SVG FROM SAS

Programming SAS
to Program SVG

Overview

- What is SVG?
- SAS Knowledge
- HTML Knowledge
- SVG Knowledge
- JavaScript Knowledge

What is SVG?

- Scalable Vector Graphics
- XML-based file format to represent 2-D vector graphics
- Open standard under development by World Wide Web Consortium (W3C)
- Compatible with CSS and JavaScript
- Unlike SAS, SVG is case-sensitive

SAS Knowledge

- Statements
  - ATTRIB
  - DO
  - FILE
  - IF-THEN
  - LINK
  - PUT
  - SET
- Functions
  - CAT
  - STRIP

HTML Knowledge

- Hyper Text Markup Language (HTML)
- Markup tags
  - Keywords

    <HTML></HTML> HTML document

    <HEAD></HEAD> Information about document

    <BODY></BODY> Visible page content
- Cascading Style Sheets (CSS)
  - Supported but not implemented in example

SVG Knowledge

- Scalable Vector Graphics (SVG)
  - SVG workspace is an object in the HTML document
- Document Object Model (DOM)
  - Each shape is a distinct object in an SVG document
    - Circle
    - Ellipse
    - Rectangle
    - Line
    - Text

JavaScript Knowledge

- Document Object Model (DOM)
- Manipulate the properties of SVG objects
  - Position
  - Size
  - Color
  - Opacity

SVG From SAS

- Advantages
  - Interactive
    - Charts dynamically respond to user requests
  - Repeatable
    - No typos
    - Write one line of code; repeat as needed
  - Control
    - Customizable
    - Scalable