18.11.1	Overview
7.18.11.2	Content model
7.18.11.3	Attributes
7.18.12	textsize
7.18.12.1	Overview
7.18.12.2	Content model
7.18.12.3	Attributes
7.18.13	markupcolor
7.18.13.1	Overview
7.18.13.2	Content model
7.18.13.3	Attributes
7.18.14	value
7.18.14.1	Overview
7.18.14.2	Content model
7.18.14.3	Attributes
7.18.15	units
7.18.15.1	Overview
7.18.15.2	Content model
7.18.15.3	Attributes
7.18.16	precision
7.18.16.1	Overview
7.18.16.2	Content model
7.18.16.3	Attributes
7.18.17	usertext
7.18.17.1	Overview
7.18.17.2	Content model
7.18.17.3	Attributes
7.18.18	extensionlength
7.18.18.1	Overview
7.18.18.2	Content model
7.18.18.3	Attributes
7.19	3D comment related elements
7.19.1	General
7.19.2	comment3dmarkup
7.19.2.1	Overview
7.19.2.2	Content model

- 7.19.2.3 Attributes
- 7.19.3 anchor
 - 7.19.3.1 Overview
 - 7.19.3.2 Content model
 - 7.19.3.3 Attributes
- 7.19.4 anchorpartname
 - 7.19.4.1 Overview
 - 7.19.4.2 Content model
 - 7.19.4.3 Attributes
- 7.19.5 textposition
 - 7.19.5.1 Overview
 - 7.19.5.2 Content model
 - 7.19.5.3 Attributes
- 7.19.6 textsize
 - 7.19.6.1 Overview
 - 7.19.6.2 Content model
 - 7.19.6.3 Attributes
- 7.19.7 markupcolor
 - 7.19.7.1 Overview
 - 7.19.7.2 Content model
 - 7.19.7.3 Attributes
- 7.19.8 textboxx
 - 7.19.8.1 Overview
 - 7.19.8.2 Content model
 - 7.19.8.3 Attributes
- 7.19.9 textboxy
 - 7.19.9.1 Overview
 - 7.19.9.2 Content model
 - 7.19.9.3 Attributes
- 7.19.10 usertext
 - 7.19.10.1 Overview
 - 7.19.10.2 Content model
 - 7.19.10.3 Attributes

Page count: 125