

SVG File Size Optimization Guide

Techniques to minimize SVG pattern file size by 40-80%

Remove unnecessary attributes

Delete xmlns:xlink if not using xlink. Remove id on unnamed elements. Strip XML declarations.

Round coordinates

Round all decimals to 1 place. cx="10.4732" becomes cx="10.5". Saves bytes in complex paths.

Use <use> for repetition

Define one shape in , reference with . 8 uses vs 8 separate shapes = 60-80% size reduction.

Eliminate whitespace

Remove all newlines and extra spaces in production SVG. Saves 10-30% on complex patterns .

Short colour notation

#6366f1 (7 chars) vs rgb(99,102,241) (16 chars). Use 3-char hex where possible: #fff vs #ffffff.

Run SVGO

npx svgo --multipass pattern.svg. Typical reduction: 40-60%. Enable all plugins for maximum compression.

Stroke vs fill for lines

A stroked line is lighter than a thin filled rectangle. Use stroke-width not tiny elements.

Omit default values

fill="black" is default -- omit it. opacity="1" is default -- omit it. Saves bytes per element.