



Specification Information Note

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for

Wireless Application Protocol

WAP-169-WTA-20000707-a

Wireless Telephony Application Specification

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1. Scope

This document provides changes and corrections to the following document files:

- WAP-169-WTA-20000707-a

It includes changes from the following change requests:

- CR-WTA-ERICSSON-20010509-1

2. Notation

In the subsections describing the changes new text is underlined. Removed text has ~~striketrough~~ marks. The presented text is copied from the specification. Text that is not presented is not affected at all. The change descriptions may also include editor's notes similar to the one below. The notes are not part of the actual changes and must not be included in the changed text.

Editor's note: Framed notes like these only clarify where and how the changes shall be applied.

3. WTA use of WML in WAP 2.0

3.1 Change Classification

Class 1 – Major Change or Market Effecting Change

3.2 Change Summary

WTA requires the client to support WTA-WML, a superset of WML 1. As this requirement is carried forward into WAP 2.0, a client that supports WTA must support WTA-WML and WML 1, in addition to WML 2 - three markup languages. This also means that WAP 2.0 has an implicit WML 1 requirement although the intention is to move to the XHTML based WML 2. This is a **significant architectural inconsistency** since some WAP 2.0 content author will use WML 2 while others have to use the old WML 1. And WAP 2.0 browser manufacturers must support must support WML 1 natively in addition to WML 2, although that would normally not be a requirement for a WAP 2.0 client.

WTA-WML was defined because WML 1 did not permit WTA events to be bound using the <onevent> element and was unaware of event parameters. WML 2, however, supports these features: it permits WTA events in the <onevent> element and is aware of event parameters. **This makes WTA-WML redundant when WML 2 is supported.**

To further complicate this matter, WML 2 is behind in the specification process. Until WML 2 becomes a final Specification, WTA cannot have a normative reference to it. On the other hand, if WTA continues to use WTA-WML in WAP 2.0 then **WTA will bring in WML 1 and thus create an architectural inconsistency** that will not go unnoticed by content authors, browser manufacturers, and the general public. It will become especially difficult to motive to content authors why they have to use WML 1 to write WTA applications in WAP 2.0, but may use the XHTML based WML 2 for all other applications.

In order to get around this problem as much as is possible, **it is proposed that an informative note is added to section 8 of the WTA specification or as an additional note published together with the WTA specification.** The purpose of the note is to inform the WTA reader of WAP Forum's intentions to use WML 2.0 and the fact that the architectural inconsistency of having three different markup languages is recognized and will be fixed.

WML 2 is compatible with WML 1 content as specified in the "WML 1 to WML 2 transformation" by the WAE working group. The same specification also applies to WTA-WML, since WTA-WML does not change the syntax of WML 1.

3.3 Change Description

Editor's note: In chapter 8 WTA-WML Content, add an informative NOTE regarding WTA use of WML in WAP 2.0.

8. WTA-WML Content

All WTA services must be written in the WTA-WML language. This markup language is a superset of WML.

NOTE: The ability to use event parameters and bind to WTA events is supported by WML 2. When a WAP 2.0 client supports WML 2, WTA services can be authored with WML 2 instead of WTA-WML. Since WTA-WML is a superset of WML 1 and does not change the syntax, existing WTA-WML services are compatible with WML 2.0 in the same way as existing WML 1 services are.

It is **recommended** that WAP 2.0 client manufacturers support WML 2 in order to realise WTA services, rather than WTA-WML, which is based on WML 1 and superseded by WML 2.

8.1 WTA-WML Content Format

This section defines the content format used to represent wta-wml content.

WTA-WML is an application of [XML] version 1.0.

8.1.1 Document Identifiers

Editor's note: These identifiers have not yet been registered with the IANA or ISO 9070 Registrar

8.1.1.1 SGML Public Identifier

--//WAPFORUM//DTD WTA-WML 1.2//EN

8.1.1.2 WTA-WML Media Type

Textual form: text/x-wap-wta-wml

Tokenised form: application/x-wap-wta-wmlc

8.1.2 WTA-WML Element Semantics

The WTA-WML DTD contains the WML DTD as a subdocument. This allows forward-compatibility with WML while also allowing the variant syntax required for WTA event parameters.

```
<!ENTITY % wml-dtd PUBLIC "-//WAPFORUM//DTD WML 1.2//EN"
    "http://www.wapforum.org/DTD/wml12.dtd">
```

```
%wml-dtd;
```

The syntax and semantics of all WML elements (see [WML]) are identical for WTA-WML with the exceptions specified in the following sections.

