Change Document for SyncML HTTP Binding

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1 Formatting Conventions 5
1.1 Errata Type Classifications 5
2 Errata 6
2.1 HTTP Content Type 6
2.1.1 Problem 6
2.1.2 Solution 6
2.1.3 Other specifications/erratas affected 6
2.2 UTF-8 in HTTP 6
2.2.1 Problem 6
2.2.2 Solution 6
2.2.3 Other specifications/erratas affected 7
2.3 HTTP Authentication 7
2.3.1 Problem 7
2.3.2 Solution 7
2.3.3 Other specifications/erratas affected 8
2.4 RFC 2119 8
2.4.1 Problem 8
2.4.2 Solution 8
2.4.3 Other specifications/erratas affected 8
3 Enhancements 9
3.1 MIME Types 9
3.1.1 Problem 9
3.1.2 Solution 9
3.1.3 Other specifications/erratas affected 9
4 References 9

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1 Formatting Conventions

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY" and "OPTIONAL" in this document are to be interoperated as described in [RFC 2119].

1.1 Errata Type Classifications

The errata types are classified according to the following scheme:

CLARIFICATION: Textual enhancement that provides a clearer explanation of a specification item without changing any behavior.

CORRECTION: A modification that obsoletes some items in the current published specification.

PROBLEM: A known problem for which an erratum has yet to be proposed.

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2 Errata

2.1 HTTP Content Type

2.1.1 Problem

I In several examples the content type is misspelled as 'application/vnd.syncml-xml' 'application/vnd.syncml-wbxml' instead of 'application/vnd.syncml+xml'and 'application/vnd.syncml+wbxml'.

2.1.2 Solution

Correct the typos on pages 10 (3 typos), 16 (2 typos) and 17 (1 typo) to reflect the correct content type as defined in the SyncML representation protocol V 1.0.1.

2.1.3 Other specifications/erratas affected

None.

2.2 UTF-8 in HTTP

2.2.1 Problem

Requiring UTF-8 support imposes a large implementation cost on clients in areas of the world where UTF-8 is not commonly used. Relaxing the client requirements can cause interoperability problems, but will also make for faster insertion into the Japanese and Korean markets.

2.2.2 Solution

In section 5.3.3, Request Headers, change the paragraph that talks about the Accept Charset request header. The current paragraph reads:

"The Accept-Charset request header is used to specify which character sets are acceptable in the response. Implementations conforming to this specification MUST support this header with the "UTF-8" character set value. Implementations MAY support additional, IANA registered character set values. The following is an example of how this header is specified to indicate that the client expects responses formated into the UTF-8 character set:

Accept-Charset: UTF-8"

The new version of that paragraph will read:

"The Accept-Charset request header is used to specify which character sets are acceptable in the response. Server implementations conforming to this specification MUST support this header with the "UTF-8" character set value. Client implementations SHOULD support the "UTF-8" character set. Implementations MAY support additional, IANA registered character set values. Client implementations not supporting UTF-8 SHOULD take careful consideration of the potential impact of lack of UTF-8 support on interoperability of the device. If a recipient is unable to provide support for the character set encoding specified in the Accept-Charset request headers sent by the originator, the recipient MUST send to the

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originator a HTTP status 406, "Not acceptable". This is in keeping with [RFC2616]. Note that there will be no SyncML message sent with this response. The following is an example of how this header is specified to indicate that the client expects responses formated into the UTF-8 character set:

Accept-Charset: UTF-8"

In section 7, References, add a reference to IANA, specifically the registered character set:

http://www.iana.org/assignments/character-sets.

2.2.3 Other specifications/erratas affected

None.

2.3 HTTP Authentication

2.3.1 Problem

At the moment a HTTP client must support authentication on SyncML level and may support authentication on HTTP level but the server must support authentication on both levels. The WSP protocol does not have an equivalent method for authentication with MD5 (Digest) so the WSP client can not support this authentication method.

Problem occurs in the server when a server supports both HTTP and WSP (though a WAP Gateway) clients.

2.3.2 Solution

Change the MUST to MAY so the server can handle HTTP clients and WSP client (though a WAP Gateway) in the same way.

Change from:

5.3.3 Request Header

```
Authorization          MUST   MUST
Proxy-Authorization    MUST   MUST
```

5.3.4 Response Header

```
Authentication-Info    MUST   MUST
Proxy-Authenticate     MUST   MUST
WWW-Authenticate       MUST   MUST
```

Change to:

5.3.3 Request Header

```
Authorization          MAY    MAY
Proxy-Authorization    MAY    MAY
```

5.3.4 Response Header

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```
Authentication-Info    MAY    MAY
Proxy-Authenticate     MAY    MAY
WWW-Authenticate       MAY    MAY
```

The description must also be changed from MUST to MAY.

2.3.3 Other specifications/erratas affected

None.

2.4 RFC 2119

2.4.1 Problem

The current definition is unclear about how to interpret a receiving element when the “Static Conformance Requirements” column defines an element as MAY.

In almost every document we have a reference to `www.ietf.org` and in chapter “Static Conformance Requirements” we have:

“In these tables, optional features are specified by a "MAY", mandatory features are specified by a "MUST" and recommended features are specified by a "SHOULD".”

2.4.2 Solution

Change the reference to RFC2119 and include the MAY definition from the RFC under the chapter “Static Conformance Requirements”:

“An implementation which does not include a particular option MUST be prepared to interoperate with another implementation which does include the option, though perhaps with reduced functionality.”

2.4.3 Other specifications/erratas affected

None.

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3 Enhancements

3.1 MIME Types

3.1.1 Problem

SyncML Binding documents do not include SyncML Device Management MIME types.

3.1.2 Solution

Change the text as described below.

Data synchronization client implementations conforming to this specification MUST support this header with either the "application/vnd.syncml+xml" or "application/vnd.syncml+wbxml" media type values. Data synchronization server implementations conforming to this specification MUST support both "application/vnd.syncml+xml" and "application/vnd.syncml+wbxml" media type values, as requested by the SyncML data synchronization client.

Device Management client implementations conforming to this specification MUST support this header with either the "application/vnd.syncml.dm+xml" or "application/vnd.syncml.dm+wbxml" media type values. Device management server implementations conforming to this specification MUST support both "application/vnd.syncml.dm+xml" and "application/vnd.syncml.dm+wbxml" media type values, as requested by the SyncML device management client.

The following is an example of how this header is specified to indicate that the client expects responses formatted according to the clear-text, XML [5] representation of SyncML data synchronization:

Accept: application/vnd.syncml+xml

The following is an example of how this header is specified to indicate that the client expects responses formatted according to the binary, WBXML [4] representation of SyncML device management

Accept: application/vnd.syncml.dm+wbxml

3.1.3 Other specifications/erratas affected

None.

4 References

[RFC 2119] Key words for use in RFCs to Indicate Requirement Levels, IETF.

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