SVG support in 4D

Colored elements and attributes are rendered by the SVG engine. The Red ones are new or improved with the v12 (Updated 7/12/2009)

Elements*	Attributes	Supported
a	Implemented as 'g' element	**Yes**
altGlyph		No
altGlyphDef		No
altGlyphItem		No
animate		No
animateColor		No
animateMotion		No
animateTransform		No
circle	**cx** **cy** **r**	**Yes**
clipPath	11.0 Only 'rect' element is supported; 12.0 'rect', 'line', 'polyline', 'polygon', 'circle', 'ellipse' and 'path' elements are supported **clipPathUnits** 11.3	**Yes**
color-profile		No
cursor		No
definition-src		No
defs		**Yes**
desc		**Yes**
ellipse	**cx** **cy** **rx** **ry**	**Yes**
feBlend**	**mode** 11.0. Windows, only 'over' is yes; Mac OS, all blend types are yes. For not supported types, 'over' blend type is used. **in2**	**Yes**
feColorMatrix**	**type** **values**	**Yes**
feComponentTransfer		No
feComposite**	**operator** 11.0. Windows, only 'over' is yes; Mac OS, 'normal', 'in', 'out' and 'atop' are yes. For not supported types, 'normal' compositing type is used. k1 No k2 No k3 No	**Yes**

	k4 **in2**	No	
feConvolveMatrix			No
feDiffuseLightning			No
feDisplacementMap			No
feDistantLight			No
feFlood			No
feFuncA			No
feFuncB			No
feFuncG			No
feFuncR			No
feGaussianBlur**	**stdDeviation** 11.0. only the first value is used for both X and Y deviation		**Yes**
feImage			No
feMerge			No
feMergeNode			No
feMorphology			No
feOffset**	**dx** **dy**		**Yes**
fePointLight			No
feSpecularLighting			No
feSpotLight			No
feTile			No
feTurbulence			No
filter	Only local URIs are supported		**Yes**
font			No
font-face			No
font-face-format			No
font-face-name			No
font-face-src			No
font-face-uri			No
foreignObject			No
g			**Yes**
glyph			No
glyphRef			No
hkern			No
image	All 4D picture codecs are supported (including SVG) **x** **x** **width**		**Yes**

	height			
	xlink:href	11.0 local or external file URIs are supported; 11.3 Base64 embedding is supported		
line	**x1** **y1** **x2** **y2**			**Yes**
linearGradient	11.0 Only the first and the last 'stop' elements are parsed; 12.0 All stop elements are parsed and used by gradients			**Yes**
	x1			
	y1			
	x2			
	y2			
	gradientUnits			
	gradientTransform	12.0		
	spreadMethod	11.0 Windows: 'pad' is yes as 'reflect'; 12.0 All wrapping modes are yes		
	xlink:href	Only local URIs are supported		
marker	**markerUnits**	11.3		**Yes**
	refX	11.3		
	refY	11.3		
	markerWidth	11.3		
	markerHeight	11.3		
	preserveAspectRatio	11.3		
	viewBox	11.3		
	orient	11.3		
mask				No
metadata				**Yes**
missing-glyph				No
mpath				No
path	**d**	11.3 Quadratic bezier		**Yes**
	pathLength	No		
pattern	**x**	12.0		**Yes**
	y	12.0		
	width	12.0		
	height	12.0		
	viewBox	12.0		
	preserveAspectRatio	12.0		
	xlink:href	12.0 Only local URIs are supported		
	patternUnits	12.0		
	patternContentUnits	12.0		
	patternTransform	12.0		
polygon	**points**			**Yes**

polyline	points		Yes
radialGradient	11.0 Only the first and the last 'stop' elements are parsed; 12.0 All stop elements are parsed and used by gradients		Yes
	cx		
	cy		
	r		
	fx		
	fy		
	gradientUnits		
	gradientTransform	12.0	
	spreadMethod	11.0 'reflect' and 'repeat' are yes as 'pad'; 12.0 All wrapping modes are yes	
	xlink:href	Only local URIs are supported	
rect	**x**		Yes
	y		
	width		
	height		
	rx		
	ry		
script			No
set			No
solidColor	**solid-color**		Yes
	solid-opacity		
stop	**offset**		Yes
	stop-color		
	stop-opacity		
style	Embedded CSS2-compliant inline declarations (see CSS styles window tab for CSS2 support)		Yes
	type	"text/css" content-type only is supported	
	media	Only 'print', 'screen' and 'all' are supported (default: 'all') (parser ignore CSS styles if other media type is specified)	
svg	'baseProfile' and 'version' attributes are ignored		Yes
	x		
	y		
	width		
	height		
	preserveAspectRatio		
	viewBox		
	viewport-fill	SVG version 1.2 (cf http://www.w3.org/TR/SVGMobile12/painting.html) (default: white)	
	viewport-fill-opacity	SVG version 1.2 (cf http://www.w3.org/TR/SVGMobile12/painting.html) (default: 0.0)	
switch			No
symbol	**viewBox**		Yes

	preserveAspectRatio	
tbreak	11.3	**Yes**
text***	**x** If a list of values is specified, only the first one is parsed **y** If a list of values is specified, only the first one is parsed **dx** If a list of values is specified, only the first one is parsed **dy** If a list of values is specified, only the first one is parsed rotate No (use the attribute 'transform' to rotate the text) textLength No lengthAdjust No	**Yes**
textArea***	11.3 **x** **y** **width** **height** editable No focusable No	**Yes**
textPath		No
title		**Yes**
tref		No
tspan***	**x** If a list of values is specified, only the first one is parsed **y** If a list of values is specified, only the first one is parsed **dx** If a list of values is specified, only the first one is parsed **dy** If a list of values is specified, only the first one is parsed rotate No textLength No (use the attribute 'transform' to rotate the text)	**Yes**
use	**x** **y** **width** **height** **xlink:href** Only local URIs are supported	**Yes**
video		No
view		No
vkern		No