8.1.2.1 The WTA-WML Element

```
<!ELEMENT wta-wml ( head?, template?, card+ )>
<!ATTLIST wta-wml
    xml:lang          NMTOKEN      #IMPLIED
    %coreattrs;
>
```

The wta-wml element is identical in purpose and usage to the wml element in [WML]. It is merely a container for content that adheres to the semantics required for WTA services.

8.1.2.2 The SETVAR Element

The setvar element is syntactically and semantically identical to the setvar element in [WML] except that the value attribute may contain WTA event parameter references. The BNF for event parameters is found in section 10.5.

8.1.2.3 The ONEVENT Element

The onevent element is syntactically and semantically identical to the onevent element in [WML] except that the type attribute may contain a WTA event identifier as specified in [WTAI].

8.1.3 The WTA-WML DTD

```
<!--
Wireless Telephony Applications Wireless Markup Language (WTA-WML) Document Type
Definition.
WTA-WML is an XML language. Typical usage:
<?xml version="1.0"?>
<!DOCTYPE wta-wml PUBLIC "-//WAPFORUM//DTD WTA-WML 1.2//EN"
    "http://www.wapforum.org/DTD/wta-wml12.dtd">
<wta-wml>
...
</wta-wml>
-->

<!ENTITY % wml-dtd PUBLIC "-//WAPFORUM//DTD WML 1.2//EN"
    "http://www.wapforum.org/DTD/wml12.dtd">
```

```
%wml-dtd;
```

```
<!ELEMENT wta-wml ( head?, template?, card+ )>
<!ATTLIST wta-wml
            xml:lang          NMTOKEN      #IMPLIED
            %coreattrs;
>
```

8.1.4 WBXML Tokens

8.1.4.1 Global Extension Tokens

None defined.

8.1.4.2 Tag Tokens

WTA-WML uses all of the tag tokens in code page zero (0) of [WML] plus the following tag token codes in code page one (1). All numbers are in hexadecimal.

<u>Tag Name</u>	<u>Token</u>
wta-wml	3F

8.1.4.3 Attribute Start Tokens

WTA-WML uses all of the attribute start tokens in code page zero (0) of [WML] plus the following attribute start token codes in code page one (1). All numbers are in hexadecimal.

<u>Attribute Name</u>	<u>Attribute Value Prefix</u>	<u>Token</u>
href	wtai://	05
href	wtai://wp/mc;	06
href	wtai://wp/sd;	07
href	wtai://wp/ap;	08
href	wtai://ms/ec	09
type	wtaev-	10
type	wtaev-cc/	11
type	wtaev-cc/ic	12
type	wtaev-cc/cl	13
type	wtaev-cc/co	14
type	wtaev-cc/oc	15
type	wtaev-cc/cc	16
type	wtaev-cc/dtmf	17
type	wtaev-nt/	20
type	wtaev-nt/it	21
type	wtaev-nt/st	22
type	wtaev-pb/	30

type	wtaev-lg/	38
type	wtaev-ms/	50
type	wtaev-ms/ns	51
type	wtaev-gsm/	58
type	wtaev-gsm/ru	59
type	wtaev-gsm/ch	5A
type	wtaev-gsm/ca	5B
type	wtaev-pdc/	60
type	wtaev-ansil36/	68
type	wtaev-ansil36/ia	69
type	wtaev-ansil36/if	6A
type	wtaev-cdma/	70

8.1.4.4 Attribute Value Tokens

WTA-WML uses all of the attribute value tokens in code page zero (0) of [WML]. No additional tokens are defined.

8.1.5 Gateway Considerations

The WAP Gateway must ensure that WTA-WML content has valid syntax, including event parameter variable references. The WTA-WML DTD and associated syntax rules specified herein must be enforced.

