



Class Conformance Requirements

Approved Version 13 December 2000

Wireless Application Protocol
WAP-215-ClassConform-20001213-a

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1. Scope

The scope of this document is limited to the definition of WAP June 2000 Conformance Release specification baseline. Additionally, the mandatory features of a device class profile for a given WAP specification baseline, along with the optional features supported by a device claiming to meet a device class profile will determine the set of conformance tests to be run on that device. The conformance tests will validate whether the device meets the criteria for the claimed device class profile and for any optional feature claimed. Successful validation will result in the device being given a WAP Forum mark of conformance as a certain class of device for the baseline in question.

With the exception of CLASS A devices, which are required to implement all features defined in the WAP baseline specifications, this document does not override the basic WAP architectural model.

Specifically, this document does not override the fact that an entire specification may be optional by the WAP architecture. As an example, WTLS is an optional layer in the WAP stack. This document defines the mandatory and optional features that must or may be implemented, if that layer is present.

2. References

2.1. Normative References

- [CREQ] “Specification of WAP Conformance Requirements”. WAP Forum™.
WAP-221-CREQ-20000915-a. [URL:http://www.wapforum.org/](http://www.wapforum.org/)
- [RFC2119] “Key words for use in RFCs to Indicate Requirement Levels”. S. Bradner. March 1997.
[URL:http://www.ietf.org/rfc/rfc2119.txt](http://www.ietf.org/rfc/rfc2119.txt)
- [RFC2234] “Augmented BNF for Syntax Specifications: ABNF”. D. Crocker, Ed., P. Overell.
November 1997. [URL:http://www.ietf.org/rfc/rfc2234.txt](http://www.ietf.org/rfc/rfc2234.txt)

2.2. Informative References

None.

3. Terminology and Conventions

3.1. Conventions

The key words “MUST”, “MUST NOT”, “REQUIRED”, “SHALL”, “SHALL NOT”, “SHOULD”, “SHOULD NOT”, “RECOMMENDED”, “MAY”, and “OPTIONAL” in this document are to be interpreted as described in [RFC2119].

All sections and appendixes, except “Scope” and “Introduction”, are normative, unless they are explicitly indicated to be informative.

3.2. Definitions

WAP Baseline - An approved Conformance Release of all the WAP specifications including the Static Conformance Requirements for each of the specifications

3.3. Abbreviations

ICMP	Internet Control Message Protocol
ICS	Implementation Conformance Statement
OEM	Original Equipment Manufacturer
SCR	Static Conformance Requirement
UDP	User Datagram Protocol
WAE	Wireless Application Environment
WAP	Wireless Application Protocol
WCMP	Wireless Control Message Protocol
WDP	Wireless Datagram Protocol
WIM	Wireless Identity Module
WML	Wireless Mark-up Language
WSP	Wireless Session Protocol
WTA	Wireless Telephony Applications
WTAI	Wireless Telephony Application Interface
WTLS	Wireless Transport Layer Security
WTP	Wireless Transport Protocol

4. Introduction

This document outlines all WAP Specifications that define the WAP June 2000 Conformance Release. Additionally, this document outlines the client and server device class profiles proposed by the WAP Interoperability Group. The profiles define the conformance requirements on devices that want to use a WAP Forum mark of conformance as a certain class of WAP device. In other words, the device profiles identify the high level requirements in terms of mandatory features of the WAP specifications that are relevant for various client and server device class profiles on a per WAP baseline basis.

To meet the conformance requirements for the various device classes, the profile definitions in this document occasionally override the more detailed mandatory and optional classification of a feature as identified in the Static Conformance Requirements of a given WAP specification for the WAP baseline under consideration.

5. June 2000 Conformance Release

The complete list of June 2000 conformance release specifications and applicable SINS can be found in WAP Forum Technical website at <http://www.wapforum.org/what/technical.htm>, under section "Approved Specifications included in the June 2000 conformance release".

Those specifications will form the WAP June 2000 Conformance Release baseline as referenced in this document.

6. Implementation Conformance Statement

Online ICS will include the Static Conformance Requirements (SCR) from all specifications included into one particular WAP Conformance Release. These specifications are referenced in section 5 of this document.

The specifications used in constructing the online ICS are referenced on the ICS.

The SCRs from each specification are included into the ICS as two groups of items, mandatory features and optional features.

The ICS is constructed using the CCR and SCR interspecification dependencies, detailed in the SCRs and in section 7 of this document.

On the online ICS, following fields are listed for each item:

- Identifier
- Textual description
- Specification Reference
- Subsection
- Mandatory/Optional
- Supported
- Dependencies
- Applicable test cases

On the paper copy of the ICS, following fields are listed for each item:

- Identifier
- Textual description
- Mandatory/Optional
- Supported

The ICS is versioned based on continual changes.

