

WAP WML

Version 16-Jun-1999

Wireless Application Protocol Wireless Markup Language Specification Version 1.1

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1. Scope

Wireless Application Protocol (WAP) is a result of continuous work to define an industry-wide specification for developing applications that operate over wireless communication networks. The scope for the WAP Forum is to define a set of specifications to be used by service applications. The wireless market is growing very quickly and reaching new customers and services. To enable operators and manufacturers to meet the challenges in advanced services, differentiation and fast/flexible service creation, WAP defines a set of protocols in transport, session and application layers. For additional information on the WAP architecture, refer to "*Wireless Application Protocol Architecture Specification*" [WAP].

This specification defines the Wireless Markup Language (WML). WML is a markup language based on [XML] and is intended for use in specifying content and user interface for narrowband devices, including cellular phones and pagers.

WML is designed with the constraints of small narrowband devices in mind. These constraints include:

- Small display and limited user input facilities
- Narrowband network connection
- Limited memory and computational resources

WML includes four major functional areas:

- Text presentation and layout - WML includes text and image support, including a variety of formatting and layout commands. For example, boldfaced text may be specified.
- Deck/card organisational metaphor - all information in WML is organised into a collection of *cards* and *decks*. Cards specify one or more units of user interaction (eg. a choice menu, a screen of text or a text entry field). Logically, a user navigates through a series of WML cards, reviews the contents of each, enters requested information, makes choices and moves on to another card.

Cards are grouped together into decks. A WML deck is similar to an HTML page, in that it is identified by a URL [RFC2396] and is the unit of content transmission.

- Inter-card navigation and linking - WML includes support for explicitly managing the navigation between cards and decks. WML also includes provisions for event handling in the device, which may be used for navigational purposes or to execute scripts. WML also supports anchored links, similar to those found in [HTML4].
- String parameterisation and state management - all WML decks can be parameterised using a state model. Variables can be used in the place of strings and are substituted at run-time. This parameterisation allows for more efficient use of network resources.

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