WAP Specification Information Note
WAP-164_100-PAP
Version 18-Feb-2000

A Wireless Application Protocol
Specification Information Note for:

Push Access Protocol Specification
WAP-164-PAP
Version 08-Nov-1999

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1. Scope

Specification Information Note (SIN) fixes technical and clerical errors in the originally published approved specification.

This Specification Information Note addresses following issues in WAP Push Access Protocol Specification, WAP-164-PAP, Version 08-Nov-1999:

- Interpretation of QoS information in the resultnotification-message
- Use of upper and lower case letters in the network and bearer attributes
- Use of PAP badmessage-response

1.1 Included Change Requests

The following approved change requests are included in this Specification Information Note:

- CR-PAP-20000203-ERICSSON-2
- CR-PAP-20000214-ERICSSON-1
- CR-PAP-20000216-MOTOROLA-2

1.2 Affected Sections

This Specification Information Note modifies the following specification sections:

- 9.2.2 The quality-of-service Element
- 9.6 The resultnotification-message Element
- 9.12 The badmessage-response Element
- 9.13 Status Codes
- 12.2 Document Type Definition (DTD)
- 15.1.3 Semantics
2. Document Status

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2.1 Copyright Notice
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2.2 Errata
Known problems associated with this document are published at http://www.wapforum.org/.

2.3 Comments
Comments regarding this document can be submitted to the WAP Forum in the manner published at http://www.wapforum.org/.
3. Interpretation of QoS information in the resultnotification-message

3.1 Change Classification

1 – New Feature, Major Change or Market Effecting Change [ ]
2 – Bug Fixes [ X ]
3 – Clerical Corrections [ ]

3.2 Change Summary
As currently specified, the quality-of-service element contains three attributes that do not contain any useful information when sent in a resultnotification-message (they convey information from the PI to the PPG that must be honoured or rejected by the PPG). These attributes are:

• priority
• network-required
• bearer-required

This SIN states that these attributes are to be ignored by the PI when sent in a resultnotification-message. By this it is ensured that the PI won’t get confused if it gets a notification that contains attribute values that are different from what was specified in the submission (e.g. default values if these attributes are left out).

3.3 Change
New text is underlined. Removed text has strikethrough marks. The presented text is copied from the specification. Text that is not presented is not affected at all.

Editor's note: Framed editor's notes like these only clarify how the corrections shall be applied. They are not part of the specification.

9.6 The resultnotification-message Element
The resultnotification-message element provides a means to specify the outcome of a submitted message for a specific recipient after the final result is known. This includes message delivery, expiration, cancellation, etc.

The quality-of-service element specifies the delivery methods used if the message delivery was successful. It MUST be included if it was present in the push submission. The PI must ignore the information specified by the bearer-required, network-required and priority attributes in this element. Further, the PPG must assign the delivery-method attribute either the value “confirmed” or “unconfirmed”.
4. Use of upper and lower case letters in the network and bearer attributes

4.1 Change Classification

<table>
<thead>
<tr>
<th>Classification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – New Feature, Major Change or Market Effecting Change</td>
<td>[   ]</td>
</tr>
<tr>
<td>2 – Bug Fixes</td>
<td>[ X ]</td>
</tr>
<tr>
<td>3 – Clerical Corrections</td>
<td>[   ]</td>
</tr>
</tbody>
</table>

4.2 Change Summary

The bearer and network attributes in the quality-of-service element contain values specified by the WDP specification. It is however not clear if those attributes values are case sensitive or not. This SIN states that are case insensitive.

4.3 Change

New text is underlined. Removed text has strikethrough marks. The presented text is copied from the specification. Text that is not presented is not affected at all.

Editor's note: Framed editor's notes like these only clarify how the corrections shall be applied. They are not part of the specification.

9.2.2 The quality-of-service Element

`network=CDATA`

The network desired for use when delivering the message. Network types are defined in an appendix of [WDP]. The value of this attribute is case insensitive.

`bearer=CDATA`

The bearer desired for use when delivering the message. Bearer types are defined in an appendix of [WDP]. The value of this attribute is case insensitive.

5. Use of PAP badmessage-response

5.1 Change Classification

<table>
<thead>
<tr>
<th>Classification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – New Feature, Major Change or Market Effecting Change</td>
<td>[   ]</td>
</tr>
<tr>
<td>2 – Bug Fixes</td>
<td>[ X ]</td>
</tr>
<tr>
<td>3 – Clerical Corrections</td>
<td>[   ]</td>
</tr>
</tbody>
</table>
5.2 Change Summary

In the current specification, the usage of badmessage-response is not clearly defined for the case of reception of a message with a non-supported version. This should be clarified in order to avoid possible interoperability problems between a PI and a PPG regarding the version of PAP used. Furthermore, this will benefit the creation of the upcoming interoperability test suite for WAP Push.

This SIN states a correction to this by defining the appropriate return code and behaviour.

5.3 Change

New text is underlined. Removed text has strikethrough marks. The presented text is copied from the specification. Text that is not presented is not affected at all.

Editor's note: Framed editor's notes like these only clarify how the corrections shall be applied. They are not part of the specification.

9.12 The badmessage-response Element

Editor's note: Note that the message may now be sent in either direction.

```xml
<!ELEMENT badmessage-response EMPTY >
<!ATTLIST badmessage-response
    code CDATA #REQUIRED
    desc CDATA #IMPLIED
    bad-message-fragment CDATA #IMPLIED>
```

The badmessage-response element is used in response to messages that are unrecognisable or that are of a protocol version that is not supported.

The PPG MUST detect the version of the message (see section 10), and if the version is not supported, status code 3002 (Version not supported) MUST be returned to the Push Initiator.

When the message is unrecognisable, use of status code 2000 (Bad Request) is appropriate.

A fragment of the unrecognisable message should be included in the bad-message-fragment attribute.

Direction: (PPG → Push Initiator)

Attributes

- `code=CDATA`
  - This attribute contains a code that indicates the status of the submission. See Status Codes (section 9.13).
- `desc=CDATA`
  - This attribute contains a textual description of the outcome of the message.
- `bad-message-fragment=CDATA`
  - This attribute contains a fragment of the bad message.

9.13 Status Codes
Editor’s note: A column for badmessage-response needs to be added to the table of status codes. The rows for codes 2000 and 3002 are modified. All the other rows are unaffected except for the addition of an empty cell in the column for badmessage-response.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>response-result</th>
<th>cancel-result</th>
<th>result-notification-message</th>
<th>result-notification-response</th>
<th>Statusquery-result</th>
<th>ccq-response</th>
<th>badmessage-response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>Bad Request</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>3002</td>
<td>Version not Supported</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

12.2 Document Type Definition (DTD)

```xml
<!-- == unarmed declaration for bad message response message -->
<!ELEMENT badmessage-response EMPTY >
<!ATTLIST badmessage-response
  code                   CDATA             #REQUIRED
  desc                   CDATA             #IMPLIED
  bad-message-fragment   CDATA             # REQUIRED
>
```

15.1.3 Semantics

Editor’s note: Add rows to the table for these two new SCR entries.

<table>
<thead>
<tr>
<th>Item</th>
<th>Functionality</th>
<th>Reference</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAP_SEM_009</td>
<td>Detect the PAP version of a received message.</td>
<td>9.12</td>
<td>M</td>
</tr>
<tr>
<td>PAP_SEM_010</td>
<td>Return status code 3002 in badmessage-response only when PAP version is not supported.</td>
<td>9.12</td>
<td>M</td>
</tr>
</tbody>
</table>