RFCTool User Guide

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<series>draft-hallambaker-rfctool

<status>informational

<stream>independent

<ipr>trust200902

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<also>https://mathmesh.com/Documents/draft-hallambaker-jsonbcd.html

RFCTool is a tool that converts source documents in Word, Markdown, HTML, and/or XML to Internet specifications. This document provides information on how to use RFCTool to generate Internet Drafts and RFCs.

Introduction

RFCTool is a documentation production tool for IETF documents supporting multiple input and output formats. Currently implemented input formats are Word, Markdown and XML2RFC, all of which are supported as output formats with the addition of HTML and plaintext.

Document preparation is supported in either Word (OOXML) or Markdown format or a combination of both. Since the OOXML format is supported as an output format by practically every word processing tool in current use, this allows the user to use almost any editor to prepare the source text.

While OOXML allows the use of editors with rich functionality, generating text in OOXML format is not straightforward. Consequently, the preferred approach is typically to use Word document as the principal document source with inclusions from verbatim and Markdown sources.

The tool is Open source (MIT License) and does not require installation of Word to process OOXML documents.

# Installing and Using RFCTool.

RFCTool is available as source code from the GITHub repository or as a standalone executable for any of the platforms supported by .NET Core 3.1:

* Windows (7, 8.1, 10) x64, ARM32
* Linux (various) x64, ARM32, ARM64
* macOS (10.13+)

RFCTool may be run on numerous other platforms by installing and configuring .NET Core 3.1 on that platform.

## Installation

RFCTool is installed by simply placing the executable file in a directory that is in the user's shell executable discovery path.

The files are actually self-extracting ZIP files which unpack themselves the first time they are run.

## Running RFCTool

The about command returns the tool version and build information:

The help command provides usage information for the RFCTool commands:

## Converting files

A file is converted using RFCTool by specifying the file to be converted followed by the output formats to be generated:

The input format is inferred from the input file extension as follows:

.xml

.docx

.md

The output formats are specified by the following options:

/xml

/docx

/md

/txt

/html

The output file name may be specified explicitly (e.g. /html=file.html) and otherwise defaults to the input filename with the appropriate extension.

## Creating Templates

The template command generates a template which may be used to get started with a new document. This is particularly useful for creating Word documents as all the template document is prepopulated with the styles recognized by the tool.

# Editing with Word

RFCTool recognizes Word paragraph and character styles and interprets them as XML2RFC markup instructions.

BCP14 language (MUST/SHOULD/MAY) is automatically recognized and tagged. References to RFCs, Internet Drafts and certain other document series are automatically recognized and extracted.

Metadata

Series / Status /Stream

Ipr

Keyword

Author / surname / initials / firstname / email / organization

Paragraph Styles

Title

Subtitle

li

nli

dt

dd

pre

{anchor}

Character Styles

Bold

Italic

Underline

Subscript

Superscript

References

Norm

Info

Xref

Relref

Eref/a

Tables

Including files

Examples

Source Code

SVG Images.

Editing with Markdown

Document Markup

Document data

The tool is intentionally lax in allowing specification of document data and metadata using the metadata tags specified in all versions of the xml schema plus additional tags defined for use with markdown.

The following tags are preferred:

|  |  |
| --- | --- |
| **Tag** | **Values** |
| document | rfcxxx, draft-xxx |
| status | std, bcp, info, exp, historic |
| stream | IETF, IRTF, IAB, independent |
| ipr | trust200902 |
| updates | rfc1234, rfc3456 |
| obsoletes | rfc1235 |
| keyword | pki |
| consensus | yes |
| area | Security |
| workgroup | LAMPS |
| std | STD number |
| bcp | BCP number |
| also | (url on users site) |

### Authors

|  |  |
| --- | --- |
| **Tag** | **Examples** |
| fullname |  |
| firstname |  |
| surname |  |
| initials |  |
| email |  |
| organization |  |
| role |  |
| organizationabbrev |  |
| organizationascii |  |
| street |  |
| city |  |
| region |  |
| code |  |
| country |  |
| phone |  |
| uri |  |

Formatting

Cref - comment

Eref - external link (not added to references)

RelRef - reference to a specific anchor within a referenced doc.

Iref - term for the index

Xref - reference to an anchor in this document

Including files

Figures

Source code

Section headings

References

Informative

Normative

Processing Instructions

|  |  |  |
| --- | --- | --- |
| Tag | Default | Use |
| TocDepth | 3 | Table of Contents depth |
| SortRefs | true | Sort references |
| Symrefs | true | Use symbolic references |
| TocInclude | true | Include Table of Contents |
| TofInclude | true | Include Table of Figures |
| TotInclude | true | Include Table of Terms |
| TonInclude | true | Include Table of Normative Language |
| IndexInclude | false | Include index |
| EmbedStylesheet | true | Embed the stylesheet. |

Office Open XML (Word) Syntax

Office Open XML (ECMA-376) (OOXML) is an open standard for document markup format with ubiquitous support in word processing software. Introduced in Microsoft Office 2007, the format is notably supported by Google Docs and LibreOffice as a native document format.

Use of OOXML as the source format for standards documents allows the use of features commonly provided by word processing software such as spelling and grammar checking to be used during document editing.

The chief disadvantage in use of OOXML as a document source format is that the format is relatively complex and requires the

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Formatting

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Markdown Syntax

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Acknowledgements

Security Considerations

IANA Considerations

[TBS list out all the code points that require an IANA registration]