

Network Working Group
Internet-Draft
Intended status: Standards Track
Expires: October 06, 2012

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April 06, 2012

Additional Media Type Structured Syntax Suffixes
draft-hansen-media-type-suffix-regs-01

Abstract

This document defines several Structured Syntax Suffixes for use with media type registrations. In particular, it defines and registers the "+json", "+ber", "+der", "+fastinfoset" and "+wxml" Structured Syntax Suffixes.

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[1.](#) Introduction

[RFC3023] created the +xml suffix convention that may be used by media types whose representation uses XML underneath, that is, they could have been successfully parsed as if the media type had been application/xml in addition to their being parsed as their media type that is using the +xml suffix. [\[I-D.ietf-appsawg-media-type-regs\]](#) defines a registry to be used for future Structured Syntax Suffixes.

A variety of Structured Syntax Suffixes have already been used in some Media Type registration, in particular "+json", "+der", "+fastinfoset" and "+wxml". This document defines and registers these Structured Syntax Suffixes in the Structured Syntax Suffix registry, along with "+ber".

Discussion of this document should occur in the Apps Area Working Group (apps-discuss@ietf.org).

[2.](#) When to Use these Structured Syntax Suffixes

Each of the Structured Syntax Suffixes defined in this document are appropriate for use when the media type identifies the semantics of the protocol payload. That is, knowing the semantics of the specific media type provides for more specific processing of the content than that afforded by generic processing of the underlying representation.

At the same time, using the suffix provides receivers of the media types to do generic processing of the underlying representation in cases where they do not need to handle specially the specific semantics of the exact media type.

[3.](#) The +json Structured Syntax Suffix

[RFC4627] defines the "application/json" media type. The suffix "+json" may be used with any media type whose representation follows that established for "application/json". The Message Type Structured Syntax Suffix registration form follows:

Name	JavaScript Object Notation (JSON)
+suffix	+json
References	[RFC4627]

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Encoding considerations Per [[RFC4627](#)], JSON may be represented using UTF-8, UTF-16, or UTF-32. When JSON is written in UTF-8, JSON is 8bit compatible. When JSON is written in UTF-16 or UTF-32, JSON is binary.

Interoperability considerations n/a

Security considerations See [[RFC4627](#)]

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Author/Change controller The Apps Area Working Group has change control over this registration.

[4.](#) The +ber and +der Structured Syntax Suffixes

The CCITT defined the Basic Encoding Rules (BER) and Distinguished Encoding Rules (DER) message transfer syntaxes in [[CCITT.X690.2002](#)]. The suffix "+ber" may be used with any media type whose representation follows the BER message transfer syntax. The suffix "+der" may be used with any media type whose representation follows the DER message transfer syntax. The Message Type Structured Syntax Suffix registration forms follows:

Name	Basic Encoding Rules (BER) message transfer syntax
+suffix	+ber

References [\[CCITT.X690.2002\]](#)

Encoding considerations BER is a binary encoding.

Interoperability considerations n/a

Security considerations There are no security considerations inherent in BER. Each individual media type registered with a +ber suffix may have additional security considerations.

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Name Distinguished Encoding Rules (DER) message transfer syntax

+suffix +der

References [\[CCITT.X690.2002\]](#)

Encoding considerations DER is a binary encoding.

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Interoperability considerations n/a

Security considerations There are no security considerations inherent in DER. Each individual media type registered with a +der suffix may have additional security considerations.

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5. The +fastinfoset Structured Syntax Suffix

The ITU-T and ISO have defined the Fast Infoset document format as a binary representation of the XML Information Set in [\[ITU.X891.2005\]](#) and [\[ISO.IEC.24824-1.2007\]](#). These documents further define the "application/fastinfoset" media type. The suffix "+fastinfoset" may be used with any media type whose representation follows that

established for "application/fastinfoset". The Message Type Structured Syntax Suffix registration form follows:

Name Fast Infoset document format
+suffix +infoset
References [[ITU.X891.2005](#)] and [[ISO.IEC.24824-1.2007](#)]

Encoding considerations Fast Infoset is a binary encoding. The binary, quoted-printable and base64 content-transfer-encodings are suitable for use with Fast Infoset.

Interoperability considerations n/a

Security considerations There are no security considerations inherent in Fast Infoset. Each individual media type registered with a +der suffix may have additional security considerations.

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6. The +wxml Structured Syntax Suffix

The WAP Forum has defined the WAP Binary XML (WBXML) document format as a binary representation of XML in [[WBXML](#)]. This document further defines the "application/vnd.wap.wxml" media type. The suffix "+wxml" may be used with any media type whose representation follows that established for "application/vnd.wap.wxml". The Message Type Structured Syntax Suffix registration form follows:

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Name WAP Binary XML (WBXML) document format
+suffix +wxml
References [[WBXML](#)]

Encoding considerations WBXML is a binary encoding.

Interoperability considerations n/a

Security considerations There are no security considerations inherent in WBXML. Each individual media type registered with a +der suffix may have additional security considerations.

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7. IANA Considerations

See the Message Type Structured Syntax Suffix registration forms in [Section 3](#) - [Section 6](#).

8. Security Considerations

See the Security considerations sections found in the Message Type Structured Syntax Suffix registration forms from [Section 3](#) - [Section 6](#).

9. References

9.1. Normative References

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WAP-192-WBXML-20010725-a, July 2001.

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