These changes are documented and the ICS version history is available on the ICS.

7. Device Class Profiles

7.1. Device Class Overview

This section is an informative description on device class profiles.

Classes of device profiles are being defined on the basis of cross level functionality types that will remain unchanged across all WAP baselines.

A **data profile** class (or **Class C**) client or server device will provide all mandatory data features of the WAP specifications.

A **data and telephony profile** class (or **Class B**) client or server device will provide all mandatory data and telephony features of the WAP specifications.

A **complete data and telephony profile** class (or **Class A**) client or server device will provide all mandatory and all optional data and telephony features of the WAP specifications.

From a client or server device customer perspective, these profiles provide the high-level functionality indication that “data” or “data and telephony” based applications are supported or not. Note that while the mandatory feature set support required for a “data” or “data and telephony” device profile may change across baselines, the basic nature of the device being a “data” or “data and telephony” device does not change. For example, a “data” profile client class device may be required to support more data related WML tags in a given WAP baseline compared to another one, but it still remains a “data” profile client.

In particular, more detailed WAP specification features are -not- a criteria for creating additional class profiles for clients and servers. For example, the support (or not) for security layer (WTLS) will not be a sufficient reason for creating another device class profile. The motivation is that there are many optional features like security and using those as a basis will simply result in proliferation of class profiles (and WAP logos and stamps) without adding any real value or clarification to an end customer. Using this approach, the OEM manufacturer or retailer of clients and servers may wish to indicate the list of optional features that are available or not for various devices of a given profile and baseline. This is no different than how device features are currently advertised and sold to end customers.

Table 1 gives a high level overview on applicability of protocol layers for the different classes. More detailed information about the applicability of different specifications if given, separated for client and server devices, in the following chapters.

In the Class columns of table 1 the notation is as follows:

- M means the line item is mandatory for the class
- O means the line item is optional for the class.

The table below gives only an informative overview of the conformance release and the device classes. The official and normative definitions of device class profiles and conformance requirements to them are described later in sections 7.2 and 7.3.

Table 1 - Device class overview

Protocol Feature/Layer	Class A	Class B	Class C
WAE	M	M	M
WML	M	M	M
WMLScript / WMLScriptLibs	M	M	M
WAPCachingMod	M	M	M

UAProf	M	O	O
WSP	M	M	M
WTP ¹	M	M	M
WDP/UDP	M	M	M
WCMP/ICMP	M	M	M
Push	M	M	O
WTA	M	M	O
WTAI	M	M	O
WTLS	M	M	O
WIM	M	O	O
WMLScriptCrypto	M	O	O

7.2. Client device class conformance requirements

The following table identifies the normative class conformance requirements in terms of the mandatory features of the various WAP specifications for each of the client device class profiles.

Note that the mandatory and optional client device features of a given specification are identified in the Static Conformance Requirements of that specification. The class conformance requirements table merely references the individual specifications for mandatory and optional features, and overrides them as needed for a given client device class profile.

Table 2 - WAP JUNE 2000 CONFORMANCE RELEASE BASELINE CLIENT DEVICE CLASS CONFORMANCE REQUIREMENTS

Item	Function	Status	Requirements
CCR-WAPJ2K-C-001	WAP June-2000 Conformance Release Client profile	M	CCR-CLASSA-C-001 OR CCR-CLASSB-C-001 OR CCR-CLASSC-C-001
CCR-CLASSA-C-001	A complete data and telephony profile class, Class A client	O	WAESpec:MCF AND WAESpec:OCF AND WML:MCF AND WML:OCF AND WBXML:MCF AND WBXML:OCF AND WMLScript:MCF AND WMLScript:OCF AND WMLScriptLibs:MCF AND WMLScriptLibs:OCF AND WAPCachingMod:MCF AND

¹ WTP is only mandated for clients that support WSP connection mode.

