

Corrections to "A Syntax for Describing Media Feature Sets"

Status of this Memo

This document specifies an Internet standards track protocol for the Internet community, and requests discussion and suggestions for improvements. Please refer to the current edition of the "Internet Official Protocol Standards" (STD 1) for the standardization state and status of this protocol. Distribution of this memo is unlimited.

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Abstract

In RFC 2533, "A Syntax for Describing Media Feature Sets", an expression format is presented for describing media feature capabilities using simple media feature tags.

This memo contains two corrections to that specification: one fixes an error in the formal syntax specification, and the other fixes an error in the rules for reducing feature comparison predicates.

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1. Introduction

In RFC 2533, "A Syntax for Describing Media Feature Sets" [1], an expression format is presented for describing media feature capabilities using simple media feature tags. This provides a format for message handling agents to describe the media feature content of messages that they can handle. That memo also describes an algorithm for finding the common capabilities expressed by two different feature expressions.

This memo contains two corrections to that specification: one fixes an error in the formal syntax specification, and the other fixes an error in the feature set matching algorithm, in the rules for reducing feature comparison predicates.

The first of these corrections affects the normative content of RFC 2533; the second affects non-normative content.

1.1 Terminology and document conventions

This specification uses syntax notation and conventions described in RFC 2234, "Augmented BNF for Syntax Specifications: ABNF" [2].

NOTE: Comments like this provide additional nonessential information about the rationale behind this document. Such information is not needed for building a conformant implementation, but may help those who wish to understand the design in greater depth.

1.2 Discussion of this document

Discussion of this document should take place on the content negotiation and media feature registration mailing list hosted by the Internet Mail Consortium (IMC).

Please send comments regarding this document to:

ietf-medfree@imc.org

To subscribe to this list, send a message with the body 'subscribe' to "ietf-medfree-request@imc.org".

To see what has gone on before you subscribed, please see the mailing list archive at:

<http://www.imc.org/ietf-medfree/>

2. Correction to feature expression syntax

In section 4.1, RFC 2533 defines the syntax for a "set" expression as follows:

```
set      = attr "=" "[" setentry *( "," setentry ) "]"
setentry = value "/" range
```

The production for 'setentry' should read:

```
setentry = value / range
```

That is: the '/' character is not a character literal, but separates two alternative forms for 'setentry'. This corrected syntax allows the set expression examples given in section 4.2.5 of RFC 2533, such as:

```
( width=[3,4,6..17/2] )
```

3. Correction to feature set matching reduction rules

In section 5.8.2, "Rules for simplifying unordered values", RFC 2533 lists the following rewriting rules for simplifying feature tag comparisons with unordered values:

```
(LE f a) (LE f b)    --> (LE f a),    a=b
                        FALSE,         otherwise
(LE f a) (GE f b)    --> FALSE,         a!=b
(LE f a) (NL f b)    --> (LE f a)      a!=b
                        FALSE,         otherwise
(LE f a) (NG f b)    --> (LE f a),      a!=b
                        FALSE,         otherwise
```

The second of these rules is incomplete, and should read:

```
(LE f a) (GE f b)    --> (LE f a),    a=b
                        FALSE,         otherwise
```

NOTE: implementation experience with these rules has suggested a revised feature set matching algorithm with a more useful set of simplification rules. Apart from the change noted above, the algorithm given in RFC 2533 has been implemented and shown to work as intended, but the results generated are not always in the most convenient form. It is planned to test and publish a revised algorithm at a future date.

4. Security Considerations

Security considerations are discussed in RFC 2533 [1] and related documents.

5. References

- [1] Klyne, G., "A Syntax for Describing Media Feature Sets", RFC 2533, March 1999.
- [2] Crocker, D. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF", RFC 2234, November 1997.

6. Author's Address

Graham Klyne
Content Technologies Ltd.
1220 Parkview
Arlington Business Park
Theale
Reading, RG7 4SA
United Kingdom

Phone: +44 118 930 1300
Fax: +44 118 930 1301
EMail: GK@ACM.ORG

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