Overview

There are several tasks involved in authoring an Internet-Draft and in making an RFC ready for publication that can be automated or assisted programmatically. The current production process utilizes several programs to validate or manipulate the document content. These programs perform tasks like verifying conformance criteria, identifying duplicate words, locating dangling references, and checking spelling. The RFC Editor wishes to unify and streamline this process to balance the expected complexity involved in producing documents in the upcoming xml2rfc v3 format. This project will create a command-line program that can be used to incrementally process an xml2rfc v3 formatted document towards being publication ready. This program will also be useful to authors preparing Internet-Drafts.

Deliverables/Tasks

- An application providing the capabilities described below.

Detailed Description

For a given input document, the application will help authors and the RFC Editor:
- Identify and optionally remove duplicate words
- Identify and optionally correct misspelled words
- Verify that imbedded XML stanzas are well formed
- Verify that imbedded ABNF is complete and well formed

The application will take an xml2rfc v3 formatted document and a set of command line arguments, and produce diagnostic output and, when appropriate, an output xml2rfc v3 formatted document. The operations must not modify the input file directly.

The document will not duplicate the functionality of idnits beyond what is needed to parse the XML input. If presented with a malformed XML document, the program should refer the user to idnits.

It is not the intent to re-invent functionality that is already well implemented. For example, we anticipate that this application will use a utility like aspell (either through it's command-line interface or by integrating its library) rather than implementing its own spell checker. Similarly, the application should integrate as much of the existing tool chain as is reasonable. Other candidate sources of functionality include

- xmllint
- bap

At a minimum, the application will run on unix-like operating systems (including OS/X) and on Microsoft Windows. Running on other systems, or being easily portable to other systems, is preferable.

The application should be usable by authors on their own computers, even when those computers are not connected to the Internet. The application must be easy to integrate with a web-server, allowing its functionality to be provided as a web service.

The application must be usable both interactively, and in a batch mode. In batch mode, all decisions will assume a default input instead of requiring interaction.

The application will be released as open-source under the policies set forward by the IETF Trust.

Expected Development Processes and Practices

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