

Symbol & Use Element Guide

Advanced SVG Techniques: viewBox, Transforms & Symbols

About This Document

This reference accompanies the article: Advanced SVG Techniques: viewBox, Transforms & Symbols

Read the full article at: <https://svgeneration.com/docs/advanced-svg-techniques>

Article Summary

Master the less-known SVG features: viewBox manipulation, nested transforms, symbols, and use element power-ups.

Marker Elements: Arrowheads & Decorations

`<marker>` elements attach automatically to the endpoints and midpoints of lines, polylines, and paths. This is how SVG draws arrowheads but markers can be any SVG shape. For patterns, markers enable lines with automatic, evenly-spaced decorations (diamonds, circles, ticks) without manually calculating every position. Set `markerUnits="strokeWidth"` for markers that scale with line thickness.

The xlink Deprecation

SVG 1.1 used `xlink:href` for all cross-references. SVG 2.0 deprecates XLink entirely, replacing it with a plain `href` attribute. All modern browsers support both. New SVG code should use plain `href`. Legacy patterns using `xlink:href` on `<use>` elements still work in all current browsers but should be migrated to avoid issues as XLink support is eventually removed.

Free Resources

Visit [SVGeneration.com](https://svgeneration.com) for 600 free SVG background patterns. No attribution required.

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