			WAPCachingMod:OCF AND UAProf:MCF AND UAProf:OCF AND PushMessage:MCF AND PushMessage:OCF AND PushOTA:MCF AND PushOTA:OCF AND ServiceInd:MCF AND ServiceInd:OCF AND ServiceLoad:MCF AND ServiceLoad:OCF AND CacheOP:MCF AND CacheOP:OCF AND WSP:MCF AND WSP:OCF AND WTP:MCF AND WTP:OCF AND WDP:MCF AND WDP:OCF AND WAPOverGSMUSSD:MCF AND WAPOverGSMUSSD:OCF AND WCMP:MCF AND WCMP:OCF AND WTLS:MCF AND WTLS:OCF AND WIM:MCF AND WIM:OCF AND WMLScriptCrypto:MCF AND WMLScriptCrypto:OCF AND WTA:MCF AND WTA:OCF AND WTAI:MCF AND WTAI:OCF AND WTAIS136:MCF AND WTAIS136:OCF AND WTAIGSM:MCF AND WTAIGSM:OCF AND WTAIPDC:MCF AND WTAIPDC:OCF
CCR-CLASSB-C-001	A data and telephony profile class, Class B client	O	WAESpec:MCF AND WML:MCF AND WBXML:MCF AND WMLScript:MCF AND WMLScriptLibs:MCF AND WAPCachingMod:MCF AND WSP:MCF AND WDP:MCF AND WCMP:MCF AND PushMessage:MCF AND PushOTA:MCF AND ServiceInd:MCF AND WTLS:MCF AND WTA:MCF AND WTAI:MCF

CCR-CLASSC-C-001	A data profile class, Class C client	O	WASpec:MCF AND WML:MCF AND WBXML:MCF AND WMLScript:MCF AND WMLScriptLibs:MCF AND WAPCachingMod:MCF AND WSP:MCF AND WDP:MCF AND WCMP:MCF
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7.3. Server device class conformance requirements

The following table identifies the normative class conformance requirements in terms of the mandatory features of the various WAP specifications for each of the server device class profiles.

Note that the mandatory and optional server device features of a given specification are identified in the Static Conformance Requirements of that specification. The class conformance requirements table merely references the individual specifications for mandatory and optional features, and overrides them as needed for a given server device class profile.

Table 3 - WAP JUNE 2000 CONFORMANCE RELEASE BASELINE SERVER DEVICE CLASS CONFORMANCE REQUIREMENTS

Identifier	Function	Status	Requirements
CCR-WAPJ2K-S-001	WAP June-2000 Conformance Release Server profile	M	CCR-CLASSA-S-001 OR CCR-CLASSB-S-001 OR CCR-CLASSC-S-001
CCR-CLASSA-S-001	A complete data and telephony profile class, Class A server	O	WASpec:MSF AND WASpec:OSF AND WML:MSF AND WML:OSF AND WBXML:MSF AND WBXML:OSF AND WMLScript:MSF AND WMLScript:OSF AND WMLScriptSL:MSF AND WMLScriptlibs:OSF AND WAPCachingMod:MSF AND WAPCachingMod:OSF AND UAProf:MSF AND UAProf:OSF AND PPGService:MSF AND PPGService:OSF AND PushMessage:MSF AND PushMessage:OSF AND PushOTA:MSF AND PushOTA:OSF AND ServiceInd:MSF AND ServiceInd:OSF AND ServiceLoad:MSF AND ServiceLoad:OSF AND PAP:MSF AND

			PAP:OSF AND CacheOP:MSF AND CacheOP:OSF AND WSP:MSF AND WSP:OSF AND WTP:MSF AND WTP:OSF AND WDP:MSF AND WDP:OSF AND WAPOverGSMUSSD:MSF AND WAPOverGSMUSSD:OSF AND WCMP:MSF AND WCMP:OSF AND WTLS:MSF AND WTLS:OSF AND WIM:MSF AND WIM:OSF AND WMLScriptCrypto:MSF AND WMLScriptCrypto:OSF AND WTA:MSF AND WTA:OSF AND WTAI:MSF AND WTAI:OSF AND WTAIIS136:MSF AND WTAIIS136:OSF AND WTAIGSM:MSF AND WTAIGSM:OSF AND WTAIPDC:MSF AND WTAIPDC:OSF
CCR-CLASSB-S-001	A data and telephony profile class, Class B server	O	WAESpec:MSF AND WML:MSF AND WBXML:MSF AND WMLScript:MSF AND WMLScriptLibs:MSF AND WAPCachingMod:MSF AND PPGService:MSF AND PushMessage:MSF AND PushOTA:MSF AND ServiceInd:MSF AND PAP:MSF AND WSP:MSF AND WTP:MSF AND WDP:MSF AND WCMP:MSF AND WTLS:MSF AND WTA:MSF AND WTAI:MSF
CCR-CLASSC-S-001	A data profile class, Class C server	O	WAE:MSF AND WML:MSF AND WBXML:MSF AND WMLS:MSF AND WMLSSL:MSF AND WAPCachingMod:MSF AND WSP:MSF AND WTP:MSF AND

			WDP:MSF AND WCMP:MSF
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Appendix A. Change History

(Informative)

Type of Change	Date	Section	Description
Class 0	13 December 2000		The initial version of this document.