* See above Common attributes

** See above Common attributes > Filter (fe)

*** See above Common attributes > Text

Common attributes

color		All CSS2-color-types are supported (cf http://www.w3.org/TR/REC-CSS2/syndata.html#value-def-color) (example with red color: #F00, #FF0000, rgb(255,0,0)) and all SVG 1.1 color names are supported too (see http://www.w3.org/TR/SVG/types.html#ColorKeywords); colors are expressed in sRGB color space
class	11.3	Used by CSS styles class selector (inherited by child elements)
clip	No	'svg', 'image' and 'marker' elements establish a clipping path set to the bounds of the viewport
clip-path		Only 'clipPath' elements can be referenced
clip-rule	No	Clip rule is inherited from fill rule
display		yes as visibility attribute
fill		12.0 Implementation of 'pattern' paint server
fill-opacity		
fill-rule	12.0	
filter		Only local URIs are supported
id		
marker	11.3	only local URIs are supported
marker-start	11.3	only local URIs are supported
marker-mid	11.3	only local URIs are supported
marker-end	11.3	only local URIs are supported
opacity		
overflow	No	'svg', 'image' and 'marker' elements establish a clipping path set to the bounds of the viewport
shape-rendering	12.0	All modes but 'optimizeSpeed' are yes as 'auto'; 'optimizeSpeed' is yes by disabling anti-aliasing
stroke		12.0 Implementation of 'pattern' paint server
stroke-dasharray	12.0	
stroke-dashoffset	12.0	
stroke-opacity		
stroke-linecap		Windows: 'butt' cap is yes as 'square' cap
stroke-linejoin		
stroke-miterlimit	12.0	
style	11.3	CSS2-compliant inline declarations (see CSS styles window tab for CSS2 support)
transform		
visibility		

xml:base	No	
xml:id		
xml:lang	11.3	Used by CSS styles :lang({ident}) pseudo-class selector (inherited by child elements) (default: "en")
xml:space	No	

Text

text-anchor	11.0 12.0	Default: start; If 'writing-mode' is set to 'rl', it is recommended to set 'text-anchor' to 'end' to ensure correct writing with 'text' and 'tspan' elements.
text-decoration	11.0	Default: none; 'blink' is not supported; 'overline' is not supported in 'textArea'
font-size-adjust	No	
kerning	12.0	Windows: Implementation is constrainted to left to right or up to bottom text (disabled for right to left text) and to 'text' and 'tspan' elements; Mac OS: Fully supported.
font-stretch	No	
font-variant	No	
letter-spacing	12.0	Windows: Implementation is constrainted to left to right or up to bottom text (disabled for right to left text) and to 'text' and 'tspan' elements; Mac OS: Fully supported.
word-spacing	No	
glyph-orientation-horizontal	No	
glyph-orientation-vertical	No	
dominant-baseline	No	
direction	No	
unicode-bidi	No	
writing-mode	12.0	If 'lr' or 'tb', 'direction' is assumed to be 'ltr' and 'unicode-bidi' to be 'bidi-override'; If 'rl', 'direction' is assumed to be 'rtl' and 'unicode-bidi' to be 'bidi-override'
text-rendering	12.0	All modes but 'optimizeSpeed' are yes as 'auto'; 'optimizeSpeed' is yes by disabling font smoothing

Filter (fe)

x	No	filter limit is always set to the container filter bounds
y	No	filter limit is always set to the container filter bounds
width	No	filter limit is always set to the container filter bounds

height	No	filter limit is always set to the container filter bounds
in	11.0	only 'SourceGraphic' and 'SourceAlpha' are supported
result		

4D private attributes

4D-text	read/write	Replace/read text node content: only usable on 'text' 'tspan' and 'textArea' elements and with 'SVG Set Attribute' or 'SVG Get Attribute' commands
4D-bringToFront	write	If 'true', move node to the front of sibling nodes - only usable with 'SVG Set Attribute' command
4D-isOfClass-{IDENT [[S|COMMA] IDENT]*}	read	If node inherited class attribute contains all class name(s), return 'true' otherwise return 'false' - only usable with 'SVG Get Attribute' command (for instance return true for "4D-isOfClass-land' if node inherited class is 'land department01')

xml-stylesheet

Only CSS stylesheets are supported (other stylesheets are ignored). See *infra.* for CSS2 syntax supported

type	11.3	"text/css" content-type only is supported
href	11.3	Relative/absolute URI (for relative URI, base path is equal to parent document base path - can be either SVG document or another CSS stylesheet.
media	11.3	Only 'print', 'screen' and 'all' are supported (default: 'all') (parser ignore CSS styles if other media type is specified)

CSS2 syntax		universal, type, class, attribute, ID, descendant, child and adjacent selectors are fully supported; only :first-child and :lang({ident}) pseudo-classes selectors are fully supported: other pseudo-classes rules are ignored
!important	11.3	by default, CSS styles do not override attributes that are explicitly set - not inherited - by a matching element so you must use !important symbol if you want a CSS style to override matching element attribute if it is explicitely set
at-rule@media	11.3	only 'print', 'screen' and 'all' are supported - other medias rules are ignored
at-rule @import	11.3	only 'print', 'screen' and 'all' are supported - other medias rules are ignored
comments /*.*/	11.3	
<!-- and -->	No	parsed and tokenized for compatibility but not used : use /* .. */ comments if you want to comment some rulesets or declarations
expressions	No	parsed and tokenized for compatibility but not used
counters	No	parsed and tokenized for compatibility but not used
functions	No	parsed and tokenized for compatibility but not used