Overview

The upcoming RFC format will allow line drawings in RFCs using a specialized profile of the SVG (Scalable Vector Graphics) language. That profile is specified in draft-brownlee-sfg-rfc. It is a restricted subset of the SVG 1.2 Tiny profile.

The RFC Editor requires a tool to verify that submitted SVG is valid and conforms to this specialized profile. This tool must also be usable by authors to identify and correct any issues before submission.

Deliverables/Tasks

- An application that reads one or more SVG documents and provides diagnostics regarding its well-formedness and conformance to the profile specified in draft-brownlee-sfg-rfc
- A test suite for the application.
- Documentation and training for the RFC Production Center staff

Detailed Description and Requirements

The application must run on UNIX-like operating systems (including OS/X) and Microsoft Windows. Running on other systems, or being easily portable to other systems, is preferable. The application must be usable as part of a web service, or run as a standalone application on a personal computer.

The application must accept files that contain only an SVG document, or files in the xml2rfc v3 grammar defined in draft-hoffman-xml2rfc. If the input document is in the xml2rfc v3 grammar, the program will extract all contained SVG documents and report on each individually. Note that extracting the SVG documents must include processing several forms of content inclusion, including xi:include, ENTITY references, and artwork src= references.

The diagnostic output of the application must help an author or the RFC Editor quickly identify and correct any issues in the structure of the provided SVG documents. The output should identify the use of any SVG elements not allowed in the restricted profile. The output should include enough information to make the erroneous section of the input document easy to locate. The output should also be easy to cut-and-paste into email and instant messaging systems.

The application must also be able to produce a version of each SVG input (that is sufficiently well formed to process) with any content not allowed by the SVG profile removed.

The application should anticipate eventually being invoked by, or being integrated into, the rfclint application that is being concurrently developed.

Expected Development Processes and Practices

The contractor will adhere to the requirements at
http://trac.tools.ietf.org/tools/ietfdb/wiki/ContractorInstructions?version=11